

PROJECT NUMBER: U18R1010A

PROJECT NAME: Stoneway 312

PROJECT LOCATION: Arlington, WA

CUSTOMER: H&H Steel Erectors



STRUCTURAL TESTS AND INSPECTION:

- 1) THE SPECIAL INSPECTOR'S DUTIES ARE AS DESCRIBED IN SPECIAL INSPECTION. THE SPECIAL INSPECTOR'S DUTIES ARE AS DESCRIBED IN IBC 1704.3 AND IBC 1705
- 2) ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND INSPECTION AGENCY EMPLOYED BY THE OWNER OR ARCHITECT.
- 3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE TEST AND INSPECTION FIRM WITH A SCHEDULE TO FACILITATE THE PROPER COORDINATION OF WORK.
- 4) PORTIONS OF WORK REQUIRING SPECIAL INSPECTION:

AGENCY RESPONSIBLE FOR INSPECTION AND TESTING TO BE NAMED BY OWNER LATER.

A. STRUCTURAL STEEL:

1. MILL REPORTS AND IDENTIFICATION OF STEEL (AFFIDAVIT OF COMPLIANCE)
2. SAMPLING AND TESTING OF SPECIMENS

B. WELDING:

1. ALL STRUCTURAL WELDING (INCLUDES DECKING AND WELDED STUDS), EXCEPT WELDING IN APPROVED SHOPS PER IBC 1704.2.2
2. ULTRASONIC TESTING OF FULL PENETRATION WELD CONNECTIONS AT MOMENT FRAMES, BRACED FRAMES, BEAM SPLICES, AND FIELD WELDS.
3. STRUCTURAL LIGHT GAGE METAL FRAME WELDING

C. BOLTING:

1. HIGH STRENGTH BOLT A325SC AND A490SC (TORQUE VERIFICATION)
2. HIGH STRENGTH BOLT A325N AND A490X (PER COVER SHEET NOTES)
3. EXPANSION/ADHESIVE ANCHORS IN CONCRETE OR MASONRY

YES	NO	N/A
☐	☒	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐

PROJECT NAME
STONEWAY 312
ARLINGTON, WA

CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA

JOB NUMBER
U18R1010A

PROJECT TITLE
ANCHOR BOLTS FOR BUILDING DEPT. REVIEW

SHEET
C2 of 3

Anchor Bolts - Construction
For Building Dept. Review

DATE
11/12/18
11/14/18

NUCOR BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46783
PHONE: (260) 837-7881 FAX: (260) 837-7384
PO BOX 1006, 200 WESTSTONE RD, SWANSEA, SC 29160
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
1055 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 919-3100 FAX: (435) 919-3101

CASEY KENT CHRISTIANSEN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
52021

NOV 16 2018

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Proj (in)
24	Endwall	3/4"	F1554	3.00
40	Frame	3/4"	F1554	3.00
40	Frame	1"	F1554	3.00

ANCHOR BOLT PLAN

GENERAL NOTES

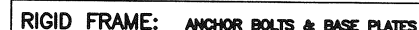
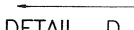
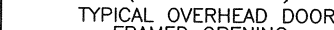
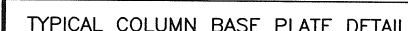
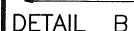
1. THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 55 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.
2. METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.
3. ALL ANCHOR RODS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AS WELL AS ALL CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY METAL BUILDING MANUFACTURER.
4. THIS DRAWING IS NOT TO SCALE.
5. FINISHED FLOOR ELEVATION = 100'-0" UNLESS NOTED OTHERWISE.
6. "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.
7. ANCHOR RODS ARE REQUIRED ONLY IN THE QUANTITIES SPECIFIED. BASEPLATES MAY BE FABRICATED WITH MORE HOLES THAN NEEDED FOR THIS PROJECT.
8. THE ANCHOR BOLT LOCATIONS PROVIDED BY METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. PLEASE NOTE THAT THESE REQUIREMENTS MAY NOT SATISFY ALL ANCHOR BOLT CONCRETE EDGE DISTANCE REQUIREMENTS DEPENDING ON THE DETAILS OF THE FOUNDATION DESIGN. BECAUSE FOUNDATION DESIGN IS NOT WITHIN THE METAL BUILDING MANUFACTURER'S SCOPE OF WORK, IT IS THE RESPONSIBILITY OF THE QUALIFIED PROFESSIONAL DESIGNING THE FOUNDATION TO MAKE CERTAIN THAT SUFFICIENT CONCRETE EDGE DISTANCE IS PROVIDED FOR THE ANCHOR BOLTS IN THE DETAILS OF THE FOUNDATION DESIGN.

NUCOR BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46783
PHONE: (260) 837-7891 FAX: (260) 837-7384
PO BOX 1006, 200 WHETSTONE RD, SWANSEA, SC 29160
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
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PROJECT NAME
STONEWAY 312
ARLINGTON, WA
CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA
JOB NUMBER
U18R1010A



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2* Frame lines: 2 3 4 5 6 7 8 9 10 11

1. ALL LOADING CONDITIONS ARE EXAMINED. THE MAXIMUM AND MINIMUM HORIZONTAL (H) AND VERTICAL (V) REACTIONS AND THE CORRESPONDING VERTICAL (V) OR HORIZONTAL (H) REACTIONS ARE REPORTED.
2. REACTIONS ARE PROVIDED BY LOAD CASE IN ORDER TO AID THE FOUNDATION ENGINEER IN DETERMINING THE APPROPRIATE LOAD FACTORS AND COMBINATION TO BE USED WITH EITHER WORKING STRESS OR ULTIMATE STRENGTH DESIGN METHODS. WIND LOAD CASES ARE GIVEN FOR EACH PRIMARY WIND DIRECTION.
3. FOR ASCE7-10 BASED BUILDING CODES THE UNFACTORED LOAD CASE REACTIONS DUE TO WIND ARE GENERATED USING ULTIMATE DESIGN WIND SPEEDS (V_{ult}).
4. POSITIVE (+) REACTIONS ARE AS SHOWN ABOVE. FOUNDATION LOADS ARE IN OPPOSITE DIRECTIONS.
5. BRACING REACTIONS ARE IN THE PLANE OF THE BRACE WITH THE HORIZONTAL REACTION (H) ACTING AWAY FROM THE BRACED BAY AND THE VERTICAL REACTION (V) ACTING DOWNWARD.

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***** ENDWALL COLUMN LOAD CASE ABBREVIATIONS: *****
Collat: COLLATERAL LOAD
Rafta Wind_L/Rafta Wind_R: LATERAL WIND FROM THE LEFT/RIGHT
Brace Wind_L/Brace Wind_R: LATERAL WIND FROM THE LEFT/RIGHT
Wind_P/Wind_S: LONGITUDINAL WIND PRESSURE/SUCTION ON COLUMNS
Wind_Ln: LONGITUDINAL WIND SUCTION ON ROOF
Seis_R: LATERAL SEISMIC LOAD FROM THE LEFT/RIGHT
E_UNB_LL/E_UNB_SL/E_UNB_SL_R: UNBALANCED ROOF WIND WITH WIND FROM LEFT/RIGHT
E_PAT_LL/E_PAT_SL/E_PAT_SL_R: PARTIAL LIVE/SNOW LOADING FOR CONTINUOUS BEAM SYSTEMS

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ENDWALL COLUMN:				BASIC COLUMN REACTIONS (k)									
Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Loft Vert	Wind Wind1 Vert
1	A	0.7	0.1	2.3	2.3	-3.1	-4.3	-0.2	-1.4	-3.6	4.0	-4.4	-3.6
1	B	1.9	0.3	6.6	6.6	-8.6	-12.8	1.5	-2.7	-10.0	10.7	-12.7	-3.6
1	C	0.6	0.1	2.2	2.2	-3.5	-4.4	0.4	-0.4	-3.2	3.6	-4.3	-3.6

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
12	C	0.6	0.1	2.2	2.2	-4.4	-3.5	-0.4	0.4	-3.2	3.6	-4.3	-3.6
12	B	1.9	0.3	6.6	6.6	-12.8	-8.6	-2.7	1.5	-10.0	10.7	-12.7	-9.3
12	A	0.7	0.3	2.3	2.3	-4.7	-3.7	-0.5	0.5	-3.2	3.6	-4.3	-3.6

[illegible][illegible]

BUILDING BRACING REACTIONS							
Loc	Wall Line	Col Line	± Reactions(k)		Seismic(k)		Panel Shear (lb/ft)
			Wind Horiz	Wind Vert	Seismic Horiz	Seismic Vert	
L_EW	1	A,B	6.2	10.5	1.5	2.5	
F_SW	C	3,4	3.7	3.0	8.8	7.3	
		9,10	3.7	3.0	8.8	7.3	
R_EW	12	A,B	6.2	10.5	1.5	2.5	
R_SW	A	Torsional Bracing Used					

2. COLUMN BASE PLATES MAY HAVE MORE HOLES THAN ARE REQUIRED DUE TO PRODUCTION LIMITATIONS. PLEASE FOLLOW ANCHOR BOLT DETAILS FOR QUANTITY OF ANCHOR BOLTS REQUIRED. EXTRA BASE PLATE HOLES DO NOT NEED INFILLED PER THE MBS DESIGN SPECIFICATIONS.

ALCOA

BUILDING SYSTEMS

305 INDUSTRIAL PARKWAY, WATERLOO, N. 46793
PHONE: (260) 837-7881 FAX: (260) 837-7384

P.O. BOX 1006, 200 WESTONE RD, SWANSEA, SC 29160
PHONE: (803) 586-2100 FAX: (803) 568-2121

600 APACHE TRAIL, TERRYLL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417

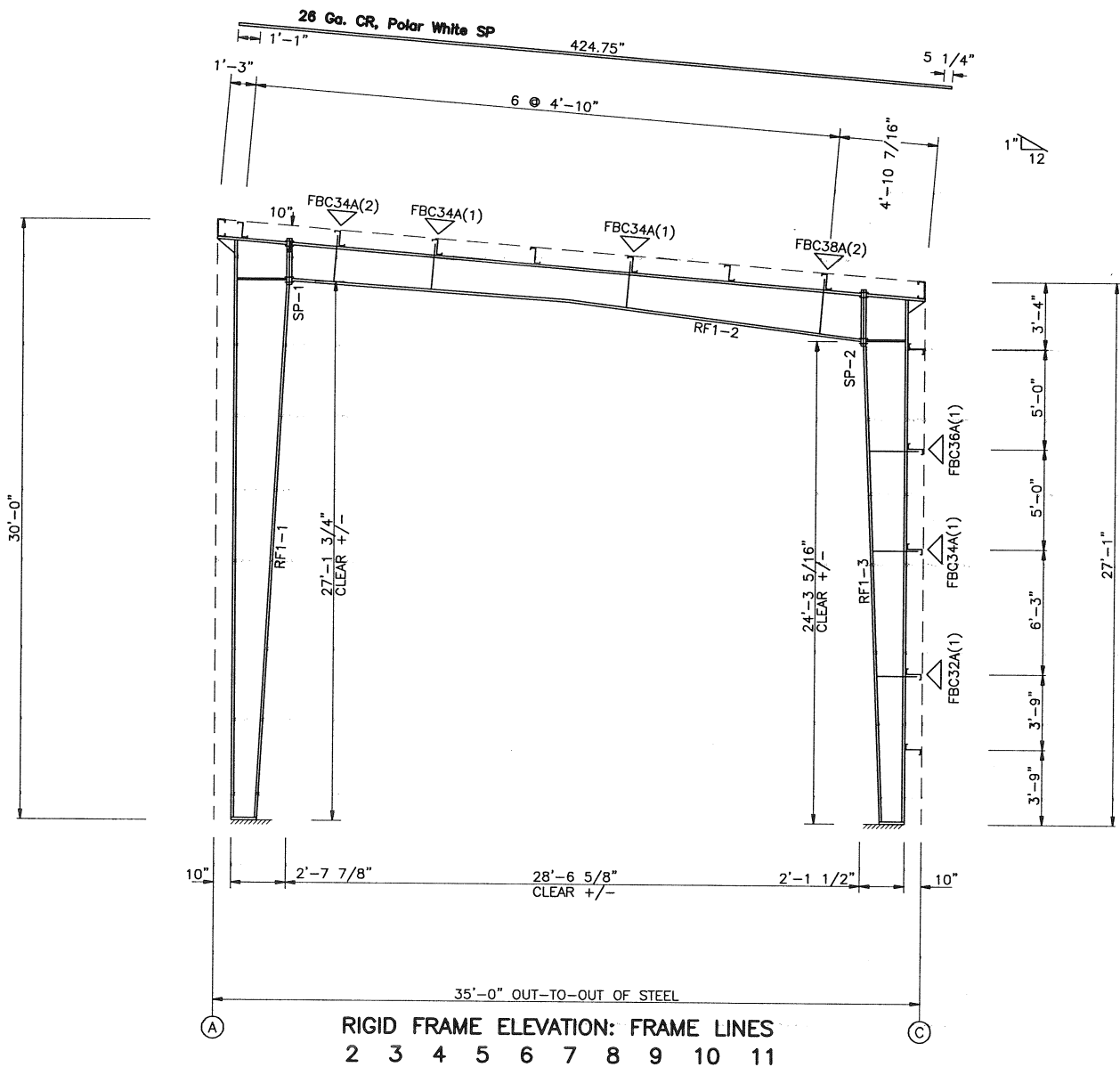
1050 WATERLY LANE, BIRMGHAM CITY, UT 84302
PHONE: (435) 919-3100 FAX: (435) 919-3101

PROJECT NAME	STONEMWAY 312
CUSTOMER NAME	ARLINGTON, WA
JOB NUMBER	U18R1010A
SHEET TITLE	H&H STEEL ERECTORS LAKE STEVENS, WA

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SPLICE PLATE & BOLT TABLE									
Mark	Qty								
	Top	Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	0.750	3.00	8"	5/8"	2'-2 3/8"
SP-2	4	4	0	A325	0.625	2.25	6"	1/2"	2'-7 7/8"

MEMBER TABLE						
Mark	Web Depth		Web Plate		Outside Flange	
	Start/End	Thick	Length		W x Thk x Length	Inside Flange
RF1-1	12.0/25.3	0.164	226.6		8 x 1/2" x 348.4	8 x 3/8" x 323.1
	25.3/31.0	0.164	96.0		8 x 5/16" x 41.4	
	31.0/31.0	0.220	25.8			
RF1-2	20.0/18.0	0.150	167.7		5 x 5/16" x 167.7	5 x 1/4" x 166.0
	18.0/26.0	0.164	176.7		5 x 3/16" x 174.5	5 x 1/4" x 176.8
	25.0/25.0	0.188	29.0		5 x 3/16" x 35.1	5 x 1/4" x 288.5
RF1-3	25.0/12.0	0.135	288.2		5 x 3/16" x 77.1	
					5 x 1/4" x 238.0	



- GENERAL NOTES**
- INDICATES FLANGE BRACING LOCATIONS. (1) = ONE SIDE; (2) = TWO SIDES.
 - IF FLANGE BRACING IS REQUIRED ON BOTH SIDES OF AN EXPANDABLE RIGID FRAME, THE OPPOSITE SIDE FLANGE BRACES WILL HAVE TO BE INSTALLED AT THE TIME OF FUTURE EXPANSION. THESE FLANGE BRACES HAVE BEEN PROVIDED, AS REQUIRED, FOR THIS FUTURE CONDITION.
 - RIGID FRAMES SHALL HAVE 50% OF THEIR BOLTS INSTALLED AND TIGHTENED ON BOTH SIDES OF THE WEB ADJACENT TO EACH FLANGE BEFORE THE HOISTING EQUIPMENT IS RELEASED.
 - INTERIOR COLUMN METAL TAG IS ORIENTED TOWARD THE LOW EAVE OF THE BUILDING.

PROJECT NAME
STONEWAY 312
ARLINGTON, WA

CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA

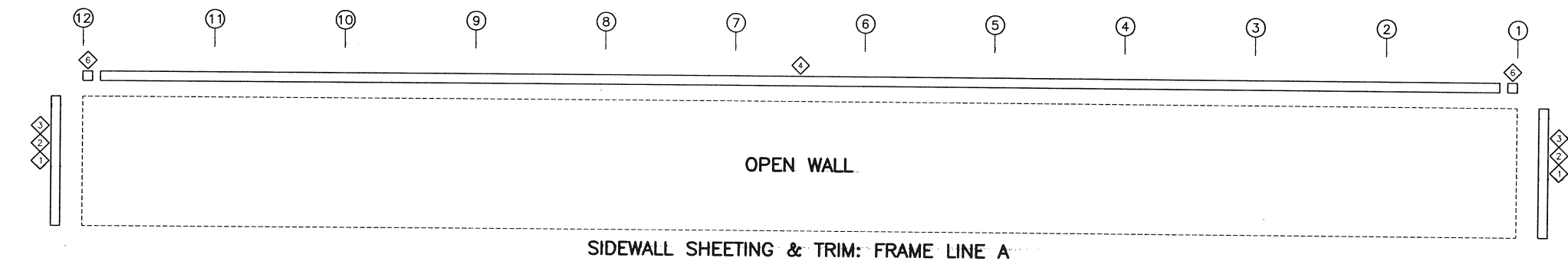
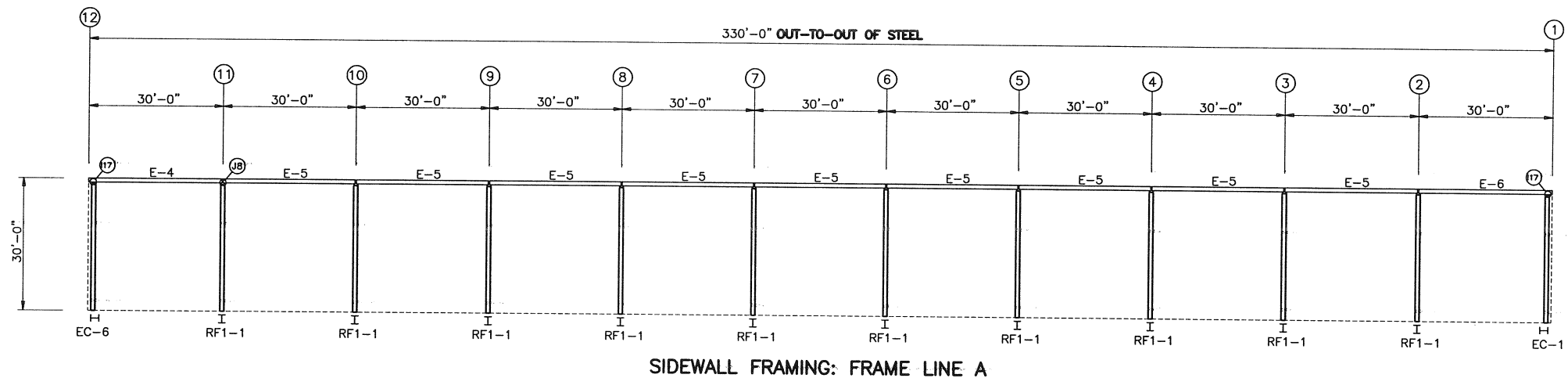
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SHEET TITLE
E2 of 6

ANCHOR BOLTS - Construction
For Building Dept. Review

DATE
11/12/18
11/14/18

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PO BOX 1006, 200 WHISTON RD, SWANSEA, SC 29160
PHONE (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
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TRIM TABLE FRAME LINE A			
◇ ID	PART	LENGTH	DETAIL
1	OCC01	121.000	TRIM_707
2	MFB01	121.000	TRIM_707
3	JTA121	121.000	TRIM_707
4	HEA02	242.000	TRIM_20
6	H4000	5.000	

MEMBER TABLE FRAME LINE A		
MARK	PART	LENGTH
E-4	10HE099	359.500
E-5	10HE099	359.500
E-6	10HE099	359.500

SIDEWALL FRAMING PLAN

GENERAL NOTES

1. STD. ROD/CABLE SIZES PER PART PREFIX ARE:

ROD	CABLE
RDB- = 5/8" ROD	CAA- = 1/4" CABLE
RDC- = 3/4" ROD	CAB- = 3/8" CABLE
RDD- = 7/8" ROD	CAC- = 1/2" CABLE
RDE- = 1" ROD	
RDF- = 1 1/8" ROD	
RDG- = 1 1/4" ROD	

2. ROD/CABLE BRACING THAT OCCURS IN FLUSH OR INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING OF GIRT WEBS TO ALLOW FOR BRACING.
3. FRAMED OPENINGS WHICH ARE FIELD LOCATED WILL REQUIRE FIELD CUTTING OF GIRTS AND SHEETING.
4. THIS DRAWING IS NOT TO SCALE.

DATE	BY	CHK	APP	DATE	BY	CHK	APP
11/12/18	MBS	TGW	KDB	11/14/18	MBS	GRU	KDB
Anchor Bolts - Construction				For Building Dept. Review			

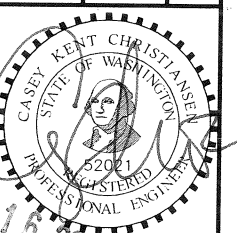
NUGON
BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
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ARLINGTON, WA

CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA

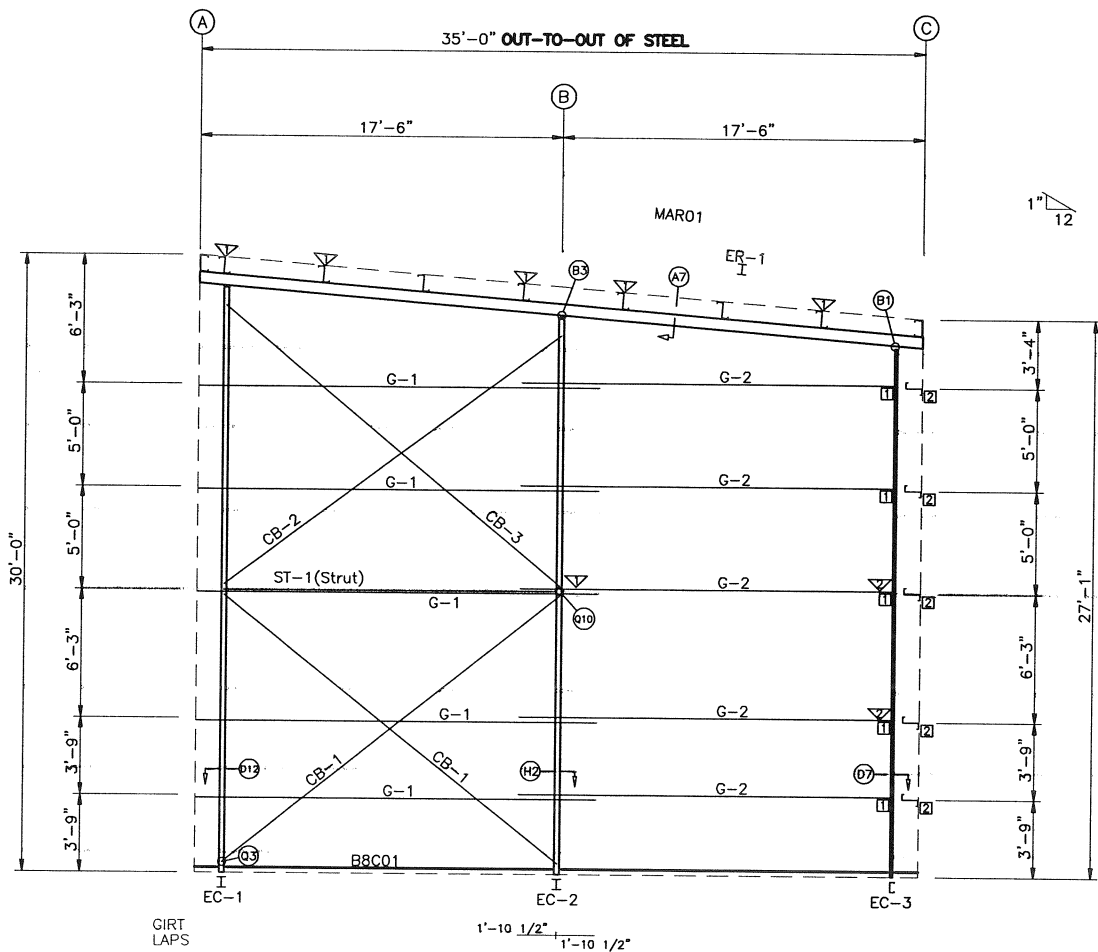
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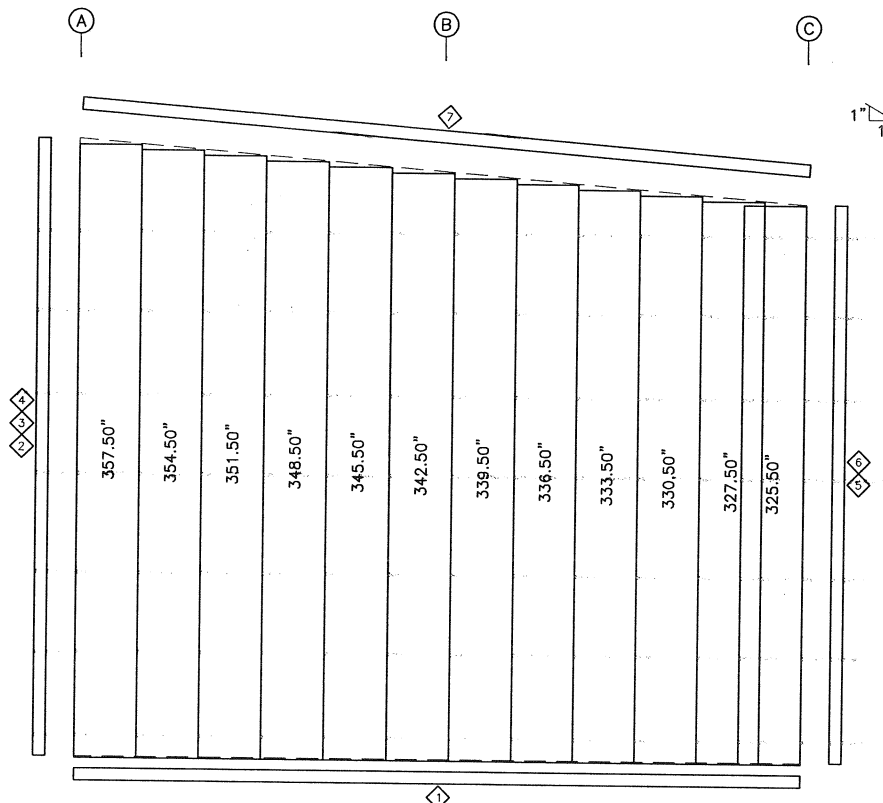


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E4 of 6



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1
PANELS: 26 Ga. CW - Polar White SP

BOLT TABLE FRAME LINE 1				
LOCATION	QUAN	TYPE	DIA	LENGTH
EC-1/ER-1	4	A325	1/2"	2"
EC-2/ER-1	4	A325	1/2"	2"
EC-3/ER-1	6	A325	1/2"	2"
Strut	2	A325	1"	3 1/4"

TRIM TABLE FRAME LINE 1			
ID	PART	LENGTH	DETAIL
1	BSB01	122.000	TRIM_303
2	OCC01	121.000	TRIM_707
3	MFB01	121.000	TRIM_707
4	JTA121	121.000	TRIM_707
5	OCA01	242.000	TRIM_7
6	MFB01	121.000	TRIM_7
7	RTA02	242.000	TRIM_2

MEMBER TABLE FRAME LINE 1		
MARK	PART	LENGTH
EC-1	W8x10	336.875
EC-2	W10x22	320.750
EC-3	W12S099	304.375
ER-1	W12x14	419.938
G-1	08Z054	232.250
G-2	08Z054	222.000
ST-1	W08SB075	188.750
CB-1	RDB-	252.000
CB-2	RDB-	245.000
CB-3	RDB-	254.000

FLANGE BRACE TABLE FRAME LINE 1			
▽ ID	#	MARK	CLIP
1	1	FBC30	
2	1	FBE01	

CONNECTION PLATES FRAME LINE 1	
ID	MARK/PART
1	GCW08gcb
2	GCC03

ENDWALL FRAMING PLAN

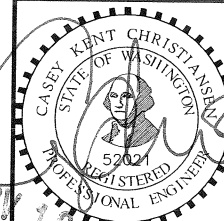
GENERAL NOTES

- STD. ROD/CABLE SIZES PER PART PREFIX ARE:
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 RDF- = 1 1/8" ROD
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 CABLE
 CAA- = 1/4" CABLE
 CAB- = 3/8" CABLE
 CAC- = 1/2" CABLE
- ROD/CABLE BRACING THAT OCCURS IN FLUSH OR INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING OF GIRT WEBS TO ALLOW FOR BRACING.
- FRAMED OPENINGS WHICH ARE FIELD LOCATED WILL REQUIRE FIELD CUTTING OF GIRTS AND SHEETING.
- THIS DRAWING IS NOT TO SCALE.

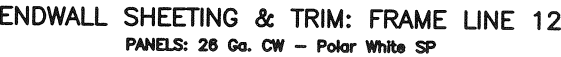
DATE	BY	CHK	DATE	BY	CHK
11/12/18	MBS	TOW	11/14/18	MBS	GRJ
Anchor Bolts - Construction			For Building Dept. Review		

NUCOR BUILDING SYSTEMS
 300 INDUSTRIAL PARKWAY, WATERLOO, IN 47933
 PHONE: (260) 837-7881 FAX: (260) 837-7384
 PO BOX 1006, 200 WESTSTONE RD, SWANSEA, SC 29160
 PHONE: (803) 568-2100 FAX: (803) 568-2121
 600 APACHE TRAIL, TERRELL, TX 75160
 PHONE: (972) 324-3407 FAX: (972) 324-3417
 1005 W. 17TH AVE., CHICAGO, IL 60607
 PHONE: (438) 918-1100 FAX: (438) 918-3101

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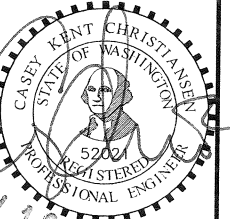
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CONNECTION PLATES	
FRAME LINE 12	
ID	MARK/PART
1	GCC03
2	GCW08qcb

2. ROD/CABLE BRACING THAT OCCURS IN FLUSH OR INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING OF GIRT WEBS TO ALLOW FOR BRACING.
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BOLTS REQ'D ONLY AS SHOWN

PLATE WASHER
MK. ESW01 (2)

3"

CAP. PLATE/
RAFTER

ROOF
LINE

SECTION "A"

USE (4) 1/2" x 2" A325 BOLTS H0603 / NUTS H0300
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS.

SEE PLANS AND ELEVATIONS FOR BRACING MARK NUMBERS

WEB OF COLUMN OR RAFTER

COUPLING NUT (QUANTITY VARIES)

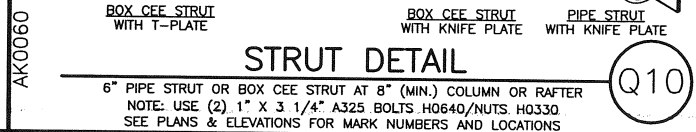
ROD ASSEMBLY MK. RD_____

HILLSIDE WASHER, FLAT WASHER, AND NUT

ROD BRACE

WEB TO WEB

Q3



6" PIPE STRUT OR BOX CEE STRUT AT 8" (MIN.) COLUMN OR RAFTER
NOTE: USE (2) 1" X 3 1/4" A325 BOLTS, H0640/NUTS, H0330.
SEE PLANS & ELEVATIONS FOR MARK NUMBERS AND LOCATIONS

NUTS MK. H0400

232 LAPPED GIRTS @ INTERIOR BAY COLUMNS
** THE THIN HEAD 1/2" A307 BOLT MUST BE INSTALLED INTO THE
FIRST GIRT AND CLIP OF A LAPPED CONDITION. THE BOLT/NUT
ASSEMBLY MUST BE WRENCH TIGHT PRIOR TO THE SECOND LAPPED
GIRT BEING INSTALLED.

UNLESS SPECIFICALLY NOTED OTHERWISE, STANDARD CEE GIRT ORIENTATION IS TO HAVE THE GIRT TOED UP AS SHOWN IN THE DETAIL BELOW. STANDARD CLIP ATTACHMENT IS BELOW THE GIRT, HOWEVER SOME DETAILS REQUIRE THAT THE CLIP BE ABOVE THE GIRT. (REFER TO THE GIRT DETAILS ON THE ERECTION DRAWINGS FOR REQUIREMENTS) BOTH CLIP ATTACHMENTS ARE SHOWN IN THE DETAIL BELOW.

ZEE GIRT ORIENTATION CEE GIRT ORIENTATION

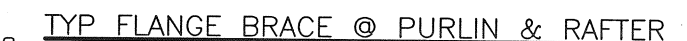
NOTE: BYPASS GIRT CONDITION IS SHOWN FOR REFERENCE ONLY. YOUR PROJECT MAY HAVE FLUSH OR INSET GIRTS.

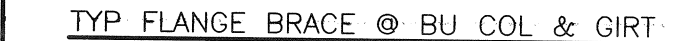
ACTUAL FLANGE BRACES DO NOT HAVE MARK NUMBERS ON THEM

Diagram illustrating the geometry of the rectangular plate. The plate has two circular holes. The dimension line above the plate is labeled "LENGTH".

Diagram illustrating the dimensions of the rectangular plate. The length is indicated by a dimension line above the plate, labeled "LENGTH".

03	49 1/2"
04	50 1/4"





NUCOR

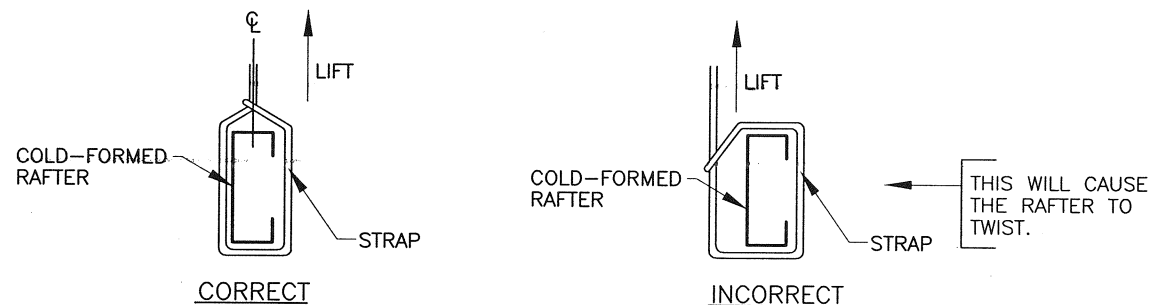
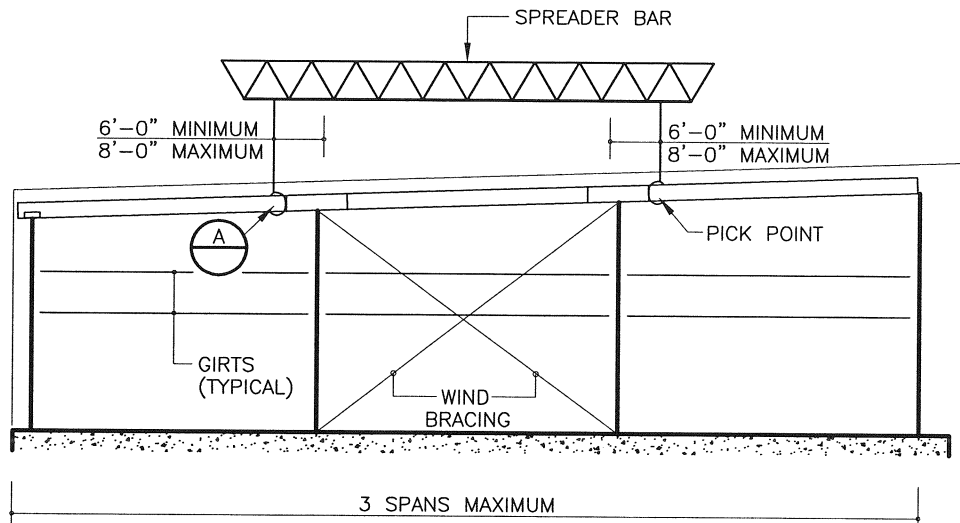
BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 47394
PHONE: (260) 837-7891 FAX: (260) 837-7384

PO BOX 1006, 200 WHETSTONE RD, SWANSEA SC 29160
PHONE: (803) 568-2100 FAX: (803) 568-2121

800 APACHE TRAIL, TERRELL, TX 75160
PHONE: (872) 524-5407 FAX: (872) 524-5417

1050 WATERY LAKE, BIRMGHAM CITY, UT 84302
PHONE: (435) 919-2100 FAX: (435) 919-2101

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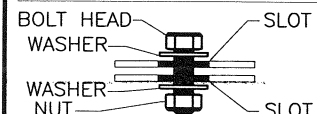


SECTION A

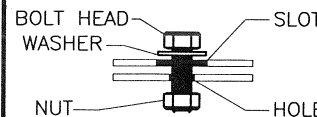
COLD FORMED ENDWALL ERECTOR DETAIL

- 1) GIRTS, CLIPS, RAFTERS AND COLUMNS MUST BE SECURELY AND TIGHTLY BOLTED TOGETHER PRIOR TO STANDING UP THE ENDWALL SECTION. (NOTE: THE GIRTS PROVIDE STABILITY TO THE ENDWALL SYSTEM DURING THE ERECTION PROCESS)
- 2) BUILT-UP COLUMNS/RAFTERS MUST BE ERECTED INDIVIDUALLY WHEN USED WITH COLD FORMED ENDWALL PARTS
- 3) THIS DETAIL IS SUGGESTED IN ORDER TO MAINTAIN STRUCTURAL INTEGRITY OF ENDWALL PARTS AFTER ERECTION. SOUND JUDGEMENT BASED ON ERECTION KNOWLEDGE AND EXPERIENCE SHOULD BE APPLIED REGARDING SAFETY AND PRACTICALITY OF INDIVIDUAL SITUATIONS.
- 4) REGULATIONS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ACT, LOCAL, STATE, AND/OR FEDERAL AGENCIES SHOULD BE ADHERED TO AT ALL TIMES. THE METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR INJURY, DAMAGE, OR FAILURE WHICH MAY RESULT FROM FAILING TO MEET ANY OF THESE REGULATIONS.

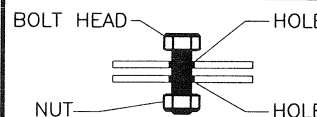
TYPICAL WASHER REQUIREMENTS ERECTOR NOTE (UNLESS NOTED OTHERWISE ON DRAWINGS)



SLOT TO SLOT CONNECTIONS
WASHERS ARE REQUIRED ON BOTH SIDES OF MATERIAL IF SLOTS ARE USED ON BOTH SIDES (NOTE LAPPED ZEE MEMBER EXCEPTION).



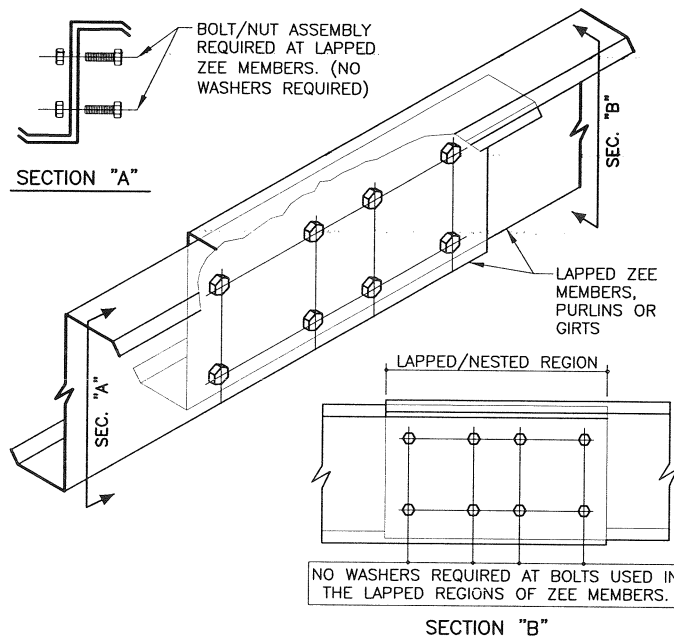
SLOT TO HOLE CONNECTIONS
ONE WASHER REQUIRED ON SLOTTED SIDE ONLY.



HOLE TO HOLE CONNECTIONS
NO WASHERS ARE REQUIRED WHEN SLOTS ARE NOT USED.

WASHER PART NUMBERS

H0200 - 1/2" FLAT WASHER	H0240 - 1" FLAT WASHER
H0210 - 5/8" FLAT WASHER	H0250 - 1 1/8" FLAT WASHER
H0220 - 3/4" FLAT WASHER	H0260 - 1 1/4" FLAT WASHER
H0230 - 7/8" FLAT WASHER	



TYPICAL FIELD WELD REQUIREMENTS ERECTOR NOTE: (UNLESS NOTED OTHERWISE ON DRAWINGS)

ALL FIELD WELDING MUST BE PERFORMED BY AWS/CWB CERTIFIED WELDERS WHO ARE QUALIFIED FOR THE WELDING PROCESSES AND POSITIONS INDICATED.

ALL WORK MUST BE COMPLETED AND INSPECTED IN ACCORDANCE WITH THE APPLICABLE AWS/CWB SPECIFICATIONS.

WELD ELECTRODES USED FOR THE SMAW (OR STICK) WELD PROCESS MUST BE 70 KSI/483 MPa MATERIAL AND LOW HYDROGEN CONTENT.

GALVANIZED STEEL FIELD WELDING RECOMMENDATIONS

PREPARATION OF WELD AREA

AWS D-19.0, WELDING ZINC COATED STEEL, CALLS FOR WELDS TO BE MADE ON STEEL THAT IS FREE OF ZINC IN THE AREA TO BE WELDED. FOR GALVANIZED STRUCTURAL COMPONENTS, THE ZINC COATING SHOULD BE REMOVED AT LEAST ONE TO FOUR INCHES (2.5-10 cm) FROM EITHER SIDE OF THE INTENDED WELD ZONE AND ON BOTH SIDES OF THE WORKPIECE. GRINDING BACK THE ZINC COATING IS THE PREFERRED AND MOST COMMON METHOD; BURNING THE ZINC AWAY OR PUSHING BACK THE MOLTEN ZINC FROM THE WELD AREA ARE ALSO EFFECTIVE.

TOUCH-UP OF WELD AREA

WELDING ON GALVANIZED SURFACES DESTROYS THE ZINC COATING ON AND AROUND THE WELD AREA. RESTORATION OF THE AREA WILL BE PERFORMED IN ACCORDANCE WITH ASTM A 780, STANDARD PRACTICE FOR REPAIR OF DAMAGED AND UNCOATED AREAS OF HOT-DIP GALVANIZED COATINGS, WHICH SPECIFIES THE USE OF PAINTS CONTAINING ZINC DUST, ZINC-BASED SOLDERS OR SPRAYED ZINC. ALL TOUCHUP AND REPAIR METHODS ARE CAPABLE OF BUILDING A PROTECTIVE LAYER TO THE THICKNESS REQUIRED BY ASTM A 780.

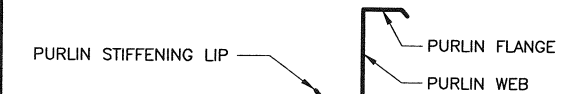
SAFETY & HEALTH

WHEN WELDING DIRECTLY ON GALVANIZED STEEL IS UNAVOIDABLE, OSHA PERMISSIBLE EXPOSURE LIMITS (PELS) MAY BE EXCEEDED AND EVERY PRECAUTION, INCLUDING HIGH-VELOCITY CIRCULATING FANS WITH FILTERS, AIR RESPIRATORS AND FUME-EXTRACTION SYSTEMS SUGGESTED BY AWS, SHOULD BE EMPLOYED. FUMES FROM WELDING GALVANIZED STEEL CAN CONTAIN ZINC, IRON, AND LEAD. FUME COMPOSITION TYPICALLY DEPENDS ON THE COMPOSITION OF THE MATERIALS USED, AS WELL AS THE HEAT APPLIED BY THE PARTICULAR WELDING PROCESS. IN ANY EVENT, GOOD VENTILATION MINIMIZES THE AMOUNT OF EXPOSURE TO FUMES.

PRIOR TO WELDING ON ANY METAL, CONSULT ANSI/ASC Z-49.1, SAFETY IN WELDING, CUTTING AND ALLIED PROCESSES, WHICH CONTAINS INFORMATION ON THE PROTECTION OF PERSONNEL AND THE GENERAL AREA, VENTILATION AND FIRE PREVENTION.

INFORMATION COURTESY OF AMERICAN GALVANIZERS ASSOCIATION

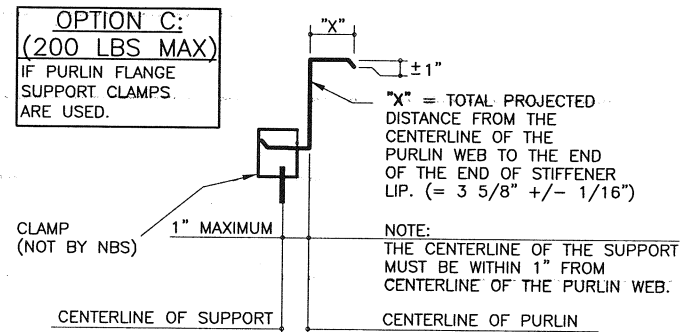
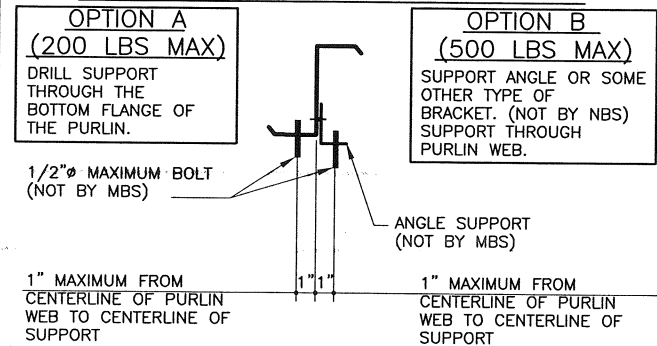
COLLATERAL DEAD LOADS, UNLESS OTHERWISE NOTED, ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED. WHEN SUSPENDED SPRINKLER SYSTEMS, LIGHTING, HVAC EQUIPMENT, CEILINGS, ETC. ARE SUSPENDED FROM ROOF MEMBERS, CONSULT ENGINEER OF RECORD IF THESE CONCENTRATED LOADS EXCEED 500 POUNDS (USING THE WEB MOUNT DETAIL) OR 200 POUNDS (USING THE FLANGE MOUNT DETAIL), OR IF INDIVIDUAL MEMBERS ARE LOADED SIGNIFICANTLY MORE THAN OTHERS.



GENERAL RESTRICTION:

UNDER NO CIRCUMSTANCES CAN THE PURLIN STIFFENING LIP BE FIELD MODIFIED FROM THE FACTORY SUPPLIED CONDITION. ALSO DO NOT HANG ANYTHING FROM PURLIN STIFFENING LIP.

OPTIONS FOR SUPPORT ATTACHMENTS

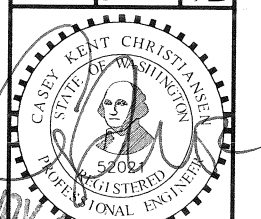


PURLIN SUPPORT METHODS

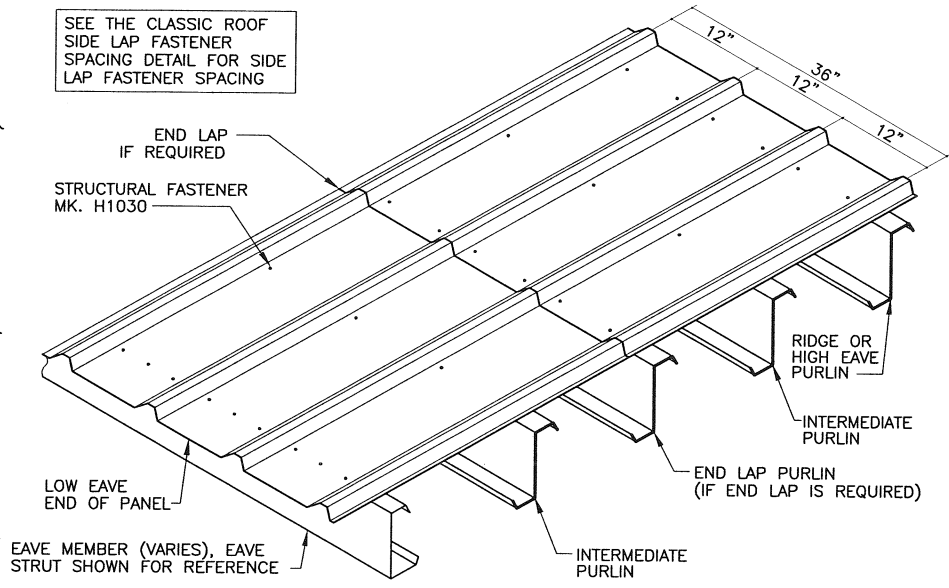
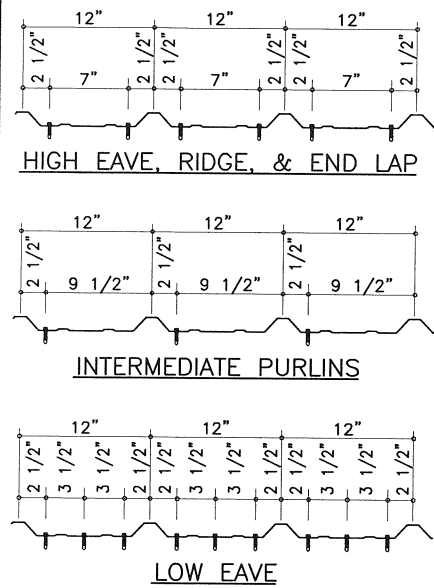
DATE	11/12/18	11/14/18
DESIGN	CKC	CKC
ENGINEER	TGW	CKC
ARCHITECT	GRU	CKC
ISSUE	MBS	MBS
Anchor Bolts - Construction	For Building Dept. Review	

NUGEN BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46783
PHONE: (260) 837-7881 FAX: (260) 837-7384
PO BOX 1006, 200 WESTSTONE RD, SWANSEA, SC 29160
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
1080 WILBY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 919-3100 FAX: (435) 919-3101

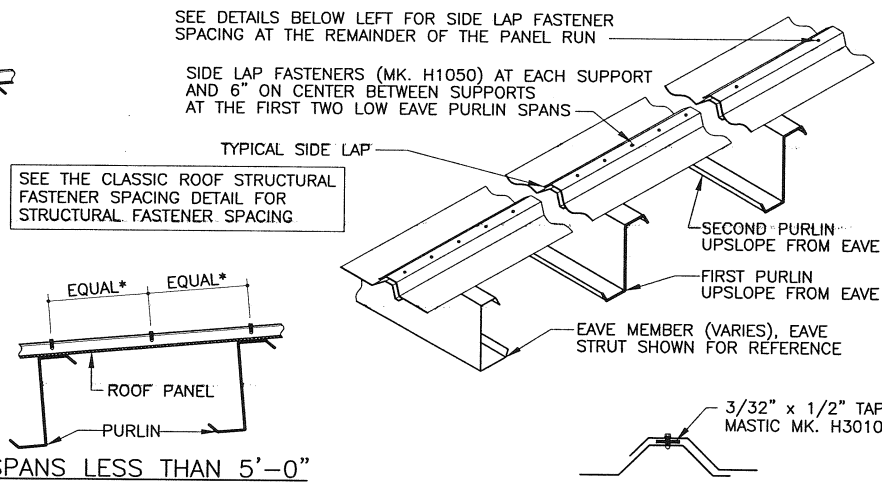
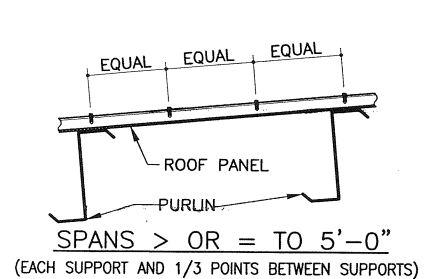
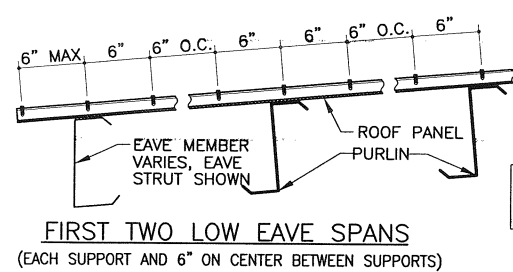
PROJECT NAME
STONEWAY 312
ARLINGTON, WA
CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA
JOB NUMBER
U18R1010A
SHEET TITLE



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CLASSIC ROOF STRUCTURAL FASTENER SPACING (STANDARD)



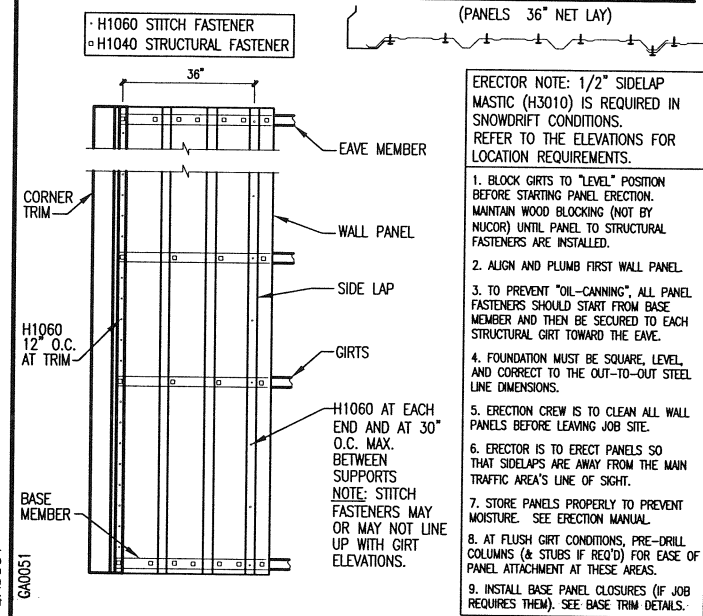
SPANS LESS THAN 5'-0"

NON-UL 90	EACH SUPPORT AND MIDPOINT BETWEEN SUPPORTS.
UL 90	EACH SUPPORT AND SPACED EQUALLY BETWEEN SUPPORTS. NOT TO EXCEED 20" (1'-8").



CLASSIC ROOF SIDE LAP FASTENER SPACING (STANDARD)

"CLASSIC PANEL" ERECTION NOTES



- ERECTOR NOTE: 1/2" SIDELAP MASTIC (H3010) IS REQUIRED IN SNOWDRIFT CONDITIONS. REFER TO THE ELEVATIONS FOR LOCATION REQUIREMENTS.
1. BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING PANEL ERECTION. MAINTAIN WOOD BLOCKING (NOT BY NUCOR) UNTIL PANEL TO STRUCTURAL FASTENERS ARE INSTALLED.
 2. ALIGN AND PLUMB FIRST WALL PANEL.
 3. TO PREVENT "OIL-CANNING", ALL PANEL FASTENERS SHOULD START FROM BASE MEMBER AND THEN BE SECURED TO EACH STRUCTURAL GIRT TOWARD THE EAVE.
 4. FOUNDATION MUST BE SQUARE, LEVEL, AND CORRECT TO THE OUT-TO-OUT STEEL LINE DIMENSIONS.
 5. ERECTION CREW IS TO CLEAN ALL WALL PANELS BEFORE LEAVING JOB SITE.
 6. ERECTOR IS TO ERECT PANELS SO THAT SIDELAPS ARE AWAY FROM THE MAIN TRAFFIC AREA'S LINE OF SIGHT.
 7. STORE PANELS PROPERLY TO PREVENT MOISTURE. SEE ERECTION MANUAL.
 8. AT FLUSH GIRT CONDITIONS, PRE-DRILL COLUMNS (& STUBS IF REQ'D) FOR EASE OF PANEL ATTACHMENT AT THESE AREAS.
 9. INSTALL BASE PANEL CLOSURES (IF JOB REQUIRES THEM). SEE BASE TRIM DETAILS.

STANDARD FASTENER SCHEDULE

H1000 SELF-TAPPING SCREW (GOOF SCREW) 17-14 x 1 1/4" WITH WASHER LONG LIFE FASTENER 3/8" HEAD	H1042 SELF-DRILLING SCREW 12-14 x 7/8" TCP3 W/O WASHER 5/16" HEAD	H1070 SELF-DRILLING SCREW 12-24 x 1 1/2" TCP3 W/O WASHER 5/16" HEAD DRILLING CAPACITY
H1020 SELF-DRILLING SCREW 1/4-14 x 1 1/4" TCP3 W/O WASHER 3/16" THK MAX DRILLING CAPACITY 5/16" HEAD	H1045 SELF-DRILLING SCREW 12-14 x 2" TCP3 W/O WASHER 5/16" HEAD	H1100 1/8" x 3/16" STAINLESS STEEL BLIND POP RIVET
H1030 SELF-DRILLING SCREW 12-14 x 1 1/4" TCP2 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1047 SELF-DRILLING SCREW 12-14 x 2" TCP3 FLAT TOP WITH WASHER 5/16" HEAD	H1110 3/8" STAINLESS GROMMET FASTENER
H1035 SELF-DRILLING SCREW 12-14 x 1 1/2" TCP2 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1050 SELF-DRILLING SCREW 1/4-14 x 7/8" TCP1 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1220 SELF-DRILLING SCREW 12-14 x 1" TCP3 W/O WASHER PHILLIPS HEAD
H1040 SELF-DRILLING SCREW 12-14 x 1 1/4" TCP2 W/O WASHER 5/16" HEAD	H1060 SELF-DRILLING SCREW 1/4-14 x 7/8" TCP1 W/O WASHER 5/16" HEAD	PRE-DRILL DIAMETERS
H1041 SELF-DRILLING SCREW 12-14 x 1 1/4" TCP2 FLAT TOP WITH WASHER 5/16" HEAD	H1061 SELF-DRILLING SCREW 1/4-14 x 7/8" TCP1 FLAT TOP WITH WASHER 5/16" HEAD	3/16" FOR: H1020, H1070
		5/32" FOR: H1030, H1035, H1040, H1041, H1042, H1045, H1047, H1220
		1/8" FOR: H1050, H1060, H1061

PLEASE REFER TO THE ROOF AND WALL SHEETING ERECTION MANUALS FOR FURTHER ASSEMBLY INSTRUCTIONS

DATE	PK	CHK	ENG	DES	APP	REV	DATE
11/12/18	CKC	KOB	TOW	MBS	Anchor Bolts - Construction		
11/14/18	CKC	KOB	GRJ	MBS	For Building Dept. Review		

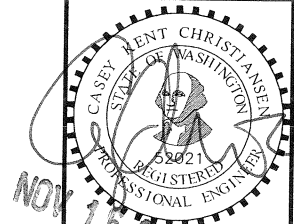
NUCOR BUILDING SYSTEMS
 305 INDUSTRIAL PARKWAY, WATERLOO, IN 47393
 PHONE: (860) 837-7891 FAX: (860) 837-7384
 PO BOX 1006, 200 WESTLINE RD, SWANSEA, SC 29160
 PHONE: (803) 568-2100 FAX: (803) 568-4121
 600 APACHE TRAIL, TERRELL, TX 75160
 PHONE: (972) 524-5407 FAX: (972) 524-5417
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PROJECT NAME
STONEWAY 312
ARLINGTON, WA

CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA

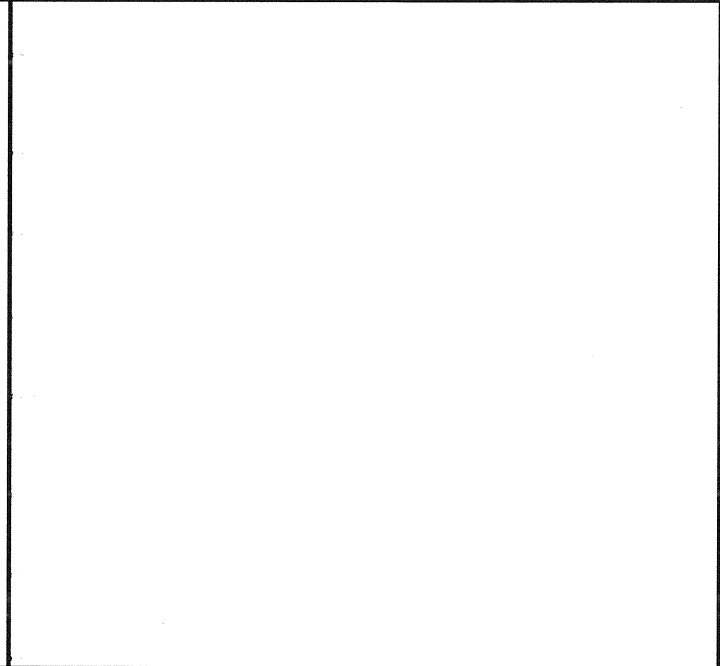
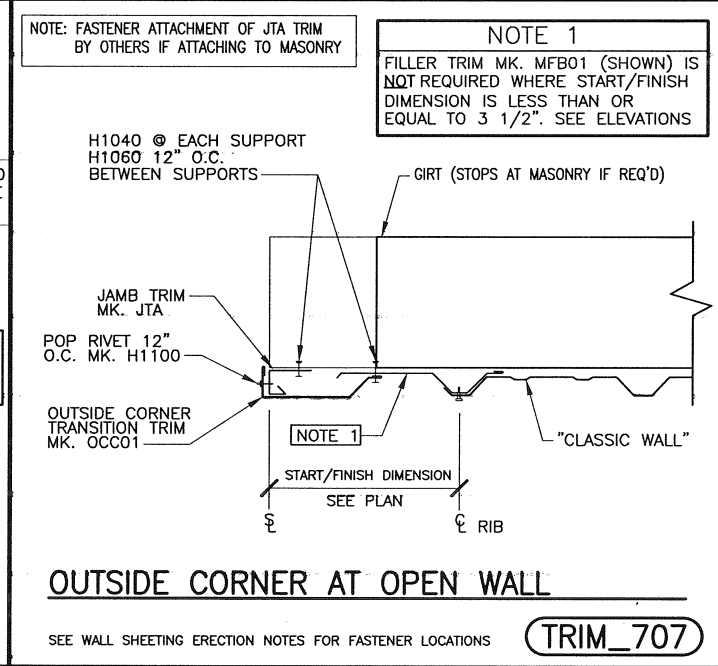
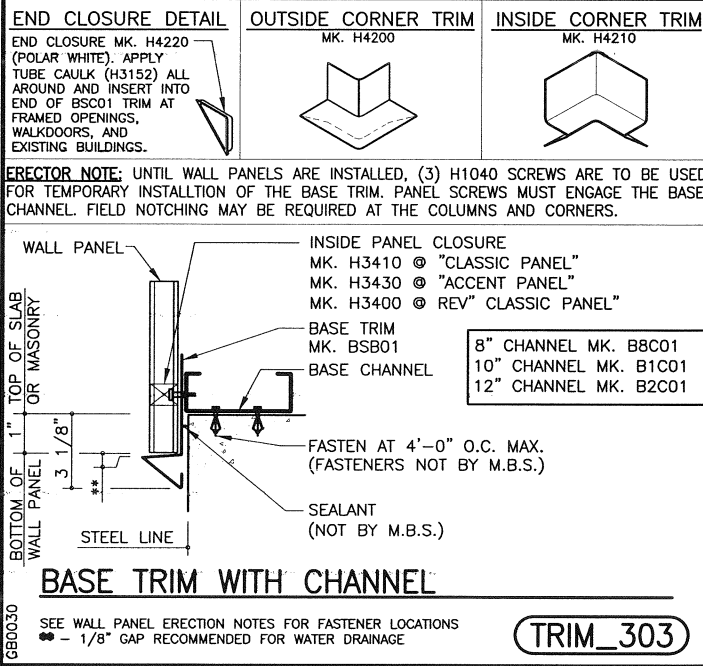
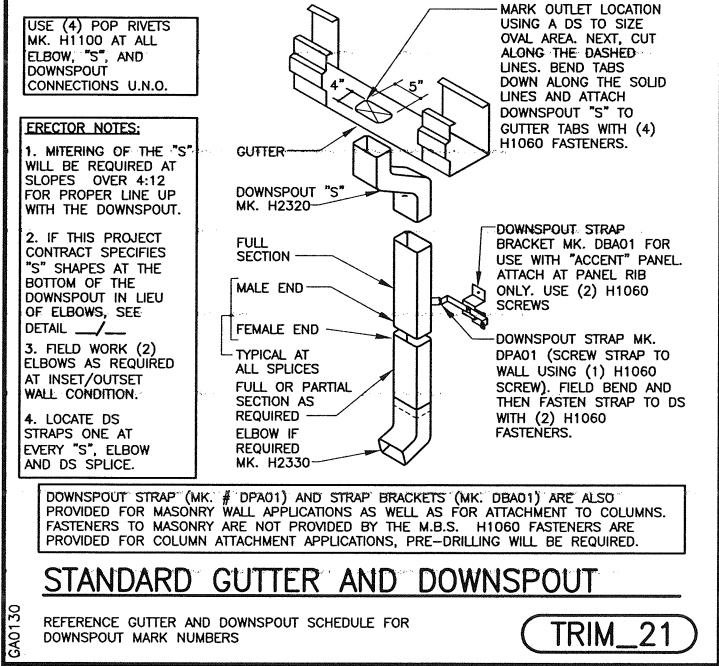
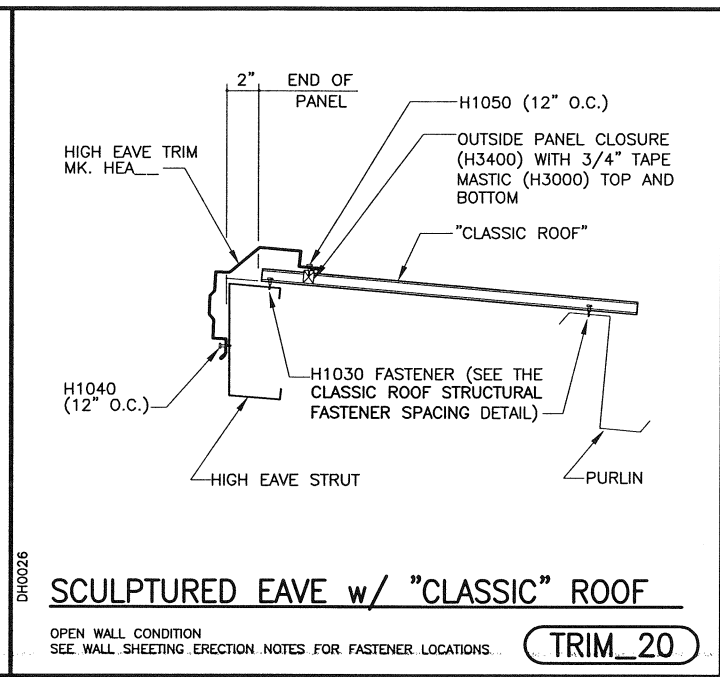
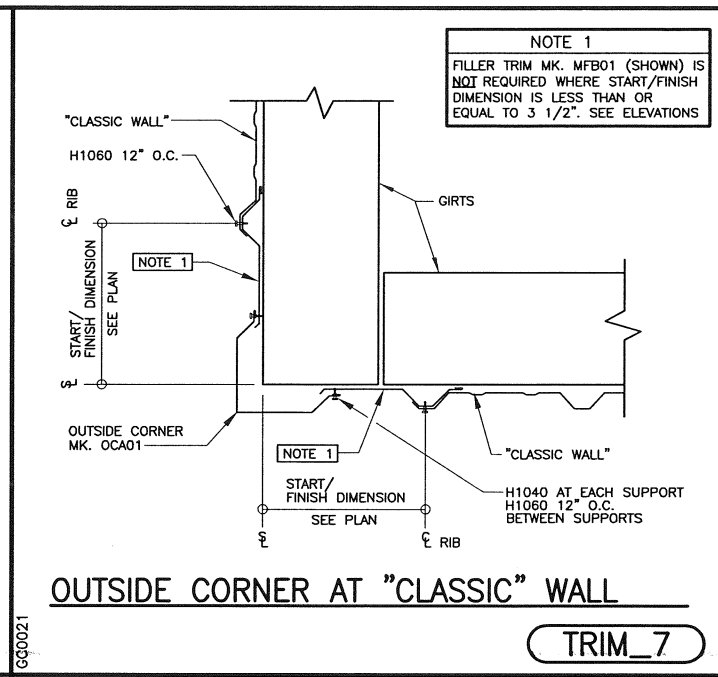
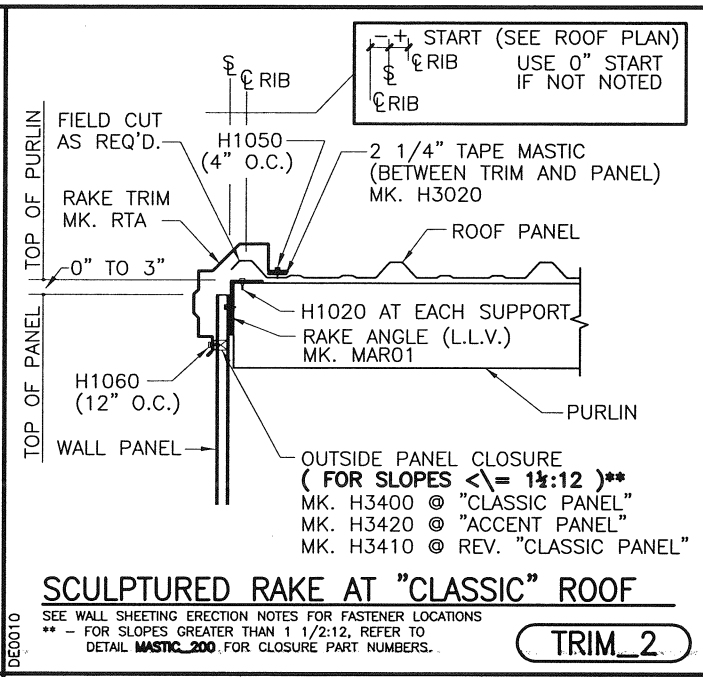
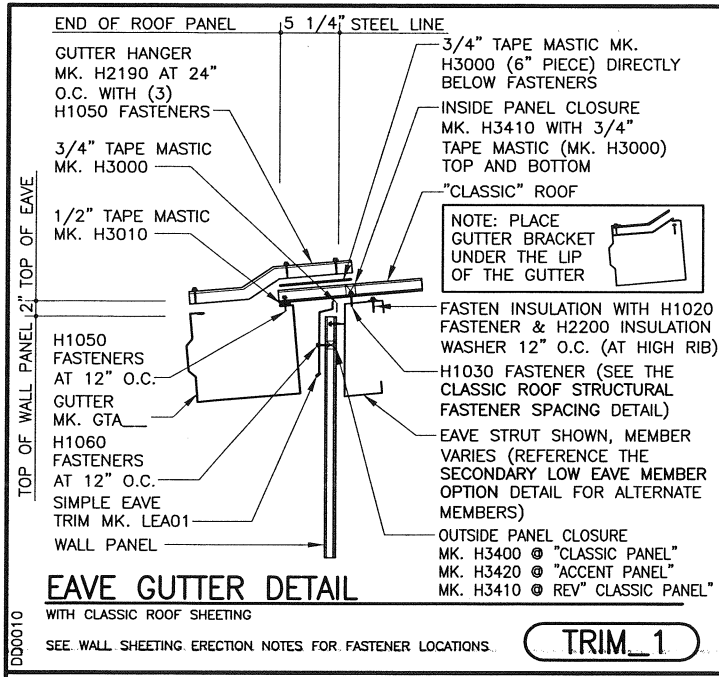
JOB NUMBER
U18R1010A

SHEET TITLE
U18R1010A



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D4 of 5



Anchor Bolts - Construction	For Building Dept. Review	DATE	11/12/18
MBS	TGW	KOB	CAC
MBS	GRU	KOB	CAC
11/14/18			

NUCOR BUILDING SYSTEMS
300 N. W. 10th Ave., Suite 200, Ft. Lauderdale, FL 33304
PHONE: (954) 837-7881 FAX: (954) 837-7384
PO BOX 1006, 200 WHITESTONE RD, SWANSEA, SC 29160
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
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PROJECT NAME
STONEWAY 312
ARLINGTON, WA

CUSTOMER NAME
H&H STEEL ERECTORS
LAKE STEVENS, WA

JOB NUMBER
U18R1010A

SHEET TITLE
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CAVEY KENT CHRISTIANSEN
REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
NO. 52027

D5 of 5

1050 North Watery Lane
Brigham City, UT 84302

Ph: (435) 919-3100
Fax: (435) 919-3101

November 9, 2018

H&H Steel Erectors
2824 103rd Ave SE
Lake Stevens, WA 98258

Project Name: Stoneway 312

Buildings: A->35'-0"x330'-0"x27'-1"(RCG,1.0:12)

Attn: Bill Holcomb

Project Location: Arlington, WA 98223

NBS Project #: U18R1010A

This Letter of Design Certification ensures that the materials supplied by Nucor Building Systems are designed in accordance with the information specified to Nucor Building Systems on the order documents and summarized by the loading information listed below. The Project Engineer of Record (not NBS) is responsible for verifying that the building code and design loads meet any and all applicable local requirements.

The Professional Engineer whose seal appears on this Letter of Certification is employed by Nucor Building Systems, a Member of MBMA, and does not serve as or represent the Engineer of Record for this project and shall not be construed as such.

DESIGN LOAD CRITERIA:

Structural Loads Applied in General Accordance with: IBC 2015
Risk Category: II - Standard Buildings

PROJECT-WIDE LOADING INFORMATION:

Ground Snow Load: 25.0 psf Snow Exposure Factor, Ce: 1.00 Snow Imp. Factor, Is: 1.00
Roof Live Load: 20.0 psf Not Reducible Per Code.
Ultimate Design Wind Velocity: 115 mph Nominal Design Wind Velocity: 89 mph
***Components & Cladding Pressures: 40 psf/ -50 psf
Is Roof to meet UL 90 Requirements?: No Wind Exposure: C
Seismic Criteria: Ss: 1.094 S1: 0.426 • No ground snow included in seismic calculations.
Design Sds / Sd1: 0.775/0.447 Analysis Procedure: Equiv. Lat. Force Procedure
Seis. Imp. Factor, Ie: 1.00 Basic SFRS: Ord. Steel Mom. Frames &
Seis. Design Category: D Site Class: D Ord. Steel Conc.-Br. Frames

BUILDING-SPECIFIC LOADING INFORMATION:

Bldg	Roof Dead (psf)*	Collateral Dead		Snow Coefficient		Snow Load (psf)		Wind		Seismic		
		Pri (psf)	Sec (psf)	Ct	Cs	Ps (psf)	**Pm (psf)	Enclosure	GCpi	R	Cs	V (kips)
A	3.0	1.0	1.0	1.2	1.00	21.00	25.00	Part-Encl.	± 0.55	3.25	0.238	25.27

*Primary Structural Not Included

**P_m is based on the minimum roof snow load calculated per building code or the contract-specified roof snow load, whichever is greater. This value, P_m, is only applied in combination with Dead and Collateral Loads. Roof Snow in other loading conditions is determined per the specified Building Code.

***Design wind pressures to be used for wall exterior component and cladding materials not provided by Nucor Building Systems.

Mezzanine Information:

Floor Dead Load: N/A Floor Collateral Load: N/A Floor Live Load: N/A

Crane Information:

No cranes on building.

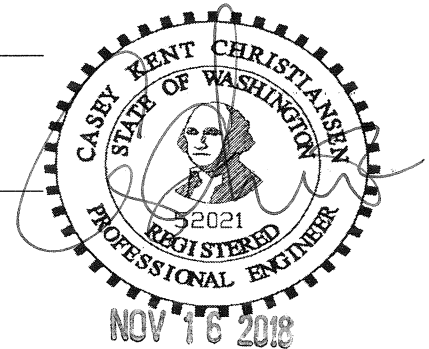
Roof-Top Unit Information

No roof-top units on building.

The design of structural members supporting roof gravity loads is controlled by the more critical effect of roof live load or roof snow applied in accordance with the governing building code.

DESIGN STANDARDS REFERENCED:

- AISC Specification for Structural Steel Buildings - Steel Construction Manual, 14th Edition, © 2010.
- AISI North-American Specification for the Design of Cold-Formed Steel Structures, © 2012 Edition.
- IBC codes are designed in accordance with ASCE7-10 Edition.
- MBMA Low Rise Building Systems Manual, Latest Edition.
- AWS Latest Edition of Structural Welding Code.
- No buyout structural components provided on this project.



NUCOR BUILDING SYSTEMS	Job No	U18R1010A	Date	11/9/2018
	Customer	H&H Steel Erectors	Designed By	KDB
	Description	Stoneway 312		

S T R U C T U R A L D E S I G N C A L C U L A T I O N S F O R

H&H Steel Erectors
2824 103rd Ave SE
Lake Stevens, WA 98258

P R O J E C T

Job: U18R1010A
Stoneway 312
17305 56th Ave NE
Arlington, WA 98223



B U I L D I N G D A T A

BUILDING SIZE:

Width (ft) = 35
Length (ft) = 330
Back Eave Height (ft) = 30
Front Eave Height (ft) = 27.08
Roof Slope (rise/100) = -1.0:12

BUILDING LOADS:

Roof Dead Load (psf) = 3.00
Roof Live Load (psf) = 20.00
Rigid Frame Live Load (psf) = 20
Collateral Load (psf) = 1.00
Roof Snow Load (psf) = 25.00

BUILDING CODE:

Wind Code = IBC 15
Wind Speed (mph) = 115
Closed/Open = Partial
Exposure = C
Importance - Wind = 1.00
Importance - Seismic = 1.00
Seismic Design Category = D
Seismic Coeff (Fa*Ss) = 1.162

This building was designed by: KDB, DATE: 11/ 9/18.

The Professional Engineer whose seal appears on these Structural Design Calculations is employed by Nucor Building Systems and does not serve as or represent the Engineer of Record for this project and shall not be construed as such.

	Job No	U18R1010A	Date	11/9/2018
	Customer	H&H Steel Erectors	Designed By	KDB
	Description	Stoneway 312		

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Nucor Building Systems
P.O. Box 907 1050 North Watery Lane
Brigham City, UT 84302

STRUCTURAL DESIGN CALCULATIONS
FOR
H&H Steel Erectors
2824 103rd Ave SE
Lake Stevens, WA 98258

Stoneway 312
17305 56th Ave NE
Arlington, WA 98223
U18R1010A

BUILDING LAYOUT

Width (ft)= 35.0
Length (ft)= 330.0
Eave Height (ft)= 30.0/ 27.1
Roof Slope (rise/12)= 1.00

BUILDING LOADS

Roof Dead Load (psf)= 3.0
Wall Dead Load
Left Endwall (psf)= 3.0
Right Endwall (psf)= 3.0
Front Sidewall (psf)= 3.0
Back Sidewall (psf)= 0.0
Live Load (psf)= 20.0
Collateral Load (psf)= 1.0
Snow Load (psf)= 25.0
Wind Speed (mph)= 115.0
Wind Code = IBC 15
Closed/Open = P
Exposure = C
Internal Wind Coeff = -0.55, +0.55
Importance - Wind = 1.00
Importance - Seismic = 1.00
Seismic Design Category= D
Seismic Coeff (Fa*Ss) = 1.16

Designer : KDB
Detailer : MBS

11/ 9/18

```
=====
U18R1010A          Design Loads For Building Components:  11/ 9/18      1:22pm
=====
```

FRONT SIDEWALL:

BASIC LOADS:

```

-----Edge_Strip_Ratio-----
Basic   Wind_Load_Ratio   Zone   Col/
Wind    Deflect   Factor   Width   Girt   Panel   Jamb
27.5    0.39    0.60    3.50    1.08    1.17    1.08
```

WIND PRESSURE/SUCTION:

```

Wind    Wind    Wind
Press   Suct    Long
34.2   -36.7          .. Girt/Header
39.9   -42.4          .. Panel
34.2   -36.7          .. Jamb
0.0    0.0          .. Parapet
```

BACK SIDEWALL:

BASIC LOADS:

```

-----Edge_Strip_Ratio-----
Basic   Wind_Load_Ratio   Zone   Col/
Wind    Deflect   Factor   Width   Girt   Panel   Jamb
27.5    0.39    0.60    3.50    1.08    1.17    1.08
```

WIND PRESSURE/SUCTION:

```

Wind    Wind    Wind
Press   Suct    Long
34.2   -36.7          .. Girt/Header
39.9   -42.4          .. Panel
34.2   -36.7          .. Jamb
0.0    0.0          .. Parapet
```

LEFT ENDWALL:

BASIC LOADS:

```

-----Edge_Strip_Ratio-----
Dead   Coll   Live   Snow   Rain   Basic   Wind_Load_Ratio   Zone   Col/
Load   Load   Load   Load   Load   Wind    Deflect   Factor   Width   Girt   Panel   Jamb
3.0    1.0    20.0   21.0   0.0    27.5    0.39    0.60    3.50    1.08    1.17    1.08
```

BASIC LOADS AT EAVE:

```

Seis    Seis    Seis    ---Torsion---
Dead    Girt    Load   Wind    Seismic
3.00    0.00    1.85    0.00    0.00
```

WIND PRESSURE/SUCTION:

Wind	Wind	
Press	Suct	
34.2	-36.7	.. Column
34.2	-36.7	.. Girt/Header
34.2	-36.7	.. Jamb
39.9	-42.4	.. Panel
49.4	-40.7	.. Parapet
41.3	-27.5	.. Transverse bracing, Facia/Parapet

WIND COEFFICIENTS:

Surf	---Wind_1--		---Wind_2--		Long	Surface
Id	Left	Right	Left	Right	Wind	Friction
1	-0.06	-0.91	1.04	0.20	-1.01	0.00
2	-0.99	-1.40	0.11	-0.30	-1.40	0.00
3	-0.90	-0.06	0.20	1.04	-1.01	0.00

COLUMN, RAFTER & BRACING DESIGN LOADS:

Load	---Live---				--Add_Snow-				Wind_1		Wind_2		Long_Wind		
Column_Wind	Long	Tran	Aux_Load												
No. Id	Dead	Coll	Roof	Floor	Snow	Drift	Slide	Rain	Left	Right	Left	Right	1	2	
Press	Suct	Seis	Seis	Id	Coef										
90 1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0	0.00										
2	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0	0.00										
3	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0	0.00										
4	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	1	1.00										
5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0	0.00										
6	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0	0.00										
7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	
0.60	0.00	0.00	0.00	0	0.00										
8	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	
0.00	0.60	0.00	0.00	0	0.00										
9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	
0.60	0.00	0.00	0.00	0	0.00										
10	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	
0.00	0.60	0.00	0.00	0	0.00										
11	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	
0.60	0.00	0.00	0.00	0	0.00										
12	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	
0.00	0.60	0.00	0.00	0	0.00										
13	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	
0.60	0.00	0.00	0.00	0	0.00										
14	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	
0.00	0.60	0.00	0.00	0	0.00										
15	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	
0.60	0.00	0.00	0.00	0	0.00										
16	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	
0.60	0.00	0.00	0.00	0	0.00										
17	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	
0.00	0.60	0.00	0.00	0	0.00										
18	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	
0.00	0.60	0.00	0.00	0	0.00										
19	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	
0.45	0.00	0.00	0.00	0	0.00										
20	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	

0.00	0.00	0.00	0.00	3	1.00									
81	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.60	0.00	0.00	0.00	0	0.00									
82	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.00	0.60	0.00	0.00	0	0.00									
83	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.60	0.00	0.00	0.00	0	0.00									
84	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.60	0.00	0.00	0	0.00									
85	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.60	0.00	0.00	0.00	0	0.00									
86	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.60	0.00	0.00	0.00	0	0.00									
87	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.60	0.00	0.00	0	0.00									
88	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.00	0.60	0.00	0.00	0	0.00									
89	1.08	1.08	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.52	0	0.00									
90	1.08	1.08	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	-0.52	0	0.00									

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load
Aux	Id	Name	Load	Id Coeff
3	1	MIN_SNOW	1	1 1.00
	2	E1PAT_SL_1	1	2 0.50
	3	E1PAT_SL_2	1	3 0.50

ADDITIONAL LOADS:

No.	Add	Loc	Basic	Load	Fx	Fy	Mom	X	Y	.. Conc
Add	Id	Id	Load	Type	W1	W2	Co	Dl1	Dl2	.. Dist
3	1	2	U_SNOW	D	-0.38	-0.38	-0.08	0.00	35.12	
	2	2	U_SNOW	D	-0.32	-0.32	-0.08	0.00	17.56	
	3	2	U_SNOW	D	-0.32	-0.32	-0.08	17.56	35.12	

RIGHT ENDWALL:

BASIC LOADS:

Dead	Coll	Live	Snow	Rain	Basic	Wind_Load_Ratio	----Edge_Strip_Ratio----					
Load	Load	Load	Load	Load	Wind	Deflect	Factor	Zone	Width	Girt	Panel	Col/Jamb
3.0	1.0	20.0	21.0	0.0	27.5	0.39	0.60		3.50	1.08	1.17	1.08

BASIC LOADS AT EAVE:

Seis	Seis	Seis	---Torsion---	
Dead	Girt	Load	Wind	Seismic
3.00	0.00	1.85	0.00	0.00

WIND PRESSURE/SUCTION:

Wind	Wind	
Press	Suct	
34.2	-36.7	.. Column
34.2	-36.7	.. Girt/Header
34.2	-36.7	.. Jamb
39.9	-42.4	.. Panel
49.4	-40.7	.. Parapet
41.3	-27.5	.. Transverse bracing, Facia/Parapet

85	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.60	0.00	0.00	0.00	0	0.00									
86	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.60	0.00	0.00	0.00	0	0.00									
87	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.60	0.00	0.00	0	0.00									
88	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.00	0.60	0.00	0.00	0	0.00									
89	1.08	1.08	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.52	0	0.00									
90	1.08	1.08	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	-0.52	0	0.00									

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load
Aux	Id	Name	Load	Id Coeff
3	1	MIN_SNOW	1	1 1.00
	2	E2PAT_SL_1	1	2 0.50
	3	E2PAT_SL_2	1	3 0.50

ADDITIONAL LOADS:

No.	Add	Loc	Basic	Load	Fx	Fy	Mom	X	Y	.. Conc
Add	Id	Id	Load	Type	W1	W2	Co	Dl1	Dl2	.. Dist
3	1	2	U_SNOW	D	-0.38	-0.38	0.08	0.00	35.12	
	2	2	U_SNOW	D	-0.32	-0.32	0.08	0.00	17.56	
	3	2	U_SNOW	D	-0.32	-0.32	0.08	17.56	35.12	

ROOFDES:

BASIC LOADS:

Dead	Coll	Live	Snow	Rain	Basic	Wind_Load_Ratio	Surface	Seis	%
Load	Load	Load	Load	Load	Wind	Deflect	Factor	Friction	Factor Snow
3.0	1.0	20.0	21.0	0.0	27.5	0.39	0.00	0.00	1.089 0.00

WIND PRESSURE/SUCTION:

Wind	Wind	Wind	
Press	Suct	Suct_Roof	
20.6	-45.4		.. Purlins
23.4	-45.4		.. Panels
26.1	7.2	-19.0	.. Long Bracing, Building
31.9	3.3		.. Long Bracing, Wall Edge Zone
41.3	-27.5	22.0	.. Long Bracing, Facia/Parapet

EDGE & CORNER ZONE WIND:

Wind Surf	No.	Zone				--Purlin---	---	Panel---	
Id	Id	Zone	Id	Width	Length	Press	Suct	Press	Suct
1	2	9	1	0.00	0.00	1.00	1.00	1.00	1.00
			3	0.00	7.00	1.00	1.24	1.00	1.30
			4	7.00	0.00	1.00	1.24	1.00	1.30
			5	0.00	7.00	1.00	1.24	1.00	1.30
			6	3.50	0.00	1.00	1.06	1.00	1.12
			7	7.00	14.00	1.00	1.30	1.00	1.91
			8	7.00	14.00	1.00	1.30	1.00	1.91
			9	7.00	7.00	1.00	1.06	1.00	1.42
			10	7.00	7.00	1.00	1.06	1.00	1.42

EDGE & CORNER ZONE WIND: LONGITUDINAL

Wind Surf	No.	Zone				Purlin
Id	Id	Zone	Id	Width	Length	Suct

1	2	1	1	0.00	0.00	1.00
2	2	1	1	0.00	0.00	1.00

PURLIN DESIGN LOADS:

Surf	--Load-	--Add_Snow-								Wind	Wind	Aux_Load	
Id	No.	Id	Dead	Coll	Live	Snow	Drift	Slide	Rain	Press	Suct	Id	Coef
2	27	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		3	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	1	1.00
		4	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		5	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
		6	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0	0.00
		7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0	0.00
		8	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0	0.00
		9	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0	0.00
		10	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0	0.00
		11	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0	0.00
		12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0	0.00
		13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0	0.00
		14	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	4	1.00
		15	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	5	1.00
		16	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	6	1.00
		17	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	7	1.00
		18	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	8	1.00
		19	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	9	1.00
		20	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	10	1.00
		21	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	11	1.00
		22	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	12	1.00
		23	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	13	1.00
		24	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	2	1.00
		25	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	3	1.00
		26	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2	-1.00
		27	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	3	-1.00

BRACING DESIGN LOADS:

--Load-					--Add_Snow-				Wind	Wind	Seis	Aux_Load	
No.	Id	Dead	Coll	Live	Snow	Drift	Slide	Rain	Press	Suct	Load	Id	Coef
14	1	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0	0.00
	2	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0	0.00
	4	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	5	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0	0.00
	6	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	7	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0	0.00
	8	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	9	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
	10	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00
	11	1.08	1.08	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
	12	1.08	1.08	0.00	0.75	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
	13	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
	14	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load
Aux	Id	Name	Load	Id Coef
13	1	MIN_SNOW	1	1 1.00
	2	PAT_SL_1	1	2 0.50
	3	PAT_SL_2	1	12 0.50
	4	PAT_SL_3	2	2 0.50
				3 0.50

5	PAT_SL_4	2	3	0.50
			4	0.50
6	PAT_SL_5	2	4	0.50
			5	0.50
7	PAT_SL_6	2	5	0.50
			6	0.50
8	PAT_SL_7	2	6	0.50
			7	0.50
9	PAT_SL_8	2	7	0.50
			8	0.50
10	PAT_SL_9	2	8	0.50
			9	0.50
11	PAT_SL10	2	9	0.50
			10	0.50
12	PAT_SL11	2	10	0.50
			11	0.50
13	PAT_SL12	2	11	0.50
			12	0.50

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fy		Dx		.. Conc
Add	Id	Id	Load	Type	W1	W2	Dx1	Dx2	.. Dist
12	1	2	U_SNOW	D	-25.0	-25.0	0.0	35.1	
	2	0	U_SNOW	D	-21.0	-21.0	0.0	30.0	
	3	0	U_SNOW	D	-21.0	-21.0	30.0	60.0	
	4	0	U_SNOW	D	-21.0	-21.0	60.0	90.0	
	5	0	U_SNOW	D	-21.0	-21.0	90.0	120.0	
	6	0	U_SNOW	D	-21.0	-21.0	120.0	150.0	
	7	0	U_SNOW	D	-21.0	-21.0	150.0	180.0	
	8	0	U_SNOW	D	-21.0	-21.0	180.0	210.0	
	9	0	U_SNOW	D	-21.0	-21.0	210.0	240.0	
	10	0	U_SNOW	D	-21.0	-21.0	240.0	270.0	
	11	0	U_SNOW	D	-21.0	-21.0	270.0	300.0	
	12	0	U_SNOW	D	-21.0	-21.0	300.0	330.0	

RIGID FRAME # 1:

BASIC LOADS:

Dead	Coll	Live	Snow	Rain	Basic	Defl	Temperature
					Wind	Ratio	Change
3.0	1.0	20.0	21.0	0.0	27.5	0.39	0

BASIC LOADS AT EAVE:

Seismic	Weak_Axis_L	Weak_Axis_R	--Torsion--	--EW_Brace--
Load	Wind	Seis	Wind	Seis
1.34	0.00	0.00	0.00	0.00

WIND COEFFICIENTS:

Surf	--Wind_1--	--Wind_2--	Long_Wind	Surface
Id	Left	Right	1	2
1	-0.15	-0.84	0.95	0.26
2	-0.92	-1.24	0.18	-0.14
3	-0.84	-0.15	0.26	0.95

DESIGN LOADS:

-Load-		---Live---	--Add_Snow-	--Wind_1-	--Wind_2-	Long_Wind
--Seismic-		Aux_Load				
No.	Id	Dead	Coll	Roof	Floor	Snow
Long	Tran	Temp	Id	Coef		
56	1	1.00	1.00	0.00	0.00	0.00

0.00	0.00	0.00	0	0.00											
	32	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00
0.00	0.00	0.00	0	0.00											
	33	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00
0.00	0.00	0.00	0	0.00											
	34	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	0.00
0.00	0.00	0.00	0	0.00											
	35	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
0.00	0.00	0.00	0	0.00											
	36	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45
0.00	0.00	0.00	0	0.00											
	37	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0	0.00											
	38	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.00	0.00	0.00	0	0.00											
	39	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0	0.00											
	40	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.00	0.00	0	0.00											
	41	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.00	0.00	0	0.00											
	42	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.60	0.00
0.00	0.00	0.00	0	0.00											
	43	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.00	0.00	0.00	0	0.00											
	44	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.60
0.00	0.00	0.00	0	0.00											
	45	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.40	0.70	0.00	0	0.00											
	46	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-0.40	-0.70	0.00	0	0.00											
	47	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.70	0.00	0.00	0	0.00											
	48	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-0.70	0.00	0.00	0	0.00											
	49	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.52	0.00	0	0.00											
	50	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	-0.52	0.00	0	0.00											
	51	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.52	0.00	0.00	0	0.00											
	52	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-0.52	0.00	0.00	0	0.00											
	53	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.70	0.00	0	0.00											
	54	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	-0.70	0.00	0	0.00											
	55	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.35	0.21	0.00	0	0.00											
	56	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-1.35	-0.21	0.00	0	0.00											

AUXILIARY LOADS:

No.	Aux	Aux	No.	Add_Load
Aux	Id	Name	Load	Id Coeff
1	1	MIN_SNOW	1	1 1.00

ADDITIONAL LOADS:

No.	Add	Surf	Basic	Load	Fx	Fy	Mom	Dx	Dy	..	Conc
Add	Id	Id	Type	Type	W1	W2	Co	D11	D12	..	Dist

1 1 2 U_SNOW D -0.75 -0.75 -0.080 0.00 35.12

U18R1010A Reactions, Anchor Bolts, & Base Plates:11/ 9/18 1:22pm

		-----Foundation_Loads(k)-----								-----		
Frame	Col	Max_Pos_Val			Max_Neg_Val			Anc._Bolt		Base_Plate		
Line	Line	Id	Horz	Vert	Id	Horz	Vert	No.	Diam	Width	Len	Thick
1	A	9	2.4	-7.8	10	-2.1	-7.8	4	0.750	8.00	7.94	0.375
		11	1.8	5.5	9	2.4	-7.8					
1	B	12	6.4	-10.5	13	-6.0	-10.5	4	0.750	8.00	10.25	0.375
		14	4.8	12.3	12	6.4	-10.5					
1	C	12	2.2	-2.3	13	-1.9	-2.3	4	0.750	8.20	12.00	0.375
		3	0.0	3.5	12	2.2	-2.3					
12	C	9	2.2	-2.3	10	-1.9	-2.3	4	0.750	8.20	12.00	0.375
		3	0.0	3.5	9	2.2	-2.3					
12	B	9	6.4	-10.5	10	-6.0	-10.5	4	0.750	8.00	10.25	0.375
		11	4.8	12.3	9	6.4	-10.5					
12	A	12	2.4	-7.8	13	-2.1	-7.8	4	0.750	8.00	7.94	0.375
		14	1.8	5.5	12	2.4	-7.8					
2*	A	1	6.5	-4.6	2	-9.1	-1.6	4	0.750	8.00	13.00	0.375
		3	2.6	17.6	4	-3.6	-11.6					
2*	C	5	8.2	-3.4	6	-7.4	-0.9	4	1.000	8.00	13.00	0.375
		7	-3.0	16.6	8	2.7	-13.4					

2* Frame Lines:2 3 4 5 6 7 8 9 10 11

LOAD COMBINATIONS:

Id Combination

- 1 Dead+0.6Wind_Right1
- 2 0.6Dead+0.6Wind_Left2
- 3 Dead+Collateral+MIN_SNOW
- 4 0.6Dead+0.6Wind_Left1
- 5 0.6Dead+0.6Wind_Right2
- 6 Dead+0.6Wind_Left1
- 7 Dead+Collateral+0.75Snow+0.45Wind_Left2
- 8 0.6Dead+0.6Wind_Right1
- 9 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
- 10 0.6Dead+0.6Wind_Left1+0.6Wind_Pressure
- 11 Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Suction
- 12 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
- 13 0.6Dead+0.6Wind_Right1+0.6Wind_Pressure
- 14 Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Suction

U18R1010A Bracing Reactions Report: 11/ 9/18 1:22pm

BUILDING BRACING REACTIONS:

		-----Reactions(k)-----							
---Wall---		Col	----Wind----		--Seismic--		Panel_Shear(lb/ft)		Notes
Loc	Line	Line	Horz	Vert	Horz	Vert	Wind	Seismic	
L_EW	1	A ,B	6.21	10.46	1.49	2.51			
F_SW	C	3 ,4	3.66	3.04	8.84	7.34			
		6 ,7	3.66	3.04	8.84	7.34			
		9 ,10	3.66	3.04	8.84	7.34			
R_EW	12	B ,A	6.21	10.46	1.49	2.51			
B_SW	A	Torsional Bracing Used!							

Reaction values shown are unfactored. Maximum load combination factors are:

Wind : 0.60

Seismic: 0.70

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U18R1010A	Additional Reactions Report:	11/ 9/18	1:22pm
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Rigid Frame Column Reactions(k)

Frame Line	Col Line	----Dead---		Collateral		----Live---		----Snow---		Wind_Left1	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2*	A	0.3	3.1	0.1	0.6	1.7	11.1	1.7	11.1	-6.4	-22.5
2*	C	-0.3	2.4	-0.1	0.5	-1.7	10.9	-1.7	10.9	-11.8	-5.5
Frame Line	Col Line	Wind_Right1		Wind_Left2		Wind_Right2		Wind_Long1		Wind_Long2	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2*	A	10.3	-12.9	-15.5	-5.8	1.1	3.8	6.9	-20.2	8.0	-18.5
2*	C	4.9	-24.7	-2.6	11.2	14.0	-8.0	-8.5	-17.4	-7.5	-19.2
Frame Line	Col Line	-Seis_Left-		-Seis_Right		-Seis_Long-		-MIN_SNOW-			
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert		
2*	A	-1.4	-2.3	1.4	2.3	-1.3	-2.0	2.2	14.0		
2*	C	-1.4	2.3	1.4	-2.3	-1.2	2.0	-2.1	13.6		

2* Frame Lines:2 3 4 5 6 7 8 9 10 11

Endwall Column Reactions(k)

Frame Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert
1	A	0.7	0.1	2.3	2.3	-3.1	-4.3	-0.2	-1.4
1	B	1.9	0.3	6.6	6.6	-8.6	-12.8	1.5	-2.7
1	C	0.6	0.1	2.2	2.2	-3.5	-4.4	0.4	-0.4

Frame Line	Col Line	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert	Seismic Left Vert	Seismic Right Vert	--MIN_SNOW-- Horz	Vert
1	A	-3.6	4.0	-4.4	-3.1	-0.03	-0.1	0.0	2.9
1	B	-10.0	10.7	-12.7	-9.0	0.1	0.1	0.0	8.3
1	C	-3.2	3.6	-4.3	-3.1	-0.03	0.03	0.0	2.8

Frame Line	Col Line	-E1PAT_SL_1- Horz	-E1PAT_SL_2- Vert	Horz	Vert
1	A	0.0	1.4	0.0	-0.2
1	B	0.0	1.7	0.0	1.7
1	C	0.0	-0.2	0.0	1.3

Frame Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert
12	C	0.6	0.1	2.2	2.2	-4.4	-3.5	-0.4	0.4
12	B	1.9	0.3	6.6	6.6	-12.8	-8.6	-2.7	1.5
12	A	0.7	0.1	2.3	2.3	-4.3	-3.1	-1.4	-0.2

Frame Line	Col Line	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert	Seismic Left Vert	Seismic Right Vert	--MIN_SNOW-- Horz	Vert
12	C	-3.2	3.6	-4.3	-3.1	0.03	-0.03	0.0	2.8
12	B	-10.0	10.7	-12.7	-9.0	0.1	0.1	0.0	8.3
12	A	-3.6	4.0	-4.4	-3.1	-0.1	-0.03	0.0	2.9

Frame Line	Col Line	-E2PAT_SL_1- Horz	-E2PAT_SL_2- Vert	Horz	Vert
12	C	0.0	1.3	0.0	-0.2
12	B	0.0	1.7	0.0	1.7
12	A	0.0	-0.2	0.0	1.4

U18R1010A	Seismic Design Report:	11/ 9/18	1:22pm
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Building Data

Code	=IBC 15
Length	= 330.00
Width	= 35.00

Left Eave Height = 30.00
Right Eave Height = 27.08

Seismic Formula

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Base Shear, V      = 0.667*Ie*Fa*Ss*W/R

Vmin              = 0.044*Sds*Ie*W
Vmax              = Sd1*Ie*W/(T*R)

T(Moment_Frame)   = 0.409
Shear Force, E    = Rho*V
(Rigid frame, endwall frame, wind bent, wind column & base reactions)

T(Braced_Frame)   = 0.247
Shear Force, Em   = Omega*V
(Wall diagonal bracing, splice at rigid frame & wind bent knee)

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Note: Applied load is seismic force multiplied by load combination

Fa*Ss	=	1.162
Zone/Design Category	=	D
Ie	=	1.000
S1	=	0.426
Sd1	=	0.447
Sds	=	0.775

Seismic Dead Load, W

Frame	Dead	=	3.00 (psf)		
Roof	Dead	=	3.00 (psf)		
Collateral		=	1.00 (psf)		
Roof	Total	=	7.00 (psf)	, Weight=	80.85 (k)
L_EW	Dead	=	3.00 (psf)	, Weight=	1.50 (k)
F_SW	Dead	=	3.00 (psf)	, Weight=	13.41 (k)
R_EW	Dead	=	3.00 (psf)	, Weight=	1.50 (k)
B_SW	Dead	=	0.00 (psf)	, Weight=	0.00 (k)

				Total =	97.25 (k)

Seismic Forces

Roof Bracing

R = 3.25, Rho= 1.30
 Cs = 0.2385
 W = 83.85 (k)
 Force, V = 20.00 (k)
 Force, E = 26.00 (k)

Sidewall Bracing

Front R = 3.25, Rho= 1.30, Omega= 2.00
 Cs = 0.2385
 W = 105.94 (k)
 Force, V = 25.27 (k)
 Force, Em = 50.54 (k)
 Force, E = 32.85 (k)

Endwall Bracing

Left	R =	3.25,	Rho=	1.30,	Omega=	2.00
	Cs =	0.2385				
	W =	5.95 (k)				
	Force, V =	1.42 (k)				
	Force, Em =	2.84 (k)				
	Force, E =	1.85 (k)				
Right	R =	3.25,	Rho=	1.30,	Omega=	2.00
	Cs =	0.2385				
	W =	5.95 (k)				
	Force, V =	1.42 (k)				
	Force, Em =	2.84 (k)				
	Force, E =	1.85 (k)				

Rigid Frames

	R =	3.50,	Rho=	1.30
	Cs =	0.2215		
Frame 1	W =	9.31 (k)		
	Force, V =	2.06 (k)		
	Force, E =	2.68 (k)		

End Plates

Frame	R =	3.50,	Rho=	1.00,	Omega=	3.00
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Total Base Shear

Longitudinal

Force, V =	25.27 (k)
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Transverse

Force, V =	23.45 (k)
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[illegible]

30.0000 1
30.0000 1
30.0000 1

*(11)WALL OPENINGS:

Member_Select		Bay		JambL/	JambR/	Sill	Base	Set	Panel		
*No.	Id	Id	Width	Height	Offset	Type	Height	Elev	Depth	Opt	Jamb
Header	Header	Sill									
0											

*(12)PARTIAL WALLS:

Panel		Deflect_Limit		Jamb Base		Top Full_Load								
*No.	Id	Use	Opt	Start	End	Start	End	Height	Type	Type	Type	Girt	Col	Part
Opt	Girt	Panel												
0														

*(13)GIRT DESIGN:

*Girt	--Flange_Strap--	Set	Set	Max		
*Type	Out	In	Space	Depth	Lap	Space
'ZB'	'C'	'N'	10.0000	0.000	0.0000	7.5000

*(14)GIRT LOCATION:

*Set	No.	Girt
*Loc	Girt	Location
'Y'	5	3.7500 7.5000 13.7500 18.7500 23.7500

*(15)SPECIAL GIRT:

--Bay_Id--							
*No.	Start	End	Height	Type	Rot	Part	Use
0							

*(16)PANELS/GUTTERS:

*Wall	-----Gutter-----		-----Insulation-----		Stand		
*Panel	Use	Type	Width	Use	Thick	Part	Seam
'CW6-80	'-'	'Y'	0.000	'O'	4.000	'-----'	'N'

*(17)LINER PANELS:

--Bay_Id-				
*No.	Start	End	Height	Part
0				

*(18)FACIA/PARAPET:

-Bay_Id--		Edge_Extend		Ext						
*No.	Id	Type	Opt	Start	End	Elev	Height	Left	Right	Mount
0										

*(19)FACIA/PARAPET GIRTS:

*Ext	----Top----	--Interior-	---Gutter--	---Back_Panel---	Angle	Beam				
*Id	Type	Rotate	Type	Rotate	Type	Rotate	Part	Rotate	Spacing	Lap

*(20)BASIC LOADS:

---Deflection---		Wind				
*Basic	Load_Ratio	Load	---Seismic---			
*Wind	Snow	Wind	Seis	Factor	Dead	Coeff
27.5	1.00	0.39	1.00	0.60	3.00	0.0000

*(21)EDGE ZONE:

-Left_Zone--		-Right_Zone-		Jamb/		
Width	Base	Width	Base	Girt	Panel	Column
3.500	0.000	3.500	0.000	1.08	1.17	1.08

*(22)WIND PRESSURE/SUCTION:

Wind	Wind	
Pressure	Suction	
34.2	-36.7	.. Girt/Header
39.9	-42.4	.. Panel
34.2	-36.7	.. Jamb
0.0	0.0	.. Parapet Girt

*(23)GIRT LAPS:

Data	-----Set_1-----		-----Set_2-----		-----Set_3-----					
Opt	Sets	Left	Right	Quan	Left	Right	Quan	Left	Right	Quan
'-'	0									

*(24)GIRT STRAPS:

Data	---Set_1---	---Set_2---	---Set_3---	---Set_4---					
Opt	Sets	Strap	Quan	Strap	Quan	Strap	Quan	Strap	Quan
'-'	0								

*(25)EXPANSION JOINTS:

No.	Expansion_Location
0	

*(26)BEAMS:

No.	Bay		
Beam	Id Use	Offset	Height
0			

*(27)DESIGN CODE OPTIONS:

No.	Event	Condition
0		

*(28)PANEL SCREWS:

No.					Washer		-----Spacing-----		
Zone	Zone	Part	Dia	Limit	Dia				
2	'INT'	'H1040'	0.216	2.800	0.446	12.000	6.000	0.000	
	'EDGE'	'H1040'	0.216	2.800	0.446	12.000	6.000	0.000	

* Code files used:

* IBC.15
 * EW_IBC.15 Version 4.0

```

=====
U18R1010A          Wall 2 - Design Code          11/ 9/18  1:22pm
=====
  
```

STRUCTURAL CODE:

Design Basis : WS - Working Stress
 Hot Rolled Steel : AISC10
 Cold Formed Steel : NAUS12

BUILDING CODE:

Wind Code : IBC 15
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)

Cold Formed Steel : 29500 (ksi)

U18R1010A

Wall 2 - Bypass Girt Layout

11/ 9/18 1:22pm

GIRT LAYOUT:

Locate	Des Id	Bay Id	Part	Bay_Offset		Design Length	---Extend---		Weight	----Max_Load----			
				Start	End		Left	Right		Id	UC	Report	Rot
3.75	1	1	10Z067	0.00	30.00	29.67	0.00	3.50	124.2	WS 0.99	Moment	D	
		2	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		3	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.67	Mom+Shr	D	
		4	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.67	Mom+Shr	D	
		5	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.65	Mom+Shr	D	
		6	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.65	Mom+Shr	D	
		7	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.65	Mom+Shr	D	
		8	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.67	Mom+Shr	D	
		9	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.67	Mom+Shr	D	
		10	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		11	10Z067	0.00	30.00	29.67	3.50	0.00	124.2	WS 0.99	Moment	D	
7.50	2	1	10Z089	0.00	30.00	29.67	0.00	3.50	165.0	WS 0.89	Moment	D	
		2	10Z067	0.00	30.00	30.00	3.50	3.50	138.5	WS 0.91	Mom+Shr	D	
		3	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		4	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		5	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		6	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		7	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		8	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		9	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		10	10Z067	0.00	30.00	30.00	3.50	3.50	138.5	WS 0.91	Mom+Shr	D	
		11	10Z089	0.00	30.00	29.67	3.50	0.00	165.0	WS 0.89	Moment	D	
13.75	3	1	10Z089	0.00	30.00	29.67	0.00	3.50	165.0	WS 1.00	Moment	D	
		2	10Z067	0.00	30.00	30.00	3.50	3.50	138.5	WS 1.03	Mom+Shr	D	
		3	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 1.00	Mom+Shr	D	
		4	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 1.00	Mom+Shr	D	
		5	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.98	Mom+Shr	D	
		6	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.98	Mom+Shr	D	
		7	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.98	Mom+Shr	D	
		8	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 1.00	Mom+Shr	D	
		9	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 1.00	Mom+Shr	D	
		10	10Z067	0.00	30.00	30.00	3.50	3.50	138.5	WS 1.03	Mom+Shr	D	
		11	10Z089	0.00	30.00	29.67	3.50	0.00	165.0	WS 1.00	Moment	D	
18.75	4	1	10Z089	0.00	30.00	29.67	0.00	3.50	165.0	WS 0.89	Moment	D	
		2	10Z067	0.00	30.00	30.00	3.50	3.50	138.5	WS 0.91	Mom+Shr	D	
		3	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		4	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		5	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		6	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		7	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.87	Mom+Shr	D	
		8	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		9	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS 0.89	Mom+Shr	D	
		10	10Z067	0.00	30.00	30.00	3.50	3.50	138.5	WS 0.91	Mom+Shr	D	

		11	10Z089	0.00	30.00	29.67	3.50	0.00	165.0	WS	0.89	Moment	D
23.75	5	1	10Z075	0.00	30.00	29.67	0.00	3.50	139.0	WS	0.90	Moment	D
		2	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.93	Mom+Shr	D
		3	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.73	Mom+Shr	D
		4	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.73	Mom+Shr	D
		5	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.71	Mom+Shr	D
		6	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.71	Mom+Shr	D
		7	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.71	Mom+Shr	D
		8	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.73	Mom+Shr	D
		9	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.73	Mom+Shr	D
		10	10Z060	0.00	30.00	30.00	3.50	3.50	124.1	WS	0.93	Mom+Shr	D
		11	10Z075	0.00	30.00	29.67	3.50	0.00	139.0	WS	0.90	Moment	D

WS - 0.6Wind_Suction

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay

1	2	3	4	5	6	7	8	9	10	11
0	0	0	0	0	0	0	0	0	0	0

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U18R1010A Wall 2 - Girt Design 1 (Locate 3.75) 11/ 9/18 1:22pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	10Z067	3.7500	29.67		3.50	3.75	0	124.2	0.00	0.70
2	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
3	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
4	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
5	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
6	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
7	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
8	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
9	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
10	10Z060	3.7500	30.00	3.50	3.50	3.75	0	124.1	0.00	0.70
11	10Z067	3.7500	29.67	3.50		3.75	0	124.2	0.00	0.70

									1364.9	

LOAD ID:0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Lap	Right Sup	Right Loc
1	0.87		-1.14	-1.41	0.00		-4.92	11.30	3.58	8.06
2	1.23	0.96	-0.81	-1.08	8.06	4.22	-1.80	16.00	2.44	5.74
3	1.13	0.86	-0.91	-1.18	5.74	2.25	-2.56	14.69	2.81	6.46
4	1.16	0.89	-0.88	-1.15	6.46	2.86	-2.31	15.10	2.69	6.23

5	1.15	0.88	-0.89	-1.16	6.24	2.67	-2.39	14.97	2.72	6.30
6	1.15	0.88	-0.88	-1.15	6.30	2.73	-2.36	15.00	2.73	6.30
7	1.16	0.89	-0.88	-1.15	6.30	2.72	-2.39	15.03	2.67	6.23
8	1.15	0.88	-0.89	-1.16	6.24	2.69	-2.31	14.90	2.86	6.46
9	1.18	0.91	-0.86	-1.13	6.46	2.81	-2.56	15.31	2.25	5.74
10	1.08	0.81	-0.96	-1.23	5.74	2.44	-1.80	14.00	4.22	8.06
11	1.41	1.14		-0.87	8.06	3.58	-4.92	18.36		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.14	2.82	0.41	MidS	-4.92	7.62	0.64	RLap	0.62	-1.28	
2	LLap	0.96	2.02	0.48	LLap	4.22	5.35	0.79	LLap	0.81	-0.21	
3	RLap	-0.91	2.02	0.45	RLap	2.81	5.47	0.51	RLap	0.62	-0.58	
4	LLap	0.89	2.02	0.44	LLap	2.86	5.45	0.53	LLap	0.62	-0.46	
5	RLap	-0.89	2.02	0.44	RLap	2.72	5.47	0.50	RLap	0.61	-0.50	
6	RLap	-0.88	2.02	0.44	RLap	2.73	5.47	0.50	RLap	0.61	-0.48	
7	LLap	0.89	2.02	0.44	LLap	2.72	5.47	0.50	LLap	0.61	-0.50	
8	RLap	-0.89	2.02	0.44	RLap	2.86	5.45	0.53	RLap	0.62	-0.46	
9	LLap	0.91	2.02	0.45	LLap	2.81	5.47	0.51	LLap	0.62	-0.58	
10	RLap	-0.96	2.02	0.48	RLap	4.22	5.35	0.79	RLap	0.81	-0.21	
11	LLap	1.14	2.82	0.41	MidS	-4.92	7.62	0.64	LLap	0.62	-1.28	

UNBRACE LENGTHS:

Bay	Major	Minor(ft)						Cb								
	Mom1/Mom2															
	Id	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
RSup																
	1	29.7	1.0	1.0	1.0	3.6	3.5	1.00	1.00	1.00	1.73	1.30	1.00	1.00	1.00	0.00
0.44	2	30.0	3.5	5.7	1.0	3.7	3.5	1.25	1.82	1.00	1.77	1.32	0.52	0.00	1.00	0.00
0.43	3	30.0	3.5	3.5	1.0	3.7	3.5	1.35	1.35	1.00	1.76	1.31	0.39	0.39	1.00	0.00
0.43	4	30.0	3.5	3.8	1.0	3.7	3.5	1.31	1.77	1.00	1.76	1.32	0.44	0.00	1.00	0.00
0.43	5	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43	6	30.0	3.5	3.7	1.0	3.7	3.5	1.31	1.76	1.00	1.76	1.31	0.43	0.00	1.00	0.00
0.43	7	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43	8	30.0	3.5	3.7	1.0	3.8	3.5	1.32	1.76	1.00	1.77	1.31	0.43	0.00	1.00	0.00
0.44	9	30.0	3.5	3.7	1.0	3.0	3.5	1.31	1.76	1.00	1.74	1.35	0.43	0.00	1.00	0.00
0.39	10	30.0	3.5	3.7	1.0	5.7	3.5	1.32	1.77	1.00	1.82	1.25	0.43	0.00	1.00	0.00
0.52	11	29.7	3.5	3.6	1.0	1.0	1.0	1.30	1.73	1.00	1.00	1.00	0.44	0.00	1.00	1.00
1.00																

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

1.00	1	29.7	22.6	22.6	22.6	1.0	1.0	1.14	1.14	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	2	30.0	1.0	1.0	13.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	3	30.0	1.0	1.0	16.3	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	4	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	5	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	6	30.0	1.0	1.0	15.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	7	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	8	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	9	30.0	1.0	1.0	16.3	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	10	30.0	1.0	1.0	13.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	11	29.7	1.0	1.0	22.6	22.6	22.6	1.00	1.00	1.14	1.14	1.14	1.00	1.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.65	2.65	2.11	0.31
2	0.58	2.65	1.89	0.31	0.44	2.65	1.89	0.23
3	0.44	2.65	1.89	0.23	0.50	2.65	1.89	0.26
4	0.50	2.65	1.89	0.26	0.48	2.65	1.89	0.25
5	0.48	2.65	1.89	0.25	0.48	2.65	1.89	0.26
6	0.48	2.65	1.89	0.26	0.48	2.65	1.89	0.26
7	0.48	2.65	1.89	0.26	0.48	2.65	1.89	0.25
8	0.48	2.65	1.89	0.25	0.50	2.65	1.89	0.26
9	0.50	2.65	1.89	0.26	0.44	2.65	1.89	0.23
10	0.44	2.65	1.89	0.23	0.58	2.65	1.89	0.31
11	0.65	2.65	2.11	0.31				

DEFLECTION: (Working Load)

Span	Wind_Pressure		Wind_Suction	
Id	Calc	Limit	Calc	Limit
1	-0.83	3.96	0.90	3.96
2	-0.14	4.00	0.15	4.00
3	-0.37	4.00	0.40	4.00
4	-0.30	4.00	0.32	4.00
5	-0.32	4.00	0.35	4.00
6	-0.31	4.00	0.34	4.00
7	-0.32	4.00	0.35	4.00
8	-0.30	4.00	0.32	4.00
9	-0.37	4.00	0.40	4.00
10	-0.14	4.00	0.15	4.00

11 -0.83 3.96 0.90 3.96

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U18R1010A Wall 2 - Girt Design 2 (Locate 7.50) 11/ 9/18 1:22pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	10Z089	7.5000	29.67		3.50	5.00	0	165.0	0.00	0.70
2	10Z067	7.5000	30.00	3.50	3.50	5.00	0	138.5	0.00	0.70
3	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
4	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
5	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
6	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
7	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
8	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
9	10Z060	7.5000	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
10	10Z067	7.5000	30.00	3.50	3.50	5.00	0	138.5	0.00	0.70
11	10Z089	7.5000	29.67	3.50		5.00	0	165.0	0.00	0.70

									1475.4	

LOAD ID:0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Lap	Right Sup	
1	1.17		-1.52	-1.88	0.00		-6.62	11.36	4.62	10.56
2	1.63	1.27	-1.09	-1.44	10.56	5.48	-2.43	15.92	3.31	7.74
3	1.51	1.15	-1.21	-1.57	7.74	3.08	-3.38	14.73	3.73	8.58
4	1.55	1.19	-1.17	-1.53	8.58	3.80	-3.09	15.09	3.59	8.32
5	1.54	1.18	-1.18	-1.54	8.32	3.57	-3.18	14.98	3.63	8.40
6	1.54	1.18	-1.18	-1.54	8.40	3.64	-3.15	15.00	3.64	8.40
7	1.54	1.18	-1.18	-1.54	8.40	3.63	-3.18	15.02	3.57	8.32
8	1.53	1.17	-1.19	-1.55	8.32	3.59	-3.09	14.91	3.80	8.58
9	1.57	1.21	-1.15	-1.51	8.58	3.73	-3.38	15.27	3.08	7.74
10	1.44	1.09	-1.27	-1.63	7.74	3.31	-2.43	14.08	5.48	10.56
11	1.88	1.52		-1.17	10.56	4.62	-6.62	18.30		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.52	6.64	0.23	MidS	-6.62	10.80	0.61	RSup	0.55	-1.32	
2	LLap	1.27	2.82	0.45	LLap	5.48	6.29	0.87	LLap	0.85	-0.27	
3	RLap	-1.21	2.02	0.60	RLap	3.73	5.47	0.68	RLap	0.83	-0.75	
4	LLap	1.19	2.02	0.59	LLap	3.80	5.46	0.70	LLap	0.83	-0.62	
5	RLap	-1.18	2.02	0.58	RLap	3.63	5.47	0.66	RLap	0.81	-0.66	
6	LLap	1.18	2.02	0.58	RLap	3.64	5.47	0.67	LLap	0.81	-0.64	
7	LLap	1.18	2.02	0.58	LLap	3.63	5.47	0.66	LLap	0.81	-0.66	
8	RLap	-1.19	2.02	0.59	RLap	3.80	5.46	0.70	RLap	0.83	-0.62	

9	LLap	1.21	2.02	0.60	LLap	3.73	5.47	0.68	LLap	0.83	-0.75
10	RLap	-1.27	2.82	0.45	RLap	5.48	6.29	0.87	RLap	0.85	-0.27
11	LLap	1.52	6.64	0.23	MidS	-6.62	10.80	0.61	LSup	0.55	-1.32

UNBRACE LENGTHS:

Bay	Major	-----Minor(ft)-----					-----Cb-----								
-----Mom1/Mom2-----															
Id	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
RSup															
1	29.7	1.0	1.0	1.0	3.4	3.5	1.00	1.00	1.00	1.73	1.31	1.00	1.00	1.00	0.00
0.44															
2	30.0	3.5	5.5	1.0	3.7	3.5	1.25	1.81	1.00	1.77	1.32	0.52	0.00	1.00	0.00
0.43															
3	30.0	3.5	3.5	1.0	3.7	3.5	1.34	1.34	1.00	1.76	1.31	0.40	0.40	1.00	0.00
0.43															
4	30.0	3.5	3.8	1.0	3.7	3.5	1.31	1.77	1.00	1.76	1.32	0.44	0.00	1.00	0.00
0.43															
5	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43															
6	30.0	3.5	3.7	1.0	3.7	3.5	1.31	1.76	1.00	1.76	1.31	0.43	0.00	1.00	0.00
0.43															
7	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43															
8	30.0	3.5	3.7	1.0	3.8	3.5	1.32	1.76	1.00	1.77	1.31	0.43	0.00	1.00	0.00
0.44															
9	30.0	3.5	3.7	1.0	3.1	3.5	1.31	1.76	1.00	1.75	1.34	0.43	0.00	1.00	0.00
0.40															
10	30.0	3.5	3.7	1.0	5.5	3.5	1.32	1.77	1.00	1.81	1.25	0.43	0.00	1.00	0.00
0.52															
11	29.7	3.5	3.5	1.0	1.0	1.0	1.31	1.31	1.00	1.00	1.00	0.44	0.44	1.00	1.00
1.00															

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.86	2.65	2.80	0.32
2	0.65	2.65	2.11	0.31	0.58	2.65	2.11	0.28
3	0.52	2.65	1.89	0.28	0.61	2.65	1.89	0.32
4	0.61	2.65	1.89	0.32	0.59	2.65	1.89	0.31
5	0.59	2.65	1.89	0.31	0.60	2.65	1.89	0.32
6	0.60	2.65	1.89	0.32	0.60	2.65	1.89	0.32
7	0.60	2.65	1.89	0.32	0.59	2.65	1.89	0.31
8	0.59	2.65	1.89	0.31	0.61	2.65	1.89	0.32
9	0.61	2.65	1.89	0.32	0.52	2.65	1.89	0.28
10	0.58	2.65	2.11	0.28	0.65	2.65	2.11	0.31
11	0.86	2.65	2.80	0.32				

LOAD ID:0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-1.28		1.63	2.02	0.00		7.13	11.50	-4.96	-11.35
2	-1.75	-1.37	1.16	1.55	-11.35	-5.89	2.61	15.92	-3.55	-8.31
3	-1.62	-1.24	1.30	1.68	-8.31	-3.31	3.63	14.73	-4.00	-9.21
4	-1.66	-1.28	1.26	1.64	-9.21	-4.07	3.31	15.09	-3.86	-8.93
5	-1.65	-1.26	1.27	1.65	-8.93	-3.83	3.42	14.98	-3.90	-9.01
6	-1.65	-1.27	1.27	1.65	-9.01	-3.90	3.38	15.00	-3.90	-9.01
7	-1.65	-1.27	1.26	1.65	-9.01	-3.90	3.42	15.02	-3.83	-8.93
8	-1.64	-1.26	1.28	1.66	-8.93	-3.86	3.31	14.91	-4.07	-9.21
9	-1.68	-1.30	1.24	1.62	-9.21	-4.00	3.63	15.27	-3.31	-8.31
10	-1.55	-1.16	1.37	1.75	-8.31	-3.55	2.61	14.08	-5.89	-11.35
11	-2.02	-1.63		1.28	-11.35	-4.96	7.13	18.17		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.63	6.64	0.25	MidS	7.13	8.02	0.89	RSup	0.59	1.42	
2	LLap	-1.37	2.82	0.48	LLap	-5.89	7.62	0.77	LLap	0.91	0.29	
3	RLap	1.30	2.02	0.64	MidS	3.63	4.54	0.80	RLap	0.89	0.81	
4	LLap	-1.28	2.02	0.63	MidS	3.31	4.54	0.73	LLap	0.89	0.66	
5	RLap	1.27	2.02	0.63	MidS	3.42	4.54	0.75	RLap	0.87	0.71	
6	LLap	-1.27	2.02	0.63	MidS	3.38	4.54	0.74	LLap	0.87	0.69	
7	LLap	-1.27	2.02	0.63	MidS	3.42	4.54	0.75	LLap	0.87	0.71	
8	RLap	1.28	2.02	0.63	MidS	3.31	4.54	0.73	RLap	0.89	0.66	
9	LLap	-1.30	2.02	0.64	MidS	3.63	4.54	0.80	LLap	0.89	0.81	
10	RLap	1.37	2.82	0.48	RLap	-5.89	7.62	0.77	RLap	0.91	0.29	
11	LLap	-1.63	6.64	0.25	MidS	7.13	8.02	0.89	LSup	0.59	1.42	

UNBRACE LENGTHS:

Bay	Major		-----Minor(ft)-----					-----Cb-----								
	Mom1	Mom2	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
Id	(ft)															
RSup																
1.00	1	29.7	22.7	22.7	22.7	1.0	1.0	1.14	1.14	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	2	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	3	30.0	1.0	1.0	16.2	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	4	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	5	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	6	30.0	1.0	1.0	15.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	7	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	8	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	9	30.0	1.0	1.0	16.2	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	10	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00

1.00
 11 29.7 1.0 1.0 22.7 22.7 22.7 1.00 1.00 1.14 1.14 1.14 1.00 1.00 1.00 1.00
 1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.92	2.65	2.80	0.35
2	0.70	2.65	2.11	0.33	0.63	2.65	2.11	0.30
3	0.56	2.65	1.89	0.30	0.66	2.65	1.89	0.35
4	0.66	2.65	1.89	0.35	0.64	2.65	1.89	0.34
5	0.64	2.65	1.89	0.34	0.64	2.65	1.89	0.34
6	0.64	2.65	1.89	0.34	0.64	2.65	1.89	0.34
7	0.64	2.65	1.89	0.34	0.64	2.65	1.89	0.34
8	0.64	2.65	1.89	0.34	0.66	2.65	1.89	0.35
9	0.66	2.65	1.89	0.35	0.56	2.65	1.89	0.30
10	0.63	2.65	2.11	0.30	0.70	2.65	2.11	0.33
11	0.92	2.65	2.80	0.35				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction	
	Calc	Limit	Calc	Limit
1	-0.86	3.96	0.92	3.96
2	-0.18	4.00	0.19	4.00
3	-0.49	4.00	0.53	4.00
4	-0.40	4.00	0.43	4.00
5	-0.43	4.00	0.46	4.00
6	-0.42	4.00	0.45	4.00
7	-0.43	4.00	0.46	4.00
8	-0.40	4.00	0.43	4.00
9	-0.49	4.00	0.53	4.00
10	-0.18	4.00	0.19	4.00
11	-0.86	3.96	0.92	3.96

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U18R1010A          Wall 2 - Girt Design  3 (Locate 13.75)    11/ 9/18  1:22pm
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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	10Z089	13.7500	29.67		3.50	5.63	0	165.0	0.00	0.70
2	10Z067	13.7500	30.00	3.50	3.50	5.63	0	138.5	0.00	0.70
3	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70
4	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70
5	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70
6	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70
7	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70

8	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70
9	10Z060	13.7500	30.00	3.50	3.50	5.63	0	124.1	0.00	0.70
10	10Z067	13.7500	30.00	3.50	3.50	5.63	0	138.5	0.00	0.70
11	10Z089	13.7500	29.67	3.50		5.63	0	165.0	0.00	0.70

1475.4

LOAD ID:0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	1.31		-1.71	-2.11	0.00		-7.45	11.36	5.20	11.88
2	1.84	1.43	-1.22	-1.63	11.88	6.16	-2.74	15.92	3.73	8.71
3	1.70	1.30	-1.36	-1.76	8.71	3.47	-3.81	14.73	4.19	9.66
4	1.74	1.34	-1.32	-1.72	9.66	4.27	-3.48	15.09	4.04	9.36
5	1.73	1.32	-1.33	-1.73	9.36	4.02	-3.58	14.98	4.08	9.45
6	1.73	1.33	-1.33	-1.73	9.45	4.09	-3.54	15.00	4.09	9.45
7	1.73	1.33	-1.32	-1.73	9.45	4.08	-3.58	15.02	4.02	9.36
8	1.72	1.32	-1.34	-1.74	9.36	4.04	-3.48	14.91	4.27	9.66
9	1.76	1.36	-1.30	-1.70	9.66	4.19	-3.81	15.27	3.47	8.71
10	1.63	1.22	-1.43	-1.84	8.71	3.73	-2.74	14.08	6.16	11.88
11	2.11	1.71		-1.31	11.88	5.20	-7.45	18.30		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.71	6.64	0.26	MidS	-7.45	10.80	0.69	RSup	0.62	-1.49	
2	LLap	1.43	2.82	0.51	LLap	6.16	6.29	0.98	LLap	0.95	-0.30	
3	RLap	-1.36	2.02	0.67	RLap	4.19	5.47	0.77	RLap	0.93	-0.85	
4	LLap	1.34	2.02	0.66	LLap	4.27	5.46	0.78	LLap	0.93	-0.70	
5	RLap	-1.33	2.02	0.66	RLap	4.08	5.47	0.75	RLap	0.91	-0.74	
6	LLap	1.33	2.02	0.66	LLap	4.09	5.47	0.75	LLap	0.91	-0.73	
7	LLap	1.33	2.02	0.66	LLap	4.08	5.47	0.75	LLap	0.91	-0.74	
8	RLap	-1.34	2.02	0.66	RLap	4.27	5.46	0.78	RLap	0.93	-0.70	
9	LLap	1.36	2.02	0.67	LLap	4.19	5.47	0.77	LLap	0.93	-0.85	
10	RLap	-1.43	2.82	0.51	RLap	6.16	6.29	0.98	RLap	0.95	-0.30	
11	LLap	1.71	6.64	0.26	MidS	-7.45	10.80	0.69	LSup	0.62	-1.49	

UNBRACE LENGTHS:

Bay Id	Major (ft)	-----Minor(ft)-----						-----Cb-----							
		LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
1	29.7	1.0	1.0	1.0	3.4	3.5	1.00	1.00	1.00	1.73	1.31	1.00	1.00	1.00	0.00
2	30.0	3.5	5.5	1.0	3.7	3.5	1.25	1.81	1.00	1.77	1.32	0.52	0.00	1.00	0.00
3	30.0	3.5	3.5	1.0	3.7	3.5	1.34	1.34	1.00	1.76	1.31	0.40	0.40	1.00	0.00
4	30.0	3.5	3.8	1.0	3.7	3.5	1.31	1.77	1.00	1.76	1.32	0.44	0.00	1.00	0.00

0.43	5	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43	6	30.0	3.5	3.7	1.0	3.7	3.5	1.31	1.76	1.00	1.76	1.31	0.43	0.00	1.00	0.00
0.43	7	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.44	8	30.0	3.5	3.7	1.0	3.8	3.5	1.32	1.76	1.00	1.77	1.31	0.43	0.00	1.00	0.00
0.40	9	30.0	3.5	3.7	1.0	3.1	3.5	1.31	1.76	1.00	1.75	1.34	0.43	0.00	1.00	0.00
0.52	10	30.0	3.5	3.7	1.0	5.5	3.5	1.32	1.77	1.00	1.81	1.25	0.43	0.00	1.00	0.00
1.00	11	29.7	3.5	3.5	1.0	1.0	1.0	1.31	1.31	1.00	1.00	1.00	0.44	0.44	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.97	2.65	2.80	0.36
2	0.73	2.65	2.11	0.35	0.66	2.65	2.11	0.31
3	0.59	2.65	1.89	0.31	0.69	2.65	1.89	0.36
4	0.69	2.65	1.89	0.36	0.67	2.65	1.89	0.35
5	0.67	2.65	1.89	0.35	0.67	2.65	1.89	0.36
6	0.67	2.65	1.89	0.36	0.67	2.65	1.89	0.36
7	0.67	2.65	1.89	0.36	0.67	2.65	1.89	0.35
8	0.67	2.65	1.89	0.35	0.69	2.65	1.89	0.36
9	0.69	2.65	1.89	0.36	0.59	2.65	1.89	0.31
10	0.66	2.65	2.11	0.31	0.73	2.65	2.11	0.35
11	0.97	2.65	2.80	0.36				

LOAD ID:0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-1.44		1.84	2.27	0.00		8.02	11.50	-5.58	-12.77
2	-1.97	-1.54	1.31	1.74	-12.77	-6.62	2.93	15.92	-4.00	-9.34
3	-1.82	-1.39	1.46	1.89	-9.34	-3.72	4.08	14.73	-4.50	-10.36
4	-1.87	-1.44	1.41	1.85	-10.37	-4.58	3.73	15.09	-4.34	-10.05
5	-1.85	-1.42	1.43	1.86	-10.05	-4.31	3.84	14.98	-4.38	-10.14
6	-1.86	-1.42	1.42	1.86	-10.14	-4.39	3.80	15.00	-4.39	-10.14
7	-1.86	-1.43	1.42	1.85	-10.14	-4.38	3.84	15.02	-4.31	-10.05
8	-1.85	-1.41	1.44	1.87	-10.05	-4.34	3.73	14.91	-4.58	-10.36
9	-1.89	-1.46	1.39	1.82	-10.37	-4.50	4.08	15.27	-3.72	-9.34
10	-1.74	-1.31	1.54	1.97	-9.34	-4.00	2.93	14.08	-6.62	-12.77
11	-2.27	-1.84		1.44	-12.77	-5.58	8.02	18.17		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit

1	RLap	1.84	6.64	0.28	MidS	8.02	8.02	1.00	RSup	0.66	1.60
2	LLap	-1.54	2.82	0.55	LLap	-6.62	7.62	0.87	LLap	1.03	0.32
3	RLap	1.46	2.02	0.72	MidS	4.08	4.54	0.90	RLap	1.00	0.91
4	LLap	-1.44	2.02	0.71	MidS	3.73	4.54	0.82	LLap	1.00	0.75
5	RLap	1.43	2.02	0.71	MidS	3.84	4.54	0.85	RLap	0.98	0.80
6	LLap	-1.42	2.02	0.70	MidS	3.80	4.54	0.84	LLap	0.98	0.78
7	LLap	-1.43	2.02	0.71	MidS	3.84	4.54	0.85	LLap	0.98	0.80
8	RLap	1.44	2.02	0.71	MidS	3.73	4.54	0.82	RLap	1.00	0.75
9	LLap	-1.46	2.02	0.72	MidS	4.08	4.54	0.90	LLap	1.00	0.91
10	RLap	1.54	2.82	0.55	RLap	-6.62	7.62	0.87	RLap	1.03	0.32
11	LLap	-1.84	6.64	0.28	MidS	8.02	8.02	1.00	LSup	0.66	1.60

UNBRACE LENGTHS:

Bay	Major	-----Minor(ft)-----						-----Cb-----											
-----Mom1/Mom2-----																			
	Id	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap			
RSup																			
	1	29.7	22.7	22.7	22.7	1.0	1.0	1.14	1.14	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	2	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	3	30.0	1.0	1.0	16.2	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	4	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	5	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	6	30.0	1.0	1.0	15.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	7	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	8	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	9	30.0	1.0	1.0	16.2	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	10	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00			
1.00	11	29.7	1.0	1.0	22.7	22.7	22.7	1.00	1.00	1.14	1.14	1.14	1.00	1.00	1.00	1.00			

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC

1					1.04	2.65	2.80	0.39
2	0.79	2.65	2.11	0.37	0.70	2.65	2.11	0.33
3	0.63	2.65	1.89	0.33	0.74	2.65	1.89	0.39
4	0.74	2.65	1.89	0.39	0.72	2.65	1.89	0.38
5	0.72	2.65	1.89	0.38	0.72	2.65	1.89	0.38
6	0.72	2.65	1.89	0.38	0.72	2.65	1.89	0.38
7	0.72	2.65	1.89	0.38	0.72	2.65	1.89	0.38
8	0.72	2.65	1.89	0.38	0.74	2.65	1.89	0.39

9	0.74	2.65	1.89	0.39	0.63	2.65	1.89	0.33
10	0.70	2.65	2.11	0.33	0.79	2.65	2.11	0.37
11	1.04	2.65	2.80	0.39				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction	
	Calc	Limit	Calc	Limit
1	-0.97	3.96	1.04	3.96
2	-0.20	4.00	0.21	4.00
3	-0.55	4.00	0.59	4.00
4	-0.45	4.00	0.49	4.00
5	-0.48	4.00	0.52	4.00
6	-0.47	4.00	0.51	4.00
7	-0.48	4.00	0.52	4.00
8	-0.45	4.00	0.49	4.00
9	-0.55	4.00	0.59	4.00
10	-0.20	4.00	0.21	4.00
11	-0.97	3.96	1.04	3.96

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U18R1010A          Wall 2 - Girt Design  4 (Locate 18.75)    11/ 9/18  1:22pm
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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	10Z089	18.7500	29.67		3.50	5.00	0	165.0	0.00	0.70
2	10Z067	18.7500	30.00	3.50	3.50	5.00	0	138.5	0.00	0.70
3	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
4	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
5	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
6	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
7	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
8	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
9	10Z060	18.7500	30.00	3.50	3.50	5.00	0	124.1	0.00	0.70
10	10Z067	18.7500	30.00	3.50	3.50	5.00	0	138.5	0.00	0.70
11	10Z089	18.7500	29.67	3.50		5.00	0	165.0	0.00	0.70

									1475.4	

LOAD ID:0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
1	1.17		-1.52	-1.88	0.00		-6.62	11.36	4.62	10.56
2	1.63	1.27	-1.09	-1.44	10.56	5.48	-2.43	15.92	3.31	7.74
3	1.51	1.15	-1.21	-1.57	7.74	3.08	-3.38	14.73	3.73	8.58
4	1.55	1.19	-1.17	-1.53	8.58	3.80	-3.09	15.09	3.59	8.32

5	1.54	1.18	-1.18	-1.54	8.32	3.57	-3.18	14.98	3.63	8.40
6	1.54	1.18	-1.18	-1.54	8.40	3.64	-3.15	15.00	3.64	8.40
7	1.54	1.18	-1.18	-1.54	8.40	3.63	-3.18	15.02	3.57	8.32
8	1.53	1.17	-1.19	-1.55	8.32	3.59	-3.09	14.91	3.80	8.58
9	1.57	1.21	-1.15	-1.51	8.58	3.73	-3.38	15.27	3.08	7.74
10	1.44	1.09	-1.27	-1.63	7.74	3.31	-2.43	14.08	5.48	10.56
11	1.88	1.52		-1.17	10.56	4.62	-6.62	18.30		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.52	6.64	0.23	MidS	-6.62	10.80	0.61	RSup	0.55	-1.32	
2	LLap	1.27	2.82	0.45	LLap	5.48	6.29	0.87	LLap	0.85	-0.27	
3	RLap	-1.21	2.02	0.60	RLap	3.73	5.47	0.68	RLap	0.83	-0.75	
4	LLap	1.19	2.02	0.59	LLap	3.80	5.46	0.70	LLap	0.83	-0.62	
5	RLap	-1.18	2.02	0.58	RLap	3.63	5.47	0.66	RLap	0.81	-0.66	
6	LLap	1.18	2.02	0.58	RLap	3.64	5.47	0.67	LLap	0.81	-0.64	
7	LLap	1.18	2.02	0.58	LLap	3.63	5.47	0.66	LLap	0.81	-0.66	
8	RLap	-1.19	2.02	0.59	RLap	3.80	5.46	0.70	RLap	0.83	-0.62	
9	LLap	1.21	2.02	0.60	LLap	3.73	5.47	0.68	LLap	0.83	-0.75	
10	RLap	-1.27	2.82	0.45	RLap	5.48	6.29	0.87	RLap	0.85	-0.27	
11	LLap	1.52	6.64	0.23	MidS	-6.62	10.80	0.61	LSup	0.55	-1.32	

UNBRACE LENGTHS:

Bay	Major	Minor(ft)						Cb							
		Mom1/Mom2													
Id	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
RSup															
1	29.7	1.0	1.0	1.0	3.4	3.5	1.00	1.00	1.00	1.73	1.31	1.00	1.00	1.00	0.00
0.44															
2	30.0	3.5	5.5	1.0	3.7	3.5	1.25	1.81	1.00	1.77	1.32	0.52	0.00	1.00	0.00
0.43															
3	30.0	3.5	3.5	1.0	3.7	3.5	1.34	1.34	1.00	1.76	1.31	0.40	0.40	1.00	0.00
0.43															
4	30.0	3.5	3.8	1.0	3.7	3.5	1.31	1.77	1.00	1.76	1.32	0.44	0.00	1.00	0.00
0.43															
5	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43															
6	30.0	3.5	3.7	1.0	3.7	3.5	1.31	1.76	1.00	1.76	1.31	0.43	0.00	1.00	0.00
0.43															
7	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43															
8	30.0	3.5	3.7	1.0	3.8	3.5	1.32	1.76	1.00	1.77	1.31	0.43	0.00	1.00	0.00
0.44															
9	30.0	3.5	3.7	1.0	3.1	3.5	1.31	1.76	1.00	1.75	1.34	0.43	0.00	1.00	0.00
0.40															
10	30.0	3.5	3.7	1.0	5.5	3.5	1.32	1.77	1.00	1.81	1.25	0.43	0.00	1.00	0.00
0.52															
11	29.7	3.5	3.5	1.0	1.0	1.0	1.31	1.31	1.00	1.00	1.00	0.44	0.44	1.00	1.00
1.00															

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.86	2.65	2.80	0.32
2	0.65	2.65	2.11	0.31	0.58	2.65	2.11	0.28
3	0.52	2.65	1.89	0.28	0.61	2.65	1.89	0.32
4	0.61	2.65	1.89	0.32	0.59	2.65	1.89	0.31
5	0.59	2.65	1.89	0.31	0.60	2.65	1.89	0.32
6	0.60	2.65	1.89	0.32	0.60	2.65	1.89	0.32
7	0.60	2.65	1.89	0.32	0.59	2.65	1.89	0.31
8	0.59	2.65	1.89	0.31	0.61	2.65	1.89	0.32
9	0.61	2.65	1.89	0.32	0.52	2.65	1.89	0.28
10	0.58	2.65	2.11	0.28	0.65	2.65	2.11	0.31
11	0.86	2.65	2.80	0.32				

LOAD ID:0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-1.28		1.63	2.02	0.00		7.13	11.50	-4.96	-11.35
2	-1.75	-1.37	1.16	1.55	-11.35	-5.89	2.61	15.92	-3.55	-8.31
3	-1.62	-1.24	1.30	1.68	-8.31	-3.31	3.63	14.73	-4.00	-9.21
4	-1.66	-1.28	1.26	1.64	-9.21	-4.07	3.31	15.09	-3.86	-8.93
5	-1.65	-1.26	1.27	1.65	-8.93	-3.83	3.42	14.98	-3.90	-9.01
6	-1.65	-1.27	1.27	1.65	-9.01	-3.90	3.38	15.00	-3.90	-9.01
7	-1.65	-1.27	1.26	1.65	-9.01	-3.90	3.42	15.02	-3.83	-8.93
8	-1.64	-1.26	1.28	1.66	-8.93	-3.86	3.31	14.91	-4.07	-9.21
9	-1.68	-1.30	1.24	1.62	-9.21	-4.00	3.63	15.27	-3.31	-8.31
10	-1.55	-1.16	1.37	1.75	-8.31	-3.55	2.61	14.08	-5.89	-11.35
11	-2.02	-1.63		1.28	-11.35	-4.96	7.13	18.17		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.63	6.64	0.25	MidS	7.13	8.02	0.89	RSup	0.59	1.42	
2	LLap	-1.37	2.82	0.48	LLap	-5.89	7.62	0.77	LLap	0.91	0.29	
3	RLap	1.30	2.02	0.64	MidS	3.63	4.54	0.80	RLap	0.89	0.81	
4	LLap	-1.28	2.02	0.63	MidS	3.31	4.54	0.73	LLap	0.89	0.66	
5	RLap	1.27	2.02	0.63	MidS	3.42	4.54	0.75	RLap	0.87	0.71	
6	LLap	-1.27	2.02	0.63	MidS	3.38	4.54	0.74	LLap	0.87	0.69	
7	LLap	-1.27	2.02	0.63	MidS	3.42	4.54	0.75	LLap	0.87	0.71	
8	RLap	1.28	2.02	0.63	MidS	3.31	4.54	0.73	RLap	0.89	0.66	
9	LLap	-1.30	2.02	0.64	MidS	3.63	4.54	0.80	LLap	0.89	0.81	
10	RLap	1.37	2.82	0.48	RLap	-5.89	7.62	0.77	RLap	0.91	0.29	
11	LLap	-1.63	6.64	0.25	MidS	7.13	8.02	0.89	LSup	0.59	1.42	

UNBRACE LENGTHS:

Bay Id	Major		-----Minor(ft)-----				Cb-----	
	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap
RSup								

1.00	1	29.7	22.7	22.7	22.7	1.0	1.0	1.14	1.14	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	2	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	3	30.0	1.0	1.0	16.2	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	4	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	5	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	6	30.0	1.0	1.0	15.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	7	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	8	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	9	30.0	1.0	1.0	16.2	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	10	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
1.00	11	29.7	1.0	1.0	22.7	22.7	22.7	1.00	1.00	1.14	1.14	1.14	1.00	1.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.92	2.65	2.80	0.35
2	0.70	2.65	2.11	0.33	0.63	2.65	2.11	0.30
3	0.56	2.65	1.89	0.30	0.66	2.65	1.89	0.35
4	0.66	2.65	1.89	0.35	0.64	2.65	1.89	0.34
5	0.64	2.65	1.89	0.34	0.64	2.65	1.89	0.34
6	0.64	2.65	1.89	0.34	0.64	2.65	1.89	0.34
7	0.64	2.65	1.89	0.34	0.64	2.65	1.89	0.34
8	0.64	2.65	1.89	0.34	0.66	2.65	1.89	0.35
9	0.66	2.65	1.89	0.35	0.56	2.65	1.89	0.30
10	0.63	2.65	2.11	0.30	0.70	2.65	2.11	0.33
11	0.92	2.65	2.80	0.35				

DEFLECTION: (Working Load)

Span	Wind_Pressure		Wind_Suction	
Id	Calc	Limit	Calc	Limit
1	-0.86	3.96	0.92	3.96
2	-0.18	4.00	0.19	4.00
3	-0.49	4.00	0.53	4.00
4	-0.40	4.00	0.43	4.00
5	-0.43	4.00	0.46	4.00
6	-0.42	4.00	0.45	4.00
7	-0.43	4.00	0.46	4.00
8	-0.40	4.00	0.43	4.00
9	-0.49	4.00	0.53	4.00
10	-0.18	4.00	0.19	4.00

11 -0.86 3.96 0.92 3.96

U18R1010A Wall 2 - Girt Design 5 (Locate 23.75) 11/ 9/18 1:22pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	10Z075	23.7500	29.67		3.50	4.08	0	139.0	0.00	0.70
2	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
3	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
4	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
5	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
6	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
7	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
8	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
9	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
10	10Z060	23.7500	30.00	3.50	3.50	4.08	0	124.1	0.00	0.70
11	10Z075	23.7500	29.67	3.50		4.08	0	139.0	0.00	0.70

									1394.6	

LOAD ID:0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Span Loc	Right Lap	Right Sup
1	0.95		-1.24	-1.54	0.00		-5.39	11.34	3.82	8.68
2	1.34	1.04	-0.88	-1.18	8.68	4.52	-1.99	15.96	2.67	6.28
3	1.23	0.94	-0.99	-1.28	6.28	2.48	-2.78	14.70	3.05	7.02
4	1.26	0.97	-0.96	-1.25	7.02	3.11	-2.52	15.09	2.93	6.79
5	1.25	0.96	-0.97	-1.26	6.79	2.91	-2.60	14.97	2.96	6.86
6	1.26	0.96	-0.96	-1.26	6.86	2.97	-2.57	15.00	2.97	6.86
7	1.26	0.97	-0.96	-1.25	6.86	2.96	-2.60	15.03	2.91	6.79
8	1.25	0.96	-0.97	-1.26	6.79	2.93	-2.52	14.91	3.11	7.02
9	1.28	0.99	-0.94	-1.23	7.02	3.05	-2.78	15.30	2.48	6.28
10	1.18	0.88	-1.04	-1.34	6.28	2.67	-1.99	14.04	4.52	8.68
11	1.54	1.24		-0.95	8.68	3.82	-5.39	18.33		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.24	3.96	0.31	MidS	-5.39	8.92	0.60	RSup	0.57	-1.27	
2	LLap	1.04	2.02	0.52	LLap	4.52	5.35	0.84	LLap	0.87	-0.24	
3	RLap	-0.99	2.02	0.49	RLap	3.05	5.47	0.56	RLap	0.68	-0.62	
4	LLap	0.97	2.02	0.48	LLap	3.11	5.46	0.57	LLap	0.68	-0.50	
5	RLap	-0.97	2.02	0.48	RLap	2.96	5.47	0.54	RLap	0.66	-0.54	
6	LLap	0.96	2.02	0.48	LLap	2.97	5.47	0.54	LLap	0.66	-0.53	
7	LLap	0.97	2.02	0.48	LLap	2.96	5.47	0.54	LLap	0.66	-0.54	
8	RLap	-0.97	2.02	0.48	RLap	3.11	5.46	0.57	RLap	0.68	-0.50	

9	LLap	0.99	2.02	0.49	LLap	3.05	5.47	0.56	LLap	0.68	-0.62
10	RLap	-1.04	2.02	0.52	RLap	4.52	5.35	0.84	RLap	0.87	-0.24
11	LLap	1.24	3.96	0.31	MidS	-5.39	8.92	0.60	LSup	0.57	-1.27

UNBRACE LENGTHS:

Bay	Major	-----Minor(ft)-----					-----Cb-----								
-----Mom1/Mom2-----															
Id	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
RSup															
1	29.7	1.0	1.0	1.0	3.5	3.5	1.00	1.00	1.00	1.73	1.31	1.00	1.00	1.00	0.00
0.44															
2	30.0	3.5	5.6	1.0	3.7	3.5	1.25	1.81	1.00	1.77	1.32	0.52	0.00	1.00	0.00
0.43															
3	30.0	3.5	3.5	1.0	3.7	3.5	1.34	1.34	1.00	1.76	1.31	0.39	0.39	1.00	0.00
0.43															
4	30.0	3.5	3.8	1.0	3.7	3.5	1.31	1.77	1.00	1.76	1.32	0.44	0.00	1.00	0.00
0.43															
5	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43															
6	30.0	3.5	3.7	1.0	3.7	3.5	1.31	1.76	1.00	1.76	1.31	0.43	0.00	1.00	0.00
0.43															
7	30.0	3.5	3.6	1.0	3.6	3.5	1.32	1.76	1.00	1.76	1.32	0.43	0.00	1.00	0.00
0.43															
8	30.0	3.5	3.7	1.0	3.8	3.5	1.32	1.76	1.00	1.77	1.31	0.43	0.00	1.00	0.00
0.44															
9	30.0	3.5	3.7	1.0	3.1	3.5	1.31	1.76	1.00	1.74	1.34	0.43	0.00	1.00	0.00
0.39															
10	30.0	3.5	3.7	1.0	5.6	3.5	1.32	1.77	1.00	1.81	1.25	0.43	0.00	1.00	0.00
0.52															
11	29.7	3.5	3.5	1.0	1.0	1.0	1.31	1.31	1.00	1.00	1.00	0.44	0.44	1.00	1.00
1.00															

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.69	2.65	2.36	0.29
2	0.55	2.65	1.89	0.29	0.45	2.65	1.89	0.24
3	0.45	2.65	1.89	0.24	0.50	2.65	1.89	0.27
4	0.50	2.65	1.89	0.27	0.49	2.65	1.89	0.26
5	0.49	2.65	1.89	0.26	0.49	2.65	1.89	0.26
6	0.49	2.65	1.89	0.26	0.49	2.65	1.89	0.26
7	0.49	2.65	1.89	0.26	0.49	2.65	1.89	0.26
8	0.49	2.65	1.89	0.26	0.50	2.65	1.89	0.27
9	0.50	2.65	1.89	0.27	0.45	2.65	1.89	0.24
10	0.45	2.65	1.89	0.24	0.55	2.65	1.89	0.29
11	0.69	2.65	2.36	0.29				

LOAD ID:0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-1.04		1.33	1.65	0.00		5.80	11.48	-4.11	-9.33
2	-1.44	-1.12	0.95	1.26	-9.33	-4.85	2.13	15.96	-2.86	-6.73
3	-1.32	-1.01	1.06	1.38	-6.73	-2.66	2.98	14.70	-3.27	-7.54
4	-1.36	-1.04	1.03	1.34	-7.54	-3.34	2.70	15.09	-3.15	-7.29
5	-1.35	-1.03	1.04	1.35	-7.29	-3.13	2.79	14.97	-3.18	-7.36
6	-1.35	-1.03	1.03	1.35	-7.36	-3.19	2.76	15.00	-3.19	-7.36
7	-1.35	-1.04	1.03	1.35	-7.36	-3.18	2.79	15.03	-3.13	-7.29
8	-1.34	-1.03	1.04	1.36	-7.29	-3.15	2.70	14.91	-3.34	-7.54
9	-1.38	-1.06	1.01	1.32	-7.54	-3.27	2.98	15.30	-2.66	-6.73
10	-1.26	-0.95	1.12	1.44	-6.73	-2.86	2.13	14.04	-4.85	-9.33
11	-1.65	-1.33		1.04	-9.33	-4.11	5.80	18.19		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.33	3.96	0.34	MidS	5.80	6.42	0.90	RSup	0.61	1.36	
2	LLap	-1.12	2.02	0.55	LLap	-4.85	6.49	0.75	LLap	0.93	0.26	
3	RLap	1.06	2.02	0.52	MidS	2.98	4.54	0.66	RLap	0.73	0.67	
4	LLap	-1.04	2.02	0.52	MidS	2.70	4.54	0.59	LLap	0.73	0.54	
5	RLap	1.04	2.02	0.51	MidS	2.79	4.54	0.61	RLap	0.71	0.58	
6	LLap	-1.03	2.02	0.51	MidS	2.76	4.54	0.61	LLap	0.71	0.56	
7	LLap	-1.04	2.02	0.51	MidS	2.79	4.54	0.61	LLap	0.71	0.58	
8	RLap	1.04	2.02	0.52	MidS	2.70	4.54	0.59	RLap	0.73	0.54	
9	LLap	-1.06	2.02	0.52	MidS	2.98	4.54	0.66	LLap	0.73	0.67	
10	RLap	1.12	2.02	0.55	RLap	-4.85	6.49	0.75	RLap	0.93	0.26	
11	LLap	-1.33	3.96	0.34	MidS	5.80	6.42	0.90	LSup	0.61	1.36	

UNBRACE LENGTHS:

Bay	Major	-----Minor(ft)-----						-----Cb-----								
	Mom1/Mom2															
	Id	(ft)	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap
RSup																
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1	29.7	22.6	22.6	22.6	1.0	1.0	1.14	1.14	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	2	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	3	30.0	1.0	1.0	16.3	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	4	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	5	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	6	30.0	1.0	1.0	15.7	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	7	30.0	1.0	1.0	15.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	8	30.0	1.0	1.0	15.5	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	9	30.0	1.0	1.0	16.3	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00
	10	30.0	1.0	1.0	13.8	1.0	1.0	1.00	1.00	1.14	1.00	1.00	1.00	1.00	1.00	1.00

1.00
 11 29.7 1.0 1.0 22.6 22.6 22.6 1.00 1.00 1.14 1.14 1.14 1.00 1.00 1.00 1.00
 1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap(k)-----				-----Right_Lap(k)-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.74	2.65	2.36	0.31
2	0.59	2.65	1.89	0.31	0.48	2.65	1.89	0.25
3	0.48	2.65	1.89	0.25	0.54	2.65	1.89	0.28
4	0.54	2.65	1.89	0.28	0.52	2.65	1.89	0.28
5	0.52	2.65	1.89	0.28	0.53	2.65	1.89	0.28
6	0.53	2.65	1.89	0.28	0.53	2.65	1.89	0.28
7	0.53	2.65	1.89	0.28	0.52	2.65	1.89	0.28
8	0.52	2.65	1.89	0.28	0.54	2.65	1.89	0.28
9	0.54	2.65	1.89	0.28	0.48	2.65	1.89	0.25
10	0.48	2.65	1.89	0.25	0.59	2.65	1.89	0.31
11	0.74	2.65	2.36	0.31				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction	
	Calc	Limit	Calc	Limit
1	-0.82	3.96	0.89	3.96
2	-0.16	4.00	0.17	4.00
3	-0.40	4.00	0.43	4.00
4	-0.33	4.00	0.35	4.00
5	-0.35	4.00	0.38	4.00
6	-0.34	4.00	0.37	4.00
7	-0.35	4.00	0.38	4.00
8	-0.33	4.00	0.35	4.00
9	-0.40	4.00	0.43	4.00
10	-0.16	4.00	0.17	4.00
11	-0.82	3.96	0.89	3.96

=====

U18R1010A	Wall 2 - Panel Design (Bay 11)	11/ 9/18 1:22pm
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PANEL DATA:

Bay Id	Part	Type	Gage	Yield	Rotation	Panel
					Stiffness	Height
11	CW6-80	CW	26.00	80.0	0.44	26.92

MOMENTS & DEFLECTION:

Span Id	Locate(ft)		Load	-----Moment(ft-lb/ft)-----						---Deflect(in)---		
	Start	End		Support			Midspan			Calc	Limit	UC
1	0.00	3.75	WP	26.6	138.5	0.19	-29.8	118.4	0.25	-0.03	0.50	0.06

			WS	-33.1	118.4	0.28	37.1	138.5	0.27	0.04	0.50	0.07
2	3.75	7.50	WP	61.7	138.5	0.45	0.3	138.5	0.00	0.01	0.50	0.03
			WS	-76.7	118.4	0.65	-0.3	118.4	0.00	-0.02	0.50	0.03
3	7.50	13.75	WP	70.7	138.5	0.51	-50.7	118.4	0.43	-0.12	0.83	0.14
			WS	-88.0	118.4	0.74	63.0	138.5	0.46	0.15	0.83	0.18
4	13.75	18.75	WP	70.8	138.5	0.51	-16.8	118.4	0.14	-0.01	0.67	0.01
			WS	-88.0	118.4	0.74	20.9	138.5	0.15	0.01	0.67	0.02
5	18.75	23.75	WP	46.3	138.5	0.33	-30.0	118.4	0.25	-0.04	0.67	0.06
			WS	-57.6	118.4	0.49	37.3	138.5	0.27	0.05	0.67	0.08
6	23.75	26.92	WP	43.3	138.5	0.31	-12.3	118.4	0.10	0.00	0.42	0.01
			WS	-53.8	118.4	0.45	15.3	138.5	0.11	0.00	0.42	0.01

WP - 0.6Wind_Pressure

WS - 0.6Wind_Suction

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=====
U18R1010A          Wall 2 - Panel Zones          11/ 9/18  1:22pm
=====
```

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
-----	-----	-----	-----
CW6-80	0.019	80.00	62.00

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
-----	-----	-----	-----
H1040	0.22	0.45	2.80

PANEL ZONE LAYOUT:

Zone		---Wall(ft)---		--Girt(ft,ft,in)--				Panel
Id	Description	Offset1	Offset2	Bay	Locate	Load Width	Min Thick	Span (ft)
-----	-----	-----	-----	---	-----	-----	-----	-----
1	Interior	3.50	326.50	2	13.75	5.63	0.060	6.25
2	Lt Edge	0.00	3.50	1	13.75	5.63	0.067	6.25
3	Rt Edge	326.50	330.00	11	13.75	5.63	0.067	6.25

GIRT SCREW CHECK:

Zone		Wind	-----Limit(k)-----				
Id	Screw Space	Suction (psf)	Load (k)	Girt Pullout	Panel Pullover	Screw Tension	Max UC
-----	-----	-----	-----	-----	-----	-----	-----
1	1.00	25.44	0.14	0.26	0.26	0.75	0.56
2	1.00	29.76	0.17	0.29	0.26	0.75	0.64
3	1.00	29.76	0.17	0.29	0.26	0.75	0.64

```
=====
U18R1010A          Wall 2 - Weight Summary          11/ 9/18  1:22pm
=====
```

Girts = 7185.80

Jambs/Headers = 0.00

7185.80

U18R1010A	Wall 2 - Warning Summary	11/ 9/18 1:22pm
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.. No Warnings

=====

*U18R1010A Sidewall Design Input 11/ 9/18 1:22pm

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```
* ( 1)JOBID:
      'U18R1010A'
```

* (2)PROGRAM OPTIONS:

*Sidewall	Run	Run	Lap
* Id	Girt	Panel	Stiff
'B'	'N'	'N'	1.00

* (3) DESIGN CODE:

*Design	---Steel_Code---			---Build---		Code	Seismic
* Code	Cold	Hot	Country	Code	Year	Label	Zone
'WS'	'NAUS12'	'AISC10'	'----'	'IBC'	'15'	'IBC 15'	'D'

* (4) DESIGN CONSTANTS:

```
*
*          ---Strength_Factors---
* Stress_Ratio          ---Seismic---
* Girt   Panel      Wind   Frame   Brace
1.03    1.03    1.0000   1.0000  1.2000
```

* (5)STEEL YIELDS:

* Web	Flg	C_Sec	W_Sec	R_Sec	P_Sec	T_Sec	U_Sec	EP	BP
55.0	55.0	55.0	55.0	50.0	42.0	46.0	50.0	55.0	55.0

* (6) DEFLECTION LIMITS:

```
* ---Girt---  --Panel---
* Wall Facia  Wall Facia
    90.    90.    90.    90.
```

* (7) REPORTS:

```
* Input  Wall  Door  Wall
* Echo   Girt  Jamb  Panel
'Y'     '2'   '3'   'Y'
```

* (8)BUILDING LAYOUT:

-----Build-----			-----Left_Expand_EW-----				-----Right_Expand_EW-----			
* Type	Width	Length	Use	Opt	Extend	Offset	Use	Opt	Extend	Offset
'FF-'	35.0000	330.0000	'N '	'-'	0.000	0.000	'N '	'-'	0.000	0.000

* (9) SURFACE SHAPE:

* No.	X_Coord	Y_Coord	Offset
3	0.0000	30.0000	10.000
	35.0000	27.0833	10.000
	35.0000	0.0000	0.000

* (10) SIDEWALL BAY SPACING:

[illegible]

30.0000 1
 30.0000 1
 30.0000 1

*(11)WALL OPENINGS:

Bay		Sill	Base	Set	Panel
Member_Select	JambL/ Id Id	JambR/ Width	Height	Offset	Type
No.	Id	Id	Width	Height	Offset
Header	Header	Sill	Height	Elev	Depth
Opt	Jamb				
0					

*(12)PARTIAL WALLS:

--Bay_Id-		----Offset----		Jamb	Base	Top	Full_Load
----Panel----		Deflect_Limit					
No.	Id	Use	Opt	Start	End	Start	End
Opt	Girt	Panel		Height	Type	Type	Type
Girt							
0							

*(13)GIRT DESIGN:

--Flange_Strap--		Set	Set	Max
Type	Out	In	Space	Depth
'ZB'	'C'	'N'	10.0000	10.000
			0.0000	7.5000

*(14)GIRT LOCATION:

Set	No.	Girt
Loc	Girt	Location
'Y'	1	7.5000

*(15)SPECIAL GIRT:

--Bay_Id--							
No.	Start	End	Height	Type	Rot	Part	Use
0							

*(16)PANELS/GUTTERS:

Wall	-----Gutter-----		-----Insulation-----		Stand
Panel	Use	Type	Width	Use	Thick
'CW6-80	'-'	'N'	0.000	'O'	4.000

*(17)LINER PANELS:

--Bay_Id-				
No.	Start	End	Height	Part
0				

*(18)FACIA/PARAPET:

-Bay_Id--		Edge_Extend		Ext
No.	Id	Type	Opt	Start
0				

*(19)FACIA/PARAPET GIRTS:

----Top----		--Interior-		---Gutter--		---Back_Panel---		Angle	Beam
Id	Type	Rotate	Type	Rotate	Type	Rotate	Part	Rotate	Spacing

*(20)BASIC LOADS:

---Deflection---		Wind		---Seismic---	
Basic	Load_Ratio	Load			
Wind	Snow	Wind	Seis	Factor	Dead
27.5	1.00	0.39	1.00	0.60	0.00
					0.0000

*(21)EDGE ZONE:

-Left_Zone--		-Right_Zone-		Jamb/		
Width	Base	Width	Base	Girt	Panel	Column
3.500	0.000	3.500	0.000	1.08	1.17	1.08

*(22)WIND PRESSURE/SUCTION:

Wind	Wind	
Pressure	Suction	
34.2	-36.7	.. Girt/Header
39.9	-42.4	.. Panel
34.2	-36.7	.. Jamb
0.0	0.0	.. Parapet Girt

*(23)GIRT LAPS:

Data	-----Set_1-----		-----Set_2-----		-----Set_3-----					
Opt	Sets	Left	Right	Quan	Left	Right	Quan	Left	Right	Quan
'-'	0									

*(24)GIRT STRAPS:

Data	---Set_1---	---Set_2---	---Set_3---	---Set_4---					
Opt	Sets	Strap	Quan	Strap	Quan	Strap	Quan	Strap	Quan
'-'	0								

*(25)EXPANSION JOINTS:

No.	Expansion_Location
0	

*(26)BEAMS:

No.	Bay		
Beam	Id Use	Offset	Height
0			

*(27)DESIGN CODE OPTIONS:

No.	Event	Condition
0		

*(28)PANEL SCREWS:

No.					Washer		-----Spacing-----		
Zone	Zone	Part	Dia	Limit	Dia				
2	'INT'	'H1040'	0.216	2.800	0.446	12.000	6.000	0.000	
	'EDGE'	'H1040'	0.216	2.800	0.446	12.000	6.000	0.000	

* Code files used:

* IBC.15
 * EW_IBC.15 Version 4.0

```

=====
U18R1010A          Wall 4 - Design Code          11/ 9/18  1:22pm
=====
  
```

STRUCTURAL CODE:

Design Basis : WS - Working Stress
 Hot Rolled Steel : AISC10
 Cold Formed Steel : NAUS12

BUILDING CODE:

Wind Code : IBC 15
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
 Cold Formed Steel : 29500 (ksi)

```
=====
U18R1010A          Wall 4 - Panel Zones                      11/ 9/18  1:22pm
=====
```

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
-----	-----	-----	-----
CW6-80	0.019	80.00	62.00

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
-----	-----	-----	-----
H1040	0.22	0.45	2.80

PANEL ZONE LAYOUT:

Zone Id	Description	----Wall(ft)---	Bay Id	--Girt(ft,ft,in)-- Locate	Load Width	Min Thick	Panel Span (ft)
-----	-----	-----	-----	-----	-----	-----	-----
1	Interior	3.50 326.50	1	0.00	0.00	0.000	0.00
2	Lt Edge	0.00 3.50	1	0.00	0.00	0.000	0.00
3	Rt Edge	326.50 330.00	11	0.00	0.00	0.000	0.00

```
=====
U18R1010A          Wall 4 - Weight Summary                    11/ 9/18  1:22pm
=====
```

Girts	=	0.00
Jambs/Headers	=	0.00

		0.00

```
=====
U18R1010A          Wall 4 - Warning Summary                    11/ 9/18  1:22pm
=====
```

.. No Warnings

```

=====
*U18R1010A                Endwall Design Input                11/ 9/18  1:22pm
=====

*( 1)JOBID:
    'U18R1010A'

*( 2)PROGRAM OPTIONS:
* EW      Run      Run      Run      Run
* Id  Col/Raf  Girt  Brace  Panel
    'L'    'Y'    'Y'    'Y'    'Y'

*( 3)DESIGN CODE:
*Design  ---Steel_Code---          ---Build---  Code      Seismic
* Code   Cold      Hot      Country  Code   Year   Label      Zone
    'WS'  'NAUS12'  'AISC10'  '----'  'IBC'  '15'  'IBC 15'  'D '

*( 4)DESIGN CONSTANTS:
*
*          ---Strength_Factors--
* ---Stress_Ratio---          ---Seismic---
* Col/Raf  Girt  Panel      Wind  Frame  Brace
    1.03   1.03   1.03   1.0000  1.0000  1.2000

*( 5)STEEL YIELDS:
* Web   Flg  C_Sec  W_Sec  R_Sec  P_Sec  T_Sec  U_Sec  EP    BP
    55.0  55.0   55.0   55.0   50.0   42.0   46.0   50.0   55.0   55.0

*( 6)DEFLECTION LIMITS:
* -----Rafter-----          ---Girt---  --Panel---
* Live  Wind  Total  Column  Wall  Facia  Wall  Facia  Brace
    180.  180.    0.   120.   90.   90.   90.   90.   60.

*( 7)REPORTS:
*   Input  Column  Wall  Door  Wall  Cable
*   Echo   Rafter  Girt  Jamb  Panel  Brace
        'Y'    'Y'    '2'  '3'    'Y'    'Y'

*( 8)BUILDING LAYOUT:
*
*          -----Expand_EW-----  --Roof_Bay--  Frame
* Type      Width      Length      Use Opt  Extend Offset Flange  No.    Width  Recess
    'FF-'    35.0000    330.0000  'N'  '-'    0.000  0.000  0.000  11    30.0000  0.3333

*( 9)SURFACE SHAPE:
* No.      X_Coord  Y_Coord  Offset
    3        0.0000  30.0000  10.000
          35.0000  27.0833  10.000
          35.0000  0.0000  10.000

*(10)BAY SPACING:
* No.      ---Bay_Set---
* Sets      Width  Quan
    2       17.5000    1
          17.5000    1

*(11)WALL OPENINGS:
*
*      Bay              Sill   Base   Set   Panel
Member_Select  JambL/      JambR/
*No.  Id  Id  Width  Height  Offset  Type  Height  Elev  Depth  Opt  Jamb
Header  Header  Sill

```

0

*(12)WIDE OPENING LAYOUT:

*---Open---		Bay_Id	--Clear_Opening--		Wedge	Stub	Column	Total		
*No.	Id	Type	St	End	Width	Height	Height	Elev	Mount	Weight
0										

*(13)WIDE OPENING AND STRUT FRAMING:

*-Open-		-----Door_Jamb-----			Stub	Head	Back_Brace	Strut	-Header_Beam-	Deflection			
*No.	Id	Type	FlgWid	FlgThk	Type	Type	Type	Loc	Type	Type	Max_Spc	Horz	Vert
0													

*(14)WIDE OPENING HEADER LOCATION:

*-Open-		No.	Column
*No.	Id	Location	Location
0			

*(15)PARTIAL WALLS:

*		--Bay_Id-		----Offset----		Jamb		Base	Top	Full_Load				
----Panel----		Deflect_Limit												
*No.	Id	Use	Opt	Start	End	Start	End	Height	Type	Type	Type	Girt	Col	Part
Opt	Girt	Panel												
0														

*(16)COLUMNS:

*	Max
*Same	UnBrace
*Depth	Length
'N'	60.000

*(17)COLUMN PART & ELEVATION:

*								---Base---	
*No.	Id	Type	Part	Opt	Rot	Depth	Elev	Opt	
3	1	'R	'	'-----'	'-'	'-'	0.000	0.000	'-'
	2	'R	'	'-----'	'-'	'-'	0.000	0.000	'-'
	3	'CDRW'	'	'-----'	'-'	'-'	0.000	0.000	'-'

*(18)COLUMN SPLICES:

*	Col		
* No.	Id	Locate	Type
0			

*(19)RAFTERS:

*Rafter	Flange
* Same	Brace
'Y'	'N'

*(20)RAFTER PART:

*	Surf				
*No.	Id	Type	Part	Depth	
1	2	'R	'	'-----'	12.000

*(21)RAFTER SPLICES:

*	Surf			
* No.	Id	Locate	Type	Opt
2	2	0.00000	'--'	'-'
	2	35.1213	'--'	'-'

*(22)GIRT DESIGN:

*Girt	--Flange_Strap--	--Depth--	Set	Max	Rafter
-------	------------------	-----------	-----	-----	--------

*Type	Out	In	Space	Offset	Project	Set	Opt	Lap	Space	Attach
'ZB'	'C'	'N'	10.0000	0.000	0.000	0.000	'W'	0.0000	7.5000	'N'

*(23)GIRT LOCATION:

* Set	No.	Girt
* Loc	Girt	Location
'P'	5	3.7500 7.5000 13.7500 18.7500 23.7500

*(24)SPECIAL GIRT:

* --Bay_Id--	
*No.	Start End Height Type Rot Part Use
0	

*(25)SIDEWALL GIRT:

*Wall	Girt	No.	Girt
* Id	Type	Depth	Offset Project Girt Location
2	'ZB'	10.000	0.000 0.000 5 3.7500 7.5000 13.7500 18.7500 23.7500
4	'ZB'	10.000	0.000 0.000 0

*(26)ROOF PURLINS:

*Surf	Surf	Peak
* Id	Ext	Space No. Locate
2	0.000	4.8715 7 1.2500 6.0833 10.9166 15.7499 20.5832 25.4165
		30.2498

*(27)WALL PANELS:

* Wall	-----Insulation-----			-Open_Bay-	
* Panel	Use	Thick	Part	F_SW	B_SW
'CW6-80'	'O'	4.000	'-----'	'N'	'Y'

*(28)LINER PANELS:

* --Bay_Id-	
*No.	Start End Height Part
0	

*(29)RIGID FRAME:

*Frame	Interior_Column
*Type	Type No. Locate
'--'	'-' 0

*(30)WALL FRAMING OPTIONS:

*Panel	Diagonal	Brace	EW_Brace_To_Frame
*Shear	Bracing	Option	Height Left Right
'N'	'Y'	'--'	0.0000 17.5000 17.5000

*(31)WALL BRACING:

* Wind	Brace	No._Bay	Specified
* Shear	Type	Specified	Bays_For_Bracing
72.8	'R'	1	1

*(32)WALL BRACING ATTACHMENT

* No.	Attach	--Bay_Id--	No.
*Attach	Id	Start End	Level Level_Height
0			

*(33)EAVE EXTENSION:

*Wall	-Bay_Id--				-Edge_Extend-		Ext
*Id	No.	Id	Type	Opt	Start End Height Width Slope	Left Right	Mount
2	0						
4	0						

*(34)CANOPY:

*Wall		-Bay_Id--				-Edge_Extend-		Ext				
*Id	No.	Id	Type	Opt	Start	End	Height	Width	Slope	Left	Right	Mount
1	0											
2	0											
4	0											

*(35)FACIA/PARAPET:

*Wall		-Bay_Id--		---Horizontal_Size--		---Vertical_Size---		Edge_Extend		Ext					
*Id	No.	Id	Type	Opt	Start	End	Elev	Width	Slope	Elev	Height	Slope	Left	Right	Mnt
1	0														
2	0														
4	0														

*(36)FACIA/PARAPET GIRTS:

*Ext		----Top----		--Interior-		---Back_Panel---		Angle		Beam	
*Id	Type	Rotate	Type	Rotate	Part	Rotate	Spacing	Lap			

*(37)LOADS FOR EAVE EXTENSION, CANOPY, FACIA, PARAPET:

*Ext		Ext_Beam		Facia/Parapet		Facia/Parapet_Girt					
*Id	Dead	Collat	Live	Snow	Rain	Press	Suct	Press	Suct	Press	Suct

*(38)BASIC LOADS:

*		---		Deflection---		Wind			
*Dead	Collat	Live	Snow	Rain	Basic	Load_Ratio	Load		
*Load	Load	Load	Load	Load	Wind	Snow	Wind	Seis	Factor
3.0	1.0	20.0	21.0	0.0	27.5	1.00	0.39	1.00	0.60

*(39)EDGE_ZONE:

* -Left_Zone--		-Right_Zone-				Jamb/	
*Width	Base	Width	Base	Girt	Panel	Column	
3.500	0.000	3.500	0.000	1.08	1.17	1.08	

*(40)BASIC LOADS AT EAVE:

*Seis		Seis		Torsion_Forces	
*Dead	Girt	Load	Wind	Seismic	
3.0	0.0000	1.42	0.00	0.00	

*(41)LONGITUDINAL BRACING LOADS:

* ---Wind-----		---Seismic---			
*Horz	Vert	Horz	Vert		
0.00	0.00	0.00	0.00	.. Left	Column
0.00	0.00	0.00	0.00	.. Right	Column

*(42)WIND PRESSURE/SUCTION:

*Wind		Wind			
*Press	Suct				
34.2	-36.7	.. Column			
34.2	-36.7	.. Girt/Header			
34.2	-36.7	.. Jamb			
39.9	-42.4	.. Panel			
49.4	-40.7	.. Parapet Girt			
41.3	-27.5	.. Transv Bracing, Facia/Parapet			

*(43)WIND COEFFICIENTS:

*Surf		Wind_1		Wind_2		Long_Wind		Surface	
*Id	Left	Right	Left	Right	1	2	Friction		
1	-0.06	-0.91	1.04	0.20	-1.01	-1.01	0.00		
2	-0.99	-1.40	0.11	-0.30	-1.40	-0.99	0.00		

-Load-		---Live---				-Add_Snow-			Wind_1		Wind_2			
Long_Wind	Column_Wind			-Seismic-		Aux_Load								
*No	Id	Dead	Coll	Roof	Floor	Snow	Drift	Slide	Rain	Left	Right	Left	Right	1
2	Press	Suct	Long	Tran	Id	Coef								
24	1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	2	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	3	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	4	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1	1.00							
	5	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	6	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	7	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1	1.00							
	8	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	10	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	11	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	12	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	13	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	14	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.00	0.00	0.00	0.00	0.00	0	0.00							
	15	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	1.00	0.00	0.00	0.00	0	0.00							
	16	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.70	0	0.00							
	17	1.11	1.11	0.00	0.00	0.00</								

0.00 0.00 0.00 0.00 0.00 0 0.00

*(46)AUXILIARY LOADS:

* No.	Aux	Aux	No._Add	Add_Load
* Aux	Id	Name	Combs	Id Coef
3	1	'MIN_SNOW '	1	1 1.00
	2	'E1PAT_SL_1'	1	2 0.50
	3	'E1PAT_SL_2'	1	3 0.50

*(47)ADDITIONAL LOADS:

* No.	Add	Loc	Basic	Load	FX	FY	Mom	X	Y	..Conc
* Add	Id	Id	Load	Type	W1	W2	Co	DL1	DL2	..Unif
3	1	2	'U_SNOW	'D '	-0.377	-0.377	-0.08	0.00	35.12	
	2	2	'U_SNOW	'D '	-0.316	-0.316	-0.08	0.00	17.56	
	3	2	'U_SNOW	'D '	-0.316	-0.316	-0.08	17.56	35.12	

*(48)GIRT LAPS:

* Data	-----Set_1-----	-----Set_2-----	-----Set_3-----
* Opt	Sets Left	Right Quan	Left Right Quan
'-'	0		

*(49)GIRT STRAPS:

* Data	---Set_1---	---Set_2---	---Set_3---	---Set_4---
*Opt	Sets Strap	Quan Strap	Quan Strap	Quan Strap
'-'	0			

*(50)PANEL SCREWS:

* No.	Washer
*Zone	Zone Part Dia Limit Dia Spacing-----
3	'INT ' 'H1040 ' 0.216 2.800 0.446 12.000 6.000 0.000
	'EDGE' 'H1040 ' 0.216 2.800 0.446 12.000 6.000 0.000
	'BASE' 'H1040 ' 0.216 2.800 0.446 12.000 6.000 0.000

*(51)BEAMS:

*No.	Bay
*Beam	Id Use Offset Height
0	

*(52)STEP LOAD COEFFICIENTS:

* Basic	Location	No.	----Step_1---	----Step_2---	----Step_3---
*No.	Load	Use Id Step	Locate Coef	Locate Coef	Locate Coef
0					

*(53)ADDITIONAL COLUMNS:

*No.	Id	Locate	Type	Rot	Opt	Part	Elev
0							

*(54)RIGID FRAME COORDINATES:

*Frame	Frame
* Id	Type No. X_Coord Y_Coord
0	'--' 0

*(55)DESIGN CODE OPTIONS:

*No.	Event	Condition
0		

*AUXILIARY LOAD DESCRIPTIONS:

* Aux	
* Id	Description

* 1 Minimum snow load
 * 2 Pattern snow load
 * 3 Pattern snow load
 *

*ADDITIONAL LOAD DESCRIPTIONS:

* Add

* Id Description
 * 1 Minimum snow load surface 2
 * 2 Pattern snow load bay 1
 * 3 Pattern snow load bay 2
 *

* Code files used:

* IBC.15
 * EW_IBC.15 Version 4.0

```
=====
U18R1010A          Wall 1 - Design Code          11/ 9/18  1:22pm
=====
```

STRUCTURAL CODE:

Design Basis : WS - Working Stress
 Hot Rolled Steel : AISC10
 Cold Formed Steel : NAUS12

BUILDING CODE:

Wind Code : IBC 15
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
 Cold Formed Steel : 29500 (ksi)

```
=====
U18R1010A          Wall 1 - Column & Rafter Design      11/ 9/18  1:22pm
=====
```

MEMBER SIZES:

Id	Member Locate	Member Part	--Web_Size-- Depth	--Flange_Size-- Thick	Width	Thick	Member Length	Member Weight	----	Max_Load	----
									Id	UC	Report
Col1	0.8	W8x10	7.48	0.170	3.94	0.205	28.1	280.9	84	0.90	Mom+Ax1
Col2	17.5	W10x22	9.48	0.240	5.75	0.360	26.7	587.4	82	0.83	Mom+Ax1
Col3	34.2	W12S099	12.00	12ga	3.63	12ga	25.3	174.1	82	0.91	Mom+Ax1
Raf1	Surf 2	W12x14	11.45	0.200	3.97	0.225	35.1	491.7	4	0.47	Mom+Ax1
								Total=	1534.2		

DESIGN ACTIONS/STRENGTH:

Id	Load Id	---Axial(k)-- Calc	Limit	---Shear(k)-- Calc	Limit	-Moment(f-k)- Calc	Limit
Col1	1	0.82	39.56	0.00	26.83	0.00	18.50
Col1	2	3.00	39.56	0.00	26.83	0.00	18.50
Col1	3	3.11	39.56	0.00	26.83	0.00	18.50
Col1	4	3.62	39.56	0.00	26.83	0.00	18.50
Col1	5	2.45	39.56	0.00	26.83	0.00	18.50
Col1	6	2.54	39.56	0.00	26.83	0.00	18.50
Col1	7	-4.33	88.62	2.04	26.83	-14.34	18.94

Col1	8	-4.33	88.62	-2.28	26.83	15.99	18.94
Col1	9	2.01	39.56	2.04	26.83	-14.34	18.94
Col1	10	2.01	39.56	-2.28	26.83	15.99	18.94
Col1	11	-2.33	88.62	2.04	26.83	-14.34	18.94
Col1	12	-2.33	88.62	-2.28	26.83	15.99	18.94
Col1	13	4.25	39.56	2.04	26.83	-14.34	18.94
Col1	14	4.25	39.56	-2.28	26.83	15.99	18.94
Col1	15	-2.87	88.62	2.04	26.83	-14.34	18.94
Col1	16	-1.86	88.62	2.04	26.83	-14.34	18.94
Col1	17	-2.87	88.62	-2.28	26.83	15.99	18.94
Col1	18	-1.86	88.62	-2.28	26.83	15.99	18.94
Col1	19	0.91	39.56	1.53	26.83	-10.75	18.94
Col1	20	0.91	39.56	-1.71	26.83	11.99	18.94
Col1	21	3.43	39.56	1.53	26.83	-10.75	18.94
Col1	22	3.43	39.56	-1.71	26.83	11.99	18.94
Col1	23	2.15	39.56	1.53	26.83	-10.75	18.94
Col1	24	2.15	39.56	-1.71	26.83	11.99	18.94
Col1	25	5.11	39.56	1.53	26.83	-10.75	18.94
Col1	26	5.11	39.56	-1.71	26.83	11.99	18.94
Col1	27	0.34	39.56	1.53	26.83	-10.75	18.94
Col1	28	0.90	39.56	1.53	26.83	-10.75	18.94
Col1	29	0.34	39.56	-1.71	26.83	11.99	18.94
Col1	30	0.90	39.56	-1.71	26.83	11.99	18.94
Col1	31	1.00	39.56	1.53	26.83	-10.75	18.94
Col1	32	1.00	39.56	-1.71	26.83	11.99	18.94
Col1	33	3.51	39.56	1.53	26.83	-10.75	18.94
Col1	34	3.51	39.56	-1.71	26.83	11.99	18.94
Col1	35	2.23	39.56	1.53	26.83	-10.75	18.94
Col1	36	2.23	39.56	-1.71	26.83	11.99	18.94
Col1	37	5.19	39.56	1.53	26.83	-10.75	18.94
Col1	38	5.19	39.56	-1.71	26.83	11.99	18.94
Col1	39	0.42	39.56	1.53	26.83	-10.75	18.94
Col1	40	0.98	39.56	1.53	26.83	-10.75	18.94
Col1	41	0.42	39.56	-1.71	26.83	11.99	18.94
Col1	42	0.98	39.56	-1.71	26.83	11.99	18.94
Col1	43	-4.61	88.62	2.04	26.83	-14.34	18.94
Col1	44	-4.61	88.62	-2.28	26.83	15.99	18.94
Col1	45	1.73	39.56	2.04	26.83	-14.34	18.94
Col1	46	1.73	39.56	-2.28	26.83	15.99	18.94
Col1	47	-2.61	88.62	2.04	26.83	-14.34	18.94
Col1	48	-2.61	88.62	-2.28	26.83	15.99	18.94
Col1	49	3.96	39.56	2.04	26.83	-14.34	18.94
Col1	50	3.96	39.56	-2.28	26.83	15.99	18.94
Col1	51	-3.15	88.62	2.04	26.83	-14.34	18.94
Col1	52	-2.14	88.62	2.04	26.83	-14.34	18.94
Col1	53	-3.15	88.62	-2.28	26.83	15.99	18.94
Col1	54	-2.14	88.62	-2.28	26.83	15.99	18.94
Col1	55	0.65	39.56	0.00	26.83	0.00	18.50
Col1	56	3.03	39.56	0.00	26.83	0.00	18.50
Col1	57	0.64	39.56	0.00	26.83	0.00	18.50
Col1	58	2.46	39.56	0.00	26.83	0.00	18.50
Col1	59	-0.95	88.62	0.00	26.83	0.00	18.50
Col1	60	2.47	39.56	0.00	26.83	0.00	18.50
Col1	61	0.91	39.56	0.00	26.83	0.00	18.50
Col1	62	2.15	39.56	0.00	26.83	0.00	18.50
Col1	63	3.43	39.56	0.00	26.83	0.00	18.50
Col1	64	5.11	39.56	0.00	26.83	0.00	18.50
Col1	65	0.34	39.56	0.00	26.83	0.00	18.50
Col1	66	0.90	39.56	0.00	26.83	0.00	18.50
Col1	67	1.00	39.56	0.00	26.83	0.00	18.50

Col1	68	2.23	39.56	0.00	26.83	0.00	18.50
Col1	69	3.51	39.56	0.00	26.83	0.00	18.50
Col1	70	5.19	39.56	0.00	26.83	0.00	18.50
Col1	71	0.42	39.56	0.00	26.83	0.00	18.50
Col1	72	0.98	39.56	0.00	26.83	0.00	18.50
Col1	73	-4.61	88.62	0.00	26.83	0.00	18.50
Col1	74	-2.61	88.62	0.00	26.83	0.00	18.50
Col1	75	1.73	39.56	0.00	26.83	0.00	18.50
Col1	76	3.96	39.56	0.00	26.83	0.00	18.50
Col1	77	-3.15	88.62	0.00	26.83	0.00	18.50
Col1	78	-2.14	88.62	0.00	26.83	0.00	18.50
Col1	79	3.29	39.56	0.00	26.83	0.00	18.50
Col1	80	1.81	39.56	0.00	26.83	0.00	18.50
Col1	81	-2.22	88.62	2.04	26.83	-14.34	18.94
Col1	82	-2.22	88.62	-2.28	26.83	15.99	18.94
Col1	83	4.36	39.56	2.04	26.83	-14.34	18.94
Col1	84	4.36	39.56	-2.28	26.83	15.99	18.94
Col1	85	-2.76	88.62	2.04	26.83	-14.34	18.94
Col1	86	-1.75	88.62	2.04	26.83	-14.34	18.94
Col1	87	-2.76	88.62	-2.28	26.83	15.99	18.94
Col1	88	-1.75	88.62	-2.28	26.83	15.99	18.94
Col1	89	2.36	39.56	0.00	26.83	0.00	18.50
Col1	90	4.18	39.56	0.00	26.83	0.00	18.50
Col2	1	2.14	127.85	0.00	48.96	0.00	40.09
Col2	2	8.44	127.85	0.00	48.96	0.00	40.09
Col2	3	8.76	127.85	0.00	48.96	0.00	40.09
Col2	4	9.99	127.85	0.00	48.96	0.00	40.09
Col2	5	6.87	127.85	0.00	48.96	0.00	40.09
Col2	6	7.11	127.85	0.00	48.96	0.00	40.09
Col2	7	2.99	127.85	5.71	48.96	-38.10	62.62
Col2	8	2.99	127.85	-6.12	48.96	40.89	51.36
Col2	9	-7.72	194.31	5.71	48.96	-38.10	62.62
Col2	10	-7.72	194.31	-6.12	48.96	40.89	51.36
Col2	11	8.03	127.85	5.71	48.96	-38.10	62.62
Col2	12	8.03	127.85	-6.12	48.96	40.89	51.36
Col2	13	-2.29	194.31	5.71	48.96	-38.10	62.62
Col2	14	-2.29	194.31	-6.12	48.96	40.89	51.36
Col2	15	-5.10	194.31	5.71	48.96	-38.10	62.62
Col2	16	-3.25	194.31	5.71	48.96	-38.10	62.62
Col2	17	-5.10	194.31	-6.12	48.96	40.89	51.36
Col2	18	-3.25	194.31	-6.12	48.96	40.89	51.36
Col2	19	7.74	127.85	4.28	48.96	-28.58	62.62
Col2	20	7.74	127.85	-4.59	48.96	30.66	51.36
Col2	21	0.93	127.85	4.28	48.96	-28.58	62.62
Col2	22	0.93	127.85	-4.59	48.96	30.66	51.36
Col2	23	11.52	127.85	4.28	48.96	-28.58	62.62
Col2	24	11.52	127.85	-4.59	48.96	30.66	51.36
Col2	25	5.25	127.85	4.28	48.96	-28.58	62.62
Col2	26	5.25	127.85	-4.59	48.96	30.66	51.36
Col2	27	2.74	127.85	4.28	48.96	-28.58	62.62
Col2	28	3.95	127.85	4.28	48.96	-28.58	62.62
Col2	29	2.74	127.85	-4.59	48.96	30.66	51.36
Col2	30	3.95	127.85	-4.59	48.96	30.66	51.36
Col2	31	7.98	127.85	4.28	48.96	-28.58	62.62
Col2	32	7.98	127.85	-4.59	48.96	30.66	51.36
Col2	33	1.17	127.85	4.28	48.96	-28.58	62.62
Col2	34	1.17	127.85	-4.59	48.96	30.66	51.36
Col2	35	11.76	127.85	4.28	48.96	-28.58	62.62
Col2	36	11.76	127.85	-4.59	48.96	30.66	51.36
Col2	37	5.49	127.85	4.28	48.96	-28.58	62.62

Col2	38	5.49	127.85	-4.59	48.96	30.66	51.36
Col2	39	2.98	127.85	4.28	48.96	-28.58	62.62
Col2	40	4.19	127.85	4.28	48.96	-28.58	62.62
Col2	41	2.98	127.85	-4.59	48.96	30.66	51.36
Col2	42	4.19	127.85	-4.59	48.96	30.66	51.36
Col2	43	2.26	127.85	5.71	48.96	-38.10	62.62
Col2	44	2.26	127.85	-6.12	48.96	40.89	51.36
Col2	45	-8.45	194.31	5.71	48.96	-38.10	62.62
Col2	46	-8.45	194.31	-6.12	48.96	40.89	51.36
Col2	47	7.30	127.85	5.71	48.96	-38.10	62.62
Col2	48	7.30	127.85	-6.12	48.96	40.89	51.36
Col2	49	-3.02	194.31	5.71	48.96	-38.10	62.62
Col2	50	-3.02	194.31	-6.12	48.96	40.89	51.36
Col2	51	-5.60	194.31	5.71	48.96	-38.10	62.62
Col2	52	-3.74	194.31	5.71	48.96	-38.10	62.62
Col2	53	-5.60	194.31	-6.12	48.96	40.89	51.36
Col2	54	-3.74	194.31	-6.12	48.96	40.89	51.36
Col2	55	4.63	127.85	0.00	48.96	0.00	40.09
Col2	56	1.95	127.85	0.00	48.96	0.00	40.09
Col2	57	3.99	127.85	0.00	48.96	0.00	40.09
Col2	58	1.89	127.85	0.00	48.96	0.00	40.09
Col2	59	3.14	127.85	0.00	48.96	0.00	40.09
Col2	60	0.74	127.85	0.00	48.96	0.00	40.09
Col2	61	7.74	127.85	0.00	48.96	0.00	40.09
Col2	62	11.52	127.85	0.00	48.96	0.00	40.09
Col2	63	0.93	127.85	0.00	48.96	0.00	40.09
Col2	64	5.25	127.85	0.00	48.96	0.00	40.09
Col2	65	2.74	127.85	0.00	48.96	0.00	40.09
Col2	66	3.95	127.85	0.00	48.96	0.00	40.09
Col2	67	7.98	127.85	0.00	48.96	0.00	40.09
Col2	68	11.76	127.85	0.00	48.96	0.00	40.09
Col2	69	1.17	127.85	0.00	48.96	0.00	40.09
Col2	70	5.49	127.85	0.00	48.96	0.00	40.09
Col2	71	2.98	127.85	0.00	48.96	0.00	40.09
Col2	72	4.19	127.85	0.00	48.96	0.00	40.09
Col2	73	2.26	127.85	0.00	48.96	0.00	40.09
Col2	74	7.30	127.85	0.00	48.96	0.00	40.09
Col2	75	-8.45	194.31	0.00	48.96	0.00	40.09
Col2	76	-3.02	194.31	0.00	48.96	0.00	40.09
Col2	77	-5.60	194.31	0.00	48.96	0.00	40.09
Col2	78	-3.74	194.31	0.00	48.96	0.00	40.09
Col2	79	7.08	127.85	0.00	48.96	0.00	40.09
Col2	80	7.11	127.85	0.00	48.96	0.00	40.09
Col2	81	8.35	127.85	5.71	48.96	-38.10	62.62
Col2	82	8.35	127.85	-6.12	48.96	40.89	51.36
Col2	83	-1.97	194.31	5.71	48.96	-38.10	62.62
Col2	84	-1.97	194.31	-6.12	48.96	40.89	51.36
Col2	85	-4.79	194.31	5.71	48.96	-38.10	62.62
Col2	86	-2.93	194.31	5.71	48.96	-38.10	62.62
Col2	87	-4.79	194.31	-6.12	48.96	40.89	51.36
Col2	88	-2.93	194.31	-6.12	48.96	40.89	51.36
Col2	89	8.95	127.85	0.00	48.96	0.00	40.09
Col2	90	6.85	127.85	0.00	48.96	0.00	40.09
Col3	1	0.70	27.09	0.00	7.56	0.00	17.21
Col3	2	2.75	25.71	0.00	7.56	0.00	17.21
Col3	3	2.86	25.71	0.00	7.56	0.00	17.21
Col3	4	3.29	25.71	0.00	7.56	0.00	17.21
Col3	5	2.22	25.71	0.00	7.56	0.00	17.21
Col3	6	2.30	25.71	0.00	7.56	0.00	17.21
Col3	7	-1.59	66.64	1.84	7.56	-11.64	14.90

Col3	8	-1.59	66.64	-2.05	7.56	12.99	14.90
Col3	9	-2.08	66.64	1.84	7.56	-11.64	14.90
Col3	10	-2.08	66.64	-2.05	7.56	12.99	14.90
Col3	11	0.85	27.09	1.84	7.56	-11.64	14.90
Col3	12	0.85	27.09	-2.05	7.56	12.99	14.90
Col3	13	0.36	27.09	1.84	7.56	-11.64	14.90
Col3	14	0.36	27.09	-2.05	7.56	12.99	14.90
Col3	15	-2.06	66.64	1.84	7.56	-11.64	14.90
Col3	16	-1.34	66.64	1.84	7.56	-11.64	14.90
Col3	17	-2.06	66.64	-2.05	7.56	12.99	14.90
Col3	18	-1.34	66.64	-2.05	7.56	12.99	14.90
Col3	19	0.80	27.09	1.38	7.56	-8.73	14.90
Col3	20	0.80	27.09	-1.54	7.56	9.74	14.90
Col3	21	0.43	27.09	1.38	7.56	-8.73	14.90
Col3	22	0.43	27.09	-1.54	7.56	9.74	14.90
Col3	23	2.41	25.71	1.38	7.56	-8.73	14.90
Col3	24	2.41	25.71	-1.54	7.56	9.74	14.90
Col3	25	2.04	25.71	1.38	7.56	-8.73	14.90
Col3	26	2.04	25.71	-1.54	7.56	9.74	14.90
Col3	27	0.44	27.09	1.38	7.56	-8.73	14.90
Col3	28	0.99	27.09	1.38	7.56	-8.73	14.90
Col3	29	0.44	27.09	-1.54	7.56	9.74	14.90
Col3	30	0.99	27.09	-1.54	7.56	9.74	14.90
Col3	31	0.88	27.09	1.38	7.56	-8.73	14.90
Col3	32	0.88	27.09	-1.54	7.56	9.74	14.90
Col3	33	0.51	27.09	1.38	7.56	-8.73	14.90
Col3	34	0.51	27.09	-1.54	7.56	9.74	14.90
Col3	35	2.49	25.71	1.38	7.56	-8.73	14.90
Col3	36	2.49	25.71	-1.54	7.56	9.74	14.90
Col3	37	2.12	25.71	1.38	7.56	-8.73	14.90
Col3	38	2.12	25.71	-1.54	7.56	9.74	14.90
Col3	39	0.52	27.09	1.38	7.56	-8.73	14.90
Col3	40	1.07	27.09	1.38	7.56	-8.73	14.90
Col3	41	0.52	27.09	-1.54	7.56	9.74	14.90
Col3	42	1.07	27.09	-1.54	7.56	9.74	14.90
Col3	43	-1.76	66.64	1.84	7.56	-11.64	14.90
Col3	44	-1.76	66.64	-2.05	7.56	12.99	14.90
Col3	45	-2.25	66.64	1.84	7.56	-11.64	14.90
Col3	46	-2.25	66.64	-2.05	7.56	12.99	14.90
Col3	47	0.61	27.09	1.84	7.56	-11.64	14.90
Col3	48	0.61	27.09	-2.05	7.56	12.99	14.90
Col3	49	0.12	27.09	1.84	7.56	-11.64	14.90
Col3	50	0.12	27.09	-2.05	7.56	12.99	14.90
Col3	51	-2.23	66.64	1.84	7.56	-11.64	14.90
Col3	52	-1.50	66.64	1.84	7.56	-11.64	14.90
Col3	53	-2.23	66.64	-2.05	7.56	12.99	14.90
Col3	54	-1.50	66.64	-2.05	7.56	12.99	14.90
Col3	55	0.76	27.09	0.00	7.56	0.00	17.21
Col3	56	0.80	27.09	0.00	7.56	0.00	17.21
Col3	57	0.74	27.09	0.00	7.56	0.00	17.21
Col3	58	0.77	27.09	0.00	7.56	0.00	17.21
Col3	59	0.27	27.09	0.00	7.56	0.00	17.21
Col3	60	0.31	27.09	0.00	7.56	0.00	17.21
Col3	61	0.80	27.09	0.00	7.56	0.00	17.21
Col3	62	2.41	25.71	0.00	7.56	0.00	17.21
Col3	63	0.43	27.09	0.00	7.56	0.00	17.21
Col3	64	2.04	25.71	0.00	7.56	0.00	17.21
Col3	65	0.44	27.09	0.00	7.56	0.00	17.21
Col3	66	0.99	27.09	0.00	7.56	0.00	17.21
Col3	67	0.88	27.09	0.00	7.56	0.00	17.21

Col3	68	2.49	25.71	0.00	7.56	0.00	17.21
Col3	69	0.51	27.09	0.00	7.56	0.00	17.21
Col3	70	2.12	25.71	0.00	7.56	0.00	17.21
Col3	71	0.52	27.09	0.00	7.56	0.00	17.21
Col3	72	1.07	27.09	0.00	7.56	0.00	17.21
Col3	73	-1.76	66.64	0.00	7.56	0.00	17.21
Col3	74	0.61	27.09	0.00	7.56	0.00	17.21
Col3	75	-2.25	66.64	0.00	7.56	0.00	17.21
Col3	76	0.12	27.09	0.00	7.56	0.00	17.21
Col3	77	-2.23	66.64	0.00	7.56	0.00	17.21
Col3	78	-1.50	66.64	0.00	7.56	0.00	17.21
Col3	79	1.66	27.09	0.00	7.56	0.00	17.21
Col3	80	3.02	25.71	0.00	7.56	0.00	17.21
Col3	81	0.95	27.09	1.84	7.56	-11.64	14.90
Col3	82	0.95	27.09	-2.05	7.56	12.99	14.90
Col3	83	0.46	27.09	1.84	7.56	-11.64	14.90
Col3	84	0.46	27.09	-2.05	7.56	12.99	14.90
Col3	85	-1.96	66.64	1.84	7.56	-11.64	14.90
Col3	86	-1.23	66.64	1.84	7.56	-11.64	14.90
Col3	87	-1.96	66.64	-2.05	7.56	12.99	14.90
Col3	88	-1.23	66.64	-2.05	7.56	12.99	14.90
Col3	89	2.34	25.71	0.00	7.56	0.00	17.21
Col3	90	2.37	25.71	0.00	7.56	0.00	17.21

Raf1	1	0.06	74.62	0.78	42.75	2.59	33.49
Raf1	2	0.33	74.62	3.92	42.75	13.07	33.49
Raf1	3	0.34	74.62	4.07	42.75	13.59	33.49
Raf1	4	0.41	74.62	4.71	42.75	15.70	33.49
Raf1	5	0.26	74.62	3.13	42.75	10.45	33.49
Raf1	6	0.27	74.62	3.25	42.75	10.84	33.49
Raf1	7	-3.26	124.55	-1.97	42.75	-6.56	42.37
Raf1	8	-3.26	124.55	-1.97	42.75	-6.56	42.37
Raf1	9	-1.05	124.55	-3.03	42.75	-10.13	42.37
Raf1	10	-1.05	124.55	-3.03	42.75	-10.13	42.37
Raf1	11	3.95	74.62	0.90	42.75	3.02	33.43
Raf1	12	3.95	74.62	0.90	42.75	3.02	33.43
Raf1	13	3.52	74.62	-0.16	42.75	-0.55	42.37
Raf1	14	3.52	74.62	-0.16	42.75	-0.55	42.37
Raf1	15	0.26	74.62	-3.03	42.75	-10.13	42.37
Raf1	16	0.20	74.62	-1.96	42.75	-6.56	42.37
Raf1	17	0.26	74.62	-3.03	42.75	-10.13	42.37
Raf1	18	0.20	74.62	-1.96	42.75	-6.56	42.37
Raf1	19	-2.67	124.55	1.19	42.75	3.98	33.45
Raf1	20	-2.67	124.55	1.19	42.75	3.98	33.45
Raf1	21	-0.92	124.55	0.39	42.75	1.31	33.50
Raf1	22	-0.92	124.55	0.39	42.75	1.31	33.50
Raf1	23	3.19	74.62	3.35	42.75	11.16	33.47
Raf1	24	3.19	74.62	3.35	42.75	11.16	33.47
Raf1	25	2.78	74.62	2.54	42.75	8.49	33.49
Raf1	26	2.78	74.62	2.54	42.75	8.49	33.49
Raf1	27	0.42	74.62	0.39	42.75	1.31	33.47
Raf1	28	0.37	74.62	1.19	42.75	3.98	33.48
Raf1	29	0.42	74.62	0.39	42.75	1.31	33.47
Raf1	30	0.37	74.62	1.19	42.75	3.98	33.48
Raf1	31	-2.68	124.55	1.31	42.75	4.37	33.46
Raf1	32	-2.68	124.55	1.31	42.75	4.37	33.46
Raf1	33	-0.93	124.55	0.51	42.75	1.70	33.50
Raf1	34	-0.93	124.55	0.51	42.75	1.70	33.50
Raf1	35	3.20	74.62	3.46	42.75	11.56	33.47
Raf1	36	3.20	74.62	3.46	42.75	11.56	33.47

Raf1	37	2.79	74.62	2.66	42.75	8.88	33.49
Raf1	38	2.79	74.62	2.66	42.75	8.88	33.49
Raf1	39	0.43	74.62	0.51	42.75	1.70	33.47
Raf1	40	0.38	74.62	1.31	42.75	4.38	33.48
Raf1	41	0.43	74.62	0.51	42.75	1.70	33.47
Raf1	42	0.38	74.62	1.31	42.75	4.38	33.48
Raf1	43	-3.24	124.55	-2.21	42.75	-7.39	42.37
Raf1	44	-3.24	124.55	-2.21	42.75	-7.39	42.37
Raf1	45	-1.04	124.55	-3.28	42.75	-10.95	42.37
Raf1	46	-1.04	124.55	-3.28	42.75	-10.95	42.37
Raf1	47	3.93	74.62	0.66	42.75	2.19	33.41
Raf1	48	3.93	74.62	0.66	42.75	2.19	33.41
Raf1	49	3.51	74.62	-0.41	42.75	-1.37	42.37
Raf1	50	3.51	74.62	-0.41	42.75	-1.37	42.37
Raf1	51	0.24	74.62	-3.28	42.75	-10.95	42.37
Raf1	52	0.18	74.62	-2.21	42.75	-7.38	42.37
Raf1	53	0.24	74.62	-3.28	42.75	-10.95	42.37
Raf1	54	0.18	74.62	-2.21	42.75	-7.38	42.37
Raf1	55	0.72	74.62	0.83	42.75	2.77	33.47
Raf1	56	1.22	74.62	0.89	42.75	2.98	33.47
Raf1	57	0.55	74.62	0.81	42.75	2.72	33.48
Raf1	58	0.90	74.62	0.86	42.75	2.87	33.48
Raf1	59	0.67	74.62	0.27	42.75	0.90	33.45
Raf1	60	1.25	74.62	0.33	42.75	1.12	33.46
Raf1	61	-2.67	124.55	1.19	42.75	3.98	33.45
Raf1	62	3.19	74.62	3.35	42.75	11.16	33.47
Raf1	63	-0.92	124.55	0.39	42.75	1.31	33.50
Raf1	64	2.78	74.62	2.54	42.75	8.49	33.49
Raf1	65	0.42	74.62	0.39	42.75	1.31	33.47
Raf1	66	0.37	74.62	1.19	42.75	3.98	33.48
Raf1	67	-2.68	124.55	1.31	42.75	4.37	33.46
Raf1	68	3.20	74.62	3.46	42.75	11.56	33.47
Raf1	69	-0.93	124.55	0.51	42.75	1.70	33.50
Raf1	70	2.79	74.62	2.66	42.75	8.88	33.49
Raf1	71	0.43	74.62	0.51	42.75	1.70	33.47
Raf1	72	0.38	74.62	1.31	42.75	4.38	33.48
Raf1	73	-3.24	124.55	-2.21	42.75	-7.39	42.37
Raf1	74	3.93	74.62	0.66	42.75	2.19	33.41
Raf1	75	-1.04	124.55	-3.28	42.75	-10.95	42.37
Raf1	76	3.51	74.62	-0.41	42.75	-1.37	42.37
Raf1	77	0.24	74.62	-3.28	42.75	-10.95	42.37
Raf1	78	0.18	74.62	-2.21	42.75	-7.38	42.37
Raf1	79	0.32	74.62	-3.89	42.75	10.84	24.69
Raf1	80	0.23	74.62	3.91	42.75	10.84	24.64
Raf1	81	3.97	74.62	1.06	42.75	3.54	33.44
Raf1	82	3.97	74.62	1.06	42.75	3.54	33.44
Raf1	83	3.53	74.62	-0.01	42.75	-0.02	42.37
Raf1	84	3.53	74.62	-0.01	42.75	-0.02	42.37
Raf1	85	0.28	74.62	-2.88	42.75	-9.60	42.37
Raf1	86	0.21	74.62	-1.81	42.75	-6.03	42.37
Raf1	87	0.28	74.62	-2.88	42.75	-9.60	42.37
Raf1	88	0.21	74.62	-1.81	42.75	-6.03	42.37
Raf1	89	0.76	74.62	3.29	42.75	10.97	33.48
Raf1	90	0.77	74.62	3.33	42.75	11.13	33.48

STRENGTH RATIO:

Id	Load		Axial	Shear	Moment	Axial+ Moment	Shear+ Moment	Control UC
	Id							
Col1	1		0.02	0.00	0.00	0.02		0.02

Col1	2	0.08	0.00	0.00	0.08	0.08
Col1	3	0.08	0.00	0.00	0.08	0.08
Col1	4	0.09	0.00	0.00	0.09	0.09
Col1	5	0.06	0.00	0.00	0.06	0.06
Col1	6	0.06	0.00	0.00	0.06	0.06
Col1	7	0.05	0.08	0.76	0.69	0.69
Col1	8	0.05	0.08	0.84	0.78	0.78
Col1	9	0.05	0.08	0.76	0.78	0.78
Col1	10	0.05	0.08	0.84	0.87	0.87
Col1	11	0.03	0.08	0.76	0.72	0.72
Col1	12	0.03	0.08	0.84	0.81	0.81
Col1	13	0.11	0.08	0.76	0.81	0.81
Col1	14	0.11	0.08	0.84	0.90	0.90
Col1	15	0.03	0.08	0.76	0.71	0.71
Col1	16	0.02	0.08	0.76	0.73	0.73
Col1	17	0.03	0.08	0.84	0.80	0.80
Col1	18	0.02	0.08	0.84	0.82	0.82
Col1	19	0.02	0.06	0.57	0.55	0.55
Col1	20	0.02	0.06	0.63	0.61	0.61
Col1	21	0.09	0.06	0.57	0.61	0.61
Col1	22	0.09	0.06	0.63	0.67	0.67
Col1	23	0.05	0.06	0.57	0.57	0.57
Col1	24	0.05	0.06	0.63	0.63	0.63
Col1	25	0.13	0.06	0.57	0.63	0.63
Col1	26	0.13	0.06	0.63	0.70	0.70
Col1	27	0.01	0.06	0.57	0.56	0.56
Col1	28	0.02	0.06	0.57	0.57	0.57
Col1	29	0.01	0.06	0.63	0.63	0.63
Col1	30	0.02	0.06	0.63	0.64	0.64
Col1	31	0.03	0.06	0.57	0.55	0.55
Col1	32	0.03	0.06	0.63	0.61	0.61
Col1	33	0.09	0.06	0.57	0.61	0.61
Col1	34	0.09	0.06	0.63	0.68	0.68
Col1	35	0.06	0.06	0.57	0.57	0.57
Col1	36	0.06	0.06	0.63	0.64	0.64
Col1	37	0.13	0.06	0.57	0.63	0.63
Col1	38	0.13	0.06	0.63	0.70	0.70
Col1	39	0.01	0.06	0.57	0.57	0.57
Col1	40	0.02	0.06	0.57	0.57	0.57
Col1	41	0.01	0.06	0.63	0.63	0.63
Col1	42	0.02	0.06	0.63	0.64	0.64
Col1	43	0.05	0.08	0.76	0.70	0.70
Col1	44	0.05	0.08	0.84	0.77	0.77
Col1	45	0.04	0.08	0.76	0.78	0.78
Col1	46	0.04	0.08	0.84	0.86	0.86
Col1	47	0.03	0.08	0.76	0.72	0.72
Col1	48	0.03	0.08	0.84	0.80	0.80
Col1	49	0.10	0.08	0.76	0.81	0.81
Col1	50	0.10	0.08	0.84	0.89	0.89
Col1	51	0.04	0.08	0.76	0.71	0.71
Col1	52	0.02	0.08	0.76	0.72	0.72
Col1	53	0.04	0.08	0.84	0.80	0.80
Col1	54	0.02	0.08	0.84	0.81	0.81
Col1	55	0.02	0.00	0.00	0.02	0.02
Col1	56	0.08	0.00	0.00	0.08	0.08
Col1	57	0.02	0.00	0.00	0.02	0.02
Col1	58	0.06	0.00	0.00	0.06	0.06
Col1	59	0.01	0.00	0.00	0.01	0.01
Col1	60	0.06	0.00	0.00	0.06	0.06
Col1	61	0.02	0.00	0.00	0.02	0.02

Col1	62	0.05	0.00	0.00	0.05	0.05
Col1	63	0.09	0.00	0.00	0.09	0.09
Col1	64	0.13	0.00	0.00	0.13	0.13
Col1	65	0.01	0.00	0.00	0.01	0.01
Col1	66	0.02	0.00	0.00	0.02	0.02
Col1	67	0.03	0.00	0.00	0.03	0.03
Col1	68	0.06	0.00	0.00	0.06	0.06
Col1	69	0.09	0.00	0.00	0.09	0.09
Col1	70	0.13	0.00	0.00	0.13	0.13
Col1	71	0.01	0.00	0.00	0.01	0.01
Col1	72	0.02	0.00	0.00	0.02	0.02
Col1	73	0.05	0.00	0.00	0.05	0.05
Col1	74	0.03	0.00	0.00	0.03	0.03
Col1	75	0.04	0.00	0.00	0.04	0.04
Col1	76	0.10	0.00	0.00	0.10	0.10
Col1	77	0.04	0.00	0.00	0.04	0.04
Col1	78	0.02	0.00	0.00	0.02	0.02
Col1	79	0.08	0.00	0.00	0.08	0.08
Col1	80	0.05	0.00	0.00	0.05	0.05
Col1	81	0.03	0.08	0.76	0.72	0.72
Col1	82	0.03	0.08	0.84	0.81	0.81
Col1	83	0.11	0.08	0.76	0.81	0.81
Col1	84	0.11	0.08	0.84	0.90	0.90
Col1	85	0.03	0.08	0.76	0.72	0.72
Col1	86	0.02	0.08	0.76	0.73	0.73
Col1	87	0.03	0.08	0.84	0.80	0.80
Col1	88	0.02	0.08	0.84	0.82	0.82
Col1	89	0.06	0.00	0.00	0.06	0.06
Col1	90	0.11	0.00	0.00	0.11	0.11
Col2	1	0.02	0.00	0.00	0.02	0.02
Col2	2	0.07	0.00	0.00	0.07	0.07
Col2	3	0.07	0.00	0.00	0.07	0.07
Col2	4	0.08	0.00	0.00	0.08	0.08
Col2	5	0.05	0.00	0.00	0.05	0.05
Col2	6	0.06	0.00	0.00	0.06	0.06
Col2	7	0.02	0.12	0.61	0.62	0.62
Col2	8	0.02	0.13	0.80	0.81	0.81
Col2	9	0.04	0.12	0.61	0.61	0.61
Col2	10	0.04	0.13	0.80	0.72	0.72
Col2	11	0.06	0.12	0.61	0.64	0.64
Col2	12	0.06	0.13	0.80	0.83	0.83
Col2	13	0.01	0.12	0.61	0.60	0.60
Col2	14	0.01	0.13	0.80	0.77	0.77
Col2	15	0.03	0.12	0.61	0.60	0.60
Col2	16	0.02	0.12	0.61	0.60	0.60
Col2	17	0.03	0.13	0.80	0.75	0.75
Col2	18	0.02	0.13	0.80	0.77	0.77
Col2	19	0.06	0.09	0.46	0.49	0.49
Col2	20	0.06	0.09	0.60	0.63	0.63
Col2	21	0.01	0.09	0.46	0.45	0.45
Col2	22	0.01	0.09	0.60	0.59	0.59
Col2	23	0.09	0.09	0.46	0.50	0.50
Col2	24	0.09	0.09	0.60	0.64	0.64
Col2	25	0.04	0.09	0.46	0.47	0.47
Col2	26	0.04	0.09	0.60	0.61	0.61
Col2	27	0.02	0.09	0.46	0.47	0.47
Col2	28	0.03	0.09	0.46	0.47	0.47
Col2	29	0.02	0.09	0.60	0.61	0.61
Col2	30	0.03	0.09	0.60	0.61	0.61
Col2	31	0.06	0.09	0.46	0.49	0.49

Col2	32	0.06	0.09	0.60	0.63	0.63
Col2	33	0.01	0.09	0.46	0.46	0.46
Col2	34	0.01	0.09	0.60	0.60	0.60
Col2	35	0.09	0.09	0.46	0.50	0.50
Col2	36	0.09	0.09	0.60	0.64	0.64
Col2	37	0.04	0.09	0.46	0.47	0.47
Col2	38	0.04	0.09	0.60	0.61	0.61
Col2	39	0.02	0.09	0.46	0.47	0.47
Col2	40	0.03	0.09	0.46	0.47	0.47
Col2	41	0.02	0.09	0.60	0.61	0.61
Col2	42	0.03	0.09	0.60	0.61	0.61
Col2	43	0.02	0.12	0.61	0.62	0.62
Col2	44	0.02	0.13	0.80	0.80	0.80
Col2	45	0.04	0.12	0.61	0.61	0.61
Col2	46	0.04	0.13	0.80	0.71	0.71
Col2	47	0.06	0.12	0.61	0.64	0.64
Col2	48	0.06	0.13	0.80	0.82	0.82
Col2	49	0.02	0.12	0.61	0.60	0.60
Col2	50	0.02	0.13	0.80	0.76	0.76
Col2	51	0.03	0.12	0.61	0.60	0.60
Col2	52	0.02	0.12	0.61	0.60	0.60
Col2	53	0.03	0.13	0.80	0.75	0.75
Col2	54	0.02	0.13	0.80	0.76	0.76
Col2	55	0.04	0.00	0.00	0.04	0.04
Col2	56	0.02	0.00	0.00	0.02	0.02
Col2	57	0.03	0.00	0.00	0.03	0.03
Col2	58	0.01	0.00	0.00	0.01	0.01
Col2	59	0.02	0.00	0.00	0.02	0.02
Col2	60	0.01	0.00	0.00	0.01	0.01
Col2	61	0.06	0.00	0.00	0.06	0.06
Col2	62	0.09	0.00	0.00	0.09	0.09
Col2	63	0.01	0.00	0.00	0.01	0.01
Col2	64	0.04	0.00	0.00	0.04	0.04
Col2	65	0.02	0.00	0.00	0.02	0.02
Col2	66	0.03	0.00	0.00	0.03	0.03
Col2	67	0.06	0.00	0.00	0.06	0.06
Col2	68	0.09	0.00	0.00	0.09	0.09
Col2	69	0.01	0.00	0.00	0.01	0.01
Col2	70	0.04	0.00	0.00	0.04	0.04
Col2	71	0.02	0.00	0.00	0.02	0.02
Col2	72	0.03	0.00	0.00	0.03	0.03
Col2	73	0.02	0.00	0.00	0.02	0.02
Col2	74	0.06	0.00	0.00	0.06	0.06
Col2	75	0.04	0.00	0.00	0.04	0.04
Col2	76	0.02	0.00	0.00	0.02	0.02
Col2	77	0.03	0.00	0.00	0.03	0.03
Col2	78	0.02	0.00	0.00	0.02	0.02
Col2	79	0.06	0.00	0.00	0.06	0.06
Col2	80	0.06	0.00	0.00	0.06	0.06
Col2	81	0.07	0.12	0.61	0.64	0.64
Col2	82	0.07	0.13	0.80	0.83	0.83
Col2	83	0.01	0.12	0.61	0.60	0.60
Col2	84	0.01	0.13	0.80	0.77	0.77
Col2	85	0.02	0.12	0.61	0.60	0.60
Col2	86	0.02	0.12	0.61	0.60	0.60
Col2	87	0.02	0.13	0.80	0.76	0.76
Col2	88	0.02	0.13	0.80	0.77	0.77
Col2	89	0.07	0.00	0.00	0.07	0.07
Col2	90	0.05	0.00	0.00	0.05	0.05
Col3	1	0.03	0.00	0.00	0.03	0.03

0.00

Col3	2	0.11	0.00	0.00	0.11	0.00	0.11
Col3	3	0.11	0.00	0.00	0.11	0.00	0.11
Col3	4	0.13	0.00	0.00	0.13	0.00	0.13
Col3	5	0.09	0.00	0.00	0.09	0.00	0.09
Col3	6	0.09	0.00	0.00	0.09	0.00	0.09
Col3	7	0.02	0.24	0.78	0.76	0.52	0.76
Col3	8	0.02	0.27	0.87	0.85	0.58	0.85
Col3	9	0.03	0.24	0.78	0.75	0.52	0.75
Col3	10	0.03	0.27	0.87	0.84	0.58	0.84
Col3	11	0.03	0.24	0.78	0.81	0.52	0.81
Col3	12	0.03	0.27	0.87	0.90	0.58	0.90
Col3	13	0.01	0.24	0.78	0.79	0.52	0.79
Col3	14	0.01	0.27	0.87	0.88	0.58	0.88
Col3	15	0.03	0.24	0.78	0.75	0.52	0.75
Col3	16	0.02	0.24	0.78	0.76	0.52	0.76
Col3	17	0.03	0.27	0.87	0.84	0.58	0.84
Col3	18	0.02	0.27	0.87	0.85	0.58	0.85
Col3	19	0.03	0.18	0.59	0.61	0.39	0.61
Col3	20	0.03	0.20	0.65	0.68	0.44	0.68
Col3	21	0.02	0.18	0.59	0.60	0.39	0.60
Col3	22	0.02	0.20	0.65	0.67	0.44	0.67
Col3	23	0.09	0.18	0.59	0.68	0.39	0.68
Col3	24	0.09	0.20	0.65	0.75	0.44	0.75
Col3	25	0.08	0.18	0.59	0.67	0.39	0.67
Col3	26	0.08	0.20	0.65	0.73	0.44	0.73
Col3	27	0.02	0.18	0.59	0.60	0.39	0.60
Col3	28	0.04	0.18	0.59	0.62	0.39	0.62
Col3	29	0.02	0.20	0.65	0.67	0.44	0.67
Col3	30	0.04	0.20	0.65	0.69	0.44	0.69
Col3	31	0.03	0.18	0.59	0.62	0.39	0.62
Col3	32	0.03	0.20	0.65	0.68	0.44	0.68
Col3	33	0.02	0.18	0.59	0.60	0.39	0.60
Col3	34	0.02	0.20	0.65	0.67	0.44	0.67
Col3	35	0.10	0.18	0.59	0.68	0.39	0.68
Col3	36	0.10	0.20	0.65	0.75	0.44	0.75
Col3	37	0.08	0.18	0.59	0.67	0.39	0.67
Col3	38	0.08	0.20	0.65	0.74	0.44	0.74
Col3	39	0.02	0.18	0.59	0.60	0.39	0.60
Col3	40	0.04	0.18	0.59	0.62	0.39	0.62
Col3	41	0.02	0.20	0.65	0.67	0.44	0.67
Col3	42	0.04	0.20	0.65	0.69	0.44	0.69
Col3	43	0.03	0.24	0.78	0.76	0.52	0.76
Col3	44	0.03	0.27	0.87	0.85	0.58	0.85
Col3	45	0.03	0.24	0.78	0.75	0.52	0.75
Col3	46	0.03	0.27	0.87	0.84	0.58	0.84
Col3	47	0.02	0.24	0.78	0.80	0.52	0.80
Col3	48	0.02	0.27	0.87	0.89	0.58	0.89
Col3	49	0.00	0.24	0.78	0.78	0.52	0.78
Col3	50	0.00	0.27	0.87	0.87	0.58	0.87
Col3	51	0.03	0.24	0.78	0.75	0.52	0.75
Col3	52	0.02	0.24	0.78	0.76	0.52	0.76
Col3	53	0.03	0.27	0.87	0.84	0.58	0.84
Col3	54	0.02	0.27	0.87	0.85	0.58	0.85
Col3	55	0.03	0.00	0.00	0.03	0.00	0.03
Col3	56	0.03	0.00	0.00	0.03	0.00	0.03
Col3	57	0.03	0.00	0.00	0.03	0.00	0.03
Col3	58	0.03	0.00	0.00	0.03	0.00	0.03
Col3	59	0.01	0.00	0.00	0.01	0.00	0.01
Col3	60	0.01	0.00	0.00	0.01	0.00	0.01
Col3	61	0.03	0.00	0.00	0.03	0.00	0.03

Col3	62	0.09	0.00	0.00	0.09	0.00	0.09
Col3	63	0.02	0.00	0.00	0.02	0.00	0.02
Col3	64	0.08	0.00	0.00	0.08	0.00	0.08
Col3	65	0.02	0.00	0.00	0.02	0.00	0.02
Col3	66	0.04	0.00	0.00	0.04	0.00	0.04
Col3	67	0.03	0.00	0.00	0.03	0.00	0.03
Col3	68	0.10	0.00	0.00	0.10	0.00	0.10
Col3	69	0.02	0.00	0.00	0.02	0.00	0.02
Col3	70	0.08	0.00	0.00	0.08	0.00	0.08
Col3	71	0.02	0.00	0.00	0.02	0.00	0.02
Col3	72	0.04	0.00	0.00	0.04	0.00	0.04
Col3	73	0.03	0.00	0.00	0.03	0.00	0.03
Col3	74	0.02	0.00	0.00	0.02	0.00	0.02
Col3	75	0.03	0.00	0.00	0.03	0.00	0.03
Col3	76	0.00	0.00	0.00	0.00	0.00	0.00
Col3	77	0.03	0.00	0.00	0.03	0.00	0.03
Col3	78	0.02	0.00	0.00	0.02	0.00	0.02
Col3	79	0.06	0.00	0.00	0.06	0.00	0.06
Col3	80	0.12	0.00	0.00	0.12	0.00	0.12
Col3	81	0.04	0.24	0.78	0.81	0.52	0.81
Col3	82	0.04	0.27	0.87	0.91	0.58	0.91
Col3	83	0.02	0.24	0.78	0.80	0.52	0.80
Col3	84	0.02	0.27	0.87	0.89	0.58	0.89
Col3	85	0.03	0.24	0.78	0.75	0.52	0.75
Col3	86	0.02	0.24	0.78	0.76	0.52	0.76
Col3	87	0.03	0.27	0.87	0.84	0.58	0.84
Col3	88	0.02	0.27	0.87	0.85	0.58	0.85
Col3	89	0.09	0.00	0.00	0.09	0.00	0.09
Col3	90	0.09	0.00	0.00	0.09	0.00	0.09

Raf1	1	0.00	0.02	0.08	0.08		0.08
Raf1	2	0.00	0.09	0.39	0.39		0.39
Raf1	3	0.00	0.10	0.41	0.41		0.41
Raf1	4	0.01	0.11	0.47	0.47		0.47
Raf1	5	0.00	0.07	0.31	0.31		0.31
Raf1	6	0.00	0.08	0.32	0.32		0.32
Raf1	7	0.03	0.05	0.15	0.17		0.17
Raf1	8	0.03	0.05	0.15	0.17		0.17
Raf1	9	0.01	0.07	0.24	0.24		0.24
Raf1	10	0.01	0.07	0.24	0.24		0.24
Raf1	11	0.05	0.02	0.09	0.11		0.11
Raf1	12	0.05	0.02	0.09	0.11		0.11
Raf1	13	0.05	0.00	0.01	0.05		0.05
Raf1	14	0.05	0.00	0.01	0.05		0.05
Raf1	15	0.00	0.07	0.24	0.24		0.24
Raf1	16	0.00	0.05	0.15	0.16		0.16
Raf1	17	0.00	0.07	0.24	0.24		0.24
Raf1	18	0.00	0.05	0.15	0.16		0.16
Raf1	19	0.02	0.03	0.12	0.12		0.12
Raf1	20	0.02	0.03	0.12	0.12		0.12
Raf1	21	0.01	0.01	0.04	0.03		0.03
Raf1	22	0.01	0.01	0.04	0.03		0.03
Raf1	23	0.04	0.08	0.33	0.35		0.35
Raf1	24	0.04	0.08	0.33	0.35		0.35
Raf1	25	0.04	0.06	0.25	0.27		0.27
Raf1	26	0.04	0.06	0.25	0.27		0.27
Raf1	27	0.01	0.01	0.04	0.04		0.04
Raf1	28	0.00	0.03	0.12	0.12		0.12
Raf1	29	0.01	0.01	0.04	0.04		0.04
Raf1	30	0.00	0.03	0.12	0.12		0.12

Raf1	31	0.02	0.03	0.13	0.13	0.13
Raf1	32	0.02	0.03	0.13	0.13	0.13
Raf1	33	0.01	0.01	0.05	0.05	0.05
Raf1	34	0.01	0.01	0.05	0.05	0.05
Raf1	35	0.04	0.08	0.35	0.36	0.36
Raf1	36	0.04	0.08	0.35	0.36	0.36
Raf1	37	0.04	0.06	0.27	0.28	0.28
Raf1	38	0.04	0.06	0.27	0.28	0.28
Raf1	39	0.01	0.01	0.05	0.05	0.05
Raf1	40	0.01	0.03	0.13	0.13	0.13
Raf1	41	0.01	0.01	0.05	0.05	0.05
Raf1	42	0.01	0.03	0.13	0.13	0.13
Raf1	43	0.03	0.05	0.17	0.19	0.19
Raf1	44	0.03	0.05	0.17	0.19	0.19
Raf1	45	0.01	0.08	0.26	0.26	0.26
Raf1	46	0.01	0.08	0.26	0.26	0.26
Raf1	47	0.05	0.02	0.07	0.09	0.09
Raf1	48	0.05	0.02	0.07	0.09	0.09
Raf1	49	0.05	0.01	0.03	0.06	0.06
Raf1	50	0.05	0.01	0.03	0.06	0.06
Raf1	51	0.00	0.08	0.26	0.26	0.26
Raf1	52	0.00	0.05	0.17	0.18	0.18
Raf1	53	0.00	0.08	0.26	0.26	0.26
Raf1	54	0.00	0.05	0.17	0.18	0.18
Raf1	55	0.01	0.02	0.08	0.09	0.09
Raf1	56	0.02	0.02	0.09	0.09	0.09
Raf1	57	0.01	0.02	0.08	0.08	0.08
Raf1	58	0.01	0.02	0.09	0.09	0.09
Raf1	59	0.01	0.01	0.03	0.03	0.03
Raf1	60	0.02	0.01	0.03	0.04	0.04
Raf1	61	0.02	0.03	0.12	0.12	0.12
Raf1	62	0.04	0.08	0.33	0.35	0.35
Raf1	63	0.01	0.01	0.04	0.03	0.03
Raf1	64	0.04	0.06	0.25	0.27	0.27
Raf1	65	0.01	0.01	0.04	0.04	0.04
Raf1	66	0.00	0.03	0.12	0.12	0.12
Raf1	67	0.02	0.03	0.13	0.13	0.13
Raf1	68	0.04	0.08	0.35	0.36	0.36
Raf1	69	0.01	0.01	0.05	0.05	0.05
Raf1	70	0.04	0.06	0.27	0.28	0.28
Raf1	71	0.01	0.01	0.05	0.05	0.05
Raf1	72	0.01	0.03	0.13	0.13	0.13
Raf1	73	0.03	0.05	0.17	0.19	0.19
Raf1	74	0.05	0.02	0.07	0.09	0.09
Raf1	75	0.01	0.08	0.26	0.26	0.26
Raf1	76	0.05	0.01	0.03	0.06	0.06
Raf1	77	0.00	0.08	0.26	0.26	0.26
Raf1	78	0.00	0.05	0.17	0.18	0.18
Raf1	79	0.00	0.09	0.44	0.44	0.44
Raf1	80	0.00	0.09	0.44	0.43	0.43
Raf1	81	0.05	0.02	0.11	0.13	0.13
Raf1	82	0.05	0.02	0.11	0.13	0.13
Raf1	83	0.05	0.00	0.00	0.05	0.05
Raf1	84	0.05	0.00	0.00	0.05	0.05
Raf1	85	0.00	0.07	0.23	0.23	0.23
Raf1	86	0.00	0.04	0.14	0.14	0.14
Raf1	87	0.00	0.07	0.23	0.23	0.23
Raf1	88	0.00	0.04	0.14	0.14	0.14
Raf1	89	0.01	0.08	0.33	0.33	0.33
Raf1	90	0.01	0.08	0.33	0.34	0.34

COLUMN REACTIONS:

	Load		In_Plane	--Out_Plane_Horz--	
Id	Id	Vert(k)	Horz(k)	Base(k)	Roof(k)
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Col1	1	0.82	0.00	0.00	0.00
Col1	2	3.00	0.00	0.00	0.00
Col1	3	3.11	0.00	0.00	0.00
Col1	4	3.62	0.00	0.00	0.00
Col1	5	2.45	0.00	0.00	0.00
Col1	6	2.54	0.00	0.00	0.00
Col1	7	-7.11	3.55	-2.04	-2.04
Col1	8	-7.11	3.55	2.28	2.28
Col1	9	2.01	0.00	-2.04	-2.04
Col1	10	2.01	0.00	2.28	2.28
Col1	11	-4.78	3.15	-2.04	-2.04
Col1	12	-4.78	3.15	2.28	2.28
Col1	13	4.25	0.00	-2.04	-2.04
Col1	14	4.25	0.00	2.28	2.28
Col1	15	-3.57	1.02	-2.04	-2.04
Col1	16	-2.32	0.72	-2.04	-2.04
Col1	17	-3.57	1.02	2.28	2.28
Col1	18	-2.32	0.72	2.28	2.28
Col1	19	-3.41	2.66	-1.53	-1.53
Col1	20	-3.41	2.66	1.71	1.71
Col1	21	3.43	0.00	-1.53	-1.53
Col1	22	3.43	0.00	1.71	1.71
Col1	23	-1.66	2.36	-1.53	-1.53
Col1	24	-1.66	2.36	1.71	1.71
Col1	25	5.11	0.00	-1.53	-1.53
Col1	26	5.11	0.00	1.71	1.71
Col1	27	-0.75	0.77	-1.53	-1.53
Col1	28	0.19	0.54	-1.53	-1.53
Col1	29	-0.75	0.77	1.71	1.71
Col1	30	0.19	0.54	1.71	1.71
Col1	31	-3.33	2.66	-1.53	-1.53
Col1	32	-3.33	2.66	1.71	1.71
Col1	33	3.51	0.00	-1.53	-1.53
Col1	34	3.51	0.00	1.71	1.71
Col1	35	-1.58	2.36	-1.53	-1.53
Col1	36	-1.58	2.36	1.71	1.71
Col1	37	5.19	0.00	-1.53	-1.53
Col1	38	5.19	0.00	1.71	1.71
Col1	39	-0.67	0.77	-1.53	-1.53
Col1	40	0.27	0.54	-1.53	-1.53
Col1	41	-0.67	0.77	1.71	1.71
Col1	42	0.27	0.54	1.71	1.71
Col1	43	-7.40	3.55	-2.04	-2.04
Col1	44	-7.40	3.55	2.28	2.28
Col1	45	1.73	0.00	-2.04	-2.04
Col1	46	1.73	0.00	2.28	2.28
Col1	47	-5.07	3.15	-2.04	-2.04
Col1	48	-5.07	3.15	2.28	2.28
Col1	49	3.96	0.00	-2.04	-2.04
Col1	50	3.96	0.00	2.28	2.28
Col1	51	-3.85	1.02	-2.04	-2.04
Col1	52	-2.60	0.72	-2.04	-2.04
Col1	53	-3.85	1.02	2.28	2.28
Col1	54	-2.60	0.72	2.28	2.28

Col1	55	-1.32	1.29	0.00	0.00
Col1	56	3.03	0.00	0.00	0.00
Col1	57	-0.77	0.96	0.00	0.00
Col1	58	2.46	0.00	0.00	0.00
Col1	59	-1.88	1.29	0.00	0.00
Col1	60	2.47	0.00	0.00	0.00
Col1	61	-3.41	2.66	0.00	0.00
Col1	62	-1.66	2.36	0.00	0.00
Col1	63	3.43	0.00	0.00	0.00
Col1	64	5.11	0.00	0.00	0.00
Col1	65	-0.75	0.77	0.00	0.00
Col1	66	0.19	0.54	0.00	0.00
Col1	67	-3.33	2.66	0.00	0.00
Col1	68	-1.58	2.36	0.00	0.00
Col1	69	3.51	0.00	0.00	0.00
Col1	70	5.19	0.00	0.00	0.00
Col1	71	-0.67	0.77	0.00	0.00
Col1	72	0.27	0.54	0.00	0.00
Col1	73	-7.40	3.55	0.00	0.00
Col1	74	-5.07	3.15	0.00	0.00
Col1	75	1.73	0.00	0.00	0.00
Col1	76	3.96	0.00	0.00	0.00
Col1	77	-3.85	1.02	0.00	0.00
Col1	78	-2.60	0.72	0.00	0.00
Col1	79	3.29	0.00	0.00	0.00
Col1	80	1.81	0.00	0.00	0.00
Col1	81	-4.67	3.15	-2.04	-2.04
Col1	82	-4.67	3.15	2.28	2.28
Col1	83	4.36	0.00	-2.04	-2.04
Col1	84	4.36	0.00	2.28	2.28
Col1	85	-3.46	1.02	-2.04	-2.04
Col1	86	-2.21	0.72	-2.04	-2.04
Col1	87	-3.46	1.02	2.28	2.28
Col1	88	-2.21	0.72	2.28	2.28
Col1	89	0.95	0.96	0.00	0.00
Col1	90	4.18	0.00	0.00	0.00
Col2	1	2.14	0.00	0.00	0.00
Col2	2	8.44	0.00	0.00	0.00
Col2	3	8.76	0.00	0.00	0.00
Col2	4	9.95	0.04	0.00	0.00
Col2	5	6.87	0.00	0.00	0.00
Col2	6	7.11	0.00	0.00	0.00
Col2	7	2.99	0.00	-5.71	-5.71
Col2	8	2.99	0.00	6.12	6.12
Col2	9	-9.24	2.19	-5.71	-5.71
Col2	10	-9.24	2.19	6.12	6.12
Col2	11	8.03	0.00	-5.71	-5.71
Col2	12	8.03	0.00	6.12	6.12
Col2	13	-4.10	2.55	-5.71	-5.71
Col2	14	-4.10	2.55	6.12	6.12
Col2	15	-3.67	0.00	-5.71	-5.71
Col2	16	-2.06	0.00	-5.71	-5.71
Col2	17	-3.67	0.00	6.12	6.12
Col2	18	-2.06	0.00	6.12	6.12
Col2	19	7.74	0.00	-4.28	-4.28
Col2	20	7.74	0.00	4.59	4.59
Col2	21	-1.43	1.64	-4.28	-4.28
Col2	22	-1.43	1.64	4.59	4.59
Col2	23	11.52	0.00	-4.28	-4.28
Col2	24	11.52	0.00	4.59	4.59

Col2	25	2.42	1.92	-4.28	-4.28
Col2	26	2.42	1.92	4.59	4.59
Col2	27	2.74	0.00	-4.28	-4.28
Col2	28	3.95	0.00	-4.28	-4.28
Col2	29	2.74	0.00	4.59	4.59
Col2	30	3.95	0.00	4.59	4.59
Col2	31	7.98	0.00	-4.28	-4.28
Col2	32	7.98	0.00	4.59	4.59
Col2	33	-1.19	1.64	-4.28	-4.28
Col2	34	-1.19	1.64	4.59	4.59
Col2	35	11.76	0.00	-4.28	-4.28
Col2	36	11.76	0.00	4.59	4.59
Col2	37	2.66	1.92	-4.28	-4.28
Col2	38	2.66	1.92	4.59	4.59
Col2	39	2.98	0.00	-4.28	-4.28
Col2	40	4.19	0.00	-4.28	-4.28
Col2	41	2.98	0.00	4.59	4.59
Col2	42	4.19	0.00	4.59	4.59
Col2	43	2.26	0.00	-5.71	-5.71
Col2	44	2.26	0.00	6.12	6.12
Col2	45	-9.97	2.19	-5.71	-5.71
Col2	46	-9.97	2.19	6.12	6.12
Col2	47	7.30	0.00	-5.71	-5.71
Col2	48	7.30	0.00	6.12	6.12
Col2	49	-4.83	2.55	-5.71	-5.71
Col2	50	-4.83	2.55	6.12	6.12
Col2	51	-4.40	0.00	-5.71	-5.71
Col2	52	-2.79	0.00	-5.71	-5.71
Col2	53	-4.40	0.00	6.12	6.12
Col2	54	-2.79	0.00	6.12	6.12
Col2	55	4.63	0.00	0.00	0.00
Col2	56	0.24	1.29	0.00	0.00
Col2	57	3.99	0.00	0.00	0.00
Col2	58	0.73	0.96	0.00	0.00
Col2	59	3.14	0.00	0.00	0.00
Col2	60	-1.24	1.29	0.00	0.00
Col2	61	7.74	0.00	0.00	0.00
Col2	62	11.52	0.00	0.00	0.00
Col2	63	-1.43	1.64	0.00	0.00
Col2	64	2.42	1.92	0.00	0.00
Col2	65	2.74	0.00	0.00	0.00
Col2	66	3.95	0.00	0.00	0.00
Col2	67	7.98	0.00	0.00	0.00
Col2	68	11.76	0.00	0.00	0.00
Col2	69	-1.19	1.64	0.00	0.00
Col2	70	2.66	1.92	0.00	0.00
Col2	71	2.98	0.00	0.00	0.00
Col2	72	4.19	0.00	0.00	0.00
Col2	73	2.26	0.00	0.00	0.00
Col2	74	7.30	0.00	0.00	0.00
Col2	75	-9.97	2.19	0.00	0.00
Col2	76	-4.83	2.55	0.00	0.00
Col2	77	-4.40	0.00	0.00	0.00
Col2	78	-2.79	0.00	0.00	0.00
Col2	79	7.08	0.01	0.00	0.00
Col2	80	7.10	0.01	0.00	0.00
Col2	81	8.35	0.00	-5.71	-5.71
Col2	82	8.35	0.00	6.12	6.12
Col2	83	-3.78	2.55	-5.71	-5.71
Col2	84	-3.78	2.55	6.12	6.12

Col2	85	-3.36	0.00	-5.71	-5.71
Col2	86	-1.75	0.00	-5.71	-5.71
Col2	87	-3.36	0.00	6.12	6.12
Col2	88	-1.75	0.00	6.12	6.12
Col2	89	8.95	0.00	0.00	0.00
Col2	90	5.69	0.96	0.00	0.00
Col3	1	0.70	0.00	0.00	0.00
Col3	2	2.84	0.00	0.00	0.00
Col3	3	2.95	0.00	0.00	0.00
Col3	4	3.37	0.00	0.00	0.00
Col3	5	2.30	0.00	0.00	0.00
Col3	6	2.38	0.00	0.00	0.00
Col3	7	-1.42	0.00	-1.84	-1.84
Col3	8	-1.42	0.00	2.05	2.05
Col3	9	-1.91	0.00	-1.84	-1.84
Col3	10	-1.91	0.00	2.05	2.05
Col3	11	0.85	0.00	-1.84	-1.84
Col3	12	0.85	0.00	2.05	2.05
Col3	13	0.36	0.00	-1.84	-1.84
Col3	14	0.36	0.00	2.05	2.05
Col3	15	-1.89	0.00	-1.84	-1.84
Col3	16	-1.16	0.00	-1.84	-1.84
Col3	17	-1.89	0.00	2.05	2.05
Col3	18	-1.16	0.00	2.05	2.05
Col3	19	0.80	0.00	-1.38	-1.38
Col3	20	0.80	0.00	1.54	1.54
Col3	21	0.43	0.00	-1.38	-1.38
Col3	22	0.43	0.00	1.54	1.54
Col3	23	2.49	0.00	-1.38	-1.38
Col3	24	2.49	0.00	1.54	1.54
Col3	25	2.13	0.00	-1.38	-1.38
Col3	26	2.13	0.00	1.54	1.54
Col3	27	0.44	0.00	-1.38	-1.38
Col3	28	0.99	0.00	-1.38	-1.38
Col3	29	0.44	0.00	1.54	1.54
Col3	30	0.99	0.00	1.54	1.54
Col3	31	0.88	0.00	-1.38	-1.38
Col3	32	0.88	0.00	1.54	1.54
Col3	33	0.51	0.00	-1.38	-1.38
Col3	34	0.51	0.00	1.54	1.54
Col3	35	2.57	0.00	-1.38	-1.38
Col3	36	2.57	0.00	1.54	1.54
Col3	37	2.21	0.00	-1.38	-1.38
Col3	38	2.21	0.00	1.54	1.54
Col3	39	0.52	0.00	-1.38	-1.38
Col3	40	1.07	0.00	-1.38	-1.38
Col3	41	0.52	0.00	1.54	1.54
Col3	42	1.07	0.00	1.54	1.54
Col3	43	-1.65	0.00	-1.84	-1.84
Col3	44	-1.65	0.00	2.05	2.05
Col3	45	-2.14	0.00	-1.84	-1.84
Col3	46	-2.14	0.00	2.05	2.05
Col3	47	0.61	0.00	-1.84	-1.84
Col3	48	0.61	0.00	2.05	2.05
Col3	49	0.12	0.00	-1.84	-1.84
Col3	50	0.12	0.00	2.05	2.05
Col3	51	-2.13	0.00	-1.84	-1.84
Col3	52	-1.40	0.00	-1.84	-1.84
Col3	53	-2.13	0.00	2.05	2.05
Col3	54	-1.40	0.00	2.05	2.05

Col3	55	0.76	0.00	0.00	0.00
Col3	56	0.80	0.00	0.00	0.00
Col3	57	0.74	0.00	0.00	0.00
Col3	58	0.77	0.00	0.00	0.00
Col3	59	0.27	0.00	0.00	0.00
Col3	60	0.31	0.00	0.00	0.00
Col3	61	0.80	0.00	0.00	0.00
Col3	62	2.49	0.00	0.00	0.00
Col3	63	0.43	0.00	0.00	0.00
Col3	64	2.13	0.00	0.00	0.00
Col3	65	0.44	0.00	0.00	0.00
Col3	66	0.99	0.00	0.00	0.00
Col3	67	0.88	0.00	0.00	0.00
Col3	68	2.57	0.00	0.00	0.00
Col3	69	0.51	0.00	0.00	0.00
Col3	70	2.21	0.00	0.00	0.00
Col3	71	0.52	0.00	0.00	0.00
Col3	72	1.07	0.00	0.00	0.00
Col3	73	-1.65	0.00	0.00	0.00
Col3	74	0.61	0.00	0.00	0.00
Col3	75	-2.14	0.00	0.00	0.00
Col3	76	0.12	0.00	0.00	0.00
Col3	77	-2.13	0.00	0.00	0.00
Col3	78	-1.40	0.00	0.00	0.00
Col3	79	1.66	0.00	0.00	0.00
Col3	80	3.11	0.00	0.00	0.00
Col3	81	0.95	0.00	-1.84	-1.84
Col3	82	0.95	0.00	2.05	2.05
Col3	83	0.46	0.00	-1.84	-1.84
Col3	84	0.46	0.00	2.05	2.05
Col3	85	-1.78	0.00	-1.84	-1.84
Col3	86	-1.06	0.00	-1.84	-1.84
Col3	87	-1.78	0.00	2.05	2.05
Col3	88	-1.06	0.00	2.05	2.05
Col3	89	2.42	0.00	0.00	0.00
Col3	90	2.46	0.00	0.00	0.00

COLUMN DEFLECTIONS:

Id	Load	Deflection(in)	
	Id	Calc	Limit
-----	----	-----	-----
Col1	1	0.00	2.81
Col1	2	0.00	2.81
Col1	3	0.00	2.81
Col1	4	0.00	2.81
Col1	5	0.00	2.81
Col1	6	0.00	2.81
Col1	7	0.00	2.81
Col1	8	0.00	2.81
Col1	9	0.00	2.81
Col1	10	0.00	2.81
Col1	11	0.00	2.81
Col1	12	0.00	2.81
Col1	13	0.00	2.81
Col1	14	-1.48	2.81
Col1	15	1.65	2.81
Col1	16	0.00	2.81
Col1	17	0.00	2.81
Col1	18	0.00	2.81

Col1	19	0.00	2.81
Col1	20	0.00	2.81
Col1	21	0.00	2.81
Col1	22	0.00	2.81
Col1	23	0.00	2.81
Col1	24	0.00	2.81
Col2	1	0.00	2.67
Col2	2	0.00	2.67
Col2	3	0.00	2.67
Col2	4	0.00	2.67
Col2	5	0.00	2.67
Col2	6	0.00	2.67
Col2	7	0.00	2.67
Col2	8	0.00	2.67
Col2	9	0.00	2.67
Col2	10	0.00	2.67
Col2	11	0.00	2.67
Col2	12	0.00	2.67
Col2	13	0.00	2.67
Col2	14	-0.93	2.67
Col2	15	1.00	2.67
Col2	16	0.00	2.67
Col2	17	0.00	2.67
Col2	18	0.00	2.67
Col2	19	0.00	2.67
Col2	20	0.00	2.67
Col2	21	0.00	2.67
Col2	22	0.00	2.67
Col2	23	0.00	2.67
Col2	24	0.00	2.67
Col3	1	0.00	2.53
Col3	2	0.00	2.53
Col3	3	0.00	2.53
Col3	4	0.00	2.53
Col3	5	0.00	2.53
Col3	6	0.00	2.53
Col3	7	0.00	2.53
Col3	8	0.00	2.53
Col3	9	0.00	2.53
Col3	10	0.00	2.53
Col3	11	0.00	2.53
Col3	12	0.00	2.53
Col3	13	0.00	2.53
Col3	14	-0.69	2.53
Col3	15	0.77	2.53
Col3	16	0.00	2.53
Col3	17	0.00	2.53
Col3	18	0.00	2.53
Col3	19	0.00	2.53
Col3	20	0.00	2.53
Col3	21	0.00	2.53
Col3	22	0.00	2.53
Col3	23	0.00	2.53
Col3	24	0.00	2.53

RAFTER DEFLECTIONS:

Id	Load	Deflection(in)	
	Id	Calc	Limit
-----	-----	-----	-----

Raf1	1	-0.02	1.11
Raf1	2	-0.10	1.11
Raf1	3	-0.11	1.11
Raf1	4	-0.12	1.11
Raf1	5	-0.08	1.11
Raf1	6	-0.09	1.11
Raf1	7	-0.10	1.11
Raf1	8	0.03	1.11
Raf1	9	0.05	1.11
Raf1	10	-0.02	1.11
Raf1	11	0.00	1.11
Raf1	12	0.05	1.11
Raf1	13	0.03	1.11
Raf1	14	-0.02	1.11
Raf1	15	-0.02	1.11
Raf1	16	-0.02	1.11
Raf1	17	-0.02	1.11
Raf1	18	-0.09	1.11
Raf1	19	-0.09	1.11
Raf1	20	-0.01	1.11
Raf1	21	-0.01	1.11
Raf1	22	0.00	1.11
Raf1	23	0.00	1.11
Raf1	24	-0.02	1.11

COLUMN/RAFTER KL/R RATIO:

Id	Unbrace_Length		----KL/R----	
	Major	Minor	Major	Minor
Col1	28.1	5.0	105	71
Col2	26.7	6.3	75	56
Col3	25.3	6.3	66	58
Raf1	16.7	4.9	43	78

LOAD COMBINATIONS:

Strength Combinations

- 1 - Dead+Collateral
- 2 - Dead+Collateral+Live
- 3 - Dead+Collateral+Snow
- 4 - Dead+Collateral+MIN_SNOW
- 5 - Dead+Collateral+0.75Live
- 6 - Dead+Collateral+0.75Snow
- 7 - Dead+0.6Wind_Left1+0.6Wind_Pressure
- 8 - Dead+0.6Wind_Left1+0.6Wind_Suction
- 9 - Dead+0.6Wind_Right1+0.6Wind_Pressure
- 10 - Dead+0.6Wind_Right1+0.6Wind_Suction
- 11 - Dead+0.6Wind_Left2+0.6Wind_Pressure
- 12 - Dead+0.6Wind_Left2+0.6Wind_Suction
- 13 - Dead+0.6Wind_Right2+0.6Wind_Pressure
- 14 - Dead+0.6Wind_Right2+0.6Wind_Suction
- 15 - Dead+0.6Wind_Pressure+0.6Wind_Long1
- 16 - Dead+0.6Wind_Pressure+0.6Wind_Long2
- 17 - Dead+0.6Wind_Suction+0.6Wind_Long1
- 18 - Dead+0.6Wind_Suction+0.6Wind_Long2
- 19 - Dead+Collateral+0.75Live+0.45Wind_Left1+0.45Wind_Pressure
- 20 - Dead+Collateral+0.75Live+0.45Wind_Left1+0.45Wind_Suction

21 - Dead+Collateral+0.75Live+0.45Wind_Right1+0.45Wind_Pressure
22 - Dead+Collateral+0.75Live+0.45Wind_Right1+0.45Wind_Suction
23 - Dead+Collateral+0.75Live+0.45Wind_Left2+0.45Wind_Pressure
24 - Dead+Collateral+0.75Live+0.45Wind_Left2+0.45Wind_Suction
25 - Dead+Collateral+0.75Live+0.45Wind_Right2+0.45Wind_Pressure
26 - Dead+Collateral+0.75Live+0.45Wind_Right2+0.45Wind_Suction
27 - Dead+Collateral+0.75Live+0.45Wind_Pressure+0.45Wind_Long1
28 - Dead+Collateral+0.75Live+0.45Wind_Pressure+0.45Wind_Long2
29 - Dead+Collateral+0.75Live+0.45Wind_Suction+0.45Wind_Long1
30 - Dead+Collateral+0.75Live+0.45Wind_Suction+0.45Wind_Long2
31 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.45Wind_Pressure
32 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.45Wind_Suction
33 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.45Wind_Pressure
34 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.45Wind_Suction
35 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Pressure
36 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Suction
37 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Pressure
38 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Suction
39 - Dead+Collateral+0.75Snow+0.45Wind_Pressure+0.45Wind_Long1
40 - Dead+Collateral+0.75Snow+0.45Wind_Pressure+0.45Wind_Long2
41 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long1
42 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long2
43 - 0.6Dead+0.6Wind_Left1+0.6Wind_Pressure
44 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
45 - 0.6Dead+0.6Wind_Right1+0.6Wind_Pressure
46 - 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
47 - 0.6Dead+0.6Wind_Left2+0.6Wind_Pressure
48 - 0.6Dead+0.6Wind_Left2+0.6Wind_Suction
49 - 0.6Dead+0.6Wind_Right2+0.6Wind_Pressure
50 - 0.6Dead+0.6Wind_Right2+0.6Wind_Suction
51 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long1
52 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2
53 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long1
54 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long2
55 - 1.11Dead+1.11Collateral+0.7Seismic
56 - 1.11Dead+1.11Collateral-0.7Seismic
57 - 1.08Dead+1.08Collateral+0.52Seismic
58 - 1.08Dead+1.08Collateral-0.52Seismic
59 - 0.49Dead+0.7Seismic
60 - 0.49Dead-0.7Seismic
61 - Dead+Collateral+0.75Live+0.45Wind_Left1
62 - Dead+Collateral+0.75Live+0.45Wind_Left2
63 - Dead+Collateral+0.75Live+0.45Wind_Right1
64 - Dead+Collateral+0.75Live+0.45Wind_Right2
65 - Dead+Collateral+0.75Live+0.45Wind_Long1
66 - Dead+Collateral+0.75Live+0.45Wind_Long2
67 - Dead+Collateral+0.75Snow+0.45Wind_Left1
68 - Dead+Collateral+0.75Snow+0.45Wind_Left2
69 - Dead+Collateral+0.75Snow+0.45Wind_Right1
70 - Dead+Collateral+0.75Snow+0.45Wind_Right2
71 - Dead+Collateral+0.75Snow+0.45Wind_Long1
72 - Dead+Collateral+0.75Snow+0.45Wind_Long2
73 - 0.6Dead+0.6Wind_Left1
74 - 0.6Dead+0.6Wind_Left2
75 - 0.6Dead+0.6Wind_Right1
76 - 0.6Dead+0.6Wind_Right2
77 - 0.6Dead+0.6Wind_Long1
78 - 0.6Dead+0.6Wind_Long2
79 - Dead+Collateral+Snow/2+E1PAT_SL_1
80 - Dead+Collateral+Snow/2+E1PAT_SL_2

81 - Dead+Collateral+0.6Wind_Left2+0.6Wind_Pressure
 82 - Dead+Collateral+0.6Wind_Left2+0.6Wind_Suction
 83 - Dead+Collateral+0.6Wind_Right2+0.6Wind_Pressure
 84 - Dead+Collateral+0.6Wind_Right2+0.6Wind_Suction
 85 - Dead+Collateral+0.6Wind_Pressure+0.6Wind_Long1
 86 - Dead+Collateral+0.6Wind_Pressure+0.6Wind_Long2
 87 - Dead+Collateral+0.6Wind_Suction+0.6Wind_Long1
 88 - Dead+Collateral+0.6Wind_Suction+0.6Wind_Long2
 89 - 1.08Dead+1.08Collateral+0.75Snow+0.52Seismic
 90 - 1.08Dead+1.08Collateral+0.75Snow-0.52Seismic

Deflection Combinations

1 - Dead+Collateral
 2 - Dead+Collateral+Live
 3 - Dead+Collateral+Snow
 4 - Dead+Collateral+MIN_SNOW
 5 - Live
 6 - Snow
 7 - MIN_SNOW
 8 - Dead+0.39Wind_Left1
 9 - Dead+0.39Wind_Right1
 10 - Dead+0.39Wind_Left2
 11 - Dead+0.39Wind_Right2
 12 - Dead+0.39Wind_Long1
 13 - Dead+0.39Wind_Long2
 14 - Dead+0.39Wind_Pressure
 15 - Dead+0.39Wind_Suction
 16 - 1.11Dead+1.11Collateral+0.7Seismic
 17 - 1.11Dead+1.11Collateral-0.7Seismic
 18 - 1.08Dead+1.08Collateral+0.75Snow+0.52Seismic
 19 - 1.08Dead+1.08Collateral+0.75Snow-0.52Seismic
 20 - 0.49Dead+0.7Seismic
 21 - 0.49Dead-0.7Seismic
 22 - Seismic
 23 - Seismic
 24 - Dead

```
=====
U18R1010A          Wall 1 - Column Flange Brace          11/ 9/18  1:22pm
=====
```

COLUMN FLANGE BRACES

Id	Column	Part	Brace_At
	Side		Girt_Id
Col2	R	L2525105	3
Col3	L	A2525105	2 3

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=====
U18R1010A          Wall 1 - Base Plate Design          11/ 9/18  1:22pm
=====
```

DESIGN CONSTANTS:

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-----
Base Plate Yield      = 55.00(ksi )
Concrete Bearing      = 1.05(ksi )
Bolt Shear Stress     = 13.05(ksi )
Bolt Tension Stress   = 21.75(ksi )
```

BASE SIZE:

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```

Id	-----Base(in)-----			--Plate_Size(in)--			-----Bolts(in)-----			
	Type	Depth	Elev	Width	Thick	Length	Type	Dia	Gage	Row
Col1	S3	7.89	0.0	8.00	0.375	7.94	GR36	0.750	4.00	2
Col2	S3	10.20	0.0	8.00	0.375	10.25	GR36	0.750	4.00	2
Col3	S3	12.00	0.0	8.20	0.375	12.00	GR36	0.750	4.00	2

S3 - Welded Plate

BASE REACTIONS:

Id	--Max_Comp-		Max_Tension+Shear			-Max_Shear-		Max_Shear+Tension		
	Load	Fy(k)	Load	Fy(k)	Fx(k)	Load	Fx(k)	Load	Fx(k)	Fy(k)
Col1	37	5.19	44	-7.40	4.22	8	4.22	44	4.22	-7.40
Col2	35	11.76	46	-9.97	6.50	84	6.64	84	6.64	-3.78
Col3	4	3.37	46	-2.14	2.05	8	2.05	46	2.05	-2.14

LOAD COMBINATIONS:

- 4 - Dead+Collateral+MIN_SNOW
8 - Dead+0.6Wind_Left1+0.6Wind_Suction
35 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Pressure
37 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Pressure
44 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
46 - 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
84 - Dead+Collateral+0.6Wind_Right2+0.6Wind_Suction

=====

U18R1010A Wall 1 - Bypass Girt Layout 11/ 9/18 1:22pm

=====

GIRT LAYOUT:

Locate	Des Bay		Part	Bay_Offset		Design Length	---Extend---		Weight	----Max_Load----			
	Id	Id		Start	End		Left	Right		Id	UC	Report	Rot
3.75	1	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.60	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.60	Mom+Shr	D
7.50	2	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.80	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.80	Mom+Shr	D
13.75	3	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.90	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.90	Mom+Shr	D
18.75	4	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.80	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.80	Mom+Shr	D
23.75	5	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.84	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.84	Mom+Shr	D

WS - 0.6Wind_Suction

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay

```

1    2
---  ---
0    0

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=====
U18R1010A      Wall 1 - Girt Design 1 (Locate 3.75)    11/ 9/18  1:22pm
=====
```

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	08Z054	3.7500	17.17		1.81	3.75	0	50.3	0.00	0.70
2	08Z054	3.7500	17.17	1.81		3.75	0	50.3	0.00	0.70

								100.6		

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.47		-0.71	-0.85	0.00		-1.46	6.15	1.80	3.21
2	0.85	0.71		-0.47	3.21	1.80	-1.46	11.01		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.71	1.8	0.38	RLap	1.80	3.73	0.48	RLap	0.56	-0.23	
2	LLap	0.71	1.8	0.38	LLap	1.80	3.73	0.48	LLap	0.56	-0.23	

UNBRACE LENGTHS

Bay Id	-----Minor-----								-----Cb-----							
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.44	2.65	1.70	0.26
2	0.44	2.65	1.70	0.26				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Span Loc	Right Lap	Right Sup
1	-0.53		0.76	0.91	0.00		1.58	6.28	-1.94	-3.46
2	-0.91	-0.76		0.53	-3.46	-1.94	1.58	10.89		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.76	1.8	0.41	MidS	1.58	3.09	0.51	RLap	0.60	0.25	
2	LLap	-0.76	1.8	0.41	MidS	1.58	3.09	0.51	LLap	0.60	0.25	

UNBRACE LENGTHS

Bay Id	-----Minor-----								-----Cb-----							
	Mom1/Mom2		LS		LL		MS		RL		RS		LS		LL	
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.48	2.65	1.70	0.28
2	0.48	2.65	1.70	0.28				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.15	2.29	0.16	2.29				
2	-0.15	2.29	0.16	2.29				

U18R1010A Wall 1 - Girt Design 2 (Locate 7.50) 11/ 9/18 1:22pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	08Z054	7.5000	17.17		1.81	5.00	0	50.3	0.00	0.70
2	08Z054	7.5000	17.17	1.81		5.00	0	50.3	0.00	0.70
									100.6	

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Loc	Right Lap	Right Sup
1	0.63		-0.94	-1.13	0.00		-1.94	6.15	2.40	4.28
2	1.13	0.94		-0.63	4.28	2.40	-1.94	11.01		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.94	1.8	0.51	RLap	2.40	3.73	0.64	RLap	0.74	-0.30	
2	LLap	0.94	1.8	0.51	LLap	2.40	3.73	0.64	LLap	0.74	-0.30	

UNBRACE LENGTHS

Bay Id	-----Minor-----						-----Cb-----									
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.59	2.65	1.70	0.35
2	0.59	2.65	1.70	0.35				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

-----Shear(k)-----				-----Moment(f-k)-----			
---------------------	--	--	--	------------------------	--	--	--

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Span Loc	Right Lap	Right Sup
1	-0.70		1.02	1.22	0.00		2.10	6.28	-2.59	-4.62
2	-1.22	-1.02		0.70	-4.62	-2.59	2.10	10.89		0.00

STRENGTH/DEFLECTION:

Bay Id	Loc	Shear(k) Calc Limit	UC	Moment(f-k) Calc Limit	UC	-Mom+Shr- Loc UC	Deflect(in) Calc Limit
1	RLap	1.02 1.8	0.55	MidS 2.10 3.09	0.68	RLap 0.80	0.33
2	LLap	-1.02 1.8	0.55	MidS 2.10 3.09	0.68	LLap 0.80	0.33

UNBRACE LENGTHS

Bay Id	Mom1/Mom2 Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	Left_Lap Calc Shear Bear UC	Right_Lap Calc Shear Bear UC
1		0.64 2.65 1.70 0.37
2	0.64 2.65 1.70 0.37	

DEFLECTION: (Working Load)

Span Id	Wind_Pressure Calc Allow	Wind_Suction Calc Allow	Seis_Pressure Calc Allow	Seis_Suction Calc Allow
1	-0.20 2.29	0.21 2.29		
2	-0.20 2.29	0.21 2.29		

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U18R1010A          Wall 1 - Girt Design 3 (Locate 13.75)    11/ 9/18  1:22pm
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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left Right	Load Width	No. Brace	Weight	Available Reduction Factor Out In
1	08Z054	13.7500	17.17		1.81	5.63	0	50.3 0.00 0.70
2	08Z054	13.7500	17.17	1.81		5.63	0	50.3 0.00 0.70

100.6

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.71		-1.06	-1.27	0.00		-2.19	6.15	2.70	4.81
2	1.27	1.06		-0.71	4.81	2.70	-2.19	11.01		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.06	1.8	0.57	RLap	2.70	3.73	0.72	RLap	0.84	-0.34	
2	LLap	1.06	1.8	0.57	LLap	2.70	3.73	0.72	LLap	0.84	-0.34	

UNBRACE LENGTHS

Bay Id	Minor								Cb							
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	Left_Lap				Right_Lap			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.66	2.65	1.70	0.39
2	0.66	2.65	1.70	0.39				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay Id	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.79		1.14	1.37	0.00		2.37	6.28	-2.92	-5.19
2	-1.37	-1.14		0.79	-5.19	-2.92	2.37	10.89		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-	Deflect(in)
-----	-----------	--	--	--	--------------	--	--	--	-----------	-------------

Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.14	1.8	0.61	MidS	2.37	3.09	0.77	RLap	0.90	0.37	
2	LLap	-1.14	1.8	0.61	MidS	2.37	3.09	0.77	LLap	0.90	0.37	

UNBRACE LENGTHS

Bay		-----Minor-----				-----Cb-----											
		-----Mom1/Mom2-----															
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL		
RS																	
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00		
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00		

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay		-----Left_Lap-----				-----Right_Lap-----			
Id		Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1						0.72	2.65	1.70	0.42
2		0.72	2.65	1.70	0.42				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.22	2.29	0.24	2.29				
2	-0.22	2.29	0.24	2.29				

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=====
U18R1010A          Wall 1 - Girt Design  4 (Locate 18.75)    11/ 9/18  1:22pm
=====

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GIRT LAYOUT:

Bay		Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
Id	Part			Left	Right				Out	In
1	08Z054	18.7500	17.17		1.81	5.00	0	50.3	0.00	0.70
2	08Z054	18.7500	17.17	1.81		5.00	0	50.3	0.00	0.70
									100.6	

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

```

-----Shear(k )-----      -----Moment(f-k )-----

```

Bay	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	0.63		-0.94	-1.13	0.00		-1.94	6.15	2.40	4.28
2	1.13	0.94		-0.63	4.28	2.40	-1.94	11.01		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.94	1.8	0.51	RLap	2.40	3.73	0.64	RLap	0.74	-0.30	
2	LLap	0.94	1.8	0.51	LLap	2.40	3.73	0.64	LLap	0.74	-0.30	

UNBRACE LENGTHS

Bay		Minor					Cb								
Mom1/Mom2															
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL
RS															
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.59	2.65	1.70	0.35
2	0.59	2.65	1.70	0.35				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

	Shear(k)				Moment(f-k)					
Bay	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.70		1.02	1.22	0.00		2.10	6.28	-2.59	-4.62
2	-1.22	-1.02		0.70	-4.62	-2.59	2.10	10.89		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.02	1.8	0.55	MidS	2.10	3.09	0.68	RLap	0.80	0.33	
2	LLap	-1.02	1.8	0.55	MidS	2.10	3.09	0.68	LLap	0.80	0.33	

UNBRACE LENGTHS

Bay		-----Minor-----					-----Cb-----									
-----Mom1/Mom2-----																
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
RS																
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00	
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap-----				-----Right_Lap-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.64	2.65	1.70	0.37
2	0.64	2.65	1.70	0.37				

DEFLECTION: (Working Load)

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.20	2.29	0.21	2.29				
2	-0.20	2.29	0.21	2.29				

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=====
U18R1010A      Wall 1 - Girt Design  5 (Locate 23.75)      11/ 9/18  1:22pm
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GIRT LAYOUT:

									Available Reduction Factor	
Bay Id	Part	Locate	Design Length	--Lap(ft)-- LeftRight		Load Width	No. Brace	Weight	Out	In
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	08Z054	23.7500	17.17		1.81	5.58	0	50.3	0.00	0.70
2	08Z054	23.7500	17.17	1.81		4.89	0	50.3	0.00	0.70

									100.6	

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay	-----Shear(k)-----				-----Moment(f-k)-----					
Id	Left	Left	Right	Right	Left	Left	Mid-Span	Right	Right	
	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.72		-1.04	-1.24	0.00		-2.28	6.31	2.41	4.48
2	1.12	0.94		-0.60	4.48	2.61	-1.79	11.19		0.00

STRENGTH/DEFLECTION:

```
Bay  -----Shear(k )-----  -----Moment(f-k )-----  -Mom+Shr-  Deflect(in)
```


2 17.2 1.0 1.0 11.8 11.8 11.8 1.00 1.00 1.13 1.13 1.13 1.00 1.00 1.00 1.00
1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap-----				-----Right_Lap-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.67	2.65	1.70	0.39
2	0.67	2.65	1.70	0.39				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.25	2.29	0.27	2.29				
2	-0.17	2.29	0.18	2.29				

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=====
U18R1010A          Wall 1 - Diagonal Bracing Design          11/ 9/18  1:22pm
=====
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PANEL SHEAR WITH NO BRACING:

Base Length	---Wind---		--Seismic--		Limit
	Load	Calc	Load	Calc	
35.00	73	101.4	56	56.8	72.8

DIAGONAL BRACE LAYOUT:

Bay	Brace_Locate		Bay	Design	-----Diag_Brace-----			----KL/R---	
Id	Start	End	Width	Length	Type	Size	Part	Calc	Limit
1	0.00	13.75	16.67	21.61	R	0.625	RDB-		
	13.75	28.09	16.67	21.99	R	0.625	RDB-		

DIAGONAL BRACE STRENGTH:

Bay	Brace_Locate		-----Wind(k)-----			----Seismic(k)---			Max
Id	Start	End	Load	Calc	Limit	Load	Calc	Limit	UC
1	0.00	13.75	73	4.60	7.34	56	2.58	8.81	0.63
	13.75	28.09	73	4.68	7.34	56	2.62	8.81	0.64

COLUMN BASE REACTIONS:

Bay	Col	-----Wind_Max-----			-----Seismic_Max----		
Id	Id	Load	Horz	Vert(+/-)	Load	Horz	Vert(+/-)
1	1	7	-3.55	5.98	55	-1.29	2.18
1	2	49	2.55	4.31	56	1.29	2.18

DEFLECTION AT RAFTER:

Wall Height	Deflection(in)		Span/Deflect			
	Wind	Seismic	---Wind---		--Seismic--	
			Calc	Limit	Calc	Limit
28.1	0.09	0.12	999.	60.	999.	60.

LOAD COMBINATIONS:

```

7 - Dead+0.6Wind_Left1+0.6Wind_Pressure
49 - 0.6Dead+0.6Wind_Right2+0.6Wind_Pressure
55 - 1.11Dead+1.11Collateral+0.7Seismic
56 - 1.11Dead+1.11Collateral-0.7Seismic
73 - 0.6Dead+0.6Wind_Left1

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=====
U18R1010A          Wall 1 - Endwall Bracing Struts          11/ 9/18  1:22pm
=====

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STRUT MEMBER:

Bay Id	Strut Locate	Strut Length	Strut Part	-Axial_Calc-		Axial Limit	Max UC	----KL/r----	
				Wind	Seis			Major	Minor
1	13.75	17.50	W08SB075	3.55	1.99	32.32	0.11	75.	0.

STRUT CONNECTION:

Bay Id	Strut Locate	Plate Type	Plate Width	Plate Thick	Bolt Type	Bolt Dia	Bolt Row	Bolt Quan	Bolt Gage
1	13.75	SB	6.25	0.50	A325	1.000	1	2	2.50

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=====
U18R1010A          Wall 1 - Wall Panel Design          11/ 9/18  1:22pm
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PANEL DATA:

Bay Id	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
1	CW6-80	CW	26.00	80.0	0.44	29.91

MOMENTS & DEFLECTION:

Span Id	Locate(ft)		Load	-----Moment(ft-lb/ft)-----						---Deflect(in)---		
	Start	End		Support			Midspan			Calc	Limit	UC
1	0.00	3.75	WP	26.9	138.5	0.19	-29.7	118.4	0.25	-0.0	0.50	0.06
			WS	-33.4	118.4	0.28	36.9	138.5	0.27	0.0	0.50	0.07
2	3.75	7.50	WP	60.8	138.5	0.44	0.0	138.5	0.00	0.0	0.50	0.02
			WS	-75.5	118.4	0.64	-0.1	118.4	0.00	-0.0	0.50	0.03
3	7.50	13.75	WP	73.7	138.5	0.53	-49.7	118.4	0.42	-0.1	0.83	0.14
			WS	-91.6	118.4	0.77	61.9	138.5	0.45	0.1	0.83	0.17
4	13.75	18.75	WP	73.7	138.5	0.53	-22.1	118.4	0.19	-0.0	0.67	0.03
			WS	-91.6	118.4	0.77	27.5	138.5	0.20	0.0	0.67	0.04
5	18.75	23.75	WP	88.6	138.5	0.64	-15.9	118.4	0.13	0.0	0.67	0.00
			WS	-110.2	118.4	0.93	19.7	138.5	0.14	0.0	0.67	0.00
6	23.75	29.91	WP	88.6	138.5	0.64	-73.7	118.4	0.62	-0.1	0.82	0.23
			WS	-110.2	118.4	0.93	91.6	138.5	0.66	0.2	0.82	0.28

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

U18R1010A Wall 1 - Panel Zones 11/ 9/18 1:22pm

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
CW6-80	0.018	80.00	62.00

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
H1040	0.22	0.45	2.80

PANEL ZONE LAYOUT:

Zone Id	Description	-----Wall----- Offset1 Offset2	Bay Id	Locate	Load Width	Min Thick	Panel Span
1	Interior	3.50 31.50	1	13.75	5.63	0.054	6.25
2	Lt Edge	0.00 3.50	1	13.75	5.63	0.054	6.25
3	Rt Edge	31.50 35.00	2	13.75	5.63	0.054	6.25

GIRT SCREW CHECK:

Zone Id	Screw Space	Wind Suction (psf)	Load (k)	-----Limit(k)----- Girt Pullout	Panel Pullover	Screw Tension	Max UC
1	1.00	25.44	0.14	0.23	0.24	0.75	0.62
2	1.00	29.76	0.17	0.23	0.24	0.75	0.72
3	1.00	29.76	0.17	0.23	0.24	0.75	0.72

BASE SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
H1040	0.22	0.45	2.80

BASE SCREW CHECK:

Base Length	Screw Space (ft)	Force/Screw Wind (k)	Seis (k)	Shear Limit (k)	Max UC
35.00	1.00	0.099	0.055	0.213	0.46

U18R1010A Wall 1 - Weight Summary 11/ 9/18 1:22pm

Columns	=	1042.48
Rafters	=	491.70
Girts	=	503.14
Bracing	=	54.74
Struts	=	146.70
Clips	=	39.60

Total Weight = 2278.36

U18R1010A	Wall 1 - Warning Summary	11/ 9/18 1:22pm
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.. No Warnings

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=====
*U18R1010A                Endwall Design Input                11/ 9/18  1:22pm
=====

*( 1)JOBID:
    'U18R1010A'

*( 2)PROGRAM OPTIONS:
* EW      Run      Run      Run      Run
* Id  Col/Raf  Girt  Brace  Panel
  'R'   'Y'    'Y'   'Y'   'Y'

*( 3)DESIGN CODE:
*Design  ---Steel_Code---          ---Build---  Code      Seismic
* Code   Cold      Hot      Country  Code   Year   Label      Zone
  'WS'   'NAUS12'  'AISC10'  '----'  'IBC'  '15'  'IBC 15'  'D '

*( 4)DESIGN CONSTANTS:
*
*          ---Strength_Factors--
* ---Stress_Ratio---          ---Seismic---
* Col/Raf  Girt  Panel      Wind  Frame  Brace
  1.03   1.03   1.03   1.0000  1.0000  1.2000

*( 5)STEEL YIELDS:
* Web   Flg   C_Sec   W_Sec   R_Sec   P_Sec   T_Sec   U_Sec   EP      BP
  55.0  55.0   55.0   55.0   50.0   42.0   46.0   50.0   55.0   55.0

*( 6)DEFLECTION LIMITS:
* -----Rafter-----          ---Girt---  --Panel---
* Live  Wind  Total  Column  Wall  Facia  Wall  Facia  Brace
  180.  180.    0.   120.   90.   90.   90.   90.   60.

*( 7)REPORTS:
*   Input  Column  Wall  Door  Wall  Cable
*   Echo   Rafter  Girt  Jamb  Panel  Brace
    'Y'    'Y'    '2'  '3'   'Y'   'Y'

*( 8)BUILDING LAYOUT:
*
*          -----Expand_EW-----  --Roof_Bay--  Frame
* Type      Width      Length      Use Opt  Extend Offset Flange  No.    Width  Recess
  'FF-'    35.0000    330.0000  'N'  '-'    0.000  0.000  0.000  11    30.0000  0.3333

*( 9)SURFACE SHAPE:
* No.      X_Coord  Y_Coord  Offset
   3        0.0000  27.0833  10.000
          35.0000  30.0000  10.000
          35.0000   0.0000  10.000

*(10)BAY SPACING:
* No.      ---Bay_Set---
* Sets      Width  Quan
   2       17.5000    1
          17.5000    1

*(11)WALL OPENINGS:
*
*      Bay              Sill   Base   Set   Panel
Member_Select  JambL/      JambR/
*No.  Id  Id  Width  Height  Offset  Type  Height  Elev  Depth  Opt  Jamb
Header  Header  Sill

```

0

*(12)WIDE OPENING LAYOUT:

*---Open---		Bay_Id	--Clear_Opening--		Wedge	Stub	Column	Total		
*No.	Id	Type	St	End	Width	Height	Height	Elev	Mount	Weight
0										

*(13)WIDE OPENING AND STRUT FRAMING:

*-Open-		-----Door_Jamb-----			Stub	Head	Back_Brace	Strut	-Header_Beam-	Deflection			
*No.	Id	Type	FlgWid	FlgThk	Type	Type	Type	Loc	Type	Type	Max_Spc	Horz	Vert
0													

*(14)WIDE OPENING HEADER LOCATION:

*-Open-		No.	Column
*No.	Id	Location	Location
0			

*(15)PARTIAL WALLS:

*		--Bay_Id-		----Offset----		Jamb	Base	Top	Full_Load					
----Panel----		Deflect_Limit												
*No.	Id	Use	Opt	Start	End	Start	End	Height	Type	Type	Type	Girt	Col	Part
Opt	Girt	Panel												
0														

*(16)COLUMNS:

*	Max
*Same	UnBrace
*Depth	Length
'N'	60.000

*(17)COLUMN PART & ELEVATION:

*						---Base---		
*No.	Id	Type	Part	Opt	Rot	Depth	Elev	Opt
3	1	'CDRW'	'-----'	'-'	'-'	0.000	0.000	'-'
	2	'R	'-----'	'-'	'-'	0.000	0.000	'-'
	3	'R	'-----'	'-'	'-'	0.000	0.000	'-'

*(18)COLUMN SPLICES:

*	Col		
* No.	Id	Locate	Type
0			

*(19)RAFTERS:

*Rafter	Flange
* Same	Brace
'Y'	'N'

*(20)RAFTER PART:

*	Surf			
*No.	Id	Type	Part	Depth
1	2	'R	'-----'	12.000

*(21)RAFTER SPLICES:

*	Surf			
* No.	Id	Locate	Type	Opt
2	2	0.0000	'--'	'-'
	2	35.1213	'--'	'-'

*(22)GIRT DESIGN:

*Girt	--Flange_Strap--	--Depth--	Set	Max	Rafter
-------	------------------	-----------	-----	-----	--------

*Type	Out	In	Space	Offset	Project	Set	Opt	Lap	Space	Attach
'ZB'	'C'	'N'	10.0000	0.000	0.000	0.000	'W'	0.0000	7.5000	'N'

*(23)GIRT LOCATION:

* Set	No.	Girt
* Loc	Girt	Location
'P'	5	3.7500 7.5000 13.7500 18.7500 23.7500

*(24)SPECIAL GIRT:

* --Bay_Id--	
*No.	Start End Height Type Rot Part Use
0	

*(25)SIDEWALL GIRT:

*Wall	Girt	No.	Girt
* Id	Type	Depth	Offset Project Girt Location
2	'ZB'	10.000	0.000 0.000 5 3.7500 7.5000 13.7500 18.7500 23.7500
4	'ZB'	10.000	0.000 0.000 0

*(26)ROOF PURLINS:

*Surf	Surf	Peak
* Id	Ext	Space No. Locate
2	0.000	4.8715 7 4.8715 9.7048 14.5381 19.3714 24.2047 29.0380
		33.8713

*(27)WALL PANELS:

* Wall	-----Insulation-----			-Open_Bay-	
* Panel	Use	Thick	Part	F_SW	B_SW
'CW6-80	'O'	4.000	'-----'	'N'	'Y'

*(28)LINER PANELS:

* --Bay_Id-	
*No.	Start End Height Part
0	

*(29)RIGID FRAME:

*Frame	Interior_Column
*Type	Type No. Locate
'--'	'-' 0

*(30)WALL FRAMING OPTIONS:

*Panel	Diagonal	Brace	EW_Brace_To_Frame
*Shear	Bracing	Option	Height Left Right
'N'	'Y'	'--'	0.0000 17.5000 17.5000

*(31)WALL BRACING:

* Wind	Brace	No._Bay	Specified
* Shear	Type	Specified	Bays_For_Bracing
72.8	'R'	1	2

*(32)WALL BRACING ATTACHMENT

* No.	Attach	--Bay_Id--	No.
*Attach	Id	Start End	Level Level_Height
0			

*(33)EAVE EXTENSION:

*Wall	-Bay_Id--				-Edge_Extend-		Ext
*Id	No.	Id	Type	Opt	Start End Height Width Slope	Left Right	Mount
2	0						
4	0						

*(34)CANOPY:

*Wall		-Bay_Id--				-Edge_Extend-		Ext				
*Id	No.	Id	Type	Opt	Start	End	Height	Width	Slope	Left	Right	Mount
3	0											
2	0											
4	0											

*(35)FACIA/PARAPET:

*Wall		-Bay_Id--		---Horizontal_Size--		---Vertical_Size---		Edge_Extend		Ext					
*Id	No.	Id	Type	Opt	Start	End	Elev	Width	Slope	Elev	Height	Slope	Left	Right	Mnt
3	0														
2	0														
4	0														

*(36)FACIA/PARAPET GIRTS:

*Ext		----Top----		--Interior-		---Back_Panel---		Angle		Beam	
*Id	Type	Rotate	Type	Rotate	Part	Rotate	Spacing	Lap			

*(37)LOADS FOR EAVE EXTENSION, CANOPY, FACIA, PARAPET:

*Ext				Ext_Beam		Facia/Parapet		Facia/Parapet_Girt	
*Id	Dead	Collat	Live	Snow	Rain	Press	Suct	Press	Suct

*(38)BASIC LOADS:

*						---Deflection---		Wind	
*Dead	Collat	Live	Snow	Rain	Basic	Load_Ratio	Load		
*Load	Load	Load	Load	Load	Wind	Snow	Wind	Seis	Factor
3.0	1.0	20.0	21.0	0.0	27.5	1.00	0.39	1.00	0.60

*(39)EDGE ZONE:

* -Left_Zone--		-Right_Zone-				Jamb/	
*Width	Base	Width	Base	Girt	Panel	Column	
3.500	0.000	3.500	0.000	1.08	1.17	1.08	

*(40)BASIC LOADS AT EAVE:

*Seis		Seis		Torsion_Forces	
*Dead	Girt	Load	Wind	Seismic	
3.0	0.0000	1.42	0.00	0.00	

*(41)LONGITUDINAL BRACING LOADS:

* ---Wind-----		---Seismic---			
*Horz	Vert	Horz	Vert		
0.00	0.00	0.00	0.00	.. Left	Column
0.00	0.00	0.00	0.00	.. Right	Column

*(42)WIND PRESSURE/SUCTION:

* Wind		Wind			
* Press	Suct				
34.2	-36.7	.. Column			
34.2	-36.7	.. Girt/Header			
34.2	-36.7	.. Jamb			
39.9	-42.4	.. Panel			
49.4	-40.7	.. Parapet Girt			
41.3	-27.5	.. Transv Bracing, Facia/Parapet			

*(43)WIND COEFFICIENTS:

* Surf		Wind_1		Wind_2		Long_Wind		Surface	
*Id	Left	Right	Left	Right	1	2	Friction		
1	-0.06	-0.90	1.04	0.20	-1.01	-1.01	0.00		
2	-1.40	-0.99	-0.30	0.11	-1.40	-0.99	0.00		

-Load-		--Live--		-Add_Snow-						Wind_1		Wind_2		
Long_Wind	Column_Wind		-Seismic-	Aux_Load										1
*No	Id	Dead	Coll	Roof	Floor	Snow	Drift	Slide	Rain	Left	Right	Left	Right	
2	Press	Suct	Long	Tran	Id	Coef								
90	1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	2	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	3	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	4	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1	1.00							
	5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	6	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0	0.00							
	7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
0.00	0.60	0.00	0.00	0.00	0.00	0	0.00							
	8	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
0.00	0.00	0.60	0.00	0.00	0.00	0	0.00							
	9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.00	0.60	0.00	0.00	0.00	0.00	0	0.00							
	10	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.00	0.00	0.60	0.00	0.00	0.00	0	0.00							
	11	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.60	0.00	0.00	0.00	0.00	0	0.00							
	12	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.00	0.60	0.00	0.00	0.00	0	0.00							
	13	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.60	0.00	0.00	0.00	0.00	0	0.00							
	14	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.00	0.60	0.00	0.00	0.00	0	0.00							
	15	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.00	0.60	0.00	0.00	0.00	0.00	0	0.00							
	16	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.60	0.60	0.00	0.00	0.00	0.00	0	0.00							
	17	1.00	0.00	0.00										

[illegible]

0.00 0.00 0.00 0.00 0.00 0 0.00

*(46)AUXILIARY LOADS:

* No.	Aux	Aux	No._Add	Add_Load
* Aux	Id	Name	Combs	Id Coef
3	1	'MIN_SNOW '	1	1 1.00
	2	'E2PAT_SL_1'	1	2 0.50
	3	'E2PAT_SL_2'	1	3 0.50

*(47)ADDITIONAL LOADS:

* No.	Add	Loc	Basic	Load	FX	FY	Mom	X	Y	..Conc
* Add	Id	Id	Load	Type	W1	W2	Co	DL1	DL2	..Unif
3	1	2	'U_SNOW	'D '	-0.377	-0.377	0.08	0.00	35.12	
	2	2	'U_SNOW	'D '	-0.316	-0.316	0.08	0.00	17.56	
	3	2	'U_SNOW	'D '	-0.316	-0.316	0.08	17.56	35.12	

*(48)GIRT LAPS:

* Data	-----Set_1-----		-----Set_2-----		-----Set_3-----					
* Opt	Sets	Left	Right	Quan	Left	Right	Quan	Left	Right	Quan
'-'	0									

*(49)GIRT STRAPS:

* Data	---Set_1---		---Set_2---		---Set_3---		---Set_4---		
* Opt	Sets	Strap	Quan	Strap	Quan	Strap	Quan	Strap	Quan
'-'	0								

*(50)PANEL SCREWS:

* No.					Washer		-----Spacing-----		
* Zone	Zone	Part	Dia	Limit	Dia				
3	'INT '	'H1040	'	0.216	2.800	0.446	12.000	6.000	0.000
	'EDGE'	'H1040	'	0.216	2.800	0.446	12.000	6.000	0.000
	'BASE'	'H1040	'	0.216	2.800	0.446	12.000	6.000	0.000

*(51)BEAMS:

*No.	Bay
*Beam	Id Use Offset Height
0	

*(52)STEP LOAD COEFFICIENTS:

* Basic	Location	No.	----Step_1---		----Step_2---		----Step_3---		
*No.	Load	Use Id	Step	Locate	Coef	Locate	Coef	Locate	Coef
0									

*(53)ADDITIONAL COLUMNS:

*No.	Id	Locate	Type	Rot	Opt	Part	Elev
0							

*(54)RIGID FRAME COORDINATES:

*Frame	Frame
* Id	Type No. X_Coord Y_Coord
0	'--' 0

*(55)DESIGN CODE OPTIONS:

*No.	Event	Condition
0		

*AUXILIARY LOAD DESCRIPTIONS:

* Aux
* Id Description

* 1 Minimum snow load
 * 2 Pattern snow load
 * 3 Pattern snow load
 *

*ADDITIONAL LOAD DESCRIPTIONS:

* Add

* Id Description
 * 1 Minimum snow load surface 2
 * 2 Pattern snow load bay 1
 * 3 Pattern snow load bay 2
 *

* Code files used:

* IBC.15
 * EW_IBC.15 Version 4.0

```
=====
U18R1010A          Wall 3 - Design Code                      11/ 9/18  1:22pm
=====
```

STRUCTURAL CODE:

Design Basis : WS - Working Stress
 Hot Rolled Steel : AISC10
 Cold Formed Steel : NAUS12

BUILDING CODE:

Wind Code : IBC 15
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
 Cold Formed Steel : 29500 (ksi)

```
=====
U18R1010A          Wall 3 - Column & Rafter Design          11/ 9/18  1:22pm
=====
```

MEMBER SIZES:

Id	Member Locate	Member Part	--Web_Size-- Depth	--Flange_Size-- Thick	Width	Thick	Member Length	Member Weight	----Max_Load----	Id	UC Report
Col1	0.8	W12S099	12.00	12ga	3.63	12ga	25.3	174.1	84 0.91 Mom+Ax1		
Col2	17.5	W10x22	9.48	0.240	5.75	0.360	26.7	587.4	84 0.83 Mom+Ax1		
Col3	34.2	W8x10	7.48	0.170	3.94	0.205	28.1	280.9	82 0.90 Mom+Ax1		
Raf1	Surf 2	W12x14	11.45	0.200	3.97	0.225	35.1	491.7	4 0.47 Mom+Ax1		
Total=								1534.2			

DESIGN ACTIONS/STRENGTH:

Id	Load Id	---Axial(k)-- Calc	Limit	---Shear(k)-- Calc	Limit	-Moment(f-k)- Calc	Limit
Col1	1	0.70	27.09	0.00	7.56	0.00	17.21
Col1	2	2.75	25.71	0.00	7.56	0.00	17.21
Col1	3	2.86	25.71	0.00	7.56	0.00	17.21
Col1	4	3.29	25.71	0.00	7.56	0.00	17.21
Col1	5	2.22	25.71	0.00	7.56	0.00	17.21
Col1	6	2.30	25.71	0.00	7.56	0.00	17.21
Col1	7	-2.08	66.64	1.84	7.56	-11.64	14.90

Col1	8	-2.08	66.64	-2.05	7.56	12.99	14.90
Col1	9	-1.59	66.64	1.84	7.56	-11.64	14.90
Col1	10	-1.59	66.64	-2.05	7.56	12.99	14.90
Col1	11	0.36	27.09	1.84	7.56	-11.64	14.90
Col1	12	0.36	27.09	-2.05	7.56	12.99	14.90
Col1	13	0.85	27.09	1.84	7.56	-11.64	14.90
Col1	14	0.85	27.09	-2.05	7.56	12.99	14.90
Col1	15	-2.06	66.64	1.84	7.56	-11.64	14.90
Col1	16	-1.34	66.64	1.84	7.56	-11.64	14.90
Col1	17	-2.06	66.64	-2.05	7.56	12.99	14.90
Col1	18	-1.34	66.64	-2.05	7.56	12.99	14.90
Col1	19	0.43	27.09	1.38	7.56	-8.73	14.90
Col1	20	0.43	27.09	-1.54	7.56	9.74	14.90
Col1	21	0.80	27.09	1.38	7.56	-8.73	14.90
Col1	22	0.80	27.09	-1.54	7.56	9.74	14.90
Col1	23	2.04	25.71	1.38	7.56	-8.73	14.90
Col1	24	2.04	25.71	-1.54	7.56	9.74	14.90
Col1	25	2.41	25.71	1.38	7.56	-8.73	14.90
Col1	26	2.41	25.71	-1.54	7.56	9.74	14.90
Col1	27	0.44	27.09	1.38	7.56	-8.73	14.90
Col1	28	0.99	27.09	1.38	7.56	-8.73	14.90
Col1	29	0.44	27.09	-1.54	7.56	9.74	14.90
Col1	30	0.99	27.09	-1.54	7.56	9.74	14.90
Col1	31	0.51	27.09	1.38	7.56	-8.73	14.90
Col1	32	0.51	27.09	-1.54	7.56	9.74	14.90
Col1	33	0.88	27.09	1.38	7.56	-8.73	14.90
Col1	34	0.88	27.09	-1.54	7.56	9.74	14.90
Col1	35	2.12	25.71	1.38	7.56	-8.73	14.90
Col1	36	2.12	25.71	-1.54	7.56	9.74	14.90
Col1	37	2.49	25.71	1.38	7.56	-8.73	14.90
Col1	38	2.49	25.71	-1.54	7.56	9.74	14.90
Col1	39	0.52	27.09	1.38	7.56	-8.73	14.90
Col1	40	1.07	27.09	1.38	7.56	-8.73	14.90
Col1	41	0.52	27.09	-1.54	7.56	9.74	14.90
Col1	42	1.07	27.09	-1.54	7.56	9.74	14.90
Col1	43	-2.25	66.64	1.84	7.56	-11.64	14.90
Col1	44	-2.25	66.64	-2.05	7.56	12.99	14.90
Col1	45	-1.76	66.64	1.84	7.56	-11.64	14.90
Col1	46	-1.76	66.64	-2.05	7.56	12.99	14.90
Col1	47	0.12	27.09	1.84	7.56	-11.64	14.90
Col1	48	0.12	27.09	-2.05	7.56	12.99	14.90
Col1	49	0.61	27.09	1.84	7.56	-11.64	14.90
Col1	50	0.61	27.09	-2.05	7.56	12.99	14.90
Col1	51	-2.23	66.64	1.84	7.56	-11.64	14.90
Col1	52	-1.50	66.64	1.84	7.56	-11.64	14.90
Col1	53	-2.23	66.64	-2.05	7.56	12.99	14.90
Col1	54	-1.50	66.64	-2.05	7.56	12.99	14.90
Col1	55	0.80	27.09	0.00	7.56	0.00	17.21
Col1	56	0.76	27.09	0.00	7.56	0.00	17.21
Col1	57	0.77	27.09	0.00	7.56	0.00	17.21
Col1	58	0.74	27.09	0.00	7.56	0.00	17.21
Col1	59	0.31	27.09	0.00	7.56	0.00	17.21
Col1	60	0.27	27.09	0.00	7.56	0.00	17.21
Col1	61	0.43	27.09	0.00	7.56	0.00	17.21
Col1	62	2.04	25.71	0.00	7.56	0.00	17.21
Col1	63	0.80	27.09	0.00	7.56	0.00	17.21
Col1	64	2.41	25.71	0.00	7.56	0.00	17.21
Col1	65	0.44	27.09	0.00	7.56	0.00	17.21
Col1	66	0.99	27.09	0.00	7.56	0.00	17.21
Col1	67	0.51	27.09	0.00	7.56	0.00	17.21

Col1	68	2.12	25.71	0.00	7.56	0.00	17.21
Col1	69	0.88	27.09	0.00	7.56	0.00	17.21
Col1	70	2.49	25.71	0.00	7.56	0.00	17.21
Col1	71	0.52	27.09	0.00	7.56	0.00	17.21
Col1	72	1.07	27.09	0.00	7.56	0.00	17.21
Col1	73	-2.25	66.64	0.00	7.56	0.00	17.21
Col1	74	0.12	27.09	0.00	7.56	0.00	17.21
Col1	75	-1.76	66.64	0.00	7.56	0.00	17.21
Col1	76	0.61	27.09	0.00	7.56	0.00	17.21
Col1	77	-2.23	66.64	0.00	7.56	0.00	17.21
Col1	78	-1.50	66.64	0.00	7.56	0.00	17.21
Col1	79	3.02	25.71	0.00	7.56	0.00	17.21
Col1	80	1.66	27.09	0.00	7.56	0.00	17.21
Col1	81	0.46	27.09	1.84	7.56	-11.64	14.90
Col1	82	0.46	27.09	-2.05	7.56	12.99	14.90
Col1	83	0.95	27.09	1.84	7.56	-11.64	14.90
Col1	84	0.95	27.09	-2.05	7.56	12.99	14.90
Col1	85	-1.96	66.64	1.84	7.56	-11.64	14.90
Col1	86	-1.23	66.64	1.84	7.56	-11.64	14.90
Col1	87	-1.96	66.64	-2.05	7.56	12.99	14.90
Col1	88	-1.23	66.64	-2.05	7.56	12.99	14.90
Col1	89	2.37	25.71	0.00	7.56	0.00	17.21
Col1	90	2.34	25.71	0.00	7.56	0.00	17.21
Col2	1	2.14	127.85	0.00	48.96	0.00	40.09
Col2	2	8.44	127.85	0.00	48.96	0.00	40.09
Col2	3	8.76	127.85	0.00	48.96	0.00	40.09
Col2	4	9.99	127.85	0.00	48.96	0.00	40.09
Col2	5	6.87	127.85	0.00	48.96	0.00	40.09
Col2	6	7.11	127.85	0.00	48.96	0.00	40.09
Col2	7	-7.72	194.31	5.71	48.96	-38.10	62.62
Col2	8	-7.72	194.31	-6.12	48.96	40.89	51.36
Col2	9	2.99	127.85	5.71	48.96	-38.10	62.62
Col2	10	2.99	127.85	-6.12	48.96	40.89	51.36
Col2	11	-2.29	194.31	5.71	48.96	-38.10	62.62
Col2	12	-2.29	194.31	-6.12	48.96	40.89	51.36
Col2	13	8.03	127.85	5.71	48.96	-38.10	62.62
Col2	14	8.03	127.85	-6.12	48.96	40.89	51.36
Col2	15	-5.10	194.31	5.71	48.96	-38.10	62.62
Col2	16	-3.25	194.31	5.71	48.96	-38.10	62.62
Col2	17	-5.10	194.31	-6.12	48.96	40.89	51.36
Col2	18	-3.25	194.31	-6.12	48.96	40.89	51.36
Col2	19	0.93	127.85	4.28	48.96	-28.58	62.62
Col2	20	0.93	127.85	-4.59	48.96	30.66	51.36
Col2	21	7.74	127.85	4.28	48.96	-28.58	62.62
Col2	22	7.74	127.85	-4.59	48.96	30.66	51.36
Col2	23	5.25	127.85	4.28	48.96	-28.58	62.62
Col2	24	5.25	127.85	-4.59	48.96	30.66	51.36
Col2	25	11.52	127.85	4.28	48.96	-28.58	62.62
Col2	26	11.52	127.85	-4.59	48.96	30.66	51.36
Col2	27	2.74	127.85	4.28	48.96	-28.58	62.62
Col2	28	3.95	127.85	4.28	48.96	-28.58	62.62
Col2	29	2.74	127.85	-4.59	48.96	30.66	51.36
Col2	30	3.95	127.85	-4.59	48.96	30.66	51.36
Col2	31	1.17	127.85	4.28	48.96	-28.58	62.62
Col2	32	1.17	127.85	-4.59	48.96	30.66	51.36
Col2	33	7.98	127.85	4.28	48.96	-28.58	62.62
Col2	34	7.98	127.85	-4.59	48.96	30.66	51.36
Col2	35	5.49	127.85	4.28	48.96	-28.58	62.62
Col2	36	5.49	127.85	-4.59	48.96	30.66	51.36
Col2	37	11.76	127.85	4.28	48.96	-28.58	62.62

Col2	38	11.76	127.85	-4.59	48.96	30.66	51.36
Col2	39	2.98	127.85	4.28	48.96	-28.58	62.62
Col2	40	4.19	127.85	4.28	48.96	-28.58	62.62
Col2	41	2.98	127.85	-4.59	48.96	30.66	51.36
Col2	42	4.19	127.85	-4.59	48.96	30.66	51.36
Col2	43	-8.45	194.31	5.71	48.96	-38.10	62.62
Col2	44	-8.45	194.31	-6.12	48.96	40.89	51.36
Col2	45	2.26	127.85	5.71	48.96	-38.10	62.62
Col2	46	2.26	127.85	-6.12	48.96	40.89	51.36
Col2	47	-3.02	194.31	5.71	48.96	-38.10	62.62
Col2	48	-3.02	194.31	-6.12	48.96	40.89	51.36
Col2	49	7.30	127.85	5.71	48.96	-38.10	62.62
Col2	50	7.30	127.85	-6.12	48.96	40.89	51.36
Col2	51	-5.60	194.31	5.71	48.96	-38.10	62.62
Col2	52	-3.74	194.31	5.71	48.96	-38.10	62.62
Col2	53	-5.60	194.31	-6.12	48.96	40.89	51.36
Col2	54	-3.74	194.31	-6.12	48.96	40.89	51.36
Col2	55	1.95	127.85	0.00	48.96	0.00	40.09
Col2	56	4.63	127.85	0.00	48.96	0.00	40.09
Col2	57	1.89	127.85	0.00	48.96	0.00	40.09
Col2	58	3.99	127.85	0.00	48.96	0.00	40.09
Col2	59	0.74	127.85	0.00	48.96	0.00	40.09
Col2	60	3.14	127.85	0.00	48.96	0.00	40.09
Col2	61	0.93	127.85	0.00	48.96	0.00	40.09
Col2	62	5.25	127.85	0.00	48.96	0.00	40.09
Col2	63	7.74	127.85	0.00	48.96	0.00	40.09
Col2	64	11.52	127.85	0.00	48.96	0.00	40.09
Col2	65	2.74	127.85	0.00	48.96	0.00	40.09
Col2	66	3.95	127.85	0.00	48.96	0.00	40.09
Col2	67	1.17	127.85	0.00	48.96	0.00	40.09
Col2	68	5.49	127.85	0.00	48.96	0.00	40.09
Col2	69	7.98	127.85	0.00	48.96	0.00	40.09
Col2	70	11.76	127.85	0.00	48.96	0.00	40.09
Col2	71	2.98	127.85	0.00	48.96	0.00	40.09
Col2	72	4.19	127.85	0.00	48.96	0.00	40.09
Col2	73	-8.45	194.31	0.00	48.96	0.00	40.09
Col2	74	-3.02	194.31	0.00	48.96	0.00	40.09
Col2	75	2.26	127.85	0.00	48.96	0.00	40.09
Col2	76	7.30	127.85	0.00	48.96	0.00	40.09
Col2	77	-5.60	194.31	0.00	48.96	0.00	40.09
Col2	78	-3.74	194.31	0.00	48.96	0.00	40.09
Col2	79	7.11	127.85	0.00	48.96	0.00	40.09
Col2	80	7.08	127.85	0.00	48.96	0.00	40.09
Col2	81	-1.97	194.31	5.71	48.96	-38.10	62.62
Col2	82	-1.97	194.31	-6.12	48.96	40.89	51.36
Col2	83	8.35	127.85	5.71	48.96	-38.10	62.62
Col2	84	8.35	127.85	-6.12	48.96	40.89	51.36
Col2	85	-4.79	194.31	5.71	48.96	-38.10	62.62
Col2	86	-2.93	194.31	5.71	48.96	-38.10	62.62
Col2	87	-4.79	194.31	-6.12	48.96	40.89	51.36
Col2	88	-2.93	194.31	-6.12	48.96	40.89	51.36
Col2	89	6.85	127.85	0.00	48.96	0.00	40.09
Col2	90	8.95	127.85	0.00	48.96	0.00	40.09
Col3	1	0.82	39.56	0.00	26.83	0.00	18.50
Col3	2	3.00	39.56	0.00	26.83	0.00	18.50
Col3	3	3.11	39.56	0.00	26.83	0.00	18.50
Col3	4	3.62	39.56	0.00	26.83	0.00	18.50
Col3	5	2.45	39.56	0.00	26.83	0.00	18.50
Col3	6	2.54	39.56	0.00	26.83	0.00	18.50
Col3	7	2.01	39.56	2.04	26.83	-14.34	18.94

Col3	8	2.01	39.56	-2.28	26.83	15.99	18.94
Col3	9	-4.33	88.62	2.04	26.83	-14.34	18.94
Col3	10	-4.33	88.62	-2.28	26.83	15.99	18.94
Col3	11	4.25	39.56	2.04	26.83	-14.34	18.94
Col3	12	4.25	39.56	-2.28	26.83	15.99	18.94
Col3	13	-2.33	88.62	2.04	26.83	-14.34	18.94
Col3	14	-2.33	88.62	-2.28	26.83	15.99	18.94
Col3	15	-2.87	88.62	2.04	26.83	-14.34	18.94
Col3	16	-1.86	88.62	2.04	26.83	-14.34	18.94
Col3	17	-2.87	88.62	-2.28	26.83	15.99	18.94
Col3	18	-1.86	88.62	-2.28	26.83	15.99	18.94
Col3	19	3.43	39.56	1.53	26.83	-10.75	18.94
Col3	20	3.43	39.56	-1.71	26.83	11.99	18.94
Col3	21	0.91	39.56	1.53	26.83	-10.75	18.94
Col3	22	0.91	39.56	-1.71	26.83	11.99	18.94
Col3	23	5.11	39.56	1.53	26.83	-10.75	18.94
Col3	24	5.11	39.56	-1.71	26.83	11.99	18.94
Col3	25	2.15	39.56	1.53	26.83	-10.75	18.94
Col3	26	2.15	39.56	-1.71	26.83	11.99	18.94
Col3	27	0.34	39.56	1.53	26.83	-10.75	18.94
Col3	28	0.90	39.56	1.53	26.83	-10.75	18.94
Col3	29	0.34	39.56	-1.71	26.83	11.99	18.94
Col3	30	0.90	39.56	-1.71	26.83	11.99	18.94
Col3	31	3.51	39.56	1.53	26.83	-10.75	18.94
Col3	32	3.51	39.56	-1.71	26.83	11.99	18.94
Col3	33	1.00	39.56	1.53	26.83	-10.75	18.94
Col3	34	1.00	39.56	-1.71	26.83	11.99	18.94
Col3	35	5.19	39.56	1.53	26.83	-10.75	18.94
Col3	36	5.19	39.56	-1.71	26.83	11.99	18.94
Col3	37	2.23	39.56	1.53	26.83	-10.75	18.94
Col3	38	2.23	39.56	-1.71	26.83	11.99	18.94
Col3	39	0.42	39.56	1.53	26.83	-10.75	18.94
Col3	40	0.98	39.56	1.53	26.83	-10.75	18.94
Col3	41	0.42	39.56	-1.71	26.83	11.99	18.94
Col3	42	0.98	39.56	-1.71	26.83	11.99	18.94
Col3	43	1.73	39.56	2.04	26.83	-14.34	18.94
Col3	44	1.73	39.56	-2.28	26.83	15.99	18.94
Col3	45	-4.61	88.62	2.04	26.83	-14.34	18.94
Col3	46	-4.61	88.62	-2.28	26.83	15.99	18.94
Col3	47	3.96	39.56	2.04	26.83	-14.34	18.94
Col3	48	3.96	39.56	-2.28	26.83	15.99	18.94
Col3	49	-2.61	88.62	2.04	26.83	-14.34	18.94
Col3	50	-2.61	88.62	-2.28	26.83	15.99	18.94
Col3	51	-3.15	88.62	2.04	26.83	-14.34	18.94
Col3	52	-2.14	88.62	2.04	26.83	-14.34	18.94
Col3	53	-3.15	88.62	-2.28	26.83	15.99	18.94
Col3	54	-2.14	88.62	-2.28	26.83	15.99	18.94
Col3	55	3.03	39.56	0.00	26.83	0.00	18.50
Col3	56	0.65	39.56	0.00	26.83	0.00	18.50
Col3	57	2.46	39.56	0.00	26.83	0.00	18.50
Col3	58	0.64	39.56	0.00	26.83	0.00	18.50
Col3	59	2.47	39.56	0.00	26.83	0.00	18.50
Col3	60	-0.95	88.62	0.00	26.83	0.00	18.50
Col3	61	3.43	39.56	0.00	26.83	0.00	18.50
Col3	62	5.11	39.56	0.00	26.83	0.00	18.50
Col3	63	0.91	39.56	0.00	26.83	0.00	18.50
Col3	64	2.15	39.56	0.00	26.83	0.00	18.50
Col3	65	0.34	39.56	0.00	26.83	0.00	18.50
Col3	66	0.90	39.56	0.00	26.83	0.00	18.50
Col3	67	3.51	39.56	0.00	26.83	0.00	18.50

Col3	68	5.19	39.56	0.00	26.83	0.00	18.50
Col3	69	1.00	39.56	0.00	26.83	0.00	18.50
Col3	70	2.23	39.56	0.00	26.83	0.00	18.50
Col3	71	0.42	39.56	0.00	26.83	0.00	18.50
Col3	72	0.98	39.56	0.00	26.83	0.00	18.50
Col3	73	1.73	39.56	0.00	26.83	0.00	18.50
Col3	74	3.96	39.56	0.00	26.83	0.00	18.50
Col3	75	-4.61	88.62	0.00	26.83	0.00	18.50
Col3	76	-2.61	88.62	0.00	26.83	0.00	18.50
Col3	77	-3.15	88.62	0.00	26.83	0.00	18.50
Col3	78	-2.14	88.62	0.00	26.83	0.00	18.50
Col3	79	1.81	39.56	0.00	26.83	0.00	18.50
Col3	80	3.29	39.56	0.00	26.83	0.00	18.50
Col3	81	4.36	39.56	2.04	26.83	-14.34	18.94
Col3	82	4.36	39.56	-2.28	26.83	15.99	18.94
Col3	83	-2.22	88.62	2.04	26.83	-14.34	18.94
Col3	84	-2.22	88.62	-2.28	26.83	15.99	18.94
Col3	85	-2.76	88.62	2.04	26.83	-14.34	18.94
Col3	86	-1.75	88.62	2.04	26.83	-14.34	18.94
Col3	87	-2.76	88.62	-2.28	26.83	15.99	18.94
Col3	88	-1.75	88.62	-2.28	26.83	15.99	18.94
Col3	89	4.18	39.56	0.00	26.83	0.00	18.50
Col3	90	2.36	39.56	0.00	26.83	0.00	18.50

Raf1	1	0.06	75.01	-0.78	42.75	2.59	33.49
Raf1	2	0.33	75.01	-3.92	42.75	13.07	33.49
Raf1	3	0.34	75.01	-4.07	42.75	13.59	33.49
Raf1	4	0.41	75.01	-4.71	42.75	15.70	33.49
Raf1	5	0.26	75.01	-3.13	42.75	10.45	33.49
Raf1	6	0.27	75.01	-3.25	42.75	10.84	33.49
Raf1	7	-1.05	124.55	3.03	42.75	-10.13	42.37
Raf1	8	-1.05	124.55	3.03	42.75	-10.13	42.37
Raf1	9	-3.26	124.55	1.97	42.75	-6.56	42.37
Raf1	10	-3.26	124.55	1.97	42.75	-6.56	42.37
Raf1	11	3.52	75.01	0.16	42.75	-0.55	42.37
Raf1	12	3.52	75.01	0.16	42.75	-0.55	42.37
Raf1	13	3.95	75.01	-0.90	42.75	3.02	33.43
Raf1	14	3.95	75.01	-0.90	42.75	3.02	33.43
Raf1	15	0.26	75.01	3.03	42.75	-10.13	42.37
Raf1	16	0.20	75.01	1.96	42.75	-6.56	42.37
Raf1	17	0.26	75.01	3.03	42.75	-10.13	42.37
Raf1	18	0.20	75.01	1.96	42.75	-6.56	42.37
Raf1	19	-0.92	124.55	-0.39	42.75	1.31	33.50
Raf1	20	-0.92	124.55	-0.39	42.75	1.31	33.50
Raf1	21	-2.67	124.55	-1.19	42.75	3.98	33.45
Raf1	22	-2.67	124.55	-1.19	42.75	3.98	33.45
Raf1	23	2.78	75.01	-2.54	42.75	8.49	33.49
Raf1	24	2.78	75.01	-2.54	42.75	8.49	33.49
Raf1	25	3.19	75.01	-3.35	42.75	11.16	33.47
Raf1	26	3.19	75.01	-3.35	42.75	11.16	33.47
Raf1	27	0.42	75.01	-0.39	42.75	1.31	33.47
Raf1	28	0.37	75.01	-1.19	42.75	3.98	33.48
Raf1	29	0.42	75.01	-0.39	42.75	1.31	33.47
Raf1	30	0.37	75.01	-1.19	42.75	3.98	33.48
Raf1	31	-0.93	124.55	-0.51	42.75	1.70	33.50
Raf1	32	-0.93	124.55	-0.51	42.75	1.70	33.50
Raf1	33	-2.68	124.55	-1.31	42.75	4.37	33.46
Raf1	34	-2.68	124.55	-1.31	42.75	4.37	33.46
Raf1	35	2.79	75.01	-2.66	42.75	8.88	33.49
Raf1	36	2.79	75.01	-2.66	42.75	8.88	33.49

Raf1	37	3.20	75.01	-3.46	42.75	11.56	33.48
Raf1	38	3.20	75.01	-3.46	42.75	11.56	33.48
Raf1	39	0.43	75.01	-0.51	42.75	1.70	33.47
Raf1	40	0.38	75.01	-1.31	42.75	4.38	33.48
Raf1	41	0.43	75.01	-0.51	42.75	1.70	33.47
Raf1	42	0.38	75.01	-1.31	42.75	4.38	33.48
Raf1	43	-1.04	124.55	3.28	42.75	-10.95	42.37
Raf1	44	-1.04	124.55	3.28	42.75	-10.95	42.37
Raf1	45	-3.24	124.55	2.21	42.75	-7.39	42.37
Raf1	46	-3.24	124.55	2.21	42.75	-7.39	42.37
Raf1	47	3.51	75.01	0.41	42.75	-1.37	42.37
Raf1	48	3.51	75.01	0.41	42.75	-1.37	42.37
Raf1	49	3.93	75.01	-0.66	42.75	2.19	33.41
Raf1	50	3.93	75.01	-0.66	42.75	2.19	33.41
Raf1	51	0.24	75.01	3.28	42.75	-10.95	42.37
Raf1	52	0.18	75.01	2.21	42.75	-7.38	42.37
Raf1	53	0.24	75.01	3.28	42.75	-10.95	42.37
Raf1	54	0.18	75.01	2.21	42.75	-7.38	42.37
Raf1	55	1.22	75.01	-0.89	42.75	2.98	33.48
Raf1	56	0.72	75.01	-0.83	42.75	2.77	33.47
Raf1	57	0.90	75.01	-0.86	42.75	2.87	33.48
Raf1	58	0.55	75.01	-0.81	42.75	2.72	33.48
Raf1	59	1.25	75.01	-0.33	42.75	1.12	33.46
Raf1	60	0.67	75.01	-0.27	42.75	0.90	33.45
Raf1	61	-0.92	124.55	-0.39	42.75	1.31	33.50
Raf1	62	2.78	75.01	-2.54	42.75	8.49	33.49
Raf1	63	-2.67	124.55	-1.19	42.75	3.98	33.45
Raf1	64	3.19	75.01	-3.35	42.75	11.16	33.47
Raf1	65	0.42	75.01	-0.39	42.75	1.31	33.47
Raf1	66	0.37	75.01	-1.19	42.75	3.98	33.48
Raf1	67	-0.93	124.55	-0.51	42.75	1.70	33.50
Raf1	68	2.79	75.01	-2.66	42.75	8.88	33.49
Raf1	69	-2.68	124.55	-1.31	42.75	4.37	33.46
Raf1	70	3.20	75.01	-3.46	42.75	11.56	33.48
Raf1	71	0.43	75.01	-0.51	42.75	1.70	33.47
Raf1	72	0.38	75.01	-1.31	42.75	4.38	33.48
Raf1	73	-1.04	124.55	3.28	42.75	-10.95	42.37
Raf1	74	3.51	75.01	0.41	42.75	-1.37	42.37
Raf1	75	-3.24	124.55	2.21	42.75	-7.39	42.37
Raf1	76	3.93	75.01	-0.66	42.75	2.19	33.41
Raf1	77	0.24	75.01	3.28	42.75	-10.95	42.37
Raf1	78	0.18	75.01	2.21	42.75	-7.38	42.37
Raf1	79	0.23	75.01	-3.91	42.75	10.84	24.64
Raf1	80	0.32	75.01	3.89	42.75	10.84	24.69
Raf1	81	3.53	75.01	0.01	42.75	-0.02	42.37
Raf1	82	3.53	75.01	0.01	42.75	-0.02	42.37
Raf1	83	3.97	75.01	-1.06	42.75	3.54	33.44
Raf1	84	3.97	75.01	-1.06	42.75	3.54	33.44
Raf1	85	0.28	75.01	2.88	42.75	-9.60	42.37
Raf1	86	0.21	75.01	1.81	42.75	-6.03	42.37
Raf1	87	0.28	75.01	2.88	42.75	-9.60	42.37
Raf1	88	0.21	75.01	1.81	42.75	-6.03	42.37
Raf1	89	0.77	75.01	-3.33	42.75	11.13	33.48
Raf1	90	0.76	75.01	-3.29	42.75	10.97	33.48

STRENGTH RATIO:

Id	Load		Axial	Shear	Moment	Axial+ Moment	Shear+ Moment	Control UC
	Id							
Col1	1		0.03	0.00	0.00	0.03	0.00	0.03

Col1	2	0.11	0.00	0.00	0.11	0.00	0.11
Col1	3	0.11	0.00	0.00	0.11	0.00	0.11
Col1	4	0.13	0.00	0.00	0.13	0.00	0.13
Col1	5	0.09	0.00	0.00	0.09	0.00	0.09
Col1	6	0.09	0.00	0.00	0.09	0.00	0.09
Col1	7	0.03	0.24	0.78	0.75	0.52	0.75
Col1	8	0.03	0.27	0.87	0.84	0.58	0.84
Col1	9	0.02	0.24	0.78	0.76	0.52	0.76
Col1	10	0.02	0.27	0.87	0.85	0.58	0.85
Col1	11	0.01	0.24	0.78	0.79	0.52	0.79
Col1	12	0.01	0.27	0.87	0.88	0.58	0.88
Col1	13	0.03	0.24	0.78	0.81	0.52	0.81
Col1	14	0.03	0.27	0.87	0.90	0.58	0.90
Col1	15	0.03	0.24	0.78	0.75	0.52	0.75
Col1	16	0.02	0.24	0.78	0.76	0.52	0.76
Col1	17	0.03	0.27	0.87	0.84	0.58	0.84
Col1	18	0.02	0.27	0.87	0.85	0.58	0.85
Col1	19	0.02	0.18	0.59	0.60	0.39	0.60
Col1	20	0.02	0.20	0.65	0.67	0.44	0.67
Col1	21	0.03	0.18	0.59	0.61	0.39	0.61
Col1	22	0.03	0.20	0.65	0.68	0.44	0.68
Col1	23	0.08	0.18	0.59	0.67	0.39	0.67
Col1	24	0.08	0.20	0.65	0.73	0.44	0.73
Col1	25	0.09	0.18	0.59	0.68	0.39	0.68
Col1	26	0.09	0.20	0.65	0.75	0.44	0.75
Col1	27	0.02	0.18	0.59	0.60	0.39	0.60
Col1	28	0.04	0.18	0.59	0.62	0.39	0.62
Col1	29	0.02	0.20	0.65	0.67	0.44	0.67
Col1	30	0.04	0.20	0.65	0.69	0.44	0.69
Col1	31	0.02	0.18	0.59	0.60	0.39	0.60
Col1	32	0.02	0.20	0.65	0.67	0.44	0.67
Col1	33	0.03	0.18	0.59	0.62	0.39	0.62
Col1	34	0.03	0.20	0.65	0.68	0.44	0.68
Col1	35	0.08	0.18	0.59	0.67	0.39	0.67
Col1	36	0.08	0.20	0.65	0.74	0.44	0.74
Col1	37	0.10	0.18	0.59	0.68	0.39	0.68
Col1	38	0.10	0.20	0.65	0.75	0.44	0.75
Col1	39	0.02	0.18	0.59	0.60	0.39	0.60
Col1	40	0.04	0.18	0.59	0.62	0.39	0.62
Col1	41	0.02	0.20	0.65	0.67	0.44	0.67
Col1	42	0.04	0.20	0.65	0.69	0.44	0.69
Col1	43	0.03	0.24	0.78	0.75	0.52	0.75
Col1	44	0.03	0.27	0.87	0.84	0.58	0.84
Col1	45	0.03	0.24	0.78	0.76	0.52	0.76
Col1	46	0.03	0.27	0.87	0.85	0.58	0.85
Col1	47	0.00	0.24	0.78	0.78	0.52	0.78
Col1	48	0.00	0.27	0.87	0.87	0.58	0.87
Col1	49	0.02	0.24	0.78	0.80	0.52	0.80
Col1	50	0.02	0.27	0.87	0.89	0.58	0.89
Col1	51	0.03	0.24	0.78	0.75	0.52	0.75
Col1	52	0.02	0.24	0.78	0.76	0.52	0.76
Col1	53	0.03	0.27	0.87	0.84	0.58	0.84
Col1	54	0.02	0.27	0.87	0.85	0.58	0.85
Col1	55	0.03	0.00	0.00	0.03	0.00	0.03
Col1	56	0.03	0.00	0.00	0.03	0.00	0.03
Col1	57	0.03	0.00	0.00	0.03	0.00	0.03
Col1	58	0.03	0.00	0.00	0.03	0.00	0.03
Col1	59	0.01	0.00	0.00	0.01	0.00	0.01
Col1	60	0.01	0.00	0.00	0.01	0.00	0.01
Col1	61	0.02	0.00	0.00	0.02	0.00	0.02

Col1	62	0.08	0.00	0.00	0.08	0.00	0.08
Col1	63	0.03	0.00	0.00	0.03	0.00	0.03
Col1	64	0.09	0.00	0.00	0.09	0.00	0.09
Col1	65	0.02	0.00	0.00	0.02	0.00	0.02
Col1	66	0.04	0.00	0.00	0.04	0.00	0.04
Col1	67	0.02	0.00	0.00	0.02	0.00	0.02
Col1	68	0.08	0.00	0.00	0.08	0.00	0.08
Col1	69	0.03	0.00	0.00	0.03	0.00	0.03
Col1	70	0.10	0.00	0.00	0.10	0.00	0.10
Col1	71	0.02	0.00	0.00	0.02	0.00	0.02
Col1	72	0.04	0.00	0.00	0.04	0.00	0.04
Col1	73	0.03	0.00	0.00	0.03	0.00	0.03
Col1	74	0.00	0.00	0.00	0.00	0.00	0.00
Col1	75	0.03	0.00	0.00	0.03	0.00	0.03
Col1	76	0.02	0.00	0.00	0.02	0.00	0.02
Col1	77	0.03	0.00	0.00	0.03	0.00	0.03
Col1	78	0.02	0.00	0.00	0.02	0.00	0.02
Col1	79	0.12	0.00	0.00	0.12	0.00	0.12
Col1	80	0.06	0.00	0.00	0.06	0.00	0.06
Col1	81	0.02	0.24	0.78	0.80	0.52	0.80
Col1	82	0.02	0.27	0.87	0.89	0.58	0.89
Col1	83	0.04	0.24	0.78	0.81	0.52	0.81
Col1	84	0.04	0.27	0.87	0.91	0.58	0.91
Col1	85	0.03	0.24	0.78	0.75	0.52	0.75
Col1	86	0.02	0.24	0.78	0.76	0.52	0.76
Col1	87	0.03	0.27	0.87	0.84	0.58	0.84
Col1	88	0.02	0.27	0.87	0.85	0.58	0.85
Col1	89	0.09	0.00	0.00	0.09	0.00	0.09
Col1	90	0.09	0.00	0.00	0.09	0.00	0.09
Col2	1	0.02	0.00	0.00	0.02		0.02
Col2	2	0.07	0.00	0.00	0.07		0.07
Col2	3	0.07	0.00	0.00	0.07		0.07
Col2	4	0.08	0.00	0.00	0.08		0.08
Col2	5	0.05	0.00	0.00	0.05		0.05
Col2	6	0.06	0.00	0.00	0.06		0.06
Col2	7	0.04	0.12	0.61	0.61		0.61
Col2	8	0.04	0.13	0.80	0.72		0.72
Col2	9	0.02	0.12	0.61	0.62		0.62
Col2	10	0.02	0.13	0.80	0.81		0.81
Col2	11	0.01	0.12	0.61	0.60		0.60
Col2	12	0.01	0.13	0.80	0.77		0.77
Col2	13	0.06	0.12	0.61	0.64		0.64
Col2	14	0.06	0.13	0.80	0.83		0.83
Col2	15	0.03	0.12	0.61	0.60		0.60
Col2	16	0.02	0.12	0.61	0.60		0.60
Col2	17	0.03	0.13	0.80	0.75		0.75
Col2	18	0.02	0.13	0.80	0.77		0.77
Col2	19	0.01	0.09	0.46	0.45		0.45
Col2	20	0.01	0.09	0.60	0.59		0.59
Col2	21	0.06	0.09	0.46	0.49		0.49
Col2	22	0.06	0.09	0.60	0.63		0.63
Col2	23	0.04	0.09	0.46	0.47		0.47
Col2	24	0.04	0.09	0.60	0.61		0.61
Col2	25	0.09	0.09	0.46	0.50		0.50
Col2	26	0.09	0.09	0.60	0.64		0.64
Col2	27	0.02	0.09	0.46	0.47		0.47
Col2	28	0.03	0.09	0.46	0.47		0.47
Col2	29	0.02	0.09	0.60	0.61		0.61
Col2	30	0.03	0.09	0.60	0.61		0.61
Col2	31	0.01	0.09	0.46	0.46		0.46

Col2	32	0.01	0.09	0.60	0.60	0.60
Col2	33	0.06	0.09	0.46	0.49	0.49
Col2	34	0.06	0.09	0.60	0.63	0.63
Col2	35	0.04	0.09	0.46	0.47	0.47
Col2	36	0.04	0.09	0.60	0.61	0.61
Col2	37	0.09	0.09	0.46	0.50	0.50
Col2	38	0.09	0.09	0.60	0.64	0.64
Col2	39	0.02	0.09	0.46	0.47	0.47
Col2	40	0.03	0.09	0.46	0.47	0.47
Col2	41	0.02	0.09	0.60	0.61	0.61
Col2	42	0.03	0.09	0.60	0.61	0.61
Col2	43	0.04	0.12	0.61	0.61	0.61
Col2	44	0.04	0.13	0.80	0.71	0.71
Col2	45	0.02	0.12	0.61	0.62	0.62
Col2	46	0.02	0.13	0.80	0.80	0.80
Col2	47	0.02	0.12	0.61	0.60	0.60
Col2	48	0.02	0.13	0.80	0.76	0.76
Col2	49	0.06	0.12	0.61	0.64	0.64
Col2	50	0.06	0.13	0.80	0.82	0.82
Col2	51	0.03	0.12	0.61	0.60	0.60
Col2	52	0.02	0.12	0.61	0.60	0.60
Col2	53	0.03	0.13	0.80	0.75	0.75
Col2	54	0.02	0.13	0.80	0.76	0.76
Col2	55	0.02	0.00	0.00	0.02	0.02
Col2	56	0.04	0.00	0.00	0.04	0.04
Col2	57	0.01	0.00	0.00	0.01	0.01
Col2	58	0.03	0.00	0.00	0.03	0.03
Col2	59	0.01	0.00	0.00	0.01	0.01
Col2	60	0.02	0.00	0.00	0.02	0.02
Col2	61	0.01	0.00	0.00	0.01	0.01
Col2	62	0.04	0.00	0.00	0.04	0.04
Col2	63	0.06	0.00	0.00	0.06	0.06
Col2	64	0.09	0.00	0.00	0.09	0.09
Col2	65	0.02	0.00	0.00	0.02	0.02
Col2	66	0.03	0.00	0.00	0.03	0.03
Col2	67	0.01	0.00	0.00	0.01	0.01
Col2	68	0.04	0.00	0.00	0.04	0.04
Col2	69	0.06	0.00	0.00	0.06	0.06
Col2	70	0.09	0.00	0.00	0.09	0.09
Col2	71	0.02	0.00	0.00	0.02	0.02
Col2	72	0.03	0.00	0.00	0.03	0.03
Col2	73	0.04	0.00	0.00	0.04	0.04
Col2	74	0.02	0.00	0.00	0.02	0.02
Col2	75	0.02	0.00	0.00	0.02	0.02
Col2	76	0.06	0.00	0.00	0.06	0.06
Col2	77	0.03	0.00	0.00	0.03	0.03
Col2	78	0.02	0.00	0.00	0.02	0.02
Col2	79	0.06	0.00	0.00	0.06	0.06
Col2	80	0.06	0.00	0.00	0.06	0.06
Col2	81	0.01	0.12	0.61	0.60	0.60
Col2	82	0.01	0.13	0.80	0.77	0.77
Col2	83	0.07	0.12	0.61	0.64	0.64
Col2	84	0.07	0.13	0.80	0.83	0.83
Col2	85	0.02	0.12	0.61	0.60	0.60
Col2	86	0.02	0.12	0.61	0.60	0.60
Col2	87	0.02	0.13	0.80	0.76	0.76
Col2	88	0.02	0.13	0.80	0.77	0.77
Col2	89	0.05	0.00	0.00	0.05	0.05
Col2	90	0.07	0.00	0.00	0.07	0.07
Col3	1	0.02	0.00	0.00	0.02	0.02

Col3	2	0.08	0.00	0.00	0.08	0.08
Col3	3	0.08	0.00	0.00	0.08	0.08
Col3	4	0.09	0.00	0.00	0.09	0.09
Col3	5	0.06	0.00	0.00	0.06	0.06
Col3	6	0.06	0.00	0.00	0.06	0.06
Col3	7	0.05	0.08	0.76	0.78	0.78
Col3	8	0.05	0.08	0.84	0.87	0.87
Col3	9	0.05	0.08	0.76	0.69	0.69
Col3	10	0.05	0.08	0.84	0.78	0.78
Col3	11	0.11	0.08	0.76	0.81	0.81
Col3	12	0.11	0.08	0.84	0.90	0.90
Col3	13	0.03	0.08	0.76	0.72	0.72
Col3	14	0.03	0.08	0.84	0.81	0.81
Col3	15	0.03	0.08	0.76	0.71	0.71
Col3	16	0.02	0.08	0.76	0.73	0.73
Col3	17	0.03	0.08	0.84	0.80	0.80
Col3	18	0.02	0.08	0.84	0.82	0.82
Col3	19	0.09	0.06	0.57	0.61	0.61
Col3	20	0.09	0.06	0.63	0.67	0.67
Col3	21	0.02	0.06	0.57	0.55	0.55
Col3	22	0.02	0.06	0.63	0.61	0.61
Col3	23	0.13	0.06	0.57	0.63	0.63
Col3	24	0.13	0.06	0.63	0.70	0.70
Col3	25	0.05	0.06	0.57	0.57	0.57
Col3	26	0.05	0.06	0.63	0.63	0.63
Col3	27	0.01	0.06	0.57	0.56	0.56
Col3	28	0.02	0.06	0.57	0.57	0.57
Col3	29	0.01	0.06	0.63	0.63	0.63
Col3	30	0.02	0.06	0.63	0.64	0.64
Col3	31	0.09	0.06	0.57	0.61	0.61
Col3	32	0.09	0.06	0.63	0.68	0.68
Col3	33	0.03	0.06	0.57	0.55	0.55
Col3	34	0.03	0.06	0.63	0.61	0.61
Col3	35	0.13	0.06	0.57	0.63	0.63
Col3	36	0.13	0.06	0.63	0.70	0.70
Col3	37	0.06	0.06	0.57	0.57	0.57
Col3	38	0.06	0.06	0.63	0.64	0.64
Col3	39	0.01	0.06	0.57	0.57	0.57
Col3	40	0.02	0.06	0.57	0.57	0.57
Col3	41	0.01	0.06	0.63	0.63	0.63
Col3	42	0.02	0.06	0.63	0.64	0.64
Col3	43	0.04	0.08	0.76	0.78	0.78
Col3	44	0.04	0.08	0.84	0.86	0.86
Col3	45	0.05	0.08	0.76	0.70	0.70
Col3	46	0.05	0.08	0.84	0.77	0.77
Col3	47	0.10	0.08	0.76	0.81	0.81
Col3	48	0.10	0.08	0.84	0.89	0.89
Col3	49	0.03	0.08	0.76	0.72	0.72
Col3	50	0.03	0.08	0.84	0.80	0.80
Col3	51	0.04	0.08	0.76	0.71	0.71
Col3	52	0.02	0.08	0.76	0.72	0.72
Col3	53	0.04	0.08	0.84	0.80	0.80
Col3	54	0.02	0.08	0.84	0.81	0.81
Col3	55	0.08	0.00	0.00	0.08	0.08
Col3	56	0.02	0.00	0.00	0.02	0.02
Col3	57	0.06	0.00	0.00	0.06	0.06
Col3	58	0.02	0.00	0.00	0.02	0.02
Col3	59	0.06	0.00	0.00	0.06	0.06
Col3	60	0.01	0.00	0.00	0.01	0.01
Col3	61	0.09	0.00	0.00	0.09	0.09

Col3	62	0.13	0.00	0.00	0.13	0.13
Col3	63	0.02	0.00	0.00	0.02	0.02
Col3	64	0.05	0.00	0.00	0.05	0.05
Col3	65	0.01	0.00	0.00	0.01	0.01
Col3	66	0.02	0.00	0.00	0.02	0.02
Col3	67	0.09	0.00	0.00	0.09	0.09
Col3	68	0.13	0.00	0.00	0.13	0.13
Col3	69	0.03	0.00	0.00	0.03	0.03
Col3	70	0.06	0.00	0.00	0.06	0.06
Col3	71	0.01	0.00	0.00	0.01	0.01
Col3	72	0.02	0.00	0.00	0.02	0.02
Col3	73	0.04	0.00	0.00	0.04	0.04
Col3	74	0.10	0.00	0.00	0.10	0.10
Col3	75	0.05	0.00	0.00	0.05	0.05
Col3	76	0.03	0.00	0.00	0.03	0.03
Col3	77	0.04	0.00	0.00	0.04	0.04
Col3	78	0.02	0.00	0.00	0.02	0.02
Col3	79	0.05	0.00	0.00	0.05	0.05
Col3	80	0.08	0.00	0.00	0.08	0.08
Col3	81	0.11	0.08	0.76	0.81	0.81
Col3	82	0.11	0.08	0.84	0.90	0.90
Col3	83	0.03	0.08	0.76	0.72	0.72
Col3	84	0.03	0.08	0.84	0.81	0.81
Col3	85	0.03	0.08	0.76	0.72	0.72
Col3	86	0.02	0.08	0.76	0.73	0.73
Col3	87	0.03	0.08	0.84	0.80	0.80
Col3	88	0.02	0.08	0.84	0.82	0.82
Col3	89	0.11	0.00	0.00	0.11	0.11
Col3	90	0.06	0.00	0.00	0.06	0.06

Raf1	1	0.00	0.02	0.08	0.08	0.08
Raf1	2	0.00	0.09	0.39	0.39	0.39
Raf1	3	0.00	0.10	0.41	0.41	0.41
Raf1	4	0.01	0.11	0.47	0.47	0.47
Raf1	5	0.00	0.07	0.31	0.31	0.31
Raf1	6	0.00	0.08	0.32	0.32	0.32
Raf1	7	0.01	0.07	0.24	0.24	0.24
Raf1	8	0.01	0.07	0.24	0.24	0.24
Raf1	9	0.03	0.05	0.15	0.17	0.17
Raf1	10	0.03	0.05	0.15	0.17	0.17
Raf1	11	0.05	0.00	0.01	0.05	0.05
Raf1	12	0.05	0.00	0.01	0.05	0.05
Raf1	13	0.05	0.02	0.09	0.11	0.11
Raf1	14	0.05	0.02	0.09	0.11	0.11
Raf1	15	0.00	0.07	0.24	0.24	0.24
Raf1	16	0.00	0.05	0.15	0.16	0.16
Raf1	17	0.00	0.07	0.24	0.24	0.24
Raf1	18	0.00	0.05	0.15	0.16	0.16
Raf1	19	0.01	0.01	0.04	0.03	0.03
Raf1	20	0.01	0.01	0.04	0.03	0.03
Raf1	21	0.02	0.03	0.12	0.12	0.12
Raf1	22	0.02	0.03	0.12	0.12	0.12
Raf1	23	0.04	0.06	0.25	0.27	0.27
Raf1	24	0.04	0.06	0.25	0.27	0.27
Raf1	25	0.04	0.08	0.33	0.35	0.35
Raf1	26	0.04	0.08	0.33	0.35	0.35
Raf1	27	0.01	0.01	0.04	0.04	0.04
Raf1	28	0.00	0.03	0.12	0.12	0.12
Raf1	29	0.01	0.01	0.04	0.04	0.04
Raf1	30	0.00	0.03	0.12	0.12	0.12

Raf1	31	0.01	0.01	0.05	0.05	0.05
Raf1	32	0.01	0.01	0.05	0.05	0.05
Raf1	33	0.02	0.03	0.13	0.13	0.13
Raf1	34	0.02	0.03	0.13	0.13	0.13
Raf1	35	0.04	0.06	0.27	0.28	0.28
Raf1	36	0.04	0.06	0.27	0.28	0.28
Raf1	37	0.04	0.08	0.35	0.36	0.36
Raf1	38	0.04	0.08	0.35	0.36	0.36
Raf1	39	0.01	0.01	0.05	0.05	0.05
Raf1	40	0.01	0.03	0.13	0.13	0.13
Raf1	41	0.01	0.01	0.05	0.05	0.05
Raf1	42	0.01	0.03	0.13	0.13	0.13
Raf1	43	0.01	0.08	0.26	0.26	0.26
Raf1	44	0.01	0.08	0.26	0.26	0.26
Raf1	45	0.03	0.05	0.17	0.19	0.19
Raf1	46	0.03	0.05	0.17	0.19	0.19
Raf1	47	0.05	0.01	0.03	0.06	0.06
Raf1	48	0.05	0.01	0.03	0.06	0.06
Raf1	49	0.05	0.02	0.07	0.09	0.09
Raf1	50	0.05	0.02	0.07	0.09	0.09
Raf1	51	0.00	0.08	0.26	0.26	0.26
Raf1	52	0.00	0.05	0.17	0.18	0.18
Raf1	53	0.00	0.08	0.26	0.26	0.26
Raf1	54	0.00	0.05	0.17	0.18	0.18
Raf1	55	0.02	0.02	0.09	0.09	0.09
Raf1	56	0.01	0.02	0.08	0.09	0.09
Raf1	57	0.01	0.02	0.09	0.09	0.09
Raf1	58	0.01	0.02	0.08	0.08	0.08
Raf1	59	0.02	0.01	0.03	0.04	0.04
Raf1	60	0.01	0.01	0.03	0.03	0.03
Raf1	61	0.01	0.01	0.04	0.03	0.03
Raf1	62	0.04	0.06	0.25	0.27	0.27
Raf1	63	0.02	0.03	0.12	0.12	0.12
Raf1	64	0.04	0.08	0.33	0.35	0.35
Raf1	65	0.01	0.01	0.04	0.04	0.04
Raf1	66	0.00	0.03	0.12	0.12	0.12
Raf1	67	0.01	0.01	0.05	0.05	0.05
Raf1	68	0.04	0.06	0.27	0.28	0.28
Raf1	69	0.02	0.03	0.13	0.13	0.13
Raf1	70	0.04	0.08	0.35	0.36	0.36
Raf1	71	0.01	0.01	0.05	0.05	0.05
Raf1	72	0.01	0.03	0.13	0.13	0.13
Raf1	73	0.01	0.08	0.26	0.26	0.26
Raf1	74	0.05	0.01	0.03	0.06	0.06
Raf1	75	0.03	0.05	0.17	0.19	0.19
Raf1	76	0.05	0.02	0.07	0.09	0.09
Raf1	77	0.00	0.08	0.26	0.26	0.26
Raf1	78	0.00	0.05	0.17	0.18	0.18
Raf1	79	0.00	0.09	0.44	0.43	0.43
Raf1	80	0.00	0.09	0.44	0.44	0.44
Raf1	81	0.05	0.00	0.00	0.05	0.05
Raf1	82	0.05	0.00	0.00	0.05	0.05
Raf1	83	0.05	0.02	0.11	0.13	0.13
Raf1	84	0.05	0.02	0.11	0.13	0.13
Raf1	85	0.00	0.07	0.23	0.23	0.23
Raf1	86	0.00	0.04	0.14	0.14	0.14
Raf1	87	0.00	0.07	0.23	0.23	0.23
Raf1	88	0.00	0.04	0.14	0.14	0.14
Raf1	89	0.01	0.08	0.33	0.34	0.34
Raf1	90	0.01	0.08	0.33	0.33	0.33

COLUMN REACTIONS:

Id	Load		In_Plane Horz(k)	--Out_Plane_Horz--	
	Id	Vert(k)		Base(k)	Roof(k)
Col1	1	0.70	0.00	0.00	0.00
Col1	2	2.84	0.00	0.00	0.00
Col1	3	2.95	0.00	0.00	0.00
Col1	4	3.38	0.00	0.00	0.00
Col1	5	2.30	0.00	0.00	0.00
Col1	6	2.38	0.00	0.00	0.00
Col1	7	-1.91	0.00	-1.84	-1.84
Col1	8	-1.91	0.00	2.05	2.05
Col1	9	-1.42	0.00	-1.84	-1.84
Col1	10	-1.42	0.00	2.05	2.05
Col1	11	0.36	0.00	-1.84	-1.84
Col1	12	0.36	0.00	2.05	2.05
Col1	13	0.85	0.00	-1.84	-1.84
Col1	14	0.85	0.00	2.05	2.05
Col1	15	-1.89	0.00	-1.84	-1.84
Col1	16	-1.16	0.00	-1.84	-1.84
Col1	17	-1.89	0.00	2.05	2.05
Col1	18	-1.16	0.00	2.05	2.05
Col1	19	0.43	0.00	-1.38	-1.38
Col1	20	0.43	0.00	1.54	1.54
Col1	21	0.80	0.00	-1.38	-1.38
Col1	22	0.80	0.00	1.54	1.54
Col1	23	2.13	0.00	-1.38	-1.38
Col1	24	2.13	0.00	1.54	1.54
Col1	25	2.49	0.00	-1.38	-1.38
Col1	26	2.49	0.00	1.54	1.54
Col1	27	0.44	0.00	-1.38	-1.38
Col1	28	0.99	0.00	-1.38	-1.38
Col1	29	0.44	0.00	1.54	1.54
Col1	30	0.99	0.00	1.54	1.54
Col1	31	0.51	0.00	-1.38	-1.38
Col1	32	0.51	0.00	1.54	1.54
Col1	33	0.88	0.00	-1.38	-1.38
Col1	34	0.88	0.00	1.54	1.54
Col1	35	2.21	0.00	-1.38	-1.38
Col1	36	2.21	0.00	1.54	1.54
Col1	37	2.57	0.00	-1.38	-1.38
Col1	38	2.57	0.00	1.54	1.54
Col1	39	0.52	0.00	-1.38	-1.38
Col1	40	1.07	0.00	-1.38	-1.38
Col1	41	0.52	0.00	1.54	1.54
Col1	42	1.07	0.00	1.54	1.54
Col1	43	-2.14	0.00	-1.84	-1.84
Col1	44	-2.14	0.00	2.05	2.05
Col1	45	-1.65	0.00	-1.84	-1.84
Col1	46	-1.65	0.00	2.05	2.05
Col1	47	0.12	0.00	-1.84	-1.84
Col1	48	0.12	0.00	2.05	2.05
Col1	49	0.61	0.00	-1.84	-1.84
Col1	50	0.61	0.00	2.05	2.05
Col1	51	-2.13	0.00	-1.84	-1.84
Col1	52	-1.40	0.00	-1.84	-1.84
Col1	53	-2.13	0.00	2.05	2.05
Col1	54	-1.40	0.00	2.05	2.05

Col1	55	0.80	0.00	0.00	0.00
Col1	56	0.76	0.00	0.00	0.00
Col1	57	0.77	0.00	0.00	0.00
Col1	58	0.74	0.00	0.00	0.00
Col1	59	0.31	0.00	0.00	0.00
Col1	60	0.27	0.00	0.00	0.00
Col1	61	0.43	0.00	0.00	0.00
Col1	62	2.13	0.00	0.00	0.00
Col1	63	0.80	0.00	0.00	0.00
Col1	64	2.49	0.00	0.00	0.00
Col1	65	0.44	0.00	0.00	0.00
Col1	66	0.99	0.00	0.00	0.00
Col1	67	0.51	0.00	0.00	0.00
Col1	68	2.21	0.00	0.00	0.00
Col1	69	0.88	0.00	0.00	0.00
Col1	70	2.57	0.00	0.00	0.00
Col1	71	0.52	0.00	0.00	0.00
Col1	72	1.07	0.00	0.00	0.00
Col1	73	-2.14	0.00	0.00	0.00
Col1	74	0.12	0.00	0.00	0.00
Col1	75	-1.65	0.00	0.00	0.00
Col1	76	0.61	0.00	0.00	0.00
Col1	77	-2.13	0.00	0.00	0.00
Col1	78	-1.40	0.00	0.00	0.00
Col1	79	3.11	0.00	0.00	0.00
Col1	80	1.66	0.00	0.00	0.00
Col1	81	0.46	0.00	-1.84	-1.84
Col1	82	0.46	0.00	2.05	2.05
Col1	83	0.95	0.00	-1.84	-1.84
Col1	84	0.95	0.00	2.05	2.05
Col1	85	-1.78	0.00	-1.84	-1.84
Col1	86	-1.06	0.00	-1.84	-1.84
Col1	87	-1.78	0.00	2.05	2.05
Col1	88	-1.06	0.00	2.05	2.05
Col1	89	2.46	0.00	0.00	0.00
Col1	90	2.42	0.00	0.00	0.00
Col2	1	2.14	0.00	0.00	0.00
Col2	2	8.44	0.00	0.00	0.00
Col2	3	8.76	0.00	0.00	0.00
Col2	4	9.95	0.04	0.00	0.00
Col2	5	6.87	0.00	0.00	0.00
Col2	6	7.11	0.00	0.00	0.00
Col2	7	-9.24	2.19	-5.71	-5.71
Col2	8	-9.24	2.19	6.12	6.12
Col2	9	2.99	0.00	-5.71	-5.71
Col2	10	2.99	0.00	6.12	6.12
Col2	11	-4.10	2.55	-5.71	-5.71
Col2	12	-4.10	2.55	6.12	6.12
Col2	13	8.03	0.00	-5.71	-5.71
Col2	14	8.03	0.00	6.12	6.12
Col2	15	-3.67	0.00	-5.71	-5.71
Col2	16	-2.06	0.00	-5.71	-5.71
Col2	17	-3.67	0.00	6.12	6.12
Col2	18	-2.06	0.00	6.12	6.12
Col2	19	-1.43	1.64	-4.28	-4.28
Col2	20	-1.43	1.64	4.59	4.59
Col2	21	7.74	0.00	-4.28	-4.28
Col2	22	7.74	0.00	4.59	4.59
Col2	23	2.42	1.92	-4.28	-4.28
Col2	24	2.42	1.92	4.59	4.59

Col2	25	11.52	0.00	-4.28	-4.28
Col2	26	11.52	0.00	4.59	4.59
Col2	27	2.74	0.00	-4.28	-4.28
Col2	28	3.95	0.00	-4.28	-4.28
Col2	29	2.74	0.00	4.59	4.59
Col2	30	3.95	0.00	4.59	4.59
Col2	31	-1.19	1.64	-4.28	-4.28
Col2	32	-1.19	1.64	4.59	4.59
Col2	33	7.98	0.00	-4.28	-4.28
Col2	34	7.98	0.00	4.59	4.59
Col2	35	2.66	1.92	-4.28	-4.28
Col2	36	2.66	1.92	4.59	4.59
Col2	37	11.76	0.00	-4.28	-4.28
Col2	38	11.76	0.00	4.59	4.59
Col2	39	2.98	0.00	-4.28	-4.28
Col2	40	4.19	0.00	-4.28	-4.28
Col2	41	2.98	0.00	4.59	4.59
Col2	42	4.19	0.00	4.59	4.59
Col2	43	-9.97	2.19	-5.71	-5.71
Col2	44	-9.97	2.19	6.12	6.12
Col2	45	2.26	0.00	-5.71	-5.71
Col2	46	2.26	0.00	6.12	6.12
Col2	47	-4.83	2.55	-5.71	-5.71
Col2	48	-4.83	2.55	6.12	6.12
Col2	49	7.30	0.00	-5.71	-5.71
Col2	50	7.30	0.00	6.12	6.12
Col2	51	-4.40	0.00	-5.71	-5.71
Col2	52	-2.79	0.00	-5.71	-5.71
Col2	53	-4.40	0.00	6.12	6.12
Col2	54	-2.79	0.00	6.12	6.12
Col2	55	0.24	1.29	0.00	0.00
Col2	56	4.63	0.00	0.00	0.00
Col2	57	0.73	0.96	0.00	0.00
Col2	58	3.99	0.00	0.00	0.00
Col2	59	-1.24	1.29	0.00	0.00
Col2	60	3.14	0.00	0.00	0.00
Col2	61	-1.43	1.64	0.00	0.00
Col2	62	2.42	1.92	0.00	0.00
Col2	63	7.74	0.00	0.00	0.00
Col2	64	11.52	0.00	0.00	0.00
Col2	65	2.74	0.00	0.00	0.00
Col2	66	3.95	0.00	0.00	0.00
Col2	67	-1.19	1.64	0.00	0.00
Col2	68	2.66	1.92	0.00	0.00
Col2	69	7.98	0.00	0.00	0.00
Col2	70	11.76	0.00	0.00	0.00
Col2	71	2.98	0.00	0.00	0.00
Col2	72	4.19	0.00	0.00	0.00
Col2	73	-9.97	2.19	0.00	0.00
Col2	74	-4.83	2.55	0.00	0.00
Col2	75	2.26	0.00	0.00	0.00
Col2	76	7.30	0.00	0.00	0.00
Col2	77	-4.40	0.00	0.00	0.00
Col2	78	-2.79	0.00	0.00	0.00
Col2	79	7.10	0.01	0.00	0.00
Col2	80	7.08	0.01	0.00	0.00
Col2	81	-3.78	2.55	-5.71	-5.71
Col2	82	-3.78	2.55	6.12	6.12
Col2	83	8.35	0.00	-5.71	-5.71
Col2	84	8.35	0.00	6.12	6.12

Col2	85	-3.36	0.00	-5.71	-5.71
Col2	86	-1.75	0.00	-5.71	-5.71
Col2	87	-3.36	0.00	6.12	6.12
Col2	88	-1.75	0.00	6.12	6.12
Col2	89	5.69	0.96	0.00	0.00
Col2	90	8.95	0.00	0.00	0.00
Col3	1	0.82	0.00	0.00	0.00
Col3	2	3.00	0.00	0.00	0.00
Col3	3	3.11	0.00	0.00	0.00
Col3	4	3.62	0.00	0.00	0.00
Col3	5	2.45	0.00	0.00	0.00
Col3	6	2.54	0.00	0.00	0.00
Col3	7	2.01	0.00	-2.04	-2.04
Col3	8	2.01	0.00	2.28	2.28
Col3	9	-7.11	3.55	-2.04	-2.04
Col3	10	-7.11	3.55	2.28	2.28
Col3	11	4.25	0.00	-2.04	-2.04
Col3	12	4.25	0.00	2.28	2.28
Col3	13	-4.78	3.15	-2.04	-2.04
Col3	14	-4.78	3.15	2.28	2.28
Col3	15	-3.57	1.02	-2.04	-2.04
Col3	16	-2.32	0.72	-2.04	-2.04
Col3	17	-3.57	1.02	2.28	2.28
Col3	18	-2.32	0.72	2.28	2.28
Col3	19	3.43	0.00	-1.53	-1.53
Col3	20	3.43	0.00	1.71	1.71
Col3	21	-3.41	2.66	-1.53	-1.53
Col3	22	-3.41	2.66	1.71	1.71
Col3	23	5.11	0.00	-1.53	-1.53
Col3	24	5.11	0.00	1.71	1.71
Col3	25	-1.66	2.36	-1.53	-1.53
Col3	26	-1.66	2.36	1.71	1.71
Col3	27	-0.75	0.77	-1.53	-1.53
Col3	28	0.19	0.54	-1.53	-1.53
Col3	29	-0.75	0.77	1.71	1.71
Col3	30	0.19	0.54	1.71	1.71
Col3	31	3.51	0.00	-1.53	-1.53
Col3	32	3.51	0.00	1.71	1.71
Col3	33	-3.33	2.66	-1.53	-1.53
Col3	34	-3.33	2.66	1.71	1.71
Col3	35	5.19	0.00	-1.53	-1.53
Col3	36	5.19	0.00	1.71	1.71
Col3	37	-1.58	2.36	-1.53	-1.53
Col3	38	-1.58	2.36	1.71	1.71
Col3	39	-0.67	0.77	-1.53	-1.53
Col3	40	0.27	0.54	-1.53	-1.53
Col3	41	-0.67	0.77	1.71	1.71
Col3	42	0.27	0.54	1.71	1.71
Col3	43	1.73	0.00	-2.04	-2.04
Col3	44	1.73	0.00	2.28	2.28
Col3	45	-7.40	3.55	-2.04	-2.04
Col3	46	-7.40	3.55	2.28	2.28
Col3	47	3.96	0.00	-2.04	-2.04
Col3	48	3.96	0.00	2.28	2.28
Col3	49	-5.07	3.15	-2.04	-2.04
Col3	50	-5.07	3.15	2.28	2.28
Col3	51	-3.85	1.02	-2.04	-2.04
Col3	52	-2.60	0.72	-2.04	-2.04
Col3	53	-3.85	1.02	2.28	2.28
Col3	54	-2.60	0.72	2.28	2.28

Col3	55	3.03	0.00	0.00	0.00
Col3	56	-1.32	1.29	0.00	0.00
Col3	57	2.46	0.00	0.00	0.00
Col3	58	-0.77	0.96	0.00	0.00
Col3	59	2.47	0.00	0.00	0.00
Col3	60	-1.88	1.29	0.00	0.00
Col3	61	3.43	0.00	0.00	0.00
Col3	62	5.11	0.00	0.00	0.00
Col3	63	-3.41	2.66	0.00	0.00
Col3	64	-1.66	2.36	0.00	0.00
Col3	65	-0.75	0.77	0.00	0.00
Col3	66	0.19	0.54	0.00	0.00
Col3	67	3.51	0.00	0.00	0.00
Col3	68	5.19	0.00	0.00	0.00
Col3	69	-3.33	2.66	0.00	0.00
Col3	70	-1.58	2.36	0.00	0.00
Col3	71	-0.67	0.77	0.00	0.00
Col3	72	0.27	0.54	0.00	0.00
Col3	73	1.73	0.00	0.00	0.00
Col3	74	3.96	0.00	0.00	0.00
Col3	75	-7.40	3.55	0.00	0.00
Col3	76	-5.07	3.15	0.00	0.00
Col3	77	-3.85	1.02	0.00	0.00
Col3	78	-2.60	0.72	0.00	0.00
Col3	79	1.81	0.00	0.00	0.00
Col3	80	3.29	0.00	0.00	0.00
Col3	81	4.36	0.00	-2.04	-2.04
Col3	82	4.36	0.00	2.28	2.28
Col3	83	-4.67	3.15	-2.04	-2.04
Col3	84	-4.67	3.15	2.28	2.28
Col3	85	-3.46	1.02	-2.04	-2.04
Col3	86	-2.21	0.72	-2.04	-2.04
Col3	87	-3.46	1.02	2.28	2.28
Col3	88	-2.21	0.72	2.28	2.28
Col3	89	4.18	0.00	0.00	0.00
Col3	90	0.95	0.96	0.00	0.00

COLUMN DEFLECTIONS:

Id	Load	Deflection(in)	
	Id	Calc	Limit
-----	----	-----	-----
Col1	1	0.00	2.53
Col1	2	0.00	2.53
Col1	3	0.00	2.53
Col1	4	0.00	2.53
Col1	5	0.00	2.53
Col1	6	0.00	2.53
Col1	7	0.00	2.53
Col1	8	0.00	2.53
Col1	9	0.00	2.53
Col1	10	0.00	2.53
Col1	11	0.00	2.53
Col1	12	0.00	2.53
Col1	13	0.00	2.53
Col1	14	-0.69	2.53
Col1	15	0.77	2.53
Col1	16	0.00	2.53
Col1	17	0.00	2.53
Col1	18	0.00	2.53

Col1	19	0.00	2.53
Col1	20	0.00	2.53
Col1	21	0.00	2.53
Col1	22	0.00	2.53
Col1	23	0.00	2.53
Col1	24	0.00	2.53
Col2	1	0.00	2.67
Col2	2	0.00	2.67
Col2	3	0.00	2.67
Col2	4	0.00	2.67
Col2	5	0.00	2.67
Col2	6	0.00	2.67
Col2	7	0.00	2.67
Col2	8	0.00	2.67
Col2	9	0.00	2.67
Col2	10	0.00	2.67
Col2	11	0.00	2.67
Col2	12	0.00	2.67
Col2	13	0.00	2.67
Col2	14	-0.93	2.67
Col2	15	1.00	2.67
Col2	16	0.00	2.67
Col2	17	0.00	2.67
Col2	18	0.00	2.67
Col2	19	0.00	2.67
Col2	20	0.00	2.67
Col2	21	0.00	2.67
Col2	22	0.00	2.67
Col2	23	0.00	2.67
Col2	24	0.00	2.67
Col3	1	0.00	2.81
Col3	2	0.00	2.81
Col3	3	0.00	2.81
Col3	4	0.00	2.81
Col3	5	0.00	2.81
Col3	6	0.00	2.81
Col3	7	0.00	2.81
Col3	8	0.00	2.81
Col3	9	0.00	2.81
Col3	10	0.00	2.81
Col3	11	0.00	2.81
Col3	12	0.00	2.81
Col3	13	0.00	2.81
Col3	14	-1.48	2.81
Col3	15	1.65	2.81
Col3	16	0.00	2.81
Col3	17	0.00	2.81
Col3	18	0.00	2.81
Col3	19	0.00	2.81
Col3	20	0.00	2.81
Col3	21	0.00	2.81
Col3	22	0.00	2.81
Col3	23	0.00	2.81
Col3	24	0.00	2.81

RAFTER DEFLECTIONS:

Load		Deflection(in)	
Id	Id	Calc	Limit
-----	-----	-----	-----

Raf1	1	-0.02	1.11
Raf1	2	-0.10	1.11
Raf1	3	-0.11	1.11
Raf1	4	-0.12	1.11
Raf1	5	-0.08	1.11
Raf1	6	-0.09	1.11
Raf1	7	-0.10	1.11
Raf1	8	0.05	1.11
Raf1	9	0.03	1.11
Raf1	10	0.00	1.11
Raf1	11	-0.02	1.11
Raf1	12	0.05	1.11
Raf1	13	0.03	1.11
Raf1	14	-0.02	1.11
Raf1	15	-0.02	1.11
Raf1	16	-0.02	1.11
Raf1	17	-0.02	1.11
Raf1	18	-0.09	1.11
Raf1	19	-0.09	1.11
Raf1	20	-0.01	1.11
Raf1	21	-0.01	1.11
Raf1	22	0.00	1.11
Raf1	23	0.00	1.11
Raf1	24	-0.02	1.11

COLUMN/RAFTER KL/R RATIO:

Id	Unbrace_Length		----KL/R----	
	Major	Minor	Major	Minor
Col1	25.3	6.3	66	58
Col2	26.7	6.3	75	56
Col3	28.1	5.0	105	71
Raf1	16.7	4.8	43	77

LOAD COMBINATIONS:

Strength Combinations

- 1 - Dead+Collateral
- 2 - Dead+Collateral+Live
- 3 - Dead+Collateral+Snow
- 4 - Dead+Collateral+MIN_SNOW
- 5 - Dead+Collateral+0.75Live
- 6 - Dead+Collateral+0.75Snow
- 7 - Dead+0.6Wind_Left1+0.6Wind_Pressure
- 8 - Dead+0.6Wind_Left1+0.6Wind_Suction
- 9 - Dead+0.6Wind_Right1+0.6Wind_Pressure
- 10 - Dead+0.6Wind_Right1+0.6Wind_Suction
- 11 - Dead+0.6Wind_Left2+0.6Wind_Pressure
- 12 - Dead+0.6Wind_Left2+0.6Wind_Suction
- 13 - Dead+0.6Wind_Right2+0.6Wind_Pressure
- 14 - Dead+0.6Wind_Right2+0.6Wind_Suction
- 15 - Dead+0.6Wind_Pressure+0.6Wind_Long1
- 16 - Dead+0.6Wind_Pressure+0.6Wind_Long2
- 17 - Dead+0.6Wind_Suction+0.6Wind_Long1
- 18 - Dead+0.6Wind_Suction+0.6Wind_Long2
- 19 - Dead+Collateral+0.75Live+0.45Wind_Left1+0.45Wind_Pressure
- 20 - Dead+Collateral+0.75Live+0.45Wind_Left1+0.45Wind_Suction

21 - Dead+Collateral+0.75Live+0.45Wind_Right1+0.45Wind_Pressure
22 - Dead+Collateral+0.75Live+0.45Wind_Right1+0.45Wind_Suction
23 - Dead+Collateral+0.75Live+0.45Wind_Left2+0.45Wind_Pressure
24 - Dead+Collateral+0.75Live+0.45Wind_Left2+0.45Wind_Suction
25 - Dead+Collateral+0.75Live+0.45Wind_Right2+0.45Wind_Pressure
26 - Dead+Collateral+0.75Live+0.45Wind_Right2+0.45Wind_Suction
27 - Dead+Collateral+0.75Live+0.45Wind_Pressure+0.45Wind_Long1
28 - Dead+Collateral+0.75Live+0.45Wind_Pressure+0.45Wind_Long2
29 - Dead+Collateral+0.75Live+0.45Wind_Suction+0.45Wind_Long1
30 - Dead+Collateral+0.75Live+0.45Wind_Suction+0.45Wind_Long2
31 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.45Wind_Pressure
32 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.45Wind_Suction
33 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.45Wind_Pressure
34 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.45Wind_Suction
35 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Pressure
36 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Suction
37 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Pressure
38 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Suction
39 - Dead+Collateral+0.75Snow+0.45Wind_Pressure+0.45Wind_Long1
40 - Dead+Collateral+0.75Snow+0.45Wind_Pressure+0.45Wind_Long2
41 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long1
42 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long2
43 - 0.6Dead+0.6Wind_Left1+0.6Wind_Pressure
44 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
45 - 0.6Dead+0.6Wind_Right1+0.6Wind_Pressure
46 - 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
47 - 0.6Dead+0.6Wind_Left2+0.6Wind_Pressure
48 - 0.6Dead+0.6Wind_Left2+0.6Wind_Suction
49 - 0.6Dead+0.6Wind_Right2+0.6Wind_Pressure
50 - 0.6Dead+0.6Wind_Right2+0.6Wind_Suction
51 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long1
52 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2
53 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long1
54 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long2
55 - 1.11Dead+1.11Collateral+0.7Seismic
56 - 1.11Dead+1.11Collateral-0.7Seismic
57 - 1.08Dead+1.08Collateral+0.52Seismic
58 - 1.08Dead+1.08Collateral-0.52Seismic
59 - 0.49Dead+0.7Seismic
60 - 0.49Dead-0.7Seismic
61 - Dead+Collateral+0.75Live+0.45Wind_Left1
62 - Dead+Collateral+0.75Live+0.45Wind_Left2
63 - Dead+Collateral+0.75Live+0.45Wind_Right1
64 - Dead+Collateral+0.75Live+0.45Wind_Right2
65 - Dead+Collateral+0.75Live+0.45Wind_Long1
66 - Dead+Collateral+0.75Live+0.45Wind_Long2
67 - Dead+Collateral+0.75Snow+0.45Wind_Left1
68 - Dead+Collateral+0.75Snow+0.45Wind_Left2
69 - Dead+Collateral+0.75Snow+0.45Wind_Right1
70 - Dead+Collateral+0.75Snow+0.45Wind_Right2
71 - Dead+Collateral+0.75Snow+0.45Wind_Long1
72 - Dead+Collateral+0.75Snow+0.45Wind_Long2
73 - 0.6Dead+0.6Wind_Left1
74 - 0.6Dead+0.6Wind_Left2
75 - 0.6Dead+0.6Wind_Right1
76 - 0.6Dead+0.6Wind_Right2
77 - 0.6Dead+0.6Wind_Long1
78 - 0.6Dead+0.6Wind_Long2
79 - Dead+Collateral+Snow/2+E2PAT_SL_1
80 - Dead+Collateral+Snow/2+E2PAT_SL_2

81 - Dead+Collateral+0.6Wind_Left2+0.6Wind_Pressure
 82 - Dead+Collateral+0.6Wind_Left2+0.6Wind_Suction
 83 - Dead+Collateral+0.6Wind_Right2+0.6Wind_Pressure
 84 - Dead+Collateral+0.6Wind_Right2+0.6Wind_Suction
 85 - Dead+Collateral+0.6Wind_Pressure+0.6Wind_Long1
 86 - Dead+Collateral+0.6Wind_Pressure+0.6Wind_Long2
 87 - Dead+Collateral+0.6Wind_Suction+0.6Wind_Long1
 88 - Dead+Collateral+0.6Wind_Suction+0.6Wind_Long2
 89 - 1.08Dead+1.08Collateral+0.75Snow+0.52Seismic
 90 - 1.08Dead+1.08Collateral+0.75Snow-0.52Seismic

Deflection Combinations

1 - Dead+Collateral
 2 - Dead+Collateral+Live
 3 - Dead+Collateral+Snow
 4 - Dead+Collateral+MIN_SNOW
 5 - Live
 6 - Snow
 7 - MIN_SNOW
 8 - Dead+0.39Wind_Left1
 9 - Dead+0.39Wind_Right1
 10 - Dead+0.39Wind_Left2
 11 - Dead+0.39Wind_Right2
 12 - Dead+0.39Wind_Long1
 13 - Dead+0.39Wind_Long2
 14 - Dead+0.39Wind_Pressure
 15 - Dead+0.39Wind_Suction
 16 - 1.11Dead+1.11Collateral+0.7Seismic
 17 - 1.11Dead+1.11Collateral-0.7Seismic
 18 - 1.08Dead+1.08Collateral+0.75Snow+0.52Seismic
 19 - 1.08Dead+1.08Collateral+0.75Snow-0.52Seismic
 20 - 0.49Dead+0.7Seismic
 21 - 0.49Dead-0.7Seismic
 22 - Seismic
 23 - Seismic
 24 - Dead

```
=====
U18R1010A          Wall 3 - Column Flange Brace          11/ 9/18  1:22pm
=====
```

COLUMN FLANGE BRACES

Id	Column Side	Part	Brace_At Girt_Id
Col1	R	A2525105	2 3
Col2	R	L2525105	3

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=====
U18R1010A          Wall 3 - Base Plate Design          11/ 9/18  1:22pm
=====
```

DESIGN CONSTANTS:

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Base Plate Yield      = 55.00(ksi )
Concrete Bearing      = 1.05(ksi )
Bolt Shear Stress    = 13.05(ksi )
Bolt Tension Stress   = 21.75(ksi )
```

BASE SIZE:

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```

Id	-----Base(in)-----			--Plate_Size(in)--			-----Bolts(in)-----			
	Type	Depth	Elev	Width	Thick	Length	Type	Dia	Gage	Row
Col1	S3	12.00	0.0	8.20	0.375	12.00	GR36	0.750	4.00	2
Col2	S3	10.20	0.0	8.00	0.375	10.25	GR36	0.750	4.00	2
Col3	S3	7.89	0.0	8.00	0.375	7.94	GR36	0.750	4.00	2

S3 - Welded Plate

BASE REACTIONS:

Id	--Max_Comp-		Max_Tension+Shear			-Max_Shear-		Max_Shear+Tension		
	Load	Fy(k)	Load	Fy(k)	Fx(k)	Load	Fx(k)	Load	Fx(k)	Fy(k)
Col1	4	3.38	44	-2.14	2.05	8	2.05	44	2.05	-2.14
Col2	37	11.76	44	-9.97	6.50	82	6.64	82	6.64	-3.78
Col3	35	5.19	46	-7.40	4.22	10	4.22	46	4.22	-7.40

LOAD COMBINATIONS:

- 4 - Dead+Collateral+MIN_SNOW
 8 - Dead+0.6Wind_Left1+0.6Wind_Suction
 10 - Dead+0.6Wind_Right1+0.6Wind_Suction
 35 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Pressure
 37 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Pressure
 44 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
 46 - 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
 82 - Dead+Collateral+0.6Wind_Left2+0.6Wind_Suction

=====

U18R1010A Wall 3 - Bypass Girt Layout 11/ 9/18 1:22pm

=====

GIRT LAYOUT:

Locate	Des Bay			Bay_Offset Design			---Extend---			----Max_Load----			
	Id	Id	Part	Start	End	Length	Left	Right	Weight	Id	UC	Report	Rot
3.75	1	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.60	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.60	Mom+Shr	D
7.50	2	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.80	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.80	Mom+Shr	D
13.75	3	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.90	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.90	Mom+Shr	D
18.75	4	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.80	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.80	Mom+Shr	D
23.75	5	1	08Z054	0.00	17.50	17.17	0.00	1.81	50.3	WS	0.84	Mom+Shr	D
		2	08Z054	0.00	17.50	17.17	1.81	0.00	50.3	WS	0.84	Mom+Shr	D

WS - 0.6Wind_Suction

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay

1 2

0 0

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=====
U18R1010A      Wall 3 - Girt Design 1 (Locate 3.75)      11/ 9/18  1:22pm
=====
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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	08Z054	3.7500	17.17		1.81	3.75	0	50.3	0.00	0.70
2	08Z054	3.7500	17.17	1.81		3.75	0	50.3	0.00	0.70

								100.6		

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----						
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup	
1	0.47		-0.71	-0.85	0.00		-1.46	6.15	1.80	3.21	
2	0.85	0.71		-0.47	3.21	1.80	-1.46	11.01		0.00	

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.71	1.8	0.38	RLap	1.80	3.73	0.48	RLap	0.56	-0.23	
2	LLap	0.71	1.8	0.38	LLap	1.80	3.73	0.48	LLap	0.56	-0.23	

UNBRACE LENGTHS

Bay Id	-----Minor-----						-----Cb-----									
	Mom1/Mom2		LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.44	2.65	1.70	0.26

2 0.44 2.65 1.70 0.26

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.53		0.76	0.91	0.00		1.58	6.28	-1.94	-3.46
2	-0.91	-0.76		0.53	-3.46	-1.94	1.58	10.89		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.76	1.8	0.41	MidS	1.58	3.09	0.51	RLap	0.60	0.25	
2	LLap	-0.76	1.8	0.41	MidS	1.58	3.09	0.51	LLap	0.60	0.25	

UNBRACE LENGTHS

Bay Id	-----Minor-----				-----Cb-----											
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.48	2.65	1.70	0.28
2	0.48	2.65	1.70	0.28				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.15	2.29	0.16	2.29				
2	-0.15	2.29	0.16	2.29				

U18R1010A Wall 3 - Girt Design 2 (Locate 7.50) 11/ 9/18 1:22pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	08Z054	7.5000	17.17		1.81	5.00	0	50.3	0.00	0.70
2	08Z054	7.5000	17.17	1.81		5.00	0	50.3	0.00	0.70

									100.6	

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.63		-0.94	-1.13	0.00		-1.94	6.15	2.40	4.28
2	1.13	0.94		-0.63	4.28	2.40	-1.94	11.01		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.94	1.8	0.51	RLap	2.40	3.73	0.64	RLap	0.74	-0.30	
2	LLap	0.94	1.8	0.51	LLap	2.40	3.73	0.64	LLap	0.74	-0.30	

UNBRACE LENGTHS

Bay Id	-----Minor-----								-----Cb-----							
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.59	2.65	1.70	0.35
2	0.59	2.65	1.70	0.35				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Span Loc	Right Lap	Right Sup
1	-0.70		1.02	1.22	0.00		2.10	6.28	-2.59	-4.62
2	-1.22	-1.02		0.70	-4.62	-2.59	2.10	10.89		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.02	1.8	0.55	MidS	2.10	3.09	0.68	RLap	0.80	0.33	
2	LLap	-1.02	1.8	0.55	MidS	2.10	3.09	0.68	LLap	0.80	0.33	

UNBRACE LENGTHS

Bay Id	-----Minor-----				-----Cb-----											
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.64	2.65	1.70	0.37
2	0.64	2.65	1.70	0.37				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.20	2.29	0.21	2.29				
2	-0.20	2.29	0.21	2.29				

U18R1010A Wall 3 - Girt Design 3 (Locate 13.75) 11/ 9/18 1:22pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
				Left	Right				Out	In
1	08Z054	13.7500	17.17		1.81	5.63	0	50.3	0.00	0.70
2	08Z054	13.7500	17.17	1.81		5.63	0	50.3	0.00	0.70

100.6

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.71		-1.06	-1.27	0.00		-2.19	6.15	2.70	4.81
2	1.27	1.06		-0.71	4.81	2.70	-2.19	11.01		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.06	1.8	0.57	RLap	2.70	3.73	0.72	RLap	0.84	-0.34	
2	LLap	1.06	1.8	0.57	LLap	2.70	3.73	0.72	LLap	0.84	-0.34	

UNBRACE LENGTHS

Bay Id	-----Minor-----						-----Cb-----									
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.66	2.65	1.70	0.39
2	0.66	2.65	1.70	0.39				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.79		1.14	1.37	0.00		2.37	6.28	-2.92	-5.19
2	-1.37	-1.14		0.79	-5.19	-2.92	2.37	10.89		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.14	1.8	0.61	MidS	2.37	3.09	0.77	RLap	0.90	0.37	
2	LLap	-1.14	1.8	0.61	MidS	2.37	3.09	0.77	LLap	0.90	0.37	

UNBRACE LENGTHS

Bay	Minor						Cb									
Mom1/Mom2																
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
RS																
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00	
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.72	2.65	1.70	0.42
2	0.72	2.65	1.70	0.42				

DEFLECTION: (Working Load)

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.22	2.29	0.24	2.29				
2	-0.22	2.29	0.24	2.29				

U18R1010A Wall 3 - Girt Design 4 (Locate 18.75) 11/ 9/18 1:22pm

GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.	Available	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Reduction
									Factor
1	08Z054	18.7500	17.17		1.81	5.00	0	50.3	0.00 0.70
2	08Z054	18.7500	17.17	1.81		5.00	0	50.3	0.00 0.70
									100.6

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Loc	Right Lap	Right Sup
1	0.63		-0.94	-1.13	0.00		-1.94	6.15	2.40	4.28
2	1.13	0.94		-0.63	4.28	2.40	-1.94	11.01		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.94	1.8	0.51	RLap	2.40	3.73	0.64	RLap	0.74	-0.30	
2	LLap	0.94	1.8	0.51	LLap	2.40	3.73	0.64	LLap	0.74	-0.30	

UNBRACE LENGTHS

Bay Id	-----Minor-----				-----Cb-----											
	Mom1/Mom2	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
1	17.2	1.0	1.0	1.0	3.0	1.8	1.00	1.00	1.00	1.77	1.22	1.00	1.00	1.00	0.00	
2	17.2	1.8	3.0	1.0	1.0	1.0	1.22	1.77	1.00	1.00	1.00	0.56	0.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay Id	-----Left_Lap-----				-----Right_Lap-----			
	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.59	2.65	1.70	0.35
2	0.59	2.65	1.70	0.35				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Loc	Right Lap	Right Sup
1	-0.70		1.02	1.22	0.00		2.10	6.28	-2.59	-4.62
2	-1.22	-1.02		0.70	-4.62	-2.59	2.10	10.89		0.00

STRENGTH/DEFLECTION:

Bay Id	-----Shear(k)-----				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.02	1.8	0.55	MidS	2.10	3.09	0.68	RLap	0.80	0.33	
2	LLap	-1.02	1.8	0.55	MidS	2.10	3.09	0.68	LLap	0.80	0.33	

UNBRACE LENGTHS

Bay		Minor					Cb									
Mom1/Mom2																
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
RS																
1	17.2	12.2	12.2	12.2	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00	
2	17.2	1.0	1.0	12.2	12.2	12.2	1.00	1.00	1.13	1.13	1.13	1.00	1.00	1.00	1.00	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay		-----Left_Lap-----				-----Right_Lap-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC	
1					0.64	2.65	1.70	0.37	
2	0.64	2.65	1.70	0.37					

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.20	2.29	0.21	2.29				
2	-0.20	2.29	0.21	2.29				

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U18R1010A	Wall 3 - Girt Design	5 (Locate 23.75)	11/ 9/18	1:22pm
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GIRT LAYOUT:

Bay		Locate	Design Length	--Lap(ft)--		Load Width	No. Brace	Weight	Available Reduction Factor	
Id	Part			Left	Right				Out	In
1	08Z054	23.7500	17.17		1.81	4.89	0	50.3	0.00	0.70
2	08Z054	23.7500	17.17	1.81		5.58	0	50.3	0.00	0.70
									100.6	

LOAD ID : 0.6Wind_Pressure

GIRT ACTIONS:

-----Shear(k)-----					-----Moment(f-k)-----					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Lap	Right Sup	
1	0.60		-0.94	-1.12	0.00		-1.79	5.98	2.61	4.48
2	1.24	1.04		-0.72	4.48	2.41	-2.28	10.86		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.94	1.8	0.50	RLap	2.61	3.72	0.70	RLap	0.78	-0.26	
2	LLap	1.04	1.8	0.56	LLap	2.41	3.73	0.65	LLap	0.78	-0.38	

UNBRACE LENGTHS

Bay	Minor						Cb									
Mom1/Mom2																
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL	
RS																
1	17.2	1.0	1.0	1.0	3.4	1.8	1.00	1.00	1.00	1.78	1.21	1.00	1.00	1.00	0.00	
0.58																
2	17.2	1.8	2.7	1.0	1.0	1.0	1.24	1.76	1.00	1.00	1.00	0.54	0.00	1.00	1.00	
1.00																

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.62	2.65	1.70	0.36
2	0.62	2.65	1.70	0.36				

LOAD ID : 0.6Wind_Suction

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)			
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Right Lap
1	-0.67		1.01	1.21	0.00		1.94	-2.82
2	-1.34	-1.12		0.80	-4.83	-2.61	2.46	10.74

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.01	1.8	0.54	RLap	-2.82	4.41	0.64	RLap	0.84	0.28	
2	LLap	-1.12	1.8	0.60	MidS	2.46	3.09	0.80	LLap	0.84	0.41	

UNBRACE LENGTHS

Bay		Minor					Cb								
Mom1/Mom2															
Id	Major	LS	LL	MS	RL	RS	LS	LL	MS	RL	RS	LS	LL	MS	RL
RS															
1	17.2	11.8	11.8	11.8	1.0	1.0	1.13	1.13	1.13	1.00	1.00	1.00	1.00	1.00	1.00

1.00
 2 17.2 1.0 1.0 12.5 12.5 12.5 1.00 1.00 1.13 1.13 1.13 1.00 1.00 1.00 1.00
 1.00

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (A307)

Bay	-----Left_Lap-----				-----Right_Lap-----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.67	2.65	1.70	0.39
2	0.67	2.65	1.70	0.39				

DEFLECTION: (Working Load)

Span Id	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
	Calc	Allow	Calc	Allow	Calc	Allow	Calc	Allow
1	-0.17	2.29	0.18	2.29				
2	-0.25	2.29	0.27	2.29				

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U18R1010A          Wall 3 - Diagonal Bracing Design          11/ 9/18  1:22pm
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PANEL SHEAR WITH NO BRACING:

Base Length	---Wind---		--Seismic--		Limit
	Load	Calc	Load	Calc	
35.00	9	101.4	59	56.8	72.8

DIAGONAL BRACE LAYOUT:

Bay	Brace_Locate		Bay	Design	-----Diag_Brace-----			----KL/R---	
Id	Start	End	Width	Length	Type	Size	Part	Calc	Limit
2	0.00	13.75	16.67	21.61	R	0.625	RDB-		
	13.75	28.09	16.67	21.99	R	0.625	RDB-		

DIAGONAL BRACE STRENGTH:

Bay	Brace_Locate		-----Wind(k)-----			----Seismic(k)---			Max
Id	Start	End	Load	Calc	Limit	Load	Calc	Limit	UC
2	0.00	13.75	9	4.60	7.34	59	2.58	8.81	0.63
	13.75	28.09	9	4.68	7.34	59	2.62	8.81	0.64

COLUMN BASE REACTIONS:

Bay	Col	-----Wind_Max-----			----Seismic_Max----		
Id	Id	Load	Horz	Vert(+/-)	Load	Horz	Vert(+/-)
2	2	47	-2.55	4.31	55	-1.29	2.18
2	3	9	3.55	5.98	60	1.29	2.18

DEFLECTION AT RAFTER:

Wall Height	Deflection(in)		Span/Deflect			
	Wind	Seismic	---Wind---		--Seismic--	
			Calc	Limit	Calc	Limit
28.1	0.09	0.12	999.	60.	999.	60.

LOAD COMBINATIONS:

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9 - Dead+0.6Wind_Right1+0.6Wind_Pressure
47 - 0.6Dead+0.6Wind_Left2+0.6Wind_Pressure
55 - 1.11Dead+1.11Collateral+0.7Seismic
59 - 0.49Dead+0.7Seismic
60 - 0.49Dead-0.7Seismic

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U18R1010A          Wall 3 - Endwall Bracing Struts          11/ 9/18  1:22pm
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STRUT MEMBER:

Bay Id	Strut Locate	Strut Length	Strut Part	-Axial_Calc-		Axial Limit	Max UC	----KL/r----	
				Wind	Seis			Major	Minor
2	13.75	17.50	W08SB075	3.55	1.99	32.32	0.11	75.	0.

STRUT CONNECTION:

Bay Id	Strut Locate	Plate Type	Plate Width	Plate Thick	Bolt Type	Bolt Dia	Bolt Row	Bolt Quan	Bolt Gage
2	13.75	SB	6.25	0.50	A325	1.000	1	2	2.50

```

=====
U18R1010A          Wall 3 - Wall Panel Design          11/ 9/18  1:22pm
=====

```

PANEL DATA:

Bay Id	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
2	CW6-80	CW	26.00	80.0	0.44	29.91

MOMENTS & DEFLECTION:

Span Id	Locate(ft)		Load	-----Moment(ft-lb/ft)-----						---Deflect(in)---		
	Start	End		Support			Midspan			Calc	Limit	UC
1	0.00	3.75	WP	26.9	138.5	0.19	-29.7	118.4	0.25	-0.0	0.50	0.06
			WS	-33.4	118.4	0.28	36.9	138.5	0.27	0.0	0.50	0.07
2	3.75	7.50	WP	60.8	138.5	0.44	0.0	138.5	0.00	0.0	0.50	0.02
			WS	-75.5	118.4	0.64	-0.1	118.4	0.00	-0.0	0.50	0.03
3	7.50	13.75	WP	73.7	138.5	0.53	-49.7	118.4	0.42	-0.1	0.83	0.14
			WS	-91.6	118.4	0.77	61.9	138.5	0.45	0.1	0.83	0.17
4	13.75	18.75	WP	73.7	138.5	0.53	-22.1	118.4	0.19	-0.0	0.67	0.03
			WS	-91.6	118.4	0.77	27.5	138.5	0.20	0.0	0.67	0.04
5	18.75	23.75	WP	88.6	138.5	0.64	-15.9	118.4	0.13	0.0	0.67	0.00
			WS	-110.2	118.4	0.93	19.7	138.5	0.14	0.0	0.67	0.00
6	23.75	29.91	WP	88.6	138.5	0.64	-73.7	118.4	0.62	-0.1	0.82	0.23
			WS	-110.2	118.4	0.93	91.6	138.5	0.66	0.2	0.82	0.28

WP - 0.6Wind_Pressure

WS - 0.6Wind_Suction

U18R1010A Wall 3 - Panel Zones 11/ 9/18 1:22pm

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
CW6-80	0.018	80.00	62.00

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
H1040	0.22	0.45	2.80

PANEL ZONE LAYOUT:

Zone Id	Description	-----Wall----- Offset1 Offset2	Bay Id	Locate	Load Width	Min Thick	Panel Span
1	Interior	3.50 31.50	1	13.75	5.63	0.054	6.25
2	Lt Edge	0.00 3.50	1	13.75	5.63	0.054	6.25
3	Rt Edge	31.50 35.00	2	13.75	5.63	0.054	6.25

GIRT SCREW CHECK:

Zone Id	Screw Space	Wind Suction (psf)	Load (k)	-----Limit(k)----- Girt Pullout	Panel Pullover	Screw Tension	Max UC
1	1.00	25.44	0.14	0.23	0.24	0.75	0.62
2	1.00	29.76	0.17	0.23	0.24	0.75	0.72
3	1.00	29.76	0.17	0.23	0.24	0.75	0.72

BASE SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
H1040	0.22	0.45	2.80

BASE SCREW CHECK:

Base Length	Screw Space (ft)	Force/Screw Wind (k)	Seis (k)	Shear Limit (k)	Max UC
35.00	1.00	0.099	0.055	0.213	0.46

U18R1010A Wall 3 - Weight Summary 11/ 9/18 1:22pm

Columns	=	1042.48
Rafters	=	491.70
Girts	=	503.14
Bracing	=	54.74
Struts	=	146.70

Clips = 39.60

Total Weight = 2278.36

=====

U18R1010A

Wall 3 - Warning Summary

11/ 9/18 1:22pm

=====

.. No Warnings

```

=====
*U18R1010A                Roof Design Input                11/ 6/18 11:40am
=====

*( 1)JOBID:
    'U18R1010A'

*( 2)PROGRAM OPTIONS:
*   Run      Run      Run      Lap
*   Purlin   Panel   Brace   Stiff
*   'Y'      'Y'      'Y'      1.00

*( 3)DESIGN CODE:
*Design  ---Steel_Code---          ---Build---   Code      Seismic
* Code   Cold      Hot      Country  Code   Year   Label      Zone
* 'WS'   'NAUS12'  'AISC10'  '----'  'IBC'  '15'  'IBC 15'  'D '

*( 4)DESIGN CONSTANTS:
*
*          ---Strength_Factor---
*   -----Stress_Ratio-----      ---Seismic---
*   Purlin Panel Wind_Frame   Wind   Frame   Brace
*   1.0300  1.03      1.03      1.000   1.000   1.200

*( 5)STEEL YIELDS:
* Web   Flg   C_Sec   W_Sec   R_Sec   P_Sec   T_Sec   U_Sec   EP      BP
* 55.0  55.0   55.0   55.0   50.0   42.0   46.0   50.0   55.0   55.0

*( 6)DEFLECTION LIMITS:
*-----Purlin-----   ----Extension---   ----Gable_Ext----   Facia   ---Panel---   Facia
Wind_Frame
*Live   Wind Total   Live   Wind Total   Live   Wind Total   Girt   Live   Wind   Panel
Wind   Seis
150.0 150.0   0.0  150.0 150.0 120.0   75.0  75.0  60.0   90.0 180.0 180.0   90.0
60.0  40.0

*( 7)REPORTS:
*   Input      Roof      Eave      Roof      Cable      Roof
*   Echo      Purlin     Strut     Panel     Brace     Open
*   'Y'        'Y'        'Y'        'Y'        '2'        'Y'

*( 8)BUILDING LAYOUT:
* Build  L_Expand_EW  R_Expand_EW  -----Open_Wall-----   Column
* Type   Use   Offset  Use   Offset  L_EW  F_SW  R_EW  B_SW  Option
* 'FF-'  'N'   0.000  'N'   0.000  'N'   'N'   'N'   'Y'   '-'

*( 9)SURFACE SHAPE:
* No.      X_Coord  Y_Coord
*   3       0.0000  30.0000
*          35.0000  27.0833
*          35.0000  0.0000

*(10)WALL BAY SPACING:
* Wall      No.      ---Bay_Set---
* Id      Sets      Width  Quan
*   1       1       17.5000  2
*   2      11      30.0000  1
*          30.0000  1
*          30.0000  1
*          30.0000  1

```

		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
3	1	17.5000	2
4	11	30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
5	11	30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1
		30.0000	1

*(11)WALL OPENINGS:

* Wall	Bay								
* Id	No.	Id	Offset	Width	HeightL	HeightR	Type	Option	
1	0								
2	0								
3	0								
4	0								

*(12)PARTIAL WALLS:

*Wall	Set_Of	--Bay_Id--		Base	Top	Full_Load	----Panel-----
* Id	Bays	Id Use	Start End	Height	Type	Girt Col	Part Opt
1	0						
2	0						
3	0						
4	0						

*(13)JACK BEAM LAYOUT:

* No.	Beam	--Bay_Id-	Beam	Beam
*Beam	Id	Start End	Offset	Height
0				

*(14)SURFACE EXTENSION/FRAME RECESS:

* Surf	---Surf_Ext---	Frame_Recess
* Id	Left	Right
2	0.0000	0.0000
	1.0000	1.0000

*(15)ENDWALL COLUMN/RAFTER:

*Wall	L_Column	R_Column	
* Id	Type Rot	Type Rot	Rafter

```

1  'R'  'N'  'C'  'N'  'W12x14  '
3  'C'  'Y'  'R'  'N'  'W12x14  '

```

*(16)PURLINS:

```

* Surf  Purlin      --Flange_Strap--      Set      ----Set_Lap---
* Id    Type  Offset  Project  Out  In   Space  Depth    Ext    Int
  2    'ZB'   0.000   0.000  'C'  'N'   0.0000  0.000    0.0000  0.0000

```

*(17)PURLIN SPACING:

```

* Surf  Space      Peak      Max      Set      No.      -Purlin_Set-
* Id    Opt      Space      Space    Space    Sets     Space  Quan
  2     '-'     0.0000    5.0000  0.0000    3      1.2500    1
                                   4.8333    6
                                   4.8715    1

```

*(18)PURLIN SIZE:

```

*Surf  Show  No.
* Id   Id   Purl  Purlin_Part
  2     0     0

```

*(19)REPLACEMENT PURLINS:

```

*No.  Surf  Bay      ----Purlin---
*Purl Id   Id   Id   Part
  11   2     1   2    '10Z099'
        2     2   2    '10Z075'
        2     3   2    '10Z075'
        2     4   2    '10Z075'
        2     5   2    '10Z067'
        2     6   2    '10Z067'
        2     7   2    '10Z067'
        2     8   2    '10Z075'
        2     9   2    '10Z075'
        2    10   2    '10Z075'
        2    11   2    '10Z099'

```

*(20)EAVE STRUT:

```

*Wall
* Id   Type  Rot   No.   Part
  2    'EO'  'I'    0
  4    'EO'  'I'    0

```

*(21)WALL GIRT:

```

*Wall  Girt  Girt
* Id   Type  Part      Offset   Proj
  1    'ZB'  '08Z054  '    0.000   0.000
  2    'ZB'  '10Z060  '    0.000   0.000
  3    'ZB'  '08Z054  '    0.000   0.000
  4    'ZB'  '-----'    0.000   0.000

```

*(22)GUTTER/SOLDIER COLUMN:

```

*Wall  --Gutter--  Soldier_Opt
* Id   Use  Width  Rafter  Brace
  2    'Y'   0.000   '-'     '-'
  4    'N'   0.000   '-'     '-'

```

*(23)PANELS:

```

* Wall      ----Roof_Panel---  -----Standing_Seam-----
* Panel      Part      Start  Type  Height  Seam Type      Clamp
'CW6-80  '  'CR6-80  '    0.0000  '--'   0.000  '-----'      'N'

```

*(24)LINER PANELS:

```

*      --Bay_Id-
*No.   Start End   Part
      0

```

*(25)INSULATION

```

* Use Thick Part
  'N' 0.000 '-----'

```

*(26)ROOF BRACING OPTIONS:

```

*      -----L_EW_Brace_To_Frame-----  -----R_EW_Brace_To_Frame-----
*Panel Diagonal Left_Bay Right_Bay Left_Bay Right_Bay
*Shear Bracing Opt Part Opt Part Opt Part Opt Part
  'N' 'Y' 'L' '-----' 'L' '-----' 'L' '-----' 'L' '-----'

```

*(27)ROOF DIAGONAL BRACING:

```

* Max_Pan Brace Each User_Selected_Roof_Bays
* Shear Type EW No. Bay_Id
  113.3 'R' 'L' 11 1 2 3 4 5 6 7 8 9 10 11
                        0

```

*(28)ROOF BRACING ATTACHMENT:

```

*Wall
* Id No. Location
  1 3 0.0000 17.5000 35.0000
  3 3 0.0000 17.5000 35.0000

```

*(29)WALL/INTERIOR BRACING OPTIONS:

```

*      -----Order_Of_Selection-----
* Wall Panel Diagonal Wind Wind Weak_Axis Brace
* Id Shear Bracing Bent Column Bending Option Height
  2 'N' 'Y' 'N' 'N' 'N' '--' 0.0000
  4 'N' 'TF' 'N' 'N' 'N' '--' 0.0000
  5 'N' 'N' 'N' 'N' 'N' '--' 0.0000

```

*(30)SIDEWALL DIAGONAL BRACING:

```

* Wall Max_Pan Brace User_Selected_SW_Bays
* Id Shear Type No. Bay_Id
  2 72.8 'R' 3 3 6 9
  4 72.8 'R' 0

```

*(31)WIND BENTS:

```

*Wall Member -----Column----- -----Rafter----- No.
* Id Type Depth Part Depth Part Bays Bay_Id
  2 'W' 0.00 '-----' 0.00 '-----' 0
  4 'W' 0.00 '-----' 0.00 '-----' 0
  5 'W' 0.00 '-----' 0.00 '-----' 0

```

*(32)WIND COLUMNS:

```

*Wall Member -----Column----- No.
* Id Type Depth Part Col Bay_Id Left/
  2 'W' 0.00 '-----' 0 Right
  4 'W' 0.00 '-----' 0
  5 'W' 0.00 '-----' 0

```

*(33)WALL BRACING ATTACHMENT:

```

*Wall No. Attach --Bay_Id-- No. ----Level----
* Id Attach Id Start End Connect Option Level Height Strut
  2 1 1 1 11 'F' 0 1 27.0833 'E'
  4 1 2 1 11 'F' 0 1 30.0000 'E'

```

*(34)INTERIOR DIAGONAL BRACING:

*No	Attach	Brace	User_Selected_Int_Bays
*Brace	Offset	Type	No. Bay_Id
0			

*(35)INTERIOR BRACING ATTACHMENT:

* No.	Attach	--Bay_Id--	No.
* Attach	Offset	Start	End Level Level_Height
0			

*(36)EXTENSION LAYOUT:

* Ext	Wall	--Bay_Id-	--Edge_Extend--	End_Option
*No.	Id	Id	Type Opt Mount Start End Left Right	Left Right
0				

*(37)EXTENSION SIZE:

*Ext	Horizontal_Size	Vertical_Size	--Orient--
*Id	Height	Width Slope	Elev Height Slope Project Beam Panel

*(38)EXTENSION PURLINS:

* Ext	--Flange_Strap--	Set	Set_Lap	Peak	Max	Set
*No.	Id Loc Type Out In Space Depth	Ext Int	Space	Space	Space	Space
0						

*(39)EXTENSION EAVE STRUTS/GUTTERS:

* Ext	--Eave--	--Gutter--
*No.	Id Type Rot Use Width	
0		

*(40)EXTENSION PANELS:

* Ext	-----Standing_Seam-----
*No.	Id Loc Part Rot Space Type Height Seam Type Clamp
0	

*(41)EXTENSION BRACING:

* Ext	Run	Max_Pan	Brace	User_Selected_Bays
*No.	Id Brace Shear Type No. Bay_Id			
0				

*(42)WALL BASE ELEVATION/DEAD:

*Wall	Base	Wall	Seis	--%_Open--
* Id	Elev	Dead	Opt	Seis Wind
1	0.00	3.00	'Y'	0.00 0.00
2	0.00	3.00	'Y'	0.00 0.00
3	0.00	3.00	'Y'	0.00 0.00
4	0.00	0.00	'Y'	0.00 0.00
5	0.00	7.00	'Y'	0.00 0.00

*(43)ROOF BASIC LOADS:

						---Deflection---					Wall	Seismic
* Dead	Collat	Live	Snow	Rain	Basic	Load_Ratio	--Friction--	Edge	Ld_Rat			
* Load	Load	Load	Load	Load	Wind	Snow Wind Seis	Wind Coef	Zone	Factor			
3.0	1.0	20.0	21.0	0.0	27.5	1.00 0.39 1.00	27.5 0.0000	3.500	1.0893			

*(44)WIND PRESSURE/SUCTION:

* Wind	Wind	Wind
* Press	Suct	Suct_Roof
20.65	-45.43	.. Purlins

0.00	0.00	0.00	0	0.00									
			7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.00	0.00	0	0.00									
			8	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00
0.00	0.00	0.00	0	0.00									
			9	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00
0.00	0.00	0.00	0	0.00									
			10	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00
0.00	0.00	0.00	0	0.00									
			11	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00
0.00	0.00	0.00	0	0.00									
			12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.00	0.00	0	0.00									
			13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.00	0.00	0	0.00									
			14	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	4	1.00									
			15	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	5	1.00									
			16	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	6	1.00									
			17	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	7	1.00									
			18	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	8	1.00									
			19	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	9	1.00									
			20	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	10	1.00									
			21	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	11	1.00									
			22	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	12	1.00									
			23	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	13	1.00									
			24	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	2	1.00									
			25	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	3	1.00									
			26	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	2	-1.00									
			27	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	3	-1.00									

*(50)PURLIN LOAD COMBINATIONS, DEFLECTION:

*

* Surf	No.	Load					-Add_Snow-				---Wind1---			
---	Wind2---	Long_Wind	Aux_Load											
* Id	Load	Id	Dead	Collat	Live	Snow	Drift	Slide	Rain	Press	Suct	Press		
Suct	EW1	EW2	Id	Coef										
2	8	28	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0	0.00										
		29	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0	0.00										
		30	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	1	1.00										
		31	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0	0.00										
		32	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0	0.00										

			33	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1	1.00									
			34	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
0.00	0.00	0.00	0	0.00									
			35	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0	0.00									

*(51)BRACING LOAD COMBINATIONS, STRENGTH:

* No. Load		-Add_Snow-								Long_Wind			
Aux_Load		Id	Dead	Collat	Live	Snow	Drift	Slide	Rain	EW1	EW2	Seis	Id
* Coef	Load												
	14	1	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0
0.00		2	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0
0.00		3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0
0.00		4	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0
0.00		5	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0
0.00		6	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0
0.00		7	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0
0.00		8	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0
0.00		9	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0
0.00		10	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0
0.00		11	1.08	1.08	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.52	0
0.00		12	1.08	1.08	0.00	0.75	0.00	0.00	0.00	0.00	0.00	-0.52	0
0.00		13	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0
0.00		14	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0

*(52)BRACING LOAD COMBINATIONS, DEFLECTION:

* No. Load		-Add_Snow-								Long_Wind			
Aux_Load		Id	Dead	Collat	Live	Snow	Drift	Slide	Rain	EW1	EW2	Seis	Id
* Coef	Load												
	14	15	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0
0.00		16	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0
0.00		17	1.00	1.00	0.75	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0
0.00		18	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0
0.00		19	1.00	1.00	0.00	0.75	0.00	0.00	0.00	1.00	0.00	0.00	0
0.00		20	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	1.00	0.00	0
0.00		21	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0

0.00	22	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0
0.00	23	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0
0.00	24	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0
0.00	25	1.08	1.08	0.00	0.75	0.00	0.00	0.00	0.00	0.00	1.00	0
0.00	26	1.08	1.08	0.00	0.75	0.00	0.00	0.00	0.00	0.00	1.00	0
0.00	27	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0
0.00	28	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0

*(53)EXTENSION LOAD COMBINATIONS, STRENGTH:

No.	Load							Wind	Wind
Load	Id	Dead	Collat	Live	Snow	Rain	Press	Suct	
0									

*(54)EXTENSION LOAD COMBINATIONS, DEFLECTION:

No.	Load							Wind	Wind
Load	Id	Dead	Collat	Live	Snow	Rain	Press	Suct	
0									

*(55)PANEL LOAD COMBINATIONS, STRENGTH:

* No.	Load	-Add_Snow-							---Wind1---		---Wind2---		
Aux_Load	Id	Dead	Collat	Live	Snow	Drift	Slide	Rain	Press	Suct	Press	Suct	Id
* Load													
Coef													
13	1	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
0.00	2	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
0.00	3	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1
1.00	4	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
0.00	5	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
0.00	6	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0
0.00	7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0
0.00	8	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0
0.00	9	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0
0.00	10	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0
0.00	11	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0
0.00	12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0
0.00	13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0

*(56)PANEL LOAD COMBINATIONS, DEFLECTION:

*

* No.	Load	-Add_Snow-							---Wind1---		---Wind2---		
Aux_Load													
* Load	Id	Dead	Collat	Live	Snow	Drift	Slide	Rain	Press	Suct	Press	Suct	Id
Coef													
5	14	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
0.00													
	15	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
0.00													
	16	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1
1.00													
	17	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0
0.00													
	18	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0
0.00													

*(57)AUXILIARY LOADS:

* No.	Aux	Aux	No._Add	Add_Load	
* Aux	Id	Name	Combs	Id	Coef
13	1	'MIN_SNOW'	1	1	1.00
	2	'PAT_SL_1'	1	2	0.50
	3	'PAT_SL_2'	1	12	0.50
	4	'PAT_SL_3'	2	2	0.50
				3	0.50
	5	'PAT_SL_4'	2	3	0.50
				4	0.50
	6	'PAT_SL_5'	2	4	0.50
				5	0.50
	7	'PAT_SL_6'	2	5	0.50
				6	0.50
	8	'PAT_SL_7'	2	6	0.50
				7	0.50
	9	'PAT_SL_8'	2	7	0.50
				8	0.50
	10	'PAT_SL_9'	2	8	0.50
				9	0.50
	11	'PAT_SL10'	2	9	0.50
				10	0.50
	12	'PAT_SL11'	2	10	0.50
				11	0.50
	13	'PAT_SL12'	2	11	0.50
				12	0.50

*(58)ADDITIONAL LOADS:

*No.	Add	Surf	Basic	Load	Load	F	D	---Surface---	
*Add	Id	Id	Load	Type	Orn	W1	W2	D1	D2
12	1	2	'U_SNOW'	'D'	'T'	-25.0	-25.0	0.0000	35.1213
	2	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	0.0000	30.0000
	3	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	30.0000	60.0000
	4	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	60.0000	90.0000
	5	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	90.0000	120.0000
	6	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	120.0000	150.0000
	7	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	150.0000	180.0000
	8	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	180.0000	210.0000
	9	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	210.0000	240.0000
	10	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	240.0000	270.0000
	11	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	270.0000	300.0000
	12	0	'U_SNOW'	'D'	'L'	-21.0	-21.0	300.0000	330.0000

*(59)PURLIN LAPS:

*Surf Data -----Set_1----- -----Set_2----- -----Set_3-----

* Id	Opt	Sets	Left	Right	Quan	Left	Right	Quan	Left	Right	Quan
2	'-'	0									

*(60)PURLIN LAPS: Extensions

*Ext	Data	-----Set_1-----	-----Set_2-----	-----Set_3-----							
* Id	Opt	Sets	Left	Right	Quan	Left	Right	Quan	Left	Right	Quan

*(61)PURLIN STRAPS:

* No.	Opt	Bay	Straps/Bay
	'-'	0	

*(62)PURLIN STRAPS: Extensions

*Ext	No.	Id	Bay	Straps/Bay

*(63)PANEL SCREWS:

* No.	Zone	Locate	Id	Zone	Part	Dia	Limit	Washer	Dia	-----Spacing-----
4	'ROOF'	'	0	'INT'	'H1030'	0.216	2.778	0.500	12.000	6.000 0.000
	'ROOF'	'	0	'EDGE'	'H1030'	0.216	2.778	0.500	12.000	6.000 0.000
	'ROOF'	'	0	'CORN'	'H1030'	0.216	2.778	0.500	12.000	6.000 0.000
	'WALL'	'	0	'BASE'	'H1040'	0.216	2.800	0.446	12.000	6.000 0.000

*(64)EXPANSION JOINTS:

* No.	Expansion_Location
0	

*(65)ADDED PURLINS:

*No.	Add	Surf	--Bay_Id--	--Surface_Offset--	---Support---		
*Add	Id	Id	Start	End	Opt	Locate	
4	1	2	1	1	0.0000	7.0000	'-' 0.0000
	2	2	11	11	0.0000	7.0000	'-' 0.0000
	3	2	1	1	28.1213	35.1213	'-' 0.0000
	4	2	11	11	28.1213	35.1213	'-' 0.0000

*(66)PURLIN SYSTEMS:

*Surf	No.	System	Added_Purlins	
* Id	System	Id	No.	Id
2	2	1	0	
		2	4	1 2 3 4

*(67)ROOF OPENING LAYOUT:

* Open	-Location-	Frame	--Surface--	----Bay----	Width	Length	Ref					
*No.	Id	Use	Id	Opt	Type	Id	Offset	Id	Offset	Width	Length	Ref
Dist												
0												

*(68)ROOF OPENING FRAMING:

*Open	Jamb	Head	-----Support-----	Panel			
* Id	Type	Type	Type	Opt	Depth	Opt	Load

*(69)DESIGN CODE OPTIONS:

*No.	Event	Condition
0		

*(70)WALL LIGHT PANELS:

* Wall	---Bay----	-Light_Panel-			
* No.	Id	Id	Offset	Length	Offset

0

*AUXILIARY LOAD DESCRIPTIONS:

```
* Aux
* Id Description
* 1 Minimum snow load
* 2 Pattern snow load
* 3 Pattern snow load
* 4 Pattern snow load
* 5 Pattern snow load
* 6 Pattern snow load
* 7 Pattern snow load
* 8 Pattern snow load
* 9 Pattern snow load
* 10 Pattern snow load
* 11 Pattern snow load
* 12 Pattern snow load
* 13 Pattern snow load
*
```

*ADDITIONAL LOAD DESCRIPTIONS:

```
* Add
* Id Description
* 1 Minimum snow load surface 2
* 2 Pattern snow load bay 1
* 3 Pattern snow load bay 2
* 4 Pattern snow load bay 3
* 5 Pattern snow load bay 4
* 6 Pattern snow load bay 5
* 7 Pattern snow load bay 6
* 8 Pattern snow load bay 7
* 9 Pattern snow load bay 8
* 10 Pattern snow load bay 9
* 11 Pattern snow load bay 10
* 12 Pattern snow load bay 11
*
```

* Code files used:

```
* IBC.15
* ROOFIBC.15 Version 4.0
```

```
=====
U18R1010A          Design Code                      11/ 6/18 11:41am
=====
```

STRUCTURAL CODE:

```
Design Basis      : WS - Working Stress
Hot Rolled Steel  : AISC10
Cold Formed Steel : NAUS12
```

BUILDING CODE:

```
Wind Code        : IBC 15
Seismic Zone     : D
```

MODULUS OF ELASTICITY

```
Hot Rolled Steel : 29000 (ksi )
Cold Formed Steel : 29500 (ksi )
```

```
=====
U18R1010A          Purlin Layout(Surface= 2)          11/ 6/18 11:41am
=====
```

PURLIN SYSTEM COMBINATIONS:

System	-----Purlin-----			Added_Purlin		Total	Show	-----Max_UC-----		
Id	Depth	Row	Weight	Row	Weight	Weight	Report	Purlin	Panel	Table
1	10.0	7	11018.7	0	0.0	11018.7	Y	1.03	0.77	
2(a)	10.0	7	11018.7	6	704.2	11723.0		1.06	0.60	

(a)Purlin Warnings Occurred

SURFACE LAYOUT:

Surface		No.	Peak
Id	Length	Row	Space
2	35.121	7	4.872

PURLIN LOCATION:

Purlin	Surf		Load	Dead	Show	-----Max_Load-----			
Id	Offset	Space	Width	Load	Report	Id	UC	Report	Notes
1	1.250	1.250	3.042	1.57	Y	13	0.76	Mom, Shr	
2	6.083	4.833	4.833	0.99	Y	13	1.02	Mom, Shr	R
3	10.917	4.833	4.833	0.99	Y	9	1.03	Mom+Shr	
4	15.750	4.833	4.833	0.99	Y	9	1.03	Mom+Shr	
5	20.583	4.833	4.833	0.99	Y	9	1.03	Mom+Shr	
6	25.417	4.833	4.833	0.99	Y	9	1.03	Mom+Shr	
7	30.250	4.833	4.852	0.98	Y	9	1.03	Mom+Shr	
	35.121	4.872							

Average= 1.04

R - Revised design/detailing

LAYOUT:

Bay		Design	---Lap(ft)---		No.	Unit	Total
Id	Part	Length	Left	Right	Strap	Weight	Weight
LExt	10Z089	1.00			0	5.0	34.8
1	10Z089	29.00		4.00	0	164.1	1149.0
2	10Z067	30.00	4.00	4.00	0	142.3	995.9
3	10Z067	30.00	4.00	4.00	0	142.3	995.9
4	10Z067	30.00	4.00	4.00	0	142.3	995.9
5	10Z060	30.00	4.00	4.00	0	127.4	891.9
6	10Z060	30.00	4.00	4.00	0	127.4	891.9
7	10Z060	30.00	4.00	4.00	0	127.4	891.9
8	10Z067	30.00	4.00	4.00	0	142.3	995.9
9	10Z067	30.00	4.00	4.00	0	142.3	995.9
10	10Z067	30.00	4.00	4.00	0	142.3	995.9
11	10Z089	29.00	4.00		0	164.1	1149.0
RExt	10Z089	1.00			0	5.0	34.8
Total(lb)=						1574.1	11018.7

REVISED PURLINS:

Purlin	Surf	Bay	Bay_Offset				----Lap----	
Id	Offset	Id	Start	End	Part	Opt	Left	Right
2	6.08	1	0.00	30.00	10Z099	R	0.00	4.00
2	6.08	2	0.00	30.00	10Z075	R	4.00	4.00
2	6.08	3	0.00	30.00	10Z075	R	4.00	4.00
2	6.08	4	0.00	30.00	10Z075	R	4.00	4.00

2	6.08	5	0.00	30.00	10Z067	R	4.00	4.00
2	6.08	6	0.00	30.00	10Z067	R	4.00	4.00
2	6.08	7	0.00	30.00	10Z067	R	4.00	4.00
2	6.08	8	0.00	30.00	10Z075	R	4.00	4.00
2	6.08	9	0.00	30.00	10Z075	R	4.00	4.00
2	6.08	10	0.00	30.00	10Z075	R	4.00	4.00
2	6.08	11	0.00	30.00	10Z099	R	4.00	0.00

R - Revised design/detailing

LOAD COMBINATIONS:

- 9 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1
13 - 0.6Dead+0.6Wind_Suction1

```
=====
U18R1010A          Purlin(Surface= 2, Id= 1)          11/ 6/18 11:41am
=====
```

ROOF PURLIN

```
-----
Surface Id   = 2
Purlin Id    = 1
Offset       = 1.25
-----
```

LAYOUT: (Purlin Id= 1)

		Design	---Lap(ft)---		Load	No.	Available	
Bay		Length					Reduction	
Id	Part	(ft)	Left	Right	Width	Strap	Factor	
----	-----	-----	-----	-----	-----	-----	-----	-----
LExt	10Z089	1.00			3.04	0	0.00	0.70
1	10Z089	29.00		4.00	3.04	0	0.00	0.70
2	10Z067	30.00	4.00	4.00	3.04	0	0.00	0.70
3	10Z067	30.00	4.00	4.00	3.04	0	0.00	0.70
4	10Z067	30.00	4.00	4.00	3.04	0	0.00	0.70
5	10Z060	30.00	4.00	4.00	3.04	0	0.00	0.70
6	10Z060	30.00	4.00	4.00	3.04	0	0.00	0.70
7	10Z060	30.00	4.00	4.00	3.04	0	0.00	0.70
8	10Z067	30.00	4.00	4.00	3.04	0	0.00	0.70
9	10Z067	30.00	4.00	4.00	3.04	0	0.00	0.70
10	10Z067	30.00	4.00	4.00	3.04	0	0.00	0.70
11	10Z089	29.00	4.00		3.04	0	0.00	0.70
RExt	10Z089	1.00			3.04	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn	-----Shear(k)-----					-----Moment(f-k)-----					---Mom+Shr---			----Defl(in)---		
Id	Loc	Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC

Ext	RSup	0.10	6.64	0.02	13	RSup	0.04	10.64	0.00	27	LSup	0.00	27	-0.15	0.00	13
1	RLap	1.38	6.64	0.21	13	MidS	6.08	8.02	0.76	13	RSup	0.52	13	14.50	0.57	35
2	LLap	-1.16	2.82	0.41	13	LLap	4.05	6.32	0.64	9	LLap	0.73	13	15.00	0.14	35
3	RLap	1.10	2.82	0.39	13	MidS	3.15	5.34	0.59	13	RSup	0.60	13	15.00	0.32	35
4	LLap	-1.08	2.82	0.38	13	RSup	-4.20	7.62	0.55	13	RSup	0.61	13	15.00	0.26	35
5	RLap	1.07	2.02	0.53	13	MidS	2.96	4.54	0.65	13	RSup	0.72	13	15.00	0.31	35
6	RLap	1.07	2.02	0.53	13	MidS	2.92	4.54	0.64	13	RSup	0.72	13	15.00	0.31	35
7	LLap	-1.07	2.02	0.53	13	MidS	2.96	4.54	0.65	13	LSup	0.72	13	15.00	0.31	35

8 RLap	1.08	2.82	0.38	13 LSup	-4.20	7.62	0.55	13 LSup	0.61	13	15.00	0.26	35
9 LLap	-1.10	2.82	0.39	13 MidS	3.15	5.34	0.59	13 LSup	0.60	13	15.00	0.32	35
10 RLap	1.16	2.82	0.41	13 RLap	4.05	6.32	0.64	9 RLap	0.73	13	15.00	0.14	35
11 LLap	-1.38	6.64	0.21	13 MidS	6.08	8.02	0.76	13 LSup	0.52	13	14.50	0.57	35
Ext LSup	-0.10	6.64	0.02	13 LSup	0.02	10.64	0.00	27 LSup	0.00	27	1.00	-0.08	35

LOAD COMBINATIONS:

(9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

```
=====
U18R1010A          Purlin(Surface= 2, Id= 2)          11/ 6/18 11:41am
=====
```

ROOF PURLIN

```
-----
Surface Id   = 2
Purlin Id    = 2
Offset       = 6.08
-----
```

LAYOUT: (Purlin Id= 2)

Bay Id	Part	Design Length (ft)	---Lap(ft)---		Load Width	No. Strap	Available Reduction Factor	
			Left	Right			Out	In
LExt	10Z099	1.00			4.83	0	0.00	0.70
1	10Z099	29.00		4.00	4.83	0	0.00	0.70
2	10Z075	30.00	4.00	4.00	4.83	0	0.00	0.70
3	10Z075	30.00	4.00	4.00	4.83	0	0.00	0.70
4	10Z075	30.00	4.00	4.00	4.83	0	0.00	0.70
5	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
6	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
7	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
8	10Z075	30.00	4.00	4.00	4.83	0	0.00	0.70
9	10Z075	30.00	4.00	4.00	4.83	0	0.00	0.70
10	10Z075	30.00	4.00	4.00	4.83	0	0.00	0.70
11	10Z099	29.00	4.00		4.83	0	0.00	0.70
RExt	10Z099	1.00			4.83	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn	-----Shear(k)-----					-----Moment(f-k)-----					---Mom+Shr---			----Defl(in)---		
Id	Loc	Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC
Ext	RSup	0.16	9.16	0.02	13	RSup	-0.08	12.30	0.01	13	LSup	0.00	27	-0.21	0.00	13
1	RLap	2.05	9.16	0.22	13	MidS	9.05	8.90	1.02	13	RSup	0.68	13	14.50	0.79	35
2	LLap	-1.72	3.96	0.43	13	LLap	6.44	7.41	0.87	9	LLap	0.86	13	15.00	0.20	35
3	RLap	1.63	3.96	0.41	13	MidS	4.69	6.42	0.73	13	RSup	0.72	13	15.00	0.44	35
4	LLap	-1.61	3.96	0.41	13	RSup	-6.25	9.17	0.68	13	RSup	0.74	13	15.00	0.36	35
5	RLap	1.60	2.82	0.57	13	MidS	4.40	5.34	0.82	13	RSup	0.87	13	15.00	0.43	35
6	LLap	-1.59	2.82	0.57	13	MidS	4.35	5.34	0.82	13	LSup	0.87	13	15.00	0.42	35
7	LLap	-1.60	2.82	0.57	13	MidS	4.40	5.34	0.82	13	LSup	0.87	13	15.00	0.43	35
8	RLap	1.61	3.96	0.41	13	LSup	-6.25	9.17	0.68	13	LSup	0.74	13	15.00	0.36	35
9	LLap	-1.63	3.96	0.41	13	MidS	4.69	6.42	0.73	13	LSup	0.72	13	15.00	0.44	35

10 RLap	1.72	3.96	0.43	13 RLap	6.44	7.41	0.87	9 RLap	0.86	13	15.00	0.20	35
11 LLap	-2.05	9.16	0.22	13 MidS	9.05	8.90	1.02	13 LSup	0.68	13	14.50	0.79	35
Ext LSup	-0.16	9.16	0.02	13 LSup	-0.08	12.30	0.01	13 LSup	0.00	27	1.00	-0.11	35

LOAD COMBINATIONS:

 (9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

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U18R1010A          Purlin(Surface= 2, Id= 3)          11/ 6/18 11:41am
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ROOF PURLIN

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Surface Id   = 2
Purlin Id    = 3
Offset       = 10.92
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LAYOUT: (Purlin Id= 3)

Bay Id	Part	Design Length (ft)	---Lap(ft)---		Load Width	No. Strap	Available Reduction Factor	
			Left	Right			Out	In
LExt	10Z089	1.00			4.83	0	0.00	0.70
1	10Z089	29.00		4.00	4.83	0	0.00	0.70
2	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
3	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
4	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
5	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
6	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
7	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
8	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
9	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
10	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
11	10Z089	29.00	4.00		4.83	0	0.00	0.70
RExt	10Z089	1.00			4.83	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn Id	Loc	-----Shear(k)-----			LC	Loc	-----Moment(f-k)-----			LC	---Mom+Shr---			LC	----Defl(in)----		
		Calc	Allow	UC			Calc	Allow	UC		LC	Calc	Allow		LC		
Ext	RSup	-0.12	6.64	0.02	27	RSup	0.06	10.64	0.01	27	LSup	0.00	27	0.21	0.00	24	
1	RLap	-1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	RSup	0.74	9	14.50	0.82	35	
2	LLap	1.65	2.82	0.59	9	LLap	6.43	6.32	1.02	9	LLap	1.03	9	15.00	0.20	35	
3	RLap	-1.57	2.82	0.56	9	RSup	5.88	7.62	0.77	9	RSup	0.86	9	15.00	0.46	35	
4	LLap	1.55	2.82	0.55	9	RSup	6.03	7.62	0.79	9	RSup	0.88	9	15.00	0.37	35	
5	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.45	35	
6	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.44	35	
7	LLap	1.54	2.02	0.76	9	LSup	5.76	6.49	0.89	9	LSup	1.03	9	15.00	0.45	35	
8	RLap	-1.55	2.82	0.55	9	LSup	6.03	7.62	0.79	9	LSup	0.88	9	15.00	0.37	35	
9	LLap	1.57	2.82	0.56	9	LSup	5.88	7.62	0.77	9	LSup	0.86	9	15.00	0.46	35	
10	RLap	-1.65	2.82	0.59	9	RLap	6.43	6.32	1.02	9	RLap	1.03	9	15.00	0.20	35	
11	LLap	1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	LSup	0.74	9	14.50	0.82	35	

Ext|LSup 0.12 6.64 0.02 26|LSup 0.06 10.64 0.01 26|LSup 0.00 27| 1.00 -0.11 35

LOAD COMBINATIONS:

 (9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (24) Dead+Collateral+Snow/2+PAT_SL_1
 (26) Dead+Collateral+Snow-PAT_SL_1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

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U18R1010A	Purlin(Surface= 2, Id= 4)	11/ 6/18 11:41am
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ROOF PURLIN

 Surface Id = 2
 Purlin Id = 4
 Offset = 15.75

LAYOUT: (Purlin Id= 4)

Bay Id	Part	Design Length (ft)	---Lap(ft)---		Load Width	No. Strap	Available Reduction Factor	
			Left	Right			Out	In
LExt	10Z089	1.00			4.83	0	0.00	0.70
1	10Z089	29.00		4.00	4.83	0	0.00	0.70
2	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
3	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
4	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
5	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
6	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
7	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
8	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
9	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
10	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
11	10Z089	29.00	4.00		4.83	0	0.00	0.70
RExt	10Z089	1.00			4.83	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn Id	Loc	-----Shear(k)-----				-----Moment(f-k)-----				---Mom+Shr---			----Defl(in)----			
		Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC
Ext	RSup	-0.12	6.64	0.02	27	RSup	0.06	10.64	0.01	27	LSup	0.00	27	0.21	0.00	24
1	RLap	-1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	RSup	0.74	9	14.50	0.82	35
2	LLap	1.65	2.82	0.59	9	LLap	6.43	6.32	1.02	9	LLap	1.03	9	15.00	0.20	35
3	RLap	-1.57	2.82	0.56	9	RSup	5.88	7.62	0.77	9	RSup	0.86	9	15.00	0.46	35
4	LLap	1.55	2.82	0.55	9	RSup	6.03	7.62	0.79	9	RSup	0.88	9	15.00	0.37	35
5	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.45	35
6	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.44	35
7	LLap	1.54	2.02	0.76	9	LSup	5.76	6.49	0.89	9	LSup	1.03	9	15.00	0.45	35
8	RLap	-1.55	2.82	0.55	9	LSup	6.03	7.62	0.79	9	LSup	0.88	9	15.00	0.37	35
9	LLap	1.57	2.82	0.56	9	LSup	5.88	7.62	0.77	9	LSup	0.86	9	15.00	0.46	35
10	RLap	-1.65	2.82	0.59	9	RLap	6.43	6.32	1.02	9	RLap	1.03	9	15.00	0.20	35
11	LLap	1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	LSup	0.74	9	14.50	0.82	35

Ext|LSup 0.12 6.64 0.02 26|LSup 0.06 10.64 0.01 26|LSup 0.00 27| 1.00 -0.11 35

LOAD COMBINATIONS:

(9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (24) Dead+Collateral+Snow/2+PAT_SL_1
 (26) Dead+Collateral+Snow-PAT_SL_1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

U18R1010A Purlin(Surface= 2, Id= 5) 11/ 6/18 11:41am

ROOF PURLIN

Surface Id = 2
 Purlin Id = 5
 Offset = 20.58

LAYOUT: (Purlin Id= 5)

Bay Id	Part	Design Length (ft)	---Lap(ft)---		Load Width	No. Strap	Available Reduction Factor	
			Left	Right			Out	In
LExt	10Z089	1.00			4.83	0	0.00	0.70
1	10Z089	29.00		4.00	4.83	0	0.00	0.70
2	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
3	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
4	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
5	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
6	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
7	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
8	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
9	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
10	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
11	10Z089	29.00	4.00		4.83	0	0.00	0.70
RExt	10Z089	1.00			4.83	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn	-----Shear(k)-----					-----Moment(f-k)-----					---Mom+Shr---			----Defl(in)---		
Id	Loc	Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC
Ext	RSup	-0.12	6.64	0.02	27	RSup	0.06	10.64	0.01	27	LSup	0.00	27	0.21	0.00	24
1	RLap	-1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	RSup	0.74	9	14.50	0.82	35
2	LLap	1.65	2.82	0.59	9	LLap	6.43	6.32	1.02	9	LLap	1.03	9	15.00	0.20	35
3	RLap	-1.57	2.82	0.56	9	RSup	5.88	7.62	0.77	9	RSup	0.86	9	15.00	0.46	35
4	LLap	1.55	2.82	0.55	9	RSup	6.03	7.62	0.79	9	RSup	0.88	9	15.00	0.37	35
5	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.45	35
6	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.44	35
7	LLap	1.54	2.02	0.76	9	LSup	5.76	6.49	0.89	9	LSup	1.03	9	15.00	0.45	35
8	RLap	-1.55	2.82	0.55	9	LSup	6.03	7.62	0.79	9	LSup	0.88	9	15.00	0.37	35
9	LLap	1.57	2.82	0.56	9	LSup	5.88	7.62	0.77	9	LSup	0.86	9	15.00	0.46	35
10	RLap	-1.65	2.82	0.59	9	RLap	6.43	6.32	1.02	9	RLap	1.03	9	15.00	0.20	35
11	LLap	1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	LSup	0.74	9	14.50	0.82	35

Ext|LSup 0.12 6.64 0.02 26|LSup 0.06 10.64 0.01 26|LSup 0.00 27| 1.00 -0.11 35

LOAD COMBINATIONS:

(9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (24) Dead+Collateral+Snow/2+PAT_SL_1
 (26) Dead+Collateral+Snow-PAT_SL_1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

U18R1010A Purlin(Surface= 2, Id= 6) 11/ 6/18 11:41am

ROOF PURLIN

Surface Id = 2
 Purlin Id = 6
 Offset = 25.42

LAYOUT: (Purlin Id= 6)

Bay Id	Part	Design Length (ft)	---Lap(ft)---		Load Width	No. Strap	Available Reduction Factor	
			Left	Right			Out	In
LExt	10Z089	1.00			4.83	0	0.00	0.70
1	10Z089	29.00		4.00	4.83	0	0.00	0.70
2	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
3	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
4	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
5	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
6	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
7	10Z060	30.00	4.00	4.00	4.83	0	0.00	0.70
8	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
9	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
10	10Z067	30.00	4.00	4.00	4.83	0	0.00	0.70
11	10Z089	29.00	4.00		4.83	0	0.00	0.70
RExt	10Z089	1.00			4.83	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn	-----Shear(k)-----					-----Moment(f-k)-----					---Mom+Shr---			----Defl(in)---		
Id	Loc	Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC
Ext	RSup	-0.12	6.64	0.02	27	RSup	0.06	10.64	0.01	27	LSup	0.00	27	0.21	0.00	24
1	RLap	-1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	RSup	0.74	9	14.50	0.82	35
2	LLap	1.65	2.82	0.59	9	LLap	6.43	6.32	1.02	9	LLap	1.03	9	15.00	0.20	35
3	RLap	-1.57	2.82	0.56	9	RSup	5.88	7.62	0.77	9	RSup	0.86	9	15.00	0.46	35
4	LLap	1.55	2.82	0.55	9	RSup	6.03	7.62	0.79	9	RSup	0.88	9	15.00	0.37	35
5	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.45	35
6	RLap	-1.54	2.02	0.76	9	RSup	5.76	6.49	0.89	9	RSup	1.03	9	15.00	0.44	35
7	LLap	1.54	2.02	0.76	9	LSup	5.76	6.49	0.89	9	LSup	1.03	9	15.00	0.45	35
8	RLap	-1.55	2.82	0.55	9	LSup	6.03	7.62	0.79	9	LSup	0.88	9	15.00	0.37	35
9	LLap	1.57	2.82	0.56	9	LSup	5.88	7.62	0.77	9	LSup	0.86	9	15.00	0.46	35
10	RLap	-1.65	2.82	0.59	9	RLap	6.43	6.32	1.02	9	RLap	1.03	9	15.00	0.20	35
11	LLap	1.95	6.64	0.29	9	MidS	7.70	8.02	0.96	13	LSup	0.74	9	14.50	0.82	35

Ext|LSup 0.12 6.64 0.02 26|LSup 0.06 10.64 0.01 26|LSup 0.00 27| 1.00 -0.11 35

LOAD COMBINATIONS:

(9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (24) Dead+Collateral+Snow/2+PAT_SL_1
 (26) Dead+Collateral+Snow-PAT_SL_1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

U18R1010A Purlin(Surface= 2, Id= 7) 11/ 6/18 11:41am

ROOF PURLIN

Surface Id = 2
 Purlin Id = 7
 Offset = 30.25

LAYOUT: (Purlin Id= 7)

Bay Id	Part	Design Length (ft)	---Lap(ft)---		Load Width	No. Strap	Available Reduction Factor	
			Left	Right			Out	In
LExt	10Z089	1.00			4.85	0	0.00	0.70
1	10Z089	29.00		4.00	4.85	0	0.00	0.70
2	10Z067	30.00	4.00	4.00	4.85	0	0.00	0.70
3	10Z067	30.00	4.00	4.00	4.85	0	0.00	0.70
4	10Z067	30.00	4.00	4.00	4.85	0	0.00	0.70
5	10Z060	30.00	4.00	4.00	4.85	0	0.00	0.70
6	10Z060	30.00	4.00	4.00	4.85	0	0.00	0.70
7	10Z060	30.00	4.00	4.00	4.85	0	0.00	0.70
8	10Z067	30.00	4.00	4.00	4.85	0	0.00	0.70
9	10Z067	30.00	4.00	4.00	4.85	0	0.00	0.70
10	10Z067	30.00	4.00	4.00	4.85	0	0.00	0.70
11	10Z089	29.00	4.00		4.85	0	0.00	0.70
RExt	10Z089	1.00			4.85	0	0.00	0.70

STRENGTH/DEFLECTION SUMMARY:

Spn	-----Shear(k)-----					-----Moment(f-k)-----					---Mom+Shr---			----Defl(in)---		
Id	Loc	Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC
Ext	RSup	-0.12	6.64	0.02	27	RSup	0.06	10.64	0.01	27	LSup	0.00	27	0.21	0.00	24
1	RLap	-1.96	6.64	0.30	9	MidS	7.62	8.02	0.95	13	RSup	0.74	9	14.50	0.82	35
2	LLap	1.66	2.82	0.59	9	LLap	6.46	6.32	1.02	9	LLap	1.03	9	15.00	0.21	35
3	RLap	-1.58	2.82	0.56	9	RSup	5.91	7.62	0.77	9	RSup	0.86	9	15.00	0.46	35
4	LLap	1.55	2.82	0.55	9	RSup	6.05	7.62	0.79	9	RSup	0.89	9	15.00	0.38	35
5	RLap	-1.55	2.02	0.76	9	RSup	5.79	6.49	0.89	9	RSup	1.03	9	15.00	0.45	35
6	RLap	-1.54	2.02	0.76	9	RSup	5.79	6.49	0.89	9	RSup	1.03	9	15.00	0.44	35
7	LLap	1.55	2.02	0.76	9	LSup	5.79	6.49	0.89	9	LSup	1.03	9	15.00	0.45	35
8	RLap	-1.55	2.82	0.55	9	LSup	6.05	7.62	0.79	9	LSup	0.89	9	15.00	0.38	35
9	LLap	1.58	2.82	0.56	9	LSup	5.91	7.62	0.77	9	LSup	0.86	9	15.00	0.46	35
10	RLap	-1.66	2.82	0.59	9	RLap	6.46	6.32	1.02	9	RLap	1.03	9	15.00	0.21	35
11	LLap	1.96	6.64	0.30	9	MidS	7.62	8.02	0.95	13	LSup	0.74	9	14.50	0.82	35

Ext|LSup 0.12 6.64 0.02 26|LSup 0.06 10.64 0.01 26|LSup 0.00 27| 1.00 -0.11 35

LOAD COMBINATIONS:

 (9) Dead+Collateral+0.75Snow+0.45Wind_Pressure1
 (13) 0.6Dead+0.6Wind_Suction1
 (24) Dead+Collateral+Snow/2+PAT_SL_1
 (26) Dead+Collateral+Snow-PAT_SL_1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

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U18R1010A	In-Plane Roof Force	11/ 6/18 11:41am
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Win (k)= Design load in the plane of the purlin web
 Wout(k)= Design load in the plane of the purlin flange
 Pl (k)= Force in plane of roof per anti-roll clip

PURLIN ROLL FORCES:

Surf	Line	Load	--Roof_Load--		
Id	Id	Id	Win	Wout	Pl
2	1	3	15.80	-1.32	0.07
2	2	3	30.07	-2.51	-0.05
2	3	3	30.58	-2.55	-0.03
2	4	3	30.58	-2.55	-0.03
2	5	3	30.58	-2.55	-0.04
2	6	3	30.58	-2.55	-0.04
2	7	3	30.58	-2.55	-0.04
2	8	3	30.58	-2.55	-0.04
2	9	3	30.58	-2.55	-0.03
2	10	3	30.58	-2.55	-0.03
2	11	3	30.07	-2.51	-0.05
2	12	3	15.80	-1.32	0.07

STANDARD CONNECTION:

Surf	Line		Roll		Force/Connection			Stiff	Deflection	
Id	Id	No. Attachment	Id	Thick	Calc	Limit	UC	Calc	Calc	Limit
2	L_EW	7 Weld clip	@101	0.220	0.07	0.28	0.26	0.61	0.12	0.25
2	RF	7 Weld clip	@101	0.220	-0.05	0.28	0.18	0.54	0.08	0.25
2	R_EW	7 Weld clip	@101	0.220	0.07	0.28	0.26	0.61	0.12	0.25

PANEL SHEAR/DIAPHRAGM:

Surf	Line	Panel_Shear		-Deflection-	
Id	Id	Calc	Limit	Calc	Limit
2	L_EW	14.6	113.3	0.03	1.00
2	RF	5.1	113.3	0.03	1.00
2	R_EW	14.6	113.3	0.03	1.00

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PANEL LAYOUT:

Surf Id	Part	Type	Gage	Yield	Surface Length	No. Purlin	Max Space	---Stiffness---	
								Rotation	Shear
2	CR6-80	CR	26.00	80.0	35.12	7	4.872	0.80	16.00

PANEL STRENGTH:

Surf Id	Area	Load Id	-----Support-----				-----Midspan-----			
			Offset	Calc	Limit	Ratio	Offset	Calc	Limit	Ratio
2	Left	1	30.2	57.0	138.5	0.41	33.2	-42.3	118.4	0.36
		2	30.2	59.5	138.5	0.43	33.2	-44.1	118.4	0.37
		3	30.2	69.4	138.5	0.50	33.2	-51.5	118.4	0.43
		4	30.2	44.6	138.5	0.32	33.2	-33.1	118.4	0.28
		5	30.2	46.5	138.5	0.34	33.2	-34.5	118.4	0.29
		6	30.2	42.5	138.5	0.31	33.2	-31.5	118.4	0.27
		7	30.2	-88.1	118.4	0.74	33.2	66.5	138.5	0.48
		8	30.2	70.9	138.5	0.51	33.2	-52.6	118.4	0.44
		9	1.3	-36.8	118.4	0.31	3.7	26.9	138.5	0.19
		10	30.2	72.8	138.5	0.53	33.2	-54.0	118.4	0.46
		11	1.3	-35.7	118.4	0.30	3.7	26.1	138.5	0.19
		12	30.2	39.5	138.5	0.29	33.2	-29.3	118.4	0.25
		13	30.2	-91.1	118.4	0.77	33.2	68.7	138.5	0.50
2	Center	1	30.2	57.0	138.5	0.41	33.2	-42.3	118.4	0.36
		2	30.2	59.5	138.5	0.43	33.2	-44.1	118.4	0.37
		3	30.2	69.4	138.5	0.50	33.2	-51.5	118.4	0.43
		4	30.2	44.6	138.5	0.32	33.2	-33.1	118.4	0.28
		5	30.2	46.5	138.5	0.34	33.2	-34.5	118.4	0.29
		6	30.2	42.5	138.5	0.31	33.2	-31.5	118.4	0.27
		7	30.2	-64.5	118.4	0.55	33.1	51.3	138.5	0.37
		8	30.2	70.9	138.5	0.51	33.2	-52.6	118.4	0.44
		9	1.3	-15.5	118.4	0.13	3.7	11.3	138.5	0.08
		10	30.2	72.8	138.5	0.53	33.2	-54.0	118.4	0.46
		11	1.3	-14.3	118.4	0.12	3.7	10.5	138.5	0.08
		12	30.2	39.5	138.5	0.29	33.2	-29.3	118.4	0.25
		13	30.2	-67.5	118.4	0.57	33.1	53.5	138.5	0.39
2	Right	1	30.2	57.0	138.5	0.41	33.2	-42.3	118.4	0.36
		2	30.2	59.5	138.5	0.43	33.2	-44.1	118.4	0.37
		3	30.2	69.4	138.5	0.50	33.2	-51.5	118.4	0.43
		4	30.2	44.6	138.5	0.32	33.2	-33.1	118.4	0.28
		5	30.2	46.5	138.5	0.34	33.2	-34.5	118.4	0.29
		6	30.2	42.5	138.5	0.31	33.2	-31.5	118.4	0.27
		7	30.2	-88.1	118.4	0.74	33.2	66.5	138.5	0.48
		8	30.2	70.9	138.5	0.51	33.2	-52.6	118.4	0.44
		9	1.3	-36.8	118.4	0.31	3.7	26.9	138.5	0.19
		10	30.2	72.8	138.5	0.53	33.2	-54.0	118.4	0.46
		11	1.3	-35.7	118.4	0.30	3.7	26.1	138.5	0.19
		12	30.2	39.5	138.5	0.29	33.2	-29.3	118.4	0.25
		13	30.2	-91.1	118.4	0.77	33.2	68.7	138.5	0.50

PANEL DEFLECTION:

Surf Id	Area	Load Id	-----Deflection(in)-----			
			Offset	Calc	Limit	Ratio
2	Left	14	32.7	-0.09	0.32	0.27
		15	32.7	-0.09	0.32	0.28
		16	32.7	-0.11	0.32	0.34
		17	32.7	-0.12	0.32	0.36
		18	32.7	0.22	0.32	0.68
		14	32.7	-0.09	0.32	0.27
2	Center	14	32.7	-0.09	0.32	0.27

2	Right	15	32.7	-0.09	0.32	0.28
		16	32.7	-0.11	0.32	0.34
		17	32.7	-0.12	0.32	0.36
		18	32.7	0.20	0.32	0.61
		14	32.7	-0.09	0.32	0.27
		15	32.7	-0.09	0.32	0.28
		16	32.7	-0.11	0.32	0.34
		17	32.7	-0.12	0.32	0.36
		18	32.7	0.22	0.32	0.68

LOAD COMBINATION:

Load

Id Description

1	Dead+Live
2	Dead+Snow
3	Dead+MIN_SNOW
4	Dead+0.75Live
5	Dead+0.75Snow
6	Dead+0.6Wind_Pressure1
7	Dead+0.6Wind_Suction1
8	Dead+0.75Live+0.45Wind_Pressure1
9	Dead+0.75Live+0.45Wind_Suction1
10	Dead+0.75Snow+0.45Wind_Pressure1
11	Dead+0.75Snow+0.45Wind_Suction1
12	0.6Dead+0.6Wind_Pressure1
13	0.6Dead+0.6Wind_Suction1
14	Live
15	Snow
16	MIN_SNOW
17	Dead+Wind_Pressure1
18	Dead+Wind_Suction1

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Attachment Loads

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ROOF LOADS

EW	Attach	Wind				Seismic(a)			
Id	Locate	Wall1	Wall2	Roof	React	Wall1	Wall2	Roof	React
1	0.00	3.69	-0.73	0.00	0.00	0.093	0.093	4.82	0.00
1	17.50	6.53	-1.79	0.00	0.00	0.179	0.179	9.64	0.00
1	35.00	3.42	-0.68	0.00	10.45	0.086	0.086	8.02	23.19
3	0.00	3.69	-0.73	0.00	0.00	0.093	0.093	4.82	0.00
3	17.50	6.53	-1.79	0.00	0.00	0.179	0.179	9.64	0.00
3	35.00	3.42	-0.68	0.00	10.45	0.086	0.086	8.02	23.19

ROOF SHEAR

EW	Attach_Locate	Wind		Seismic(a)
Id	Start End			
1	0.00 17.50	-2.97		-5.01
1	17.50 35.00	-7.71		-15.00
3	0.00 17.50	-2.97		-5.01
3	17.50 35.00	-7.71		-15.00

(a)Seismic results based on base shear values

LOAD COMBINATIONS

Max Wind Coeff = 0.600
 Max Seismic Coeff = 0.763

SEISMIC LOAD

Seismic Coeff= 0.310
 Roof Dead= 7.000
 Roof Total= 7.000
 Left EW Dead= 3.000
 Front SW Dead= 3.000
 Right EW Dead= 3.000
 Back SW Dead= 0.000

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U18R1010A	Roof Diagonal Bracing	11/ 6/18 11:41am
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PANEL SHEAR:

Limit = 0.0
 Calc
 Wind = 14.0
 Seismic = 52.0

DIAGONAL BRACING:

Bay Id	Brace_Locate		-----Diag_Brace-----			Brace_Tension(k)				Max UC	KL/R
	Start	End	Type	Size	Part	Wind Calc	Wind Limit	Seismic Calc	Seismic Limit		
1	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
2	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
3	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
4	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
5	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
6	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
7	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
8	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
9	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21	
10	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07	

	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21
11	0.00	17.50	R	0.625	RDB-	0.19	7.34	0.52	7.34	0.07
	17.50	35.00	R	0.625	RDB-	0.49	7.34	1.57	7.34	0.21

TORSIONAL BRACING MOMENT:

Wind = 112.09

Seismic = 347.19

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U18R1010A          Sidewall Diagonal Bracing          11/ 6/18 11:41am
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PANEL SHEAR:

Wall Id	Base Length	Wind Calc	Seismic Calc	Limit
2	330.0	19.0	80.4	72.8
4	330.0	0.0	0.0	72.8

DIAGONAL BRACING:

Wall Id	Bay Id	Brace_Locate		Diag_Brace			Brace_Tension(k)				Max UC	KL/R
		Bot	Top	Type	Size	Part	Wind Calc	Wind Limit	Seismic Calc	Seismic Limit		
2	3	0.0	27.1	R	0.875	RDD-	2.72	14.97	15.33	17.96	0.85	
2	6	0.0	27.1	R	0.875	RDD-	2.72	14.97	15.33	17.96	0.85	
2	9	0.0	27.1	R	0.875	RDD-	2.72	14.97	15.33	17.96	0.85	

4 Torsional bracing used!

BOTTOM DIAGONAL BRACE REACTIONS:

Wall Id	Bay Id	Col Id	Wind_Max(k)		Seismic_Max(k)	
			Horz	Vert(+/-)	Horz	Vert(+/-)
2	3	3	-2.09	1.74	-7.67	6.37
2	3	4	2.09	1.74	7.67	6.37
2	6	6	-2.09	1.74	-7.67	6.37
2	6	7	2.09	1.74	7.67	6.37
2	9	9	-2.09	1.74	-7.67	6.37
2	9	10	2.09	1.74	7.67	6.37

LOAD COMBINATIONS:

1(Wind) - Dead+0.6Wind_Long1

9(Seismic) - 1.11Dead+0.76Seismic_Long

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Bracing Deflection

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ROOF ATTACHMENT DEFLECTION:

Wall Id	Attach Locate	Deflection(in)		Span/Deflect			
		Wind	Seismic	----Wind---		--Seismic--	
				Calc	Limit	Calc	Limit
1	0.0	0.08	0.37	4317	60	977	40
1	17.5	0.08	0.35	4518	60	982	40
1	35.0	0.06	0.29	5795	60	1118	40

WALL DEFLECTION AT EAVE:

Wall Id	Wall Height	Deflection(in)		Span/Deflect			
		Wind	Seismic	----Wind---		--Seismic--	
				Calc	Limit	Calc	Limit
2	27.1	0.06	0.29	5795	60	1118	40
4	30.0	0.08	0.37	4317	60	977	40

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Purlin Strut, Longitudinal Load

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Surf Id	Brace Locate	Purl Id	Bay Id	Purlin Part	Load Id	----Axial(k)----			--Moment(f-k)--			Axl+Mom		Max KL/R
						Calc	Limit	UC	Calc	Limit	UC	Loc	UC	
2	15.7 (17.5)	4	1	10Z089	1	2.55	16.36	0.16	2.4	8.02	0.31	MidS	0.44	92
					2	0.93	16.36	0.06	2.4	8.02	0.31	MidS	0.34	92
					3	1.91	16.36	0.12	-3.0	10.92	0.28	MidS	0.37	92
					4	0.70	16.36	0.04	-3.0	10.92	0.28	MidS	0.30	92
					5	1.91	16.36	0.12	-3.2	10.92	0.30	MidS	0.39	92
					6	0.70	16.36	0.04	-3.2	10.92	0.30	MidS	0.32	92
					7	2.55	16.36	0.16	2.8	8.02	0.35	MidS	0.48	92
					8	0.93	16.36	0.06	2.8	8.02	0.35	MidS	0.38	92
					9	0.94	16.36	0.06	-0.9	10.92	0.09	MidS	0.14	92
					10	-0.94	48.18	0.02	-0.9	10.92	0.09	MidS	0.10	92
					11	0.70	16.36	0.04	-5.8	10.92	0.53	MidS	0.56	92
					12	-0.70	48.18	0.01	-5.8	10.92	0.53	MidS	0.52	92
					13	0.94	16.36	0.06	-0.4	10.92	0.04	MidS	0.09	92
					14	-0.94	48.18	0.02	-0.4	10.92	0.04	MidS	0.06	92
2	15.7 (17.5)	4	2	10Z067	1	2.39	10.77	0.22	-1.8	7.62	0.25	LLap	0.46	95
					2	1.10	10.77	0.10	-1.8	7.62	0.25	LLap	0.32	95
					3	1.79	10.77	0.17	2.3	6.32	0.36	LLap	0.51	95
					4	0.82	10.77	0.08	2.3	6.32	0.36	LLap	0.41	95
					5	1.79	10.77	0.17	2.4	6.32	0.39	LLap	0.53	95
					6	0.82	10.77	0.08	2.4	6.32	0.39	LLap	0.44	95
					7	2.39	10.77	0.22	-2.1	7.62	0.28	LLap	0.49	95
					8	1.10	10.77	0.10	-2.1	7.62	0.28	LLap	0.35	95
					9	0.92	10.77	0.09	0.7	6.32	0.12	LLap	0.19	95
					10	-0.92	36.27	0.03	0.7	6.32	0.12	LLap	0.11	95
					11	0.68	10.77	0.06	4.4	6.32	0.70	LLap	0.74	95
					12	-0.68	36.27	0.02	4.4	6.32	0.70	LLap	0.68	95
					13	0.92	10.77	0.09	0.3	6.32	0.05	LLap	0.13	95
					14	-0.92	36.27	0.03	0.3	6.32	0.05	LLap	0.06	95
2	15.7 (17.5)	4	3	10Z067	1	2.23	10.77	0.21	1.3	5.34	0.25	MidS	0.44	95
					2	1.26	10.77	0.12	1.3	5.34	0.25	MidS	0.34	95

2	15.7	4	4 10Z067	3	1.67	10.77	0.16	2.1	7.62	0.28	RSup	0.38	95
				4	0.94	10.77	0.09	2.1	7.62	0.28	RSup	0.31	95
				5	1.67	10.77	0.16	2.2	7.62	0.30	RSup	0.39	95
				6	0.94	10.77	0.09	2.2	7.62	0.30	RSup	0.33	95
				7	2.23	10.77	0.21	1.5	5.34	0.28	MidS	0.48	95
				8	1.26	10.77	0.12	1.5	5.34	0.28	MidS	0.37	95
				9	0.90	10.77	0.08	0.6	7.62	0.09	RSup	0.15	95
				10	-0.90	36.27	0.02	0.6	7.62	0.09	RSup	0.09	95
				11	0.67	10.77	0.06	4.0	7.62	0.53	RSup	0.56	95
				12	-0.67	36.27	0.02	4.0	7.62	0.53	RSup	0.52	95
				13	0.90	10.77	0.08	0.3	7.62	0.04	RSup	0.11	95
				14	-0.90	36.27	0.02	0.3	7.62	0.04	RSup	0.05	95
				1	2.07	10.77	0.19	-1.7	7.62	0.23	RSup	0.41	95
				2	1.42	10.77	0.13	-1.7	7.62	0.23	RSup	0.34	95
2	15.7	4	5 10Z060	3	1.55	10.77	0.14	2.1	7.62	0.28	RSup	0.37	95
				4	1.06	10.77	0.10	2.1	7.62	0.28	RSup	0.32	95
				5	1.55	10.77	0.14	2.3	7.62	0.30	RSup	0.39	95
				6	1.06	10.77	0.10	2.3	7.62	0.30	RSup	0.34	95
				7	2.07	10.77	0.19	-2.0	7.62	0.26	RSup	0.44	95
				8	1.42	10.77	0.13	-2.0	7.62	0.26	RSup	0.37	95
				9	0.88	10.77	0.08	0.6	7.62	0.09	RSup	0.15	95
				10	-0.88	36.27	0.02	0.6	7.62	0.09	RSup	0.10	95
				11	0.65	10.77	0.06	4.1	7.62	0.55	RSup	0.57	95
				12	-0.65	36.27	0.02	4.1	7.62	0.55	RSup	0.53	95
				13	0.88	10.77	0.08	0.3	7.62	0.04	RSup	0.11	95
				14	-0.88	36.27	0.02	0.3	7.62	0.04	RSup	0.05	95
				1	1.90	9.32	0.20	1.2	4.54	0.27	MidS	0.46	95
				2	1.58	9.32	0.17	1.2	4.54	0.27	MidS	0.42	95
2	15.7	4	6 10Z060	3	1.43	9.32	0.15	2.0	6.49	0.32	RSup	0.41	95
				4	1.19	9.32	0.13	2.0	6.49	0.32	RSup	0.38	95
				5	1.43	9.32	0.15	2.2	6.49	0.34	RSup	0.43	95
				6	1.19	9.32	0.13	2.2	6.49	0.34	RSup	0.40	95
				7	1.90	9.32	0.20	1.4	4.54	0.31	MidS	0.50	95
				8	1.58	9.32	0.17	1.4	4.54	0.31	MidS	0.46	95
				9	0.86	9.32	0.09	0.6	6.49	0.10	RSup	0.17	95
				10	-0.86	32.48	0.03	0.6	6.49	0.10	RSup	0.10	95
				11	0.64	9.32	0.07	3.9	6.49	0.61	RSup	0.64	95
				12	-0.64	32.48	0.02	3.9	6.49	0.61	RSup	0.60	95
				13	0.86	9.32	0.09	0.2	6.49	0.04	RSup	0.13	95
				14	-0.86	32.48	0.03	0.2	6.49	0.04	RSup	0.06	95
				1	1.74	9.32	0.19	1.2	4.54	0.27	MidS	0.44	95
				2	1.74	9.32	0.19	1.2	4.54	0.27	MidS	0.44	95
2	15.7	4	7 10Z060	3	1.31	9.32	0.14	2.0	6.49	0.32	RSup	0.39	95
				4	1.31	9.32	0.14	2.0	6.49	0.32	RSup	0.39	95
				5	1.31	9.32	0.14	2.2	6.49	0.34	RSup	0.41	95
				6	1.31	9.32	0.14	2.2	6.49	0.34	RSup	0.41	95
				7	1.74	9.32	0.19	1.3	4.54	0.31	MidS	0.48	95
				8	1.74	9.32	0.19	1.3	4.54	0.31	MidS	0.48	95
				9	0.84	9.32	0.09	0.6	6.49	0.10	RSup	0.17	95
				10	-0.84	32.48	0.03	0.6	6.49	0.10	RSup	0.10	95
				11	0.62	9.32	0.07	3.9	6.49	0.61	RSup	0.64	95
				12	-0.62	32.48	0.02	3.9	6.49	0.61	RSup	0.60	95
				13	0.84	9.32	0.09	0.2	6.49	0.04	RSup	0.12	95
				14	-0.84	32.48	0.03	0.2	6.49	0.04	RSup	0.05	95
				1	1.58	9.32	0.17	1.2	4.54	0.27	MidS	0.42	95
				2	1.90	9.32	0.20	1.2	4.54	0.27	MidS	0.46	95
				3	1.19	9.32	0.13	2.0	6.49	0.32	LSup	0.38	95
				4	1.43	9.32	0.15	2.0	6.49	0.32	LSup	0.41	95
				5	1.19	9.32	0.13	2.2	6.49	0.34	LSup	0.40	95
				6	1.43	9.32	0.15	2.2	6.49	0.34	LSup	0.43	95

2	15.7	4	8 10Z067	7	1.58	9.32	0.17	1.4	4.54	0.31	MidS	0.46	95
				8	1.90	9.32	0.20	1.4	4.54	0.31	MidS	0.50	95
				9	0.86	9.32	0.09	0.6	6.49	0.10	LSup	0.17	95
				10	-0.86	32.48	0.03	0.6	6.49	0.10	LSup	0.10	95
				11	0.64	9.32	0.07	3.9	6.49	0.61	LSup	0.64	95
				12	-0.64	32.48	0.02	3.9	6.49	0.61	LSup	0.60	95
				13	0.86	9.32	0.09	0.2	6.49	0.04	LSup	0.13	95
				14	-0.86	32.48	0.03	0.2	6.49	0.04	LSup	0.06	95
				1	1.42	10.77	0.13	-1.7	7.62	0.23	LSup	0.34	95
				2	2.07	10.77	0.19	-1.7	7.62	0.23	LSup	0.41	95
				3	1.06	10.77	0.10	2.1	7.62	0.28	LSup	0.32	95
				4	1.55	10.77	0.14	2.1	7.62	0.28	LSup	0.37	95
				5	1.06	10.77	0.10	2.3	7.62	0.30	LSup	0.34	95
				6	1.55	10.77	0.14	2.3	7.62	0.30	LSup	0.39	95
2	15.7	4	9 10Z067	7	1.42	10.77	0.13	-2.0	7.62	0.26	LSup	0.37	95
				8	2.07	10.77	0.19	-2.0	7.62	0.26	LSup	0.44	95
				9	0.88	10.77	0.08	0.6	7.62	0.09	LSup	0.15	95
				10	-0.88	36.27	0.02	0.6	7.62	0.09	LSup	0.10	95
				11	0.65	10.77	0.06	4.1	7.62	0.55	LSup	0.57	95
				12	-0.65	36.27	0.02	4.1	7.62	0.55	LSup	0.53	95
				13	0.88	10.77	0.08	0.3	7.62	0.04	LSup	0.11	95
				14	-0.88	36.27	0.02	0.3	7.62	0.04	LSup	0.05	95
				1	1.26	10.77	0.12	1.3	5.34	0.25	MidS	0.34	95
				2	2.23	10.77	0.21	1.3	5.34	0.25	MidS	0.44	95
				3	0.94	10.77	0.09	2.1	7.62	0.28	LSup	0.31	95
				4	1.67	10.77	0.16	2.1	7.62	0.28	LSup	0.38	95
				5	0.94	10.77	0.09	2.2	7.62	0.30	LSup	0.33	95
				6	1.67	10.77	0.16	2.2	7.62	0.30	LSup	0.39	95
2	15.7	4	10 10Z067	7	1.26	10.77	0.12	1.5	5.34	0.28	MidS	0.37	95
				8	2.23	10.77	0.21	1.5	5.34	0.28	MidS	0.48	95
				9	0.90	10.77	0.08	0.6	7.62	0.09	LSup	0.15	95
				10	-0.90	36.27	0.02	0.6	7.62	0.09	LSup	0.09	95
				11	0.67	10.77	0.06	4.0	7.62	0.53	LSup	0.56	95
				12	-0.67	36.27	0.02	4.0	7.62	0.53	LSup	0.52	95
				13	0.90	10.77	0.08	0.3	7.62	0.04	LSup	0.11	95
				14	-0.90	36.27	0.02	0.3	7.62	0.04	LSup	0.05	95
				1	1.10	10.77	0.10	-1.8	7.62	0.25	RLap	0.32	95
				2	2.39	10.77	0.22	-1.8	7.62	0.25	RLap	0.46	95
				3	0.82	10.77	0.08	2.3	6.32	0.36	RLap	0.41	95
				4	1.79	10.77	0.17	2.3	6.32	0.36	RLap	0.51	95
				5	0.82	10.77	0.08	2.4	6.32	0.39	RLap	0.44	95
				6	1.79	10.77	0.17	2.4	6.32	0.39	RLap	0.53	95
2	15.7	4	11 10Z089	7	1.10	10.77	0.10	-2.1	7.62	0.28	RLap	0.35	95
				8	2.39	10.77	0.22	-2.1	7.62	0.28	RLap	0.49	95
				9	0.92	10.77	0.09	0.7	6.32	0.12	RLap	0.19	95
				10	-0.92	36.27	0.03	0.7	6.32	0.12	RLap	0.11	95
				11	0.68	10.77	0.06	4.4	6.32	0.70	RLap	0.74	95
				12	-0.68	36.27	0.02	4.4	6.32	0.70	RLap	0.68	95
				13	0.92	10.77	0.09	0.3	6.32	0.05	RLap	0.13	95
				14	-0.92	36.27	0.03	0.3	6.32	0.05	RLap	0.06	95
				1	0.93	16.36	0.06	2.4	8.02	0.31	MidS	0.34	92
				2	2.55	16.36	0.16	2.4	8.02	0.31	MidS	0.44	92
				3	0.70	16.36	0.04	-3.0	10.92	0.28	MidS	0.30	92
				4	1.91	16.36	0.12	-3.0	10.92	0.28	MidS	0.37	92
				5	0.70	16.36	0.04	-3.2	10.92	0.30	MidS	0.32	92
				6	1.91	16.36	0.12	-3.2	10.92	0.30	MidS	0.39	92
				7	0.93	16.36	0.06	2.8	8.02	0.35	MidS	0.38	92
				8	2.55	16.36	0.16	2.8	8.02	0.35	MidS	0.48	92
				9	0.94	16.36	0.06	-0.9	10.92	0.09	MidS	0.14	92
				10	-0.94	48.18	0.02	-0.9	10.92	0.09	MidS	0.10	92

2	20.5	5	1	10Z089	11	0.70	16.36	0.04	-5.8	10.92	0.53	MidS	0.56	92
					12	-0.70	48.18	0.01	-5.8	10.92	0.53	MidS	0.52	92
					13	0.94	16.36	0.06	-0.4	10.92	0.04	MidS	0.09	92
					14	-0.94	48.18	0.02	-0.4	10.92	0.04	MidS	0.06	92
					1	1.53	16.36	0.09	2.4	8.02	0.31	MidS	0.37	92
					2	0.56	16.36	0.03	2.4	8.02	0.31	MidS	0.33	92
					3	1.15	16.36	0.07	-3.0	10.92	0.28	MidS	0.32	92
					4	0.42	16.36	0.03	-3.0	10.92	0.28	MidS	0.29	92
					5	1.15	16.36	0.07	-3.2	10.92	0.30	MidS	0.34	92
					6	0.42	16.36	0.03	-3.2	10.92	0.30	MidS	0.31	92
					7	1.53	16.36	0.09	2.8	8.02	0.35	MidS	0.41	92
					8	0.56	16.36	0.03	2.8	8.02	0.35	MidS	0.37	92
					9	0.56	16.36	0.03	-0.9	10.92	0.09	MidS	0.11	92
					10	-0.56	48.18	0.01	-0.9	10.92	0.09	MidS	0.10	92
2	20.5	5	2	10Z067	11	0.42	16.36	0.03	-5.8	10.92	0.53	MidS	0.55	92
					12	-0.42	48.18	0.01	-5.8	10.92	0.53	MidS	0.52	92
					13	0.56	16.36	0.03	-0.4	10.92	0.04	MidS	0.07	92
					14	-0.56	48.18	0.01	-0.4	10.92	0.04	MidS	0.05	92
					1	1.43	10.77	0.13	-1.8	7.62	0.25	LLap	0.36	95
					2	0.66	10.77	0.06	-1.8	7.62	0.25	LLap	0.28	95
					3	1.07	10.77	0.10	2.3	6.32	0.36	LLap	0.43	95
					4	0.49	10.77	0.05	2.3	6.32	0.36	LLap	0.39	95
					5	1.07	10.77	0.10	2.4	6.32	0.39	LLap	0.45	95
					6	0.49	10.77	0.05	2.4	6.32	0.39	LLap	0.42	95
					7	1.43	10.77	0.13	-2.1	7.62	0.28	LLap	0.39	95
					8	0.66	10.77	0.06	-2.1	7.62	0.28	LLap	0.32	95
					9	0.55	10.77	0.05	0.7	6.32	0.12	LLap	0.15	95
					10	-0.55	36.27	0.02	0.7	6.32	0.12	LLap	0.10	95
2	20.5	5	3	10Z067	11	0.41	10.77	0.04	4.4	6.32	0.70	LLap	0.72	95
					12	-0.41	36.27	0.01	4.4	6.32	0.70	LLap	0.69	95
					13	0.55	10.77	0.05	0.3	6.32	0.05	LLap	0.10	95
					14	-0.55	36.27	0.02	0.3	6.32	0.05	LLap	0.05	95
					1	1.33	10.77	0.12	1.3	5.34	0.25	MidS	0.35	95
					2	0.75	10.77	0.07	1.3	5.34	0.25	MidS	0.29	95
					3	1.00	10.77	0.09	2.1	7.62	0.28	RSup	0.31	95
					4	0.56	10.77	0.05	2.1	7.62	0.28	RSup	0.30	95
					5	1.00	10.77	0.09	2.2	7.62	0.30	RSup	0.33	95
					6	0.56	10.77	0.05	2.2	7.62	0.30	RSup	0.32	95
					7	1.33	10.77	0.12	1.5	5.34	0.28	MidS	0.38	95
					8	0.75	10.77	0.07	1.5	5.34	0.28	MidS	0.32	95
					9	0.54	10.77	0.05	0.6	7.62	0.09	RSup	0.12	95
					10	-0.54	36.27	0.01	0.6	7.62	0.09	RSup	0.09	95
					11	0.40	10.77	0.04	4.0	7.62	0.53	RSup	0.55	95
2	20.5	5	4	10Z067	12	-0.40	36.27	0.01	4.0	7.62	0.53	RSup	0.52	95
					13	0.54	10.77	0.05	0.3	7.62	0.04	RSup	0.08	95
					14	-0.54	36.27	0.01	0.3	7.62	0.04	RSup	0.04	95
					1	1.24	10.77	0.11	-1.7	7.62	0.23	RSup	0.32	95
					2	0.85	10.77	0.08	-1.7	7.62	0.23	RSup	0.28	95
					3	0.93	10.77	0.09	2.1	7.62	0.28	RSup	0.32	95
					4	0.64	10.77	0.06	2.1	7.62	0.28	RSup	0.31	95
					5	0.93	10.77	0.09	2.3	7.62	0.30	RSup	0.34	95
					6	0.64	10.77	0.06	2.3	7.62	0.30	RSup	0.33	95
					7	1.24	10.77	0.11	-2.0	7.62	0.26	RSup	0.35	95
					8	0.85	10.77	0.08	-2.0	7.62	0.26	RSup	0.31	95
					9	0.52	10.77	0.05	0.6	7.62	0.09	RSup	0.12	95
					10	-0.52	36.27	0.01	0.6	7.62	0.09	RSup	0.09	95
					11	0.39	10.77	0.04	4.1	7.62	0.55	RSup	0.56	95
					12	-0.39	36.27	0.01	4.1	7.62	0.55	RSup	0.54	95
					13	0.52	10.77	0.05	0.3	7.62	0.04	RSup	0.08	95
					14	-0.52	36.27	0.01	0.3	7.62	0.04	RSup	0.04	95

2	20.5	5	5 10Z060	1	1.14	9.32	0.12	1.2	4.54	0.27	MidS	0.37	95
				2	0.95	9.32	0.10	1.2	4.54	0.27	MidS	0.35	95
				3	0.86	9.32	0.09	2.0	6.49	0.32	RSup	0.36	95
				4	0.71	9.32	0.08	2.0	6.49	0.32	RSup	0.35	95
				5	0.86	9.32	0.09	2.2	6.49	0.34	RSup	0.38	95
				6	0.71	9.32	0.08	2.2	6.49	0.34	RSup	0.37	95
				7	1.14	9.32	0.12	1.4	4.54	0.31	MidS	0.40	95
				8	0.95	9.32	0.10	1.4	4.54	0.31	MidS	0.38	95
				9	0.51	9.32	0.06	0.6	6.49	0.10	RSup	0.13	95
				10	-0.51	32.48	0.02	0.6	6.49	0.10	RSup	0.10	95
				11	0.38	9.32	0.04	3.9	6.49	0.61	RSup	0.63	95
				12	-0.38	32.48	0.01	3.9	6.49	0.61	RSup	0.60	95
				13	0.51	9.32	0.06	0.2	6.49	0.04	RSup	0.09	95
				14	-0.51	32.48	0.02	0.2	6.49	0.04	RSup	0.05	95
2	20.5	5	6 10Z060	1	1.04	9.32	0.11	1.2	4.54	0.27	MidS	0.35	95
				2	1.04	9.32	0.11	1.2	4.54	0.27	MidS	0.35	95
				3	0.78	9.32	0.08	2.0	6.49	0.32	RSup	0.35	95
				4	0.78	9.32	0.08	2.0	6.49	0.32	RSup	0.35	95
				5	0.78	9.32	0.08	2.2	6.49	0.34	RSup	0.37	95
				6	0.78	9.32	0.08	2.2	6.49	0.34	RSup	0.37	95
				7	1.04	9.32	0.11	1.3	4.54	0.31	MidS	0.39	95
				8	1.04	9.32	0.11	1.3	4.54	0.31	MidS	0.39	95
				9	0.50	9.32	0.05	0.6	6.49	0.10	RSup	0.13	95
				10	-0.50	32.48	0.02	0.6	6.49	0.10	RSup	0.10	95
				11	0.37	9.32	0.04	3.9	6.49	0.61	RSup	0.63	95
				12	-0.37	32.48	0.01	3.9	6.49	0.61	RSup	0.60	95
				13	0.50	9.32	0.05	0.2	6.49	0.04	RSup	0.09	95
				14	-0.50	32.48	0.02	0.2	6.49	0.04	RSup	0.05	95
2	20.5	5	7 10Z060	1	0.95	9.32	0.10	1.2	4.54	0.27	MidS	0.35	95
				2	1.14	9.32	0.12	1.2	4.54	0.27	MidS	0.37	95
				3	0.71	9.32	0.08	2.0	6.49	0.32	LSup	0.35	95
				4	0.86	9.32	0.09	2.0	6.49	0.32	LSup	0.36	95
				5	0.71	9.32	0.08	2.2	6.49	0.34	LSup	0.37	95
				6	0.86	9.32	0.09	2.2	6.49	0.34	LSup	0.38	95
				7	0.95	9.32	0.10	1.4	4.54	0.31	MidS	0.38	95
				8	1.14	9.32	0.12	1.4	4.54	0.31	MidS	0.40	95
				9	0.51	9.32	0.06	0.6	6.49	0.10	LSup	0.13	95
				10	-0.51	32.48	0.02	0.6	6.49	0.10	LSup	0.10	95
				11	0.38	9.32	0.04	3.9	6.49	0.61	LSup	0.63	95
				12	-0.38	32.48	0.01	3.9	6.49	0.61	LSup	0.60	95
				13	0.51	9.32	0.06	0.2	6.49	0.04	LSup	0.09	95
				14	-0.51	32.48	0.02	0.2	6.49	0.04	LSup	0.05	95
2	20.5	5	8 10Z067	1	0.85	10.77	0.08	-1.7	7.62	0.23	LSup	0.28	95
				2	1.24	10.77	0.11	-1.7	7.62	0.23	LSup	0.32	95
				3	0.64	10.77	0.06	2.1	7.62	0.28	LSup	0.31	95
				4	0.93	10.77	0.09	2.1	7.62	0.28	LSup	0.32	95
				5	0.64	10.77	0.06	2.3	7.62	0.30	LSup	0.33	95
				6	0.93	10.77	0.09	2.3	7.62	0.30	LSup	0.34	95
				7	0.85	10.77	0.08	-2.0	7.62	0.26	LSup	0.31	95
				8	1.24	10.77	0.11	-2.0	7.62	0.26	LSup	0.35	95
				9	0.52	10.77	0.05	0.6	7.62	0.09	LSup	0.12	95
				10	-0.52	36.27	0.01	0.6	7.62	0.09	LSup	0.09	95
				11	0.39	10.77	0.04	4.1	7.62	0.55	LSup	0.56	95
				12	-0.39	36.27	0.01	4.1	7.62	0.55	LSup	0.54	95
				13	0.52	10.77	0.05	0.3	7.62	0.04	LSup	0.08	95
				14	-0.52	36.27	0.01	0.3	7.62	0.04	LSup	0.04	95
2	20.5	5	9 10Z067	1	0.75	10.77	0.07	1.3	5.34	0.25	MidS	0.29	95
				2	1.33	10.77	0.12	1.3	5.34	0.25	MidS	0.35	95
				3	0.56	10.77	0.05	2.1	7.62	0.28	LSup	0.30	95
				4	1.00	10.77	0.09	2.1	7.62	0.28	LSup	0.31	95

			2	0.76	22.28	0.03	0.58	2.21	0.26	0.30	91
			3	1.54	22.28	0.07	-0.71	13.01	0.05	0.12	91
			4	0.57	22.28	0.03	-0.71	13.01	0.05	0.08	91
			5	1.54	22.28	0.07	-0.76	13.01	0.06	0.13	91
			6	0.57	22.28	0.03	-0.76	13.01	0.06	0.08	91
			7	2.05	22.28	0.09	0.66	2.21	0.30	0.39	91
			8	0.76	22.28	0.03	0.66	2.21	0.30	0.33	91
			9	0.78	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.78	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.58	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.58	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.78	26.73	0.03	-0.10	15.61	0.01	0.04	91
			14	-0.78	72.14	0.01	-0.10	15.61	0.01	0.02	91
			4	9	10HE099	1	1.89	22.28	0.08	0.58	2.21
2	0.92	22.28				0.04	0.58	2.21	0.26	0.30	91
3	1.42	22.28				0.06	-0.71	13.01	0.05	0.12	91
4	0.69	22.28				0.03	-0.71	13.01	0.05	0.08	91
5	1.42	22.28				0.06	-0.76	13.01	0.06	0.12	91
6	0.69	22.28				0.03	-0.76	13.01	0.06	0.09	91
7	1.89	22.28				0.08	0.66	2.21	0.30	0.38	91
8	0.92	22.28				0.04	0.66	2.21	0.30	0.34	91
9	0.76	26.73				0.03	-0.23	15.61	0.01	0.04	91
10	-0.76	72.14				0.01	-0.23	15.61	0.01	0.02	91
11	0.56	26.73				0.02	-1.37	15.61	0.09	0.11	91
12	-0.56	72.14				0.01	-1.37	15.61	0.09	0.08	91
13	0.76	26.73				0.03	-0.10	15.61	0.01	0.03	91
14	-0.76	72.14				0.01	-0.10	15.61	0.01	0.02	91
4	8	10HE099	1	1.73	22.28	0.08	0.58	2.21	0.26	0.34	91
			2	1.08	22.28	0.05	0.58	2.21	0.26	0.31	91
			3	1.30	22.28	0.06	-0.71	13.01	0.05	0.11	91
			4	0.81	22.28	0.04	-0.71	13.01	0.05	0.09	91
			5	1.30	22.28	0.06	-0.76	13.01	0.06	0.12	91
			6	0.81	22.28	0.04	-0.76	13.01	0.06	0.09	91
			7	1.73	22.28	0.08	0.66	2.21	0.30	0.38	91
			8	1.08	22.28	0.05	0.66	2.21	0.30	0.35	91
			9	0.73	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.73	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.54	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.54	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.73	26.73	0.03	-0.10	15.61	0.01	0.03	91
			14	-0.73	72.14	0.01	-0.10	15.61	0.01	0.02	91
4	7	10HE099	1	1.57	22.28	0.07	0.58	2.21	0.26	0.33	91
			2	1.24	22.28	0.06	0.58	2.21	0.26	0.32	91
			3	1.18	22.28	0.05	-0.71	13.01	0.05	0.11	91
			4	0.93	22.28	0.04	-0.71	13.01	0.05	0.10	91
			5	1.18	22.28	0.05	-0.76	13.01	0.06	0.11	91
			6	0.93	22.28	0.04	-0.76	13.01	0.06	0.10	91
			7	1.57	22.28	0.07	0.66	2.21	0.30	0.37	91
			8	1.24	22.28	0.06	0.66	2.21	0.30	0.35	91
			9	0.71	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.71	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.53	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.53	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.71	26.73	0.03	-0.10	15.61	0.01	0.03	91
			14	-0.71	72.14	0.01	-0.10	15.61	0.01	0.02	91
4	6	10HE099	1	1.41	22.28	0.06	0.58	2.21	0.26	0.32	91
			2	1.41	22.28	0.06	0.58	2.21	0.26	0.32	91
			3	1.06	22.28	0.05	-0.71	13.01	0.05	0.10	91
			4	1.06	22.28	0.05	-0.71	13.01	0.05	0.10	91
			5	1.06	22.28	0.05	-0.76	13.01	0.06	0.10	91

4	5	10HE099	6	1.06	22.28	0.05	-0.76	13.01	0.06	0.10	91
			7	1.41	22.28	0.06	0.66	2.21	0.30	0.36	91
			8	1.41	22.28	0.06	0.66	2.21	0.30	0.36	91
			9	0.68	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.68	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.51	26.73	0.02	-1.37	15.61	0.09	0.10	91
			12	-0.51	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.68	26.73	0.03	-0.10	15.61	0.01	0.03	91
			14	-0.68	72.14	0.01	-0.10	15.61	0.01	0.02	91
			1	1.24	22.28	0.06	0.58	2.21	0.26	0.32	91
			2	1.57	22.28	0.07	0.58	2.21	0.26	0.33	91
			3	0.93	22.28	0.04	-0.71	13.01	0.05	0.10	91
			4	1.18	22.28	0.05	-0.71	13.01	0.05	0.11	91
			5	0.93	22.28	0.04	-0.76	13.01	0.06	0.10	91
4	4	10HE099	6	1.18	22.28	0.05	-0.76	13.01	0.06	0.11	91
			7	1.24	22.28	0.06	0.66	2.21	0.30	0.35	91
			8	1.57	22.28	0.07	0.66	2.21	0.30	0.37	91
			9	0.71	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.71	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.53	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.53	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.71	26.73	0.03	-0.10	15.61	0.01	0.03	91
			14	-0.71	72.14	0.01	-0.10	15.61	0.01	0.02	91
			1	1.08	22.28	0.05	0.58	2.21	0.26	0.31	91
			2	1.73	22.28	0.08	0.58	2.21	0.26	0.34	91
			3	0.81	22.28	0.04	-0.71	13.01	0.05	0.09	91
			4	1.30	22.28	0.06	-0.71	13.01	0.05	0.11	91
			5	0.81	22.28	0.04	-0.76	13.01	0.06	0.09	91
4	3	10HE099	6	1.30	22.28	0.06	-0.76	13.01	0.06	0.12	91
			7	1.08	22.28	0.05	0.66	2.21	0.30	0.35	91
			8	1.73	22.28	0.08	0.66	2.21	0.30	0.38	91
			9	0.73	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.73	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.54	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.54	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.73	26.73	0.03	-0.10	15.61	0.01	0.03	91
			14	-0.73	72.14	0.01	-0.10	15.61	0.01	0.02	91
			1	0.92	22.28	0.04	0.58	2.21	0.26	0.30	91
			2	1.89	22.28	0.08	0.58	2.21	0.26	0.35	91
			3	0.69	22.28	0.03	-0.71	13.01	0.05	0.08	91
			4	1.42	22.28	0.06	-0.71	13.01	0.05	0.12	91
			5	0.69	22.28	0.03	-0.76	13.01	0.06	0.09	91
4	2	10HE099	6	1.42	22.28	0.06	-0.76	13.01	0.06	0.12	91
			7	0.92	22.28	0.04	0.66	2.21	0.30	0.34	91
			8	1.89	22.28	0.08	0.66	2.21	0.30	0.38	91
			9	0.76	26.73	0.03	-0.23	15.61	0.01	0.04	91
			10	-0.76	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.56	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.56	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.76	26.73	0.03	-0.10	15.61	0.01	0.03	91
			14	-0.76	72.14	0.01	-0.10	15.61	0.01	0.02	91
			1	0.76	22.28	0.03	0.58	2.21	0.26	0.30	91
			2	2.05	22.28	0.09	0.58	2.21	0.26	0.35	91
			3	0.57	22.28	0.03	-0.71	13.01	0.05	0.08	91
			4	1.54	22.28	0.07	-0.71	13.01	0.05	0.12	91
			5	0.57	22.28	0.03	-0.76	13.01	0.06	0.08	91
6	1.54	22.28	0.07	-0.76	13.01	0.06	0.13	91			
7	0.76	22.28	0.03	0.66	2.21	0.30	0.33	91			
8	2.05	22.28	0.09	0.66	2.21	0.30	0.39	91			
9	0.78	26.73	0.03	-0.23	15.61	0.01	0.04	91			

4	1	10HE099	10	-0.78	72.14	0.01	-0.23	15.61	0.01	0.02	91
			11	0.58	26.73	0.02	-1.37	15.61	0.09	0.11	91
			12	-0.58	72.14	0.01	-1.37	15.61	0.09	0.08	91
			13	0.78	26.73	0.03	-0.10	15.61	0.01	0.04	91
			14	-0.78	72.14	0.01	-0.10	15.61	0.01	0.02	91
			1	0.60	22.85	0.03	0.54	2.32	0.24	0.26	88
			2	2.22	22.85	0.10	0.54	2.32	0.24	0.33	88
			3	0.45	22.85	0.02	-0.67	13.01	0.05	0.07	88
			4	1.66	22.85	0.07	-0.67	13.01	0.05	0.12	88
			5	0.45	22.85	0.02	-0.72	13.01	0.06	0.07	88
			6	1.66	22.85	0.07	-0.72	13.01	0.06	0.13	88
			7	0.60	22.85	0.03	0.62	2.32	0.27	0.29	88
			8	2.22	22.85	0.10	0.62	2.32	0.27	0.37	88
			9	0.81	27.42	0.03	-0.22	15.61	0.01	0.04	88

10	-0.81	72.14	0.01	-0.22	15.61	0.01	0.02	88
11	0.60	27.42	0.02	-1.29	15.61	0.08	0.10	88
12	-0.60	72.14	0.01	-1.29	15.61	0.08	0.08	88
13	0.81	27.42	0.03	-0.09	15.61	0.01	0.04	88
14	-0.81	72.14	0.01	-0.09	15.61	0.01	0.02	88

U18R1010A

Eave(Wall= 4)

11/ 6/18 11:41am

EAVE STRUT

Wall Id = 4

LAYOUT:

Bay Id	Part	Design Length (ft)	--Lap(ft)--		Load Width	No. Strap	No. Row	Unit Weight	Total Weight	Available Reduction Factor	
			Left	Right						Out	In
LExt	10HE099	1.00			0.63	0	1	6.2	6.2	0.00	0.00
11	10HE099	28.83			0.63	0	1	178.9	178.9	0.00	0.00
10	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
9	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
8	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
7	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
6	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
5	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
4	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
3	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
2	10HE099	29.67			0.63	0	1	184.1	184.1	0.00	0.00
1	10HE099	28.83			0.63	0	1	178.9	178.9	0.00	0.00
RExt	10HE099	1.00			0.63	0	1	6.2	6.2	0.00	0.00

STRENGTH/DEFLECTION SUMMARY:

Spn	-----Shear(k)-----					-----Moment(f-k)-----					---Mom+Shr---			----Defl(in)---		
Id	Loc	Calc	Allow	UC	LC	Loc	Calc	Allow	UC	LC	Loc	UC	LC	Calc	Allow	LC
---	----	-----	-----	-----	--	----	-----	-----	-----	--	----	-----	--	-----	-----	--
Ext	RSup	-0.02	9.16	0.00	27	RSup	0.01	13.01	0.00	27	LSup	0.00	27	-0.04	0.00	13
11	LSup	-0.30	9.16	0.03	13	MidS	2.12	2.32	0.91	13	LSup	0.00	27	14.42	0.20	35
10	LSup	0.23	9.16	0.03	27	MidS	2.20	2.21	1.00	13	LSup	0.00	27	14.83	0.22	35
9	LSup	0.23	9.16	0.03	27	MidS	2.20	2.21	1.00	13	LSup	0.00	27	14.83	0.22	35
8	LSup	0.23	9.16	0.03	27	MidS	2.20	2.21	1.00	13	LSup	0.00	27	14.83	0.22	35
7	LSup	0.23	9.16	0.03	27	MidS	2.20	2.21	1.00	13	LSup	0.00	27	14.83	0.22	35
6	LSup	0.23	9.16	0.03	27	MidS	2.20	2.21	1.00	13	LSup	0.00	27	14.83	0.22	35

5 LSup	0.23	9.16	0.03	27 MidS	2.20	2.21	1.00	13 LSup	0.00	27	14.83	0.22	35
4 LSup	0.23	9.16	0.03	27 MidS	2.20	2.21	1.00	13 LSup	0.00	27	14.83	0.22	35
3 LSup	0.23	9.16	0.03	27 MidS	2.20	2.21	1.00	13 LSup	0.00	27	14.83	0.22	35
2 LSup	0.23	9.16	0.03	27 MidS	2.20	2.21	1.00	13 LSup	0.00	27	14.83	0.22	35
1 RSup	0.30	9.16	0.03	13 MidS	2.12	2.32	0.91	13 LSup	0.00	27	14.42	0.20	35
Ext LSup	0.01	9.16	0.00	27 LSup	0.00	13.01	0.00	27 LSup	0.00	27	1.00	-0.02	35

LOAD COMBINATIONS:

(13) 0.6Dead+0.6Wind_Suction1
 (27) Dead+Collateral+Snow-PAT_SL_2
 (35) Dead+0.39Wind_Suction1

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U18R1010A Eave Strut, Longitudinal Load(Wall= 2) 11/ 6/18 11:41am

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Wall	Bay	Eave	Bay	Load	-Axial_Calc-	Axial			
Id	Id	Part	Width	Id	Wind	Seis	Limit	Axial	Max
			(ft)		(k)	(k)	(k)	Ratio	KL/r
2	1	10E060	30.00	9	2.47	3.32	17.06	0.19	0
2	2	10E060	30.00	9	2.89	6.52	17.06	0.38	0
2	3	10E060	30.00	9	3.31	9.71	17.06	0.57	0
2	4	10E060	30.00	9	1.64	2.08	17.06	0.12	0
2	5	10E060	30.00	9	2.06	4.30	17.06	0.25	0
2	6	10E060	30.00	9	2.48	7.49	17.06	0.44	0
2	7	10E060	30.00	9	2.06	4.30	17.06	0.25	0
2	8	10E060	30.00	9	1.64	2.08	17.06	0.12	0
2	9	10E060	30.00	9	3.31	9.71	17.06	0.57	0
2	10	10E060	30.00	9	2.89	6.52	17.06	0.38	0
2	11	10E060	30.00	9	2.47	3.32	17.06	0.19	0

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U18R1010A Strut Bolts 11/ 6/18 11:41am

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RAFTER CONNECTION:

Location	Purlin	Back_SW	Front_SW
		Eave Strut	Eave Strut
Left EW	Welded Clip	Direct Bolt	Direct Bolt
RF	Welded Clip	Direct Bolt	Direct Bolt
Right EW	Welded Clip	Direct Bolt	Direct Bolt

EAVE STRUTS:

Wall	Frm_Line		----	Bolt_Selected----		----	Bolt_Capacity(k)----		Dt_Bolt
Id	Id	Type	No.	Type	Dia Wshr	Calc	Shear	Bear	Ratio
2	1	EW	2	A325	0.500 1	3.32	10.60	5.04	0.66
2	2	RF	4	A325	0.500 1 ##	6.52	21.21	10.08	0.65
2	3	RF	4	A325	0.500 1 ##	9.71	21.21	10.08	0.96
2	4	RF	4	A325	0.500 1 ##	9.71	21.21	10.08	0.96
2	5	RF	2	A325	0.500 1	4.30	10.60	5.04	0.85
2	6	RF	4	A325	0.500 1 ##	7.49	21.21	10.08	0.74

2	7	RF	4	A325	0.500	1	##	7.49	21.21	10.08	0.74	77
2	8	RF	2	A325	0.500	1		4.30	10.60	5.04	0.85	77
2	9	RF	4	A325	0.500	1	##	9.71	21.21	10.08	0.96	77
2	10	RF	4	A325	0.500	1	##	9.71	21.21	10.08	0.96	77
2	11	RF	4	A325	0.500	1	##	6.52	21.21	10.08	0.65	77
2	12	EW	2	A325	0.500	1		3.32	10.60	5.04	0.66	77
4	1	EW	2	A325	0.500	1		2.22	10.60	8.32	0.27	77
4	2	RF	2	A325	0.500	1		2.22	10.60	8.32	0.27	77
4	3	RF	2	A325	0.500	1		2.05	10.60	8.32	0.25	77
4	4	RF	2	A325	0.500	1		1.89	10.60	8.32	0.23	77
4	5	RF	2	A325	0.500	1		1.73	10.60	8.32	0.21	77
4	6	RF	2	A325	0.500	1		1.57	10.60	8.32	0.19	77
4	7	RF	2	A325	0.500	1		1.57	10.60	8.32	0.19	77
4	8	RF	2	A325	0.500	1		1.73	10.60	8.32	0.21	77
4	9	RF	2	A325	0.500	1		1.89	10.60	8.32	0.23	77
4	10	RF	2	A325	0.500	1		2.05	10.60	8.32	0.25	77
4	11	RF	2	A325	0.500	1		2.22	10.60	8.32	0.27	77
4	12	EW	2	A325	0.500	1		2.22	10.60	8.32	0.27	77

PURLINS:

Surf Id	Frm_Line Id	Type	Brace Loc	----Bolt_Selected----				-----Bolt_Capacity(k)-----					Dt_Bolt Id
				No.	Type	Dia	Wshr	---Shear---	Calc	Limit	--Bearing--	Calc	
2	1	EW	15.70	4	A307	0.500	0	2.64	10.60	2.64	11.21	0.25	71
2	2	RF	15.70	4	A307	0.500	0	2.64	10.60	2.48	16.88	0.25	71
2	3	RF	15.70	4	A307	0.500	0	2.48	10.60	2.48	16.88	0.23	71
2	4	RF	15.70	4	A307	0.500	0	2.31	10.60	2.31	16.88	0.22	71
2	5	RF	15.70	4	A307	0.500	0	2.15	10.60	2.15	16.88	0.20	71
2	6	RF	15.70	4	A307	0.500	0	1.99	10.60	1.99	15.12	0.19	71
2	7	RF	15.70	4	A307	0.500	0	1.99	10.60	1.99	15.12	0.19	71
2	8	RF	15.70	4	A307	0.500	0	2.15	10.60	1.99	15.12	0.20	71
2	9	RF	15.70	4	A307	0.500	0	2.31	10.60	2.31	16.88	0.22	71
2	10	RF	15.70	4	A307	0.500	0	2.48	10.60	2.48	16.88	0.23	71
2	11	RF	15.70	4	A307	0.500	0	2.64	10.60	2.48	16.88	0.25	71
2	12	EW	15.70	4	A307	0.500	0	2.64	10.60	2.64	11.21	0.25	71
2	1	EW	20.51	4	A307	0.500	0	1.58	10.60	1.58	11.21	0.15	71
2	2	RF	20.51	4	A307	0.500	0	1.58	10.60	1.48	16.88	0.15	71
2	3	RF	20.51	4	A307	0.500	0	1.48	10.60	1.48	16.88	0.14	71
2	4	RF	20.51	4	A307	0.500	0	1.39	10.60	1.39	16.88	0.13	71
2	5	RF	20.51	4	A307	0.500	0	1.29	10.60	1.29	16.88	0.12	71
2	6	RF	20.51	4	A307	0.500	0	1.19	10.60	1.19	15.12	0.11	71
2	7	RF	20.51	4	A307	0.500	0	1.19	10.60	1.19	15.12	0.11	71
2	8	RF	20.51	4	A307	0.500	0	1.29	10.60	1.19	15.12	0.12	71
2	9	RF	20.51	4	A307	0.500	0	1.39	10.60	1.29	16.88	0.13	71
2	10	RF	20.51	4	A307	0.500	0	1.48	10.60	1.48	16.88	0.14	71
2	11	RF	20.51	4	A307	0.500	0	1.58	10.60	1.48	16.88	0.15	71
2	12	EW	20.51	4	A307	0.500	0	1.58	10.60	1.58	11.21	0.15	71

##NOTE : Not standard bolt connection

U18R1010A

Roof Panel Zones

11/ 6/18 11:41am

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
-----	-----	-----	-----

CR6-80 0.018 80.00 62.00

PURLIN SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
H1030	0.216	0.50	2.78

PANEL ZONE LAYOUT:

Surf Id	Zone Id	Description	Locate(ft) Start	End	Surface(ft) Offset1	Offset2	Bay Id	-Purlin(ft,in)- Load Id	Min Thick	Panel Zone (ft)	
2	1	Interior	0.00	330.00	0.00	35.12	5	7	4.85	0.060	4.87
2	3	Lt edge	0.00	7.00	7.00	28.12	1	3	4.83	0.089	4.83
2	4	Top edge	14.00	316.00	0.00	7.00	5	2	4.83	0.067	4.83
2	5	Rt edge	323.00	330.00	7.00	28.12	11	3	4.83	0.089	4.83
2	6	Bot edge	7.00	323.00	31.62	35.12	1	7	4.85	0.089	0.00
2	7	Lt top corner	0.00	14.00	0.00	7.00	1	2	4.83	0.099	4.83
2	8	Rt top corner	316.00	330.00	0.00	7.00	11	2	4.83	0.099	4.83
2	9	Rt bot corner	323.00	330.00	28.12	35.12	11	7	4.85	0.089	4.87
2	10	Lt bot corner	0.00	7.00	28.12	35.12	1	7	4.85	0.089	4.87

PURLIN SCREW CHECK:

Surf Id	Zone Id	Screw Space	Wind Suction (psf)	Load (k)	Limit(k) Pullout	Panel Pullover	Screw Tension	Max UC
2	1	1.00	27.26	0.13	0.26	0.27	0.74	0.51
2	3	1.00	35.44	0.17	0.38	0.27	0.74	0.62
2	4	1.00	35.44	0.17	0.29	0.27	0.74	0.62
2	5	1.00	35.44	0.17	0.38	0.27	0.74	0.62
2	6	1.00	30.53	0.15	0.38	0.27	0.74	0.54
2	7	1.00	52.06	0.25	0.42	0.27	0.74	0.92
2	8	1.00	52.06	0.25	0.42	0.27	0.74	0.92
2	9	1.00	38.71	0.19	0.38	0.27	0.74	0.68
2	10	1.00	38.71	0.19	0.38	0.27	0.74	0.68

BASE SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
H1040	0.22	0.45	2.80

BASE SCREW CHECK:

Wall Id	Base Length	Screw Space (ft)	Force/Wind (k)	Screw Seis (k)	Shear Limit (k)	Max UC
2	330.00	1.00	0.019	0.080	0.213	Panel Shear Not Used
4	Open Wall					

U18R1010A

Weight Summary

11/ 6/18 11:41am

Roof Purlins	=	11018.74
Eave Struts	=	3268.56
Roof Bracing	=	1287.85
Wall Bracing	=	396.84

Total = 15971.99

=====

U18R1010A	Warning Summary	11/ 6/18 11:41am
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=====

.. No Warnings

```

=====
*U18R1010A          Rigid Frame Design Input          11/ 9/18  1:21pm
=====

*( 1)JOBID:
   'U18R1010A'

*( 2)FRAME DESIGN OPTIONS:
*--Frame-      -----Frame_Space-----  Section  Splice  Web_Stiffener      P
*Id Type      L_Col   R_Col   Rafter   Space   Fix   Use Ratio Side  Delta
   1 'RF '      30.0000  30.0000  30.0000   2.0000  1.00   'N'  0.00 'Y '  'DA'

*( 3)OPTIMIZATION OPTIONS:
*Plate Depth Frame -L_Col_Depth_Opt- -R_Col_Depth_Opt-  Rafter_Depth_Opt
* Opt   Opt   Sym  Typ   Min   Max  Typ   Min   Max  Typ   Min   Max
   'N'   'N'   'N'  'T '  12.00 58.00 'T '  12.00 58.00 'T '  12.00 58.00

*( 4)DESIGN CODE:
*Design ---Steel_Code---      ---Build---  Code      Seismic
* Code  Cold      Hot      Country  Code  Year  Label      Zone
   'WS ' 'NAUS12 ' 'AISC10' '----' 'IBC ' '15' 'IBC 15 ' 'D '

*( 5)DESIGN CONSTANTS:
*
*      ---Strength_Factor---
* ----Stress_Ratio-----      ---Seismic---
* Frame Col  EP  BP      Wind  Frame SpcEP
   1.03 1.03 1.03 1.03   1.0000 1.0000 1.2000

*( 6)STEEL YIELDS:
* Web  Flg  C_Sec  W_Sec  R_Sec  P_Sec  T_Sec  U_Sec  EP  BP
   55.0 55.0  55.0  55.0  50.0  42.0  46.0  50.0 55.0 55.0

*( 7)DEFLECTION LIMITS:
* --Vertical-- -----Horizontal----- -Weak_Axis-
* Live  Total  Total  Seis  Crane Floor  Wind  Seis
   180.0   0.0   60.0  40.0  100.0   0.0   60.0  40.0

*( 8)REPORTS:
* Input Design  End  Base  Revise  Action  Sec  Flange  Segment  Unbrc  Floor  Diag
* Echo  Summary Plate Plate Input  Stress Prop Brace  Displ.  Len  React  Brace
   'Y'   'Y'   '4'  'Y'  'Y'   'N'  'N'  'Y'   'N'   'N'   'N'   'N'

*( 9)SURFACE SHAPE:
* No.    X_Coord  Y_Coord  Offset
   3      0.0000  30.0000  10.000
      35.0000  27.0833  10.000
      35.0000   0.0000  10.000

*(10)MEMBER DEPTHS:
*Surf  ----Depth----  No.  --Interior_Depth-
* Id   Start    End  Dep  Locate    Depth
   1   12.000   31.000   0
   2   20.000   26.000   1   17.6213   18.000
   3   25.000   12.000   0

*(11)MEMBER SPLICES:
*Surf
* Id   No.    Locate  Type
   1     0

```


0.00	0.00	0.00	0.00	0	0.00									
	31	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0	0.00									
	32	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00
0.00	0.00	0.00	0.00	0	0.00									
	33	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
0.00	0.00	0.00	0.00	0	0.00									
	34	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45
0.00	0.00	0.00	0.00	0	0.00									
	35	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.45	0.00	0.00	0.00	0	0.00									
	36	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-0.45	0.00	0.00	0.00	0	0.00									
	37	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0	0.00									
	38	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.00	0.00	0.00	0	0.00									
	39	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0	0.00									
	40	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.00	0.00	0.00	0.00	0	0.00									
	41	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
0.00	0.00	0.00	0.00	0	0.00									
	42	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.60
0.00	0.00	0.00	0.00	0	0.00									
	43	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.60	0.00	0.00	0.00	0	0.00									
	44	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-0.60	0.00	0.00	0.00	0	0.00									
	45	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.40	0.70	0.00	0	0.00									
	46	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	-0.40	-0.70	0.00	0	0.00									
	47	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.70	0.00	0.00	0	0.00									
	48	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	-0.70	0.00	0.00	0	0.00									
	49	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.52	0.00	0	0.00									
	50	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	-0.52	0.00	0	0.00									
	51	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.52	0.00	0.00	0	0.00									
	52	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	-0.52	0.00	0.00	0	0.00									
	53	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.70	0.00	0	0.00									
	54	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	-0.70	0.00	0	0.00									
	55	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.35	0.21	0.00	0	0.00									
	56	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	-1.35	-0.21	0.00	0	0.00									

*(29)DESIGN LOADS:Deflection

*

-----Load_Coefficients-----

	---	Live---	---Add_Snow---	---Wind_1---	---Wind_2---
Long_Wind	-Seismic--	Aux_Load			

[illegible]

86 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 0.00 0.00 -1.00 0.00 0 0.00

*(30)DESIGN LOADS:Special

*

-----Load_Coefficients-----

--Wind_2--		Long_Wind		-Seismic--		---Live---		-Add_Snow-		--Wind_1--			
		Aux_Load											
*No.	Id	Use	Code	Dead	Coll	Roof	Floor	Snow	Drift	Slide	Rain	Lt	Rt
Lt	Rt	1	2	Long	Tran	Temp	Id	Coeff					
12	87	'EP'	'-----'	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	1.62	0.00	0	0.00					
	88	'EP'	'-----'	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	-1.62	0.00	0	0.00					
	89	'EP'	'-----'	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.62	0.00	0.00	0	0.00					
	90	'EP'	'-----'	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	-1.62	0.00	0.00	0	0.00					
	91	'EP'	'-----'	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	1.21	0.00	0	0.00					
	92	'EP'	'-----'	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	-1.21	0.00	0	0.00					
	93	'EP'	'-----'	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.21	0.00	0.00	0	0.00					
	94	'EP'	'-----'	1.08	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	-1.21	0.00	0.00	0	0.00					
	95	'EP'	'-----'	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	1.62	0.00	0	0.00					
	96	'EP'	'-----'	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	-1.62	0.00	0	0.00					
	97	'EP'	'-----'	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.62	0.00	0.00	0	0.00					
	98	'EP'	'-----'	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	-1.62	0.00	0.00	0	0.00					

*(31)AUXILIARY LOAD:

*

*No.	Id	Name	No._Add	--Add_Comb-
			Loads	Id
1	1	'MIN_SNOW'	1	1
				Coeff
				1.00

*(32)ADDITIONAL LOADS:

*No.	Add	Loc	Basic	Load	Fx	Fy	Mom	Dx	Dy	..
Conc	Id	Id	Load	Type	W1	W2	Co	Dl1	Dl2	..
Dist										
1	1	2	'U_SNOW'	'D'	-0.745	-0.745	-0.08	0.0000	35.1213	

*(33)FLOOR BEAMS:

*Bay	Con_Type		Con_Loc		--Properties--				
* Id	No.	Id	Height	Lt	Rt	Lt	Rt	Area	Ixx
1	0								

*(34)DIAGONAL BRACING:

*Bay	Con_Type		Con_Loc		--Properties--	
* Id	No.	Id	Level	Opt	Area	
1	0					

*(35)CRANE BRACKET:

*Span	-----Crane----	-----Beam----	-----Offset----	-----Bracket-----	Col_Sup
-------	----------------	---------------	-----------------	-------------------	---------

*No.	Id	Lt	Rt	Type	Height	Depth	Width	Left	Right	Type	Opt	Select	Lt
Rt	Load												
0													

*(36)FRAME OPTIONS/FRAME LINES:

*Moment	Frame	Frame	No.											
*Frame	Option	Option_Id	Line	Frame_Line_Id										
'OMF'	'-'	'	10	2	3	4	5	6	7	8	9	10	11	

*(37)DESIGN PLATES:

*No.	Type	Id	Width	Thick	Bolt Dia	Bolt Gage	----Top---	--Bottom--	Bolt Gage2
0									

*(38)SPECIAL FAB DATA

*No.	Id	Piece
0		Key

*(39)ENDWALL COLUMNS:

*Wall	Expand_EW							Max_Deflect
* Id	Use	Offset	No.	Locate	Offset	Option	Down	Up
1	'N'	0.000	0					
3	'N'	0.000	0					

*(40)JACK BEAMS:

*No.	Id	Offset	Height	Length	Part	Spring_Constant
						Horz Vert
0						

*(41)LINER:

*---Wall_Height---			
* F_SW	B_SW	Roof	
0.0000	0.0000	'N'	

*(42)STEPPED LOAD COEFFICIENTS:

*Basic	Loc	No.	----Step_1---	----Step_2---	----Step_3---
*No. Load	Id	Step	Locate	Coef	Locate
0					

*(43)ADDITIONAL COLUMNS:

*No.	Id	Type	Rot	Opt	Part	Elev
0						

*(44)DESIGN CODE OPTIONS:

*No.	Event	Condition
0		

*AUXILIARY LOAD DESCRIPTIONS:

* Aux	
* Id	Description
1	Minimum snow load

*ADDITIONAL LOAD DESCRIPTIONS:

* Add	
* Id	Description
1	Minimum snow load surface2

* Code files used:

* IBC.15

* RF_IBC.15 Version 4.0

*

*DS_RFDEP.Siz

Surface	Span	--Required--	-----Selected-----				
* Id	Id	Type	Span	Type	Span	#Depth	#Splice
* 1	1	W	30.0	No record selected			
* 2	1	S	35.0	S	35.0	1	0
* 3	1	W	27.1	No record selected			

U18R1010A Frame 1 - Design Code 11/ 9/18 1:21pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
 Hot Rolled Steel : AISC10
 Cold Formed Steel : NAUS12

BUILDING CODE:

Wind Code : IBC 15
 Seismic Zone : D

MODULUS OF ELASTICITY

Hot Rolled Steel : 29000 (ksi)
 Cold Formed Steel : 29500 (ksi)

U18R1010A Frame 1 - Base Plates and Anchor Bolt 11/ 9/18 1:21pm

DESIGN CONSTANTS:

Base Plate Yield = 55.00 (ksi)
 Concrete Bearing = 1.05 (ksi)
 Bolt Shear Stress = 13.05 (ksi)
 Bolt Tension Stress = 21.75 (ksi)

BASE PLATE & BOLT SIZE:

---Column_Base(in)---				--Plate_Size(in)--			--Bolts(GR36)-			-Shear(k)-		Req
Id	Typ	Depth	Elev	Width	Length	Thick	Row	Dia	Gage	Limit	UC	Thick
Left	P	12.9	0.0	8.0	13.00	0.375	2	0.750	4.00	14.0	0.63	0.237
Right	P	12.5	0.0	8.0	13.00	0.375	2	1.000	4.00	25.3	0.59	0.323

BASE REACTIONS:

Column Id	-Max_Comp-		Max_Tension+Shear			-Max_Shear		Max_Shear+Tension		
	Ld	Fy(k)	Ld	Fy(k)	Fx(k)	Ld	Fx(k)	Ld	Fx(k)	Fy(k)
Left	8	16.8	37	-10.8	3.6	38	8.8	38	8.8	-1.6
Right	30	16.2	39	-12.5	2.7	55	14.9	55	14.9	-8.0

WELDS:

Base Id	Outside_Flange_To_Base				Inside_Flange_To_Base				-----Web_To_Base-----			
	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit
Left	0.188	F1	0.68	4.18	0.188	F1	0.68	4.18	0.188	F1	0.73	2.78
Right	0.188	F1	1.25	4.18	0.188	F1	1.25	4.18	0.188	F1	1.24	2.78

LOAD COMBINATIONS:

8 - Dead+Collateral+MIN_SNOW
 30 - Dead+Collateral+0.75Snow+0.45Wind_Left2
 37 - 0.6Dead+0.6Wind_Left1
 38 - 0.6Dead+0.6Wind_Left2
 39 - 0.6Dead+0.6Wind_Right1
 55 - 0.49Dead+0.21Seismic+1.35Seismic_Long

U18R1010A Frame 1 - Bolted-End-Plates 11/ 9/18 1:21pm

DESIGN CONSTANTS:

Splice Yield = 55.00 (ksi)
 Bolt Type = A325 Snug-Tightened
 Bolt Shear Stress = 27.00 (ksi)
 Bolt Tension Stress = 45.00 (ksi)

PLATE SIZE:

Splice Id	Member Type	Web Locate	Web Depth	Splice(in)		-----Bolts(A325)-----							
				Width	Thick	Dia	Gage	Gage2	RowT	SpaceT	RowB	SpaceB	RowI
1	VEE	1- 2	20.00	8.0	0.625	0.750	3.50	3.50	2	4.00	2	4.00	0
2	VEE	3- 4	26.00	6.0	0.500	0.625	3.50	3.50	2	3.50	2	3.50	0

PLATE DESIGN:

Splice Id	Ten Type	Loc	-----Max_Moment-----				-----Max_Shear-----				Req Thick	Req Dia	Bolt UC
			Load Id	Axial (k)	Shear (k)	Moment (f-k)	Load Id	Axial (k)	Shear (k)	Moment (f-k)			
1	VEE	Top	32	5.1	10.5	78.3	8	2.5	12.4	41.2	0.570	0.720	0.53
		Bot	37	-5.7	-10.0	-99.8	37	-5.7	-10.0	-99.8	0.525	0.732	0.95
2	VEE	Top	30	5.4	-13.9	86.3	30	5.4	-13.9	86.3	0.395	0.558	0.82
		Bot	39	-4.8	11.3	-69.6	39	-4.8	11.3	-69.6	0.379	0.547	0.77

Splice Id	Type	Thick Req	Dia_Required		---Unity_Check---		
			Top	Bot	EP Bend	Bolt Top	Bolt Bot
1	VEE	0.57	0.720	0.732	0.83	0.53	0.95
2	VEE	0.39	0.558	0.547	0.62	0.82	0.77

WELDS:

Splice Id	Side	Outside_Flange_To_Bep				Inside_Flange_To_Bep				-----Web_To_Bep-----			
		Size	Typ	Calc	Limit	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit

1	L	0.188	F2	2.28	4.18	0.250	F2	4.29	5.57	0.188	F1	0.62	2.78
1	R	0.188	F2	3.56	4.18	0.250	F2	4.29	5.57	0.188	F1	0.62	2.78
2	L	0.188	F2	2.11	4.18	0.188	F2	2.24	4.18	0.188	F1	0.54	2.78
2	R	0.188	F2	2.28	4.18	0.188	F2	2.24	4.18	0.188	F1	0.54	2.78

LOAD COMBINATIONS:

8 - Dead+Collateral+MIN_SNOW
 30 - Dead+Collateral+0.75Snow+0.45Wind_Left2
 32 - Dead+Collateral+0.75Snow+0.45Wind_Right2
 37 - 0.6Dead+0.6Wind_Left1
 39 - 0.6Dead+0.6Wind_Right1

```
=====
U18R1010A          Frame 1 - Bearing Stiffeners          11/ 9/18  1:21pm
=====
```

Stiffener Yield = 36.0 (ksi)

STIFFENER SIZE:

----Stiffener---		--Web(in)--		----Stiffener_Size(in)---			
Location	Offset	Depth	Thick	Width	Thick	Length	No.
Lt Col	0.0	31.00	0.220	4.00	0.375	30.80	1
Rt Col	35.0	25.00	0.188	3.00	0.250	24.80	1

STIFFENER DESIGN:

Location	----Tension(k)---			--Compression(k)-			Max UC
	Load	Calc	Limit	Load	Calc	Limit	
Lt Col	37	42.7	64.7	32	33.6	90.8	0.66
Rt Col	39	22.6	32.3	30	27.9	51.3	0.70

WELDS:

Stiffener Location	---Stiff_To_Flg/EP--- Shear(k/in)				-----Stiff_To_Web----- Shear(k/in)			
	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit
Lt Col	0.250	F1	5.34	5.57	0.188	F1	0.55	2.78
Rt Col	0.188	F1	3.76	4.18	0.188	F1	0.56	2.78

LOAD COMBINATIONS:

30 - Dead+Collateral+0.75Snow+0.45Wind_Left2
 32 - Dead+Collateral+0.75Snow+0.45Wind_Right2
 37 - 0.6Dead+0.6Wind_Left1
 39 - 0.6Dead+0.6Wind_Right1

```
=====
U18R1010A          Frame 1 - Flange Braces          11/ 9/18  1:21pm
=====
```

DESIGN CONSTANTS:

Flange Brace Yield = 55.00 ksi
 Girt/Purlin Yield = 55.00 ksi
 Flange Brace Bolt = A325 (2 Washers)
 Bolt Shear Stress = 27.00 ksi

Flange Brace Force
 Inside flange, max of bending compression & axial

LAYOUT:

Surf Id	Loc	Side	Part	Seg Id	Web Depth	Brace Offset	Angle Deg	Design Length	-----Bolt_Dia----- Frame Purlin	Clip	--Attachment-- Frame Purlin
Ref											
2	2	2	L2525105	3	19.66	28.50	51.8	32.47	0.500	0.500	Clip Web
	3	1	L2525105	3	18.96	28.50	52.7	32.04	0.500	0.500	Clip Web
	5	1	L2525105	4	19.60	28.50	52.0	32.35	0.500	0.500	Clip Web
	7	2	L2525105	4	24.82	28.50	45.4	35.80	0.500	0.500	Clip Web
3	2	1	L2525105	6	16.01	28.50	57.3	30.31	0.500	0.500	Clip Web
	3	1	L2525105	6	19.36	28.50	52.3	32.24	0.500	0.500	Clip Web
	4	1	L2525105	6	22.03	28.50	48.7	33.94	0.500	0.500	Clip Web

DESIGN:

Surf Id	Loc	Load Id	Force (k)	-Brace_UC- Comp	Tens	---Connection_UC--- Frame	Purlin	Clip
2	2	16	0.17	0.05	0.04	0.03	0.03	
	3	40	0.24	0.08	0.05	0.04	0.05	
	5	37	0.11	0.03	0.02	0.02	0.02	
	7	14	0.15	0.05	0.03	0.03	0.03	
3	2	29	0.31	0.10	0.07	0.06	0.06	
	3	29	0.39	0.13	0.09	0.07	0.08	
	4	30	0.40	0.13	0.09	0.08	0.08	

LOAD COMBINATIONS:

14 - Dead+0.6Wind_Left2
 16 - Dead+0.6Wind_Right2
 29 - Dead+Collateral+0.75Snow+0.45Wind_Left1
 30 - Dead+Collateral+0.75Snow+0.45Wind_Left2
 37 - 0.6Dead+0.6Wind_Left1
 40 - 0.6Dead+0.6Wind_Right2

=====

U18R1010A	Frame 1 - Web To Flange Weld	11/ 9/18 1:21pm
-----------	------------------------------	-----------------

=====

Surf Id	Mem Id	Seg Id	Sec Id	Load Id	Shear (k)	Q (in3)	Ixx (in4)	---Web_Flange_Weld--- Size Typ	Shear(k/in) Calc Limit
1	1	1	1	38	8.7	22.1	290	0.188 F1	0.66 2.78
1	1	2	17	41	9.0	57.7	2118	0.188 F1	0.25 2.78
2	2	3	18	8	12.6	15.0	388	0.188 F1	0.49 2.78
2	3	4	45	30	13.3	15.6	614	0.188 F1	0.34 2.78
3	4	5	46	44	7.4	14.9	520	0.188 F1	0.21 2.78
3	4	6	68	40	7.8	7.7	113	0.188 F1	0.53 2.78

LOAD COMBINATIONS:

```

-----
  8 - Dead+Collateral+MIN_SNOW
 30 - Dead+Collateral+0.75Snow+0.45Wind_Left2
 38 - 0.6Dead+0.6Wind_Left2
 40 - 0.6Dead+0.6Wind_Right2
 41 - 0.6Dead+0.6Wind_Long1
 44 - 0.6Dead-0.6Wind_Long2

```

```

=====
U18R1010A          Frame 1 - Special Segments          11/ 9/18  1:21pm
=====

```

FLANGE PLATE:

```

-----
      --Initial--    ---Final---
      Width Thick    Width Thick
Locate  (in) (in)    (in) (in)
-----
Lt Col   8.0 0.500    8.0 0.313
Rt Col   5.0 0.188    5.0 0.188

```

WEB PLATE:

```

-----
      Calc  ---Initial--  -----Final-----
      Web   Web Shear    Web Shear
      -----
      Actions-----
      Axial Moment  Shear Thick Limit Thick Limit UC Note
Locate Id  (k ) (f-k ) (k ) (in) (k ) (in) (k )
-----
Lt Col  37  -4.8 -99.8  57.4 0.164 35.0 0.220 83.9 0.68 AISC G2-1
Rt Col  30   6.8  86.3  36.4 0.134 15.3 0.188 41.4 0.88 AISC G2-1

```

REQUIRED WEB DESIGN:

```

-----
Locate      h      av      Kv      Cv
-----
Lt Col    31.00  21.36  15.53  0.62
Rt Col    25.00  25.05   9.98  0.45

```

LOAD COMBINATIONS:

```

-----
 30 - Dead+Collateral+0.75Snow+0.45Wind_Left2
 37 - 0.6Dead+0.6Wind_Left1

```

```

=====
U18R1010A          Frame 1 - Design Summary          11/ 9/18  1:21pm
=====

```

FRAME:

```

-----
Id      = 1
Type    = RF
Line Id = 2 3 4 5 6 7 8 9 10 11
Load Width= 30.00
UC Limit= 1.03
KL/R Limit= 200.00

```

MEMBERS:

-----Max_Axial+Moment-----																		
Srf	Mem	Seg	--Flange-	Web_Depth	-Plate_Thickness-					--Max_Shear-			----O-Flg---					
----I-Flg---			Max															
Id	Id	Id	Len	Wid	Strt	End	Web	O-flg	I-flg	Id	Ld	Ucv	Id	Ld	Uco	Id	Ld	
Uci	KL/R																	

1	1	1	19.8	8.0	12.0	25.9	0.164	0.500	0.375	12	41	0.38	11	38	1.00	9	31	
1.02	185																	
1	1	2	9.2	8.0	25.9	31.0	0.164	0.500	0.375	17	41	0.78	13	38	0.95	13	31	
0.95	185																	
2	2	3	13.9	5.0	20.0	18.0	0.150	0.313	0.250	18	8	0.92	18	37	0.88	18	37	
1.01	113																	
2	3	4	14.8	5.0	18.0	26.0	0.164	0.188	0.250	45	30	0.97	31	7	0.83	45	30	
0.75	136																	
3	4	5	6.5	5.0	25.0	22.6	0.134	0.188	0.250	46	44	0.95	46	39	0.89	46	30	
1.03	85																	
3	4	6	19.8	5.0	22.6	12.0	0.134	0.250	0.250	51	44	0.60	56	40	0.77	52	29	
0.85	85																	

LOAD COMBINATIONS:

#- Controlling Load Combination In Design Summary

- 1 - Dead+Collateral
- 2 - Dead+Collateral
- 3 - Dead+Collateral+Live
- 4 - Dead+Collateral+Live
- 5 - Dead+Collateral+Snow
- 6 - Dead+Collateral+Snow
- 7#- Dead+Collateral+MIN_SNOW
- 8#- Dead+Collateral+MIN_SNOW
- 9 - Dead+Collateral+0.75Live
- 10 - Dead+Collateral+0.75Live
- 11 - Dead+Collateral+0.75Snow
- 12 - Dead+Collateral+0.75Snow
- 13 - Dead+0.6Wind_Left1
- 14 - Dead+0.6Wind_Left2
- 15 - Dead+0.6Wind_Right1
- 16 - Dead+0.6Wind_Right2
- 17 - Dead+0.6Wind_Long1
- 18 - Dead+0.6Wind_Long1
- 19 - Dead+0.6Wind_Long2
- 20 - Dead+0.6Wind_Long2
- 21 - Dead+Collateral+0.75Live+0.45Wind_Left1
- 22 - Dead+Collateral+0.75Live+0.45Wind_Left2
- 23 - Dead+Collateral+0.75Live+0.45Wind_Right1
- 24 - Dead+Collateral+0.75Live+0.45Wind_Right2
- 25 - Dead+Collateral+0.75Live+0.45Wind_Long1
- 26 - Dead+Collateral+0.75Live+0.45Wind_Long1
- 27 - Dead+Collateral+0.75Live+0.45Wind_Long2
- 28 - Dead+Collateral+0.75Live+0.45Wind_Long2
- 29#- Dead+Collateral+0.75Snow+0.45Wind_Left1
- 30#- Dead+Collateral+0.75Snow+0.45Wind_Left2
- 31#- Dead+Collateral+0.75Snow+0.45Wind_Right1
- 32 - Dead+Collateral+0.75Snow+0.45Wind_Right2

33 - Dead+Collateral+0.75Snow+0.45Wind_Long1
34 - Dead+Collateral+0.75Snow-0.45Wind_Long1
35 - Dead+Collateral+0.75Snow+0.45Wind_Long2
36 - Dead+Collateral+0.75Snow-0.45Wind_Long2
37#- 0.6Dead+0.6Wind_Left1
38#- 0.6Dead+0.6Wind_Left2
39#- 0.6Dead+0.6Wind_Right1
40#- 0.6Dead+0.6Wind_Right2
41#- 0.6Dead+0.6Wind_Long1
42 - 0.6Dead-0.6Wind_Long1
43 - 0.6Dead+0.6Wind_Long2
44#- 0.6Dead-0.6Wind_Long2
45 - 1.11Dead+1.11Collateral+0.7Seismic+0.4Seismic_Long
46 - 1.11Dead+1.11Collateral-0.7Seismic-0.4Seismic_Long
47 - 1.11Dead+1.11Collateral+0.7Seismic_Long
48 - 1.11Dead+1.11Collateral-0.7Seismic_Long
49 - 1.08Dead+1.08Collateral+0.52Seismic
50 - 1.08Dead+1.08Collateral-0.52Seismic
51 - 1.08Dead+1.08Collateral+0.52Seismic_Long
52 - 1.08Dead+1.08Collateral-0.52Seismic_Long
53 - 0.49Dead+0.7Seismic
54 - 0.49Dead-0.7Seismic
55 - 0.49Dead+0.21Seismic+1.35Seismic_Long
56 - 0.49Dead-0.21Seismic-1.35Seismic_Long
57 - Dead+Collateral
58 - Dead+Collateral
59 - Dead+Collateral+Live
60 - Dead+Collateral+Live
61 - Dead+Collateral+Snow
62 - Dead+Collateral+Snow
63 - Dead+Collateral+MIN_SNOW
64 - Dead+Collateral+MIN_SNOW
65 - Live
66 - Live
67 - Snow
68 - Snow
69 - MIN_SNOW
70 - MIN_SNOW
71 - Dead+0.39Wind_Left1
72 - Dead+0.39Wind_Left2
73 - Dead+0.39Wind_Right1
74 - Dead+0.39Wind_Right2
75 - Dead+0.39Wind_Long1
76 - Dead-0.39Wind_Long1
77 - Dead+0.39Wind_Long2
78 - Dead-0.39Wind_Long2
79 - 1.11Dead+1.11Collateral+0.7Seismic
80 - 1.11Dead+1.11Collateral-0.7Seismic
81 - 1.08Dead+1.08Collateral+0.52Seismic
82 - 1.08Dead+1.08Collateral-0.52Seismic
83 - 0.49Dead+0.7Seismic
84 - 0.49Dead-0.7Seismic
85 - Seismic
86 - -Seismic
87 - 1.11Dead+1.11Collateral+1.62Seismic
88 - 1.11Dead+1.11Collateral-1.62Seismic
89 - 1.11Dead+1.11Collateral+1.62Seismic_Long
90 - 1.11Dead+1.11Collateral-1.62Seismic_Long
91 - 1.08Dead+1.08Collateral+1.21Seismic
92 - 1.08Dead+1.08Collateral-1.21Seismic

93 - 1.08Dead+1.08Collateral+1.21Seismic_Long
 94 - 1.08Dead+1.08Collateral-1.21Seismic_Long
 95 - 0.49Dead+1.62Seismic
 96 - 0.49Dead-1.62Seismic
 97 - 0.49Dead+1.62Seismic_Long
 98 - 0.49Dead-1.62Seismic_Long

PLATE LIMITS:

Seg Id	-----Web-----		-----Flange-----		---Flange---		Web_Area/ Flange_Area	
	Depth/Thick Calc	Limit	Width/(2xThick) Calc	Limit	Thick	Min	Calc	Limit
1	154.3	260.0	10.7		0.375	0.164	1.4	10.0
2	188.6	260.0	10.7		0.375	0.164	1.7	10.0
3	133.3	260.0	10.0		0.250	0.150	2.4	10.0
4	158.2	260.0	13.3		0.188	0.164	4.6	10.0
5	185.9	260.0	13.3		0.188	0.134	3.6	10.0
6	165.1	260.0	10.0		0.250	0.134	2.4	10.0

FRAME AREA:

Frame Area= 148.79
 Building Area= 998.96
 Ratio= 0.15

WEIGHTS:

Member	1	2	3	4
Weight (lb)	1081	269	292	446
Total Weight (lb)				
Frame	=	2087		
Splice Plate	=	128		
Base Plate	=	22		
				2237

REACTIONS: (Sidewall Columns)

Load Id	-----Left_Column-----				-----Right_Column-----			
	Fx(k)	Fy(k)	Fz(k)	M(f-k)	Fx(k)	Fy(k)	Fz(k)	M(f-k)
1	0.39	3.46	0.00	0.00	-0.39	2.84	0.00	0.00
2	0.39	3.49	0.00	0.00	-0.39	2.81	0.00	0.00
3	2.05	13.92	0.00	0.00	-2.05	13.38	0.00	0.00
4	2.05	14.07	0.00	0.00	-2.05	13.23	0.00	0.00
5	2.13	14.45	0.00	0.00	-2.13	13.91	0.00	0.00
6	2.13	14.60	0.00	0.00	-2.13	13.76	0.00	0.00
7	2.51	16.61	0.00	0.00	-2.42	15.94	0.00	0.00
8	2.50	16.78	0.00	0.00	-2.42	15.77	0.00	0.00
9	1.63	11.32	0.00	0.00	-1.63	10.74	0.00	0.00
10	1.63	11.43	0.00	0.00	-1.63	10.62	0.00	0.00
11	1.70	11.71	0.00	0.00	-1.70	11.13	0.00	0.00

12	1.69	11.83	0.00	0.00	-1.69	11.01	0.00	0.00
13	-3.44	-9.66	0.00	0.00	-6.93	-1.05	0.00	0.00
14	-8.67	-0.46	0.00	0.00	-1.70	8.83	0.00	0.00
15	6.13	-4.63	0.00	0.00	2.55	-11.62	0.00	0.00
16	0.90	5.12	0.00	0.00	7.78	-2.30	0.00	0.00
17	4.24	-8.51	0.00	0.00	-5.19	-9.48	2.09	0.00
18	4.26	-8.49	0.00	0.00	-5.21	-6.04	0.00	0.00
19	4.86	-7.57	0.00	0.00	-4.60	-10.42	2.09	0.00
20	4.87	-7.55	0.00	0.00	-4.62	-6.98	0.00	0.00
21	-1.18	1.66	0.00	0.00	-6.60	8.43	0.00	0.00
22	-5.10	8.61	0.00	0.00	-2.68	15.78	0.00	0.00
23	6.02	5.92	0.00	0.00	0.49	0.00	0.00	0.00
24	2.10	13.23	0.00	0.00	4.41	7.00	0.00	0.00
25	4.58	2.73	0.00	0.00	-5.29	1.89	1.57	0.00
26	4.60	2.75	0.00	0.00	-5.31	4.47	0.00	0.00
27	5.05	3.49	0.00	0.00	-4.86	1.14	1.57	0.00
28	5.06	3.51	0.00	0.00	-4.87	3.72	0.00	0.00
29	-1.12	2.04	0.00	0.00	-6.66	8.83	0.00	0.00
30	-5.04	8.99	0.00	0.00	-2.74	16.19	0.00	0.00
31	6.08	6.32	0.00	0.00	0.43	0.39	0.00	0.00
32	2.16	13.63	0.00	0.00	4.35	7.39	0.00	0.00
33	4.65	3.12	0.00	0.00	-5.36	2.29	1.57	0.00
34	4.66	3.14	0.00	0.00	-5.37	4.87	0.00	0.00
35	5.11	3.88	0.00	0.00	-4.92	1.53	1.57	0.00
36	5.12	3.90	0.00	0.00	-4.93	4.11	0.00	0.00
37	-3.57	-10.81	0.00	0.00	-6.81	-2.00	0.00	0.00
38	-8.79	-1.62	0.00	0.00	-1.58	7.89	0.00	0.00
39	6.01	-5.83	0.00	0.00	2.67	-12.53	0.00	0.00
40	0.78	3.92	0.00	0.00	7.91	-3.20	0.00	0.00
41	4.12	-9.68	0.00	0.00	-5.07	-10.41	2.09	0.00
42	4.14	-9.66	0.00	0.00	-5.08	-6.96	0.00	0.00
43	4.73	-8.75	0.00	0.00	-4.48	-11.34	2.09	0.00
44	4.75	-8.72	0.00	0.00	-4.50	-7.90	0.00	0.00
45	-1.02	1.49	0.00	0.00	-1.80	1.87	4.38	0.00
46	1.90	6.32	0.00	0.00	0.92	4.31	0.00	0.00
47	-0.42	2.47	0.00	0.00	-1.24	-1.84	7.66	0.00
48	1.36	5.39	0.00	0.00	0.30	7.97	0.00	0.00
49	-0.29	2.58	0.00	0.00	-1.10	4.22	0.00	0.00
50	1.12	4.92	0.00	0.00	0.27	1.88	0.00	0.00
51	-0.21	2.72	0.00	0.00	-1.02	-0.64	5.69	0.00
52	1.10	4.89	0.00	0.00	0.12	6.65	0.00	0.00
53	-0.81	-0.12	0.00	0.00	-1.06	2.69	0.00	0.00
54	1.09	3.00	0.00	0.00	0.78	-0.43	0.00	0.00
55	-1.79	-1.67	0.00	0.00	-1.96	-8.03	14.78	0.00
56	2.24	4.91	0.00	0.00	1.51	9.93	0.00	0.00

DEFLECTIONS :

Load Id	Lateral Defl @ Top Of Col		Vert Defl @ Midspan
	Left	Right	
57	0.09	0.10	-0.12
58	0.07	0.07	-0.11
59	0.50	0.51	-0.62
60	0.41	0.42	-0.62
61	0.52	0.53	-0.65
62	0.43	0.44	-0.64

63	0.56	0.58	-0.74
64	0.45	0.47	-0.74
65	0.39	0.40	-0.50
66	0.32	0.33	-0.50
67	0.42	0.43	-0.53
68	0.34	0.35	-0.53
69	0.45	0.46	-0.63
70	0.37	0.38	-0.62
71	2.30	2.32	-0.14
72	2.04	2.04	-0.21
73	-1.49	-1.50	0.27
74	-1.91	-1.93	0.22
75	0.64	0.66	0.06
76	0.63	0.65	0.05
77	0.25	0.26	0.06
78	0.24	0.25	0.06
79	1.08	1.09	-0.20
80	-0.89	-0.90	-0.11
81	0.82	0.83	-0.18
82	-0.64	-0.64	-0.11
83	1.01	1.01	-0.13
84	-0.94	-0.95	0.05
85	1.39	1.39	-0.12
86	-1.38	-1.39	0.12

DEFLECTIONS RATIO:

Load Id	Lateral Defl @ Top Of Col		Vert Defl @ Midspan
	Left	Right	
----	----	-----	-----
57	3740	3303	3649
58	4817	4232	3684
59	697	615	677
60	851	748	682
61	668	590	651
62	814	716	656
63	622	548	564
64	770	675	568
65	884	780	833
66	1073	943	839
67	839	740	793
68	1017	894	799
69	770	679	668
70	954	836	673
71	151	135	2931
72	171	154	2026
73	233	210	1560
74	182	163	1921
75	544	480	7577
76	551	486	7767
77	1392	1192	6942
78	1450	1240	7055
79	322	290	2060
80	389	351	3914
81	423	380	2356
82	542	489	3936
83	345	310	3322

84	369	332	9146
85	251	226	3429
86	251	226	3436

MAX DEFLECTION:

Type	Load Id	Deflect (in)	Span/Deflect Calc	Limit
Live Vertical		-0.53	798.	180.
Horizontal Drift	71	2.32	136.	60.

Horizontal Spring Constant= 1.93 k/in

P-DELTA:(Direct Analysis)

CONVERGENCE CHECK:

Column	Max Deflect Ratio
Left	0.0470
Right	0.0470

MAXIMUM DRIFT CHECK:

Load Id	Max_Drift(in) First Order	Second Order	Second/First Ratio
7	0.47	0.58	1.23

```
=====
U18R1010A      Frame 1 - Flange Hole Check      11/ 9/18  1:21pm
=====
```

(a)FuAfn/YtFyAfg - If < 1, tension rupture calcs are implemented

LOAD COMBINATIONS:

```
=====
U18R1010A      Frame 1 - Rigid Frame Clearances  11/ 9/18  1:21pm
=====
```

VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left	27'01-14"	3'05-14"	27'01-14"
Right	24'03-04"	32'00-08"	24'03-04"
Midspan	26'02-00"	17'04-06"	26'02-00"

HORIZONTAL CLEARANCE:

Location	Span	X_CoordL	X_CoordR
Left - Right	28'06-10"	3'05-14"	32'00-08"

```
=====
U18R1010A      Frame 1 - Weight Summary      11/ 9/18  1:21pm
=====
```

```

Total Weight (lb)
  Frame      =      2087
  Splice Plate =      128
  Base   Plate =       22
              -----
              2237
```

```
=====
U18R1010A      Frame 1 - Warning Summary      11/ 9/18  1:21pm
=====
```

```
.. No Warnings
```