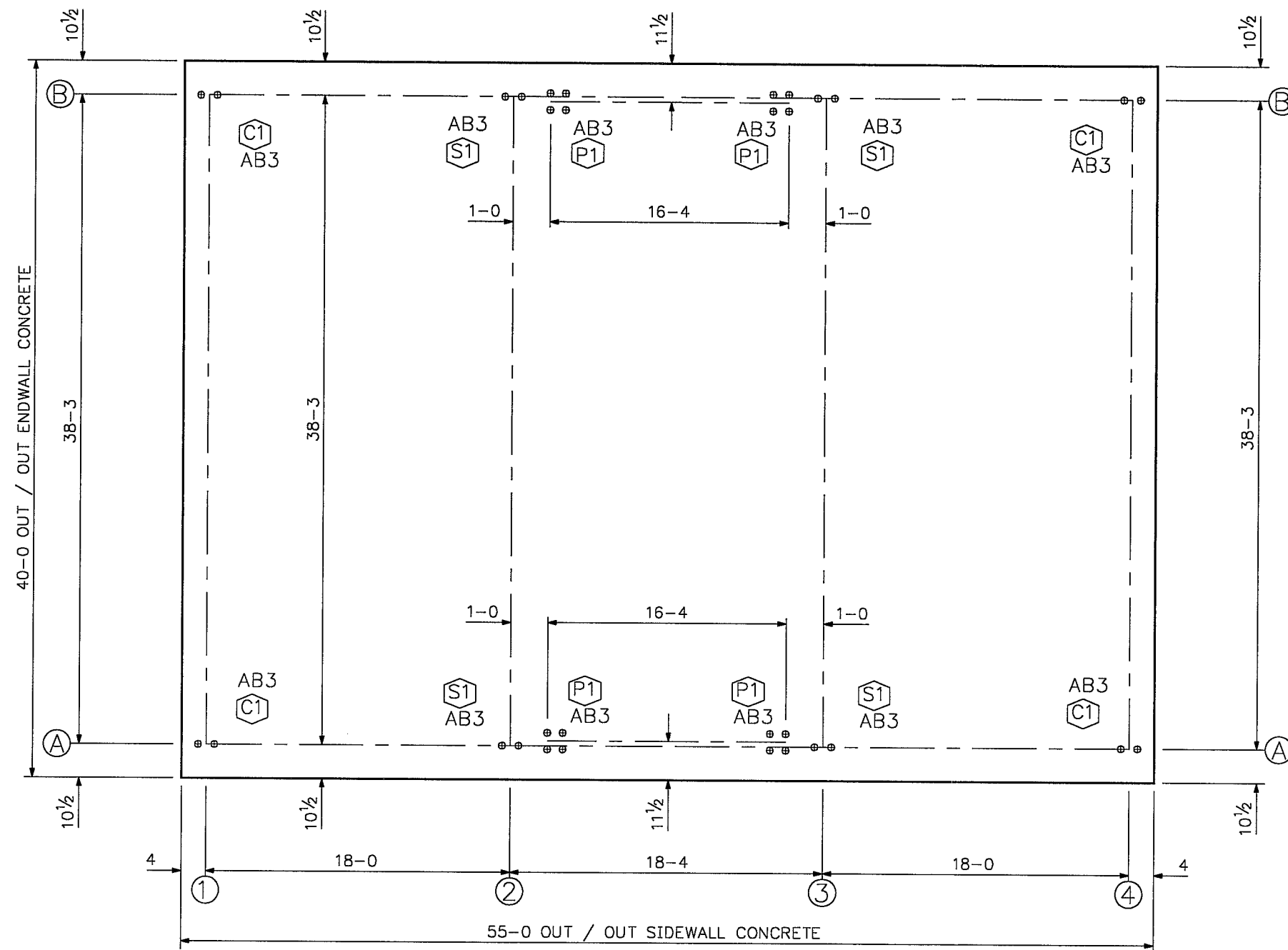




ANCHOR BOLT SETTING PLAN

(FOR REACTIONS AND DETAILS SEE A2, A3, AND A4 OF 4)

AB_ DENOTES ANCHOR BOLT SIZE,  DENOTES ANCHOR BOLT DETAIL

	
	
	
SUNWARD CORPORATION	
Buyer : ENERGY SAVERS USA	Drawn By: JEH
Cust. : GRAND FORKS AUTO	06/13/01
Descr.: 40X55X14 2.00 :12	Check By: WDA
Site : PUYALLUP, WA	6-15-01
Scale : NONE	Eng. Chk.: MB
P.O. : G25722	SHEET NO. A1 OF 4

GENERAL NOTES

1. THIS BUILDING IS DESIGNED FOR THE FOLLOWING LOADS IN ACCORDANCE WITH THE 1997 UBC BUILDING CODE.
ROOF LL = 30.00 psf
WIND LOAD = 80.00 mph EXPOSURE C
COLLATERAL LOAD = 0.00 psf
SEISMIC ZONE = 3
CRANE = N/A TYPE = N/A
MEZZANINE LOAD:
LL = N/A psf
DL = N/A psf

2. ANCHOR BOLTS AND ANY OTHER ITEMS EMBEDDED IN CONCRETE, INCLUDING ALL MASONRY FASTENERS AND ANCHORS, ARE NOT BY SUNWARD.

3. FOUNDATION DESIGN OR ANY OTHER CONCRETE DESIGN WORK IS NOT BY SUNWARD (CONSULT A LOCAL ENGINEER FOR THE DESIGN OF FOUNDATION AND CONCRETE WORK).

4. BASE PLATES ARE DESIGNED ASSUMING CONCRETE HAS A MINIMUM STRENGTH OF 2500 psi AT 28 DAYS.

5. BASE PLATES SIZES ARE 3" x 8" UNLESS NOTED.

6. ALL REACTIONS ARE GIVEN IN KIPS (1000 LBS).

MATERIAL SPECIFICATIONS

1. PANELS:
BARE GALVALUME: ASTM A792, GRADE 80, AZ 55 ALUMINUM - ZINC ALLOY COATED.
PAINTED: ASTM A792, GRADE 80, AZ 50 /55 ALUMINUM - ZINC ALLOY COATED.
TRIM MATERIAL ONLY: ASTM A792, GRADE 50, AZ 50/55 ALUMINUM - ZINC ALLOY COATED.

2. PURLINS AND GIRTS:
ASTM A570/A607, GRADE 55.

3. BUILT-UP SECTIONS:
ASTM A529/A572/A570/A607, GRADE 50.

4. HOT-ROLLED SECTIONS:
ASTM A36, GRADE 36 OR A529, A572, GRADE 50.

5. STRUCTURAL (SQUARE, RECTANGULAR AND ROUND) TUBE:
ASTM A500B (FY = 42 KSI.)

6. BOLTS:
ASTM A325, HIGH STRENGTH BOLTS WITH HEAVY HEX BOLT HEADS.
ASTM A307, MACHINE BOLTS WITH REGULAR HEX BOLT HEADS.
ANCHOR BOLTS: ASTM A307 (NOT SUPPLIED BY THE MANUFACTURER.)

7. FASTENERS:
ALL SELF-DRILLING AND SELF-TAPPING SHEET METAL SCREWS WILL CONFORM TO ANSI STANDARD B18.6.4 WILL HAVE TYPE "A" OR TYPE "AB" THREADS.
SCREWS REQUIRED FOR WEATHER TIGHTNESS WILL BE EQUIPPED WITH METAL AND EPDM BONDED WASHERS.

8. BRACING:
CABLE: EHS (EXTRA HIGH STRENGTH) 7-WIRE GALVANIZED STEEL STRAND CONFORMING TO ASTM A475.
ROD: ASTM A36, GRADE 36.
ANGLES: ASTM A36, GRADE 36 AND ASTM A607, GRADE 55.

9. HIGH STRENGTH BOLTS:
ASTM A325 (USED WHERE SPECIFIED ON DRAWINGS). ASTM A325 BOLTS USED ON RIGID FRAME MOMENT CONNECTIONS ARE DESIGNED AS BEARING TYPE CONNECTIONS, AND THREADS ARE INCLUDED IN THE SHEAR PLANE.
TURN OF THE NUT METHOD IS TO BE USED IN TIGHTENING THE HIGH STRENGTH MOMENT CONNECTION BOLTS. SPECIAL INSPECTION OF THE TIGHTENING OF THESE BOLTS IS REQUIRED AS SPECIFIED ON BUILDING CODES.

WALKDOOR ANCHOR BOLT DETAIL

1) WHEN FIELD LOCATING WALKDOOR DO SO IN ONE FOOT INCREMENTS STARTING AT STEEL LINE.
EXAMPLE: 9 1/8", 1'-9 1/8", 2'-9 1/8", ETC.

2) USE 1/2" Ø x 3 3/4" EXPANDED ANCHORS OR EQUAL, MINIMUM EMBEDMENT 2 1/4".

DOOR SIZE	3068
-----------	------

DETAIL A

WALKDOOR ANCHOR BOLT DETAIL

1) WHEN FIELD LOCATING WALKDOOR DO SO IN ONE FOOT INCREMENTS STARTING AT STEEL LINE.
EXAMPLE: 1'-8 1/2", 2'-8 1/2", 3'-8 1/2", ETC.

2) USE 1/2" Ø x 3-3/4" EXPANDED ANCHORS OR EQUAL, MINIMUM EMBEDMENT 2 1/4".

FRAMED OPENING WIDTH	3'-4"	4'-4"	6'-4"
DOOR SIZE	3070	4070	6070
X	3'-1 1/2"	4'-1 1/2"	6'-1 1/2"
Y	3'-7"	4'-7"	6'-7"

DETAIL B

WINDOW ANCHOR BOLT DETAIL

1) FIELD LOCATED BY OWNER.

2) USE 1/2" Ø x 3 3/4" EXPANDED ANCHORS OR EQUAL, MINIMUM EMBEDMENT 2 1/4".

DETAIL C

FRAMED OPENING ANCHOR BOLT DETAIL

1) SEE ANCHOR BOLT SETTING PLAN FOR LOCATION.

2) USE 1/2" Ø ANCHOR BOLTS.

DETAIL E

EDGE DETAIL

NOTE: SOME DETAILS THAT ARE SHOWN MAY NOT APPLY TO YOUR BUILDING. REFER TO YOUR VERIFICATION FOR THE OPTIONS THAT ARE INCLUDED.

VERIFY LENGTH AND WIDTH DIMENSIONS

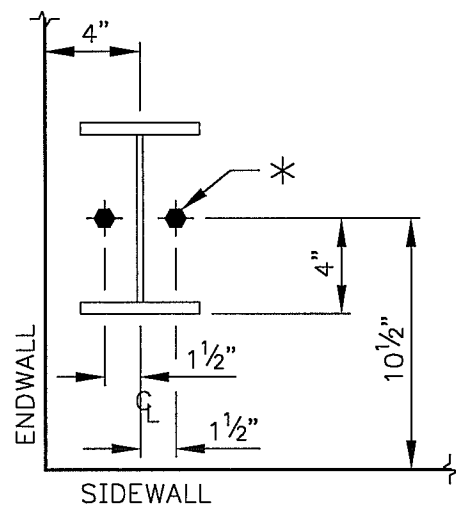
CHECK YOUR ANCHOR BOLT SETTING PLANS TO MAKE CERTAIN THAT THE DIMENSIONS LISTED AGREE WITH THE DIMENSIONS ON YOUR CONTRACT

Buyer : ENERGY SAVERS USA
Cust. : GRAND FORKS AUTO
Descr.: 40X55X14 2.00 :12
Site : PUYALLUP, WA
Scale : NONE
P.O. : G25722

Drawn By: JEH
06/13/01
Check By: WDA
6-15-01
Eng. Chk.: MB

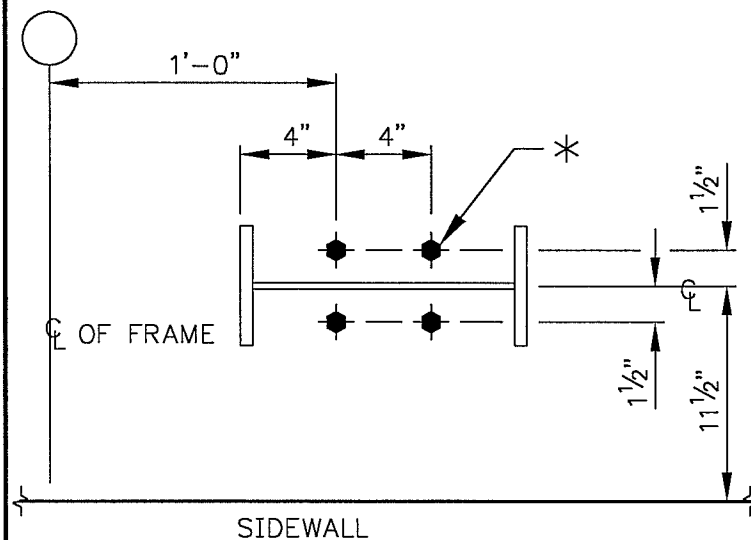
SUNWARD CORPORATION

SHEET NO. A2 OF 4



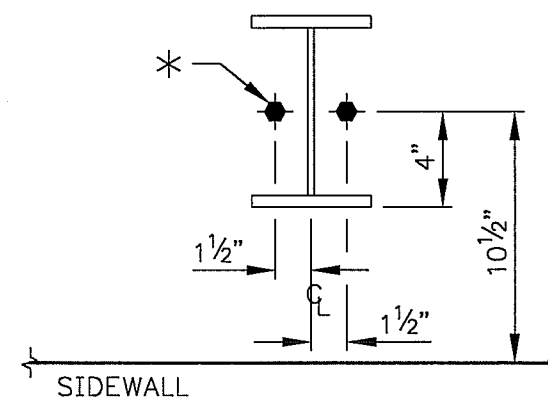
BASE: 5" X 8"

* SEE ANCHOR BOLT SETTING PLAN
FOR ANCHOR BOLT DIAMETER



BASE: 5" X 1'-0"

* SEE ANCHOR BOLT SETTING PLAN
FOR ANCHOR BOLT DIAMETER

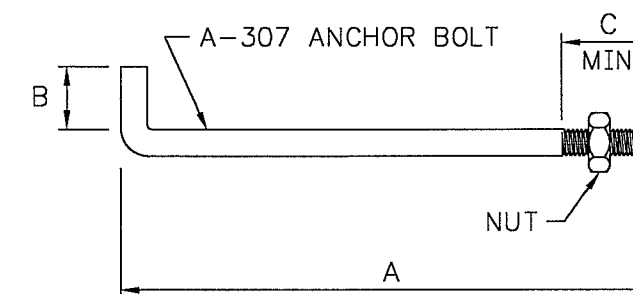


BASE: 5" X 8"

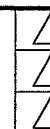
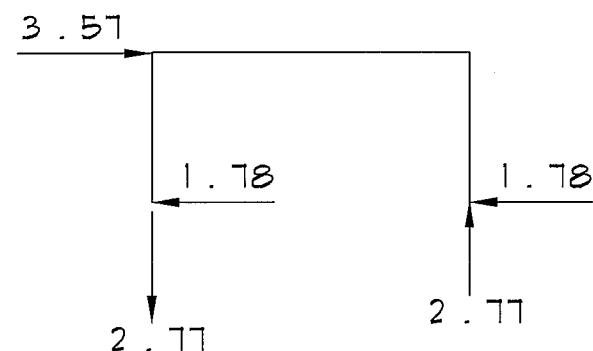
* SEE ANCHOR BOLT SETTING PLAN
FOR ANCHOR BOLT DIAMETER

ANCHOR BOLT SCHEDULE

MARK	QTY.	DIA.	LEN.	A	B	C	PROJ.
AB3	32	3/4"	1'-5 1/2"	1'-3"	2 1/2"	2 1/2"	2"



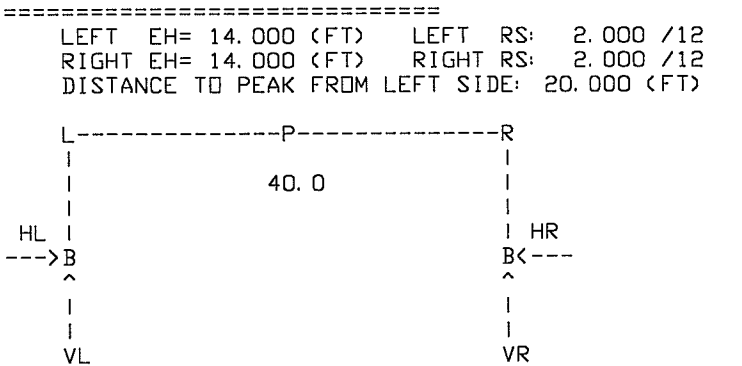
REACTIONS AT PORTAL FRAME
BETWEEN FRAME LINES (2) AND (3)
AT COLUMN LINE (A) AND (B)



SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drawn By: JEH
Cust. : GRAND FORKS AUTO 06/13/01
Descr.: 40X55X14 2.00 :12 Check By: WDA
Site : PUYALLUP, WA 6-15-01
Scale : NONE Eng. Chk.: MB
P.O. : G25722 SHEET NO. A3 OF 4

FRAME REACTIONS



FRAME LINES (G25722 #1): 1 4

BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	0.23	0.79	0.23	0.79
SL	2.02	5.60	2.02	5.60
WLL	-3.14	-4.92	-0.28	-3.58
WLR	-0.28	-3.58	-3.14	-4.92
UBL	1.51	4.93	1.51	3.47
WLL1	-2.60	-1.07	1.19	-1.87
WLR1	1.19	-1.87	-2.60	-1.07
SEIL	-0.15	-0.10	0.15	0.10
SEIR	0.15	0.10	-0.15	-0.10
COMB # 1	2.24	6.39	2.24	6.39
COMB # 3	-2.92	-4.14	-0.05	-2.79
COMB # 7	-2.37	-0.28	1.42	-1.09
COMB # 8	-1.36	2.52	2.43	1.71
COMB #11	0.08	0.69	0.37	0.88
COMB #12	0.37	0.88	0.08	0.69

NOTE: Load combinations listed are not complete for foundation design. It may control by doing additional combinations other than listed.

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ SL)
COMB # 3--> 1.00 X(DL+ WLL)
COMB # 7--> 1.00 X(DL+ WLL1)
COMB # 8--> 1.00 X(DL+ 1/2SL+ WLL1)
COMB #11--> 1.00 X(DL+ SEIL)
COMB #12--> 1.00 X(DL+ SEIR)
UBL-> 1.00X SNOW LOAD ON LEFT SLOPE ROOF+
0.50X SNOW LOAD ON RIGHT SLOPE ROOF

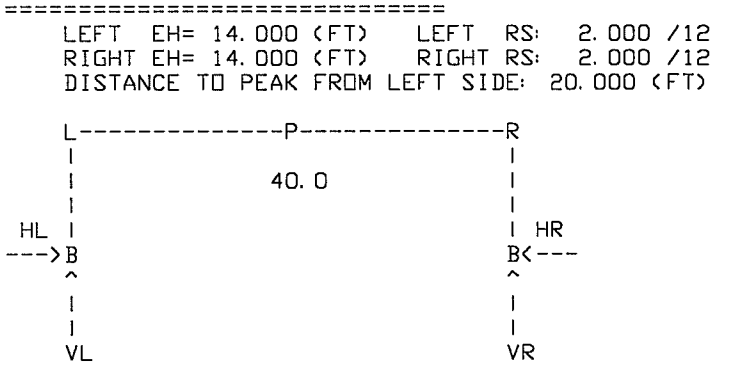
BASE PLATE SUMMARY:

L. COL: 5.00 X 8.00 X 1/2" (2) 3/4" DIA. A. B. s
R. COL: 5.00 X 8.00 X 1/2" (2) 3/4" DIA. A. B. s

NOTES:

- THE POSITIVE DIRECTIONS FOR THE FRAME COLUMN REACTIONS ARE :
HORIZONTAL - INWARD DIRECTION TO THE BUILDING.
VERTICAL - UPWARD DIRECTION.
- FORCES ON FOUNDATION WILL ACT IN THE OPPOSITE DIRECTION TO THE DIRECTION OF THE COLUMN REACTIONS.

FRAME REACTIONS



FRAME LINES (G25722 #2): 2 3

BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	0.43	1.28	0.43	1.28
SL	4.39	11.20	4.39	11.20
WLL	-6.57	-9.85	-0.83	-7.16
WLR	-0.83	-7.16	-6.57	-9.85
UBL	3.29	9.87	3.29	6.93
WLL1	-5.30	-2.14	2.29	-3.75
WLR1	2.29	-3.75	-5.30	-2.14
SEIL	-0.25	-0.16	0.25	0.16
SEIR	0.25	0.16	-0.25	-0.16
COMB # 1	4.82	12.49	4.82	12.49
COMB # 3	-6.14	-8.56	-0.40	-5.88
COMB # 7	-4.87	-0.85	2.72	-2.47
COMB # 8	-2.67	4.75	4.92	3.14
COMB #11	0.18	1.12	0.68	1.45
COMB #12	0.68	1.45	0.18	1.12

NOTE: Load combinations listed are not complete for foundation design. It may control by doing additional combinations other than listed.

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ SL)
COMB # 3--> 1.00 X(DL+ WLL)
COMB # 7--> 1.00 X(DL+ WLL1)
COMB # 8--> 1.00 X(DL+ 1/2SL+ WLL1)
COMB #11--> 1.00 X(DL+ SEIL)
COMB #12--> 1.00 X(DL+ SEIR)
UBL-> 1.00X SNOW LOAD ON LEFT SLOPE ROOF+
0.50X SNOW LOAD ON RIGHT SLOPE ROOF

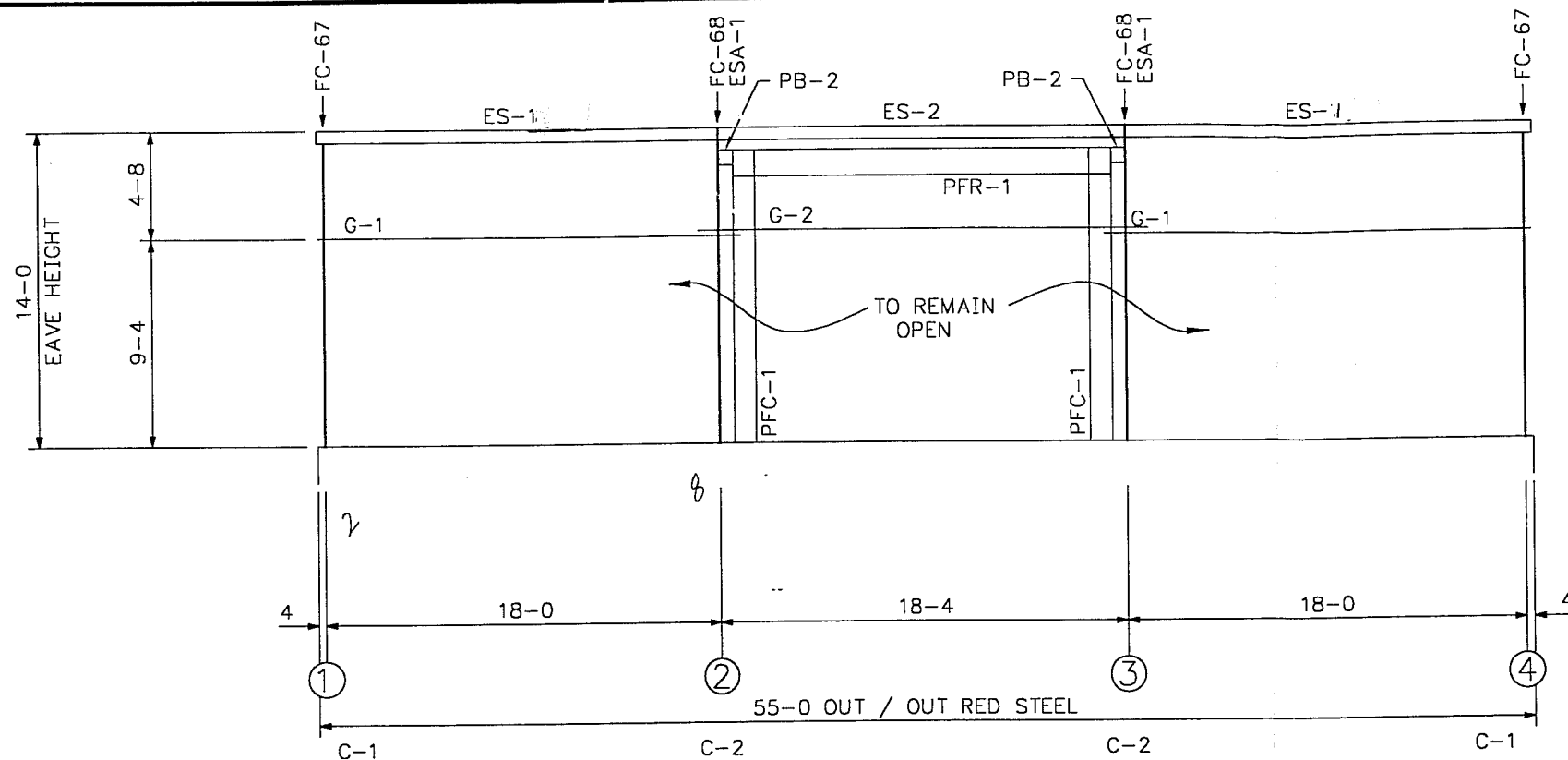
BASE PLATE SUMMARY:

L. COL: 5.00 X 8.00 X 1/2" (2) 3/4" DIA. A. B. s
R. COL: 5.00 X 8.00 X 1/2" (2) 3/4" DIA. A. B. s

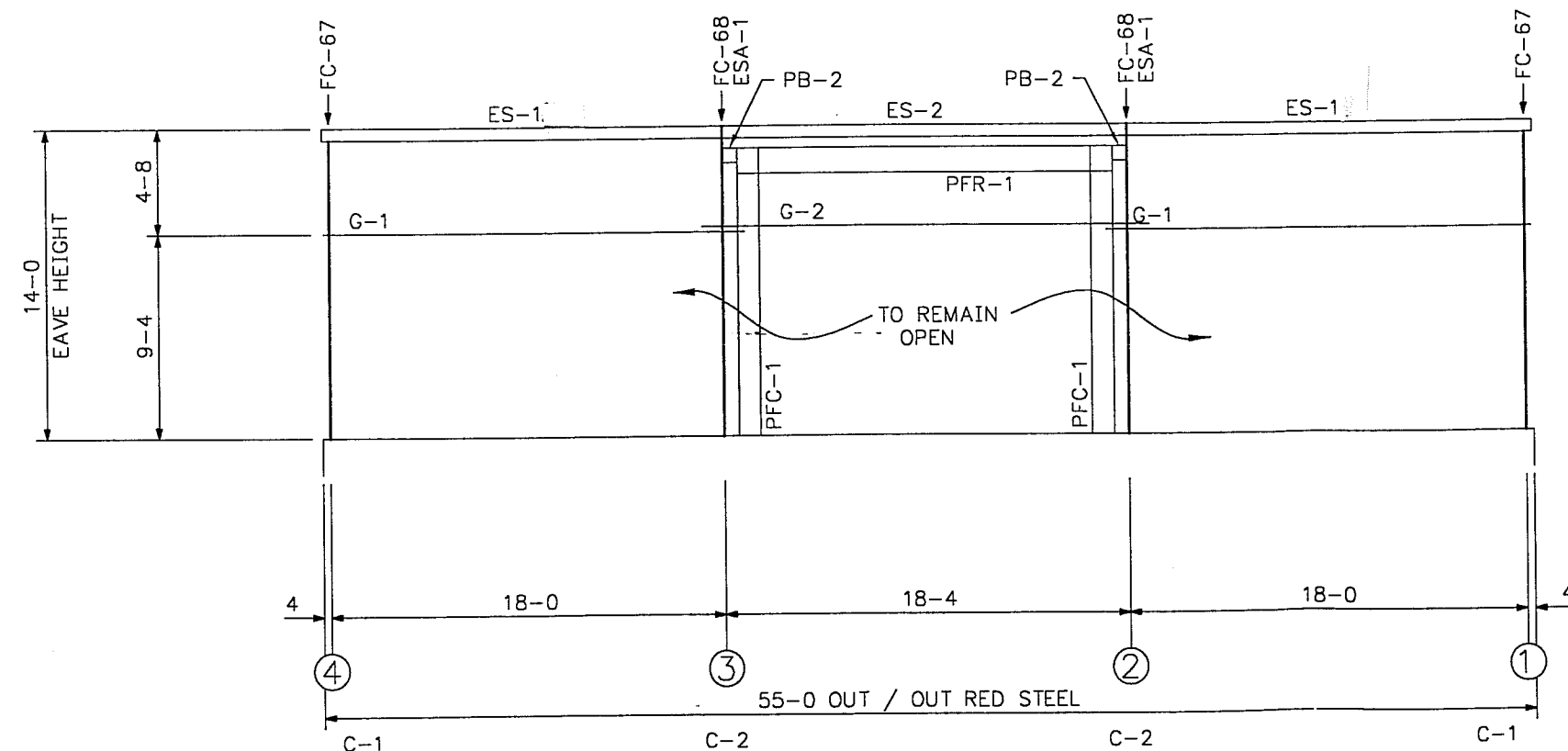


SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drawn By: JEH
Cust. : GRAND FORKS AUTO 06/13/01
Descr.: 40X55X14 2.00 :12 Check By: WDA
Site : PUYALLUP, WA 6-15-01
Scale : NONE Eng. Chk.: ME
P.O. : G25722 SHEET NO. A4 OF 4



ELEVATION AT COL. LINE A



ELEVATION AT COL. LINE B

ERECTION NOTE:

SUNWARD ADVISES THAT ALL PRIMED (RED) STEEL EXPOSED TO WEATHER BE COVERED WITH A 'RUST INHIBITIVE COATING' (NOT BY SUNWARD) BEFORE ASSEMBLY.

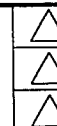
ERECTION REQUIREMENTS

FOR FRAMING DETAILS SEE G2.
FOR PORTAL FRAME DETAILS SEE E7.
2-0 GIRT LAP.
9-4 GIRT TO BE TOED DOWN.

SIDEWALL MEMBER SCHEDULE

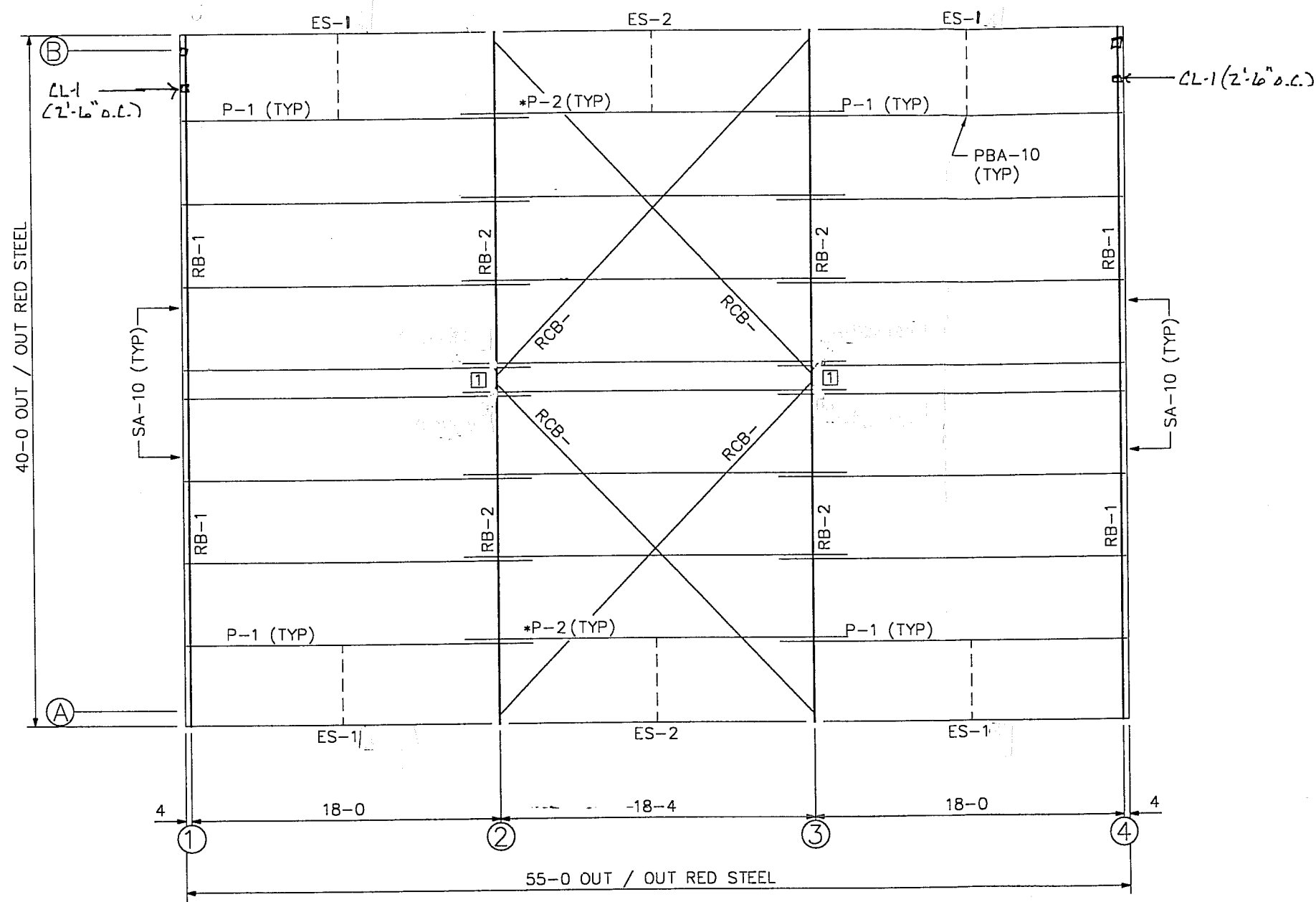
EAVE STRUTS (ES-) 8C14 GAGE (TYP.)
GIRTS (G-) 6 $\frac{1}{2}$ Z16 GAGE (TYP.)

LEGEND					
C-	MAIN FRAME COLUMN	CL-	SPECIAL CLIP	F.S.	FAR SIDE
RB-	MAIN FRAME RAFTER	RC-	RIDGE CAP	N.S.	NEAR SIDE
PFC-	PORTAL COLUMN	RS-	ROOF SHEET	N.B.S.	NOT BY SUNWARD
PFR-	PORTAL RAFTER	SW-	SIDEWALL SHEET	O.C.	ON CENTER
CC-	CORNER COLUMN	EW-	ENDWALL SHEET	SL	STEEL LINE
EC-	ENDWALL COLUMN	ETC-	FRAMING CLOSURE	A.S.	AS SHOWN
ER-	ENDWALL RAFTER	T-	TRIM	O.H.	OPPOSITE HAND
DJ-	DOOR JAMB	TR-	SPECIAL TRIM	TYP.	TYPICAL
DH-	DOOR HEADER	AL-	ANGLE	U.N.	UNLESS NOTED
G-	GIRT	A-	SPECIAL ANGLE	SCB-	SIDEWALL CABLE
P-	PURLIN	FB-	FLANGE BRACE	ECB-	ENDWALL CABLE
ES-	EAVE STRUT	CL	CENTER LINE	RCB-	ROOF CABLE
FC-	FRAMING CLIP	N.A.	NOT APPLICABLE		



SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drawn By: JEH
Cust. : GRAND FORKS AUTO 06/13/01
Descr.: 40X55X14 2.00:12 Check By: DN
Site : PUYALLUP, WA 7-27-01
Scale : NONE Eng. Chk.:
P.O. : G25722 SHEET NO. E1 OF 8



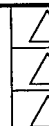
ROOF FRAMING PLAN

ERECTION REQUIREMENTS

FOR CABLE BRACING SIZES
AND DETAILS SEE G1.
FOR FRAMING DETAILS SEE G2.
4-0 PURLIN LAP.
LOCATIONS MARKED BY AN
① REQUIRE FC-182 ANTI-ROLL
CLIPS.
PBA-10 LOCATED IN CENTER OF
EACH BAY AS SHOWN AND TO BE
INSTALLED BEFORE ROOF SHEETING
SEE G4

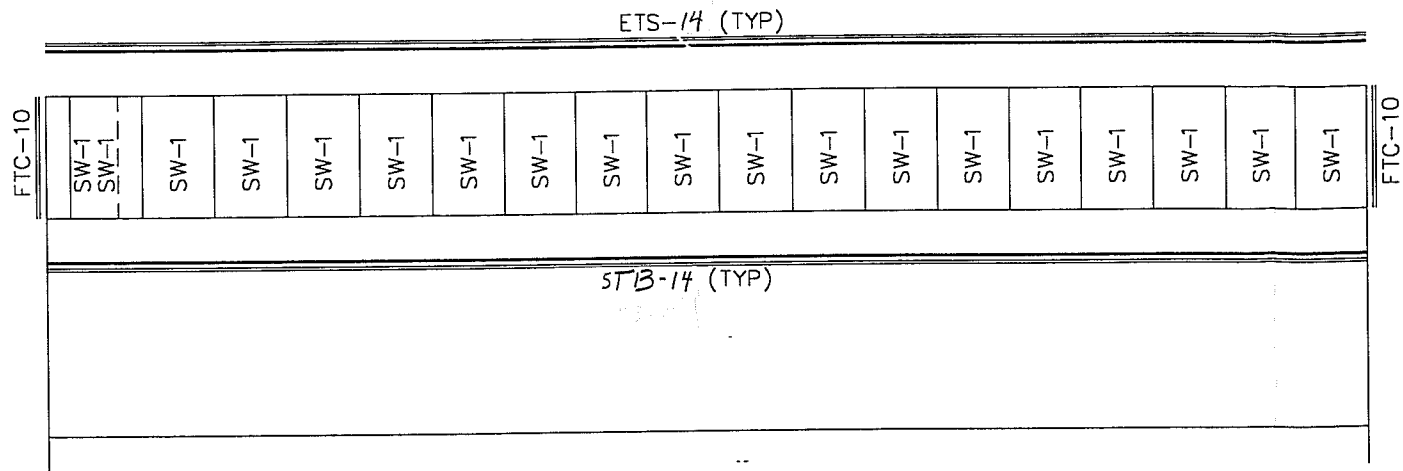
ROOF MEMBER SCHEDULE

EAVE STRUTS (ES-) 8C14 GAGE (TYP.)
PURLINS (P-) 6½Z14 GAGE (TYP.)
PURLINS (*P-) 6½Z16 GAGE (TYP.)
CABLE (RCB-) 5/16 ø

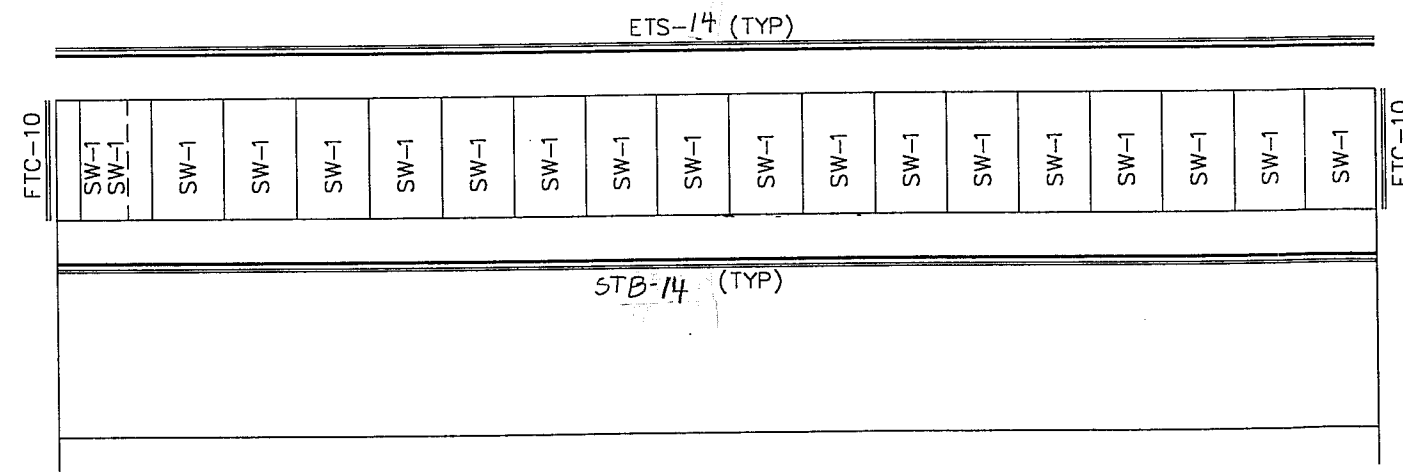


SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drawn By: JEH
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Descr.: 40X55X14 2.00:12 Check By: DN
Site : PULALLUP, WA 7-27-01
Scale : NONE Eng. Chk.:
P.O. : G25722 SHEET NO. E2 OF 8



ELEVATION AT COL. LINE A



ELEVATION AT COL. LINE B

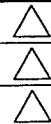
ERECTION REQUIREMENTS

BEGIN SHEETING STARTING
CENTERLINE OF HI-RIB
AT STEEL LINE.

2-0" BACKLAP AT LEFT
END.

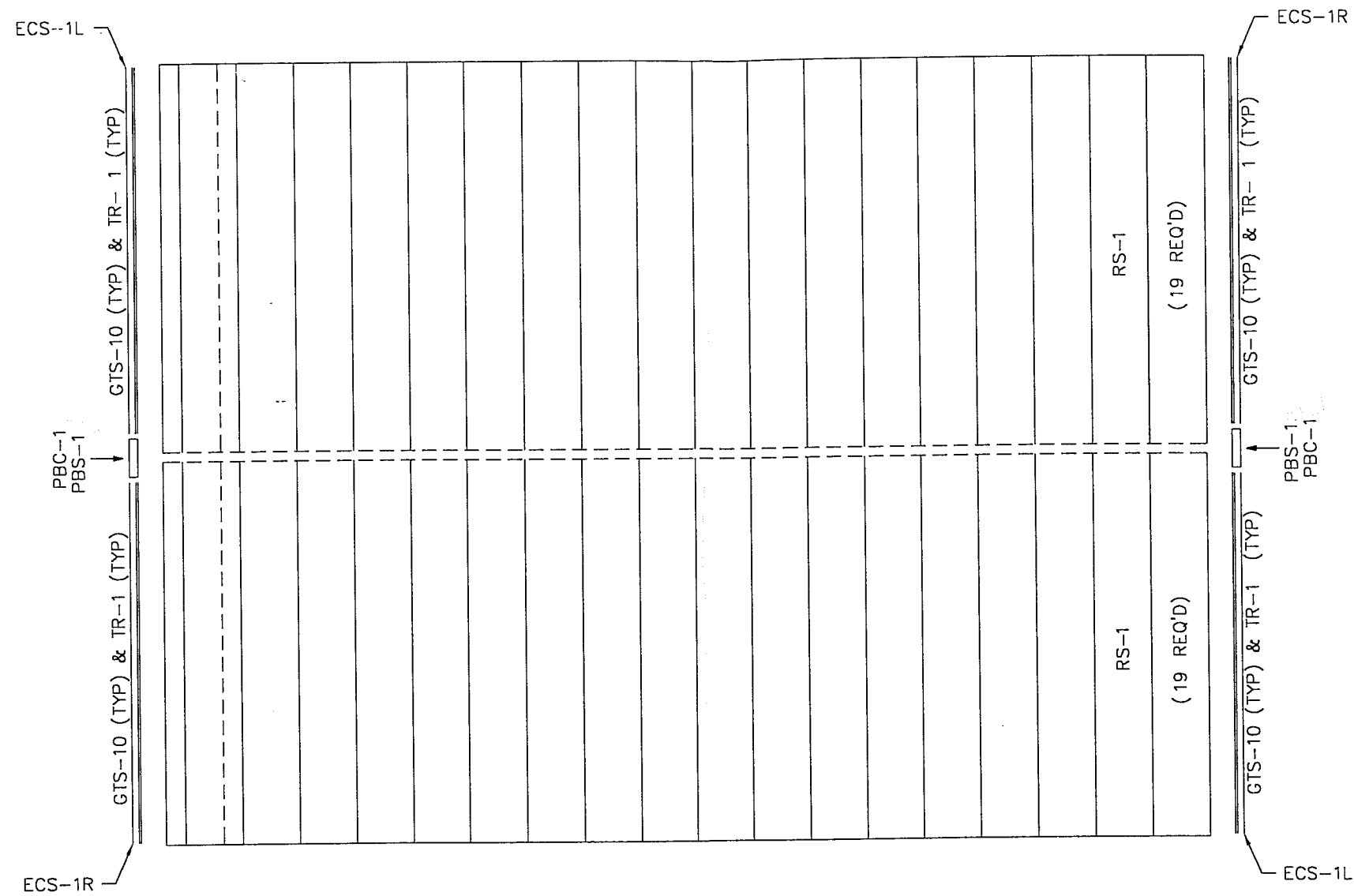
FOR TRIM DETAILS SEE G3.

FOR SCREW PATTERNS SEE G4.



SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drawn By: JEH
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Scale : NONE Eng. Chk.:
P.O. : G25722 SHEET NO. E3 OF 8



ROOF SHEETING PLAN

ERECTION REQUIREMENTS

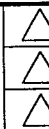
BEGIN SHEETING STARTING
CENTERLINE OF HI-RIB
AT STEEL LINE.

2-0" BACKLAP AT LEFT END.

19 RIDGE CAPS (RC-1) AT PEAK.

FOR TRIM DETAILS SEE G3.

FOR SCREW PATTERNS SEE G4.



SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA	Drawn By: <u>JEH</u>
Cust. : GRAND FORKS AUTO	<u>06/13/01</u>
Descr.: 40X55X14 2.00 :12	Check By: <u>DN</u>
Site : PUYALLUP, WA	<u>7-27-01</u>
Scale : NONE	Eng. Chk.: <u> </u>
P.O. : G25722	SHEET NO. E4 OF 8

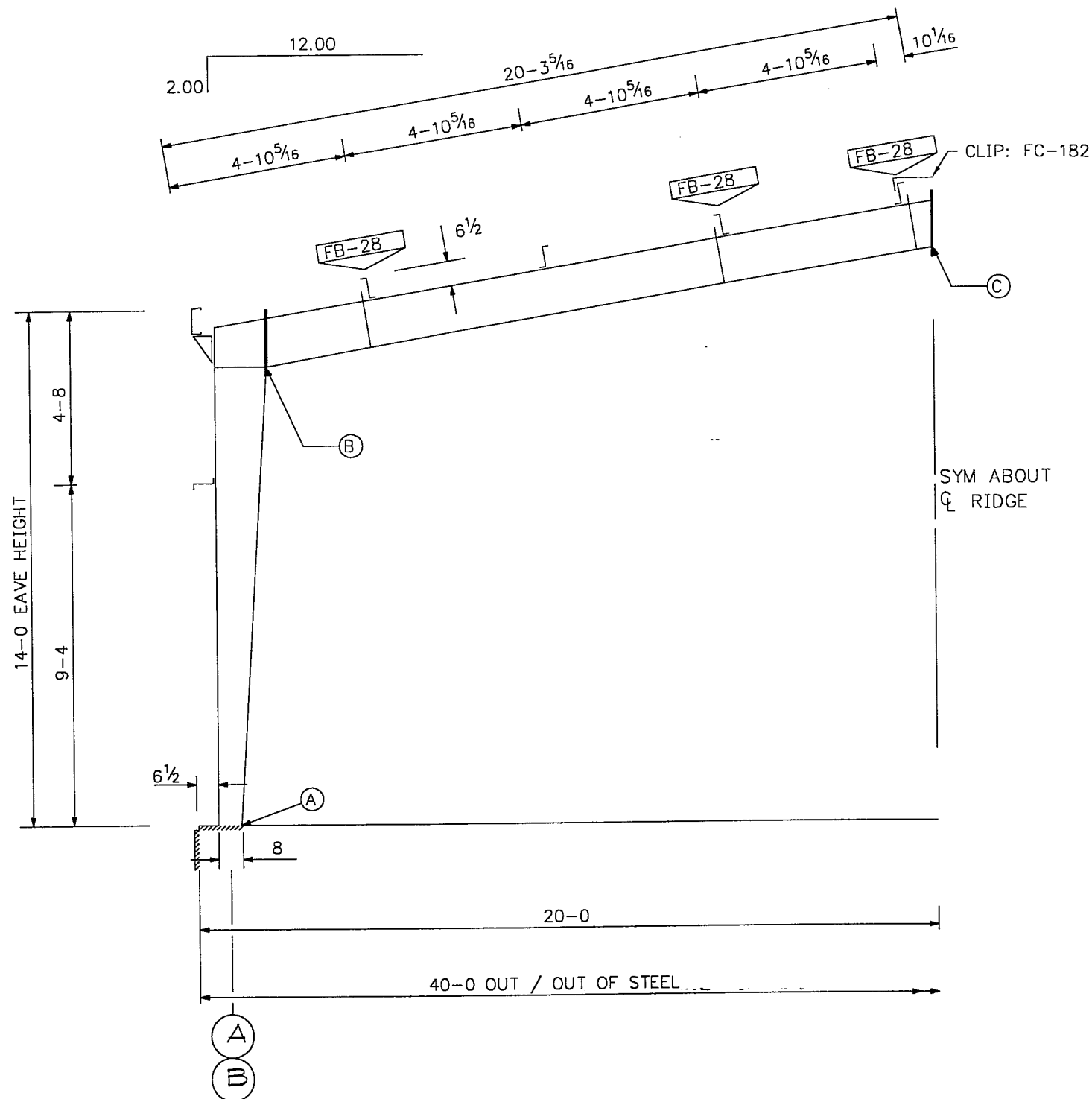


VERTICAL CLEARANCE AT LEFT HAUNCH = $12-8\frac{1}{4}$
 VERTICAL CLEARANCE AT PEAK = $15-5\frac{7}{8}$
 HORIZONTAL CLEARANCE HAUNCH TO PEAK = $18-4\frac{5}{16}$

SECTION NAME	LENGTH (FT)	DEPTHS (IN)	START	END	OUTER FLANGE (IN)	WEB (IN)	INNER FLANGE (IN)
					LEFT SIDE	CORNER WEB THICKNESS= 0.1790	
EXT. COLUMN---					(FY= 50. KSI)		
BL1A	5.00	7.63	9.35	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
BL1B	7.67	9.35	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.2500
RAFTER BEAM---					(FY= 50. KSI)		
LP1A	5.00	12.00	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
LP2A	10.00	12.00	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
LP2B	3.85	12.00	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
					RIGHT SIDE	CORNER WEB THICKNESS= 0.1790	
EXT. COLUMN---					(FY= 50. KSI)		
BR1A	5.00	7.63	9.35	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
BR1B	7.67	9.35	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.2500
RAFTER BEAM---					(FY= 50. KSI)		
RP1A	5.00	12.00	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
RP2A	10.00	12.00	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.1875
RP2B	3.85	12.00	12.00	5.0000	X 0.1875	0.1120	5.0000 X 0.1875

	$\triangle$
	$\triangle$
	$\triangle$

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Site : PUYALLUP, WA 7-27-01
Scale : NONE Eng. Chk.: _____
P.O. : G25722 SHEET NO. E5 OF 8



CROSS SECTION AT FRAME LINES 2, 3

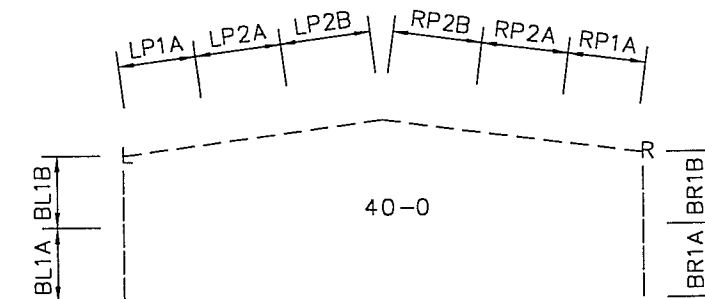
PLATE SIZE TABLE			SPLICE BOLT TABLE			
CONN.	LEFT SIDE	RIGHT SIDE	SPLICE	QTY	SIZE	TYPE
A	5 X 1/2 X 8	N/A	A	2	3/4 X 1-5/8	A307 B&N
B	5 X 1/2 X 1-9/8	5 X 1/2 X 1-9/8	B	10	3/4 X 2	A325 B&N
C	5 X 1/2 X 1-9/8	N/A	C	10	3/4 X 2	A325 B&N

VERTICAL CLEARANCE AT LEFT HAUNCH = 12'-6"
 VERTICAL CLEARANCE AT PEAK = 15'-2 13/16"
 HORIZONTAL CLEARANCE HAUNCH TO PEAK = 17'-11 5/16"

RIGID FRAME MEMBER SIZES

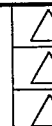
FRAME GEOMETRY:

LEFT EH= 14'-0 (FT) LEFT RS: 2 : 12
 RIGHT EH= 14'-0 (FT) RIGHT RS: 2 : 12
 DISTANCE TO PEAK FROM LEFT SIDE: 20.000 (FT)



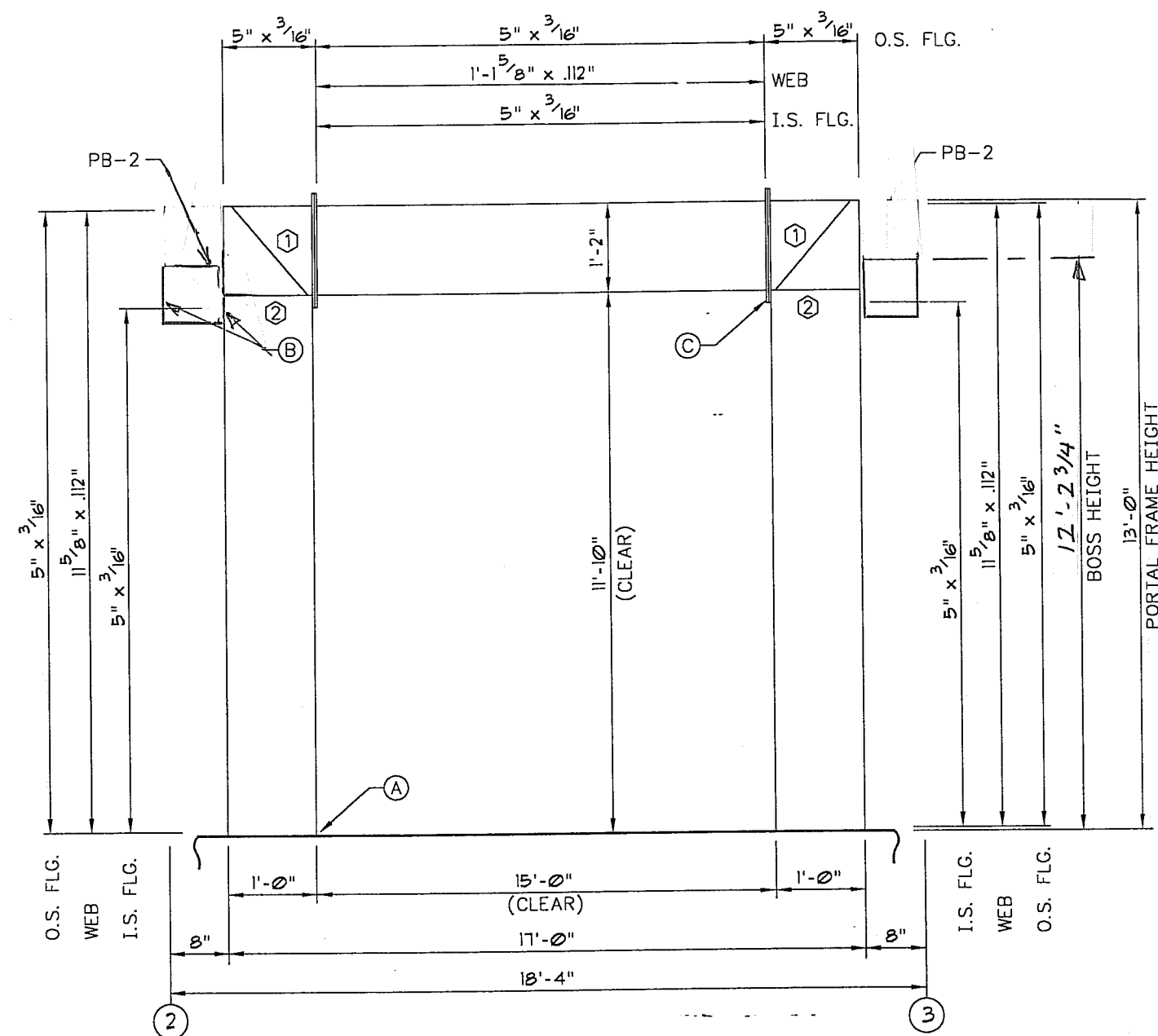
FRAME LINES: 2 3

SECTION NAME	LENGTH (FT)	-DEPTHS (IN) - START	-DEPTHS (IN) - END	OUTER FLANGE (IN)	WEB (IN)	INNER FLANGE (IN)
LEFT SIDE CORNER WEB THICKNESS= 0.1790						
EXT. COLUMN---						
BL1A	5.00	7.56	11.34	5.0000 X 0.1875	0.1120	5.0000 X 0.2500
BL1B	7.48	11.34	17.00	5.0000 X 0.1875	0.1120	5.0000 X 0.3750
<<<<< KNEE CONNECTION AT THE END OF THIS SECTION >>>>>						
RAFTER BEAM---						
LP1A	5.00	15.00	15.00	5.0000 X 0.1875	0.1790	5.0000 X 0.2500
LP2A	10.00	15.00	15.00	5.0000 X 0.1875	0.1120	5.0000 X 0.1875
LP2B	3.46	15.00	15.00	5.0000 X 0.1875	0.1120	5.0000 X 0.1875
<<<<< PEAK CONNECTION AT THE END OF THIS SECTION >>>>>						
RIGHT SIDE CORNER WEB THICKNESS= 0.1790						
EXT. COLUMN---						
BR1A	5.00	7.56	11.34	5.0000 X 0.1875	0.1120	5.0000 X 0.2500
BR1B	7.48	11.34	17.00	5.0000 X 0.1875	0.1120	5.0000 X 0.3750
<<<<< KNEE CONNECTION AT THE END OF THIS SECTION >>>>>						
RAFTER BEAM---						
RP1A	5.00	15.00	15.00	5.0000 X 0.1875	0.1790	5.0000 X 0.2500
RP2A	10.00	15.00	15.00	5.0000 X 0.1875	0.1120	5.0000 X 0.1875
RP2B	3.46	15.00	15.00	5.0000 X 0.1875	0.1120	5.0000 X 0.1875
<<<<< PEAK CONNECTION AT THE END OF THIS SECTION >>>>>						



SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drown By: JEH
 Cust. : GRAND FORKS AUTO 06/13/01
 Descr.: 40X55X14 2.00 : 12 Check By: DN
 Site : PUYALLUP, WA 7-27-01
 Scale : NONE Eng. Chk.:
 P.O. : G25722 SHEET NO. E6 OF 8



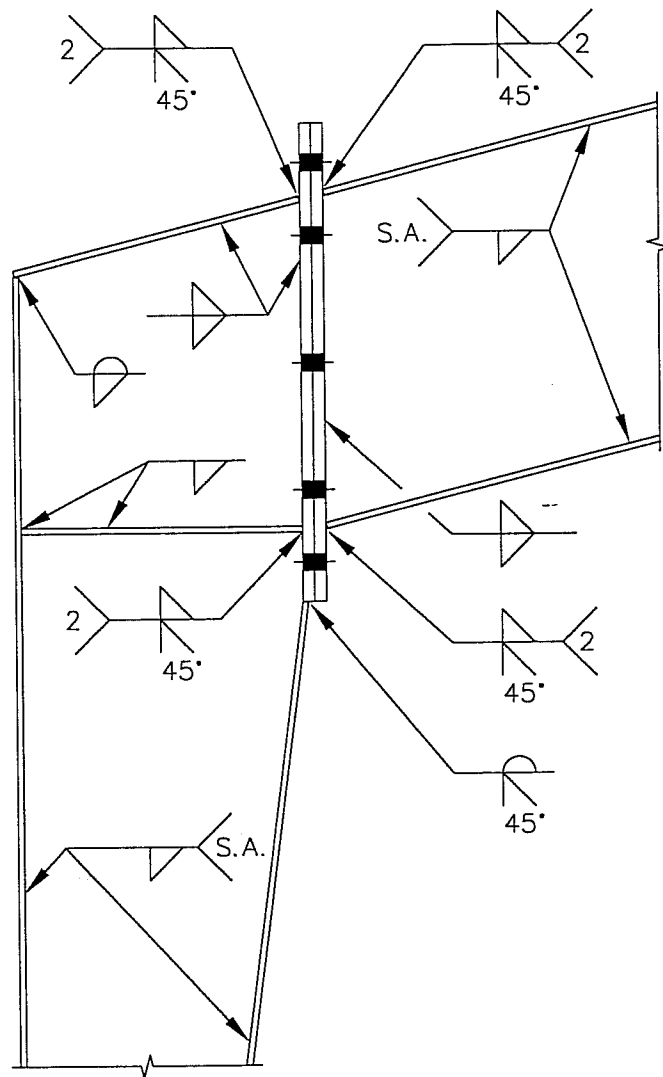
PORTAL FRAME CROSS SECTION

BETWEEN LINES: ② & ③
AT LINE(S): ① & ④

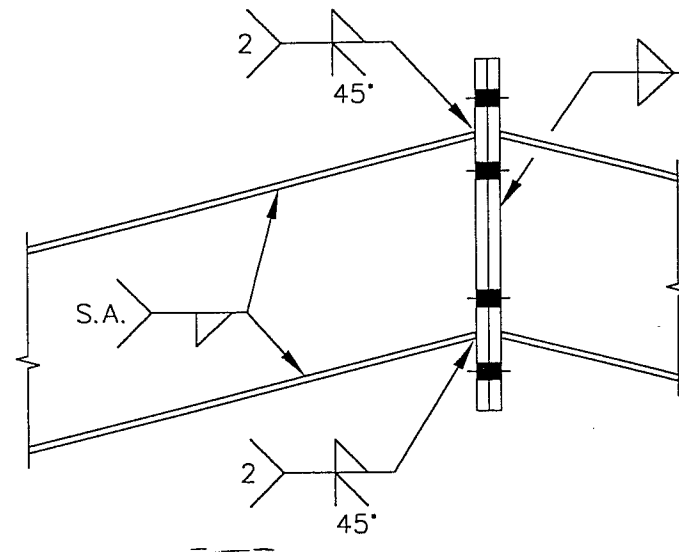
PLATE SIZE TABLE		SPlice BOLT TABLE			
CONN.	PLATE SIZE	SPlice	QTY.	SIZE	SIZE
A	5 x 1/2 x 1-0	A	4	3/4 ø x 1-5 1/2	A307 B&N
B	N/A	B	4	1/2 ø x 1 1/2	A325 B&N
C	5 x 1/4 x 1-7 1/4	C	8	3/4 ø x 2	A325 B&N

① 2.444" x 3/16"
② 2.444" x 1/4"
PB-2 5 x 0.1875 FLANGES
7.625 x 0.112 WEB

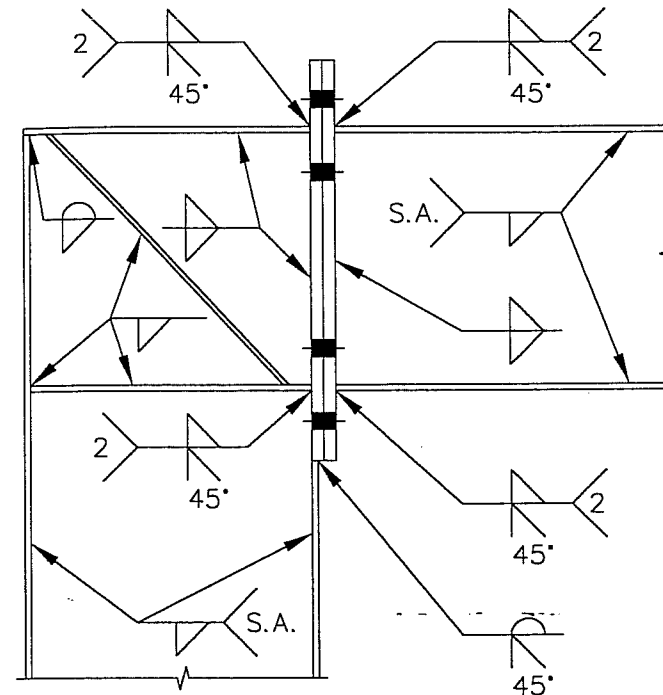
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SUNWARD CORPORATION	
Buyer : ENERGY SAVERS USA	Drawn By: JEH
Cust. : GRAND FORKS AUTO	06/13/01
Descr.: 40X55X14 2.00 :12	Check By: DN
Site : PUYALLUP, WA	7-27-01
Scale : NONE	Eng. Chk.: _____
P.O. : G25722	SHEET NO. E1 OF 8



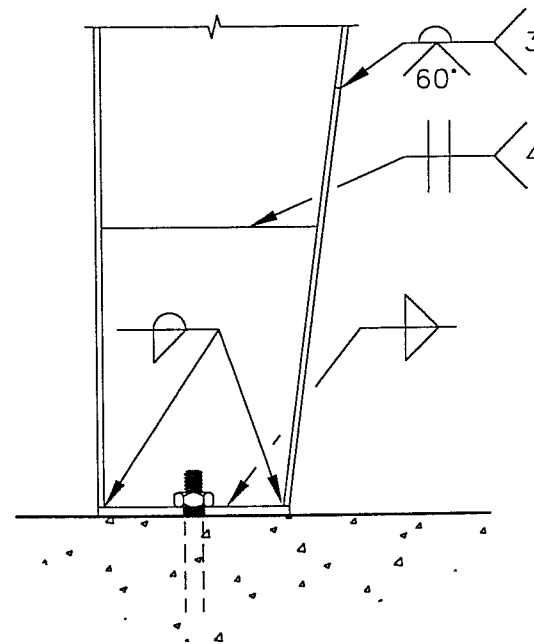
KNEE DETAIL



PEAK SPLICE



PORTAL FRAME KNEE DETAIL



BASE DETAIL

- 1) S.A. = SUBMERGED ARC PROCESS.
- 2) IF MATERIAL IS $\leq \frac{5}{16}$ " THICK, THEN WELDS WILL BE .
- 3) TYP. FLANGE SPLICE (IF MATERIAL IS $< \frac{3}{8}$ " THEN WELDS WILL BE .
- 4) TYP. WEB SPLICE (IF MATERIAL IS $> \frac{5}{16}$ " THEN WELDS WILL BE .
- 5) ALL WELD SIZES ARE $\geq$ THE THINNEST MATERIAL IN THE JOINT, EXCEPT FILLET WELDS WHICH ARE SIZED ACCORDING TO AISC TABLE (SEE BELOW).
- 6) ALL WELDING IS PERFORMED USING PROCEDURES WHICH HAVE BEEN DEVELOPED IN ACCORDANCE WITH AWS (U.S.) AND CSA (CANADIAN) STANDARDS.
- 7) S.A. WELDS ARE RETURNED 3" FROM SPLICE PLATES USING A FILLET WELD ON OPPOSITE SIDE OF WEB.

NOTES

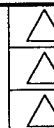
TYPICAL FRAME WELDS

MINIMUM SIZE FILLET WELD

(AISC 8th Edition - Table 1.17.2A; 9th Edition - Table J2.4)

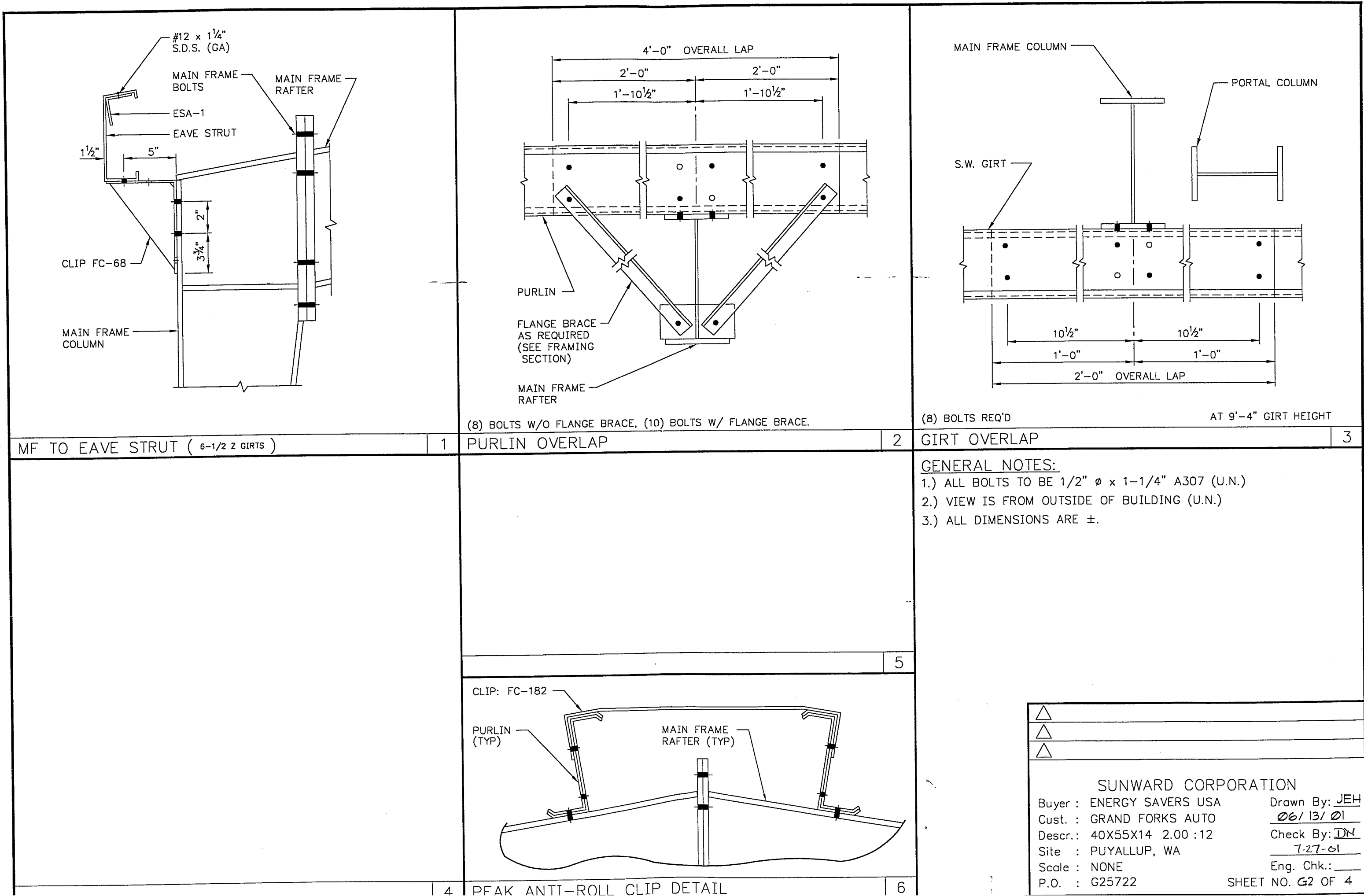
Material Thickness of Thicker Part Joined (Inches)	Minimum ^a Size of Fillet Welds (Inches)
To $\frac{1}{4}$ Inclusive	$\frac{1}{8}$
Over $\frac{1}{4}$ to $\frac{1}{2}$	$\frac{3}{16}$
Over $\frac{1}{2}$ to $\frac{3}{4}$	$\frac{1}{4}$
Over $\frac{3}{4}$	$\frac{5}{16}$

^a Lea Dimension of Fillet Welds



SUNWARD CORPORATION

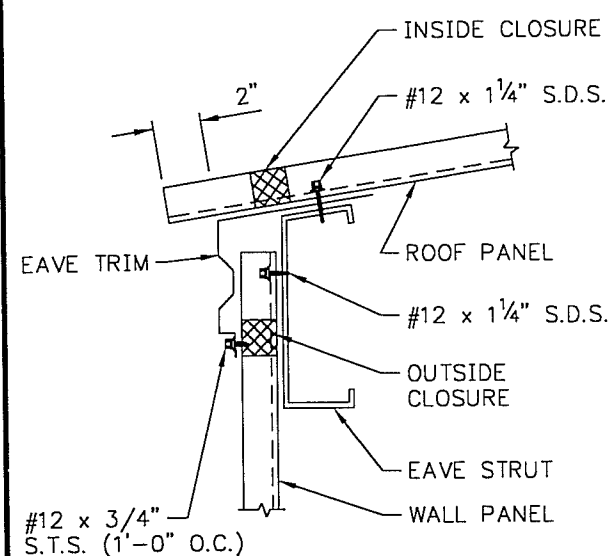
Buyer : ENERGY SAVERS USA Drawn By: JEH
 Cust. : GRAND FORKS AUTO 06/13/01
 Descr.: 40X55X14 2.00 :12 Check By: DN
 Site : PUYALLUP, WA 7-27-01
 Scale : NONE Eng. Chk.:
 P.O. : G25722 SHEET NO. E8 OF 8



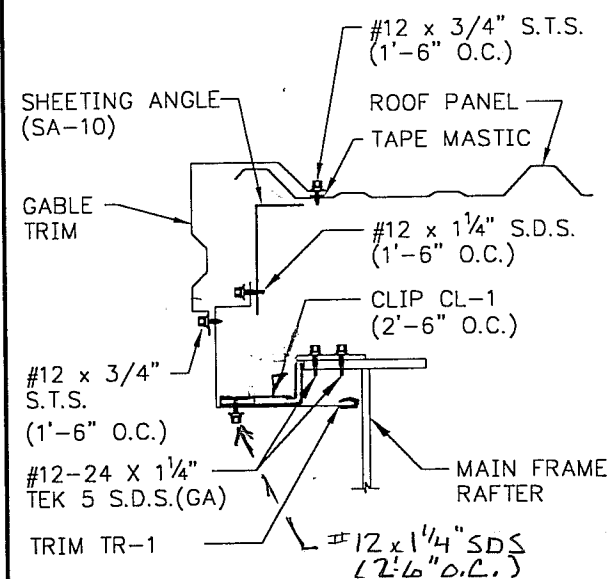
GENERAL NOTES:

- 1.) ALL BOLTS TO BE 1/2" ϕ x 1-1/4" A307 (U.N.)
- 2.) VIEW IS FROM OUTSIDE OF BUILDING (U.N.)
- 3.) ALL DIMENSIONS ARE $\pm$.

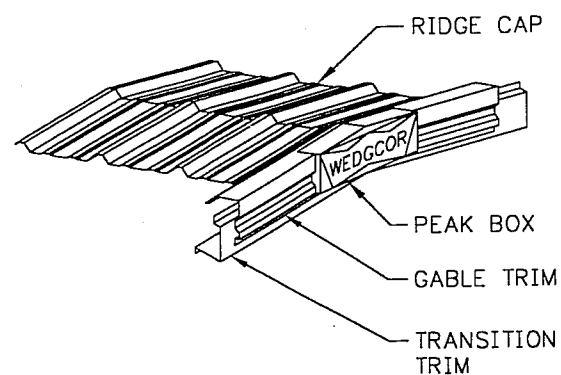
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SUNWARD CORPORATION Buyer : ENERGY SAVERS USA Cust. : GRAND FORKS AUTO Descr.: 40X55X14 2.00 :12 Site : PUYALLUP, WA Scale : NONE P.O. : G25722 Drawn By: JEH 06/13/01 Check By: DN 7-27-01 Eng. Chk.: _____ SHEET NO. G2 OF 4	



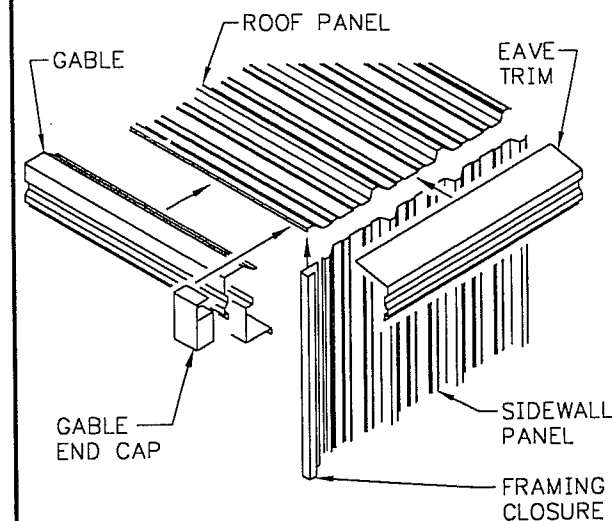
EAVE TRIM SECTION



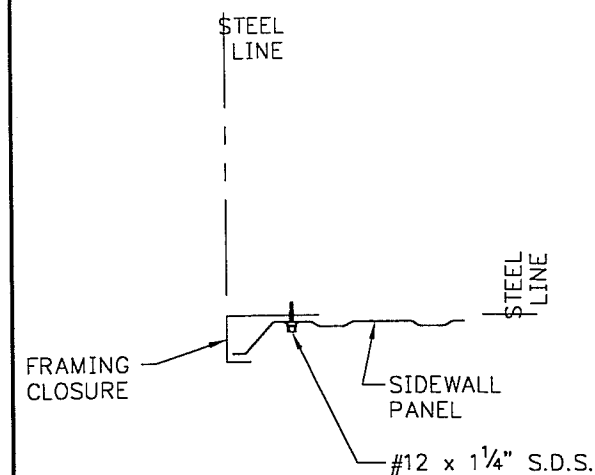
GABLE TRIM SECTION



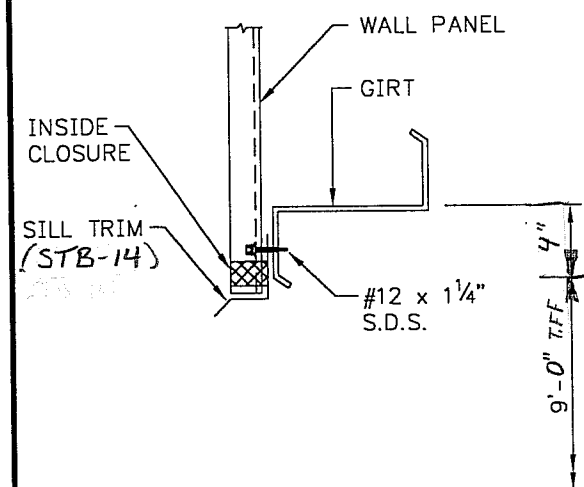
PEAK DETAIL	
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
25	100
26	100
27	100
28	100
29	100
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31	100
32	100
33	100
34	100
35	100
36	100
37	100
38	100
39	100
40	100
41	100
42	100
43	100
44	100
45	100
46	100
47	100
48	100
49	100
50	100
51	100
52	100
53	100
54	100
55	100
56	100
57	100
58	100
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61	100
62	100
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69	100
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71	100
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74	100
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77	100
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79	100
80	100
81	100
82	100
83	100
84	100
85	100
86	100
87	100
88	100
89	100
90	100
91	100
92	100
93	100
94	100
95	100
96	100
97	100
98	100
99	100
100	100



PEAK BLDG. CORNER DET.



CORNER TRIM DETAIL



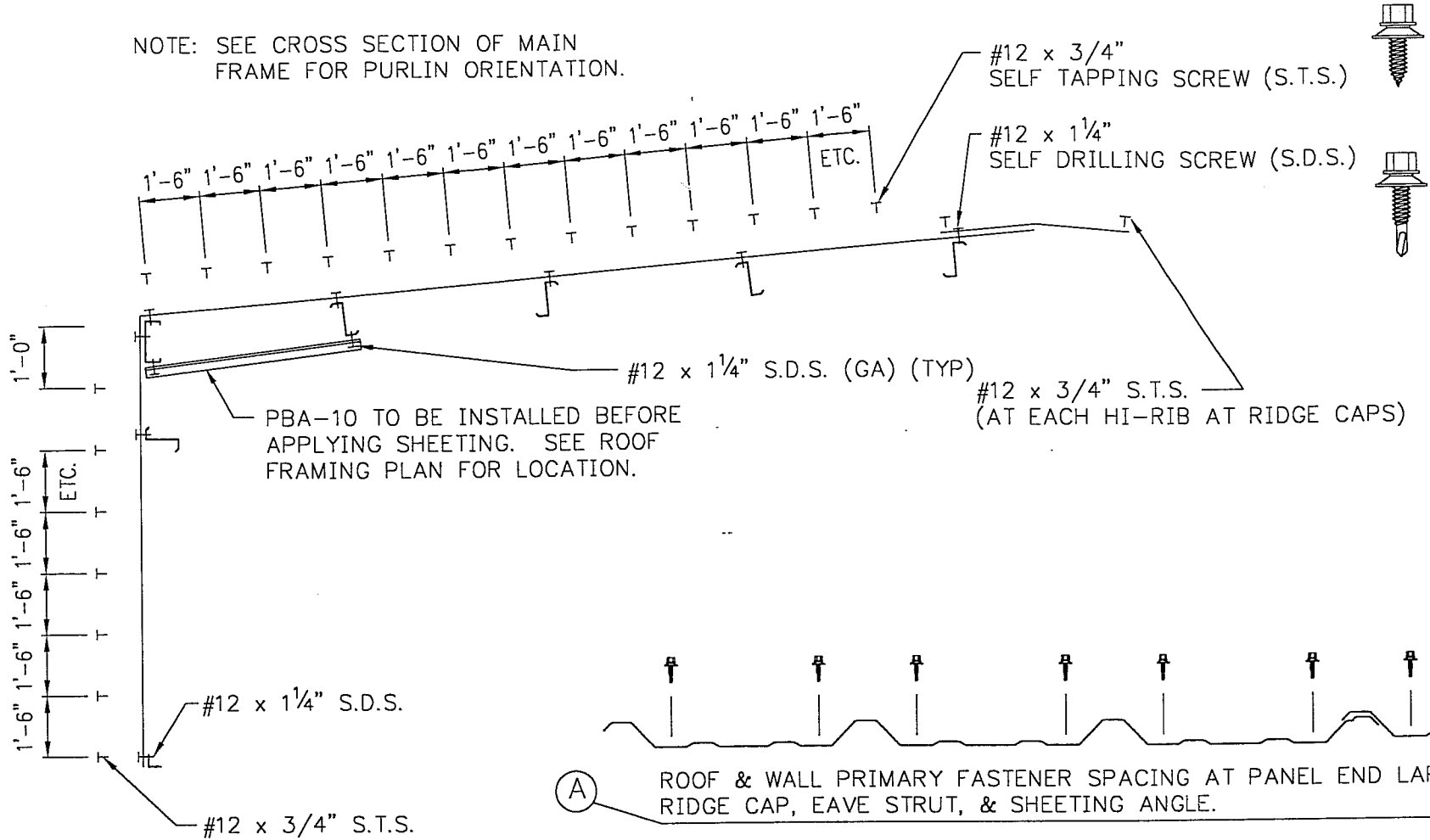
WALL PANEL SECTION

WHEN GALVALUME (GA) AND GALVANIZED (GV) MATERIAL COME IN CONTACT WITH ONE ANOTHER, A SURFACE COATING REACTION COULD OCCUR OVER A PERIOD OF TIME, DUE TO CONDENSATION OR HIGH HUMIDITY CONDITIONS. SUNWARD IS NOT RESPONSIBLE FOR MATERIAL DAMAGE CAUSED BY THIS REACTION. TO PREVENT THIS REACTION, FELT OR SEALANT SHOULD BE PLACED BETWEEN THESE SURFACES TO PREVENT DIRECT CONTACT OF ONE SURFACE WITH THE OTHER. FELT OR SEALANT IS NOT BY SUNWARD.

SUNWARD CORPORATION

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Site :	PUYALLUP, WA	<u>7-27-01</u>
Scale :	NONE	Eng. Chk.: _____
P.O. :	G25722	SHEET NO. <u>G3</u> OF <u>4</u>

NOTE: SEE CROSS SECTION OF MAIN
FRAME FOR PURLIN ORIENTATION.

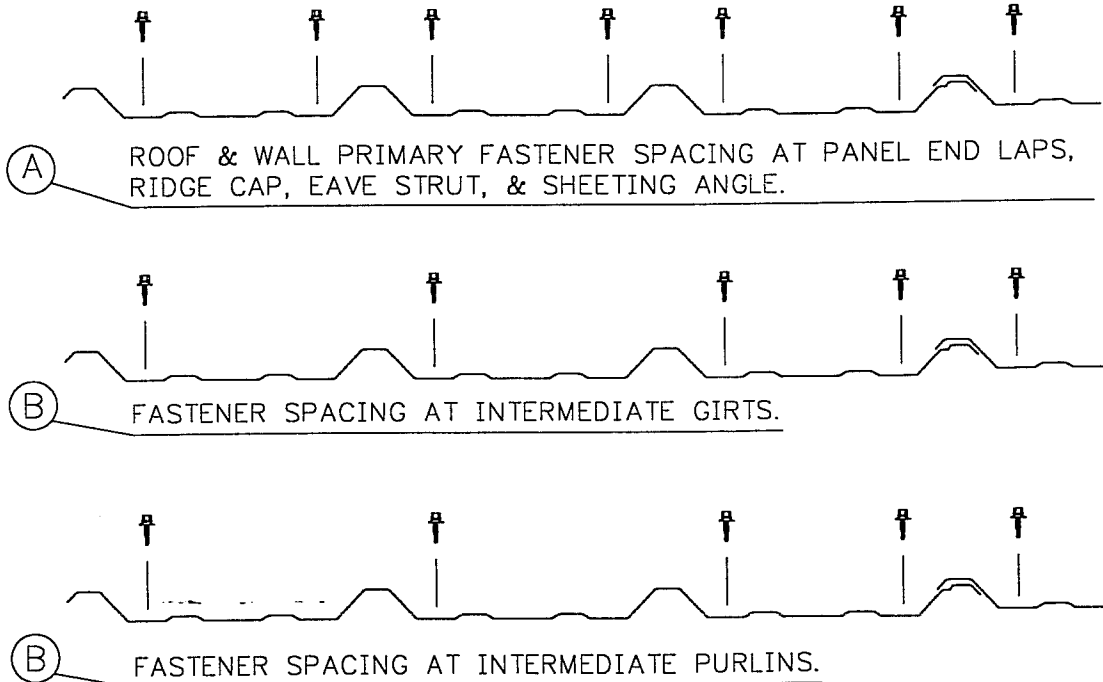


NOTE: SELF DRILLING SCREW PATTERNS

NON-INSULATED BUILDINGS:
USE PATTERNS (A) & (B).

INSULATED BUILDINGS:
USE PATTERN (A) ONLY.
(WHEN INSULATING BETWEEN THE
SHEETING AND RED IRON.)

4" OR MORE OF INSULATION REQUIRES SCREWS
LONGER THAN 1". PLEASE ADVISE SUNWARD IF
LONGER SCREWS WERE NOT PURCHASED.

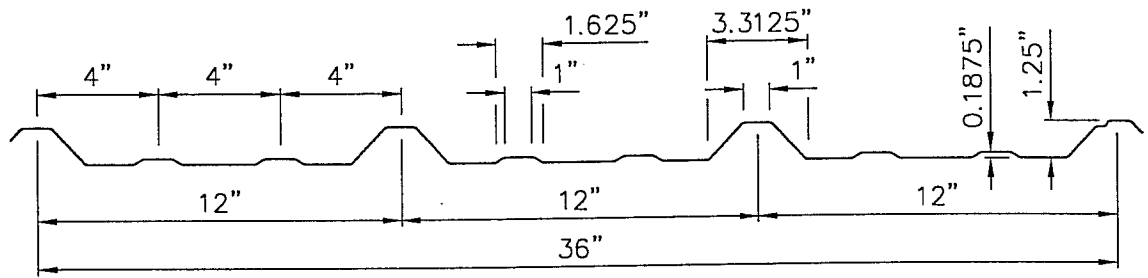


SHEETING DESCRIPTION

ROOF SHEETING	26	GA.	COLOR	GALVALUME (GA)
SCREW TYPE:	■ STANDARD	□ STAINLESS STEEL	□ OTHER	
WALL SHEETING	26	GA.	COLOR	MISTY GRAY (MG)
SCREW TYPE:	■ STANDARD	□ STAINLESS STEEL	□ OTHER	
TRIM COLOR	WHITE			
PARTITION SHEETING	N/A	GA.	COLOR	N/A
LINER PANEL	N/A	GA.	COLOR	N/A
SOFFIT PANEL	N/A	GA.	COLOR	N/A

OTHER ACCESSORIES

HI-RIB PANEL SECTION



LEGEND

C- MAIN FRAME COLUMN	FC- FRAMING CLIP	CL- CENTER LINE
RB- MAIN FRAME RAFTER	CL- SPECIAL CLIP	N.A. NOT APPLICABLE
CC- CORNER COLUMN	RC- RIDGE CAP	F.S. FAR SIDE
EC- ENDWALL COLUMN	RS- ROOF SHEET	N.S. NEAR SIDE
ER- ENDWALL RAFTER	SW- SIDEWALL	N.B.S. NOT BY SUNWARD
DJ- DOOR JAMB	EW- ENDWALL	O.C. ON CENTER
DH- DOOR HEADER	FTC- FRAMING CLOSURE	SL- STEEL LINE
G- GIRT	T- TRIM	O.H. OPPOSITE HAND
P- PURLIN	TR- SPECIAL TRIM	TYP. TYPICAL
ES- EAVE STRUT	A.S. AS SHOWN	U.N. UNLESS NOTED

CABLE SIZES

RCB- ROOF CABLE BRACING	□ NONE	■ 5/16" ø	□ 3/8" ø	□ 1/2" ø
SCB- SIDEWALL CABLE BRACING	■ NONE	□ 5/16" ø	□ 3/8" ø	□ 1/2" ø
ECB- ENDWALL CABLE BRACING	■ NONE	□ 5/16" ø	□ 3/8" ø	□ 1/2" ø

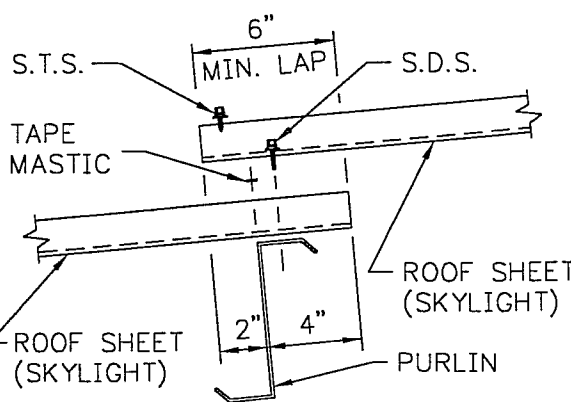
NOMENCLATURE

BA-10 - BASE SHEETING ANGLE; 2" x 4" x 16 GA., GALV.
PBA-10 - PURLIN BRIDGING ANGLE; 1" x 1" x 16 GA., GALV.
SA-10 - SHEETING ANGLE; 2-7/16" x 5-11/16" x 16 GA., GALV.
FB- - FLANGE BRACE; 1-1/2" x 1-1/2" x 1/8" ANGLE
FB- -X- FLANGE BRACE; 2-1/2" x 2-1/2" x 3/16" ANGLE

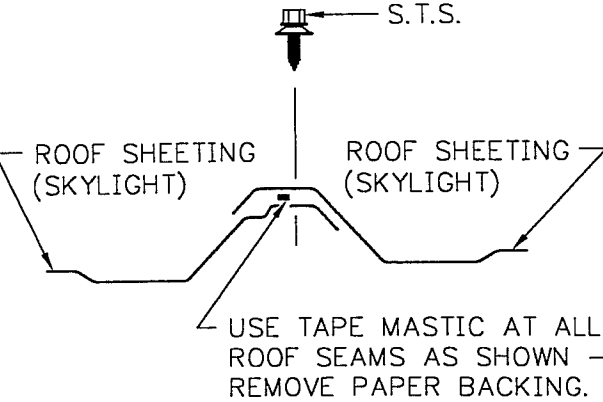
SUNWARD CORPORATION

Buyer : ENERGY SAVERS USA Drawn By: JEH
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P.O. : G25722 SHEET NO. G4 OF 4

ROOF SHEETING (SKYLIGHT) END LAP



ROOF SHEETING (SKYLIGHT) SIDE LAPS



WALL SHEETING (WALL-LIGHT) END LAP

