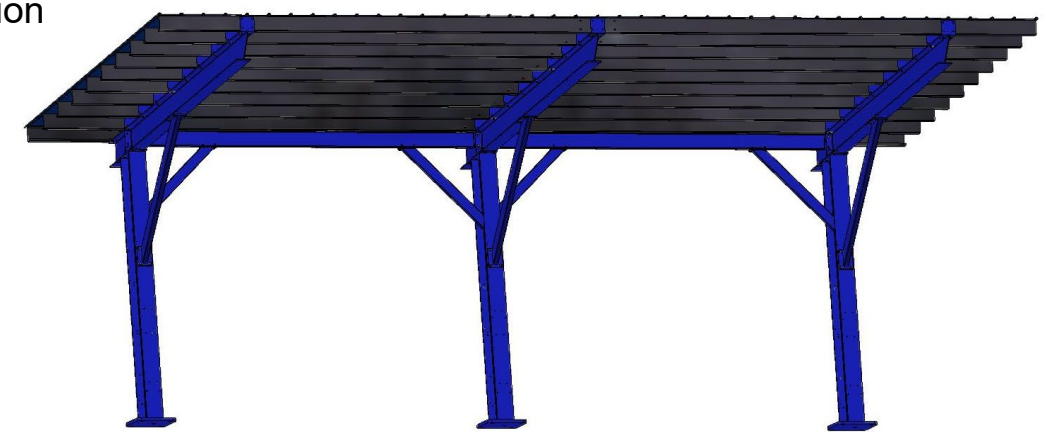
Models- **43000 12ft and 14ft Oasis Shelter**



PRODUCT INFORMATION

Please take a moment to fill out the information below in order to aid us with any future sales or service inquiries. Model number and serial number information can be found on the serial tag located inside the control box and/or on the lower exterior of the can. Key number can be found on the tag that comes attached to the keys. There may be more than one key number depending on unit.

Please keep this information with your records.

MODEL#:_____

SERIAL#:_____

KEY NUMBER(S):_____

DATE PURCHASED:_____

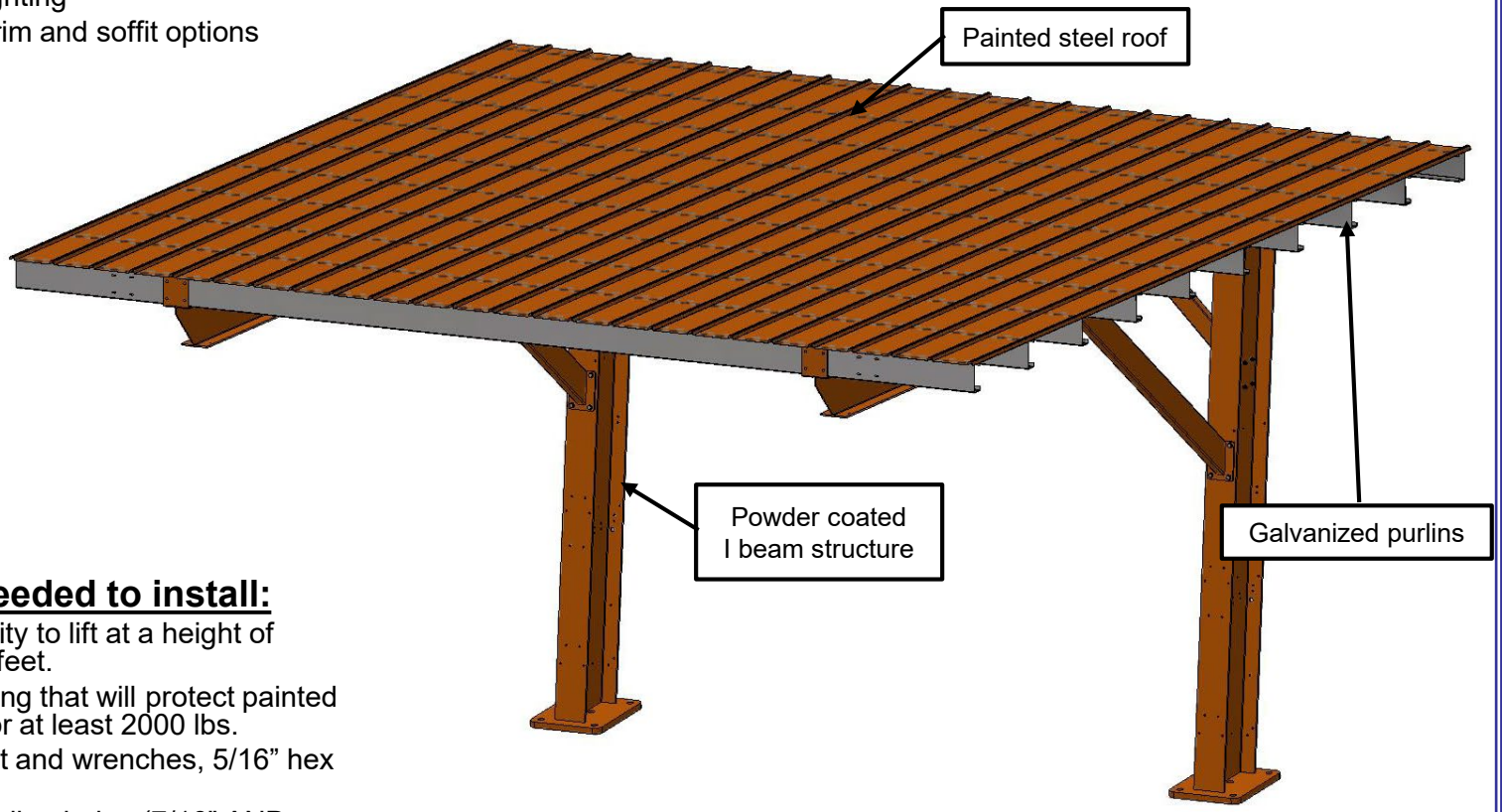
DISTRIBUTOR:_____

J.E. Adams Industries
1025 63rd Ave. S.W.
Cedar Rapids, IA 52404
1-800-553-8861
www.jeadams.com

Specifications

Unit features:

- Large shelter system
- Ability to daisy chain shelter to create multiple bays
- Powder coated I beams, zinc rich primer
- Designed to work with a variety of JE Adams vacuum products
- Standard version has 12 ft I beam spacing, optional 14 ft I beam spacing
- Optional Led Lighting
- Perimeter roof trim and soffit options



Weight 2728lbs

Equipment needed to install:

-Machine with ability to lift at a height of approximately 14 feet.

-Soft straps for lifting that will protect painted surfaces. Rated for at least 2000 lbs.

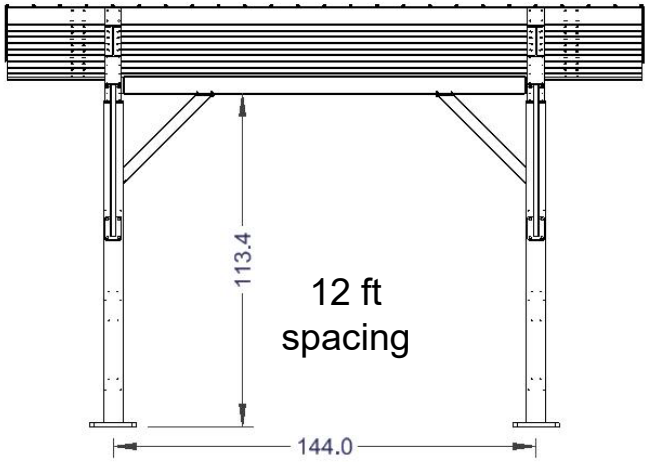
-3/4”, 9/16” socket and wrenches, 5/16” hex driver

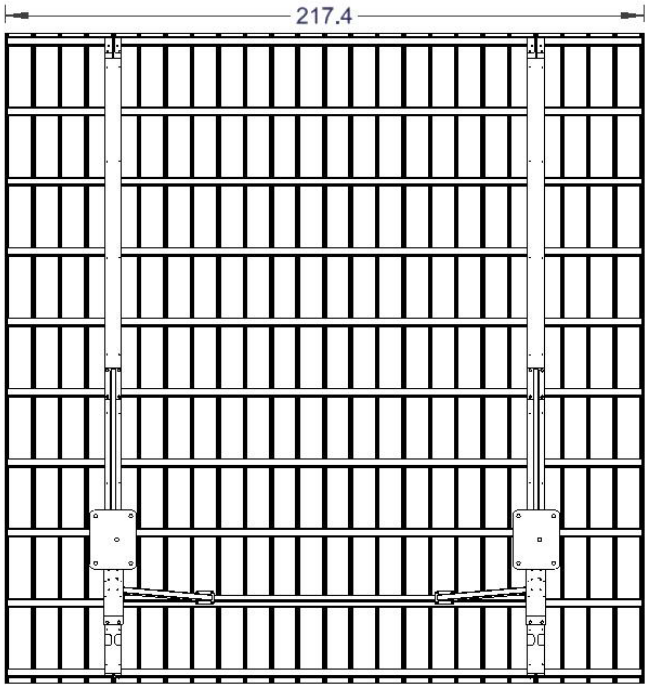
-Drift pins to help align holes (7/16” AND 5/8” holes).

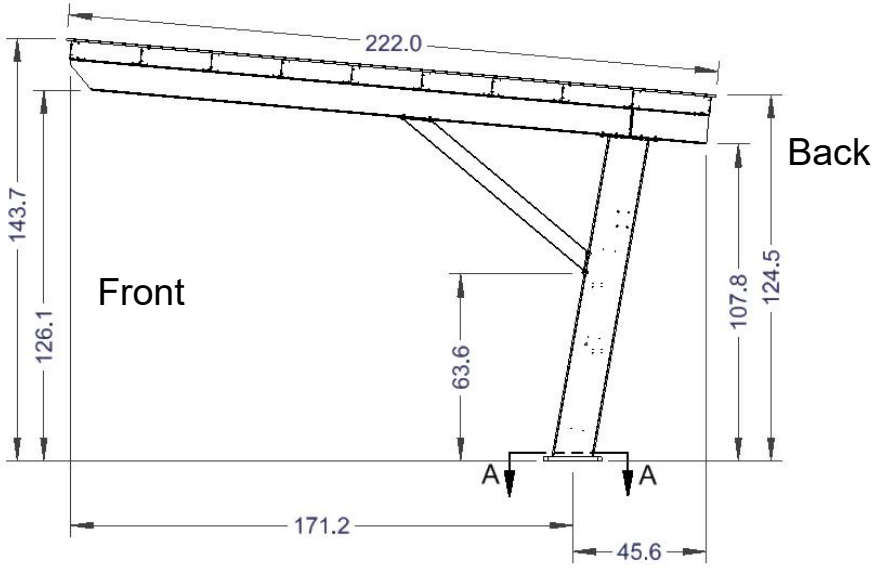
-Level

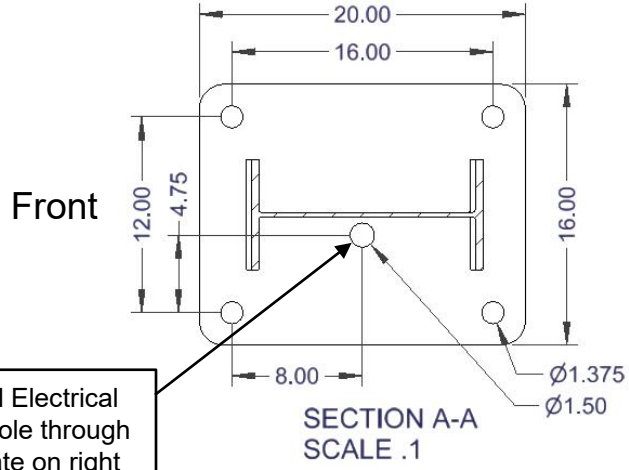
-(4) 4x4 or 6x6 wood blocks for cribbing.

Dimensions, 12ft Spacing



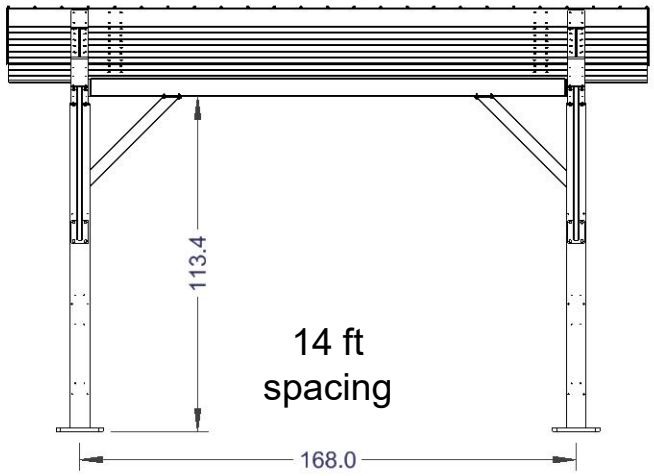


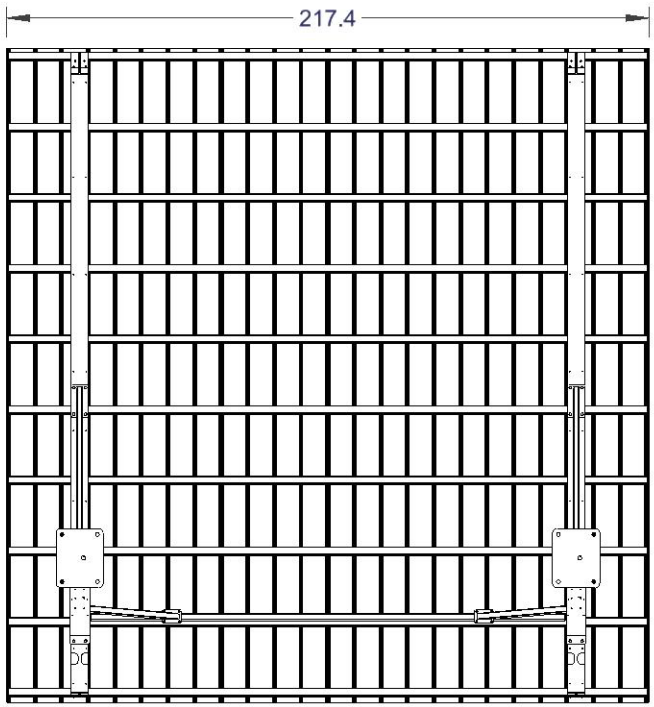


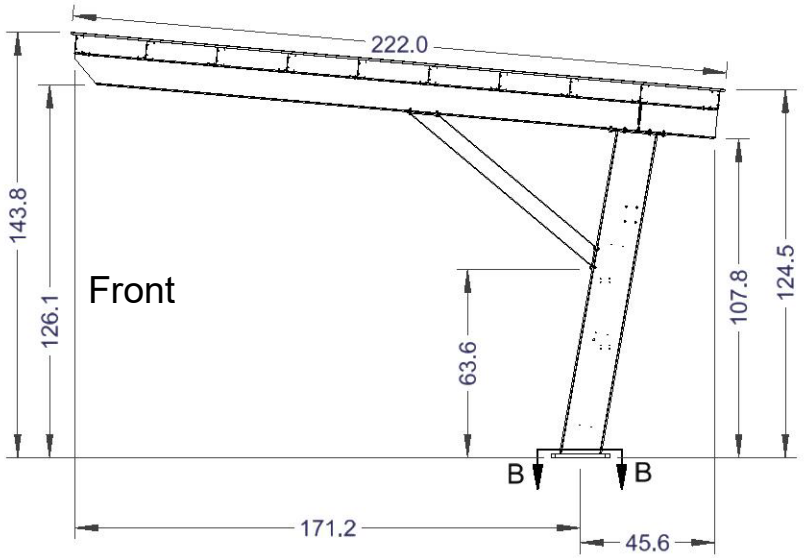


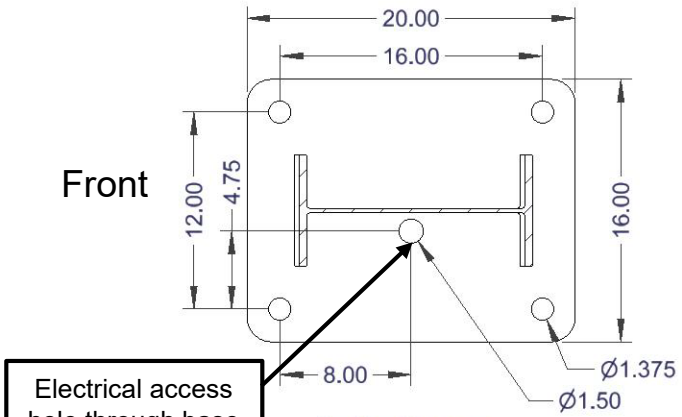
Optional Electrical access hole through base plate on right side of beam

Dimensions, 14ft Spacing





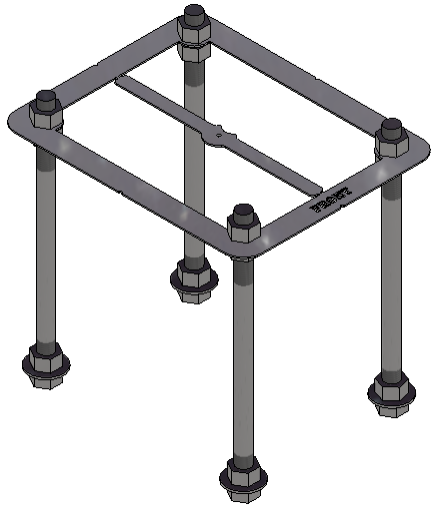




Electrical access hole through base plate on right side of beam

Installation: Foundation

STEP 1 – Layout site preparation is critical, plan accordingly. **Foundation needs to meet local codes.**



43000-CFPA kit available, includes 1-1/8" threaded rods, nuts, flat and lock washers and fixture plate to hold 12" x 16" rectangular pattern.

****JE Adams assumes no liability nor makes any representations of suitability of foundation recommendations. Owner/installer are advised to seek out local Engineering firm to conform with local/state building code and soil requirements.**

•Information presented here was developed by local engineering firm to meet 2018 International Building Code (IBC) which references ASCE 7-16 in regards to applied load development. Wind load and snow load calculations were developed for a structure of Risk Category I, with wind speeds of 107 mph and snow loads of 60 psf.

Foundation reactions at a single column produced from nominal load combinations utilizing allowable stress design of the canopy frame were:

Daisy Column Version

-1. Overturning: 74,500 ft-lb
-2. Uplift: 2305 lb
-3. Down-drag: 13,166 lb
-4. Lateral: 2500 lb

For evaluation purposes only, with normal soils a presumptive soil values per IBC of clay, sandy clay, silty clay, clayey silt, silt and sandy silt (CL, ML, MH, and CH.) were used.

With the above soil types the pier requirements are as follows:

Daisy Chained (shared center columns)

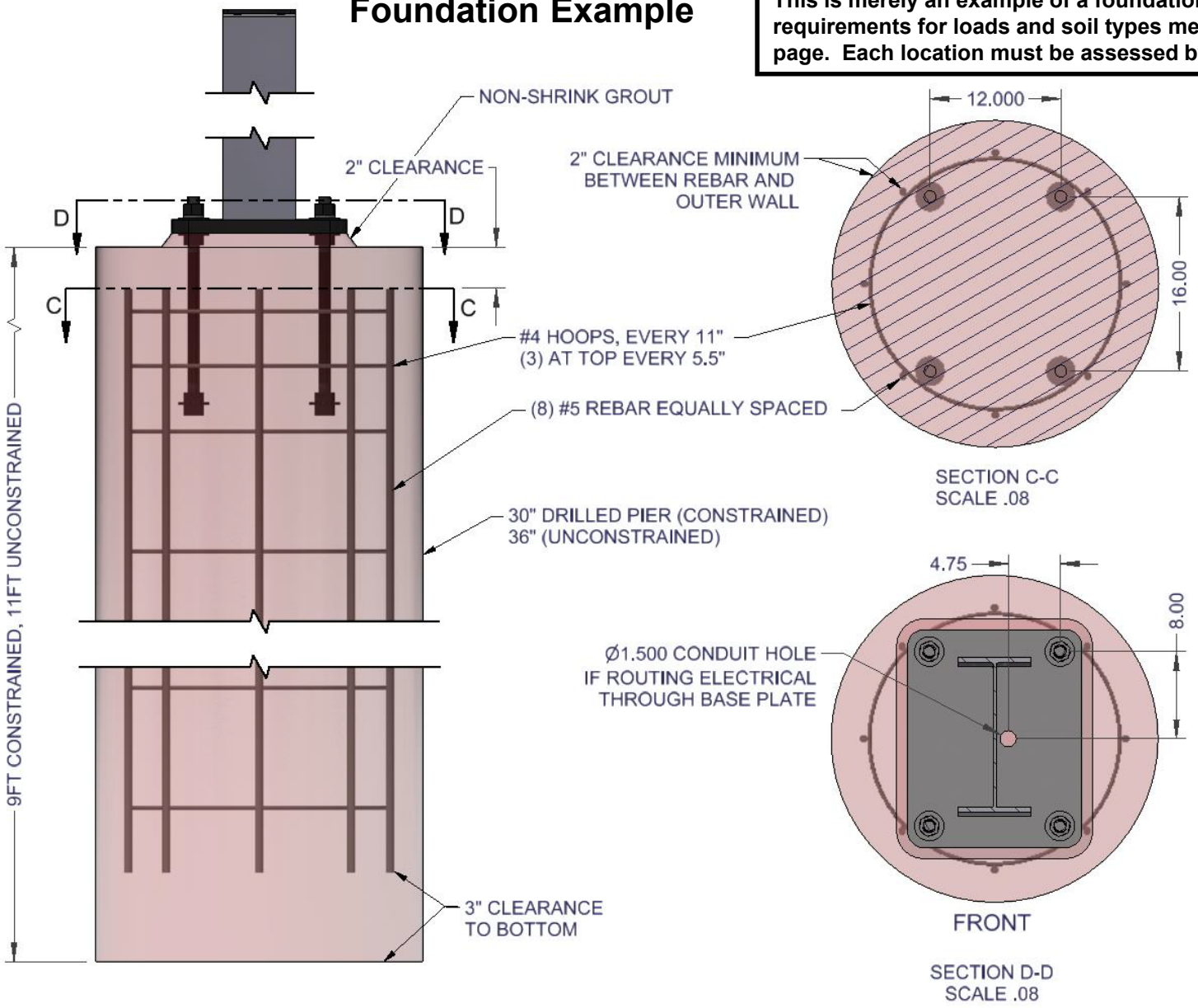
Constrained: Pier diameter- 30", Pier depth- 9'

Unconstrained: Pier diameter- 36", Pier depth- 11'

This design on following page will not be suitable for all soil types. In some cases it may lack in bearing support and in others it may be excessive. All locations must have soil types assessed and adjustments made by local licensed engineers.

Foundation Example

This is merely an example of a foundation that meets the requirements for loads and soil types mention on previous page. Each location must be assessed by local engineers.



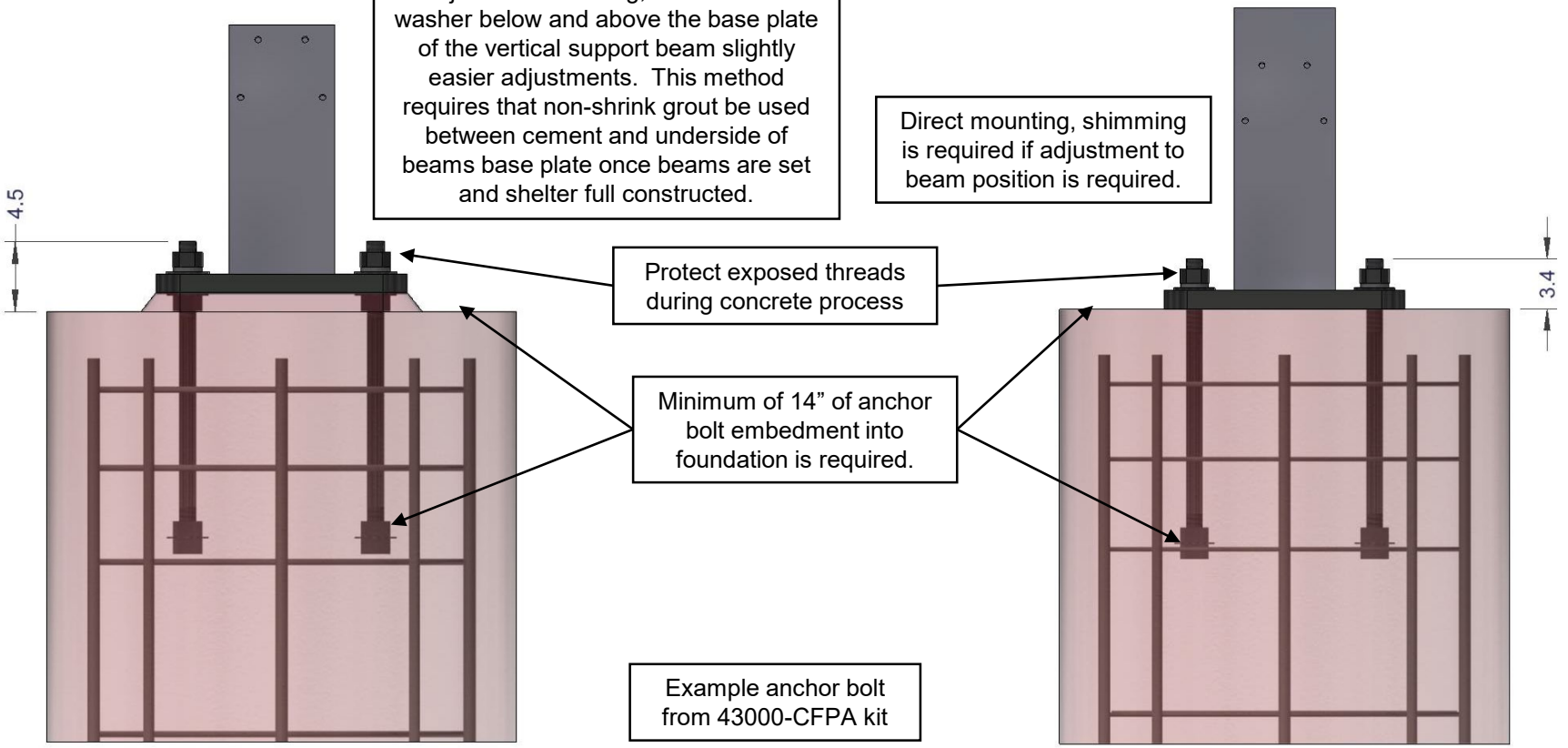
Foundation Example, cont.

Local codes may dictate foundation requirements, one must consult local engineering firm about requirements for structure and footings.

Two options for bolting vertical support beams to ground, either method requires anchor bolts of at least 1-1/8” diameter. These must be embedded at least 14” in a suitable footing.

Adjustable mounting, a nut and flat washer below and above the base plate of the vertical support beam slightly easier adjustments. This method requires that non-shrink grout be used between cement and underside of beams base plate once beams are set and shelter full constructed.

Direct mounting, shimming is required if adjustment to beam position is required.



Protect exposed threads during concrete process

Minimum of 14” of anchor bolt embedment into foundation is required.

Example anchor bolt from 43000-CFPA kit

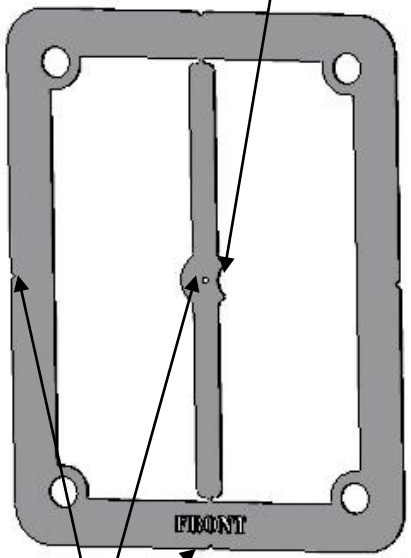
Short thread end (3”), use nut, flat-washer and nut, tighten, goes in concrete

Foundation Footings

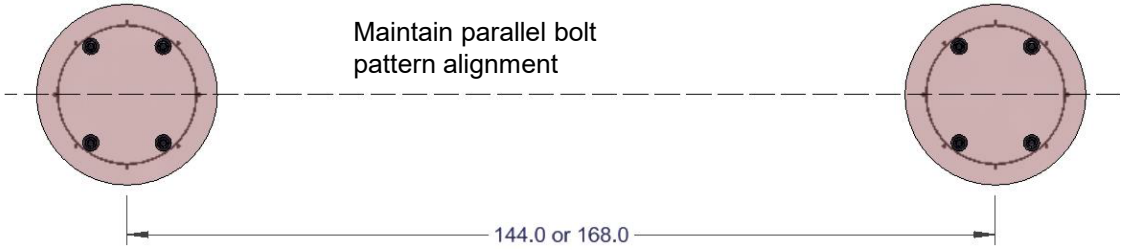
Important that footings for vertical I beam posts be level and bolt orientation be square to each other or roof beams will not be square at assembly stage. Spread of 144” (12ft) OR 168” (14ft) center to center is critically important. Allow for 4.5” of anchor bolt exposure for post leveling (nut above and below base plate). If mounting base directly to pier then 1.25” less bolt exposure is suggested. Minimum anchor bolt depth is 14”.

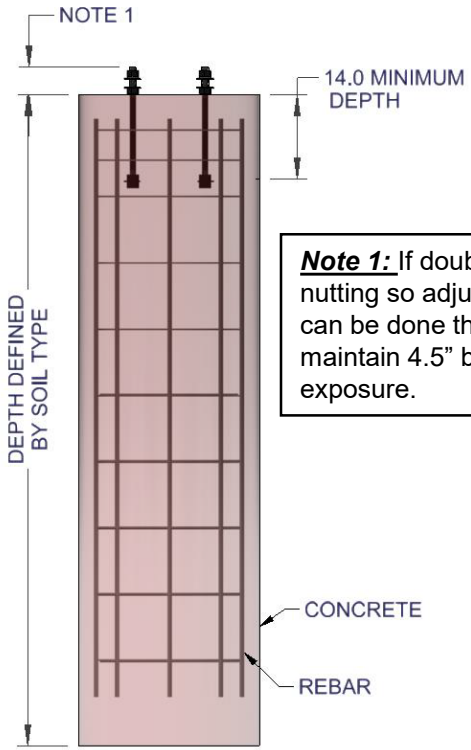
43000-CFPA Kit is very useful to align both patterns, notches in plate can be aligned with center string.

Notch on center area represents conduit hole location in bottom plate.

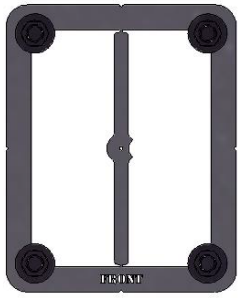


Center mark notches in perimeter of plate and center hole in middle of bolt pattern make pattern alignment easy.

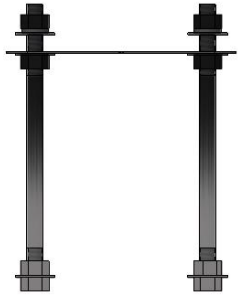


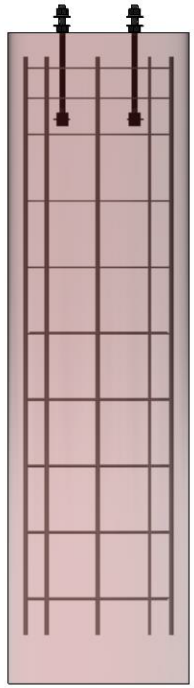


Note 1: If double nutting so adjustments can be done then maintain 4.5” bolt exposure.



43000-CFPA Kit

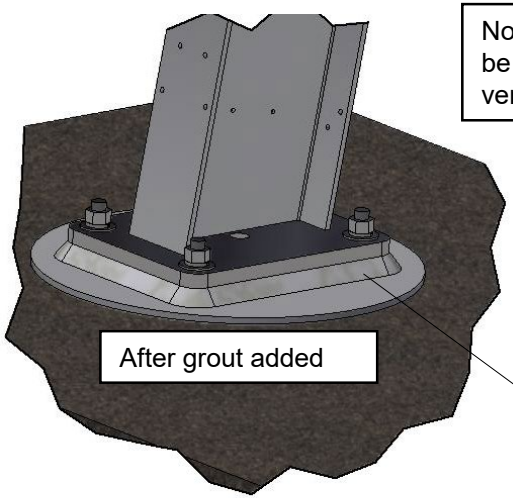




Vertical I Beam Post Assembly

CAUTION: Structural elements have significant weight and extreme caution should be taken when handling.

Take care to protect paint while lifting posts over threaded anchor bolts. Approximate weight of single I beam weldment is 440 lbs.



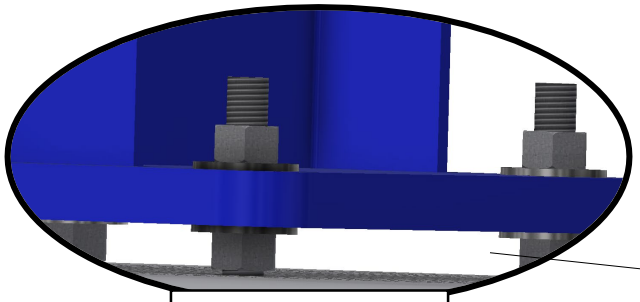
After grout added

Note orientation of post, it should be leaning back 10 degrees and vertical side to side

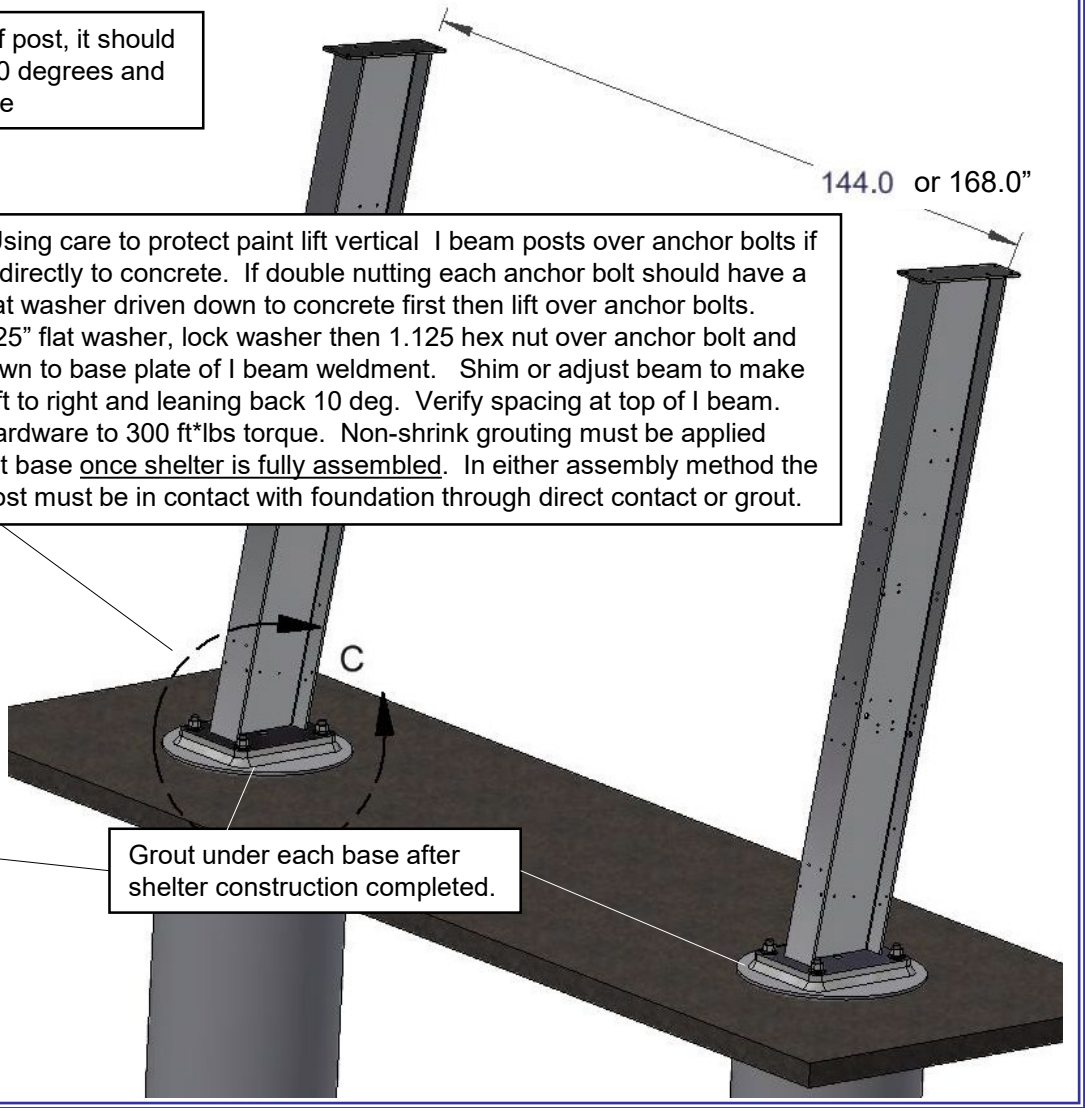
144.0 or 168.0”

Step 1. Using care to protect paint lift vertical I beam posts over anchor bolts if mounting directly to concrete. If double nutting each anchor bolt should have a nut and flat washer driven down to concrete first then lift over anchor bolts. Place 1.125” flat washer, lock washer then 1.125 hex nut over anchor bolt and tighten down to base plate of I beam weldment. Shim or adjust beam to make vertical left to right and leaning back 10 deg. Verify spacing at top of I beam. Tighten hardware to 300 ft*lbs torque. Non-shrink grouting must be applied under post base once shelter is fully assembled. In either assembly method the base of post must be in contact with foundation through direct contact or grout.

DETAIL C
SCALE .08



Before grout added



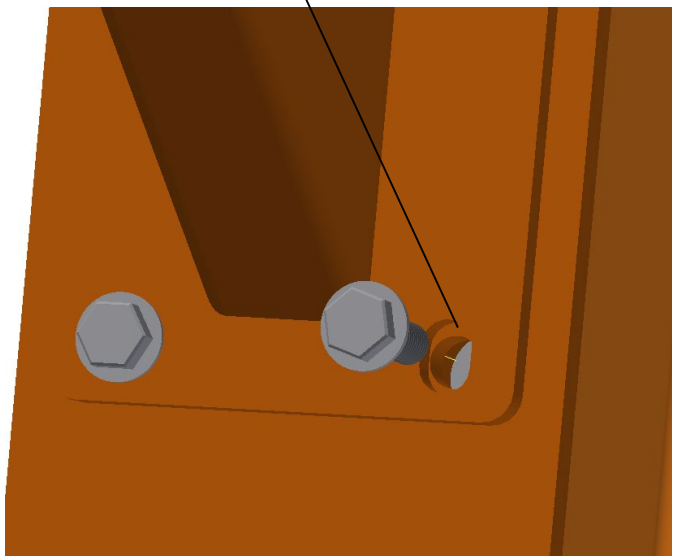
Grout under each base after shelter construction completed.

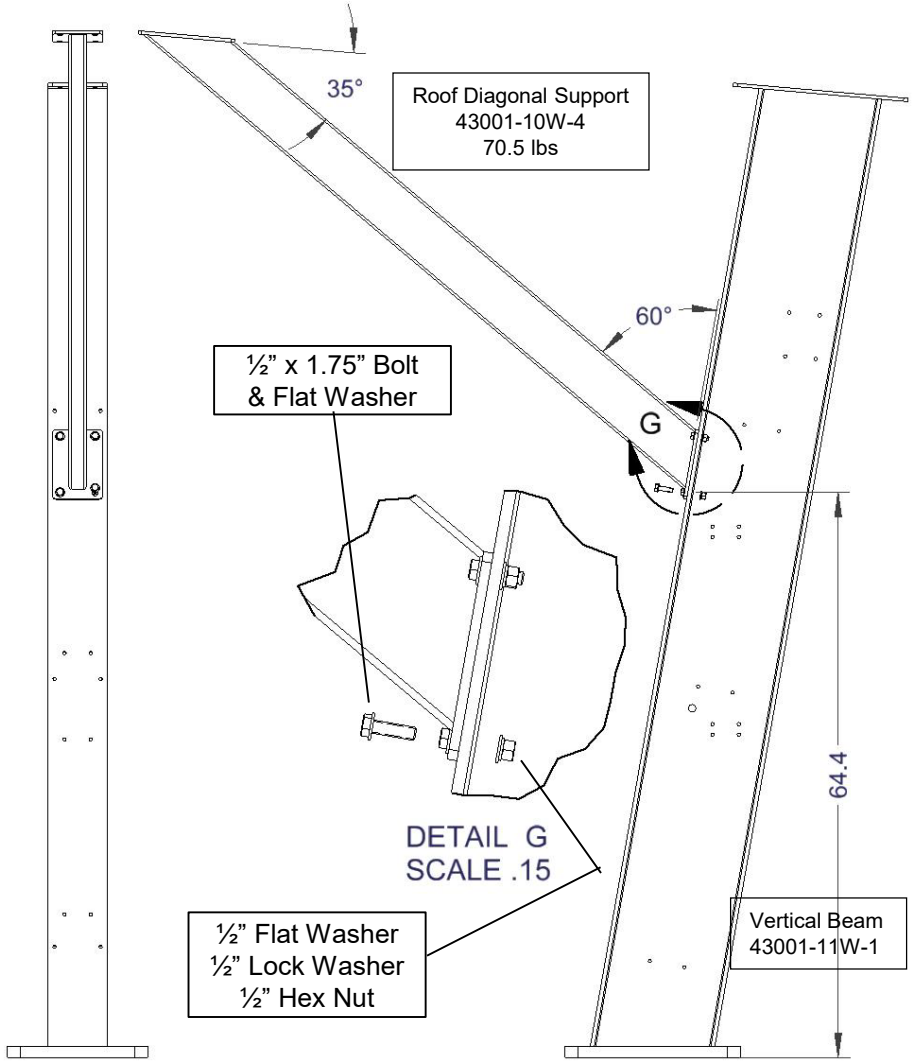
General practice throughout the assembly of this structure unless otherwise directed, there should always be a flat washer against paint on each side of all bolted joints to protect the painted finish.

Shelter Assembly

STEP 2 – Bolt (1) of the longer Roof Diagonal Support Tubes (43001-10W-4) to the Main Vertical I Beam using 5/8” holes on front face of I beam approximately 64.4” up from bottom. The 60 deg. Side should be mounted to main beam, steeper angled end should be up. Center slots on plate over 5/8” holes on I beam and bolt together using ½” x 1.75” hex bolts and nuts with flat washer always between turning hardware and paint. Torque to 75 ft*lbs

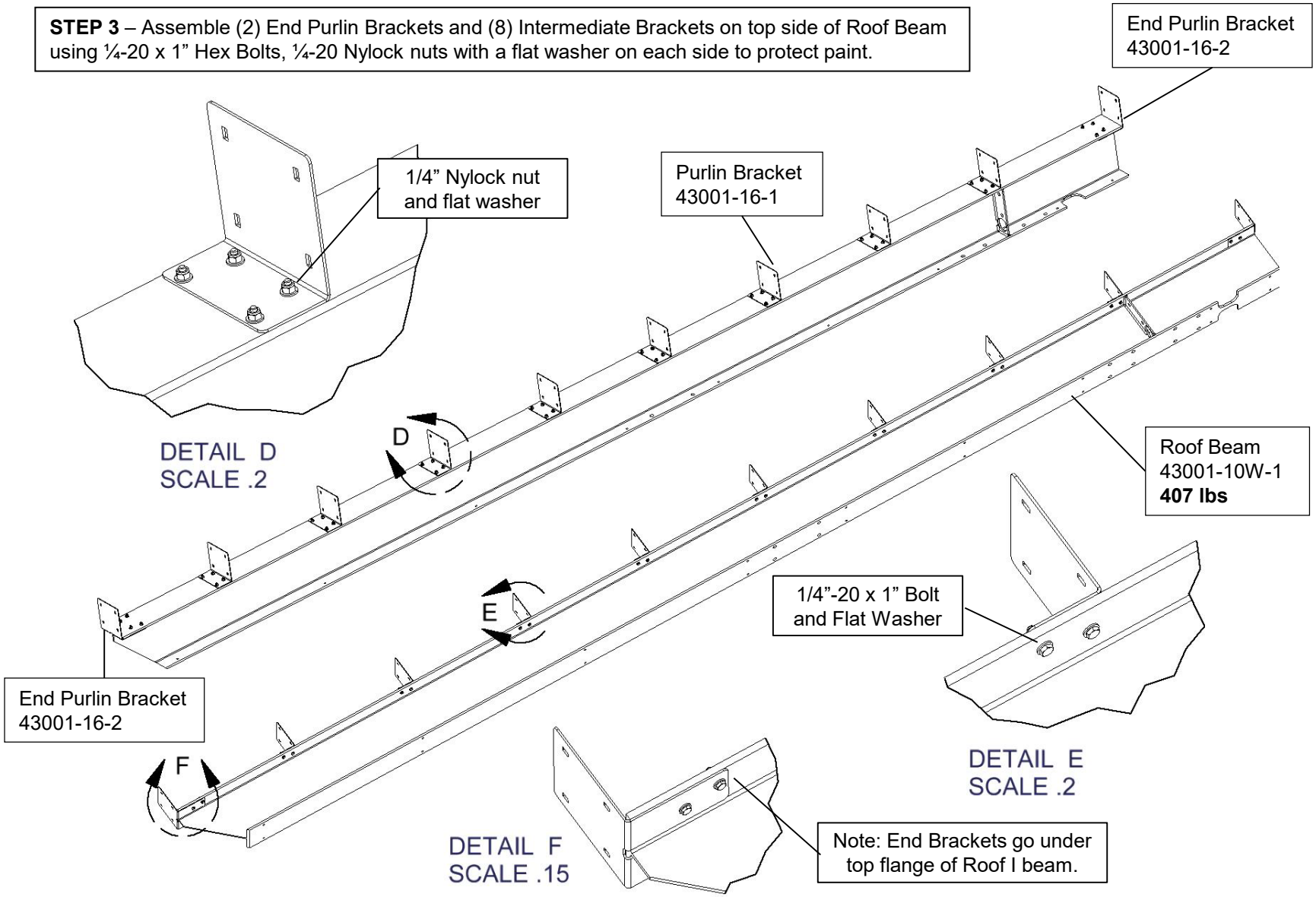
Center slot in plate best as possible. This may require adjustment when roof beam is added.





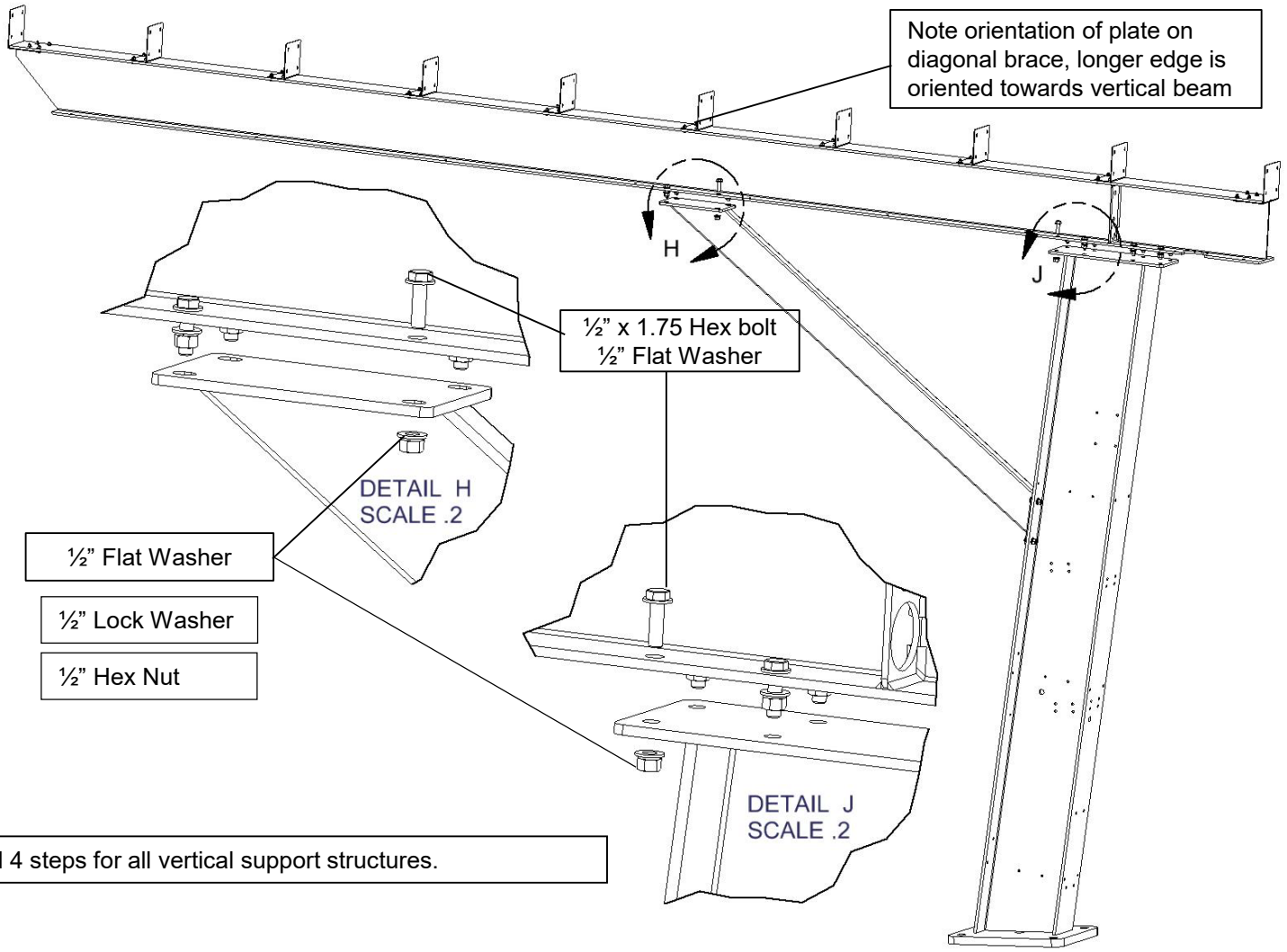
Shelter Roof Beam Assembly

STEP 3 – Assemble (2) End Purlin Brackets and (8) Intermediate Brackets on top side of Roof Beam using ¼-20 x 1" Hex Bolts, ¼-20 Nylock nuts with a flat washer on each side to protect paint.



Shelter Assembly

STEP 4 – Using mechanical lift, hoist Roof I Beam assembly from previous step on top of Vertical beam with Diagonal brace in place. Maintain connection to hoist until Roof Beam is secured. Align the (8) 5/8" holes in Roof Beam with top plate of Vertical beam. Use Drift pin to make minor adjustments to align parts. Bolt in (8) places at rear and (4) places at diagonal Support using ½" x 1.75" Hex Bolts, ½" Flat Washer on one side and ½" Flat Washer, Lock Washer and ½" Hex Nut on bottom side. Tighten to 75 ft*lbs.

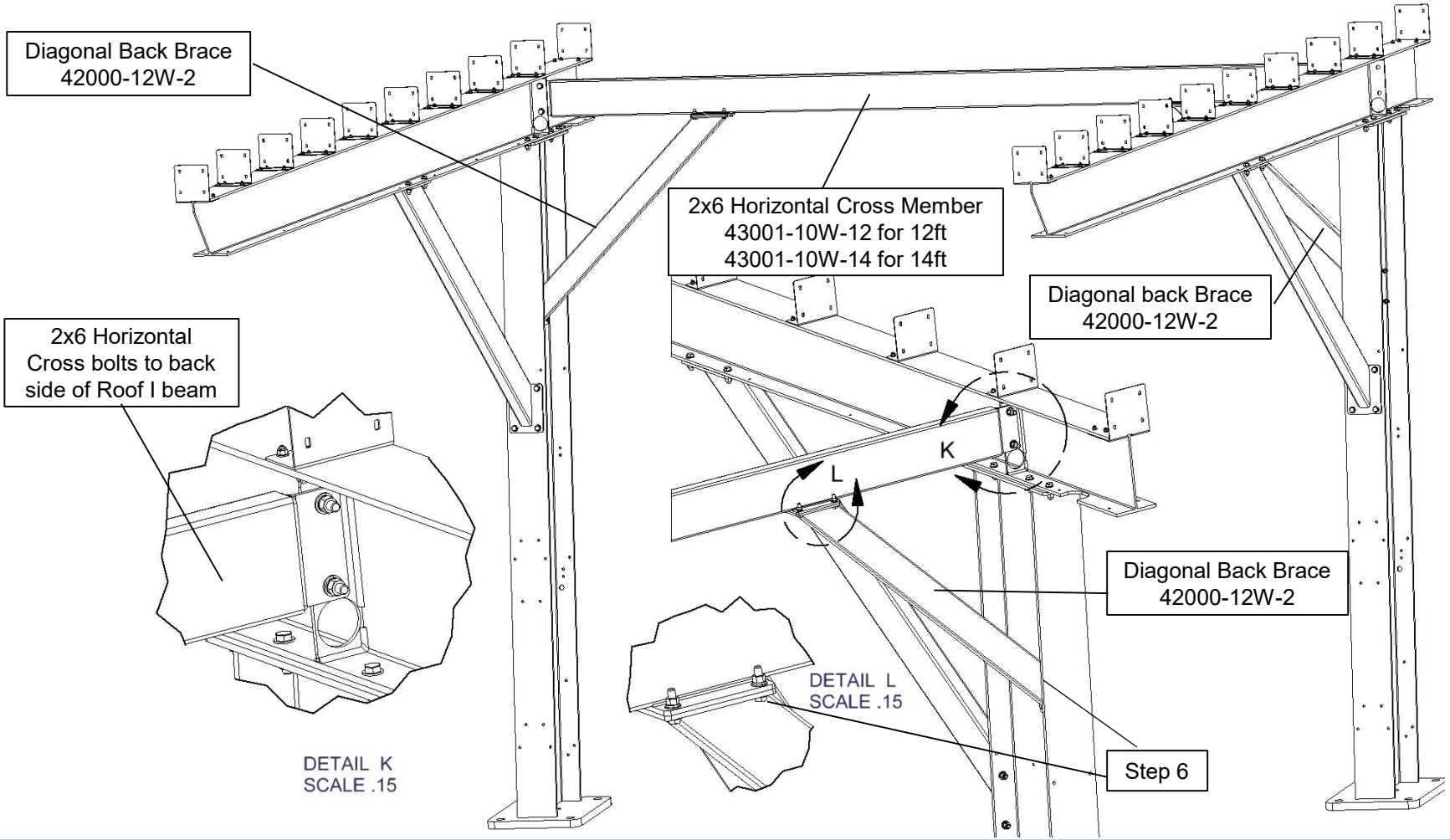


STEP 5 – Copy all 4 steps for all vertical support structures.

Shelter Assembly

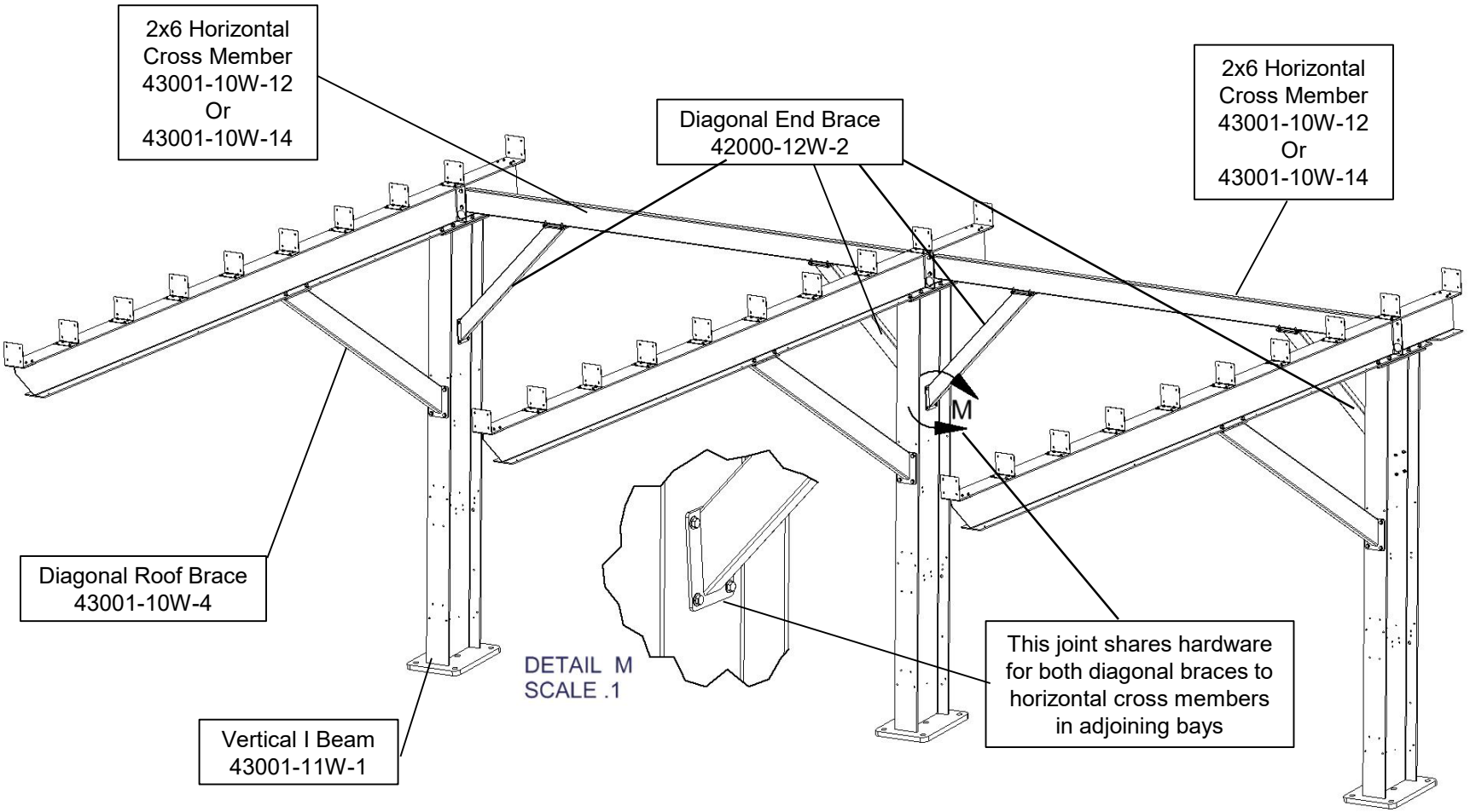
STEP 5 – Once at least two vertical beams with roof beams are erected attach 2x6 Horizontal Cross Member. This member will bolt to the back side of the plate welded into inner web of roof beam. Use (2) ½" x 1.75" Hex Bolts with flat washers in each end of the cross member. Spacing between vertical beams becomes paramount at this stage especially if multiple bays are to be erected. Finish attachment with ½" flat washer, lock washer and ½" hex nut. Don't tighten to 75 ft*lbs of torque until after next step.

STEP 6-- Attach both short Diagonal Braces (42000-12W-2) between underside of 2x6 Horizontal Cross Member and Vertical I beam using 3/8" x 1.5" Hex Bolts, (2) flat washers, lock washer and nut, as always flat washers against painted surface.



Daisy Chain Shelter Assembly

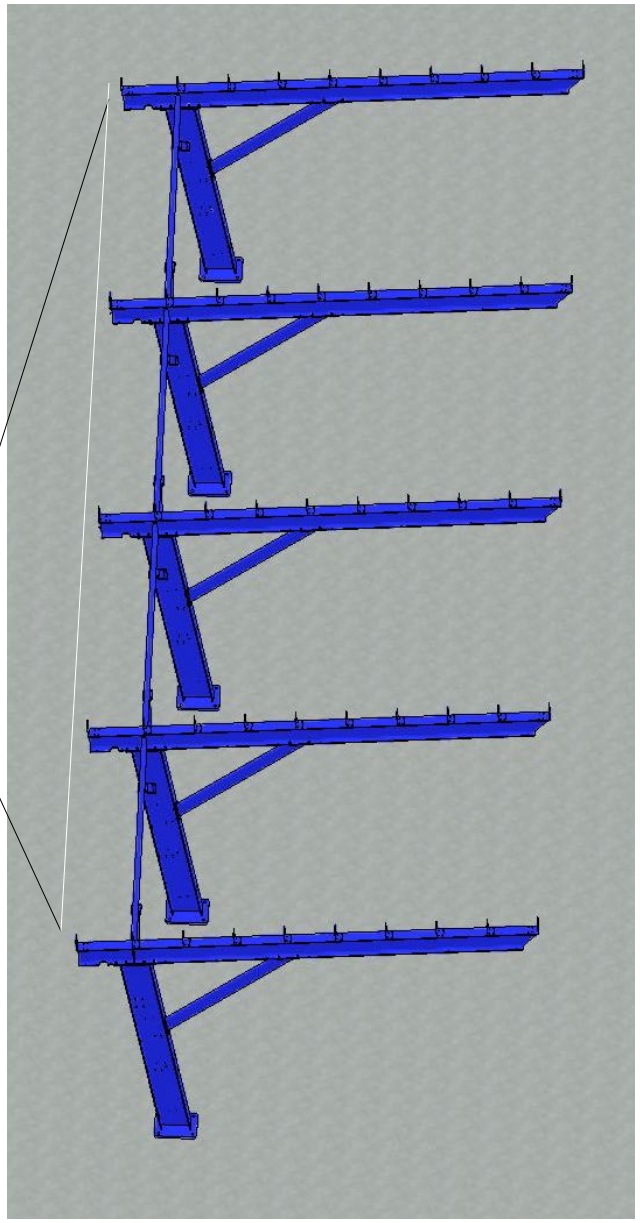
The steps to assemble a daisy chained (multiple bay) version of the shelter are identical to a single bay. The diagonal braces for the 2x6 Horizontal Cross Member will simply share hardware on the vertical beam.



Vertical I Beam Multi-Bay

Step 7– It will be imperative for aesthetic reasons to have tops of beam structures to be inline. Strongly suggested to run a string line between first and last beam assembly to create guide for the inner beam assemblies to target. Failure to have the row of beam assemblies inline will result in either a jagged roof eave alignment or varying roof overhang down length of shelter.

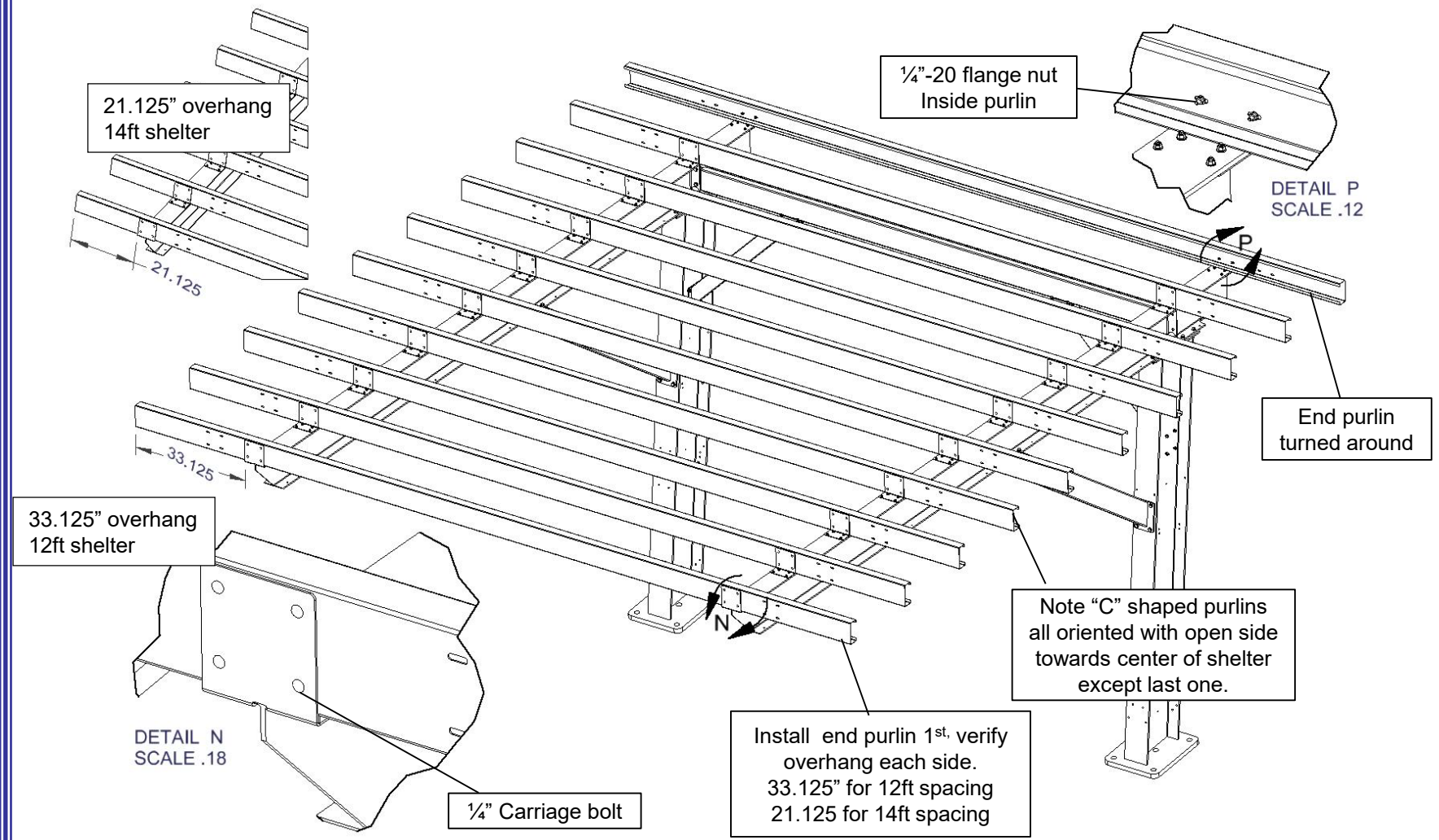
String line between first and last Vertical I Beam



General practice throughout the assembly of this structure unless otherwise directed, there should always be a flat washer against paint on each side of all bolted joints to protect the painted finish.

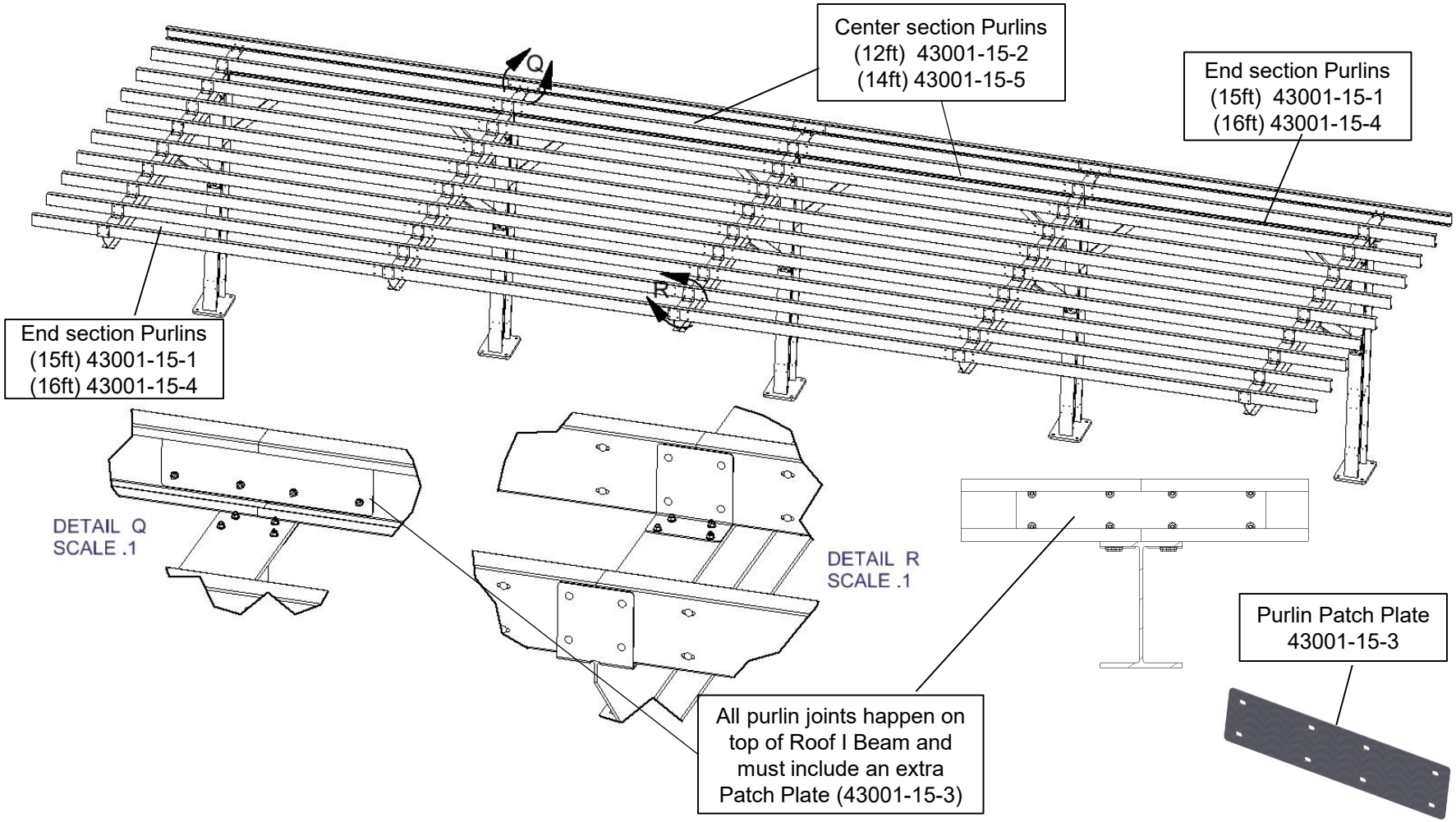
Shelter Roof Purlin Assembly

STEP 8 – Place Purlins (43001-15, 18ft) at each vertical plate on top of roof beams with slotted side aligned with slots on pre-installed purlin plates in Step 3. Purlins for single bay install have two sets of slots, inner slots are for 12ft spacing, outer for 14ft spacing. Starting at front end of roof beam bolt purlins to purlin roof brackets using ¼" x .75 carriage bolts with bolt head against painted bracket. Use ¼" flange nut on purlin surface. Drive spread of roof beam with purlin to match the 12ft or 14ft design spread. Continue to attach purlins to back end of roof. Last purlin at back end of shelter will flip over so "C" shape faces inward..



Shelter Roof Purlin Daisy Chain Assembly

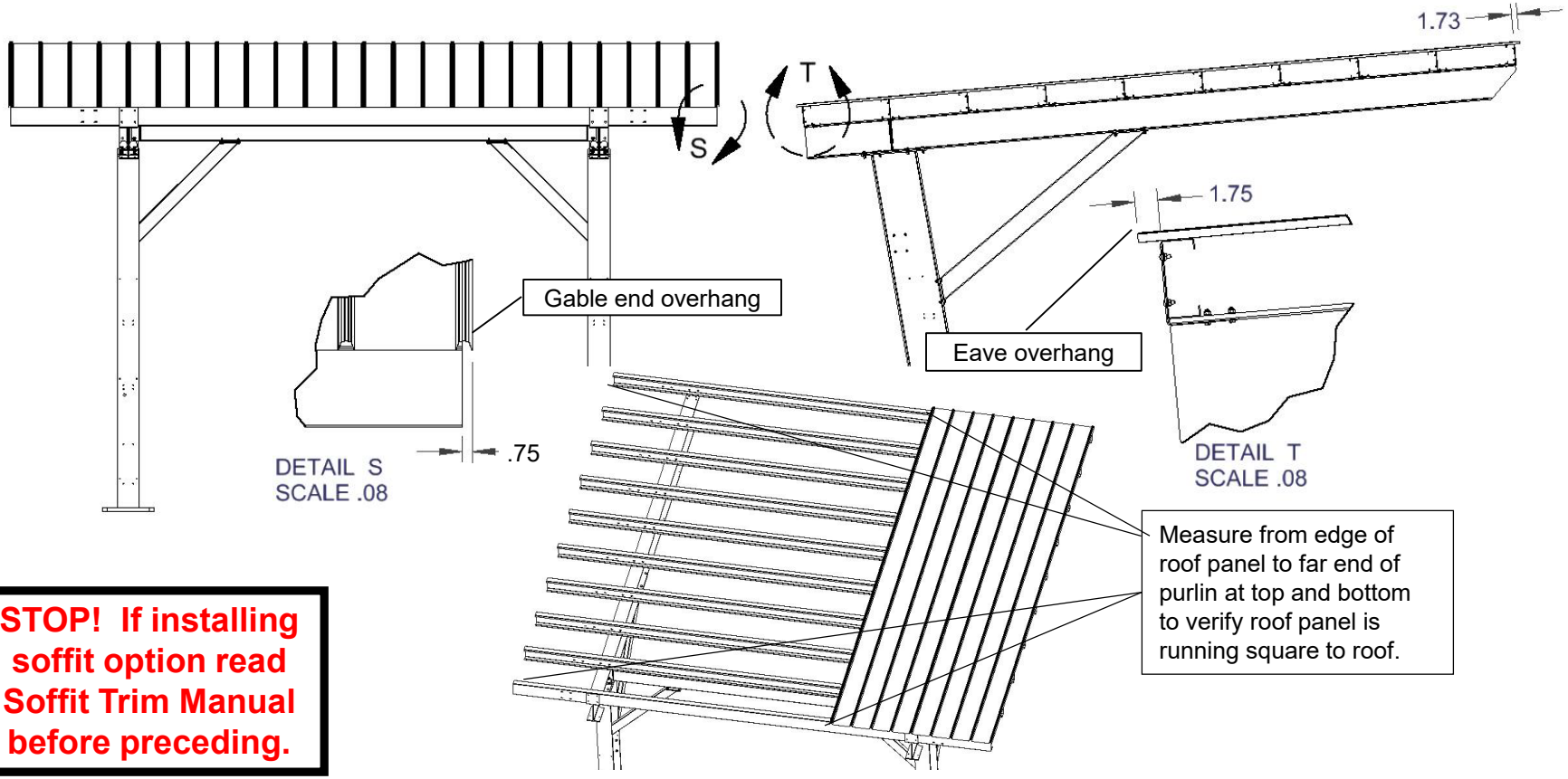
Purlin assembly is identical on a daisy chain (multi-bay) shelter except the purlin lengths are shorter, 12ft bay spacing end purlins are 15ft long and center section purlins are 12ft long. On 14ft bay spacing the end purlins are 16ft long and center section purlins are 14ft. Also the purlin to purlin butt joints have an extra Patch Plate (43001-15-3) included to strengthen spliced purlin, this patch plate should always be on inside of "C" shaped purlin. Target same 33.125" of overhang on 12Ft bay end sections and 21.125" overhang on 14ft bay end sections. Utilize same ¼-20 x .75" carriage bolts and flange nuts at joints. Always install outside purlins first to verify roof I beam spread.



Shelter Roof Assembly

STEP 9 – *STOP* Before preceding, If intending to install trim or soffit on shelter stop and read Soffit Trim Manual before installing roof panels.

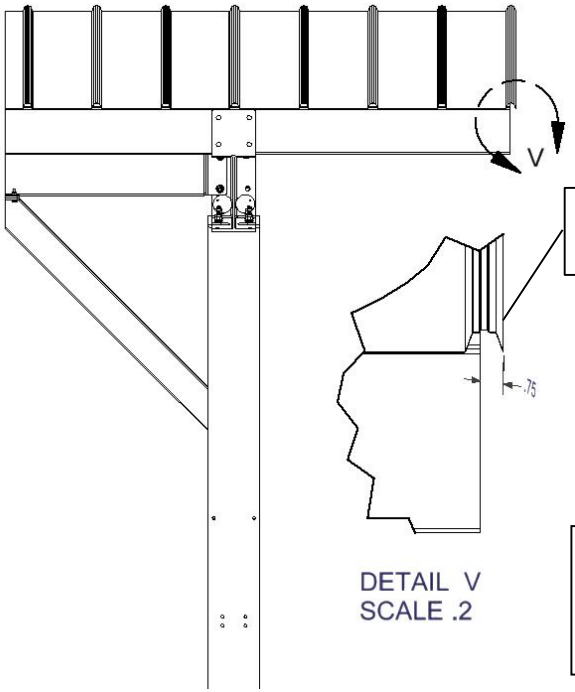
Install first roof panel (43001-18) by picking one end of structure and setting first panel to have an eave overhang of about 1.75” and a gable end overhang of about .75” (about middle of rib). Important to set this first panel square to the building so eave overhang is consistent from panel to panel. A diagonal check of square across entire purlin set could be a benefit before setting first panel. Also measuring the panel edge to far end of purlin both at the peak and bottom of slope is a good check method. Use self-drilling rubber washer sealing screws (5600D20) to attach roof panels to purlins always in flat area between ribs. Attach roof panel 3-4 places at each purlin in each sheet. For best look establish a pattern on each panel and maintain pattern across entire roof. Check each sheet is running straight before screwing down. The last panel should end with end of purlin at approximately middle of rib. Monitor how the panel will reach other end so as not to run short or long. Panels can be stretched or compressed a small amount to make these adjustments, don’t wait until last sheet however. Daisy chained shelter discussed in next page.



STOP! If installing soffit option read Soffit Trim Manual before preceding.

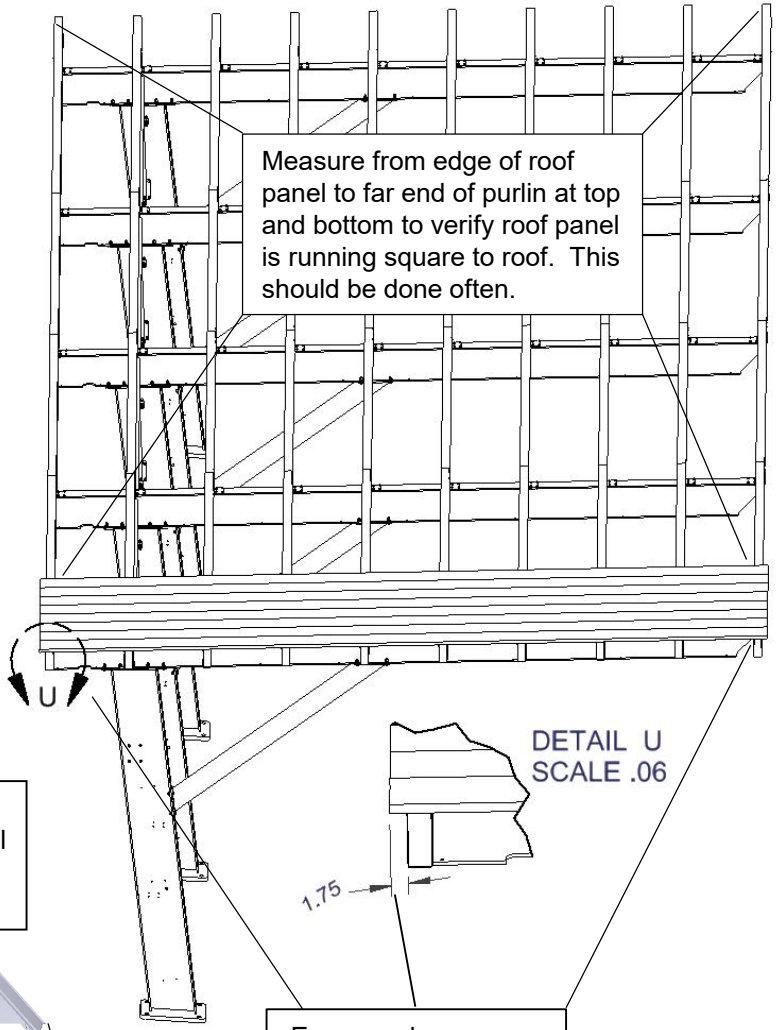
Shelter Roof Assembly

STEP 9 cont. – A multiple bay shelter roof assembly is no different than single bay but the importance of alignment of vertical beams becomes critical so run of roof purlins and roof panels is straight. This is an aesthetic issue not a functional or structural issue. Before roof panels are started it may be wise to go back to step 7 and verify alignment.



Gable end overhang same .75” as before

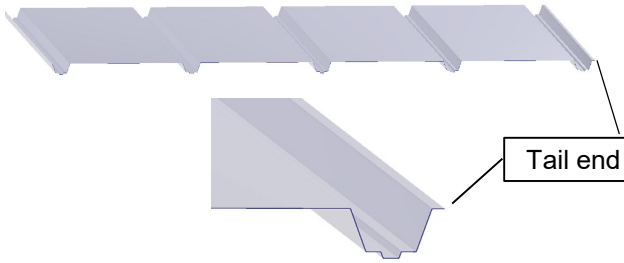
DETAIL V
SCALE .2



Measure from edge of roof panel to far end of purlin at top and bottom to verify roof panel is running square to roof. This should be done often.

DETAIL U
SCALE .06

Standard practice in stacking roof/soffit sheets is to have tail side of sheet at end so next sheet covers this feature.



Tail end of sheet

Eave overhang same 1.75” as before

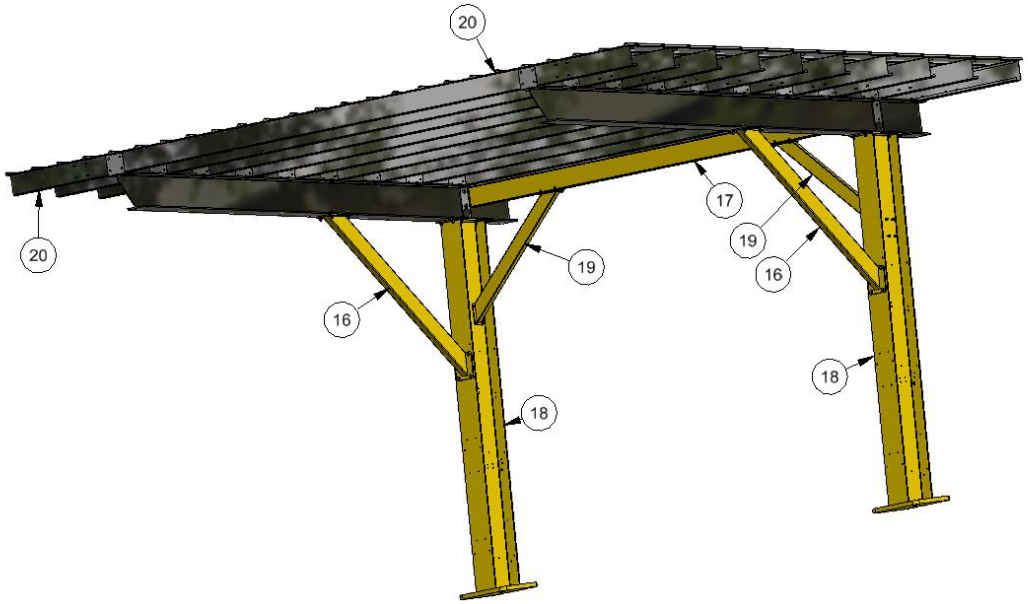
STOP! If installing soffit option read soffit manual before preceding.

Maintenance:

- Nuts and bolts on structure should be checked once a month or as needed.
- Powder coated parts will eventually wear over time. JE Adams offers touch up paint to keep parts looking great.
- Stainless steel parts should be wiped/ cleaned as needed.
- Inspect grout under shelter mounting plates at least once every 6 months, replace grout if cracked.

PART NO 43000-1

NOTES:
1. COLOR CHOICES FOR ITEM 1 SCREWS, ROOF PANEL & RIDGE CAP CAN BE FOUND AT THE SOURCE FOR ROOFING (https://www.affordablemetalmfg.com/color-picker/).
2. ALL FRAMING ELEMENTS WILL ALSO NEED COLOR ESTABLISHED.
3. PURLINS ARE GALVANIZED, GREY IN COLOR WITH NO PAINT OPTION.



BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	5600D20	SCREW, #12 X 1.5, HWH, SD, SEALING (BAG OF 250)	2
2	5601D7	1/4-20 x 1 HHCS-SS	80
3	5603D2	1/4-20 NYLOCK NUT, SS	80
4	5603D21	NUT, 1/4-20, SS, SERATED FLG	80
5	5605D2	NUT, 3/8-16, HEX, SS	16
6	5605D13	NUT, 1/2" X 13, HEX, SS	36
7	5606D2	1/4 WASHER	160
8	5606D25	1/2 SAE WASHER, SS	72
9	5606D31	WASHER, FLAT 3/8" SAE, SS	32
10	5621D1	3/8 LOCK WASHER	16
11	5622D4	3/8-16 UNC x 1.5 CAP SCREW	16
12	5635D4	BOLT, 1/4-20 X .75, CH, SS	80
13	5646D6	BOLT, 1/2-13 X 1.75",HH, HD, FT, SS	36
14	8049	1/2 LOCK WASHER	36
15	43001-10W-1P	OASIS SHELTER ROOF BEAM PAINTED	2
16	43001-10W-4P	OASIS DIAG, ROOF SUPPORT, PAINTED	2
17	43001-10W-12P	WLDMNT, CROSS MEMBER, SHELTER, PAINTED	1
18	43001-11W-1P	OASIS MAIN VERTICAL BEAM, PAINTED	2
19	42000-12W-2P	WLDMNT, SHELTER, DIAG. SPRT, PNT	2
20	43001-15	PURLIN, 6IN X12FT SPACING, 18ft	10
21	43001-16-1P	PURLIN INNER CONNECTOR PLATE, PAINTED	16
22	43001-16-2P	PURLIN END CONNECTOR PLATE, PAINTED	4
23	43001-18	ROOF PANEL, RIBBED, 3FT X 222"	6

REV	NO.	DESCRIPTION	DATE	BY
-	9198	RELEASED	7/2/24	MWS

TITLE: OASIS SHELTER 12FT SINGLE BAY

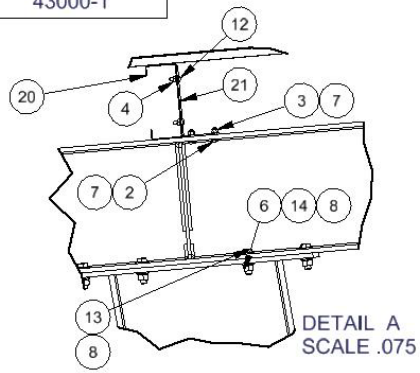
UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.020
3 PL ±.003
ANGLE ±1°

MATERIAL
DRAWN BY mws
DATE 2/12/2024
SCALE .02
SHEET 1 / 2

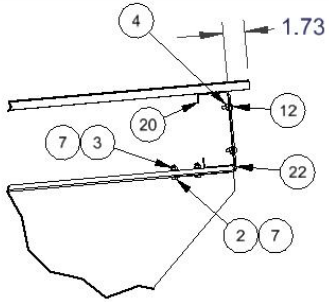
CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO 43000-1
REV. -

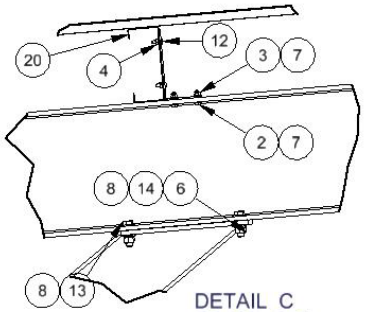
PART NO 43000-1



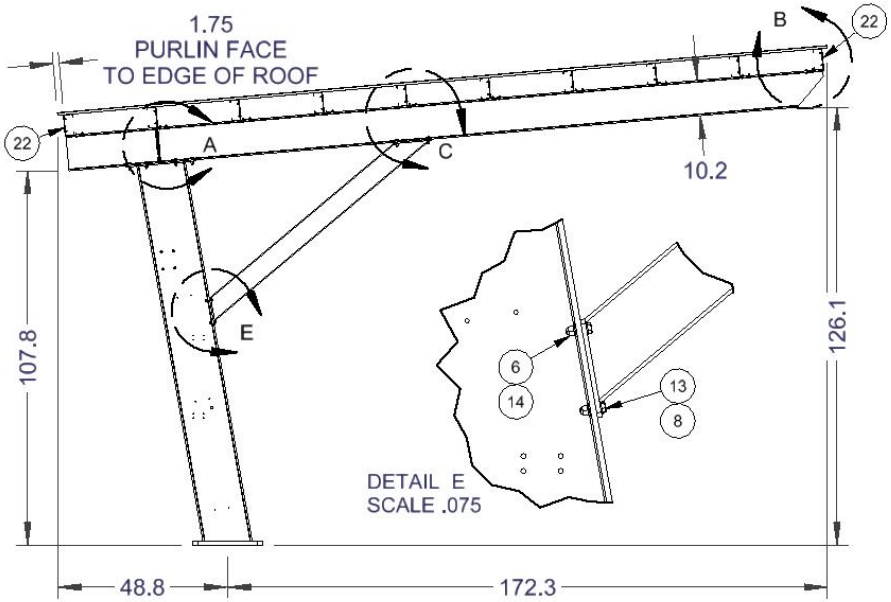
DETAIL A
SCALE .075



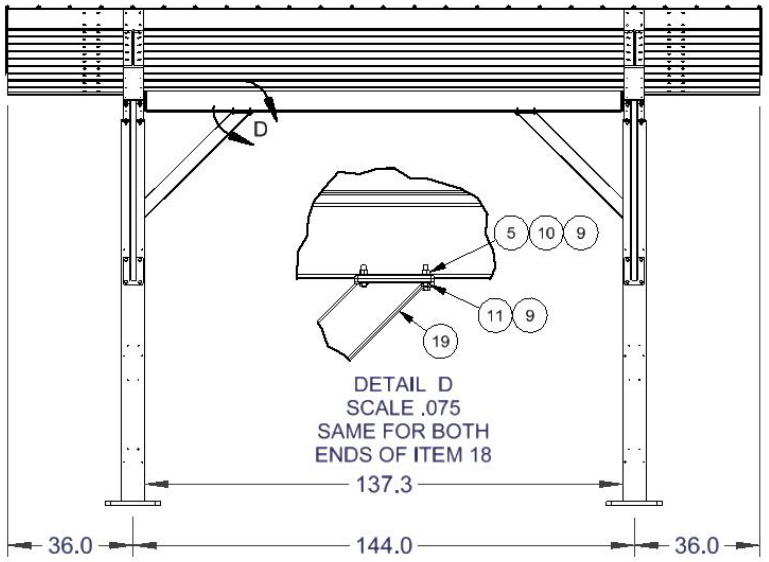
DETAIL B
SCALE .075



DETAIL C
SCALE .075



DETAIL E
SCALE .075



DETAIL D
SCALE .075
SAME FOR BOTH
ENDS OF ITEM 18

REV	NO.	DESCRIPTION	DATE	BY

TITLE: OASIS SHELTER 12FT SINGLE BAY

UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.020
3 PL ±.003
ANGLE ±1°

MATERIAL
DRAWN BY: mws
DATE: 2/12/2024
SCALE: .02
SHEET: 2 / 2

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

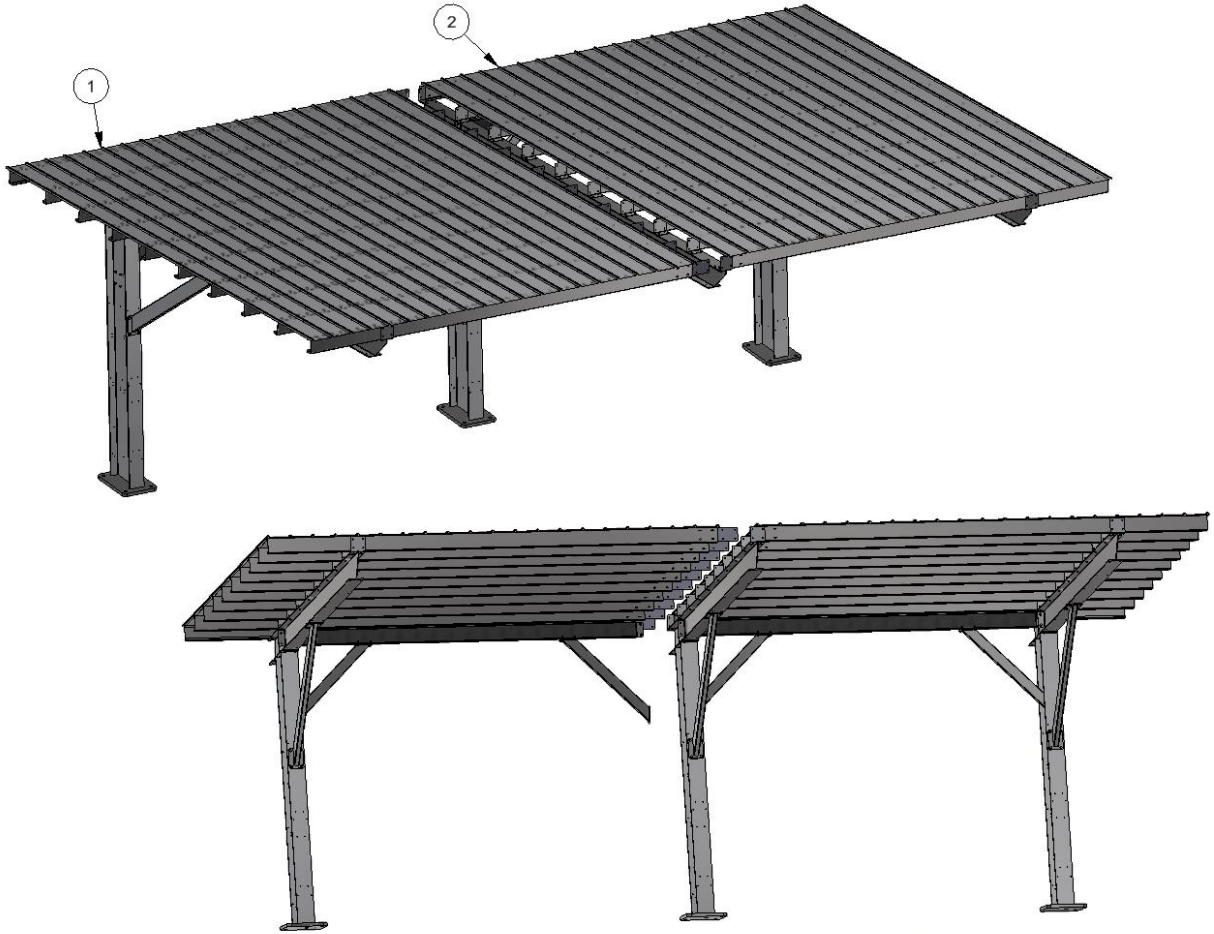
PART NO: 43000-1
REV: -

PART NO 43000-2

NOTES:
1. 43000-2-1 USED TO ADD ADDITIONAL BAYS TO THE 43000-2 ASSEMBLY.
2. COLOR CHOICES FOR ITEM 1 SCREWS, ROOF PANEL & RIDGE CAP CAN BE FOUND AT THE SOURCE FOR ROOFING (https://www.affordablemetalmfg.com/color-picker/).
2. ALL FRAMING ELEMENTS WILL ALSO NEED COLOR ESTABLISHED.
3. PURLINS ARE GALVANIZED, GREY IN COLOR WITH NO PAINT OPTION.

BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	43000-2A	OASIS SHELTER, LEFT END ASY, 12FT	1
2	43000-2B	OASIS SHELTER RIGHT END 12FT	1



REV	NO.	DESCRIPTION	DATE	BY
-	9198	RELEASED	7/2/24	MWS

TITLE: OASIS SHELTER 12FT, 2 STALL

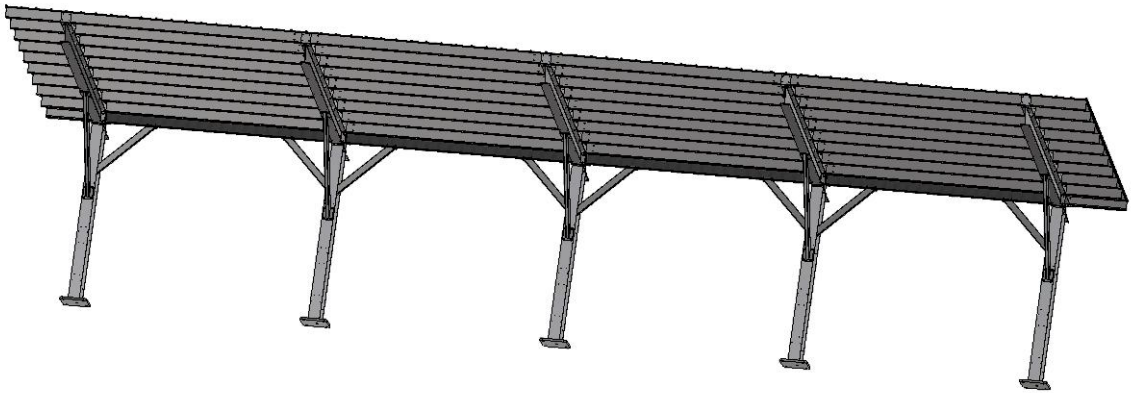
UNSPECIFIED TOLERANCES
1 PL ± .030
2 PL ± .020
3 PL ± .003
ANGLE ± 1°

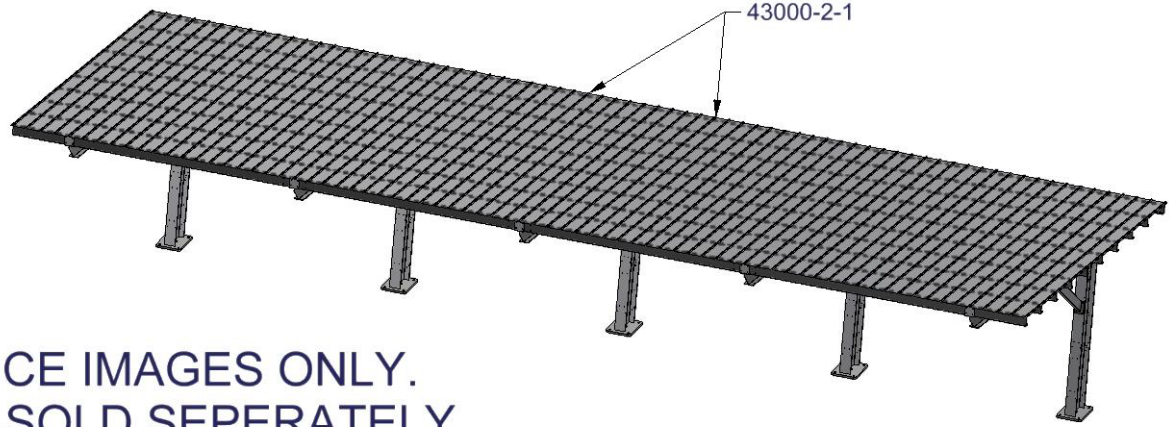
MATERIAL
DRAWN BY mws
DATE 5/14/2024
SCALE .015
SHEET 1 / 2

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO 43000-2
REV. -

PART NO 43000-2





REFERENCE IMAGES ONLY.
43000-2-1 SOLD SEPERATELY

REV	NO.	DESCRIPTION	DATE	BY

TITLE: OASIS SHELTER 12FT, 2 STALL

UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.020
3 PL ±.003
ANGLE ±1°

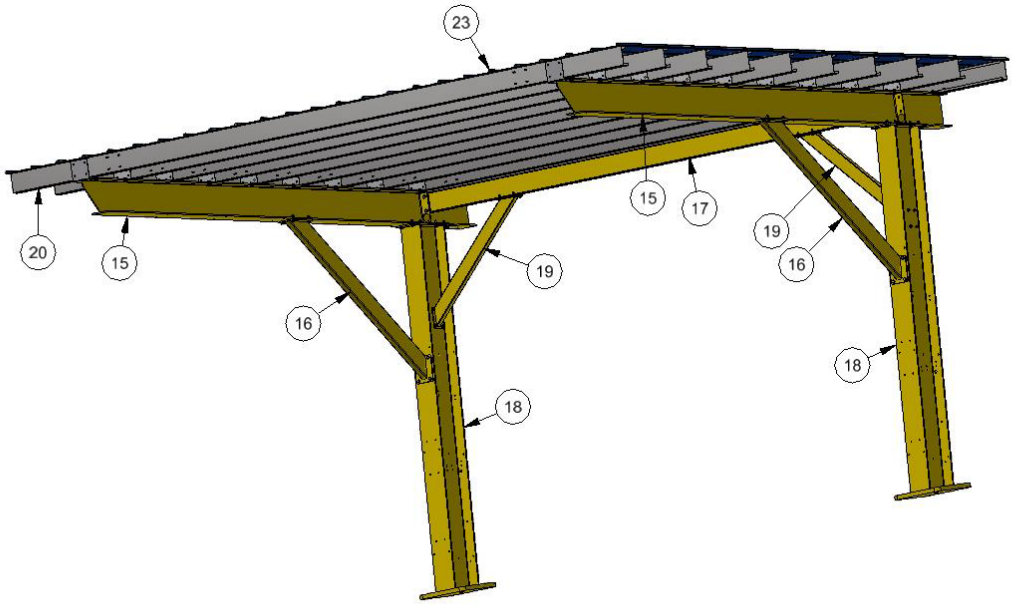
MATERIAL:
DRAWN BY: mws
DATE: 5/14/2024
SCALE: .015
SHEET: 2 / 2

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO: 43000-2
REV:

PART NO 43000-3

NOTES:
1. COLOR CHOICES FOR ITEM 1 SCREWS, ROOF PANEL & RIDGE CAP CAN BE FOUND AT THE SOURCE FOR ROOFING (https://www.affordablemetalmfg.com/color-picker/).
2. ALL FRAMING ELEMENTS WILL ALSO NEED COLOR ESTABLISHED.
3. PURLINS ARE GALVANIZED, GREY IN COLOR WITH NO PAINT OPTION.



BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	5600D20	SCREW, #12 X 1.5, HWH, SD, SEALING (BAG OF 250)	2
2	5601D7	1/4-20 x 1 HHCS-SS	80
3	5603D2	1/4-20 NYLOCK NUT, SS	80
4	5603D21	NUT, 1/4-20, SS, SERATED FLG	80
5	5605D2	NUT, 3/8-16, HEX, SS	16
6	5605D13	NUT, 1/2" X 13, HEX, SS	36
7	5606D2	1/4 WASHER	160
8	5606D25	1/2 SAE WASHER, SS	72
9	5606D31	WASHER, FLAT 3/8" SAE, SS	32
10	5621D1	3/8 LOCK WASHER	16
11	5622D4	3/8-16 UNC x 1.5 CAP SCREW	16
12	5635D4	BOLT, 1/4-20 X .75, CH, SS	80
13	5646D6	BOLT, 1/2-13 X 1.75",HH, HD, FT, SS	36
14	8049	1/2 LOCK WASHER	36
15	43001-10W-1P	OASIS SHELTER ROOF BEAM PAINTED	2
16	43001-10W-4P	OASIS DIAG. ROOF SUPPORT, PAINTED	2
17	43001-10W-14P_	WLDMNT, CROSS MEMB, 14FT	1
18	43001-11W-1P	OASIS MAIN VERTICAL BEAM, PAINTED	2
19	42000-12W-2P	WLDMNT, SHELTER, DIAG. SPRT, PNT	2
20	43001-15	PURLIN, 6IN X12FT SPACING, 18ft	10
21	43001-16-1P	PURLIN INNER CONNECTOR PLATE, PAINTED	16
22	43001-16-2P	PURLIN END CONNECTOR PLATE, PAINTED	4
23	43001-18	ROOF PANEL, RIBBED, 3FT X 222"	6

REV	NO.	DESCRIPTION	DATE	BY
-	9198	RELEASED	7/2/24	MWS

TITLE: OASIS SHELTER 14FT, SINGLE BAY

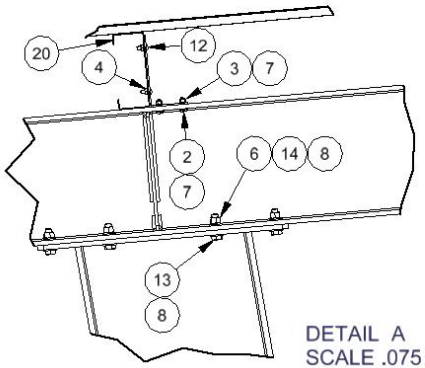
UNSPECIFIED TOLERANCES
1 PL ± .030
2 PL ± .020
3 PL ± .003
ANGLE ± 1°

MATERIAL
DRAWN BY: mws
DATE: 2/12/2024
SCALE: .02
SHEET: 1 / 2

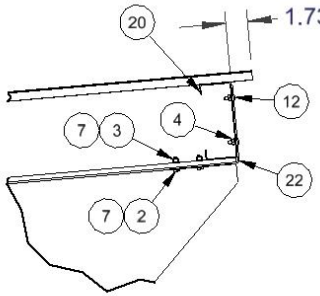
CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO: 43000-3
REV: -

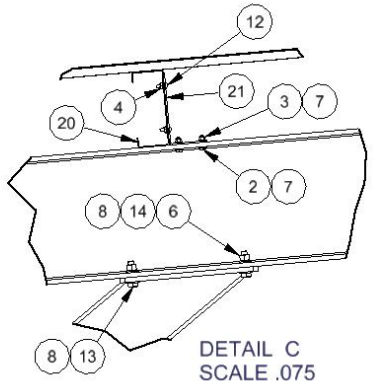
PART NO 43000-3



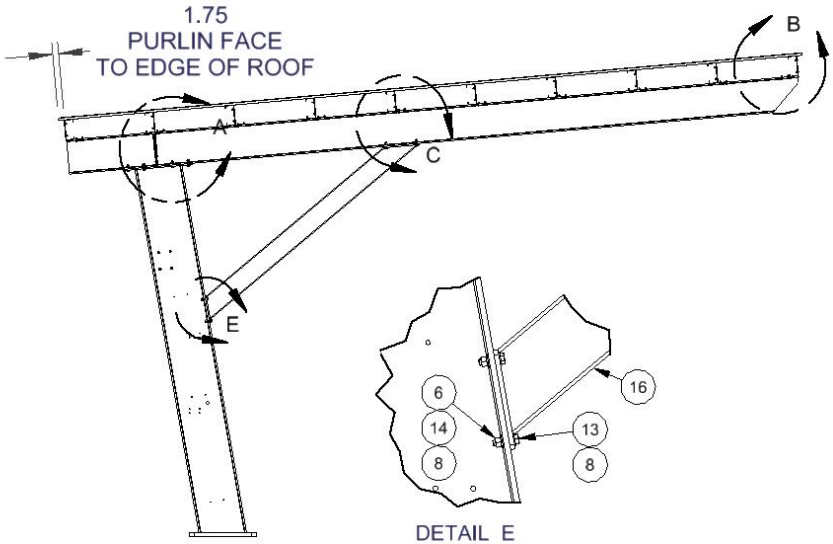
DETAIL A
SCALE .075



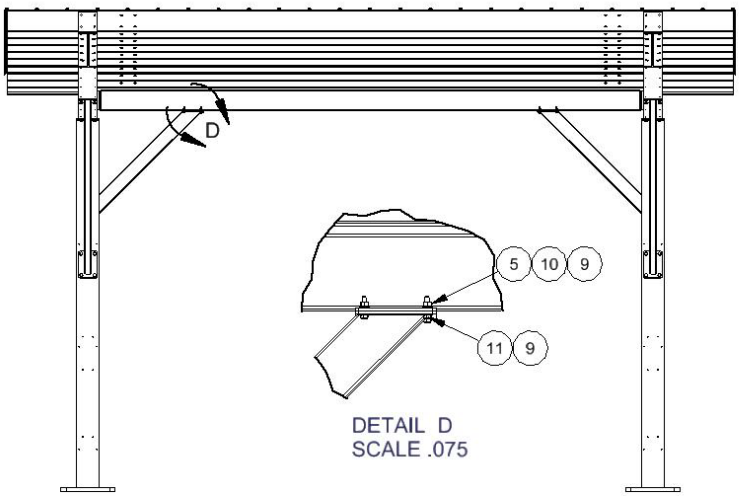
DETAIL B
SCALE .075



DETAIL C
SCALE .075



DETAIL E
SCALE .075



DETAIL D
SCALE .075

REV	NO.	DESCRIPTION	DATE	BY

THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES

TITLE: OASIS SHELTER 14FT, SINGLE BAY

UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.020
3 PL ±.003
ANGLE ±1°

MATERIAL
DRAWN BY mws
DATE 2/12/2024
SCALE .02
SHEET 2 / 2

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

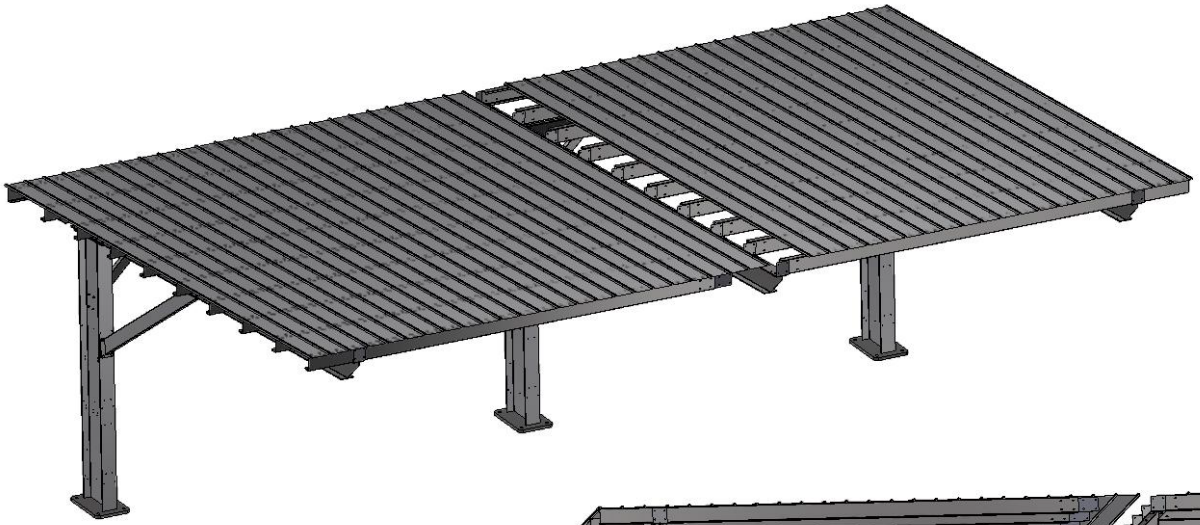
PART NO 43000-3
REV. -

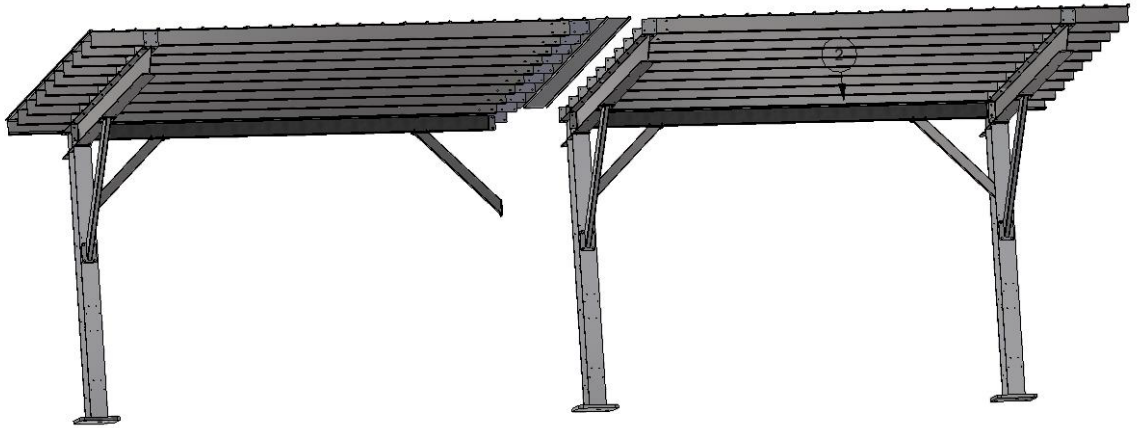
PART NO
43000-4

NOTES:
1. 43000-4-1 USED TO ADD ADDITIONAL BAYS TO THE 43000-4 ASSEMBLY.
2. COLOR CHOICES FOR ITEM 1 SCREWS, ROOF PANEL & RIDGE CAP CAN BE FOUND AT THE SOURCE FOR ROOFING (https://www.affordablemetalmfg.com/color-picker/).
2. ALL FRAMING ELEMENTS WILL ALSO NEED COLOR ESTABLISHED.
3. PURLINS ARE GALVANIZED, GREY IN COLOR WITH NO PAINT OPTION.

BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	43000-4A	OASIS SHELTER, 14FT LEFT END ASY	1
2	43000-4B	OASIS SHELTER RIGHT END 14ft	1





REV	NO.	DESCRIPTION	DATE	BY
-	9198	RELEASED	7/2/24	MWS

THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES

TITLE: OASIS SHELTER 14FT, 2 STALL

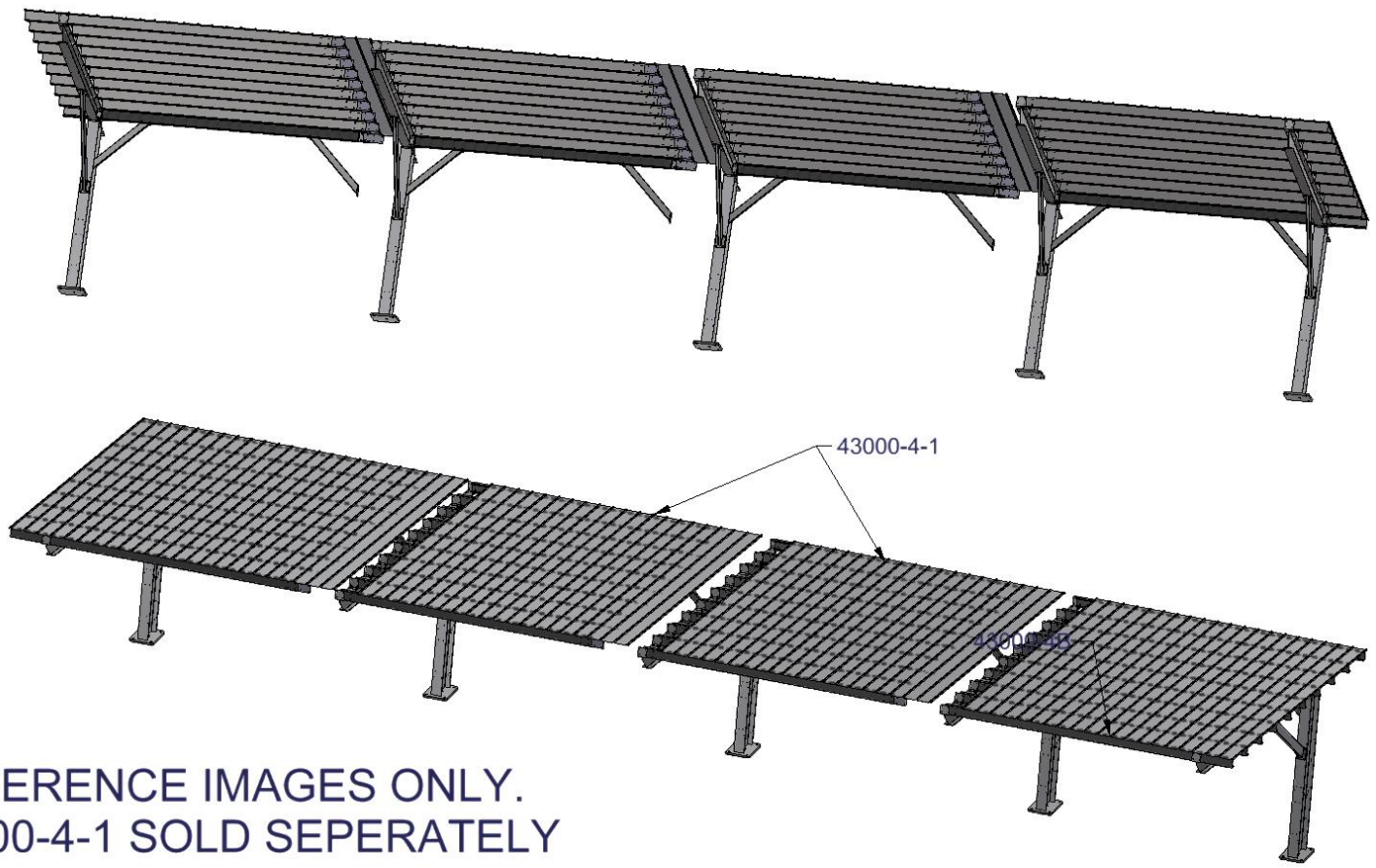
UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.020
3 PL ±.003
ANGLE ±1°

MATERIAL
DRAWN BY mws
DATE 2/12/2024
SCALE .015
SHEET 1 / 2

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO 43000-4
REV. -

PART NO 43000-4



REFERENCE IMAGES ONLY.
43000-4-1 SOLD SEPERATELY

REV	NO.	DESCRIPTION	DATE	BY

TITLE	OASIS SHELTER 14FT, 2 STALL		
UNSPECIFIED TOLERANCES 1 PL ±.030 2 PL ±.020 3 PL ±.003 ANGLE ±1°	MATERIAL	CEDAR RAPIDS, IOWA J.E. ADAMS INDUSTRIES, LTD	
	DRAWN BY: mws		
	DATE: 2/12/2024		
	SCALE: .015	SHEET: 2 / 2	
	PART NO: 43000-4	REV: -	