BALTIMORE
AIRCOIL COMPANY

FXV3

CLOSED CIRCUIT COOLING TOWER

CXVT

EVAPORATIVE CONDENSER

RIGGING & ASSEMBLY INSTRUCTIONS

IMPORTANT NOTICE

FXV3/CXVT should be rigged and assembled as outlined in this bulletin.

These procedures should be thoroughly reviewed prior to the rigging and assembly of the equipment to acquaint all personnel with procedures to be followed and to ensure that all necessary equipment is available beforehand.

Be sure to have a copy of the submittal package available for reference. If you do not have a copy of this drawing,or if you need additional information about this unit, contact your local BAC Representative whose name and telephone number are on a label adjacent to the access door. The model number and serial number ofthe unit are also located in this area.

FXV3 - CLOSED CIRCUIT COOLING TOWER
CXVT - EVAPORATIVE CONDENSER
RIGGING & ASSEMBLY INSTRUCTIONS

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1. Warnings and Cautions

Safety Precautions

- **⚠ WARNING**: Failure to use appropriate lifting equipment can result in a dropped load, causing severe injury, death, and/or property damage. Lifts must be performed by qualified riggers following BAC published Rigging Instructions, and generally accepted lifting practices. The use of a supplemental safety sling may also be required if the lift circumstances warrant its use, as determined by the rigging contractor.
- **⚠ WARNING**: To prevent bodily injury or property damage, only qualified personnel qualified should undertake the installation, operation, maintenance, and repair of this equipment. Proper care, procedures, and tools must be used in handling, lifting, installing, operating, maintaining, and repairing this equipment
- **⚠ CAUTION**: Equipment damage may occur if water, snow, ice, or debris has collected in the basin or elsewhere in the unit. Such accumulations will add substantially to the equipment's lifting weight placing equipment at risk of damage that could result in injury. Before an actual lift is undertaken, ensure no water, snow, ice, or debris has collected in the basin or elsewhere in the unit.
- **⚠ WARNING**: Equipment damage may occur if the unit is not properly anchored before operation begins. Equipment damage could result in death or serious injury. Ensure unit is properly anchored before operation beings.
- **⚠ WARNING**: ENDURADRIVE® Fan System motors can induce voltage and current in the motor leads by rotating the motor shaft, even when the motor is completely disconnected from the power source, which can lead to severe bodily injury or death from electrical shock. Mechanically lock or tie down the fan until all wiring has been completed and before servicing the drive system, or when performing any motor maintenance procedure.
- **⚠ WARNING**: Magnetic and electromagnetic fields in the vicinity of current carrying conductors and ENDURADRIVE® Fan System motors can result in a serious health hazard to persons with cardiac pacemakers, metal implants, and hearing aids. To avoid risk, stay away from the area surrounding the ENDURADRIVE® Fan System motor.
- **⚠ WARNING**: The ENDURADRIVE® Fan System variable frequency drive may apply hazardous voltages to the motor leads after power to the controller has been turned off. To avoid the risk of severe bodily injury or death from electrocution, verify that the controller is incapable of delivering hazardous voltages and that the voltage at the motor leads is zero before servicing the drive system, or when performing any motor maintenance procedure.

Equipment Precautions

- Each unit must be located and positioned to prevent the introduction of discharge air into the ventilation systems of the building on which the unit is located and of adjacent buildings.
- For weight information, refer to the submittal drawing package.
- All single-cell and multi-cell units must be rigged one section at a time.
- For weight information, refer to the submittal drawing package. Any motors or accessories shipped in the cold water basin must be removed prior to installing the upper (mechanical and coil casing) section.
- Failure to level the coil module for rigging will prevent proper engagement of rigging guides.
- ENDURADRIVE® Fan System mechanical braces are structurally required and are not removable.

2. Introduction

Safety

Adequate precautions appropriate for the installation and location of these products should be taken to safeguard the equipment and the premises from damage and the public from possible injury. **The procedures listed in this manual must be thoroughly reviewed prior to rigging and assembly. Read all warnings, cautions and notes.**

When the fan speed of the unit is to be changed from the factory set speed, including the use of a variable speed device, steps must be taken to avoid operating the equipment at or near the fan's "critical speed," which could result in fan failure and possible injury or damage. Before changing fan speed, consult your local BAC Representative and refer to the resonant speed identification procedure available in the operation & maintenance manual.

⚠ WARNING: Failure to use appropriate lifting equipment can result in a dropped load, causing severe injury, death, and/or property damage. Lifts must be performed by qualified riggers following BAC published Rigging Instructions, and generally accepted lifting practices. The use of a supplemental safety sling may also be required if the lift circumstances warrant its use, as determined by the rigging contractor.

Shipping

Models FXV3/CXVT are factory assembled to ensure uniform quality with minimum field assembly. FXV3/CXVT models ship in four sections per cell (one lower and three upper: each coil section ships separately) to minimize rigging and freight costs. Contact your local BAC Representative for more information. For the dimensions and weights of a specific unit or section, refer to the submittal drawings.

⚠ WARNING: To prevent bodily injury or property damage, only qualified personnel qualified should undertake the installation, operation, maintenance, and repair of this equipment. Proper care, procedures, and tools must be used in handling, lifting, installing, operating, maintaining, and repairing this equipment

Pre-Rigging Checks

When the unit is delivered to the jobsite, it should be checked thoroughly to ensure all required items have been received and are free of any shipping damage prior to signing the bill of lading.

The following parts should be inspected (if applicable for the unit's configuration):

- ☐ Sheaves and Belts
- ☐ Bearings
- ☐ Bearing Supports
- ☐ Fan Motor(s)
- ☐ Fan Guard(s)
- ☐ Fan(s) and Fan Shaft(s)
- ☐ Float Valve Assembly(s)
- ☐ Water Distribution System
- ☐ Coil Surface
- ☐ Cold Water Basin Accessories
- ☐ Interior Surfaces
- ☐ Exterior Surfaces
- ☐ Louvers/Combined Inlet Shields
- ☐ Spray Water Pumps
- ☐ Mating Surfaces Between Sections/Modules
- ☐ Miscellaneous Items: All bolts, nuts, washers, and sealer tape required to assemble sections or component parts are furnished by BAC and shipped with the unit.

Unit Weights

Before rigging any unit, the weight of each section should be verified from the unit submittal drawing. Unit print weights include the final assembled unit with all accessories.

⚠ CAUTION: Equipment damage may occur if water, snow, ice, or debris has collected in the basin or elsewhere in the unit. Such accumulations will add substantially to the equipment's lifting weight placing equipment at risk of damage that could result in injury. Before an actual lift is undertaken, ensure no water, snow, ice, or debris has collected in the basin or elsewhere in the unit.

Anchoring

Seven-eighths inch (7/8") diameter holes are provided in the bottom flange of the basin section for bolting the unit to the support beams. Refer to the suggested support drawing included in the submittal for location and quantity of the mounting holes. The unit must be level for proper operation. Anchor bolts must be provided by others. The IBC rating is only certified with standard anchorage locations. Using alternate anchorage locations or alternate steel supports will void any IBC wind or seismic ratings. Contact your local BAC Representative for details.

⚠ WARNING: Equipment damage may occur if the unit is not properly anchored before operation begins. Equipment damage could result in death or serious injury. Ensure unit is properly anchored before operation beings.

Cold Weather Operation

These products must be protected by mechanical and operational methods against damage and/or reduced effectiveness due to possible freeze-up. Refer to the FXV and FXV3 Closed Circuit Cooling Tower CXVB and CXVT Evaporative Condenser Operation & Maintenance Manual at www.BaltimoreAircoil.com or contact your local BAC Representative for recommended protection alternatives.

Placement

All evaporative cooling equipment must be placed in a location that ensures an adequate supply of fresh air into the air intakes. When units are located adjacent to walls or in enclosures, care must be taken to ensure the warm, saturated, discharge air is not redirected back to the air intakes. Each unit must be positioned to prevent the introduction of discharge air into the ventilation systems of the building on which the unit is located and of adjacent buildings. For detailed recommendations on BAC equipment layout, see our website at www.BaltimoreAircoil.com or contact your local BAC Representative.

NOTICE: Each unit must be located and positioned to prevent the introduction of discharge air into the ventilation systems of the building on which the unit is located and of adjacent buildings.

Warranties

Please refer to the Limitation of Warranties (located in the submittal package) applicable to and in effect at the time of the sale/ purchase of these products.

Unit Operation

Prior to start-up and unit operation, refer to the unit operation & maintenance manual shipped with the unit and also available at www.BaltimoreAircoil.com.

3. Unit Rigging & Assembly

Rigging

NOTICE: For weight information, refer to the submittal drawing package.

NOTICE: All single-cell and multi-cell units must be rigged one section at a time.

⚠ WARNING: Failure to use appropriate lifting equipment can result in a dropped load, causing severe injury, death, and/or property damage. Lifts must be performed by qualified riggers following BAC published Rigging Instructions, and generally accepted lifting practices. The use of a supplemental safety sling may also be required if the lift circumstances warrant its use, as determined by the rigging contractor.

Refer to **Table 1** and **Figure 1**, **Figure 2**, and **Figure 3** for each section's required minimum spreader bar length W1 and the recommended minimum vertical dimension "H".

Model Number	Lower Section		Plenum Section		Coil Section	
	H	W1	H	W1	H	W1
FXV3-1224-xxx	20'	12'	20'	12'	16'	12'
FXV3-1426-xxx	20'	14'	22'	14'	16'	14'
CXVT-x-1224-x, XECXVT-1224-x, CXVT-x-2424-x, XECXVT-2424-x	20'	12'	20'	12'	16'	12'
CXVT-x-1426-x, XECXVT-1426-x, CXVT-x-2826-x, XECXVT-2826-x	20'	14'	22'	14'	16'	14'

Table 1. Minimum Vertical Dimension and Spreader Bar Length for FXV3 and CXVT Units

FXV3 Model Number	Nominal Box Size	Coil Module Height
FXV3-1224-20x-xx	12' x 24'	Short
FXV3-1224-24x-xx	12' x 24'	Short
FXV3-1224-28x-xx	12' x 24'	Tall
FXV3-1224-30x-xx	12' x 24'	Tall
FXV3-1224-32x-xx	12' x 24'	Tall
FXV3-1224-36x-xx	12' x 24'	Tall
FXV3-1426-20x-xx	14' x 26'	Short
FXV3-1426-24x-xx	14' x 26'	Short
FXV3-1426-28x-xx	14' x 26'	Tall
FXV3-1426-30x-xx	14' x 26'	Tall
FXV3-1426-32x-xx	14' x 26'	Tall
FXV3-1426-36x-xx	14' x 26'	Tall

Table 2. FXV3 Nominal Box Size & Coil Module Height by Model Number

CXVT Model Number	Nominal Box Size	Coil Module Height
CXVT-581-1224-15	12' x 24'	Short
CXVT-617-1224-15	12' x 24'	Short
CXVT-650-1224-20	12' x 24'	Short
CXVT-658-1224-30	12' x 24'	Short
CXVT-676-1224-25	12' x 24'	Short
CXVT-699-1224-30	12' x 24'	Short
CXVT-700-1224-40	12' x 24'	Short
CXVT-731-1224-50	12' x 24'	Short
CXVT-744-1224-40	12' x 24'	Short
CXVT-754-1224-60	12' x 24'	Short
CXVT-778-1224-50	12' x 24'	Short
CXVT-808-1224-60	12' x 24'	Short
CXVT-813-1224-50	12' x 24'	Short
CXVT-816-1224-40	12' x 24'	Tall
CXVT-843-1224-60	12' x 24'	Short
CXVT-855-1224-50	12' x 24'	Tall
CXVT-887-1224-60	12' x 24'	Tall
CXVT-1005-1426-75	14' x 26'	Short
CXVT-1015-1426-60	14' x 26'	Tall
CXVT-1057-1426-75	14' x 26'	Tall
CXVT-712-1426-20	14' x 26'	Short
CXVT-741-1426-25	14' x 26'	Short
CXVT-766-1426-30	14' x 26'	Short
CXVT-791-1426-20	14' x 26'	Short
CXVT-807-1426-40	14' x 26'	Short
CXVT-824-1426-25	14' x 26'	Short
CXVT-844-1426-50	14' x 26'	Short
CXVT-856-1426-40	14' x 26'	Short
CXVT-874-1426-60	14' x 26'	Short
CXVT-894-1426-50	14' x 26'	Short
CXVT-910-1426-75	14' x 26'	Short
CXVT-924-1426-60	14' x 26'	Short
CXVT-933-1426-50	14' x 26'	Short
CXVT-963-1426-75	14' x 26'	Short
CXVT-965-1426-60	14' x 26'	Short
CXVT-981-1426-50	14' x 26'	Tall

CXVT Model Number	Nominal Box Size	Coil Module Height
CXVT-1162-2424-30	Qty. (2) 12' x 24'	Short
CXVT-1234-2424-30	Qty. (2) 12' x 24'	Short
CXVT-1300-2424-40	Qty. (2) 12' x 24'	Short
CXVT-1316-2424-60	Qty. (2) 12' x 24'	Short
CXVT-1352-2424-50	Qty. (2) 12' x 24'	Short
CXVT-1398-2424-60	Qty. (2) 12' x 24'	Short
CXVT-1400-2424-80	Qty. (2) 12' x 24'	Short
CXVT-1462-2424-100	Qty. (2) 12' x 24'	Short
CXVT-1488-2424-80	Qty. (2) 12' x 24'	Short
CXVT-1508-2424-120	Qty. (2) 12' x 24'	Short
CXVT-1556-2424-100	Qty. (2) 12' x 24'	Short
CXVT-1616-2424-120	Qty. (2) 12' x 24'	Short
CXVT-1626-2424-100	Qty. (2) 12' x 24'	Short
CXVT-1632-2424-80	Qty. (2) 12' x 24'	Tall
CXVT-1686-2424-120	Qty. (2) 12' x 24'	Short
CXVT-1710-2424-100	Qty. (2) 12' x 24'	Tall
CXVT-1774-2424-120	Qty. (2) 12' x 24'	Tall
CXVT-1424-2826-40	Qty. (2) 14' x 26'	Short
CXVT-1482-2826-50	Qty. (2) 14' x 26'	Short
CXVT-1532-2826-60	Qty. (2) 14' x 26'	Short
CXVT-1582-2826-40	Qty. (2) 14' x 26'	Short
CXVT-1614-2826-80	Qty. (2) 14' x 26'	Short
CXVT-1648-2826-50	Qty. (2) 14' x 26'	Short
CXVT-1688-2826-100	Qty. (2) 14' x 26'	Short
CXVT-1712-2826-80	Qty. (2) 14' x 26'	Short
CXVT-1748-2826-120	Qty. (2) 14' x 26'	Short
CXVT-1788-2826-100	Qty. (2) 14' x 26'	Short
CXVT-1820-2826-150	Qty. (2) 14' x 26'	Short
CXVT-1848-2826-120	Qty. (2) 14' x 26'	Short
CXVT-1866-2826-100	Qty. (2) 14' x 26'	Short
CXVT-1926-2826-150	Qty. (2) 14' x 26'	Short
CXVT-1930-2826-120	Qty. (2) 14' x 26'	Short
CXVT-1962-2826-100	Qty. (2) 14' x 26'	Tall
CXVT-2010-2826-150	Qty. (2) 14' x 26'	Short
CXVT-2030-2826-120	Qty. (2) 14' x 26'	Tall
CXVT-2114-2826-150	Qty. (2) 14' x 26'	Tall

Table 3. CXVT Nominal Box Size & Coil Module Height by Model Number

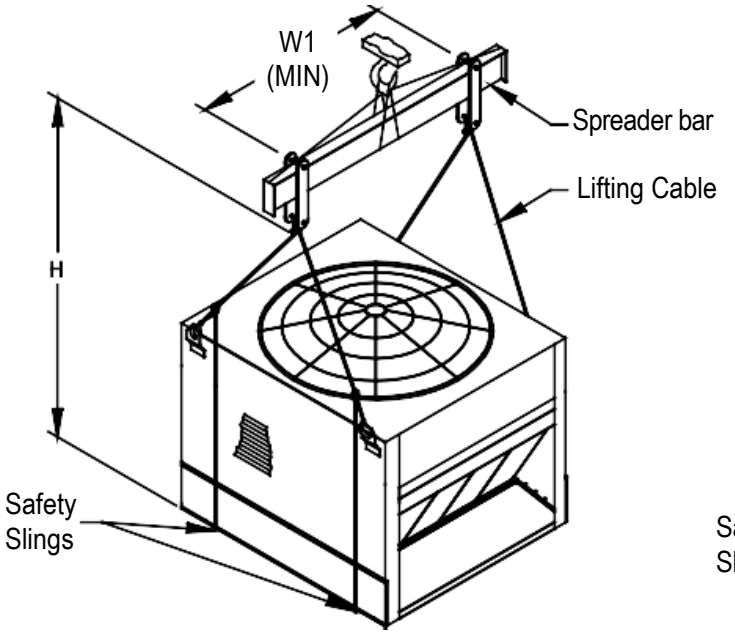


Figure 1. Plenum Module Lift

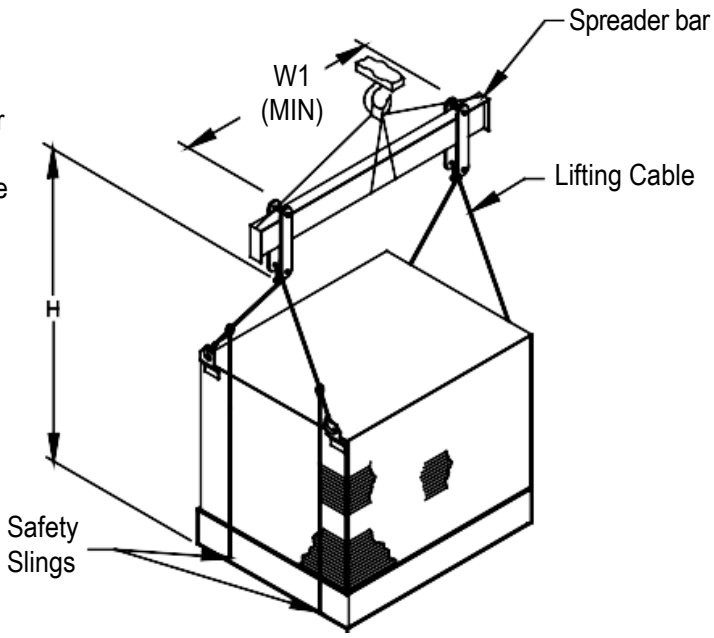


Figure 2. Coil Module Lift

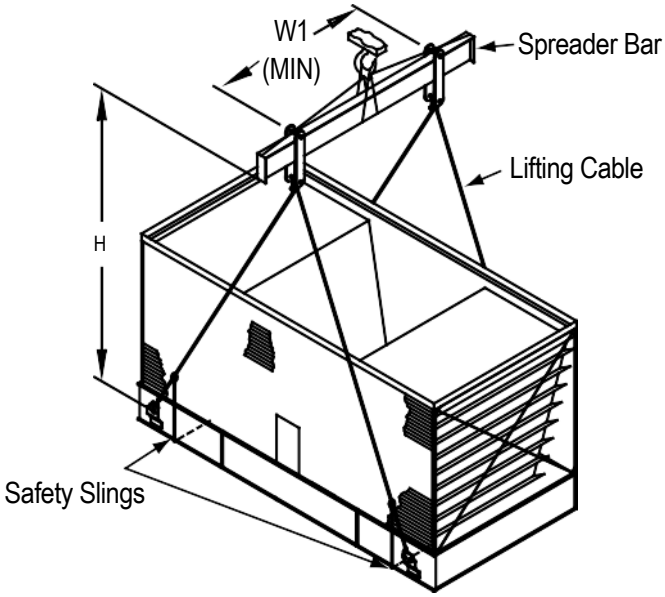


Figure 3. Lower Section Lift

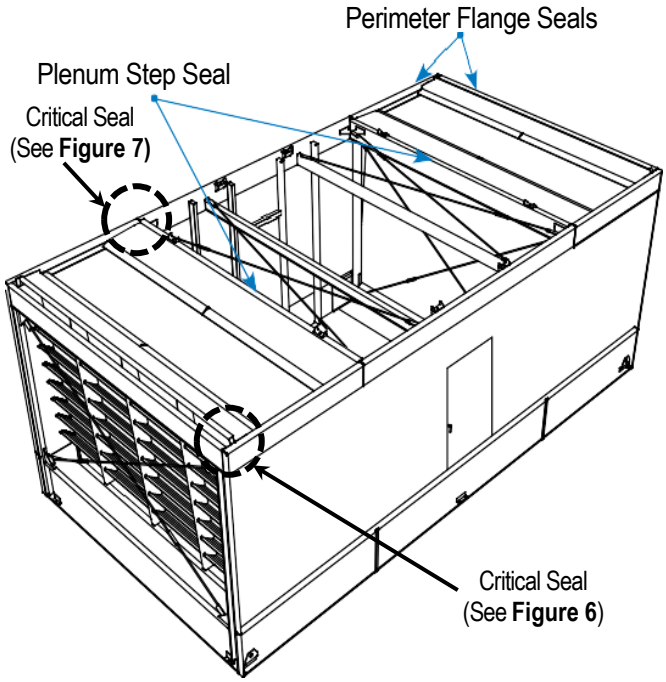


Figure 4. Lower Section Sealing Detail

Section Assembly

NOTICE: For weight information, refer to the submittal drawing package. Any motors or accessories shipped in the cold-water basin must be removed prior to installing the upper (mechanical and coil casing) section.

1. Remove any accessories shipped in the cold-water basin.
2. Position the lower section on the unit supports and bolt in place. Refer to **Figure 3** on **Page 12** and **Anchoring** on **Page 8**.
3. Wipe moisture and dirt from the perimeter flange and plenum step as shown in **Figure 4.**
4. Apply flat butyl sealer tape (BAC part #554000) across the entire plenum step seal as shown in **Figure 5**.
    a. Refer to critical seal area shown in **Figure 4** and detailed in **Figure 7**.
5. Apply a 2" x 2" piece of flat butyl sealer tape to the corner rigging guides as shown in **Figure 4** and detailed in **Figure 6**.
6. Apply flat butyl sealer tape around the entire perimeter of the lower section. Align the tape on the perimeter flange as shown in **Figure 8**. See **Figure 6** and **Figure 7** for critical sealing areas, allow 1" overlap tape at these locations.

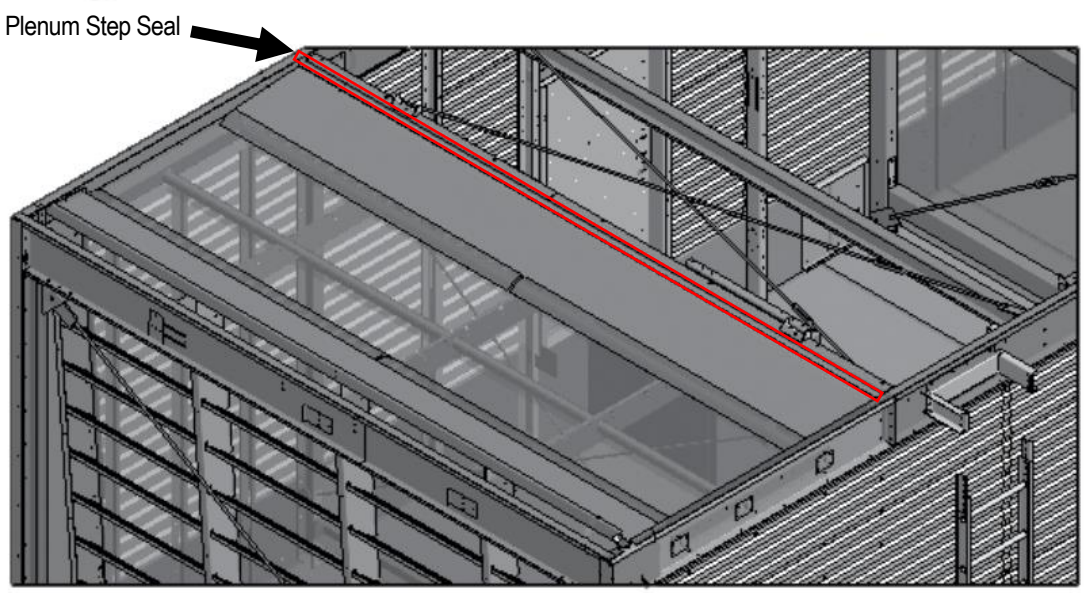


Figure 5. FXV3 and CXVT Lower Section

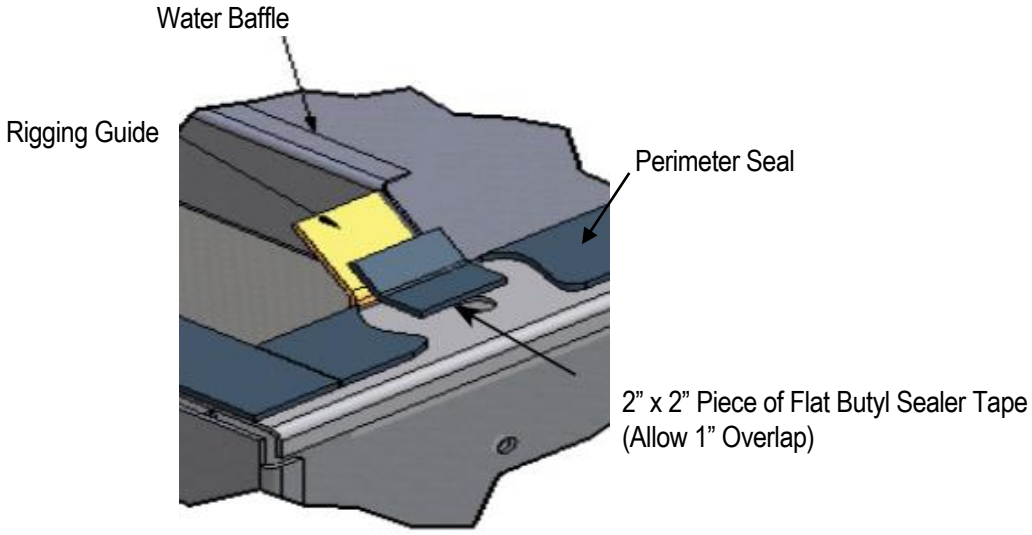


Figure 6. Perimeter Seal Detail

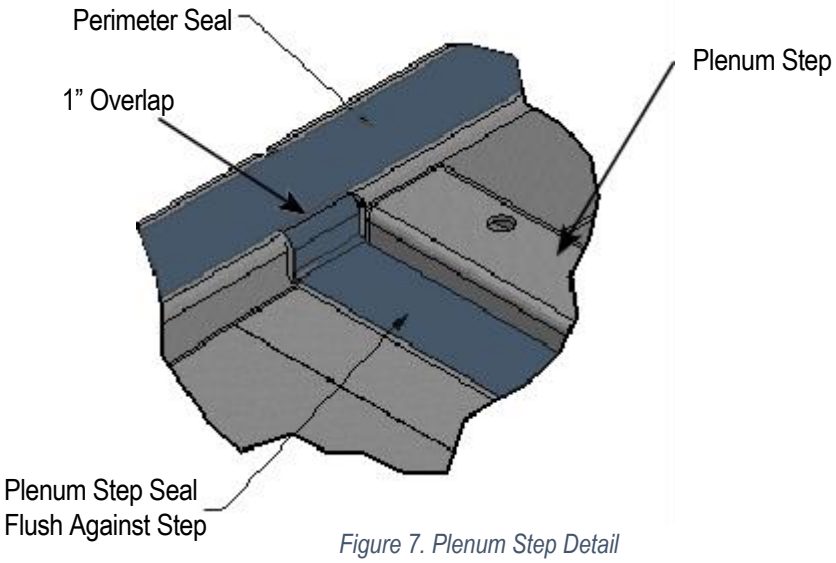


Figure 7. Plenum Step Detail

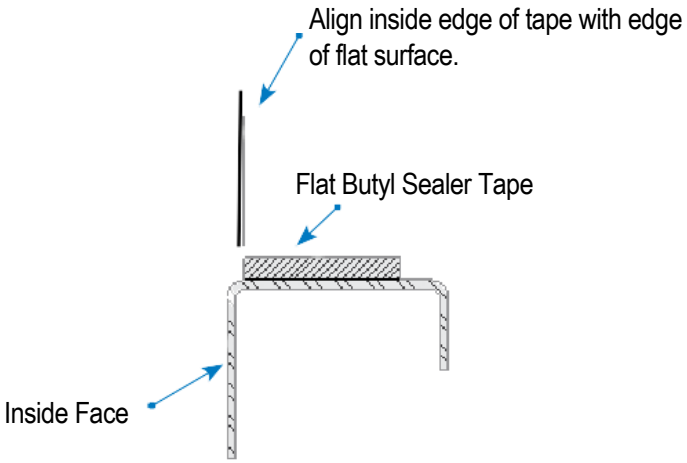


Figure 8. Application of Butyl Sealer Tape

7. Lift and set the plenum module. Refer to **Figure 1** for lifting details. Center the plenum module transversely and longitudinally. The rigging guides (**Figure 9** & **Figure 10**) will engage when the plenum module is within 2" of the lower section.
8. Bolt the plenum module in place at the four internal bracket locations using provided 1/2" hardware. See **Figure 11** for typical bolting detail.

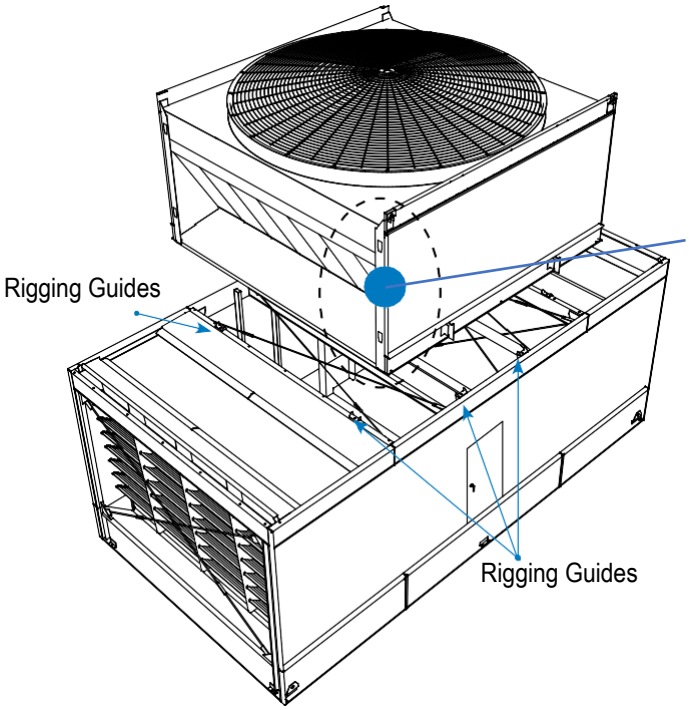


Figure 9. Plenum Module Rigging

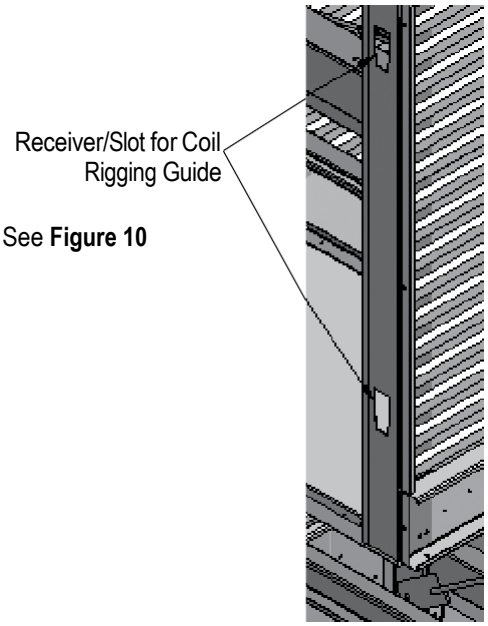


Figure 10. Detail of Receiver/Slot for Coil Rigging Guide

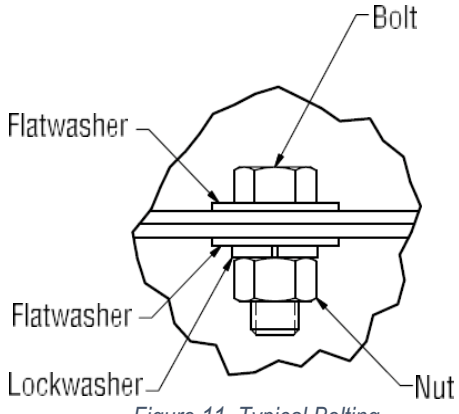


Figure 11. Typical Bolting

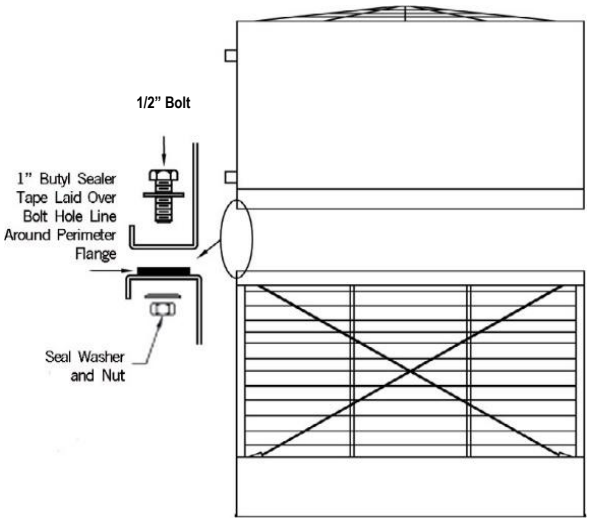
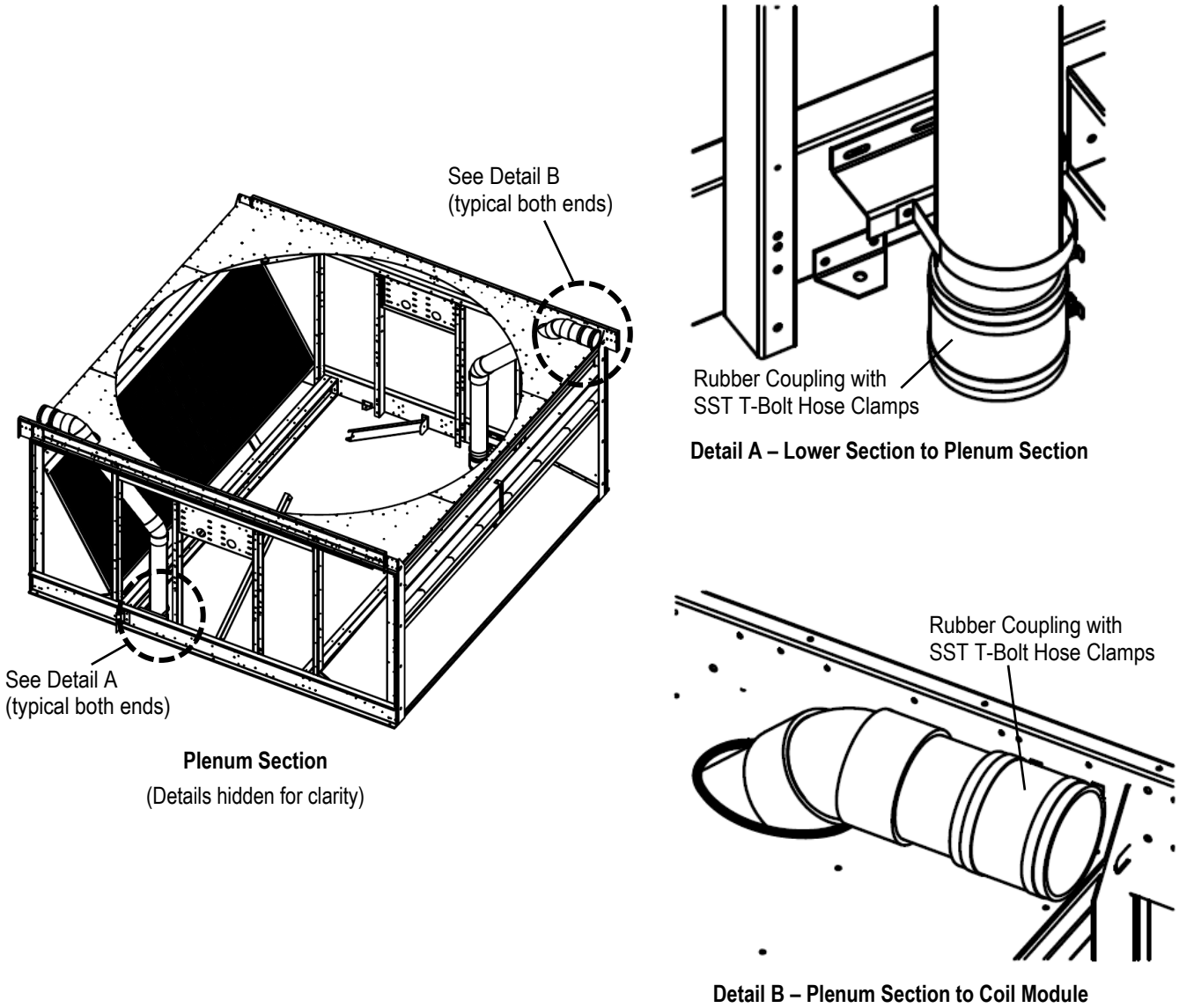


Figure 12. Typical Bolting

9. Connect the lower section and plenum section internal spray water piping by using rubber couplings and SST T-bolt hose clamps. Refer to **Figure 13** for connection details.



Plenum Section
(Details hidden for clarity)

Detail A – Lower Section to Plenum Section

Detail B – Plenum Section to Coil Module

Figure 13. Internal Spray Water Piping Connections

10. Before rigging the coil modules, wipe any moisture and debris from the corner columns and apply "D" seals (BAC part # 271665) at two locations on each coil module as shown in **Figure 14** and **Figure 15**.
    a. Coil module height "short" will receive 78" of "D" seal. Coil module height "tall" will receive 97" of "D" seal. Refer to **Table 2** and **Table 3** to determine coil module height.

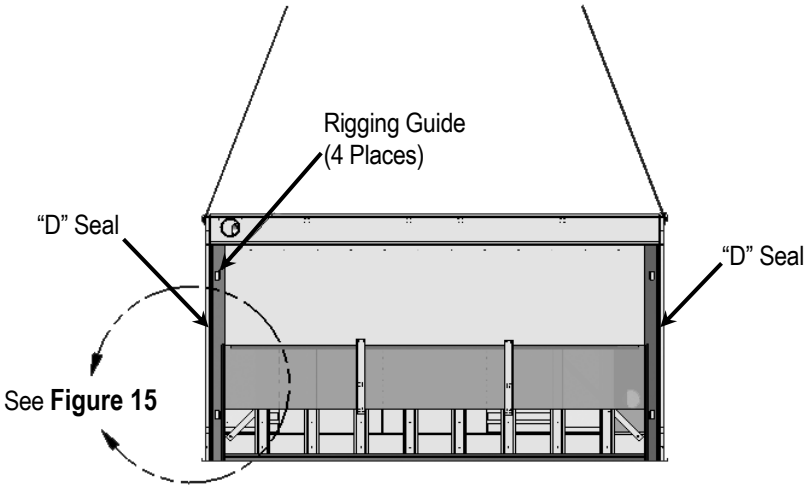


Figure 14. Coil Module as Seen from the Plenum Side

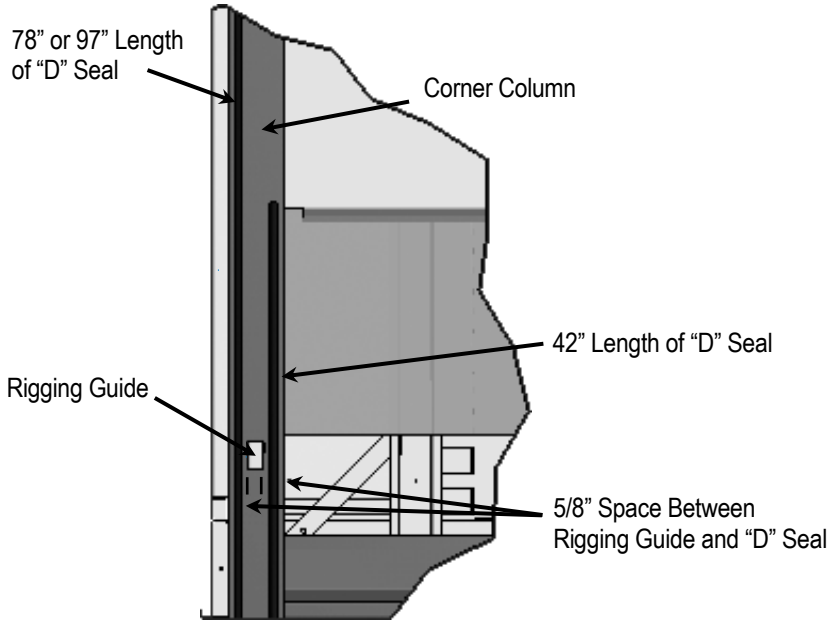


Figure 15. Detail of Corner Column

11. Lift the coil module and verify that it is level. Refer to **Figure 2** for lifting details. Adjust lifting devices as necessary to level the coil module before attempting to set. As shown in **Figure 16,** the coil connections of the coil module weigh more and will affect the balance. Tolerances are given in **Figure 17** and **Figure 18.**

> **NOTICE**: Failure to level the coil module for rigging will prevent proper engagement of rigging guides.

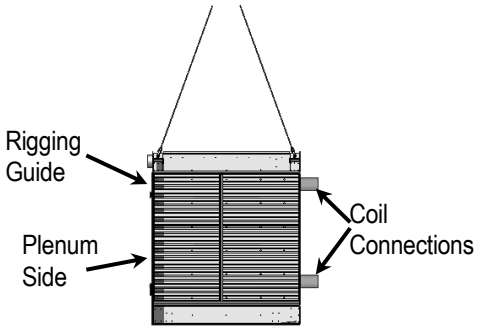


Figure 16. Coil Module End

Figure 17. Coil Module Level Tolerance as seen from the Plenum Side

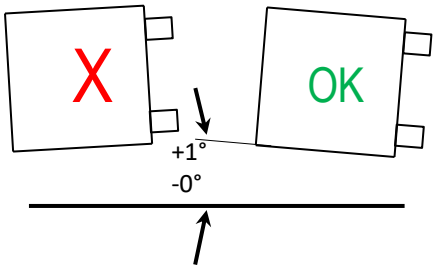


Figure 18. Coil Module Level Tolerance as seen from the Coil Module End Sides

12. To engage the rigging guides, the coil module must be positioned between 2-3/4" to 3-3/4" above the lower section as it is moved towards the plenum module. Once the coil module rigging guides have engaged the plenum module corner columns, lower the coil into final position as shown in **Figure 19**.
13. Bolt the coil module to the lower section along the louver face flange, see **Figure 11** for typical bolting detail.

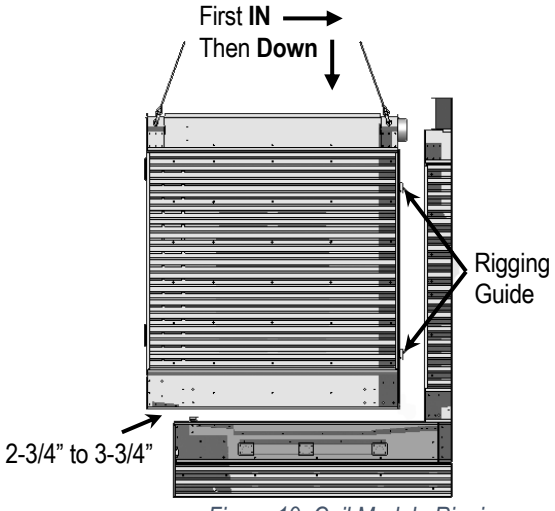


Figure 19. Coil Module Rigging

14. Install four (4) internal splice plates connecting upper section and lower section purlins, as shown in **Figure 20**. Use 1/2" Grade 5 hardware.

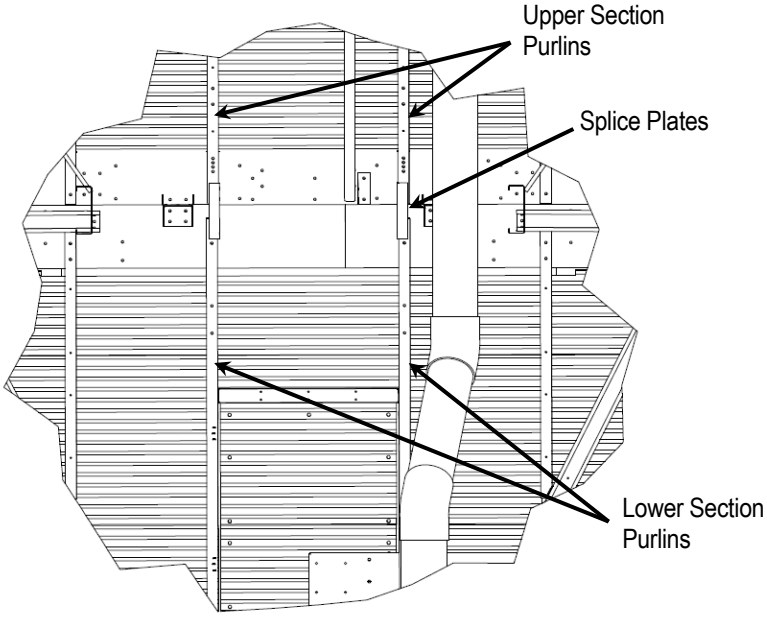


Figure 20. Internal Splice Plate Installation

12. Install external splice plates on the upper section plate for every pair of lifting ears (4 locations total). Use two splice plates, one on top of the other at these locations. Refer to **Figure 21**. Use 1/2" Grade 5 hardware.

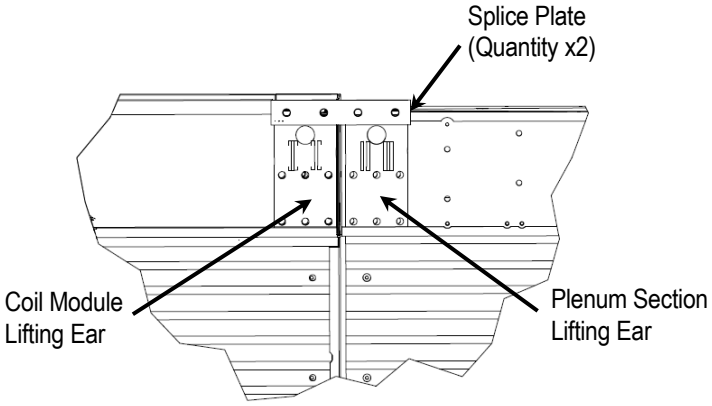


Figure 21. External Splice Plate Installation

13. Join coil section to upper plenum section. Refer to **Figure 22** and
14. **Figure** 23.
    a. Remove corner drift eliminator to gain access to coil section.
    b. Using supplied 1/2” Grade 5 hardware, bolt upper plenum section to coil section. Refer to **Figure 22** and
    c. **Figure** 23.
    d. Repeat on all 4 corners of the upper plenum section.
15. Join lower section to upper plenum section. Refer to **Figure 22** and **Figure 24**.
    a. Using supplied 1/2” Grade 5 hardware, bolt lower section to upper plenum section. Refer to **Figure 22** and **Figure 24**.
    b. Repeat until all 8 brackets are bolted together. 4 brackets are located above the access door and 4 brackets are located under the drift eliminator pan.
16. Connect the plenum section and coil module internal spray water piping by using rubber couplings and SST T-bolt hose clamps. Refer to **Figure 13** for connection details.

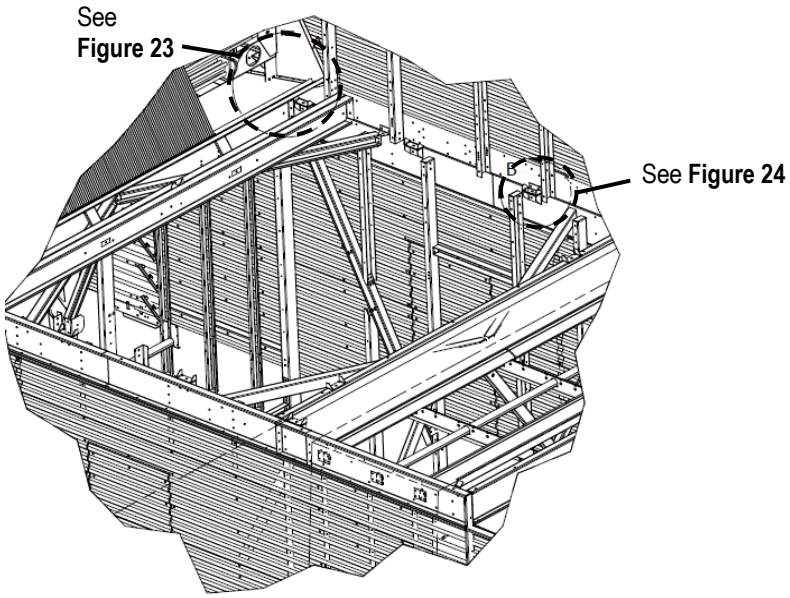


Figure 22. Upper and Lower Section Bolted Connections

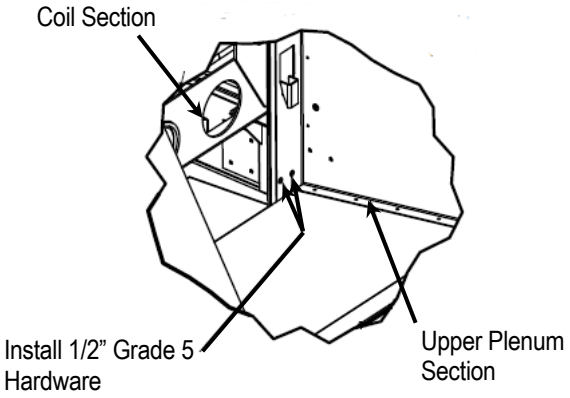


Figure 23. Coil Section to Upper Plenum Section Connection

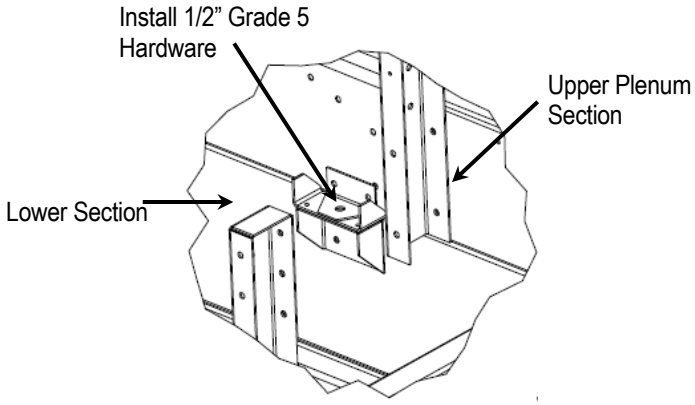


Figure 24. Lower Section to Upper Plenum Section Connection

Mechanical Section's Shipping Braces Removal on (Optional) Gear and Belt Drive Units (Optional)

Gear and belt fan drive systems may be supplied with shipping braces as shown in **Figure 25** and **Figure 26**. Belt fan drive systems include the Baltidrive® Power Train and Baltiguard™ Fan System. Shipping braces are required for shipping only. Remove the shipping braces if they interfere with platform handrails or obstruct the working area. Shipping braces may be loosened to help align the upper plenum section with the coil module.

NOTICE: ENDURADRIVE® Fan System mechanical braces are structurally required and are not removable.

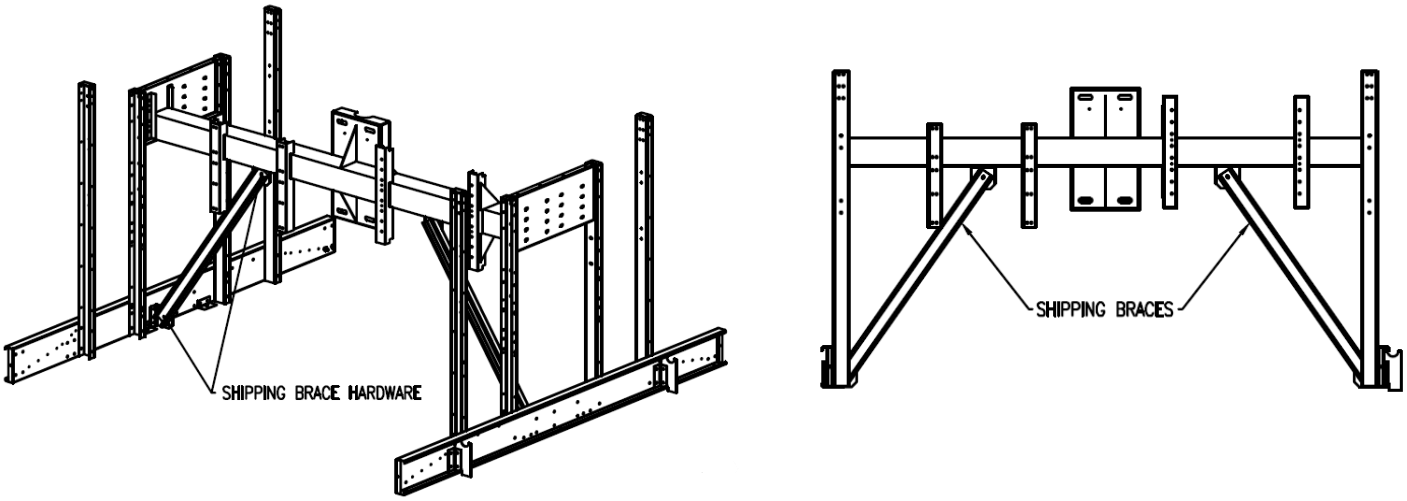


Figure 25. Belt Drive Shipping Bracing

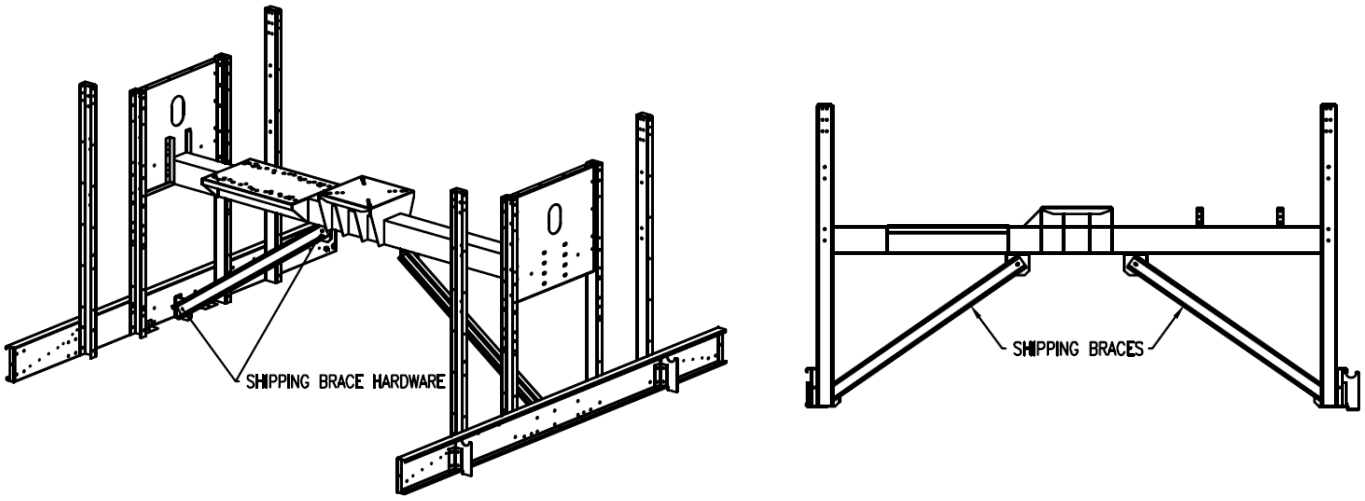


Figure 26. Gear Drive Shipping Bracing

Plain Pipe Stub Coil Connections Nitrogen Charge Removal

Coils may be supplied with plain pipe stub coil connections that are capped and charged with nitrogen from the factory. Refer to **Figure 27** for information on validating coil charge pressure. Plain pipe stub coil connections must be field cut and beveled before welding. Prior to cutting the pipe stub, relieve the pressure inside each coil using the factory installed Schrader valve.

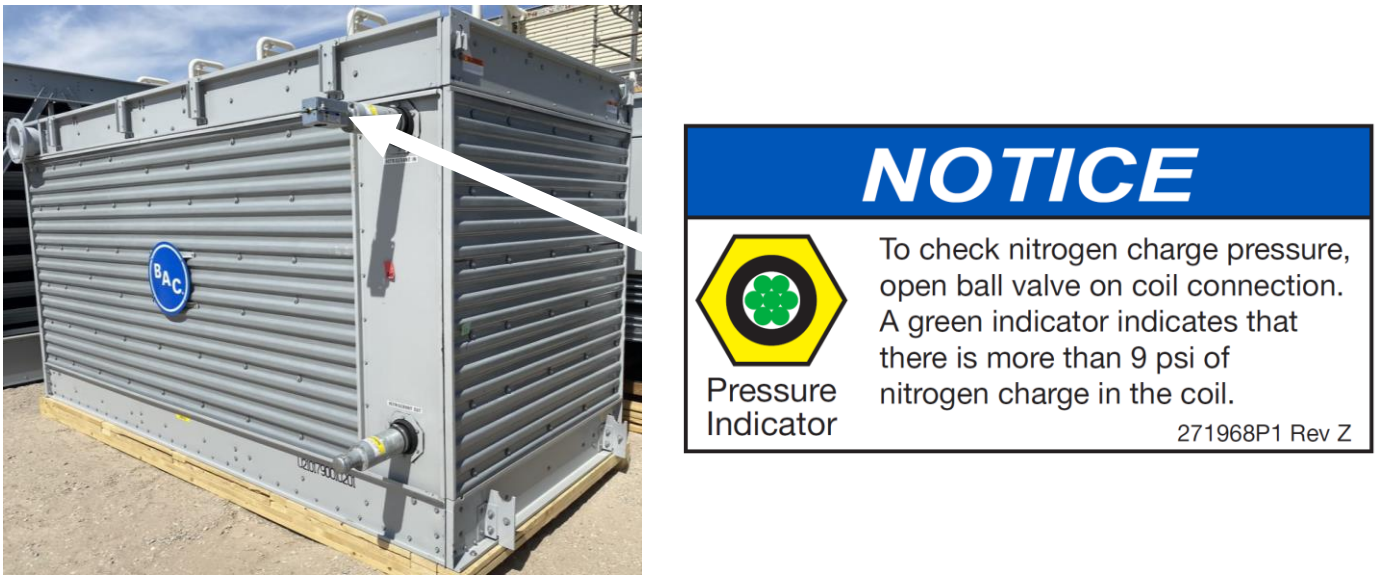


Figure 27. Coil Connections Capped and Charged

3. Accessory Installation

General Packing & Labeling Information

The parts for your new BAC equipment have been carefully packed to ensure that they arrive in good condition and have been sorted by field kit. This has been done to reduce the possibility of misplacing items and ensure trouble-free assembly. Note that extra hardware, caulk, and sealer tape (if required) have been provided to accommodate field assembly conditions.

Parts are individually labeled with for easy identification. Key information is provided on each part label to help identify the proper location for each part. This information is shown in **Figure 28.**

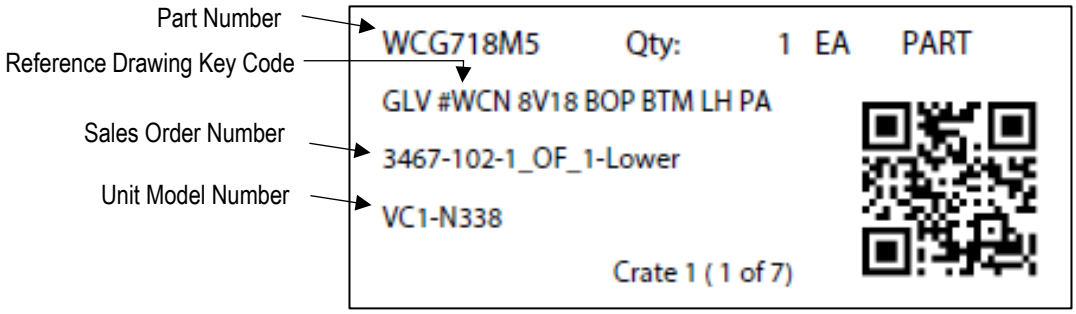


Figure 28. Sample Part Label

ENDURADRIVE® Fan System Installation

The ENDURADRIVE® Fan System is optional for select Series FXV3 and CXVT models. The ENDURADRIVE® Fan System variable frequency drive (VFD) is to be installed per the ACS880+N5350 Cooling Tower Drives User's Guide available at www.abb.com. The fan motor must be wired directly into the VFD and cannot be wired across the line. For wiring details, refer to the submittal drawings.

Warnings for the ENDURADRIVE® Fan System

⚠ WARNING: ENDURADRIVE® Fan System motors can induce voltage and current in the motor leads by rotating the motor shaft, even when the motor is completely disconnected from the power source, which can lead to severe bodily injury or death from electrical shock. Mechanically lock or tie down the fan until all wiring has been completed and before servicing the drive system, or when performing any motor maintenance procedure.

⚠ WARNING: Magnetic and electromagnetic fields in the vicinity of current carrying conductors and ENDURADRIVE® Fan System motors can result in a serious health hazard to persons with cardiac pacemakers, metal implants, and hearing aids. To avoid risk, stay away from the area surrounding the ENDURADRIVE® Fan System motor.

⚠ WARNING: The ENDURADRIVE® Fan System variable frequency drive may apply hazardous voltages to the motor leads after power to the controller has been turned off. To avoid the risk of severe bodily injury or death from electrocution, verify that the controller is incapable of delivering hazardous voltages and that the voltage at the motor leads is zero before servicing the drive system, or when performing any motor maintenance procedure.

Important Notes for the ENDURADRIVE® Fan System

- VFD must be powered on at all times so that trickle current can remove moisture from motor when idle.
- Use only a shielded motor power cable with a complete circumferential braided or copper film/tape ground jacket around the power leads. This ground should be secured to the motor frame from within the motor terminal box and must return without interruption to the drive ground.
- To prevent equipment damage, be sure that the electrical service is not capable of delivering more than the maximum motor rated amps listed on the rating plate.

Access Door Platform & Ladder Installation

Refer to **Table 4** for access door platform installation information. For ladder opening safety gate installation refer to **Ladder Opening Safety Gate Installation** on **Page 55**.

Reference Drawing	Spray Water Type	Drawing Number	Page #
Access Door Platform Installation	N/A	TA1JRR	26
Access Door Platform Ladder Installation	Remote Sump	Figure 29	25
Access Door Platform Ladder Installation	Pump Suction	CAR130	27

Table 4. Access Door Platform Reference Drawings

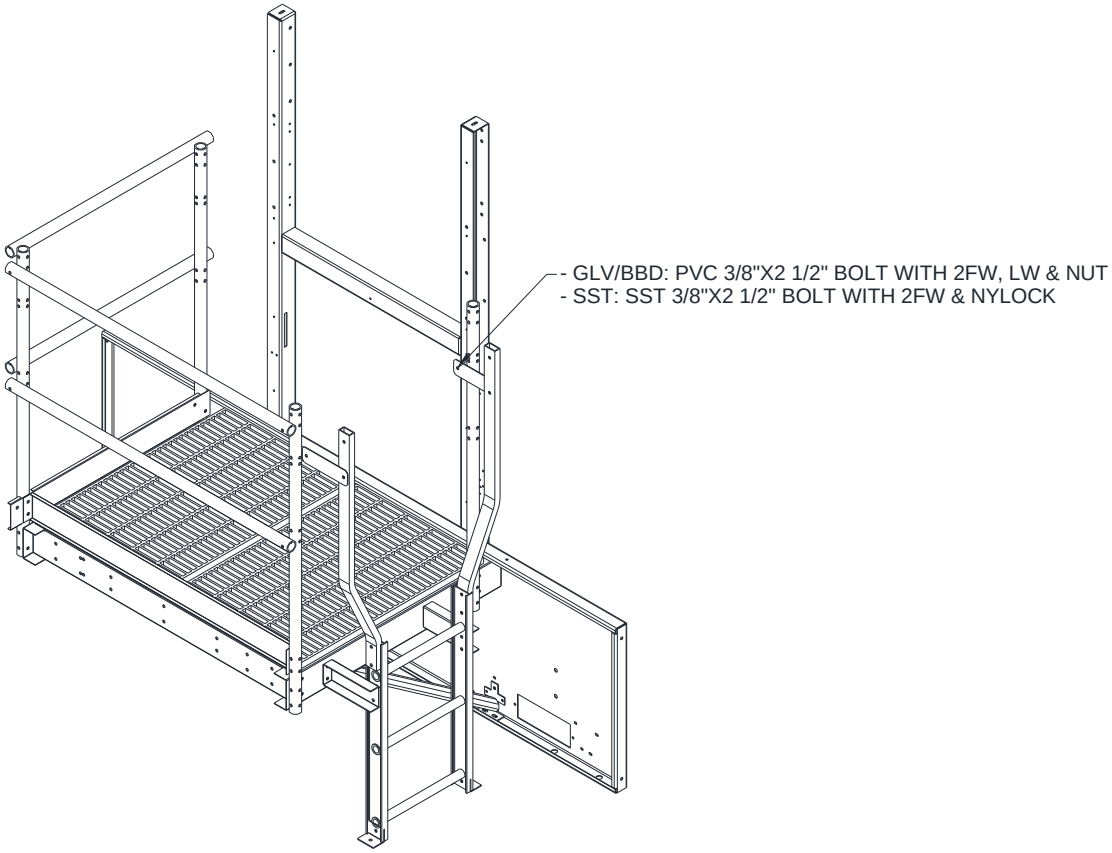


Figure 29. Access Door Platform Ladder Installation, Remote Sump

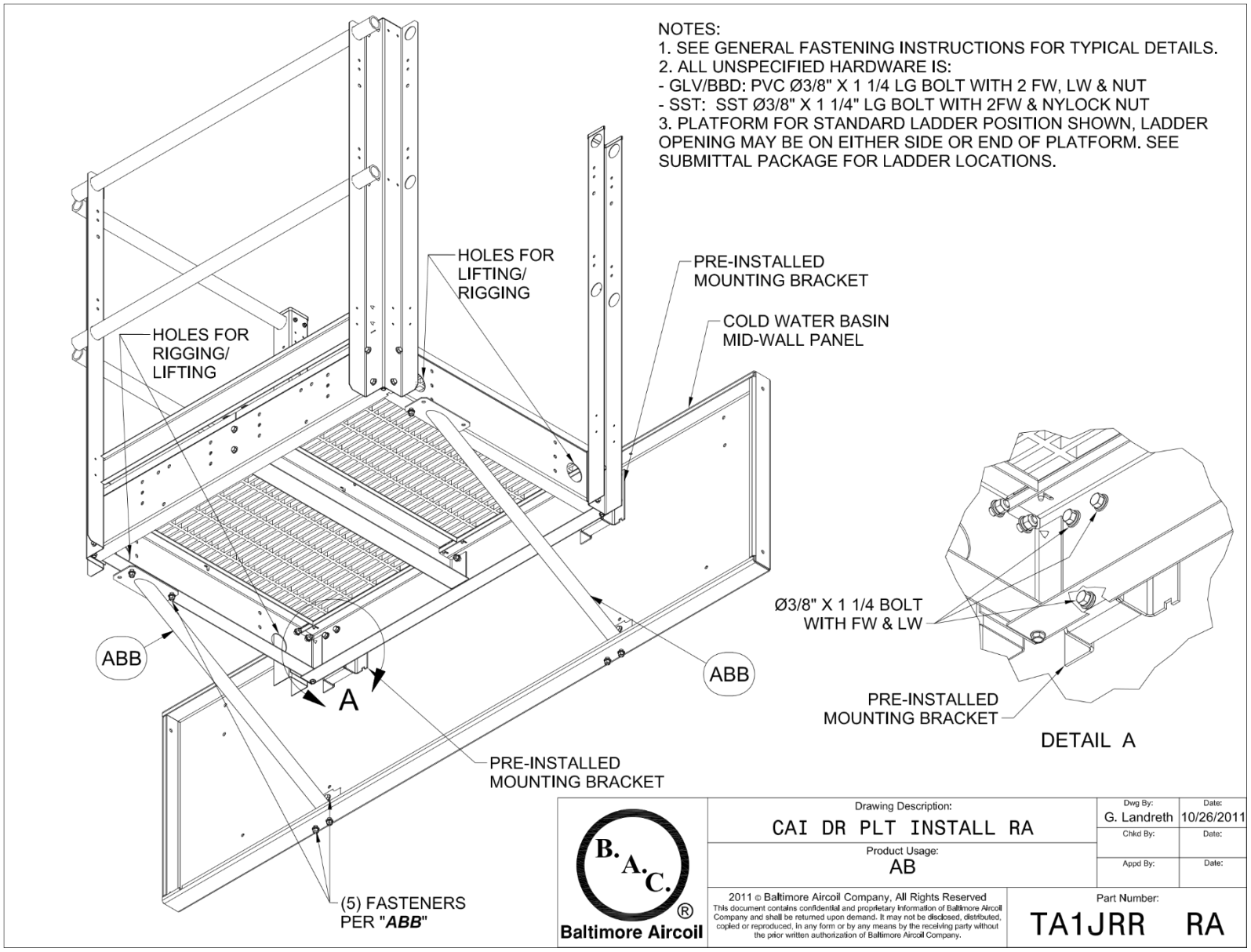
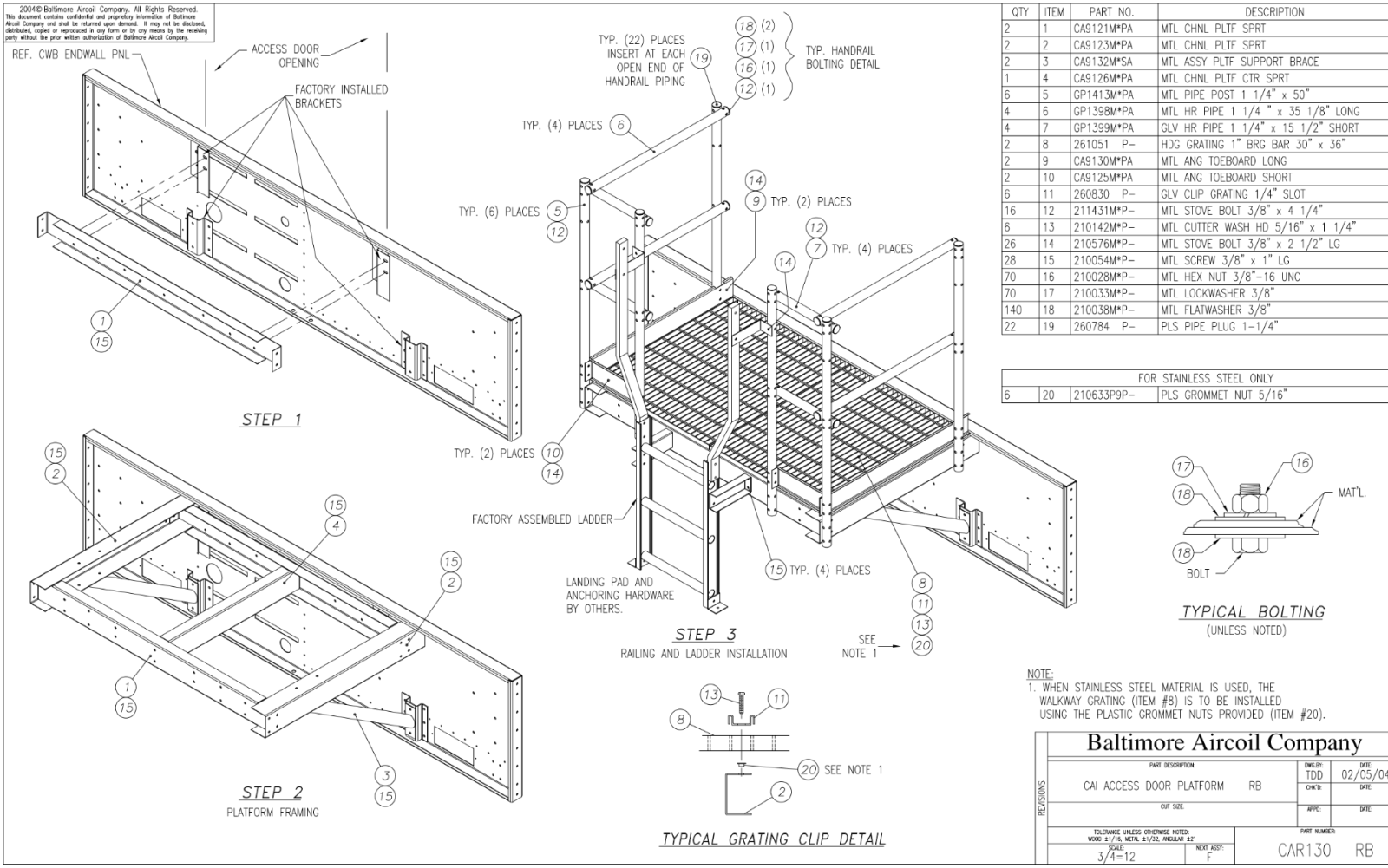


Figure 30. TA1JRR Access Door Platform Installation



QTY	ITEM	PART NO.	DESCRIPTION
2	1	CA9121M*PA	MTL CHNL PLTF SPRT
2	2	CA9123M*PA	MTL CHNL PLTF SPRT
2	3	CA9132M*SA	MTL ASSY PLTF SUPPORT BRACE
1	4	CA9126M*PA	MTL CHNL PLTF CTR SPRT
6	5	GP1413M*PA	MTL PIPE POST 1 1/4" x 50"
4	6	GP1398M*PA	MTL HR PIPE 1 1/4 " x 35 1/8" LONG
4	7	GP1399M*PA	GLV HR PIPE 1 1/4" x 15 1/2" SHORT
2	8	261051 P-	HDG GRATING 1" BRG BAR 30" x 36"
2	9	CA9130M*PA	MTL ANG TOEBOARD LONG
2	10	CA9125M*PA	MTL ANG TOEBOARD SHORT
6	11	260830 P-	GLV CLIP GRATING 1/4" SLOT
16	12	211431M*P-	MTL STOVE BOLT 3/8" x 4 1/4"
6	13	210142M*P-	MTL CUTTER WASH HD 5/16" x 1 1/4"
26	14	210576M*P-	MTL STOVE BOLT 3/8" x 2 1/2" LG
28	15	210054M*P-	MTL SCREW 3/8" x 1" LG
70	16	210028M*P-	MTL HEX NUT 3/8"-16 UNC
70	17	210033M*P-	MTL LOCKWASHER 3/8"
140	18	210038M*P-	MTL FLATWASHER 3/8"
22	19	260784 P-	PLS PIPE PLUG 1-1/4"
		FOR STAINLESS STEEL ONLY	
6	20	210633P9P-	PLS GROMMET NUT 5/16"

Figure 31. CAR130 Access Door Platform Ladder Installation, Pump Suction

Fan Deck Extension Installation

Fan deck extensions are shown in **Figure 32** and **Figure 33**. Refer to **Table 5** for fan deck extension installation reference drawings. Refer to **Table 2** and **Table 3** on **Page 10** and **11**, to determine unit width. For fan deck handrail installation information refer to **Fan Deck Handrail Installation** on **Page 62**. For fan deck ladder installation information refer to section **Fan Deck Ladder Installation** on **Page 78**.

Reference Drawing	Unit Width	Drawing Number	Page #
Fan Deck Extension Installation	12’	TA15RR	29
Fan Deck Extension Installation	14’	TA16RR	30

Table 5. Fan Deck Extension Reference Drawings

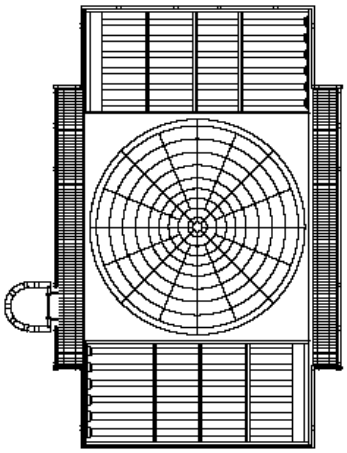


Figure 32. Plan View, Fan Deck Extension

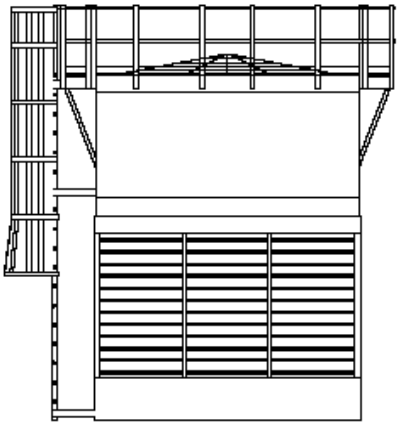


Figure 33. Side Elevation, Fan Deck Extension

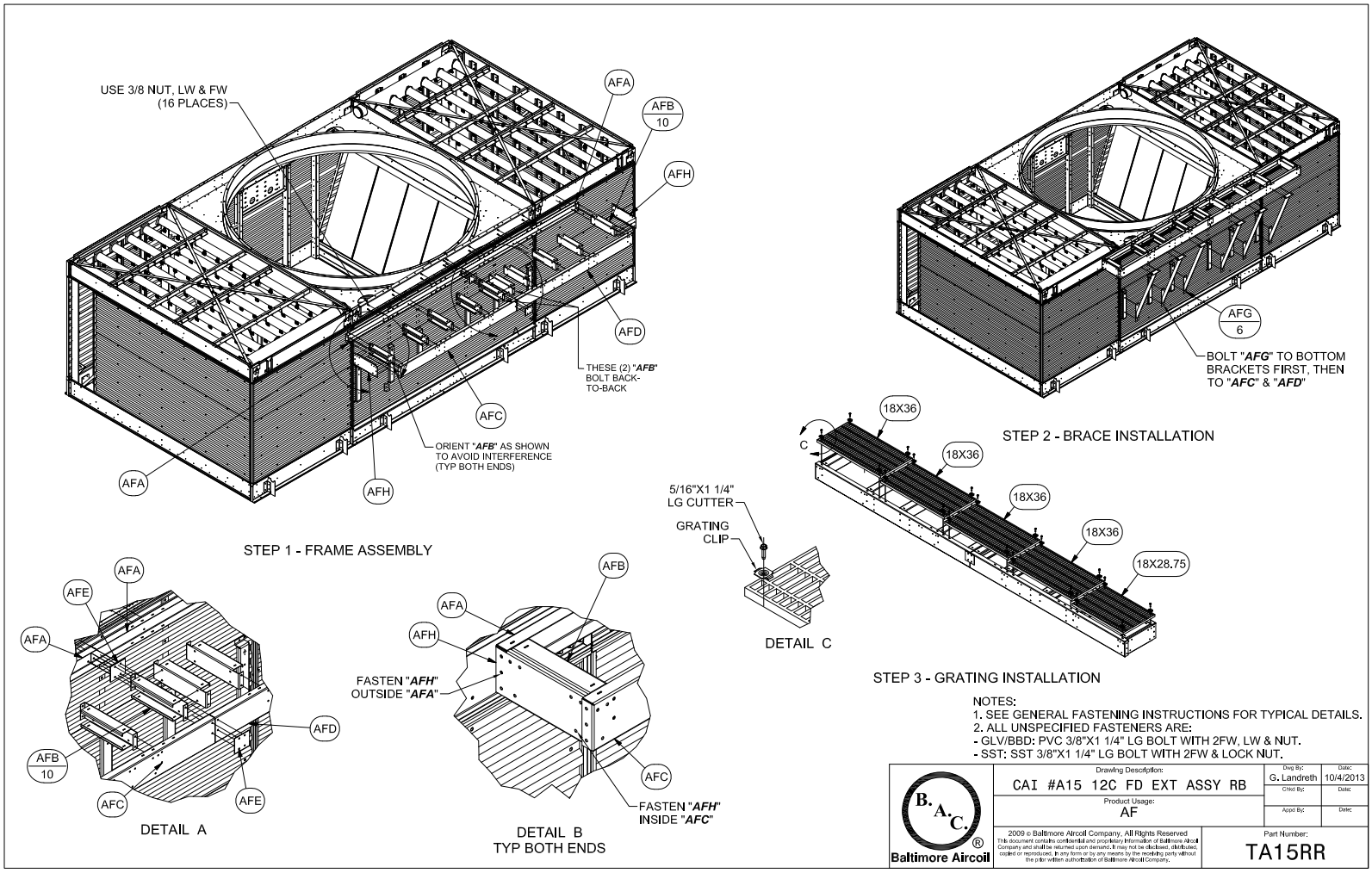


Figure 34. TA15RR Fan Deck Extension Installation 12' Units

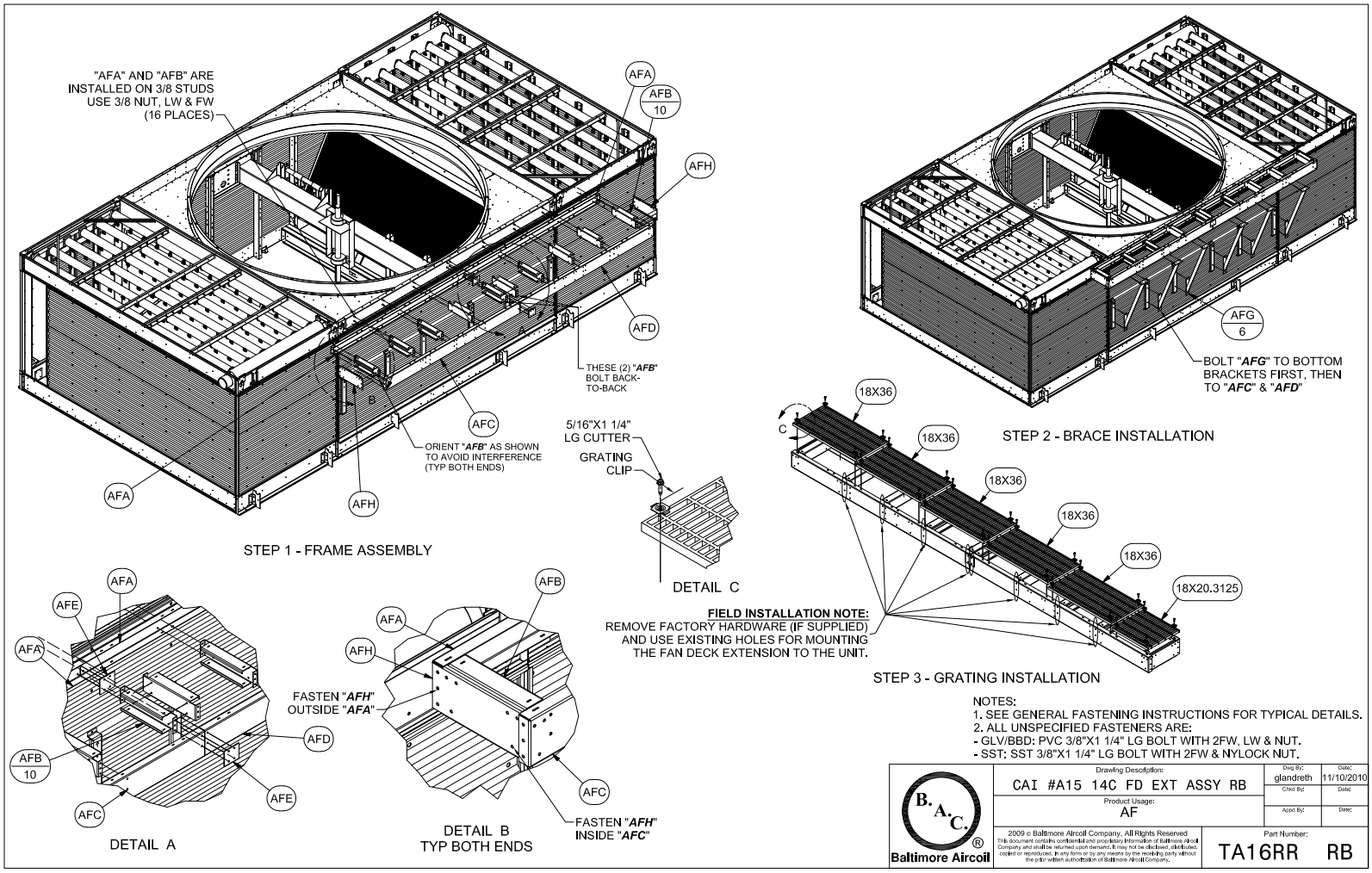


Figure 35. TA16RR Fan Deck Extension Installation 14' Units

External Motor Gear Drive Motor Base, Platform & Ladder Installation

Refer to **Table 6** for external motor gear drive motor base, platform, and ladder installation reference drawings. For multi-section ladder assembly refer to **Multi-Section Ladder Assembly** on **Page 76**. For ladder opening safety gate installation refer to **Ladder Opening Safety Gate Installation** on **Page 55**.

Reference Drawing	Drawing Number	Page #
External Motor Gear Drive Motor and Base Installation	CMR053	32
External Motor Gear Drive Platform Installation	TA4KRR	33
External Motor Gear Drive Platform Ladder Installation	TL0ZRR	34
External Motor Gear Drive Platform Ladder Safety Cage Installation	TL1CRR	35

Table 6. External Motor Gear Drive Platform Reference Drawings

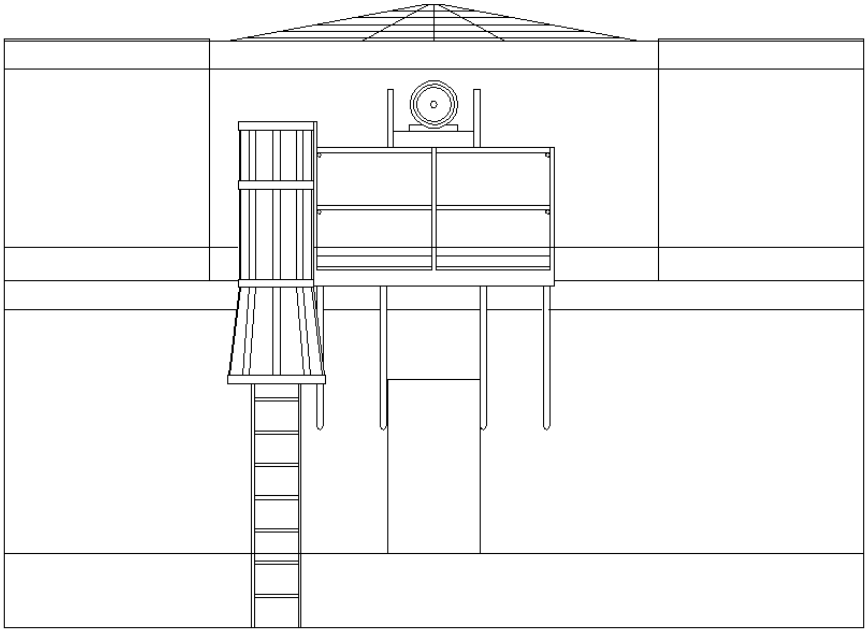
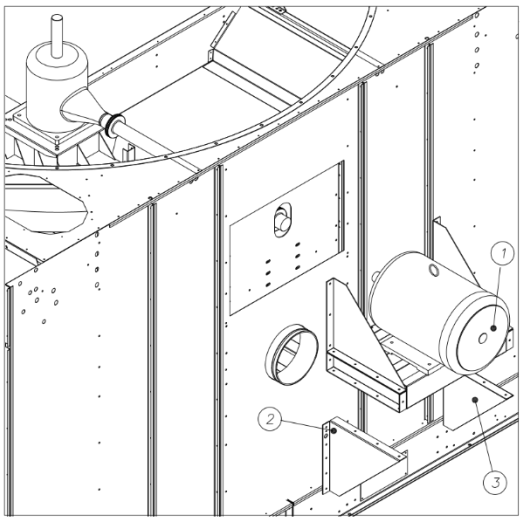


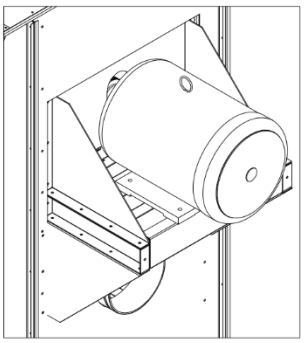
Figure 36. End Elevation External Motor Gear Drive with Platform

	QTY	ITEM	PART NO.	DESCRIPTION
–	1	1	SEE NOTE 1	MOTOR BASE ASSEMBLY
1	–	2	S3DU31M*PA	MOTOR SUPPORT GUSSET LH
–	1		S3DU35M*PA	MOTOR SUPPORT GUSSET LH
1	–	3	S3DU32M*PA	MOTOR SUPPORT GUSSET RH
–	1		S3DU36M*PA	MOTOR SUPPORT GUSSET RH
22	22	4	210055M*P	BOLT 3/8" X 1 1/4" LONG
44	44	5	210038M*P	FLATWASHER 3/8"
22	22	6	210037M*P	LOCKWASHER 3/8"
22	22	7	210028M*P	NUT 3/8"

21.5X12X160 THRU 21.5X12X224
24X14X112 THRU 24X14X224

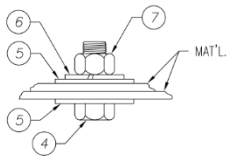


EXPLODED VIEW
SEE NOTE 2



ASSEMBLED VIEW

NOTE: (A1)
1. THE MOTOR BASE IS PRE-ASSEMBLED AT THE FACTORY (SEE DRAWING CMR055 RB).
2. IT IS NECESSARY TO INSTALL ALL (22) BOLTS AT ALL GUSSET AND MOTOR BASE LOCATIONS.



TYPICAL BOLTING
SEE NOTE 2

External Motor & Motor Base for Gear Drive

Baltimore Aircoil Co.

PART DESCRIPTION: CAI EXTERNAL MOTOR AND BASE RB
DWG.BY: BLB DATE: 12/27/01
CHK'D: DATE:
APPD: DATE:
CUT SIZE:
TOLERANCE UNLESS OTHERWISE NOTED: WOOD ±1/16, METAL ±1/32, ANGULAR ±2°
SCALE: 3/4=12
NEXT ASSY: F
PART NUMBER: CMR053 RB

REVISIONS
REV. A | BY: RLT | DATE: 02/03/05 | 1. DELETE MOTOR FROM NOTE 1

Figure 37. CMR053 External Motor Gear Drive Motor and Base Installation

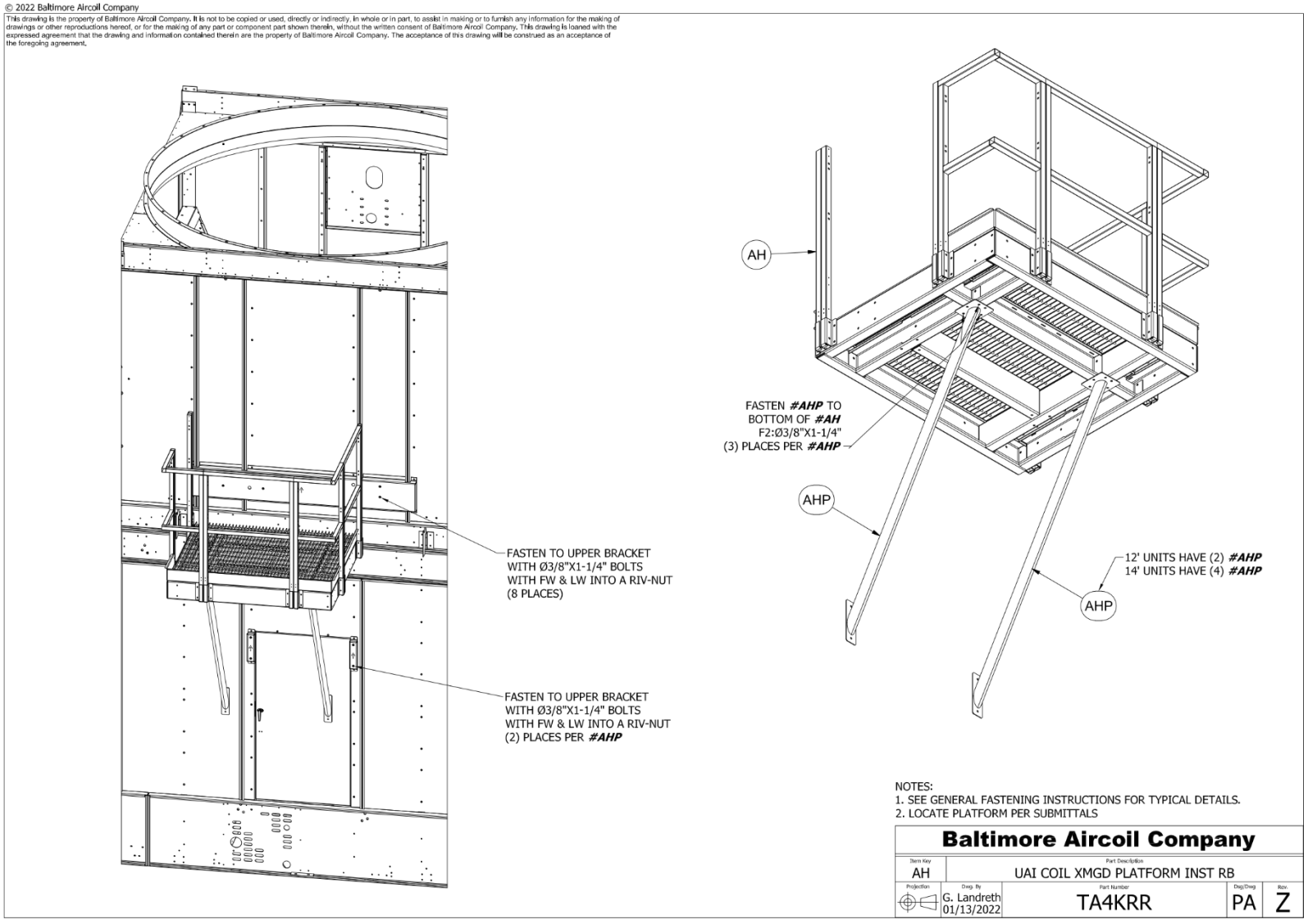


Figure 38. TA4KRR External Motor Gear Drive Platform Installation

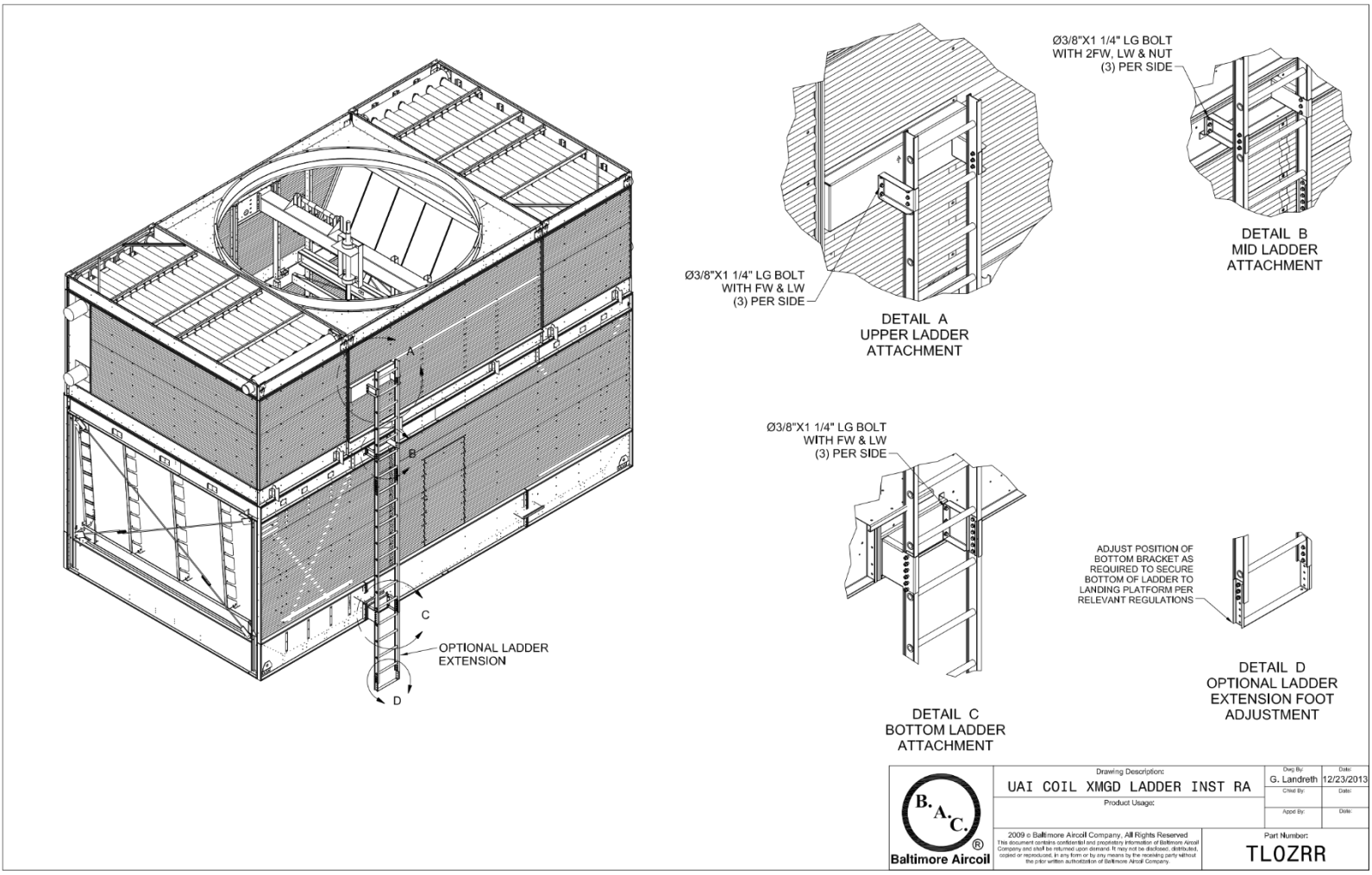


Figure 39. TL0ZRR External Motor Gear Drive Platform Ladder Installation

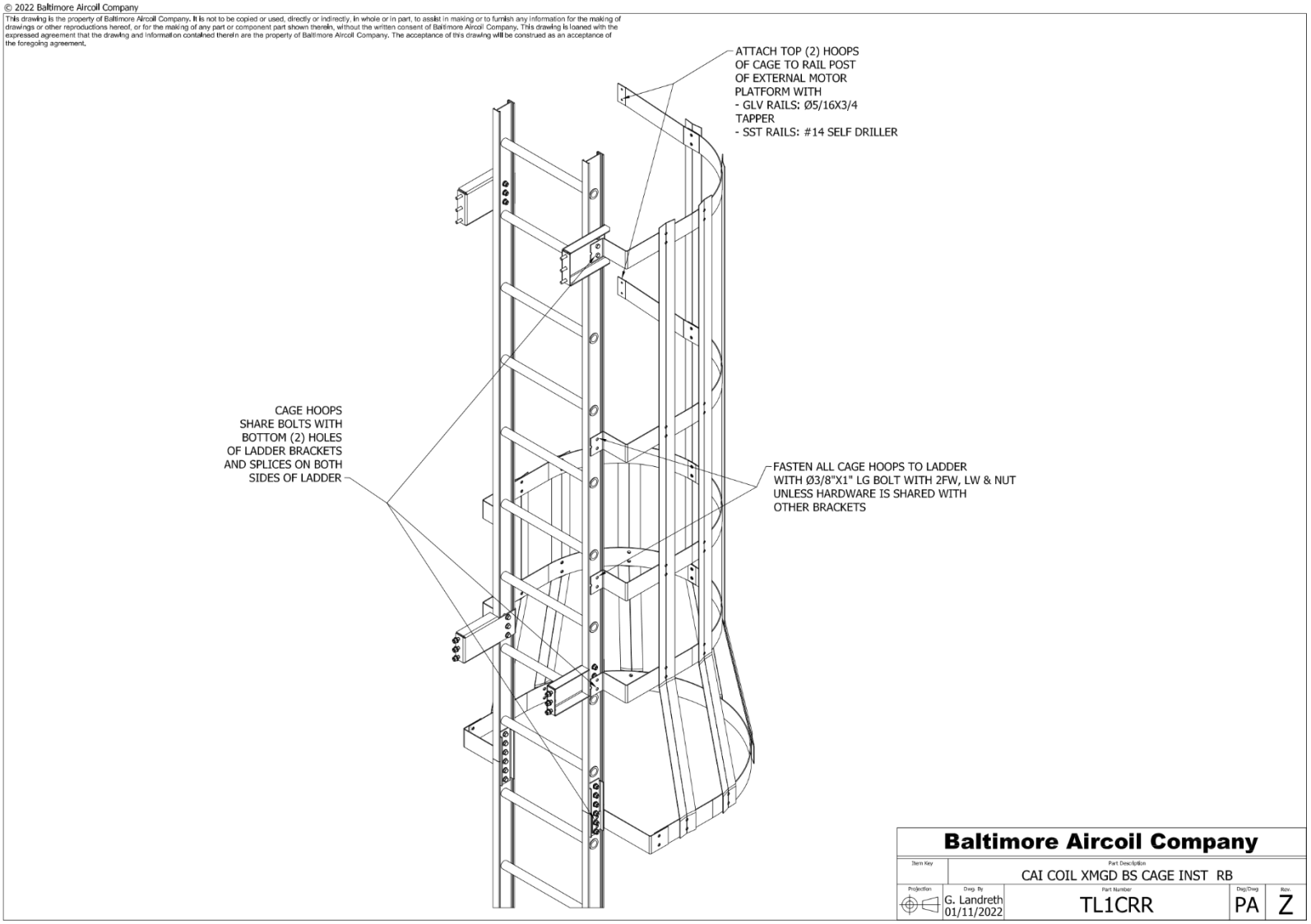


Figure 40. TL1CRR External Motor Gear Drive Platform Ladder Safety Cage Installation

Positive Closure Damper (PCD) Hood Platform & Ladder Installation

Refer to **Table 7** for PCD hood platform & ladder installation information. For multi-section ladder assembly refer to Section **Multi-Section Ladder Assembly** on **Page 76**. For ladder opening safety gate installation refer to Section **Ladder Opening Safety Gate Installation** on **Page 55**.

Reference Drawing	Drawing Number	Page #
PCD Hood Platform Installation	TA19RR	37
PCD Hood Platform Ladder Installation	TL0VRR	38

Table 7. PCD Hood Platform Reference Drawings

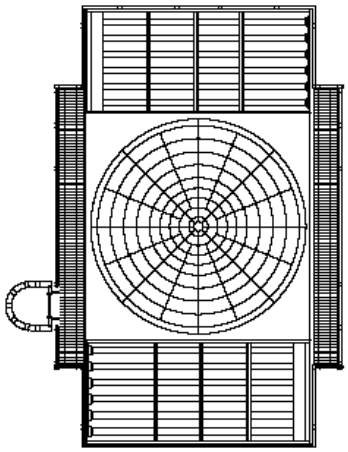


Figure 41. Plan View, PCD Hood Platform

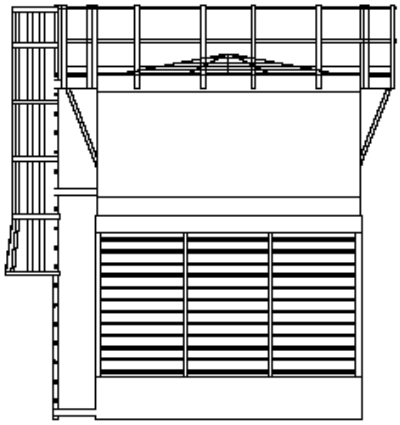


Figure 42. Side Elevation, PCD Hood Platform

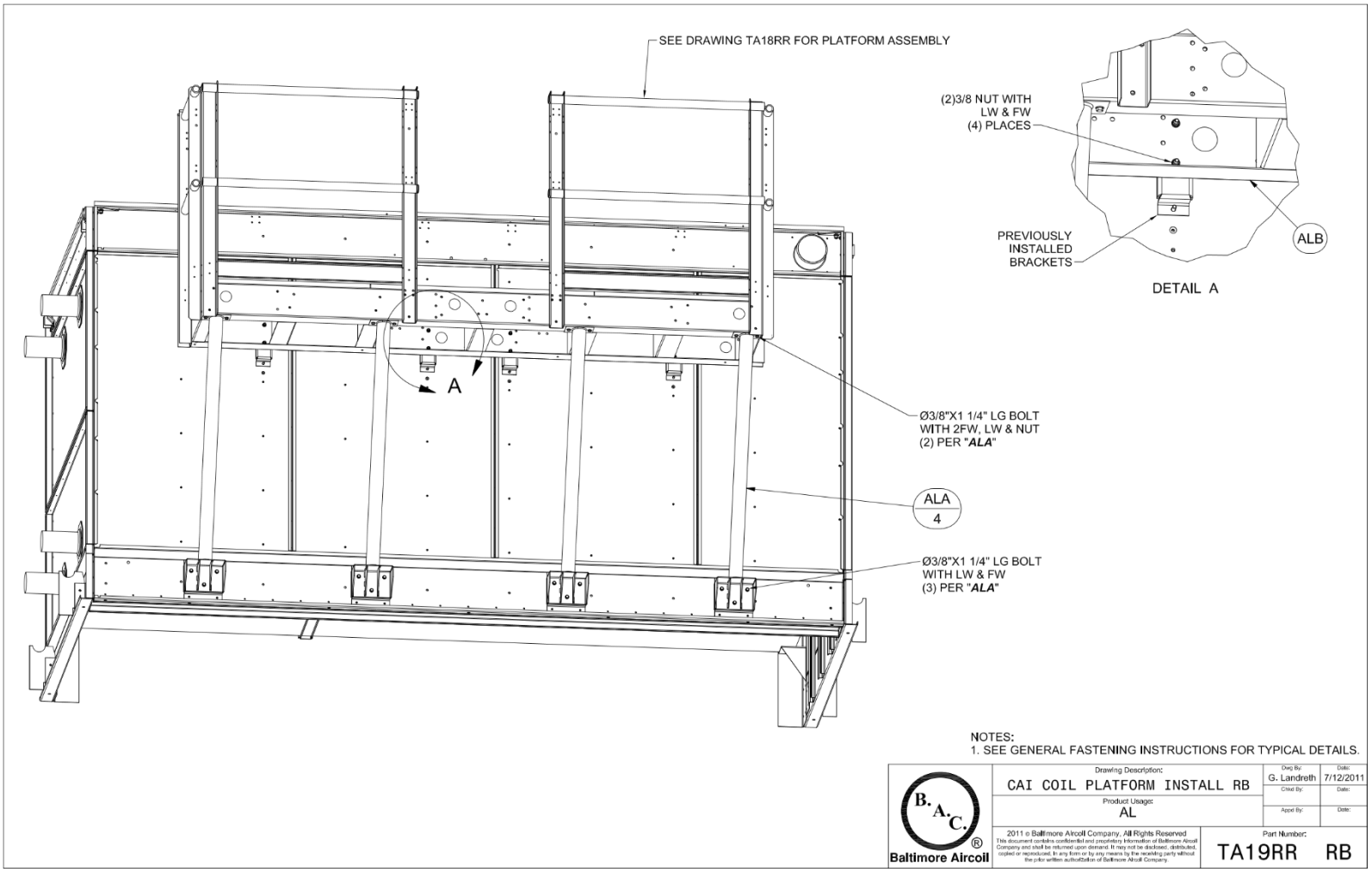


Figure 43. TA19RR PCD Hood Platform Installation

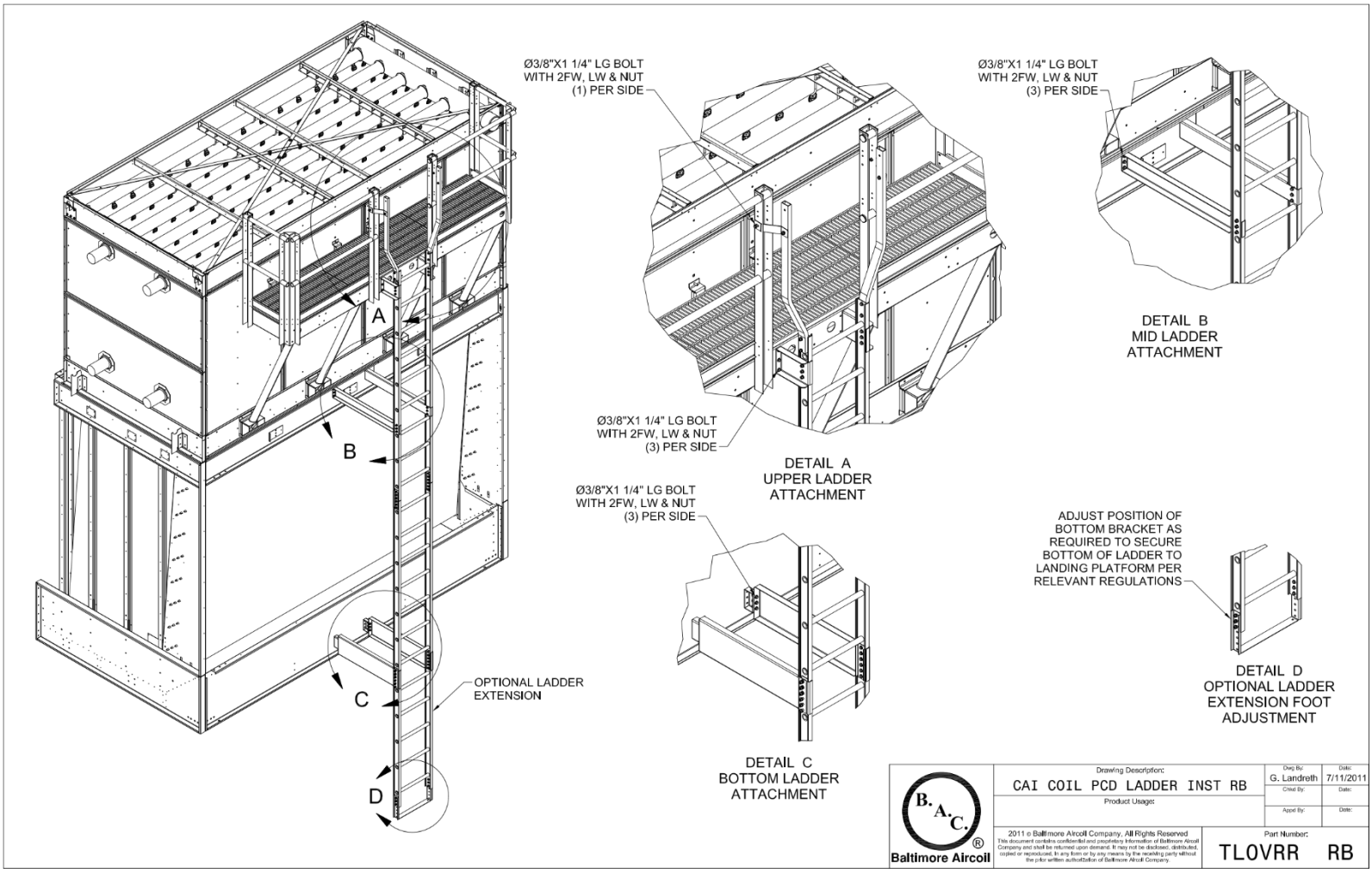


Figure 44. TL0VRR PCD Hood Platform Ladder Installation

Internal Service Platform Railing and Ladder Installation

Refer to **Table 8** for internal service platform railing installation information. Refer to **Table 9** internal service platform ladder assembly information. Refer to **Table 10** for internal service platform ladder installation information. Refer to **Table 2** and **Table 3** to determine coil module height. For ladder opening safety gate installation refer to **Section Ladder Opening Safety Gate Installation** on **Page 55**.

Reference Drawing	Fan Drive Type [1]	Coil Module Height [2]	Drawing Number	Page #
Internal Service Platform Railing Installation	Gear or Belt	Short	TA6TRR	40
Internal Service Platform Railing Installation	Gear or Belt	Tall	TA6XRR	41
Internal Service Platform Railing Installation	ENDURADRIVE® Fan System	Short	TA6URR	42
Internal Service Platform Railing Installation	ENDURADRIVE® Fan System	Tall	TA6YRR	43
Internal Service Platform Ladder Deflector Installation	ENDURADRIVE® Fan System	Short or Tall	TL2TRR	44

Table 8. Internal Service Platform Railing Reference Drawings

Reference Drawing	Spray Water Type	Fan Drive Type [1]	Drawing Number	Page #
Internal Service Platform Ladder Assembly	Pump Suction	Gear or Belt	TL2FRR	45
Internal Service Platform Ladder Assembly	Pump Suction	ENDURADRIVE® Fan System	TL2GRR	46
Internal Service Platform Ladder Assembly	Remote Sump	Gear or Belt	TL2KRR	47
Internal Service Platform Ladder Assembly	Remote Sump	ENDURADRIVE® Fan System	TL2LRR	48

Table 9. Internal Service Platform Ladder Assembly Reference Drawings

Reference Drawing	Spray Water Type	Fan Drive Type [1]	Coil Module Height [2]	Drawing Number	Page #
Internal Service Platform Ladder Installation	Pump Suction	Gear or Belt	Short or Tall	TL2HRR	49
Internal Service Platform Ladder Installation	Pump Suction	ENDURADRIVE® Fan System	Short	TL2PRR	50
Internal Service Platform Ladder Assembly	Pump Suction	ENDURADRIVE® Fan System	Tall	TL2JRR	51
Internal Service Platform Ladder Installation	Remote Sump	Gear or Belt	Short or Tall	TL2MRR	52
Internal Service Platform Ladder Installation	Remote Sump	ENDURADRIVE® Fan System	Short	TL2QRR	53
Internal Service Platform Ladder Assembly	Remote Sump	ENDURADRIVE® Fan System	Tall	TL2NRR	54

Table 10. Internal Service Platform Ladder Installation Reference Drawings

[1] Baltidrive® Power Train and Baltiguard™ Fan System are belt fan drive.
[2] Refer to **Table 2** and **Table 3** to determine coil module height.

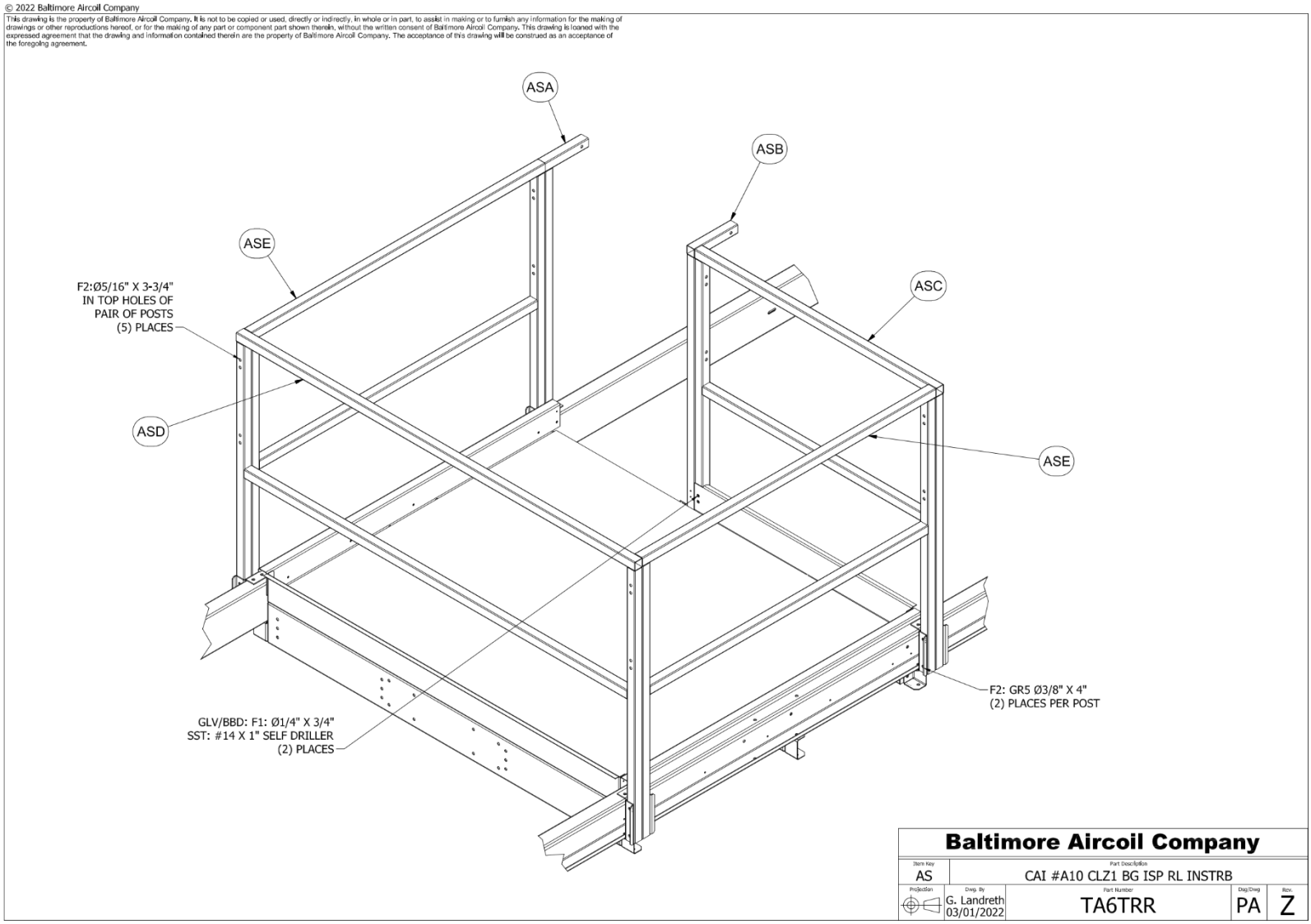


Figure 45. TA6TRR Internal Service Platform Railing Installation, Gear or Belt, Short Coil Module

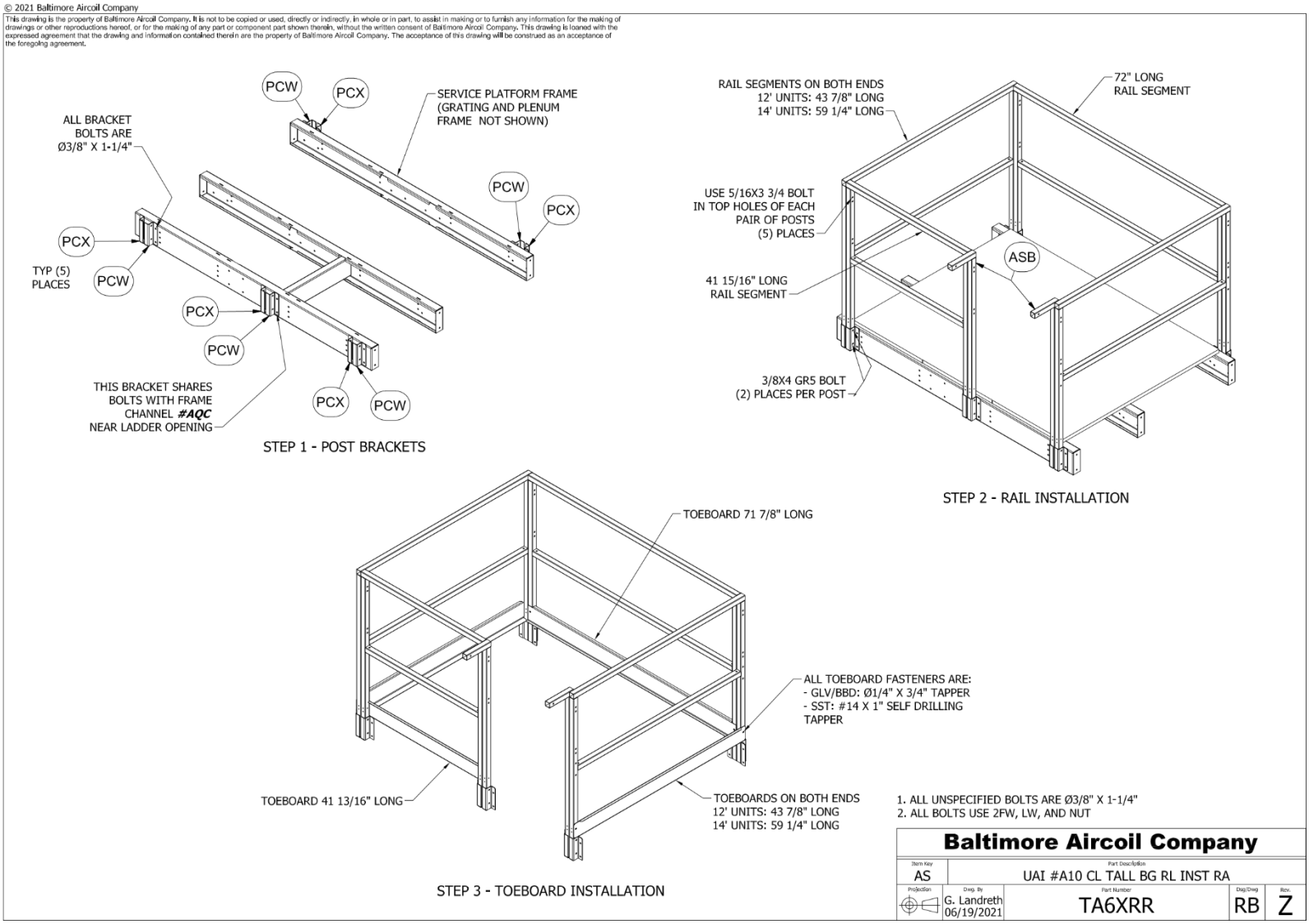
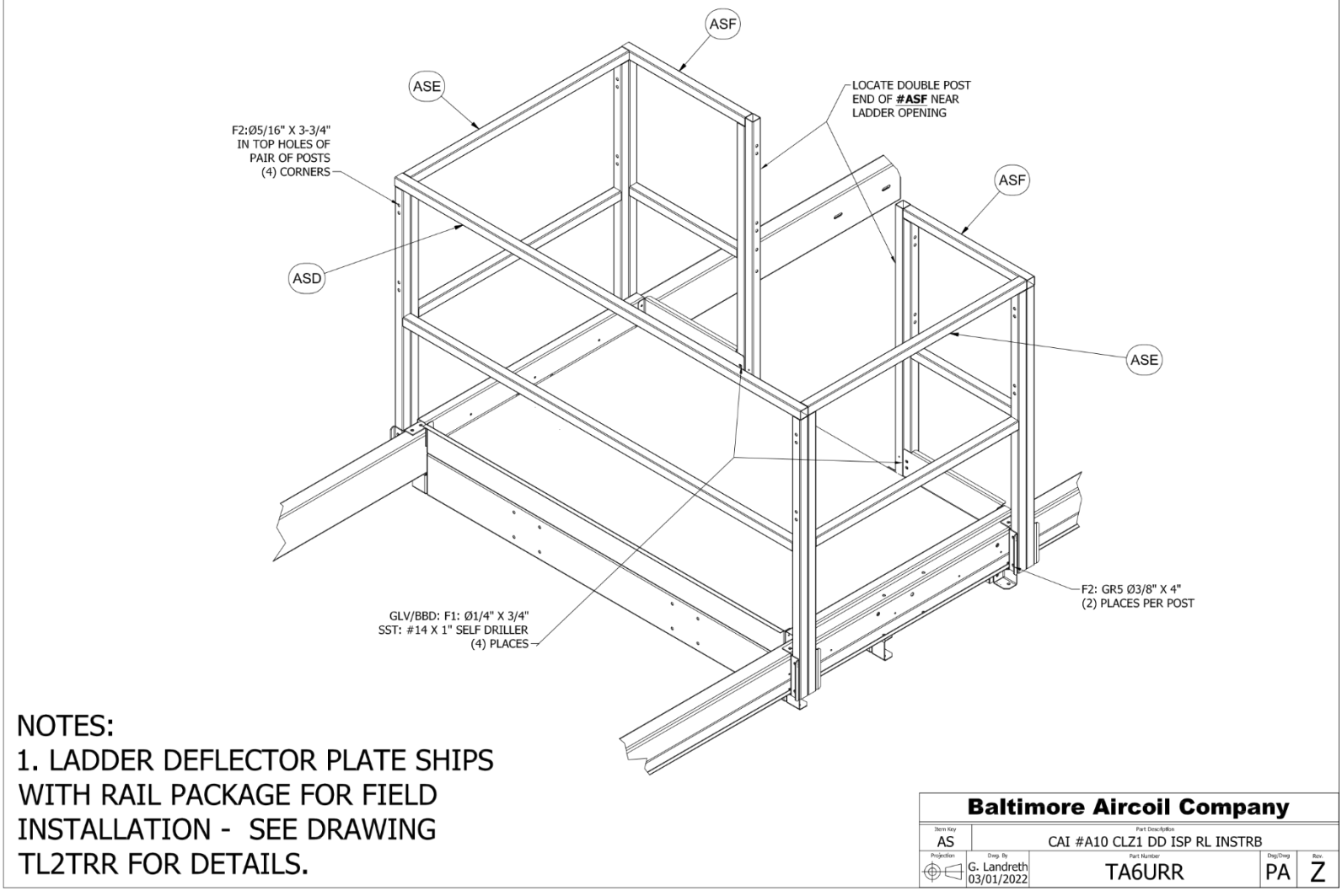


Figure 46. TA6XRR Internal Service Platform Railing Installation, Gear or Belt, Tall Coil Module



NOTES:
1. LADDER DEFLECTOR PLATE SHIPS WITH RAIL PACKAGE FOR FIELD INSTALLATION - SEE DRAWING TL2TRR FOR DETAILS.

Baltimore Aircoil Company				
Item Key: AS	Part Description: CAI #A10 CLZ1 DD ISP RL INSTRB			
Projection	Dwg. By: G. Landreth 03/01/2022	Part Number: TA6URR	Dwg/Dwg: PA	Rev.: Z

Figure 47. TA6URR Internal Service Platform Railing Installation, ENDURADRIVE® Fan System, Short Coil Module

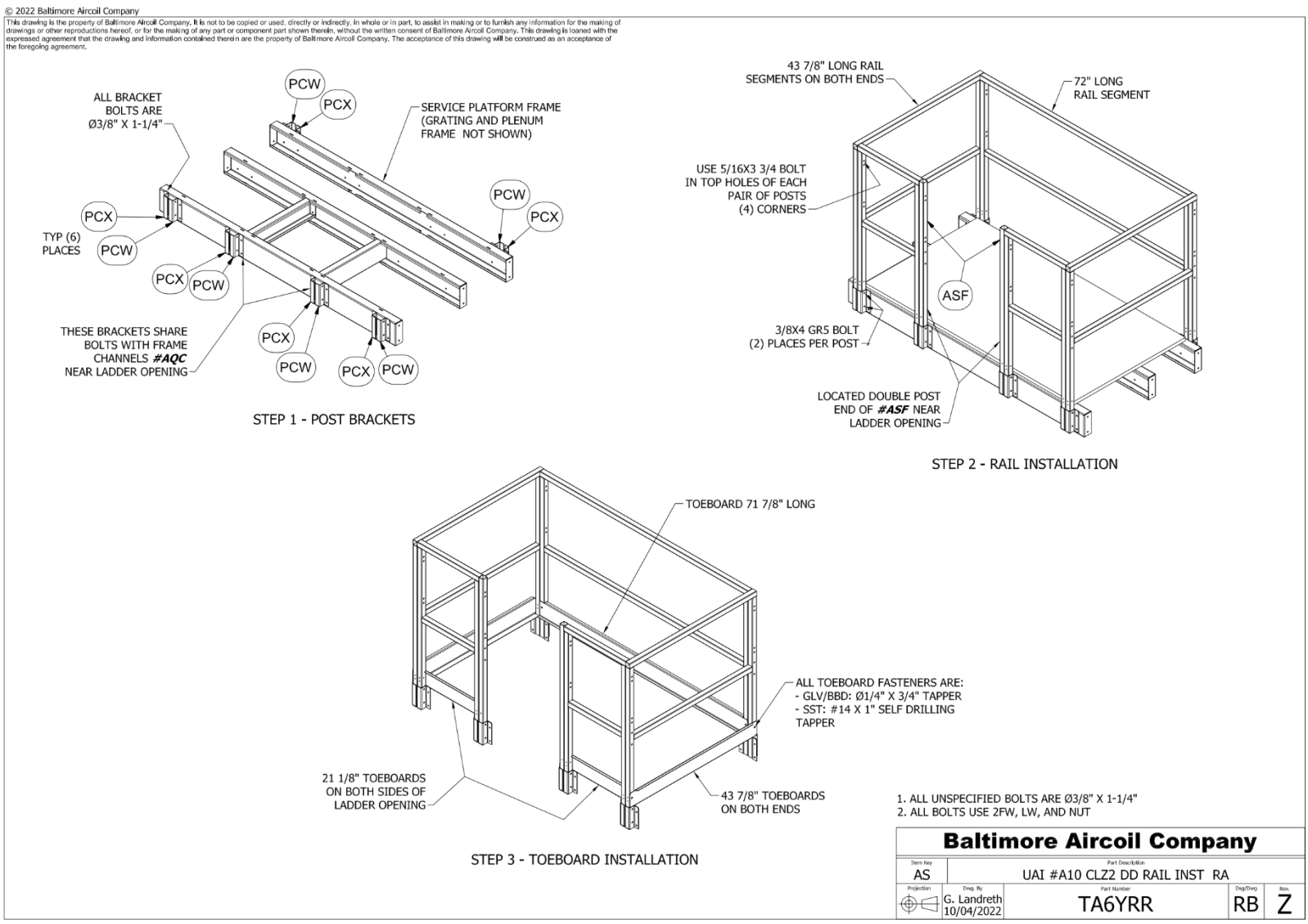
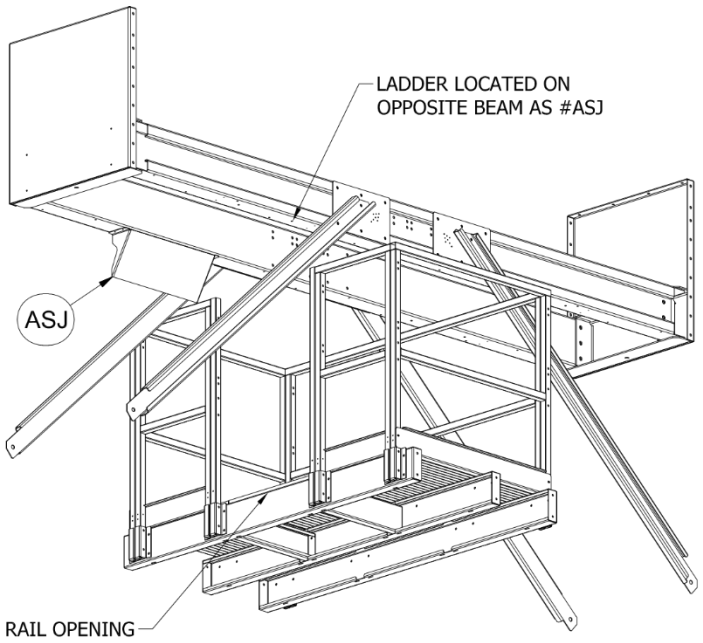
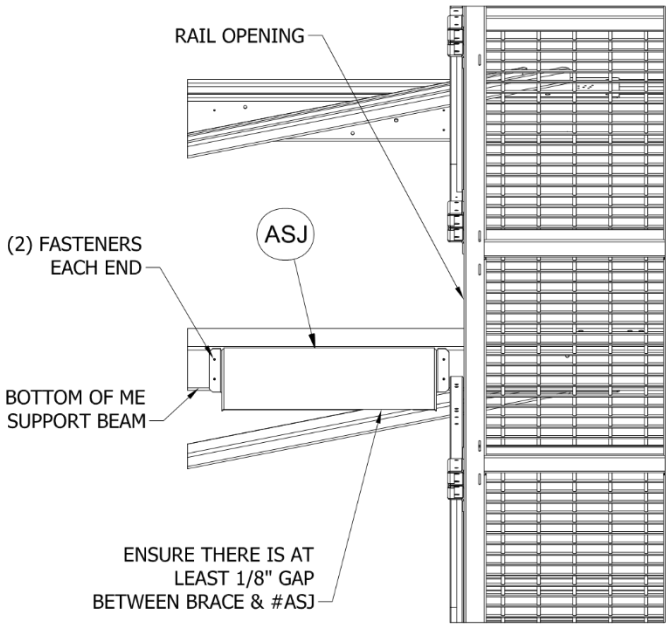


Figure 48. TA6YRR Internal Service Platform Railing Installation, ENDURADRIVE® Fan System, Tall Coil Module



DEFLECTOR LOCATION

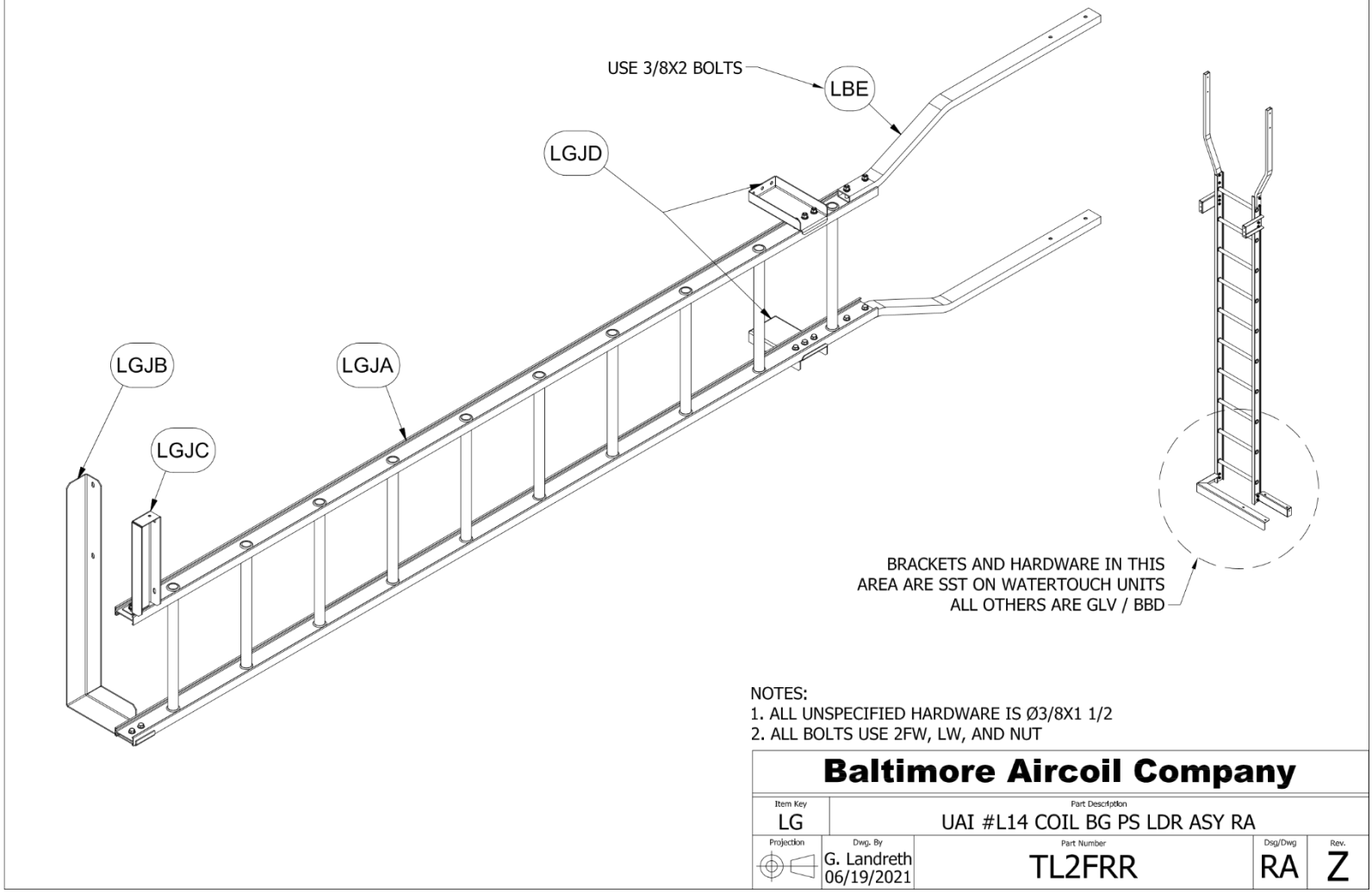


FASTENING

NOTES:
1. LOCATE LADDER PER SUBMITTAL DRAWINGS.
2. ALL FASTENERS ARE #14 SELF-DRILLERS.

Baltimore Aircoil Company				
Item Key: ASJ	Part Description: UAI CL DD ISP DEFLECT INST RA			
Projection	Dwg. By: G. Landreth 10/03/2022	Part Number: TL2TRR	Dsg/Dwg: PA	Rev.: Z

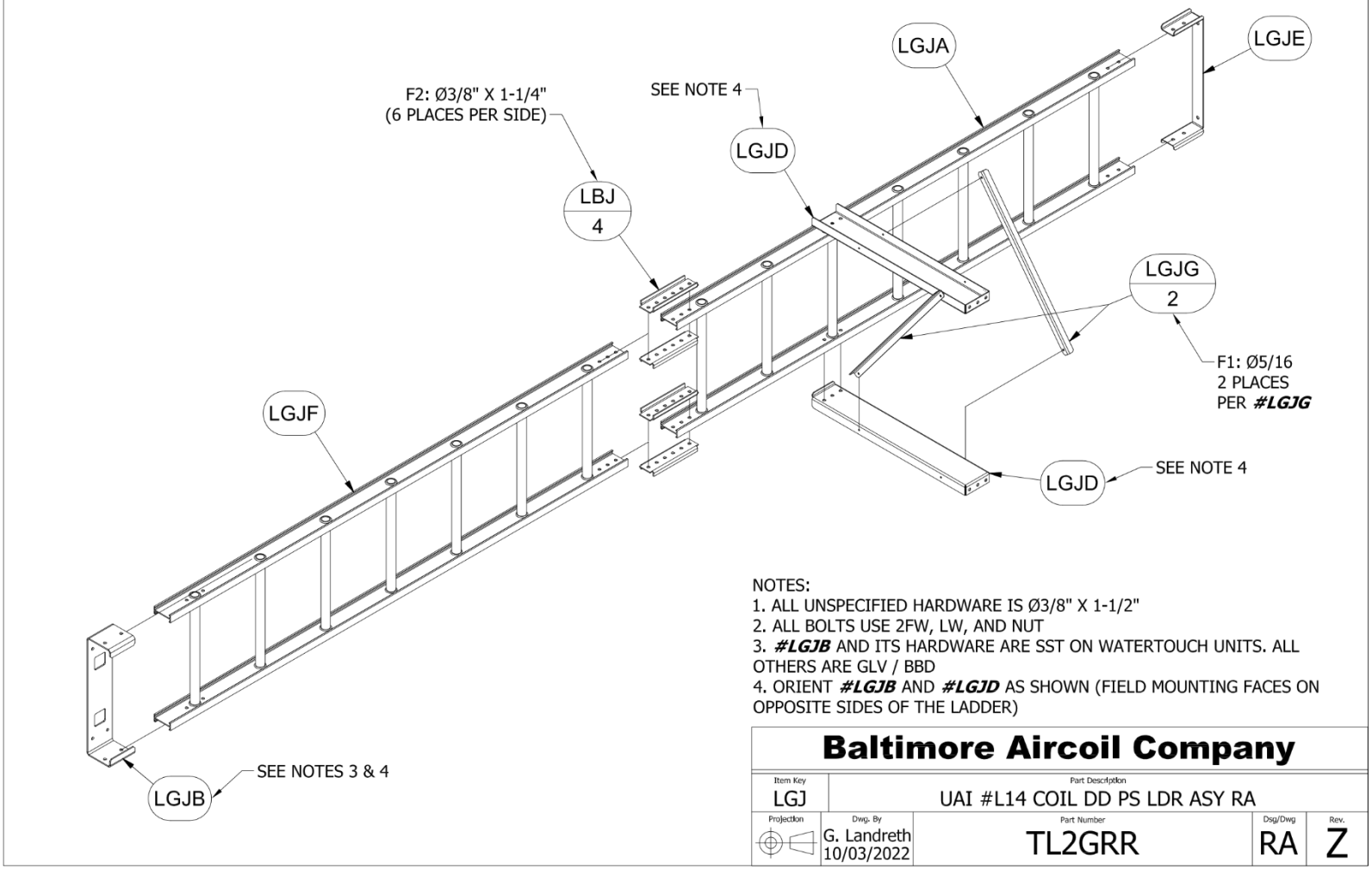
Figure 49. TL2TRR Internal Service Platform Ladder Deflector Installation, ENDURADRIVE® Fan System



NOTES:
1. ALL UNSPECIFIED HARDWARE IS Ø3/8X1 1/2
2. ALL BOLTS USE 2FW, LW, AND NUT

Baltimore Aircoil Company				
Item Key: LG	Part Description: UAI #L14 COIL BG PS LDR ASY RA			
Projection	Dwg. By: G. Landreth 06/19/2021	Part Number: TL2FRR	Dsg/Dwg: RA	Rev.: Z

Figure 50. TL2FRR Internal Service Platform Ladder Assembly, Pump Suction, Gear or Belt



NOTES:
1. ALL UNSPECIFIED HARDWARE IS Ø3/8" X 1-1/2"
2. ALL BOLTS USE 2FW, LW, AND NUT
3. ***#LGJB*** AND ITS HARDWARE ARE SST ON WATERTOUCH UNITS. ALL OTHERS ARE GLV / BBD
4. ORIENT ***#LGJB*** AND ***#LGJD*** AS SHOWN (FIELD MOUNTING FACES ON OPPOSITE SIDES OF THE LADDER)

Baltimore Aircoil Company				
Item Key: LGJ	Part Description: UAI #L14 COIL DD PS LDR ASY RA			
Projection	Dwg. By: G. Landreth 10/03/2022	Part Number: TL2GRR	Dsg/Dwg: RA	Rev.: Z

Figure 51. TL2GRR Internal Service Platform Ladder Assembly, Pump Suction, ENDURADRIVE® Fan System

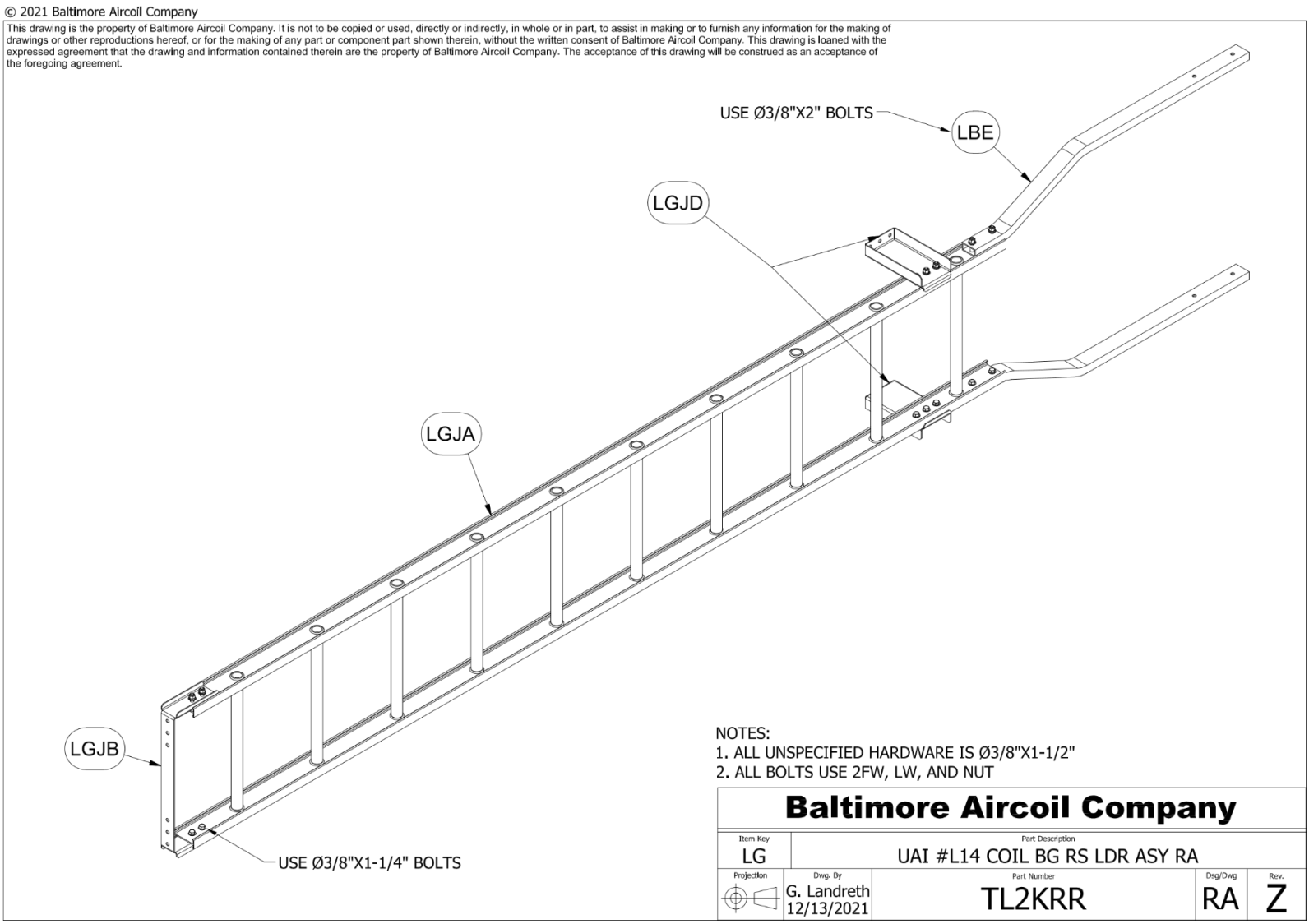


Figure 52. TL2KRR Internal Service Platform Ladder Assembly, Remote Sump, Gear or Belt

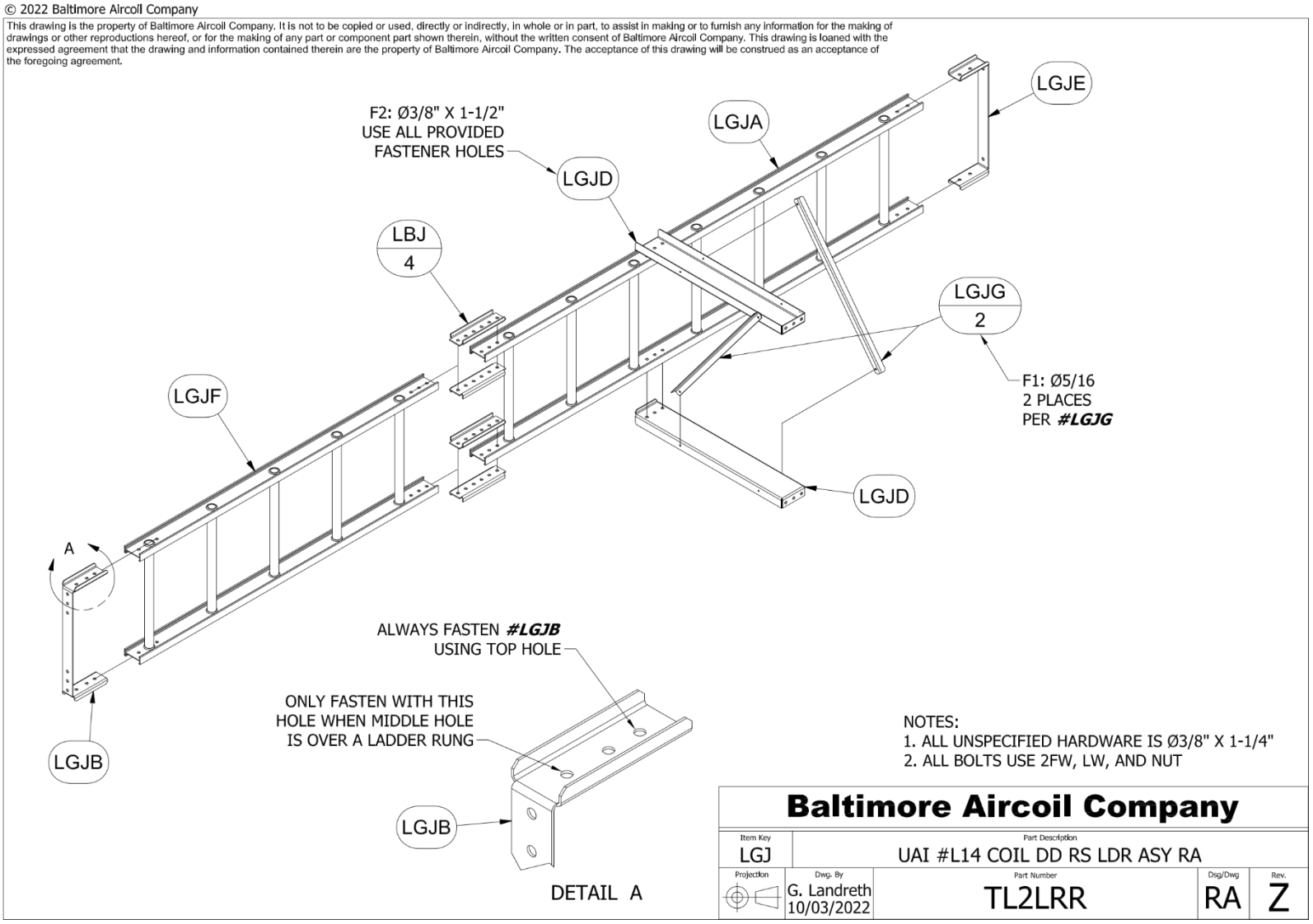


Figure 53. TL2LRR Internal Service Platform Ladder Assembly, Remote Sump, ENDURADRIVE® Fan System

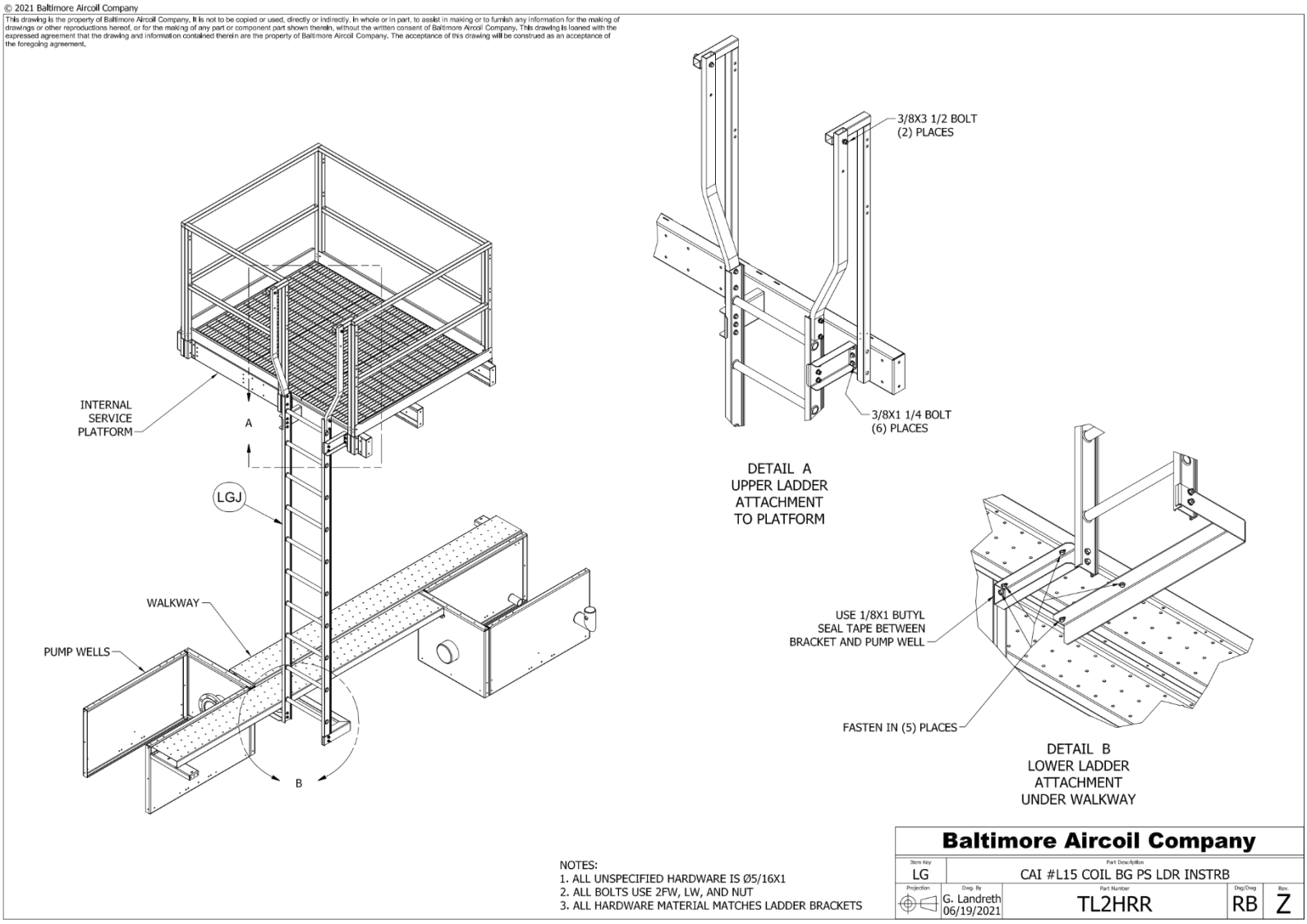


Figure 54. TL2HRR Internal Service Platform Ladder Installation, Pump Suction, Gear or Belt

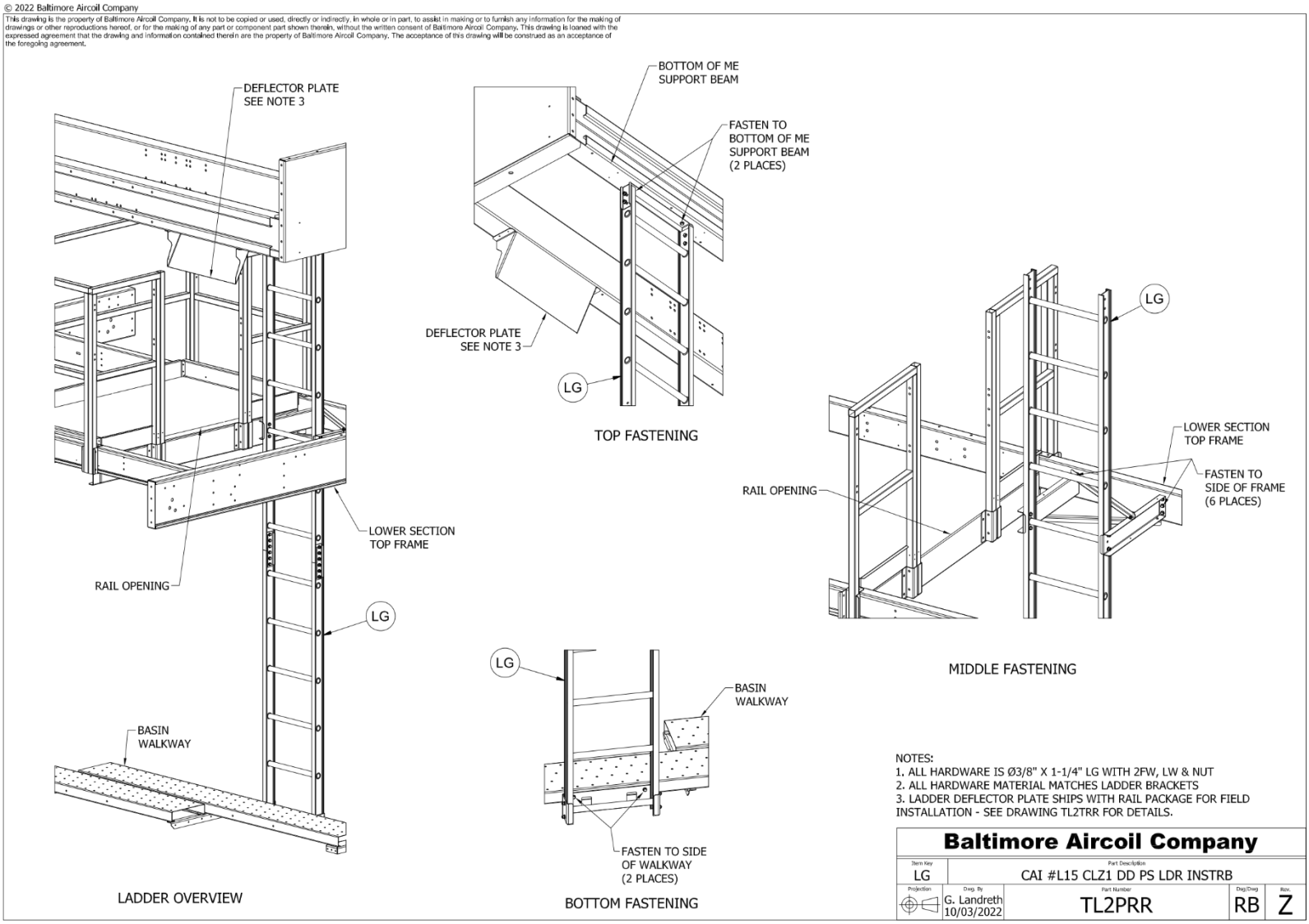


Figure 55. TL2PRR Internal Service Platform Ladder Installation, Pump Suction, ENDURADRIVE® Fan System, Short Coil Module

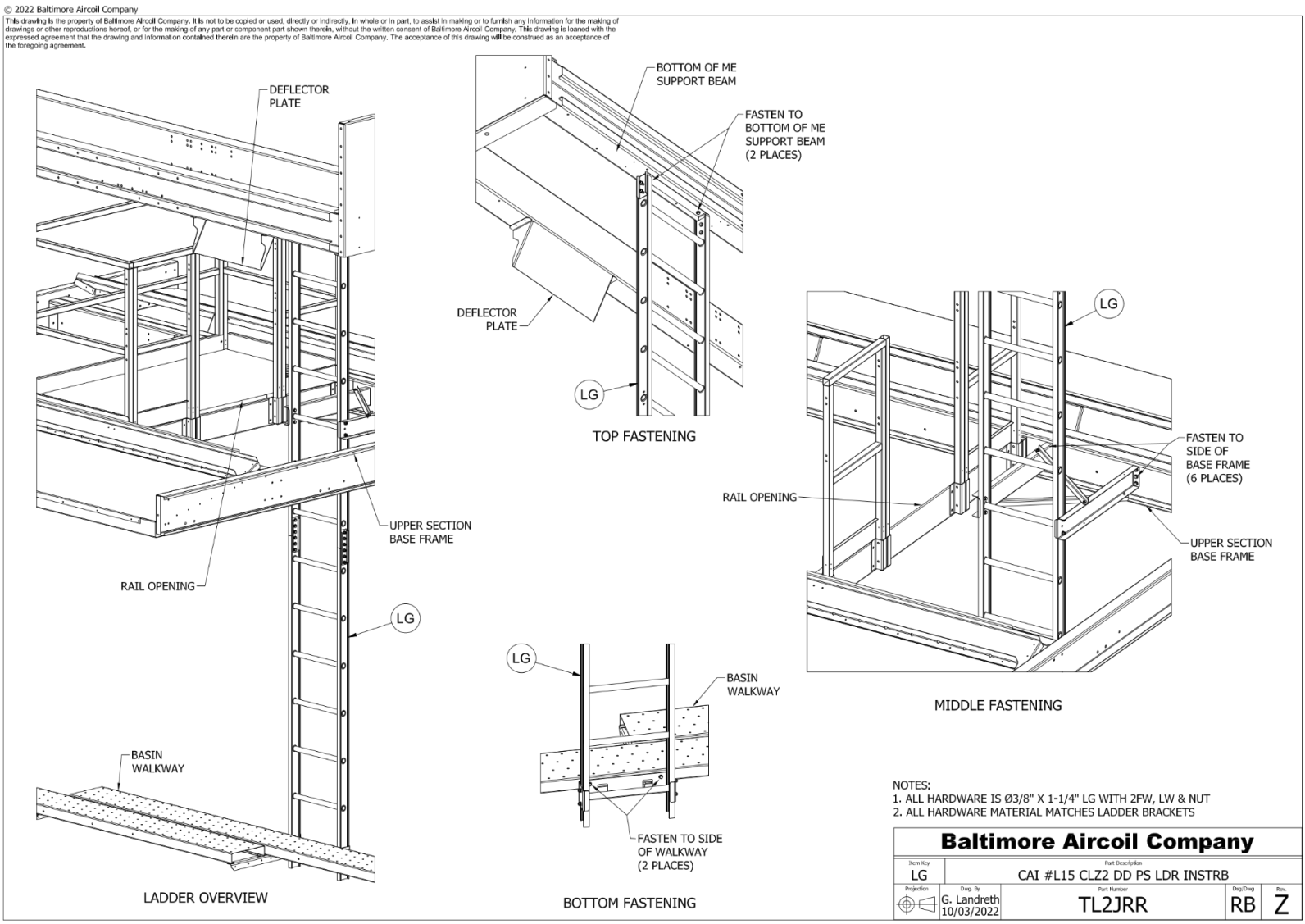


Figure 56. TL2JRR Internal Service Platform Ladder Installation, Pump Suction, ENDURADRIVE® Fan System, Tall Coil Module

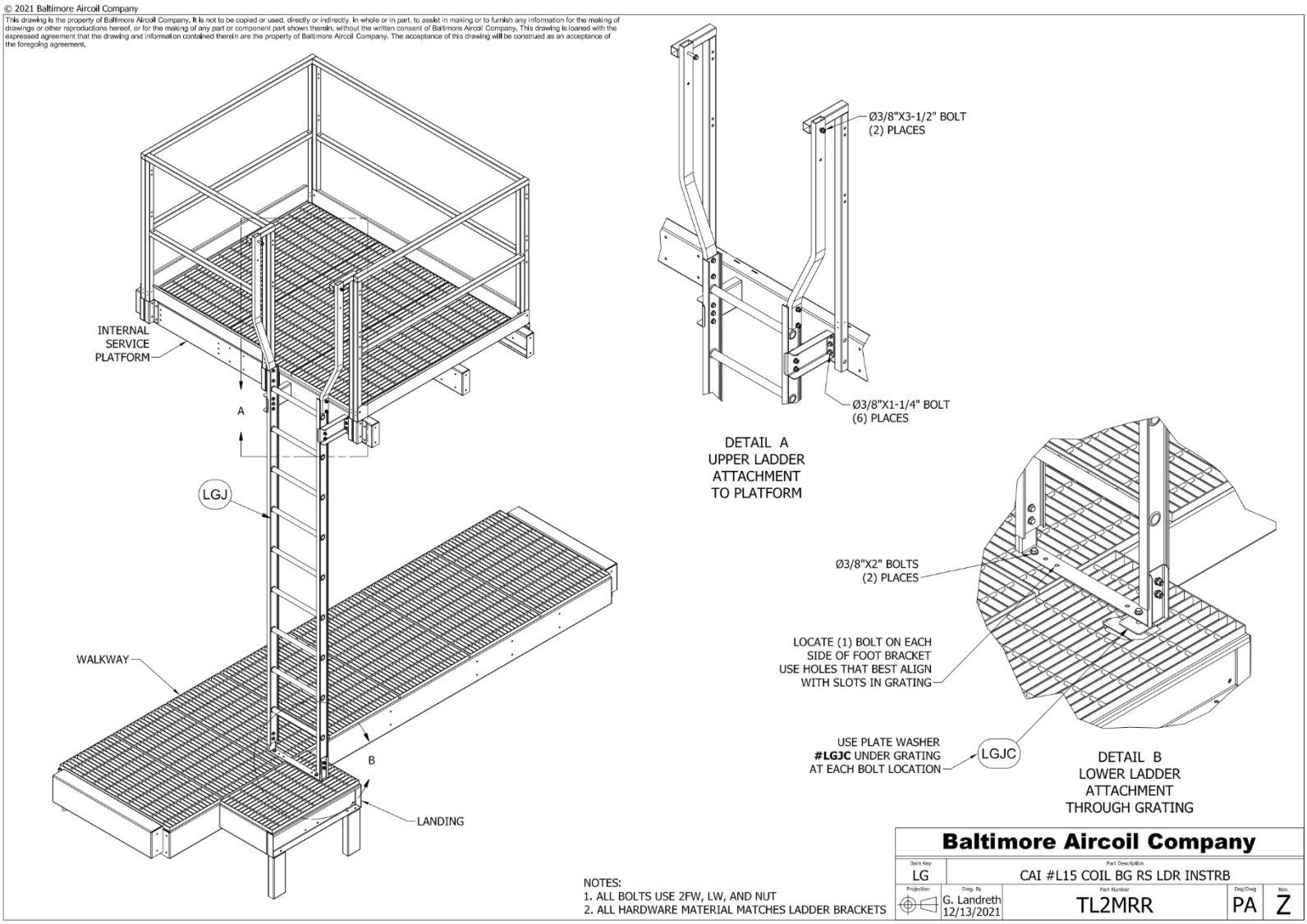


Figure 57. TL2MRR Internal Service Platform Ladder Installation, Remote Sump, Gear or Belt

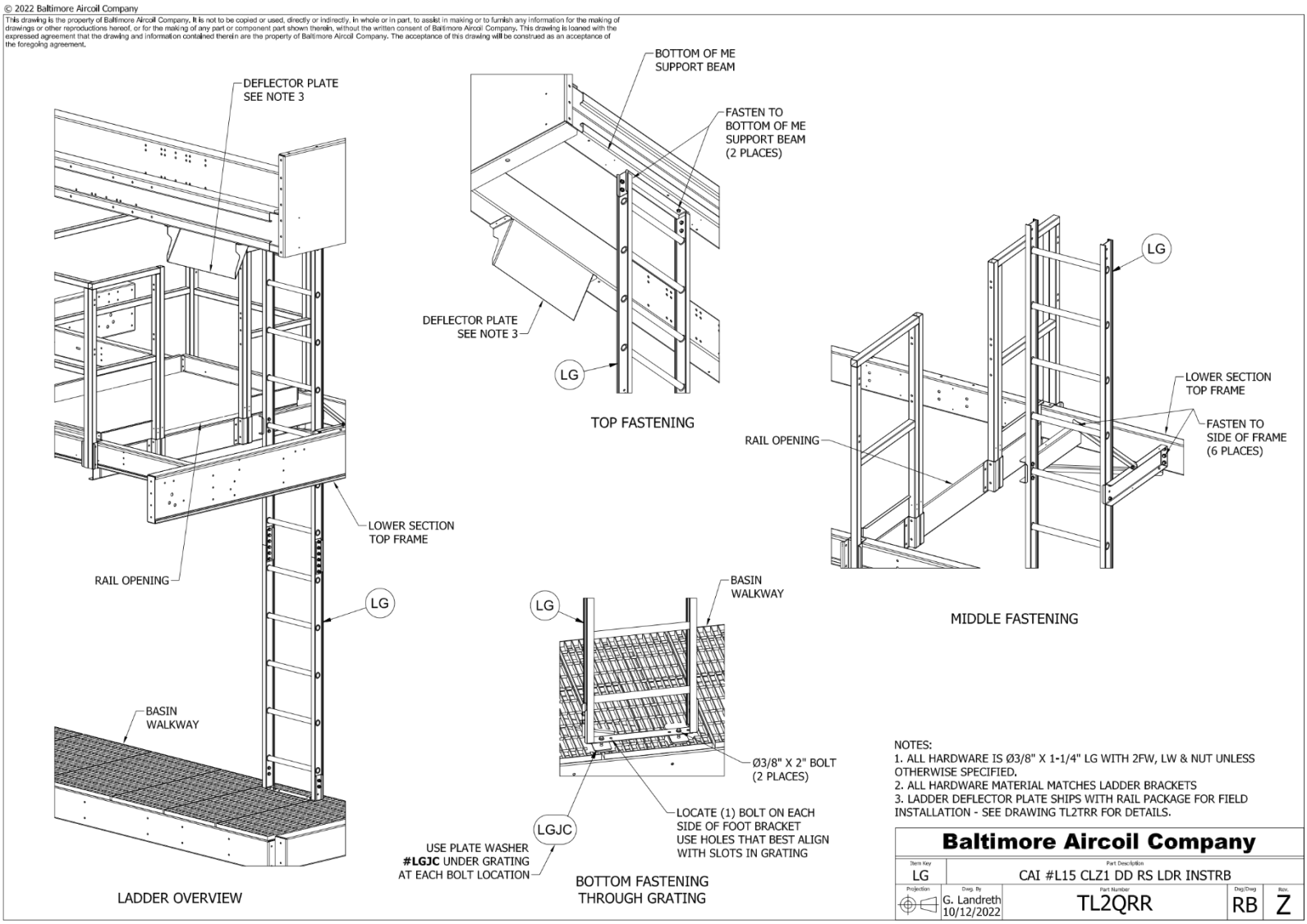


Figure 58. TL2QRR Internal Service Platform Ladder Installation, Remote Sump, ENDURADRIVE® Fan System, Short Coil Module

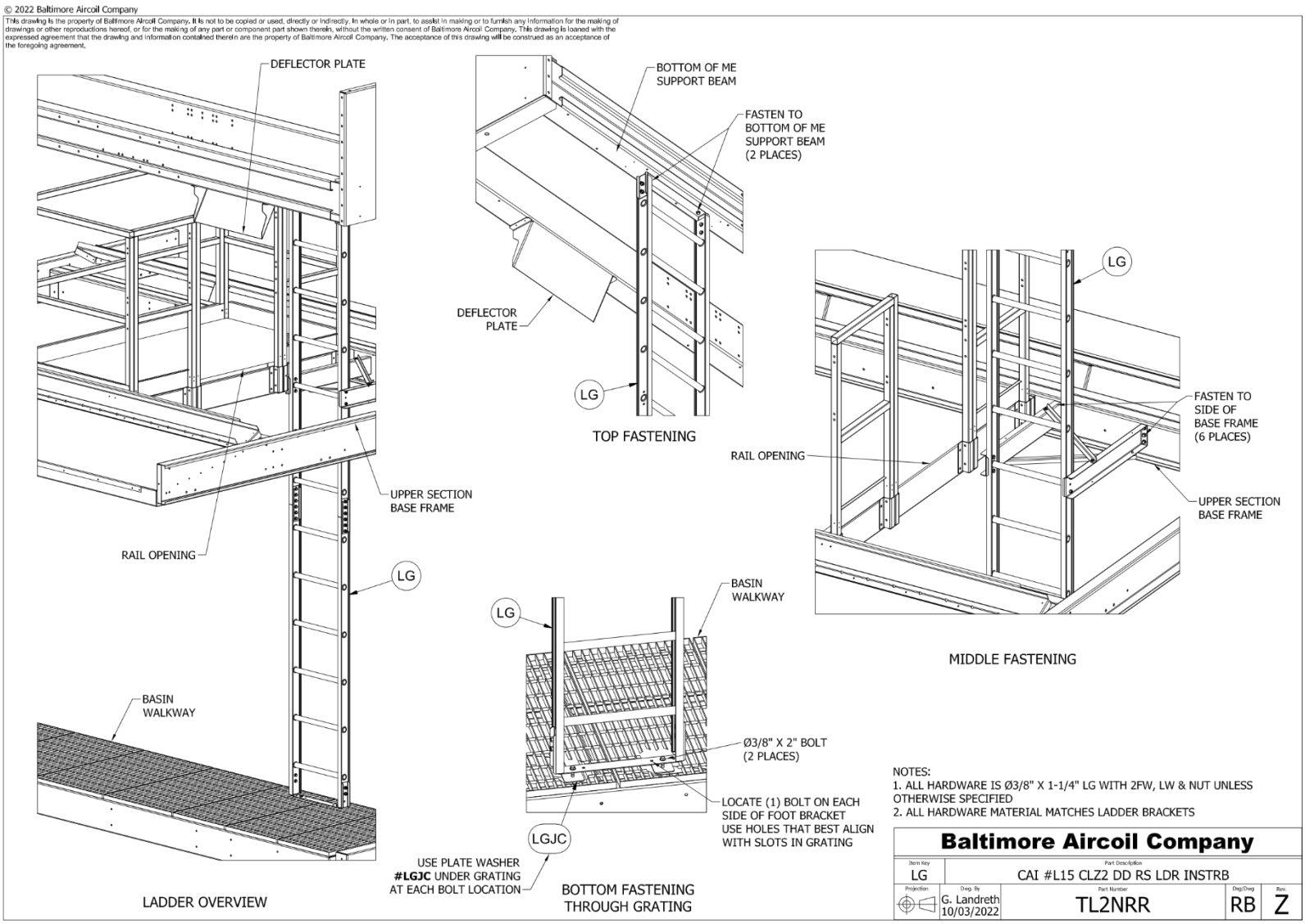


Figure 59. TL2NRR Internal Service Platform Ladder Installation, Remote Sump, ENDURADRIVE® Fan System, Tall Coil Module

Ladder Opening Safety Gate Installation

Refer to **Table 11** for ladder opening safety gate installation information.

Reference Drawing	Drawing Number	Page #
Ladder Opening Safety Gate for Internal Service Platform & External Motor Gear Drive Platform	TR0XRR	56
Ladder Opening Safety Gate for Fan Deck, Access Door Platform & PCD Hood Platform	TR1ARR	57

Table 11. Ladder Opening Safety Gate Reference Drawings

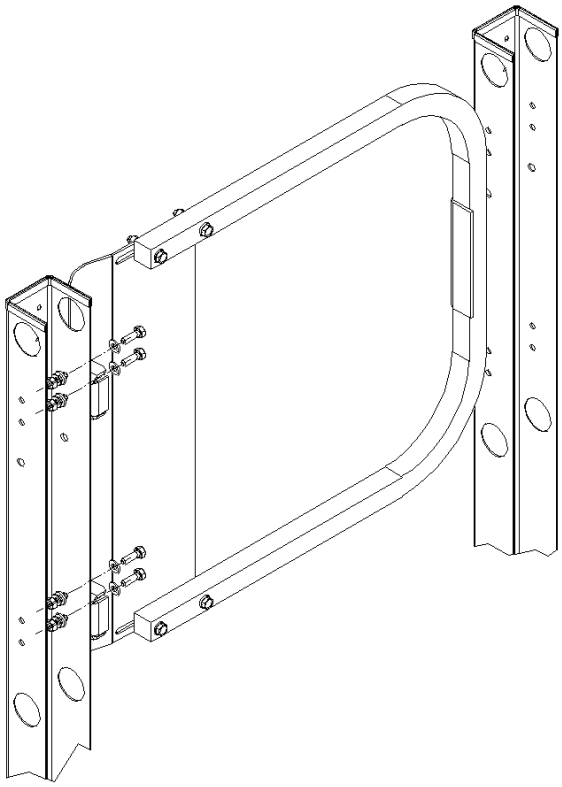
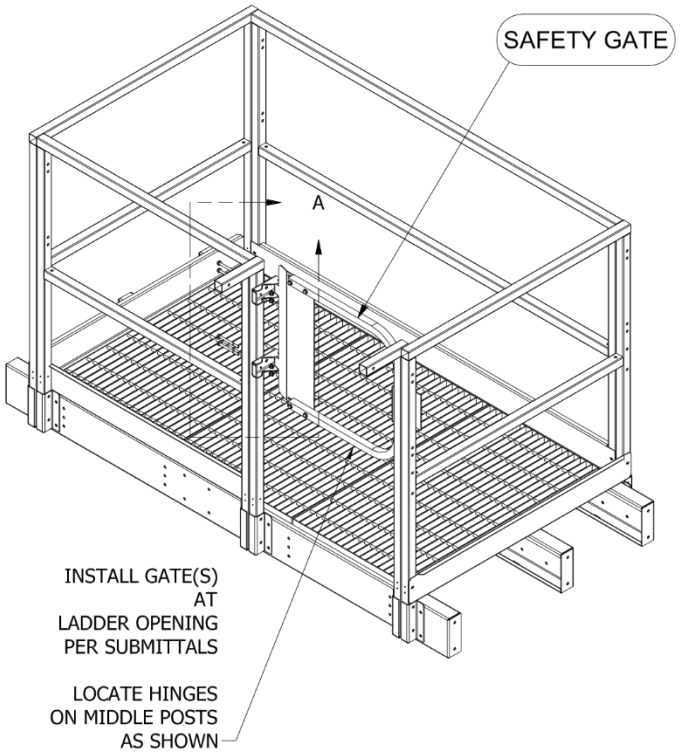
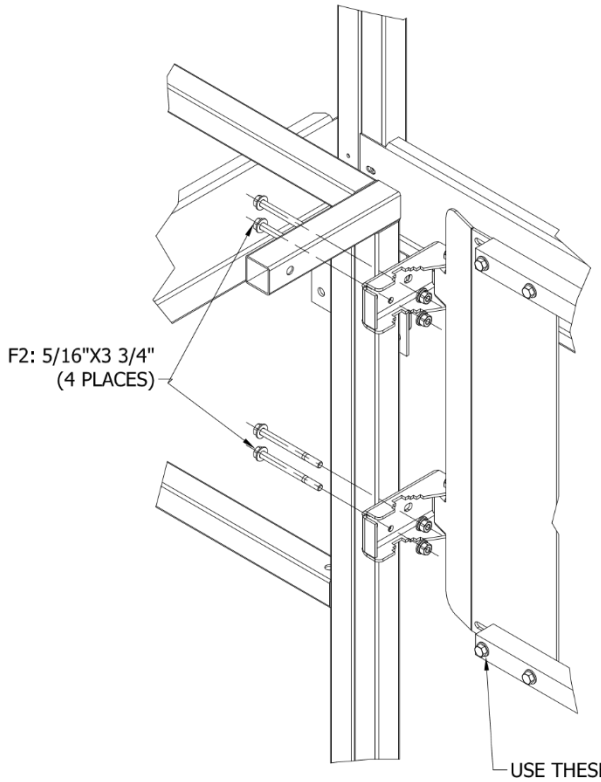


Figure 60. Ladder Opening Safety Gate





DETAIL A

Baltimore Aircoil Company				
Item Key: RF	Part Description: UAI #R20 GATE SQ TB RL INST RA			
Projection	Dwg. By: G. Landreth 07/23/2021	Part Number: TR0XRR	Dsg/Dwg: RA	Rev.: Z

Figure 61. TR0XRR Ladder Opening Safety Gate for Internal Service Platform & External Motor Gear Drive Platform

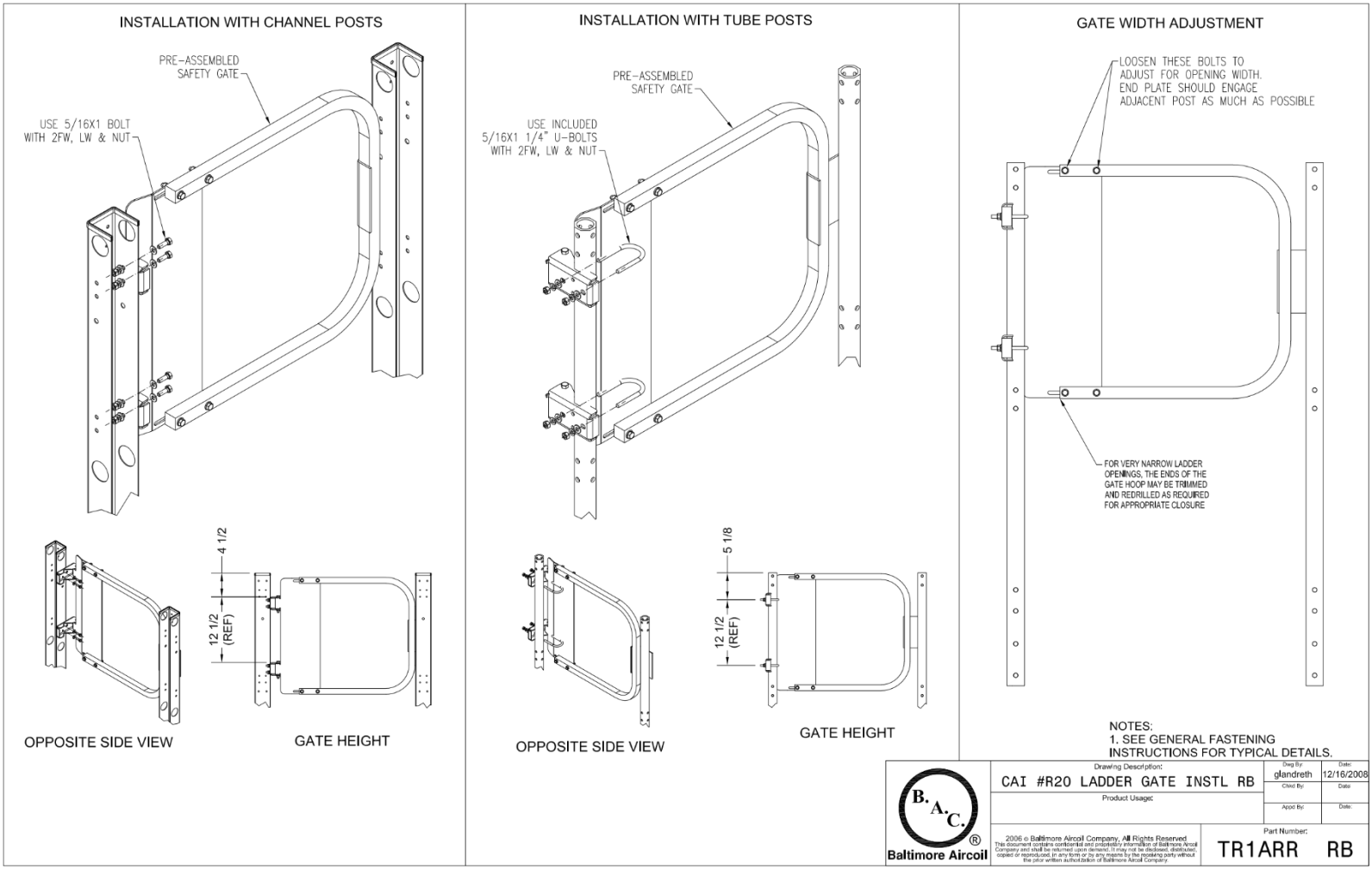


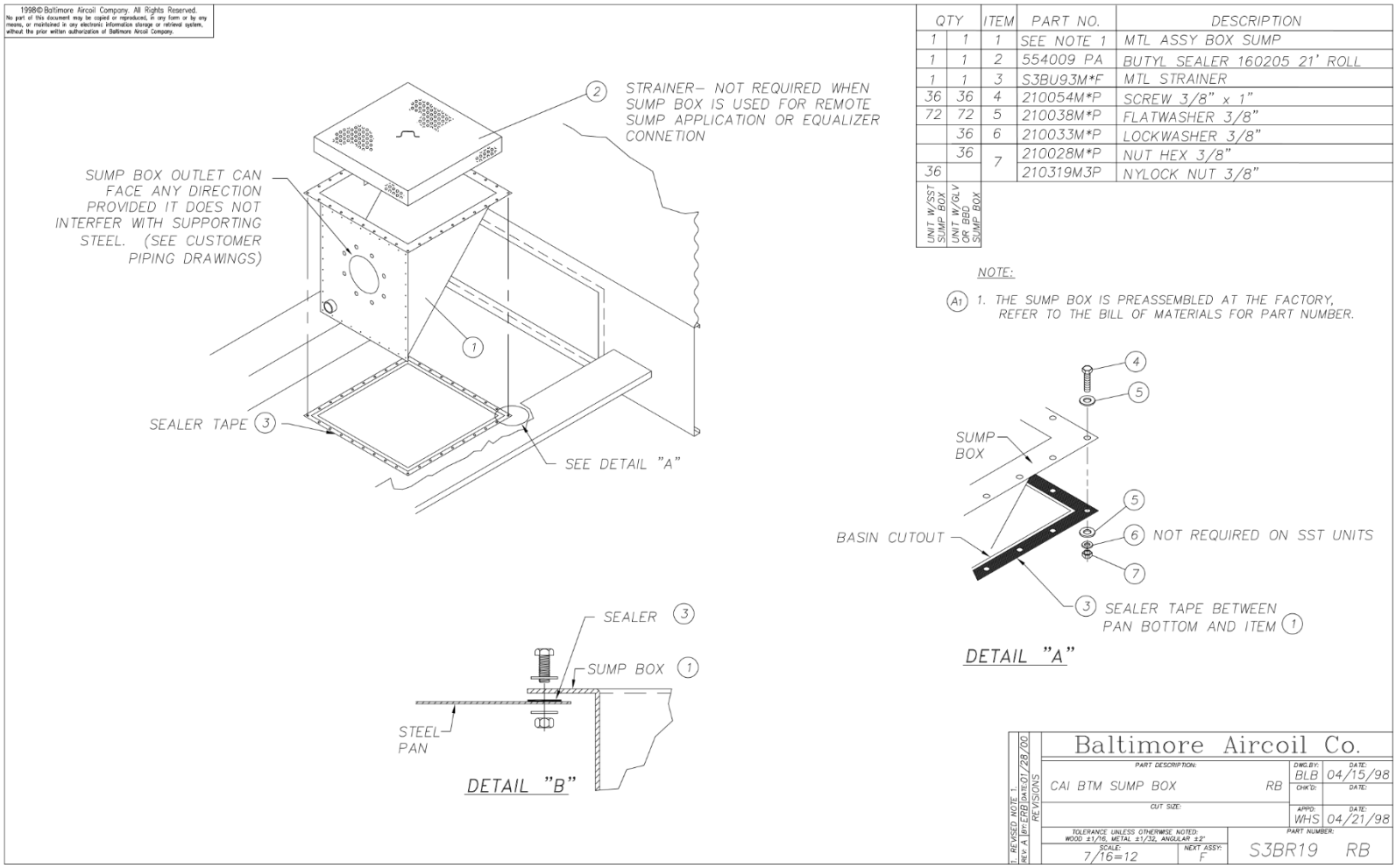
Figure 62. TR1ARR Ladder Opening Safety Gate for Fan Deck, Access Door Platform & PCD Hood Platform

Cold Water Basin Connection Installation

Refer to **Table 12** for cold water basin connection installation information.

Reference Drawing	Drawing Number	Page #
Cold Water Basin Side Outlet Depressed Sump Box Installation	S3BR19	59
Backing Ring Installation for Bottom Connections (galvanized or SST cold water basin)	S3BUM9	60
Backing Ring Installation for Bottom Connections (TriArmor® Corrosion Protection System)	TB0ERR	61

Table 12. Cold Water Basin Connection Reference Drawings



QTY		ITEM	PART NO.	DESCRIPTION
1	1	1	SEE NOTE 1	MTL ASSY BOX SUMP
1	1	2	554009 PA	BUTYL SEALER 160205 21' ROLL
1	1	3	S3BU93M*F	MTL STRAINER
36	36	4	210054M*P	SCREW 3/8" x 1"
72	72	5	210038M*P	FLATWASHER 3/8"
	36	6	210033M*P	LOCKWASHER 3/8"
	36	7	210028M*P	NUT HEX 3/8"
36			210319M3P	NYLOCK NUT 3/8"

UNIT W/SST SUMP BOX
UNIT W/GLV OR BBD SUMP BOX

NOTE:

(A1) 1. THE SUMP BOX IS PREASSEMBLED AT THE FACTORY, REFER TO THE BILL OF MATERIALS FOR PART NUMBER.

1. REVISED NOTE 1 REV A (BY: E.P.B) (DATE: 01/28/00) REVISIONS

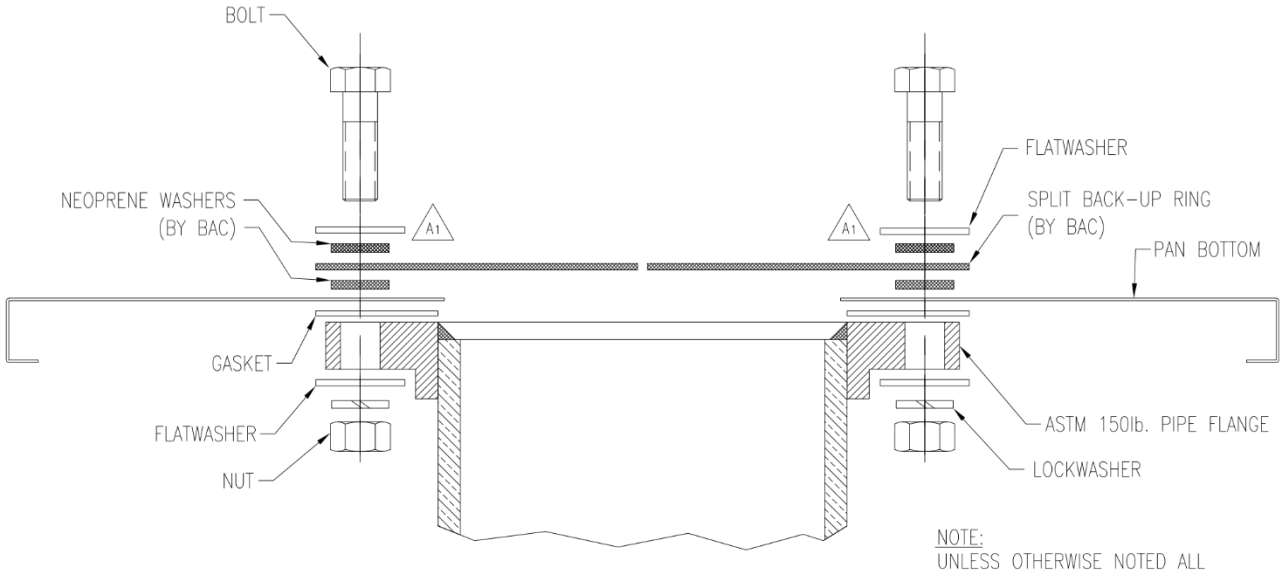
Baltimore Aircoil Co.

PART DESCRIPTION: CAI BTM SUMP BOX RB
DWG.BY: BLB DATE: 04/15/98
CHK'D: DATE:
CUT SIZE:
APP'D: WHS DATE: 04/21/98
TOLERANCE UNLESS OTHERWISE NOTED: WOOD ±1/16, METAL ±1/32, ANGULAR ±2°
SCALE: 7/16=12 NEXT ASSY: F
PART NUMBER: S3BR19 RB

Figure 63. S3BR19 Cold Water Basin Side Outlet Depressed Sump Box Installation

150 LB. PIPE FLANGE

Nominal Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	5	6	8	10	12	14	16	18	20	22	24
B1 Number of Bolts	4	4	4	4	4	4	4	4	8	8	8	8	8	12	12	12	16	16	20	20	20
Diameter of Bolts	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	3/4	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4	1-1/4



NOTE:
UNLESS OTHERWISE NOTED ALL COMPONENTS SUPPLIED BY OTHERS.

CAR # WS-176
1. ADDED CHART TO SHOW BOLT DIAMETER
REV: B | BY: HK | DATE: 03/16/10
1. ADDED NPR & FLT WSHR (ENG-0699)
REV: A | BY: LES | DATE: 12/17/07
REVISIONS

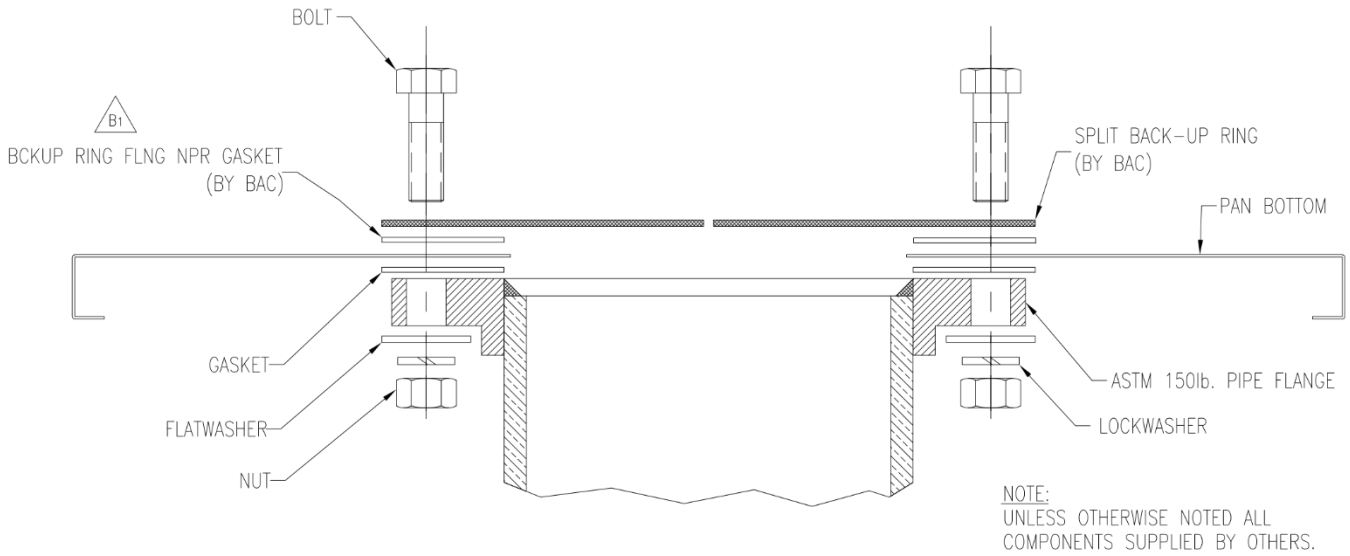
Baltimore Aircoil Co.

PART DESCRIPTION: CAI BACK UP RING INSTL RA
CUT SIZE:
DWG.BY: DJG | DATE: 05/12/98
CHK'D: | DATE:
APPD: | DATE:
TOLERANCE UNLESS OTHERWISE NOTED: WOOD ±1/16, METAL ±1/32, ANGULAR ±2°
SCALE: 3=12
NEXT ASSY: F
PART NUMBER: S3BUM9 RA

Figure 64. S3BUM9 Backing Ring Installation for Bottom Connections (galvanized or SST cold water basin)

150 LB. PIPE FLANGE

Nominal Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	5	6	8	10	12	14	16	18	20	22	24
A1 Number of Bolts	4	4	4	4	4	4	4	4	8	8	8	8	8	12	12	12	16	16	20	20	20
Diameter of Bolts	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	3/4	3/4	3/4	7/8	7/8	1	1	1-1/8	1-1/8	1-1/4	1-1/4



NOTE:
UNLESS OTHERWISE NOTED ALL COMPONENTS SUPPLIED BY OTHERS.

REVISIONS
REV: A | BY: HK | DATE: 03/16/10
1. ADDED CHART TO SHOW BOLT DIAMETER
CAR # WS-176
1. WAS NEOPRENE GASKET
EAR # 11-2230

Baltimore Aircoil Co.

PART DESCRIPTION: CAI #B51 TRI BK UP RNG INST RA
DWG.BY: PGT | DATE: 09/25/06
CHK'D: | DATE:
APPD: | DATE:
CUT SIZE:
TOLERANCE UNLESS OTHERWISE NOTED: WOOD ±1/16, METAL ±1/32, ANGULAR ±2°
SCALE: 3=12 | NEXT ASSY: F
PART NUMBER: TB0ERR RA

Figure 65. TB0ERR Backing Ring Installation for Bottom Connections (TriArmor® Corrosion Protection System)

Fan Deck Handrail Installation

Refer to **Figure 66** and **Figure 67** to aid in determining the associated reference drawing for fan deck handrail installation. Fan deck handrail installation information is shown in **Table 13**. For ladder opening safety gate installation refer to Section **Ladder Opening Safety Gate Installation** on **Page 55**.

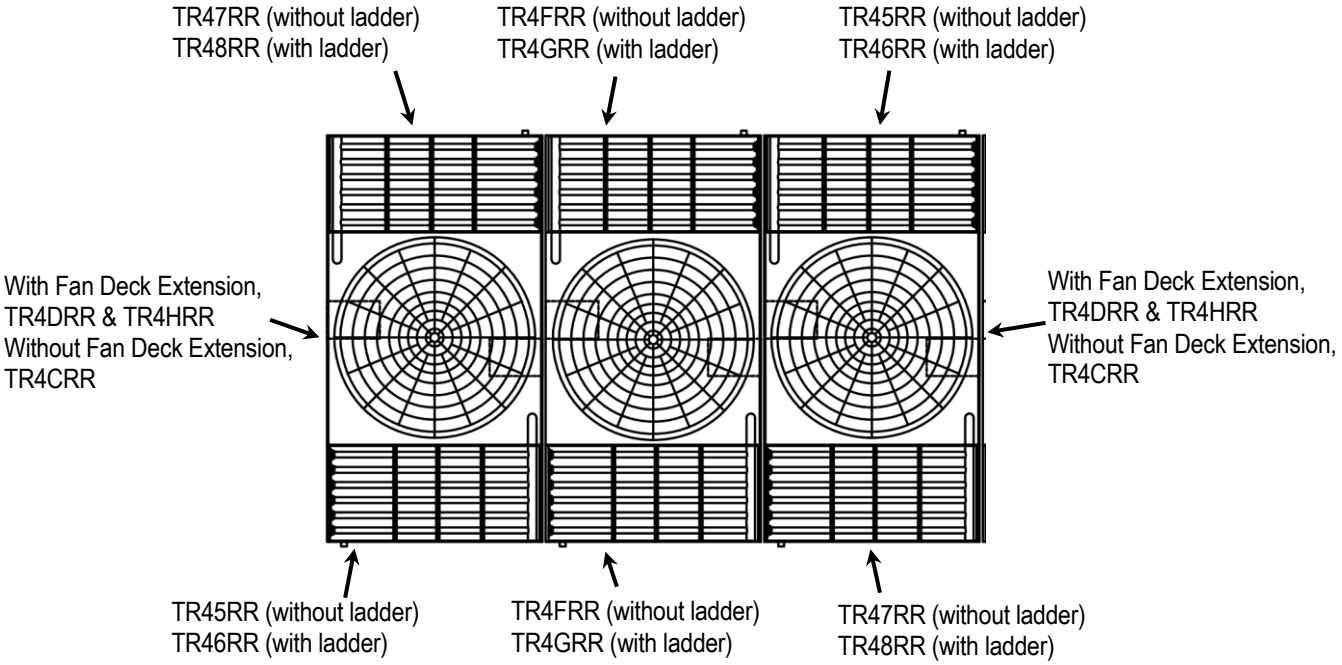


Figure 66. Multi-cell Fan Deck Handrail Reference Drawing Arrangement

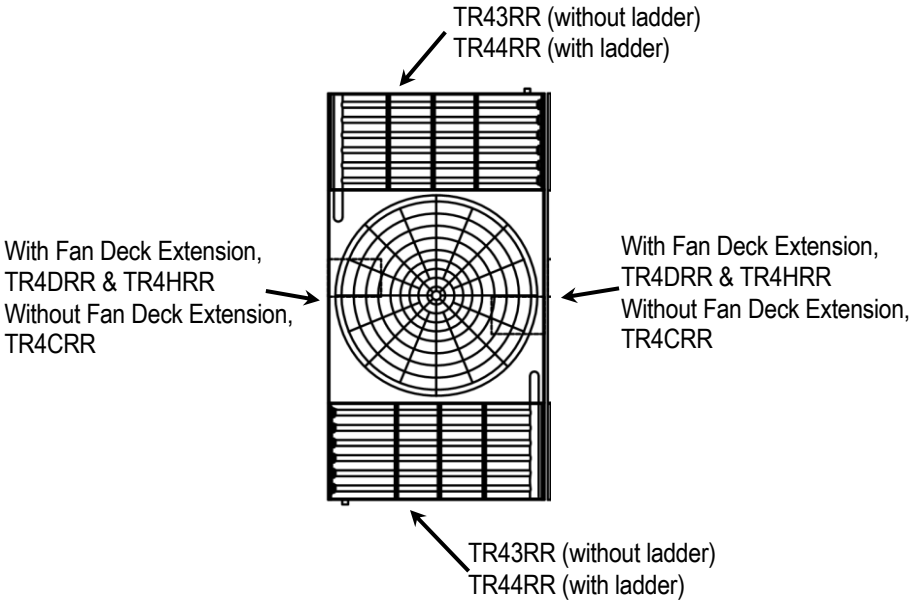


Figure 67. Single-cell Fan Deck Handrail Reference Drawing Arrangement

Reference Drawing	Ladder Opening	Drawing Number	Page #
Louver Face Railing Installation on Single Cell Unit	No	TR43RR	64
Louver Face Railing Installation on Single Cell Unit	Yes	TR44RR	65
Louver Face Railing Installation on Multi-cell Front Unit	No	TR45RR	66
Louver Face Railing Installation on Multi-cell Front Unit	Yes	TR46RR	67
Louver Face Railing Installation on Multi-cell Center Unit	No	TR4FRR	68
Louver Face Railing Installation on Multi-cell Center Unit	Yes	TR4GRR	69
Louver Face Railing Installation on Multi-cell Rear Unit	No	TR47RR	70
Louver Face Railing Installation on Multi-cell Rear Unit	Yes	TR48RR	71
End Wall Railing Installation Layout	N/A	TR4CRR	72
Fan Deck Extension Railings Installation	N/A	TR4DRR	73
End Wall Railing with Fan Deck Extension Installation Layout	N/A	TR4HRR	74
Railing Plug Installation	N/A	TR1XRR	75

Table 13. Fan Deck Handrail Installation Reference Drawings

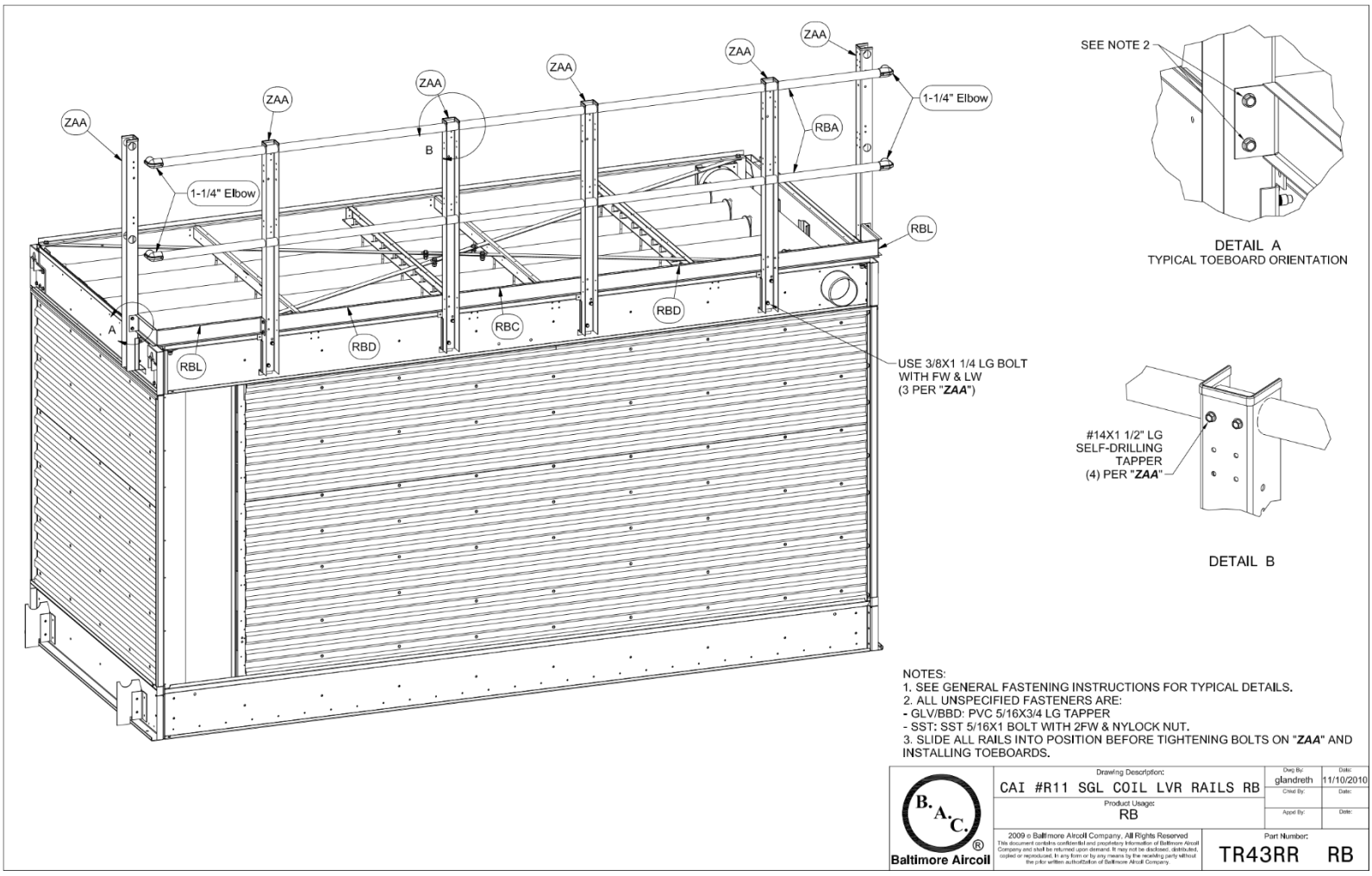


Figure 68. TR43RR Louver Face Railing Installation on Single Cell Unit, No Ladder Opening

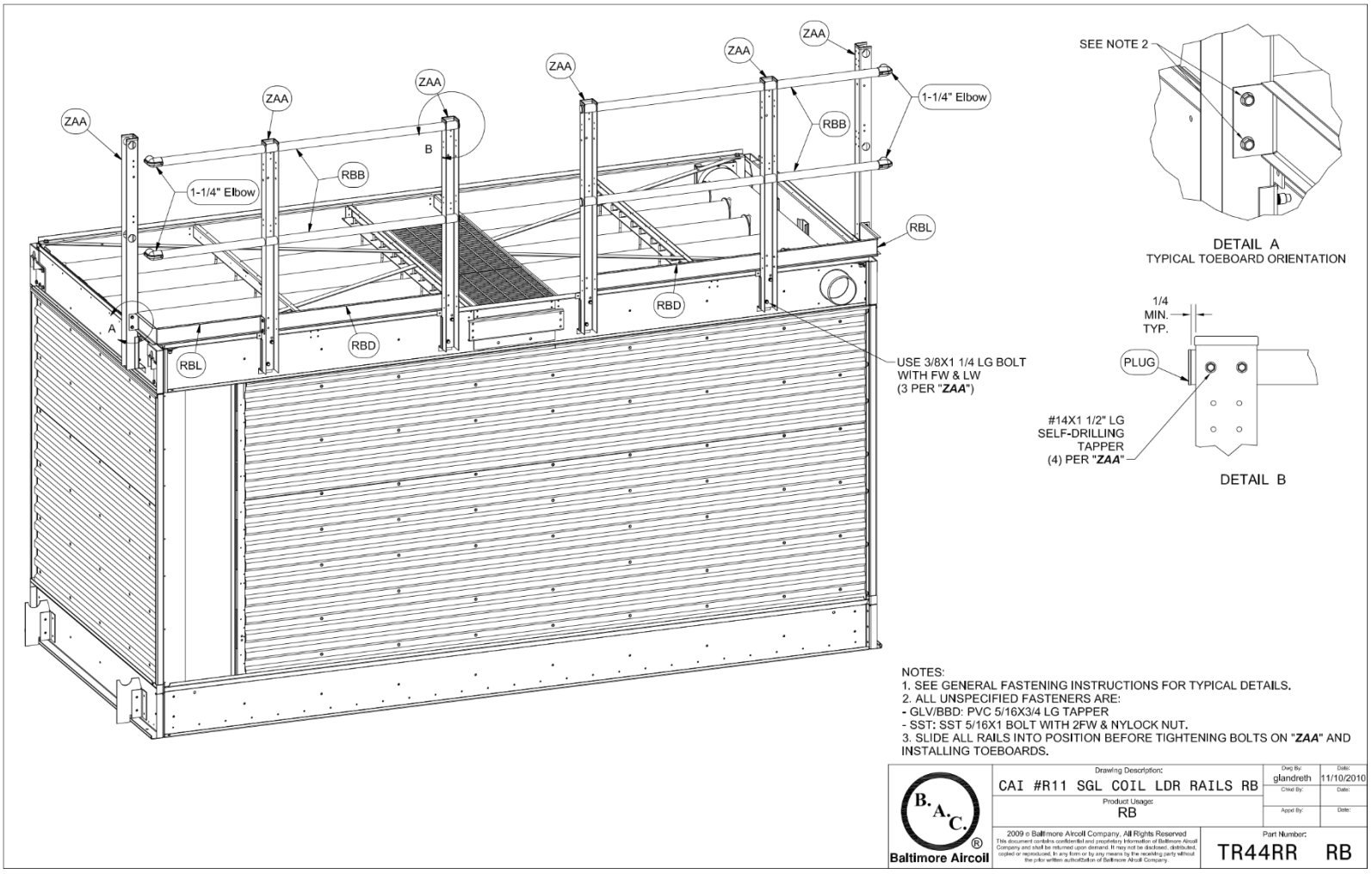


Figure 69. TR44RR Louver Face Railing Installation on Single Cell Unit, with Ladder Opening

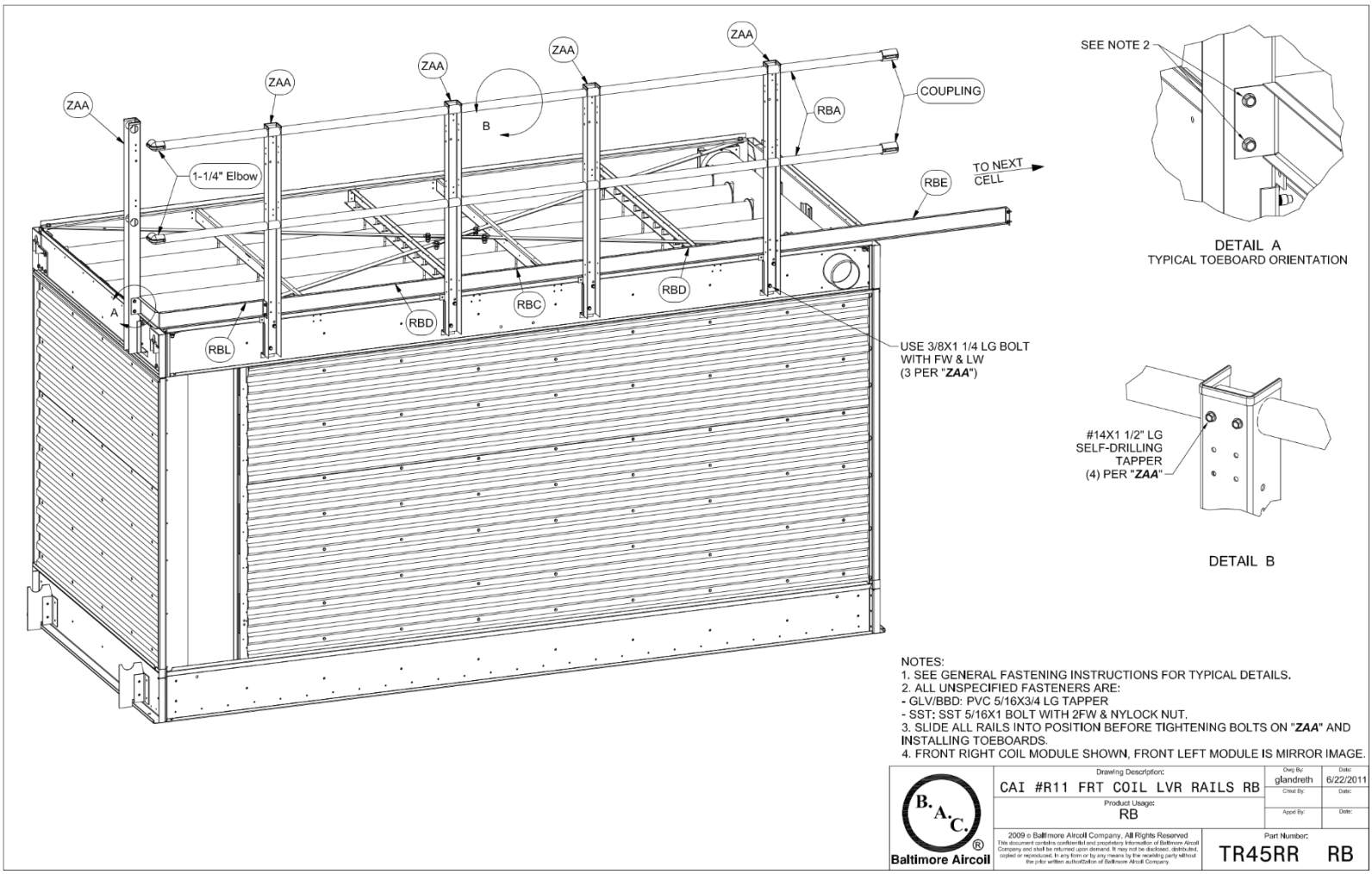


Figure 70. TR45RR Louver Face Railing Installation on Multi-cell Front Unit, No Ladder Opening

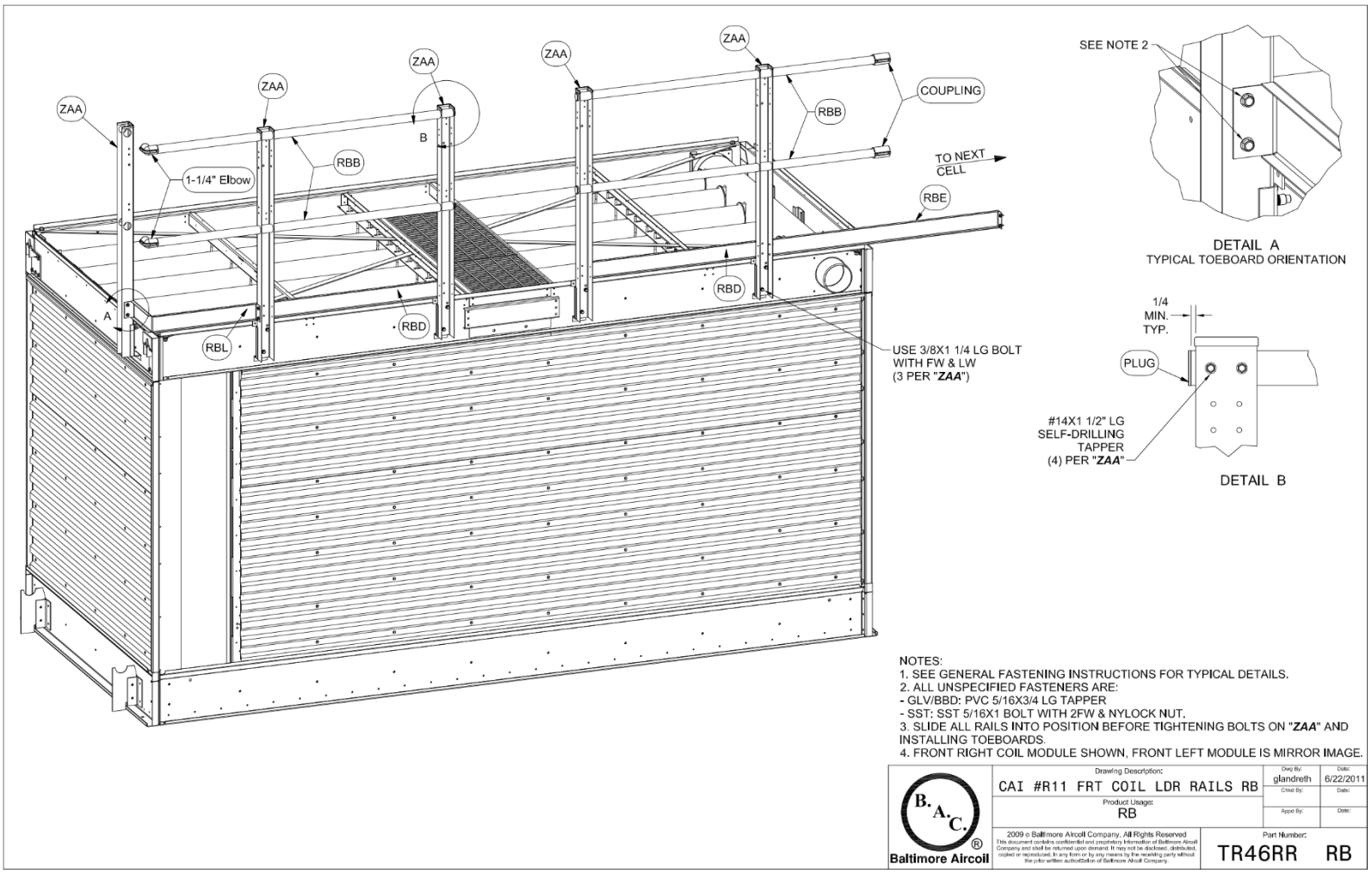


Figure 71. TR46RR Louver Face Railing Installation on Multi-cell Front Unit, with Ladder Opening

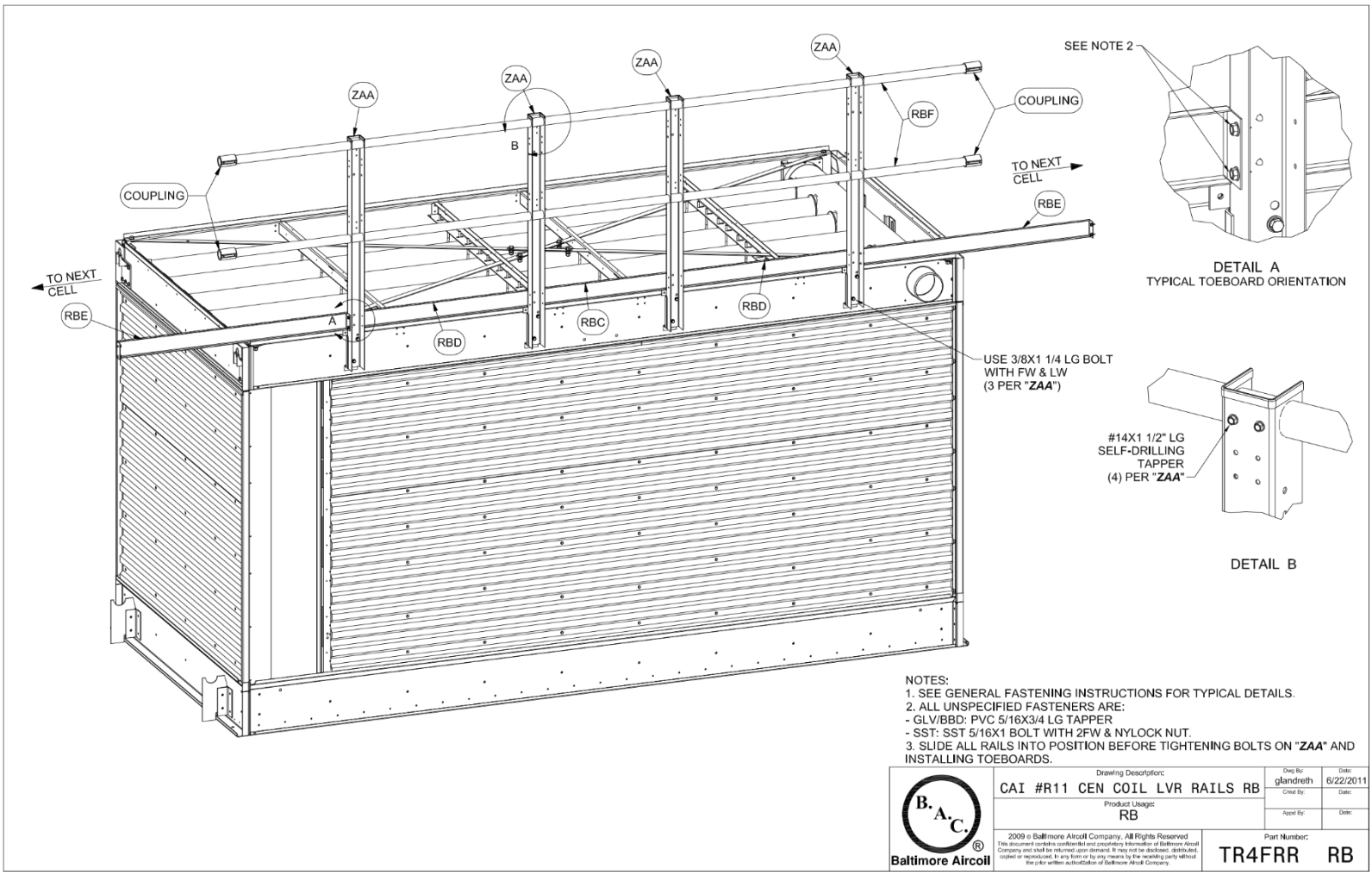


Figure 72. TR4FRR Louver Face Railing Installation on Multi-cell Center Unit, No Ladder Opening

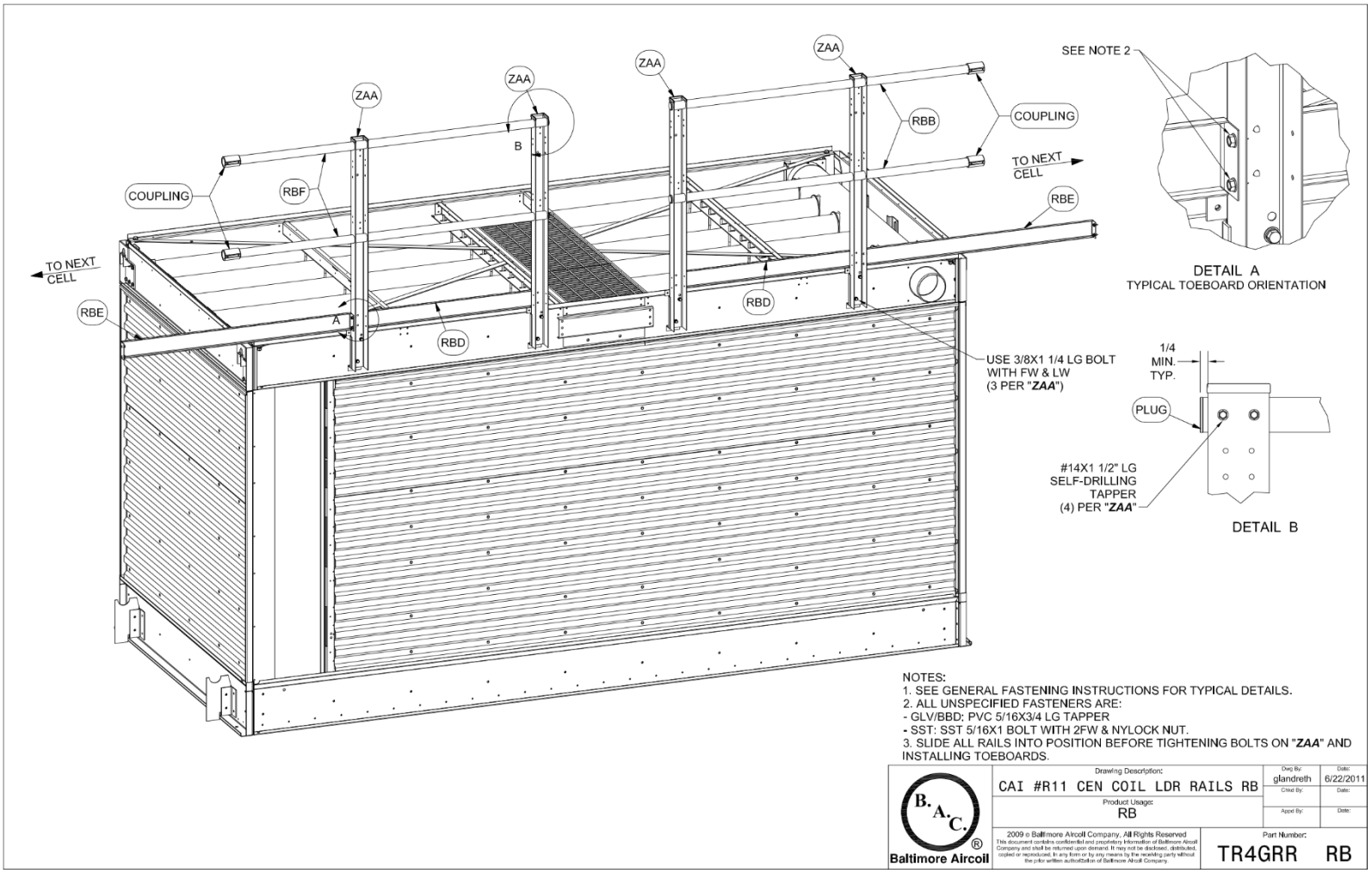


Figure 73. TR4GRR Louver Face Railing Installation on Multi-cell Center Unit, with Ladder Opening

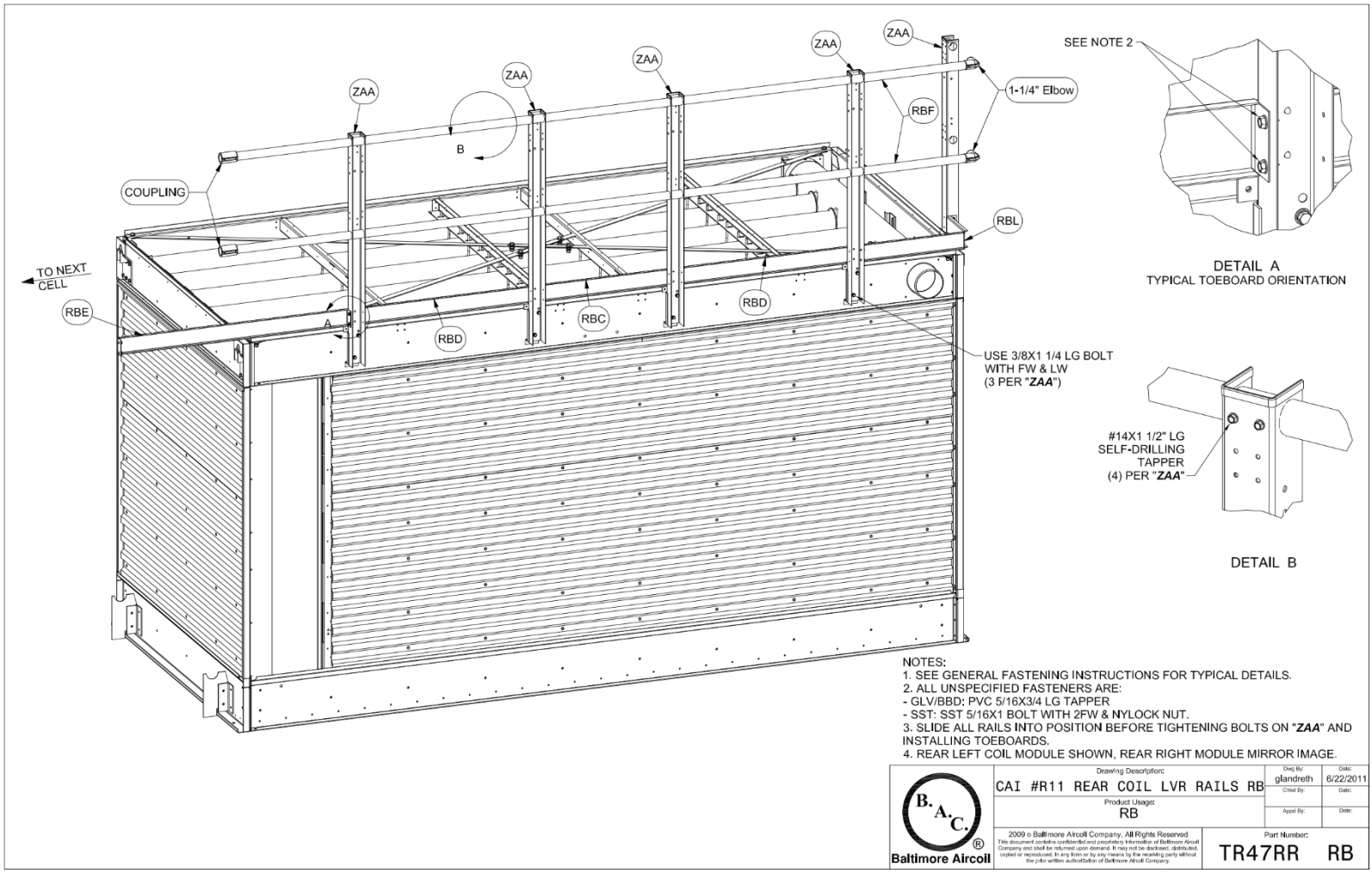


Figure 74. TR47RR Louver Face Railing Installation on Multi-cell Rear Unit, No Ladder Opening

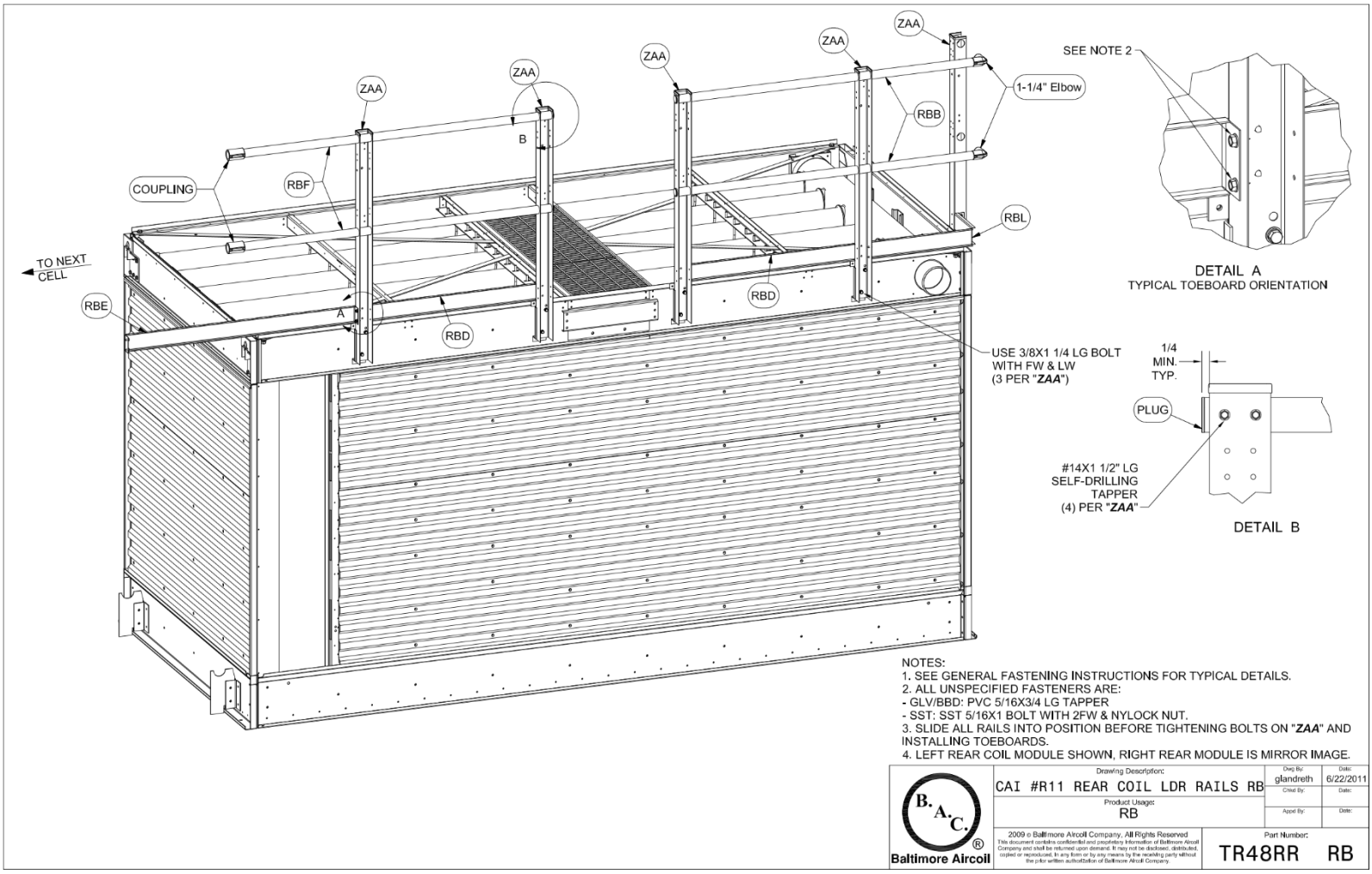


Figure 75. TR48RR Louver Face Railing Installation on Multi-cell Rear Unit, with Ladder Opening

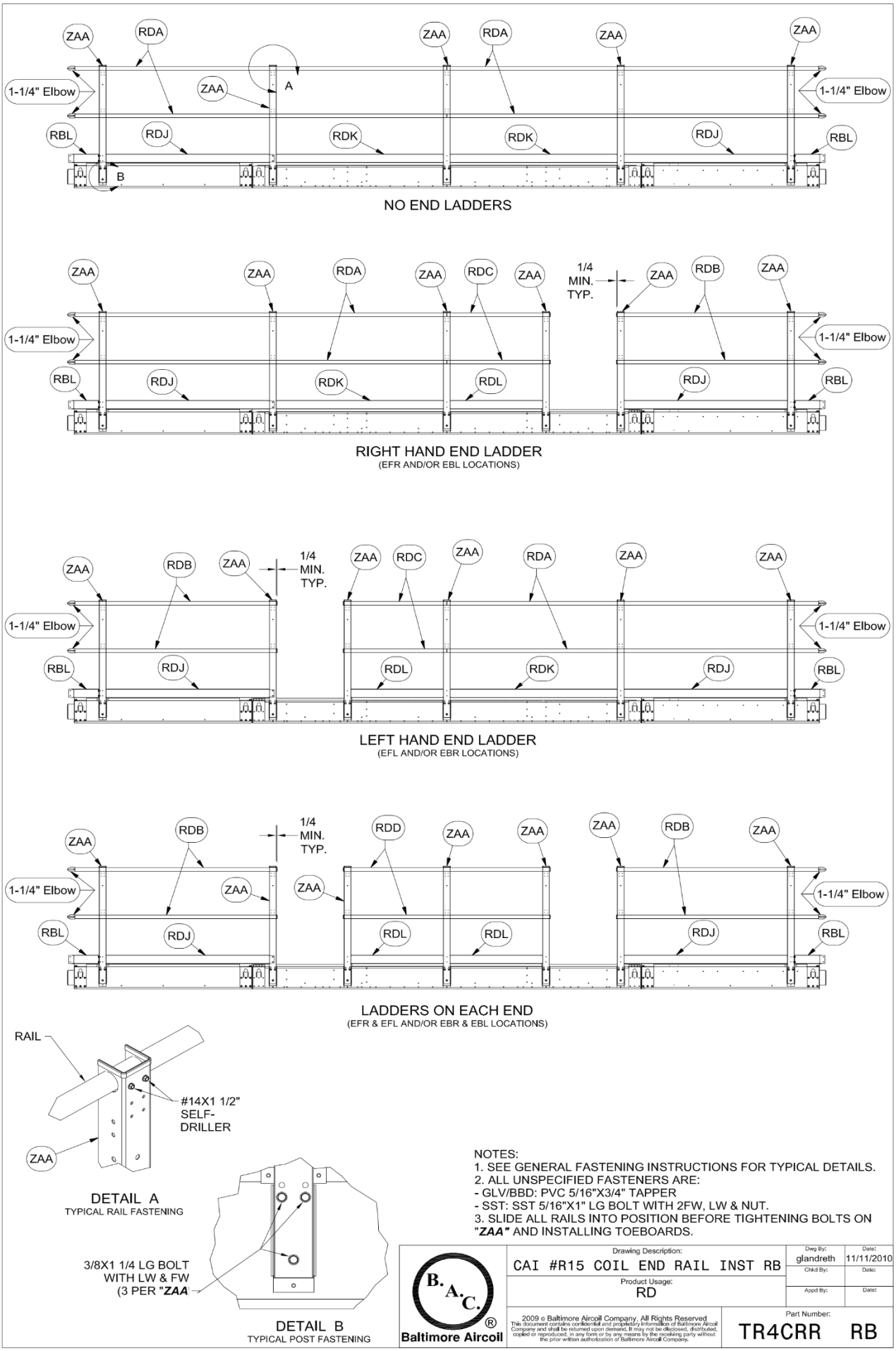


Figure 76. TR4CRR End Wall Railing Installation Layout

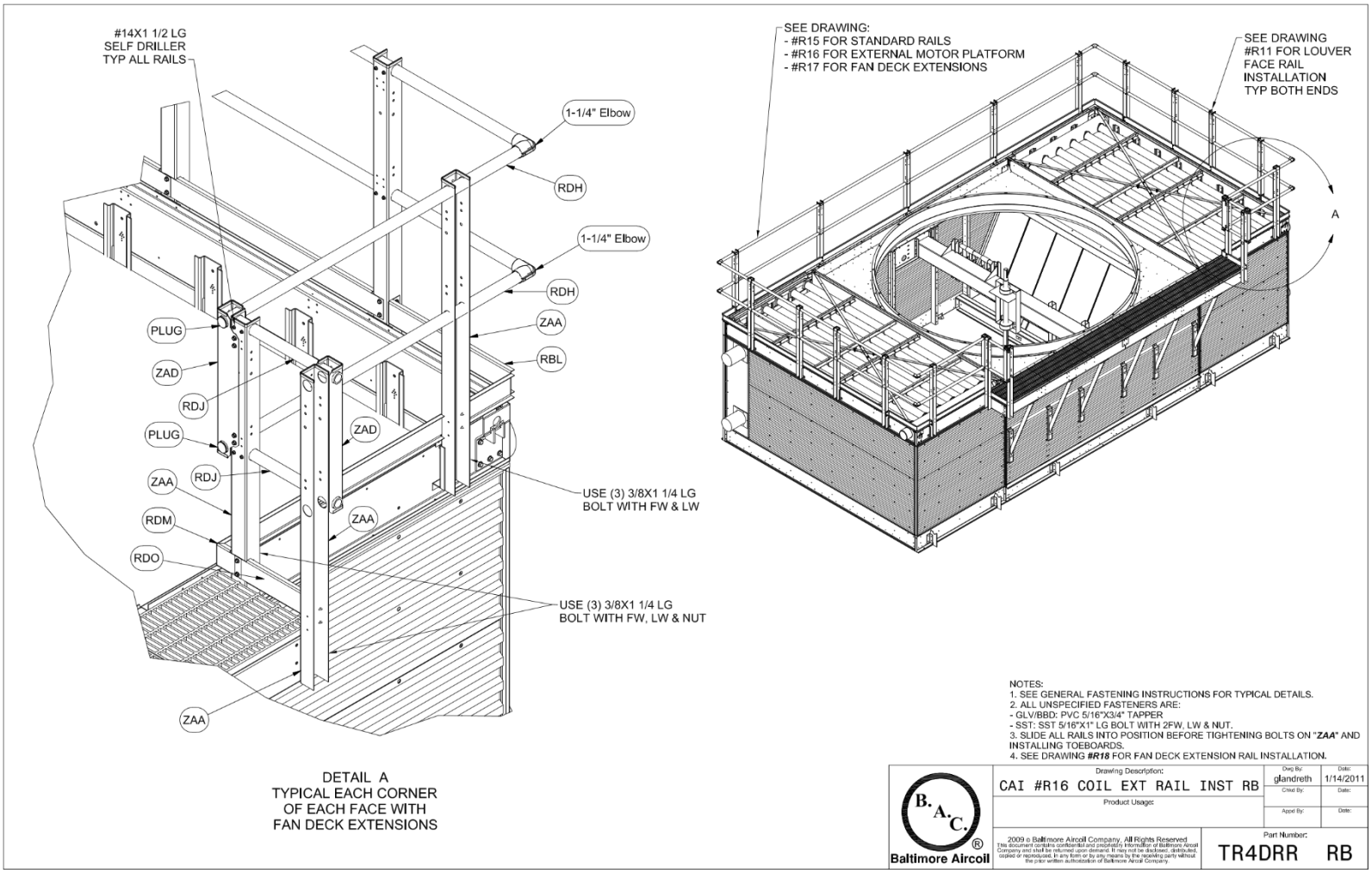


Figure 77. TR4DRR Fan Deck Extension Railings Installation

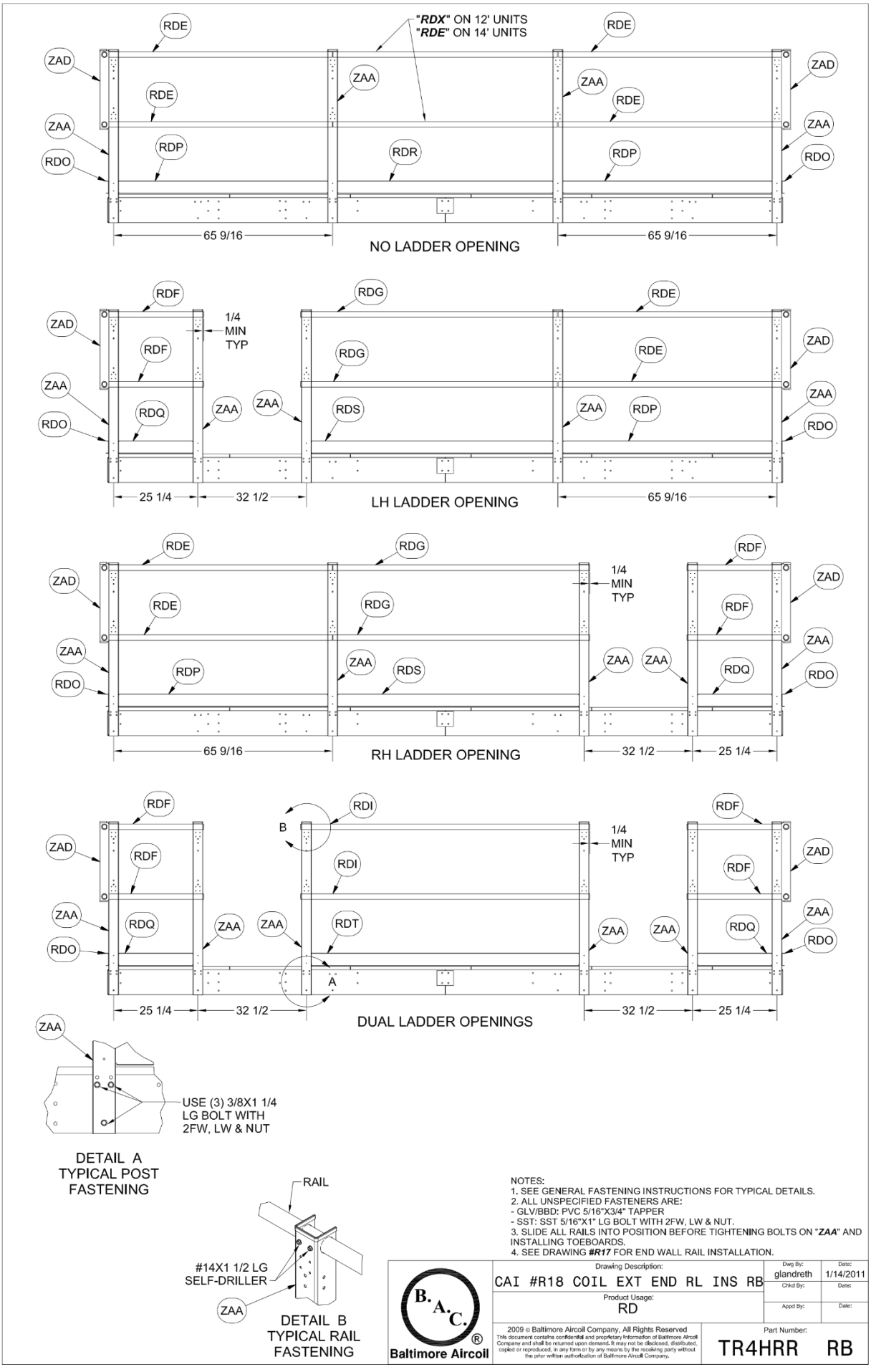
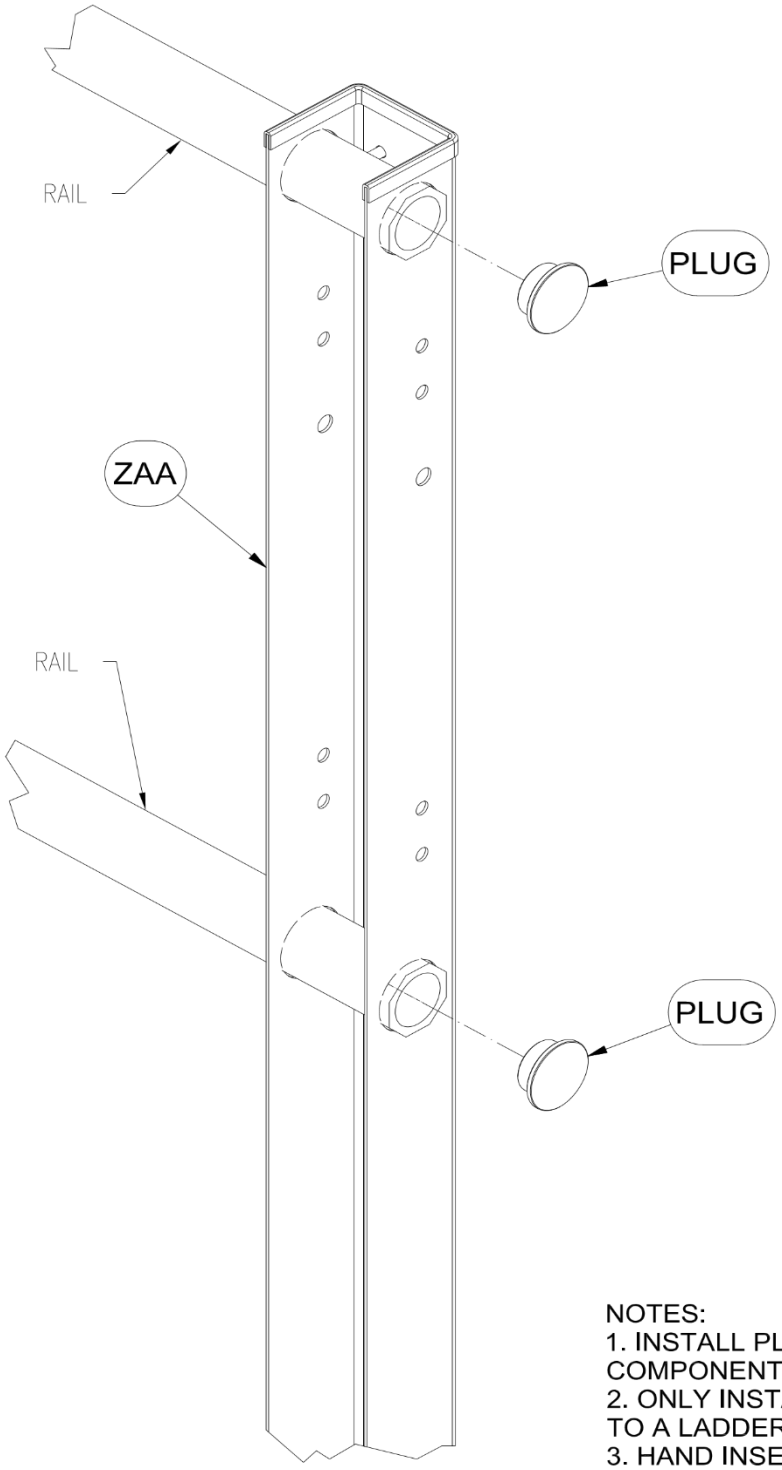


Figure 78. TR4HRR End Wall Railing with Fan Deck Extension Installation Layout



NOTES:
1. INSTALL PLUGS AFTER FASTENING ALL COMPONENTS INTO PLACE.
2. ONLY INSTALL PIPE PLUGS IN ENDS OF RAILS NEXT TO A LADDER OPENING.
3. HAND INSERT PLUGS INTO ENDS OF RAILS, AND TAP INTO PLACE WITH A SOFT MALLET.
4. DO NOT OVER TIGHTEN PLUGS, OR CRACKING MAY OCCUR.

B.A.C.® Baltimore Aircoil	Drawing Description: CAI #R19 LDR RAIL PLUG INST RA	Dwg By: glandreth	Date: 10/30/2008
		Chkd By:	Date:
	Product Usage:	Appd By:	Date:
		Part Number: TR1XRR RA	

Figure 79. TR1XRR Railing Plug Installation

Multi-Section Ladder Assembly

Ladders shipped in sections must be spliced together. Refer to **Figure 81** and **Figure 82** for ladder section splicing details. The upper, lower and extension ladder sections can be identified by referring to the reference drawing key code listed in **Table 14**. The reference drawing key code can be found on the individual part label as shown in **Figure 28** on **Page 23**. Refer to **Figure 80** for side/end designations.

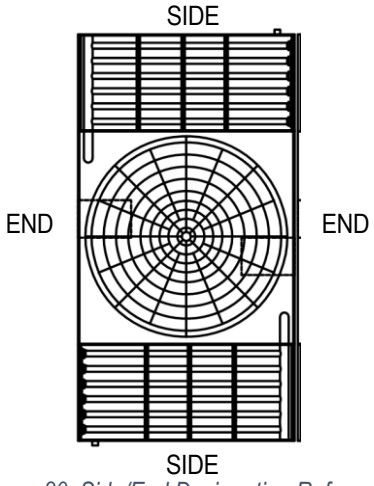


Figure 80. Side/End Designation Reference

Ladder Type	Upper Ladder Section	Lower Ladder Section	Ladder Extension Section
End to Fan Deck	LAA	LAB	LAZ
End to Fan Deck Extension	LAC	LAD	
Side to Fan Deck	LAE	LAF	
End to External Motor Gear Drive Platform	LAG	LAB	
Side to PCD Hood Platform	LAL	LAM	

Table 14. Multi-Section Ladder Assembly Reference Drawing Key Codes

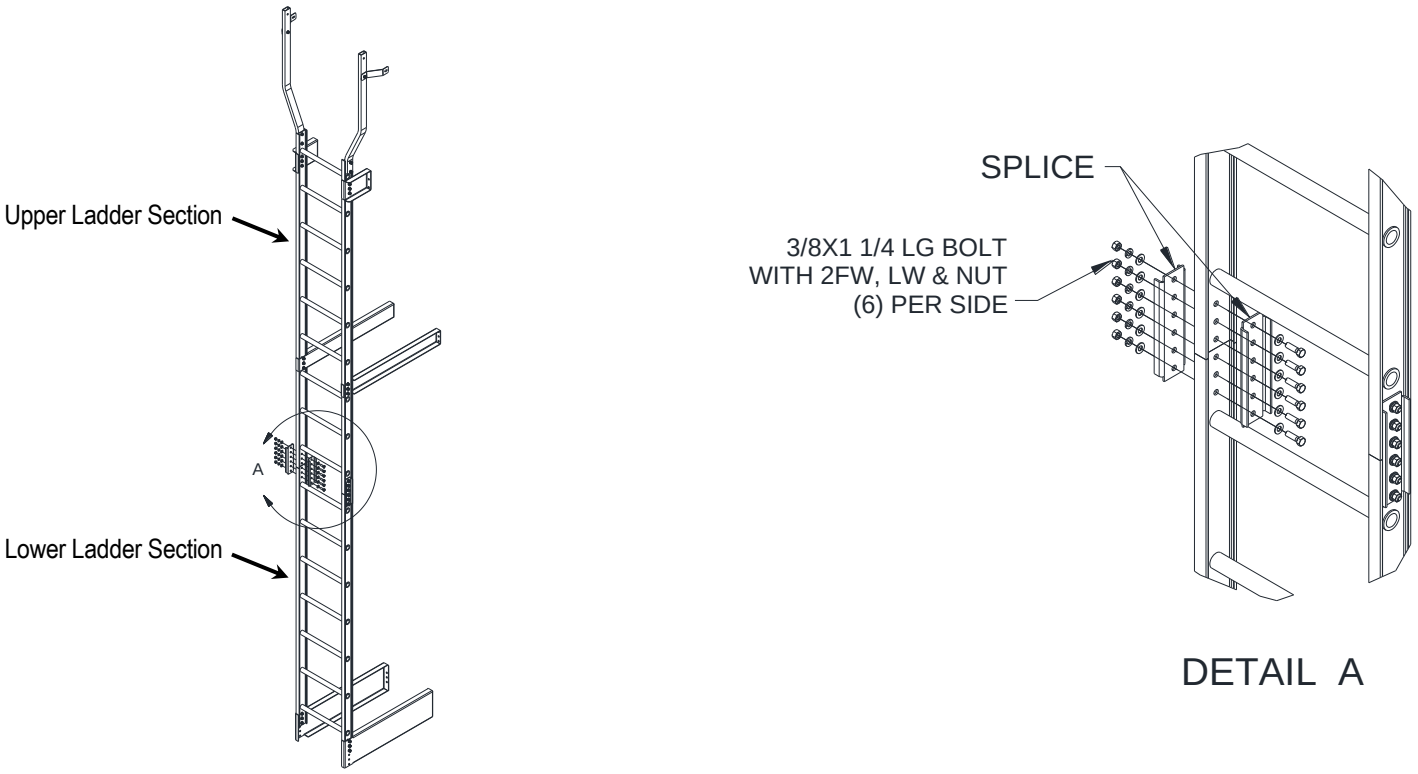


Figure 81. Ladder Assembly (Two Sections)

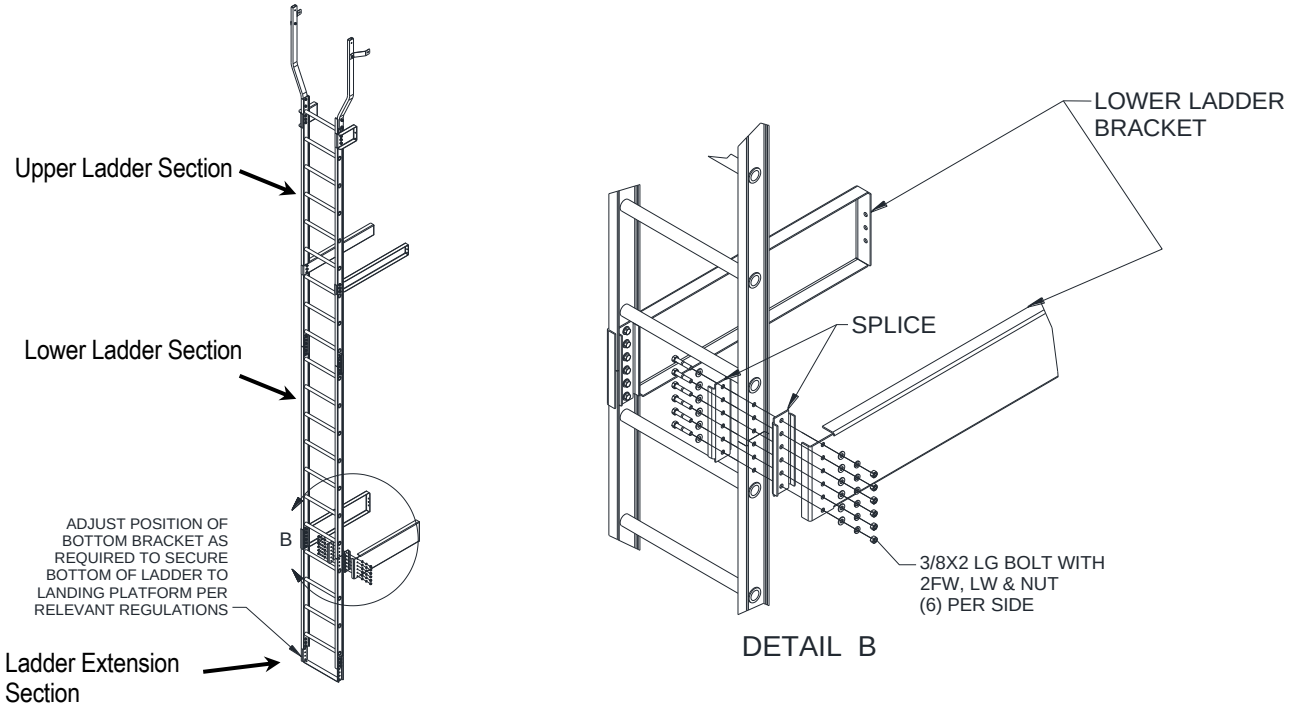


Figure 82. Ladder Assembly (Three Sections)

Fan Deck Ladder Installation

Refer to **Figure 83** to aid in determining the associated reference drawing for fan deck ladder installation. Fan deck ladder installation information is shown in **Table 15**.

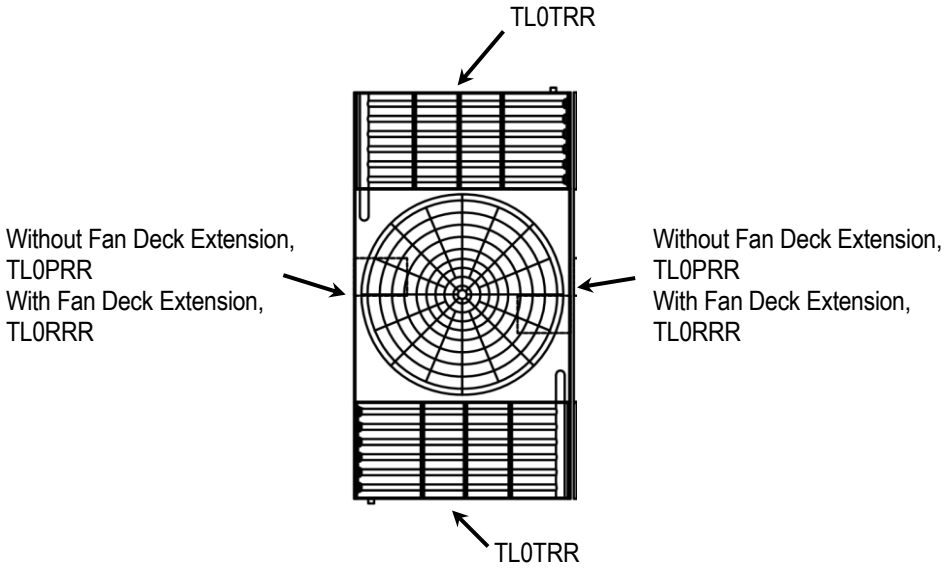


Figure 83. Fan Deck Ladder Installation Reference Drawing Arrangement

Reference Drawing	Drawing Number	Page #
End Ladder to Fan Deck Installation	TL0PRR	79
End Ladder to Fan Deck Extension Installation	TL0RRR	80
Side to Fan Deck Installation	TL0TRR	81

Table 15. Fan Deck Ladder Installation Reference Drawings

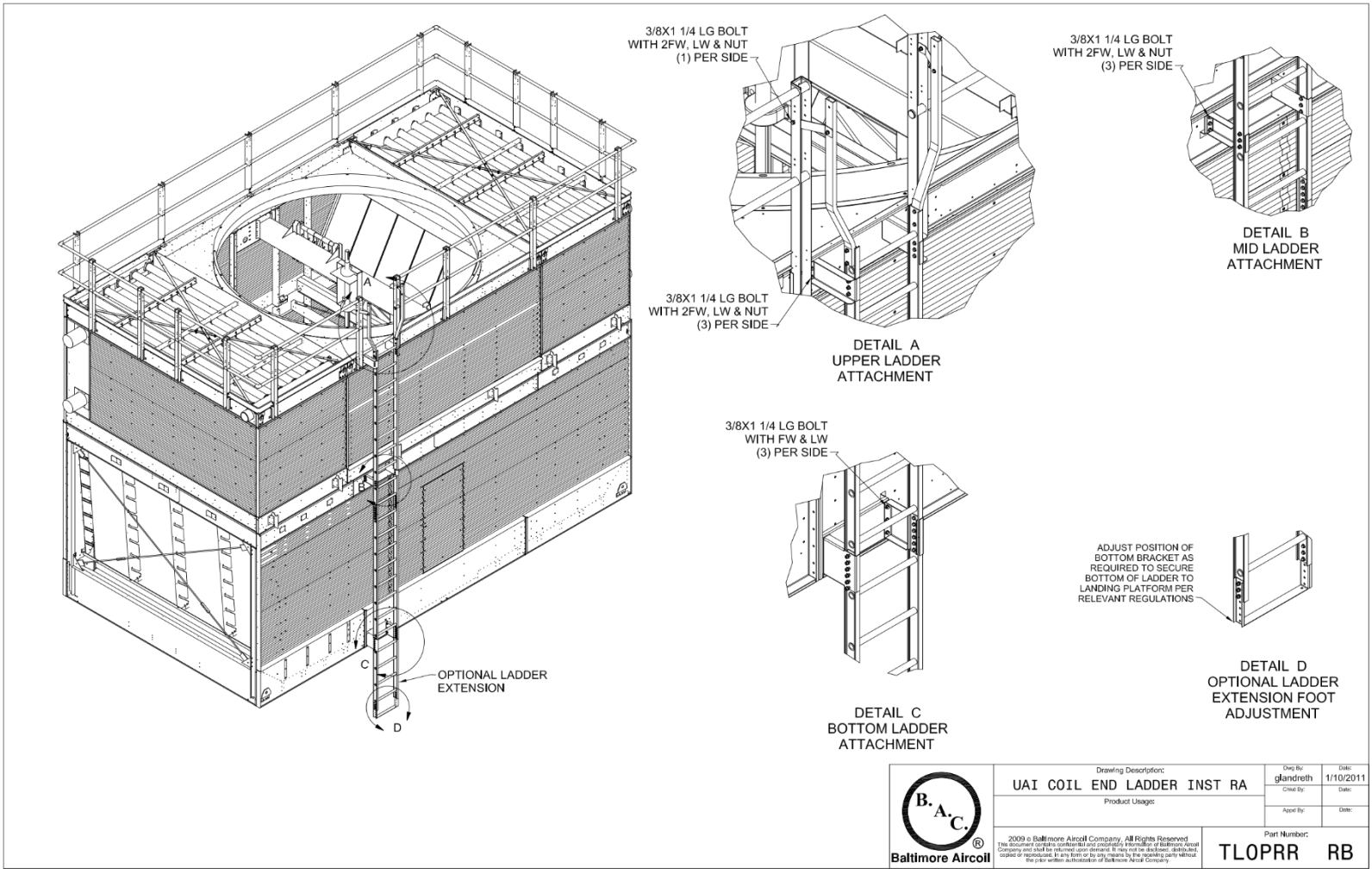


Figure 84. TL0PRR End Ladder to Fan Deck Installation

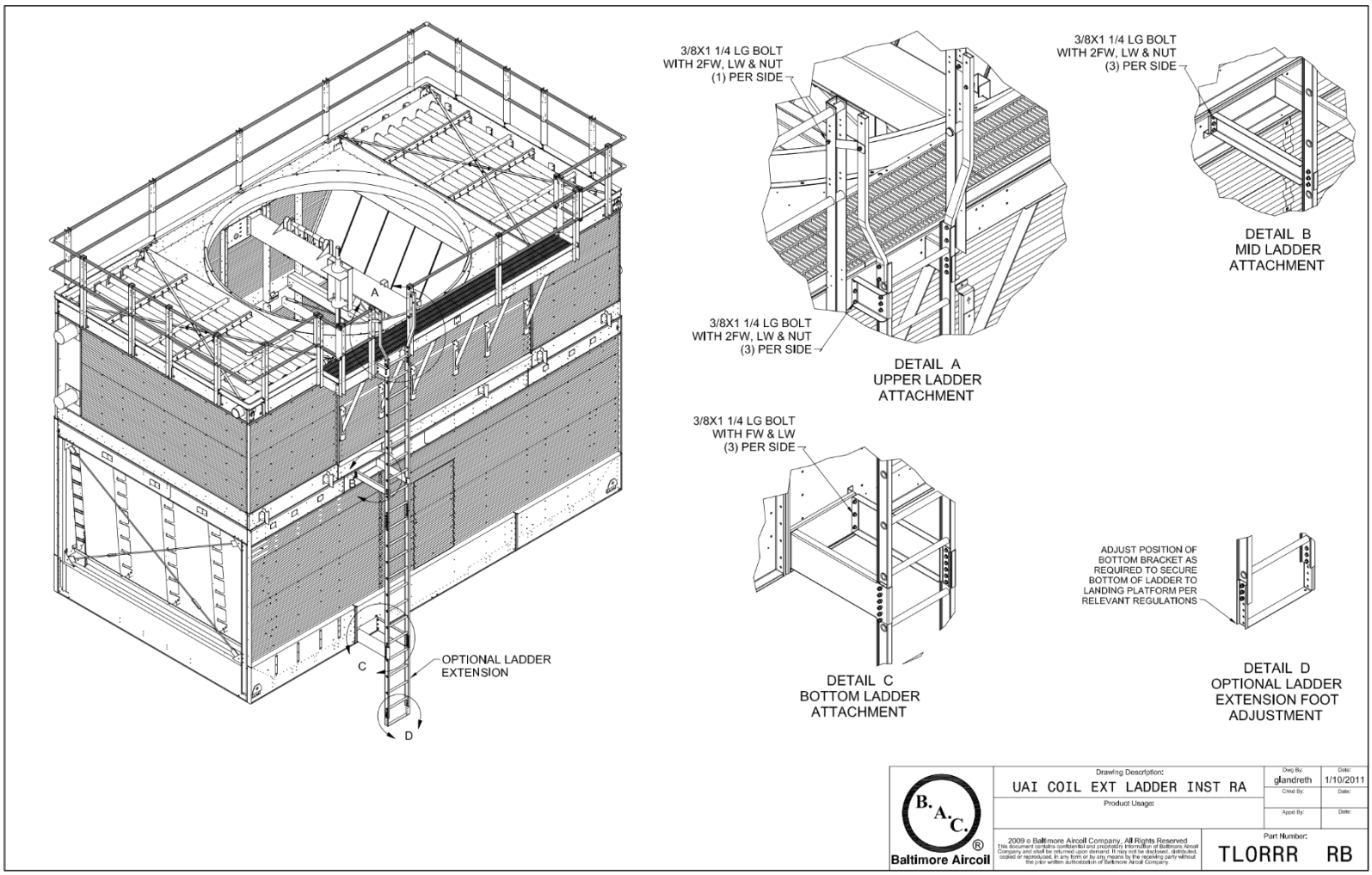


Figure 85. TL0RRR End Ladder to Fan Deck Extension Installation

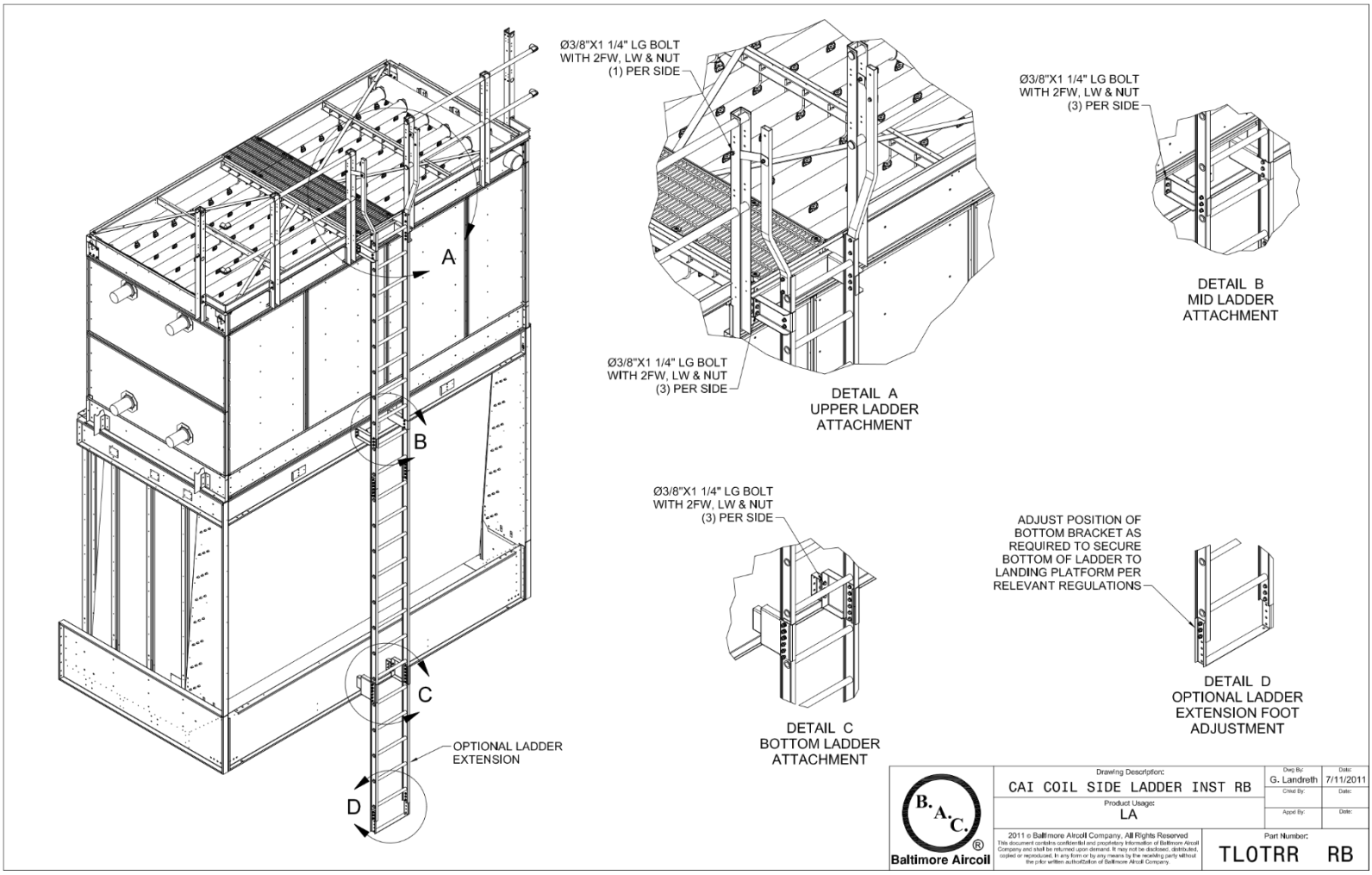


Figure 86. TL0TRR Side to Fan Deck Installation

Motor Davit Assembly & Installation

The motor davit assembly is shown in **Figure 87**. Refer to **Figure 88** for a detailed assembly and installation reference drawing.

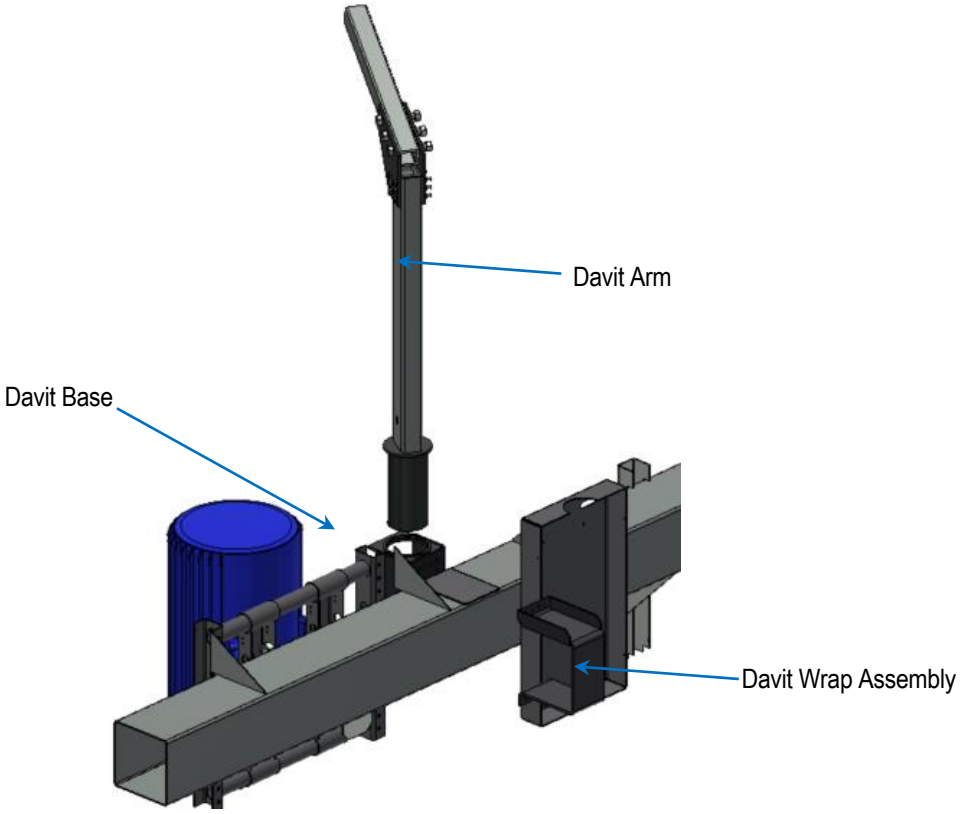
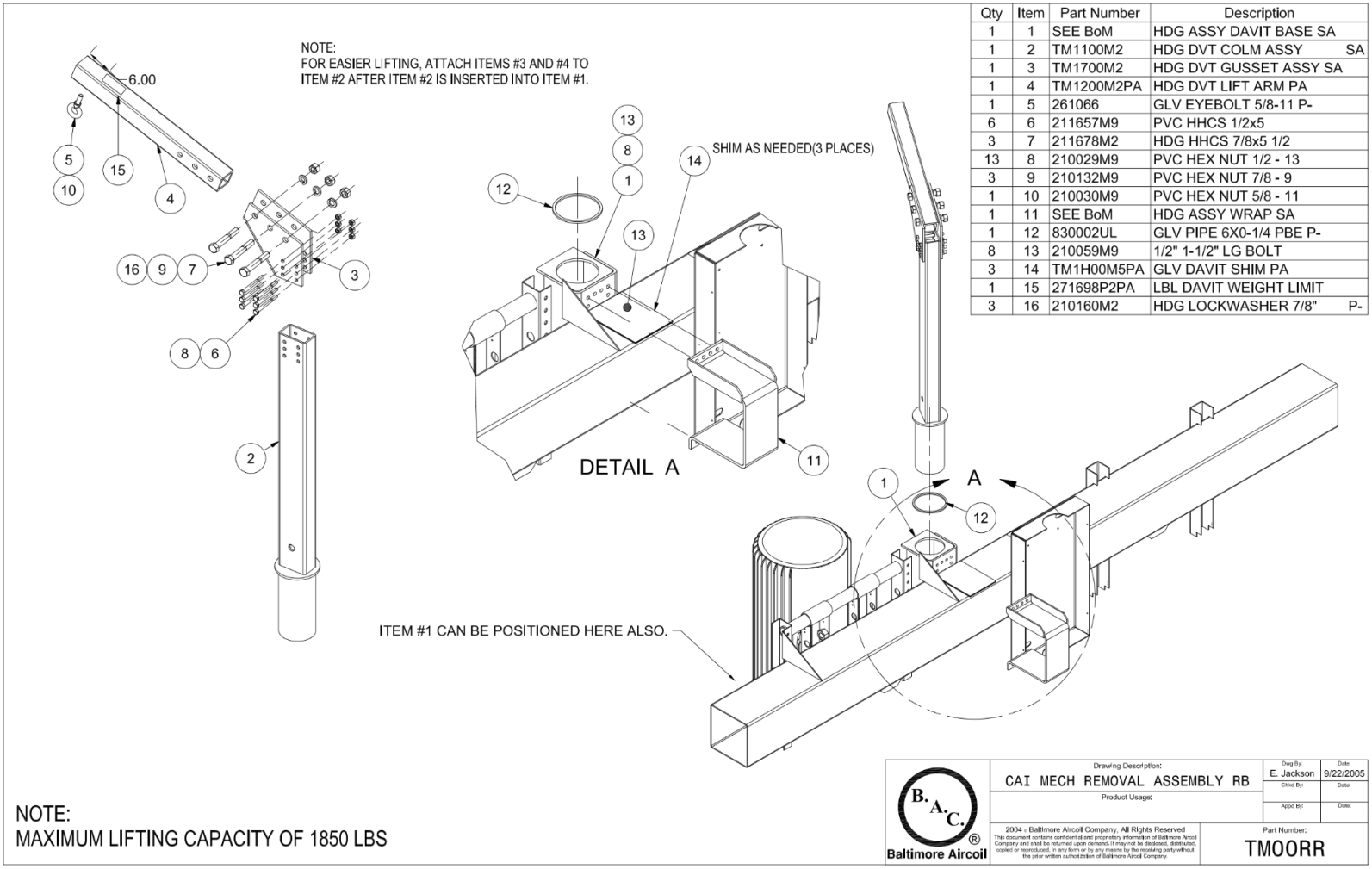


Figure 87. Motor Davit Assembly



Qty	Item	Part Number	Description
1	1	SEE BoM	HDG ASSY DAVIT BASE SA
1	2	TM1100M2	HDG DVT COLM ASSY SA
1	3	TM1700M2	HDG DVT GUSSET ASSY SA
1	4	TM1200M2PA	HDG DVT LIFT ARM PA
1	5	261066	GLV EYEBOLT 5/8-11 P-
6	6	211657M9	PVC HHCS 1/2x5
3	7	211678M2	HDG HHCS 7/8x5 1/2
13	8	210029M9	PVC HEX NUT 1/2 - 13
3	9	210132M9	PVC HEX NUT 7/8 - 9
1	10	210030M9	PVC HEX NUT 5/8 - 11
1	11	SEE BoM	HDG ASSY WRAP SA
1	12	830002UL	GLV PIPE 6X0-1/4 PBE P-
8	13	210059M9	1/2" 1-1/2" LG BOLT
3	14	TM1H00M5PA	GLV DAVIT SHIM PA
1	15	271698P2PA	LBL DAVIT WEIGHT LIMIT
3	16	210160M2	HDG LOCKWASHER 7/8" P-

Figure 88. TM00RR Mechanical Removal Assembly

Positive Closure Damper (PCD) Hood Installation

The FXV3's innovative design results in a low heat loss when the unit is idle. When additional heat loss reduction is desired, coil air intake hoods with factory mounted PCDs with stainless steel linkages and damper actuators can be provided. The motor actuators are easily accessible. The addition of optional factory mounted insulation to the hood and casing can further reduce the heat loss by minimizing losses due to conduction.

Refer to **Figure 89** and **Figure 90** for PCD hood installation details.

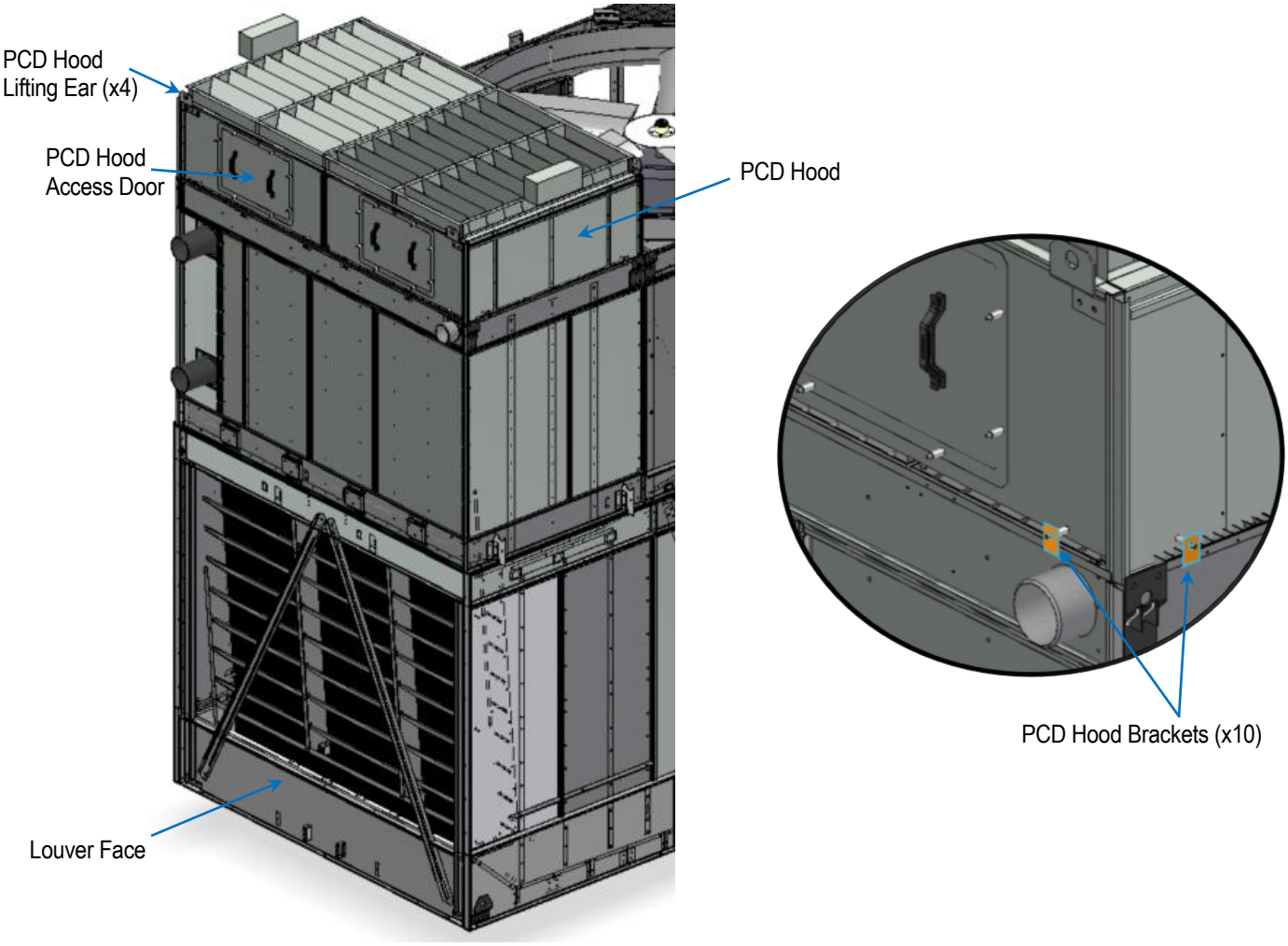


Figure 89. PCD Hood Installation

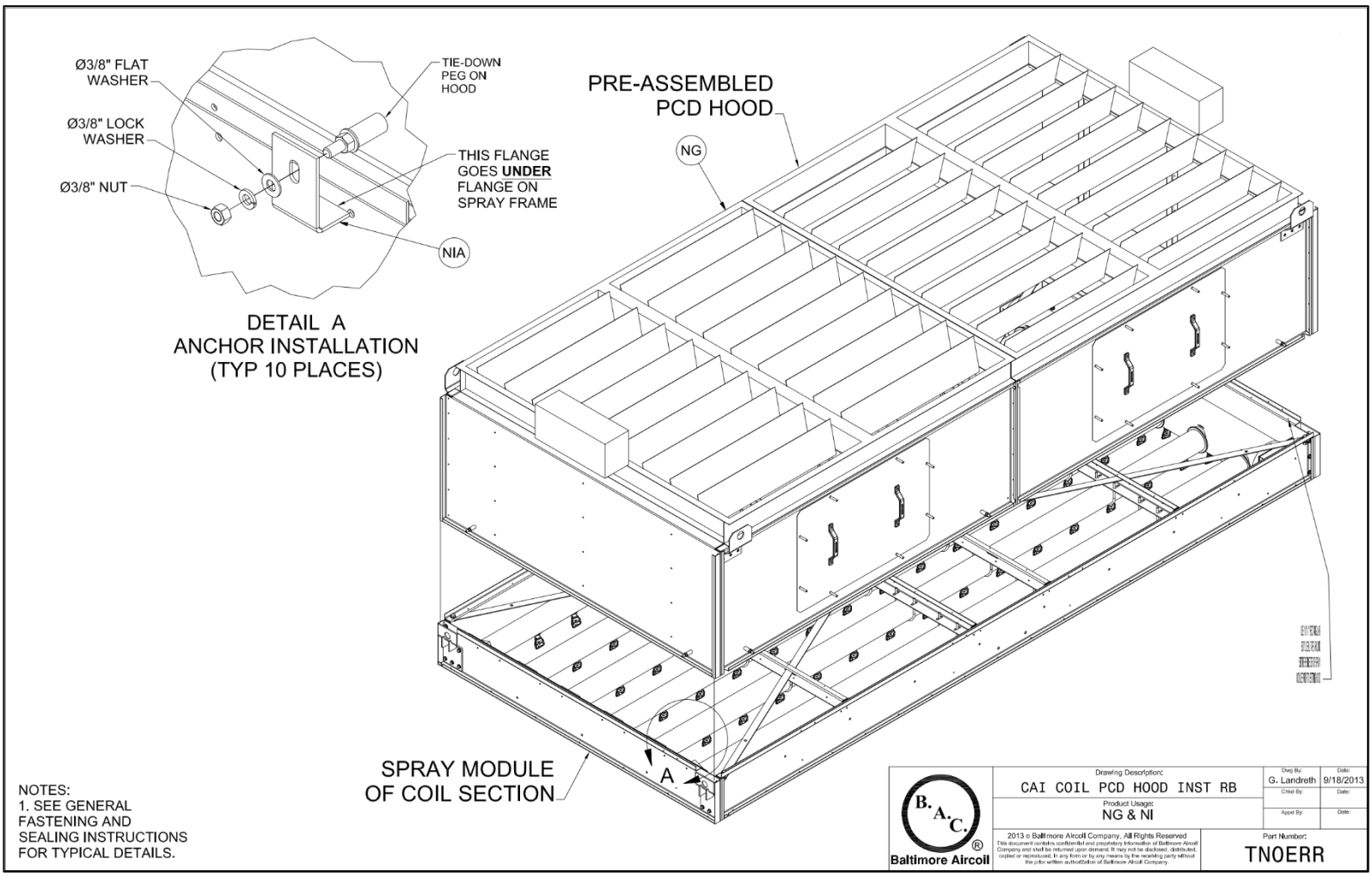


Figure 90. TN0ERR PCD Hood Installation

Ladder Safety Cage Installation

For ladder safety cage installation information refer to **Figure 91**.

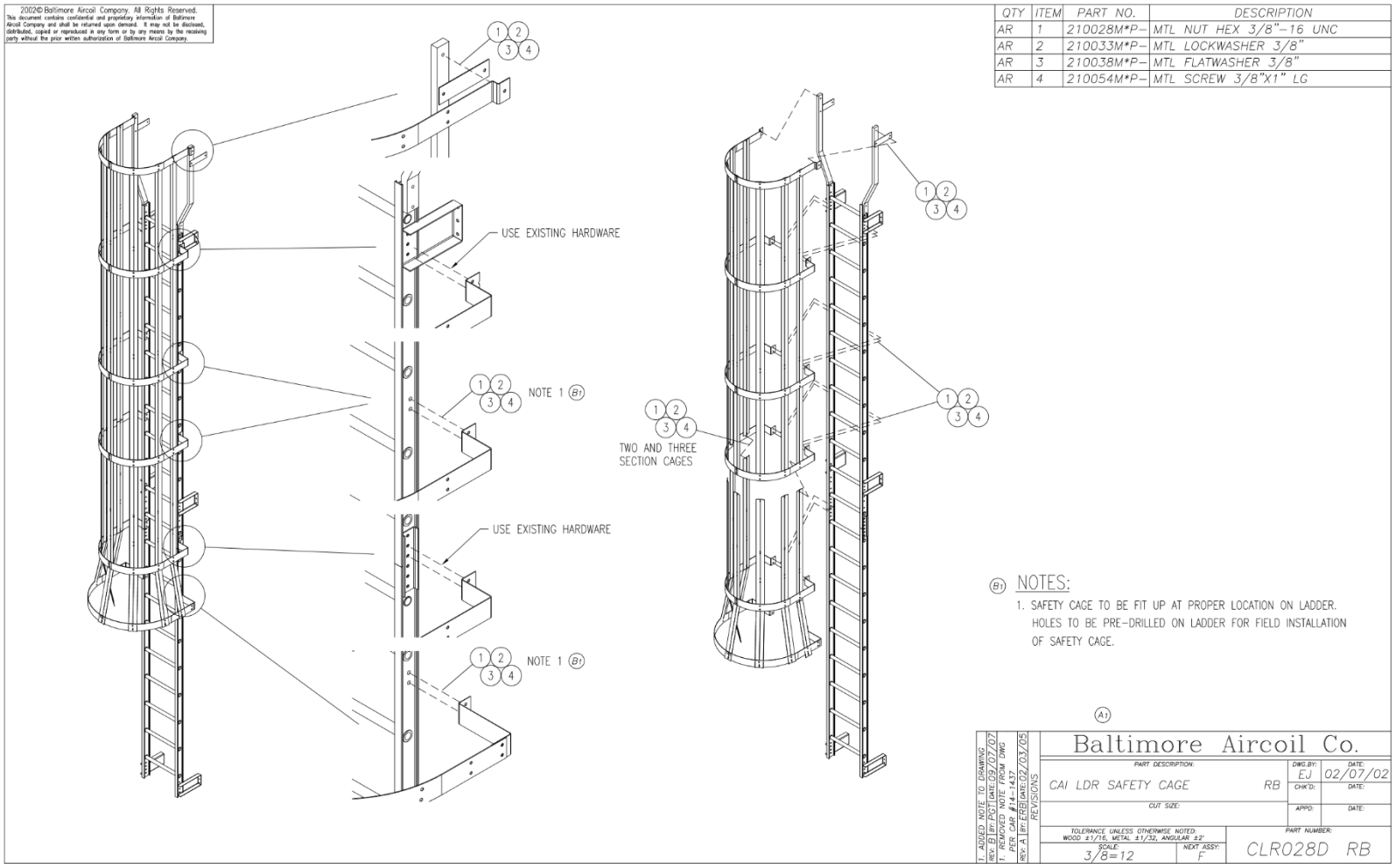


Figure 91. CLR028D Ladder Safety Cage Installation

Fan Cowl Extension Installation

For fan cowl extension installation information refer to **Figure 92**.

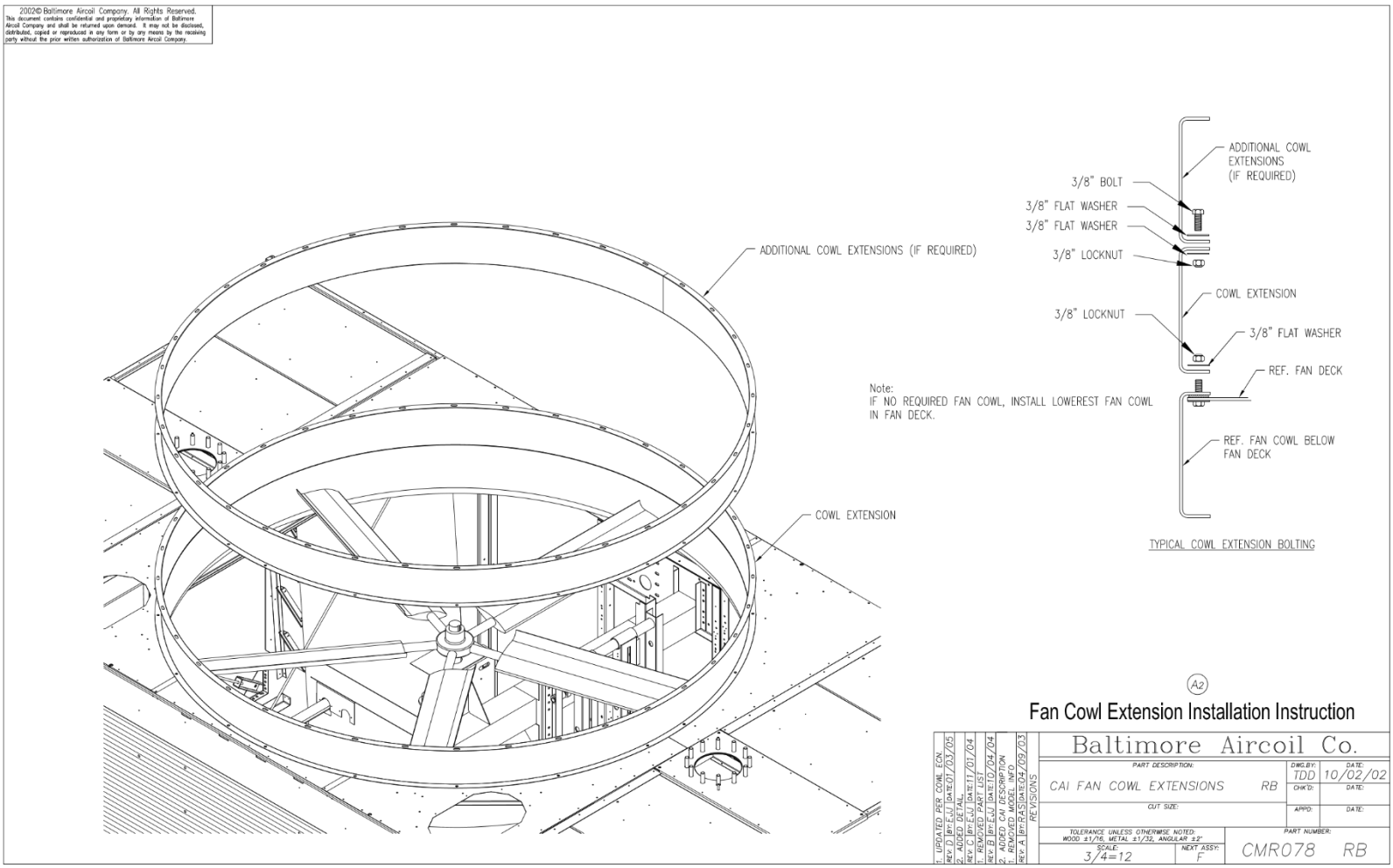


Figure 92. CMR078 Fan Cowl Extension Installation

Fan Guard Installation

For fan guard installation information refer to **Figure 93**.

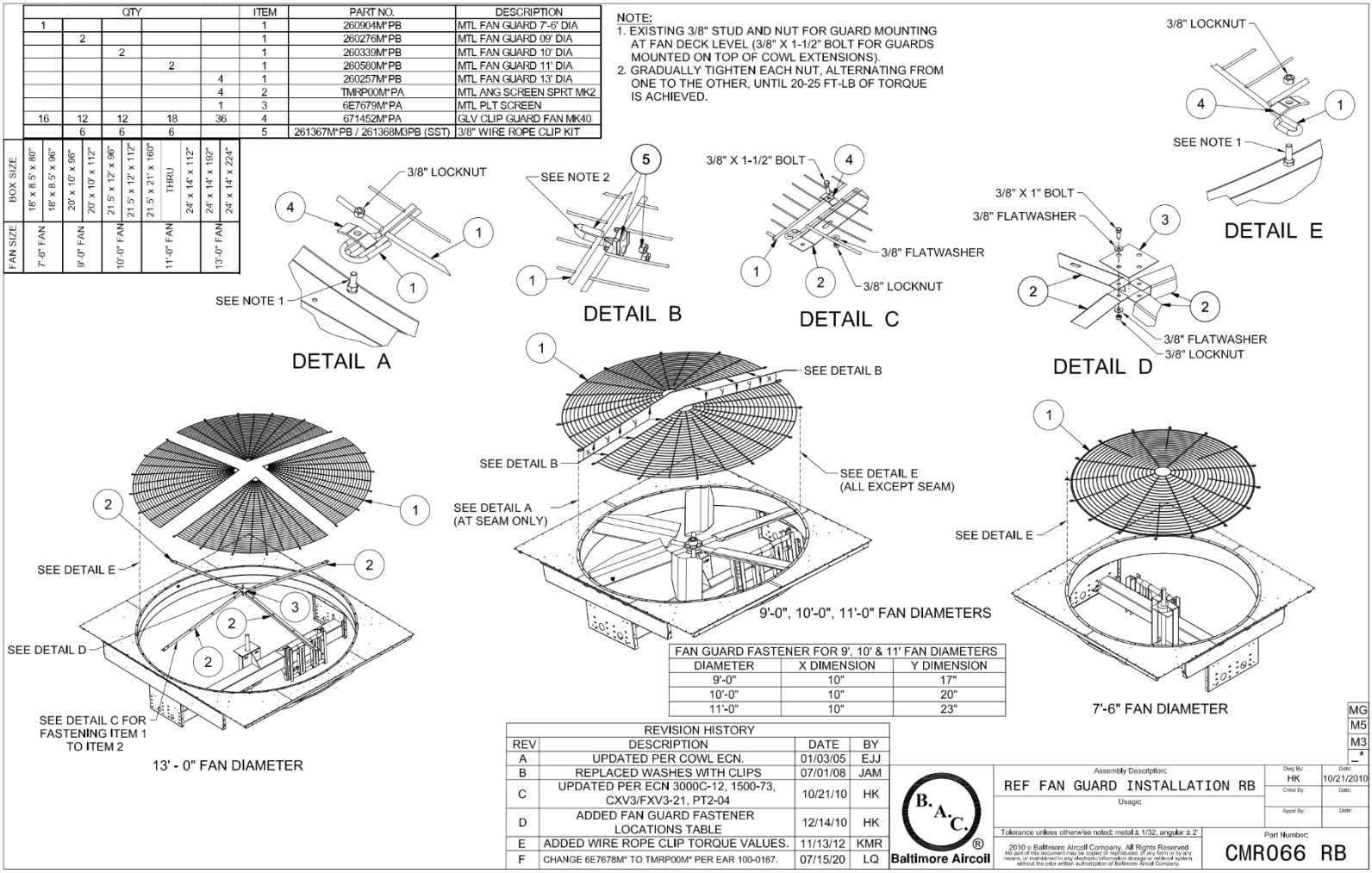


Figure 93. CMR066 Fan Guard Installation

Discharge Attenuation Installation

For discharge attenuation information refer to **Figure 94**.

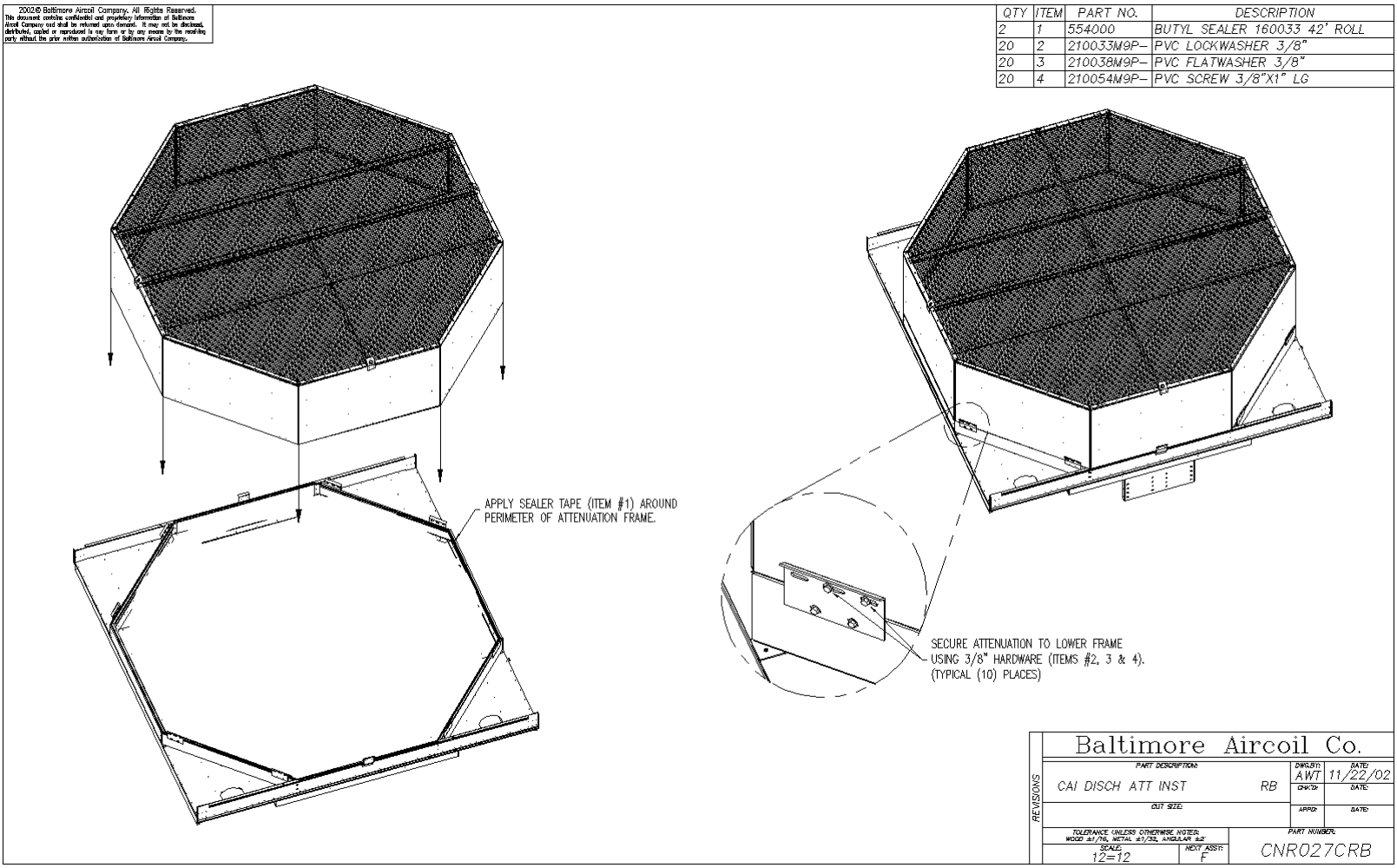


Figure 94. CNR027CR Discharge Attenuation Installation

Intake Attenuation Installation

For discharge attenuation information refer to **Figure 95**.

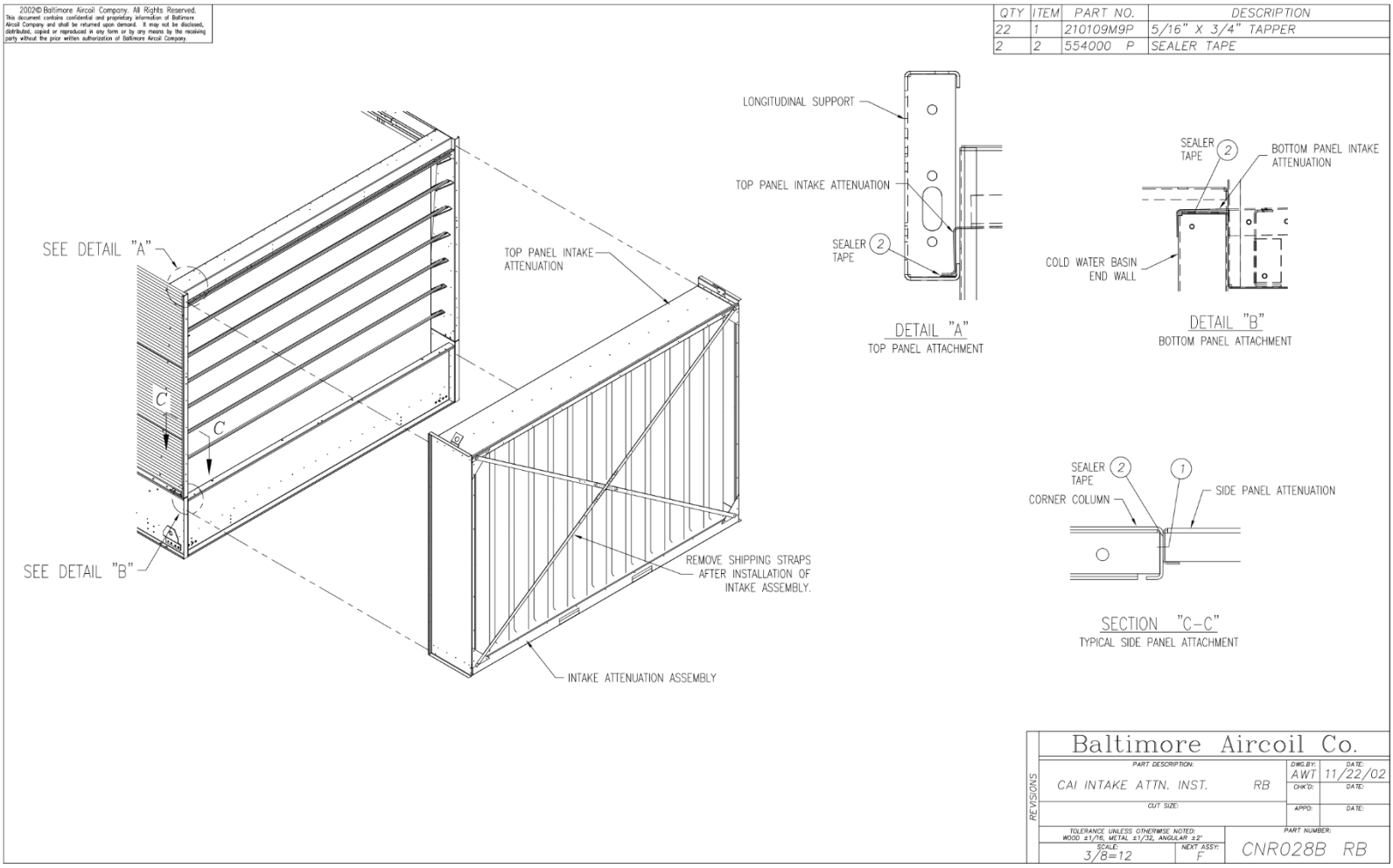


Figure 95. CNR028B Intake Attenuation Installation

FXV3

CLOSED CIRCUIT COOLING TOWER

CXVT

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