

INSTALLATION DETAILS

- Recommended crew (Adult): 2-3
- Installation time: **12 Hours not including concrete cure time**
- User age: 5-12
- Use zone: **20' Diameter**
- Weight: **1391**
- Actual Dimension: **96" Diameter**

MAINTENANCE:

- As the owner of the playground you are responsible for maintenance of the equipment and play area. A maintenance schedule must be developed, and the equipment inspected frequently. Periodic Inspections, maintenance, repair and replacement of damaged parts is necessary for the safe operation and use of the equipment.
- A maintenance section that includes component specific maintenance requirements is included at the end of this document.

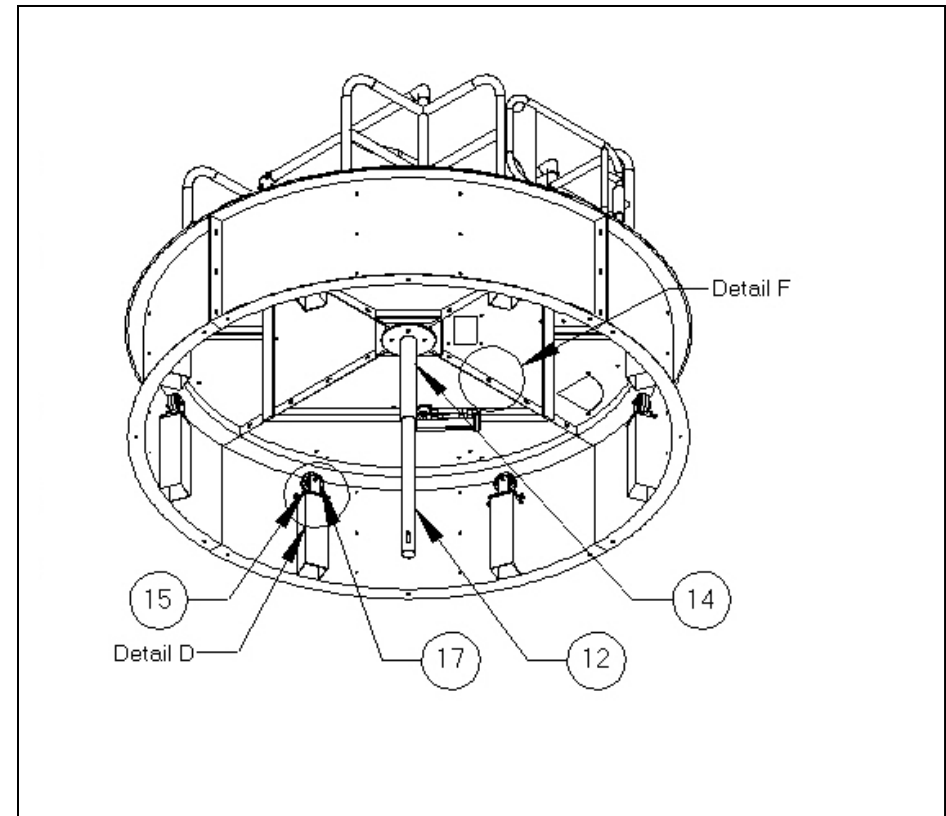
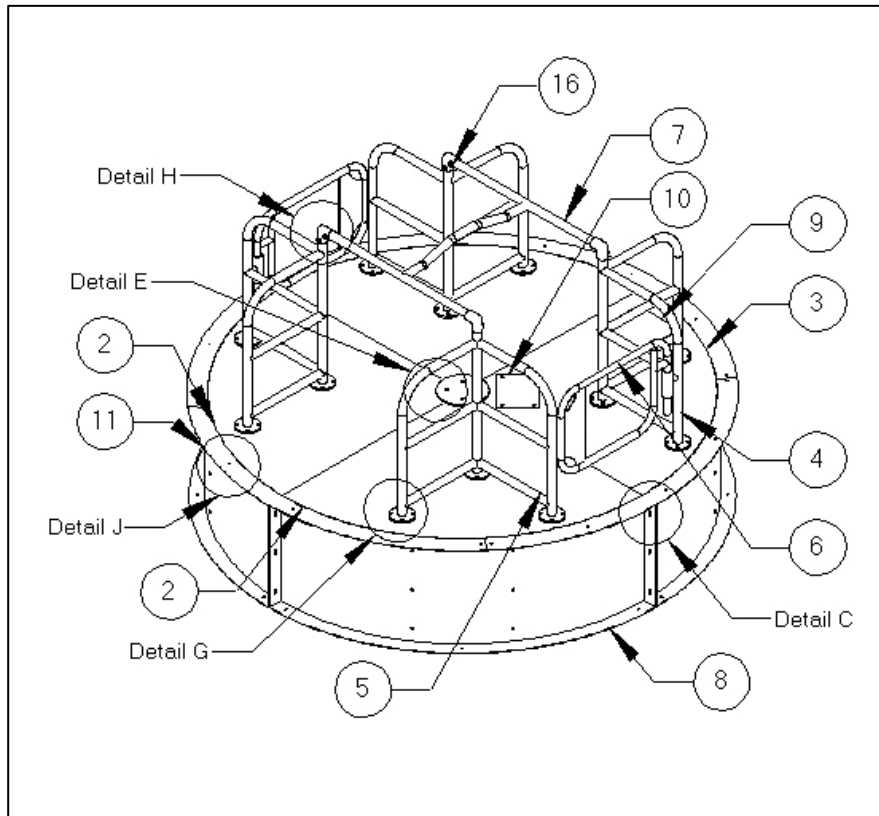
WARNING

Use of ***Solid Rubber*** safety surfacing (pour in place/mats) in compliance with ASTM specification F1292 is required.



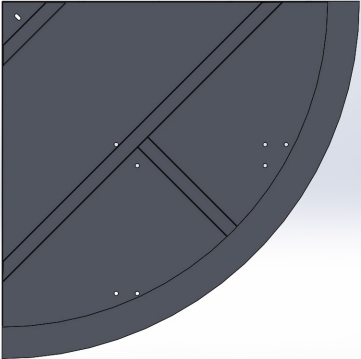
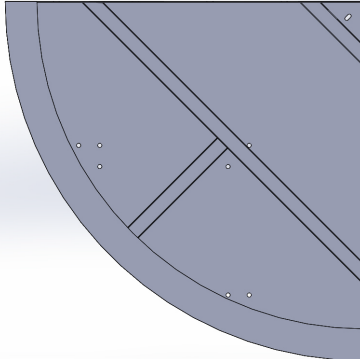
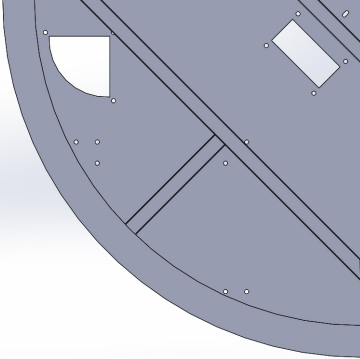
IMPORTANT

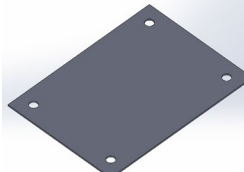
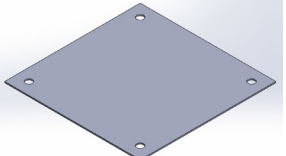
UNIT IS DESIGNED FOR ***POUR IN PLACE RUBBER SAFETY SURFACING OR RUBBER MATS***. USE OF ANY OTHER SAFETY SURFACING WILL VOID THE MANUFACTURERS WARRANTY AND COULD CAUSE AN INJURY.

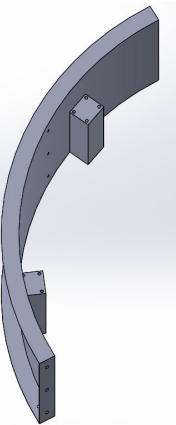


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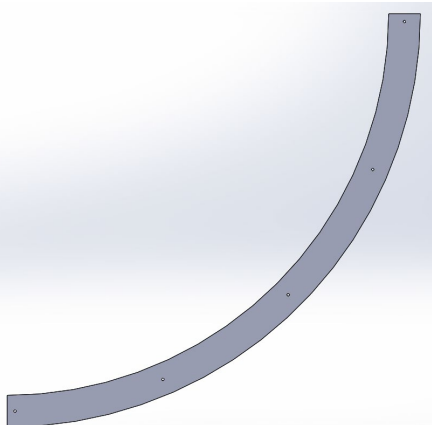
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<p>ADA 8' QTR Deck Left 913-807-L Qty 2</p>	<p>ADA 8' QTR Deck Right 913-807-R Qty 1</p>	<p>ADA 8' QTR Deck Rt w/ Access 913-807-RA Qty 1</p>

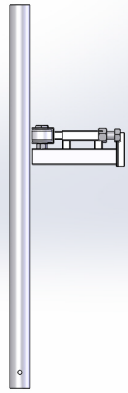
	
<p>Interior Maintenance Access Panel 913-815 Qty 1</p>	<p>Perimeter Maintenance Access Panel 913-812 QTY 1</p>



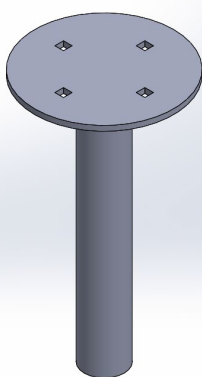
ADA Perimeter Ring Section
 913-811
 Qty 4



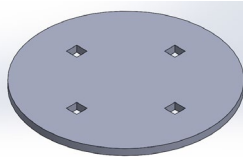
ADA Perimeter Ring Top Trim
 913-814
 Qty 4



8' MGR Post Assy
 913-806
 Qty 1



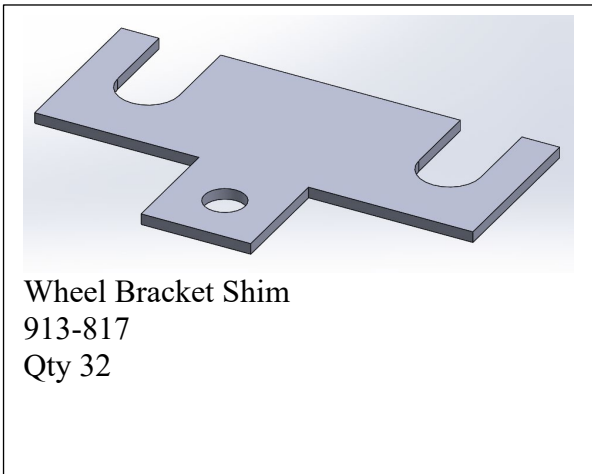
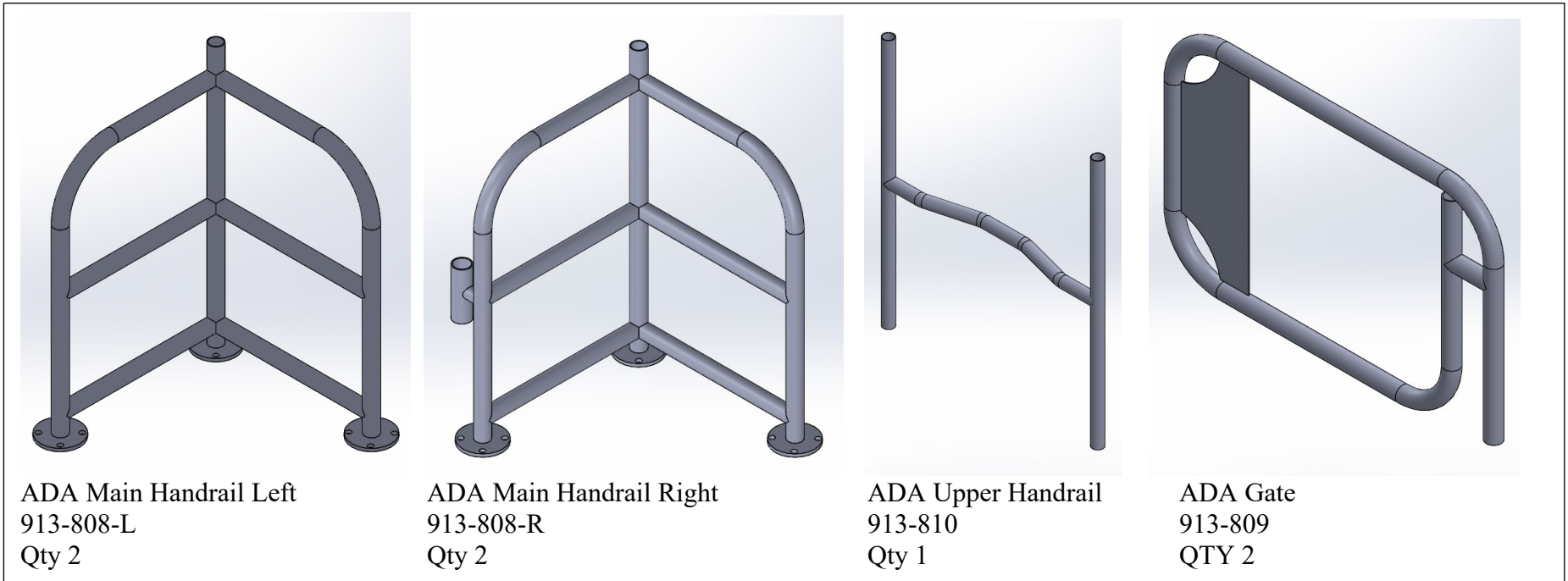
8' ADA MGR Hub Assy
 913-803
 Qty 1



Center Hub Disk For 8' MGR
 336-067
 Qty 1



4 1/2" Caster
 905-011
 Qty 8



EXCAVATION AND FOOTING INFORMATION

Remember, the excavation depths detailed in the drawings on page 11 are based on the top of the planned safety surfacing and may not necessarily be at the same height of the current surface.

The actual size required for installing the merry go round and retaining ring is a 10' square, but we recommend a square of 12' for ease of installation.

The square hole depth in the center is 2' and is about 4 ½' deep for the merry go round post. It installs the same as a standard post, but as this unit is flush mount, the depth of that hole from the surface is greater.

Once the excavation has been completed you can install the post and drainage.

Post depth is about 4 ½' deep from the top of the planned finished height of the safety surfacing, the main excavation is a 12' square down to 2'-4", the remaining diameter for the post is 2' at the center. 2" of blocking material is planned at the bottom for the post to sit.

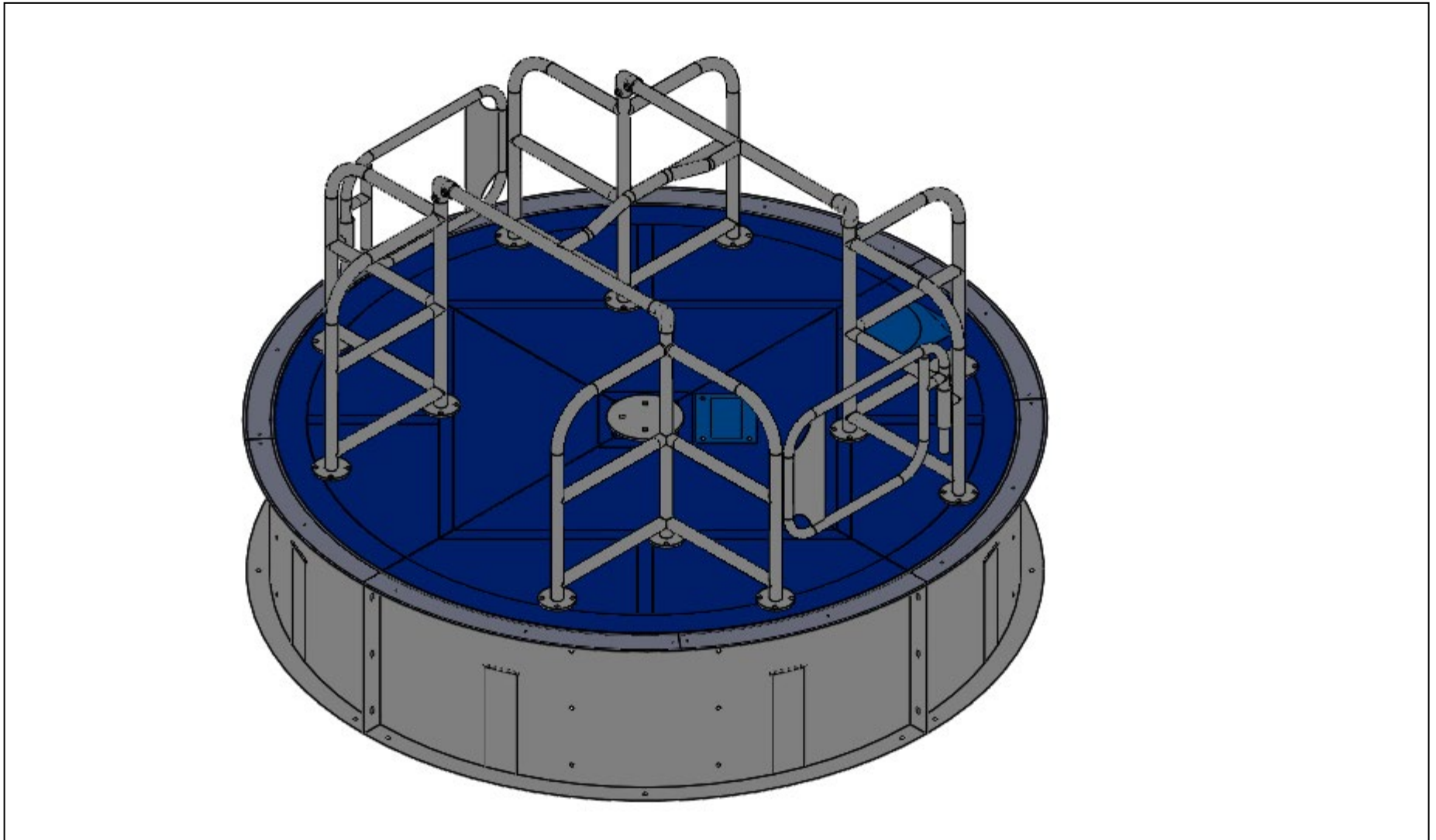
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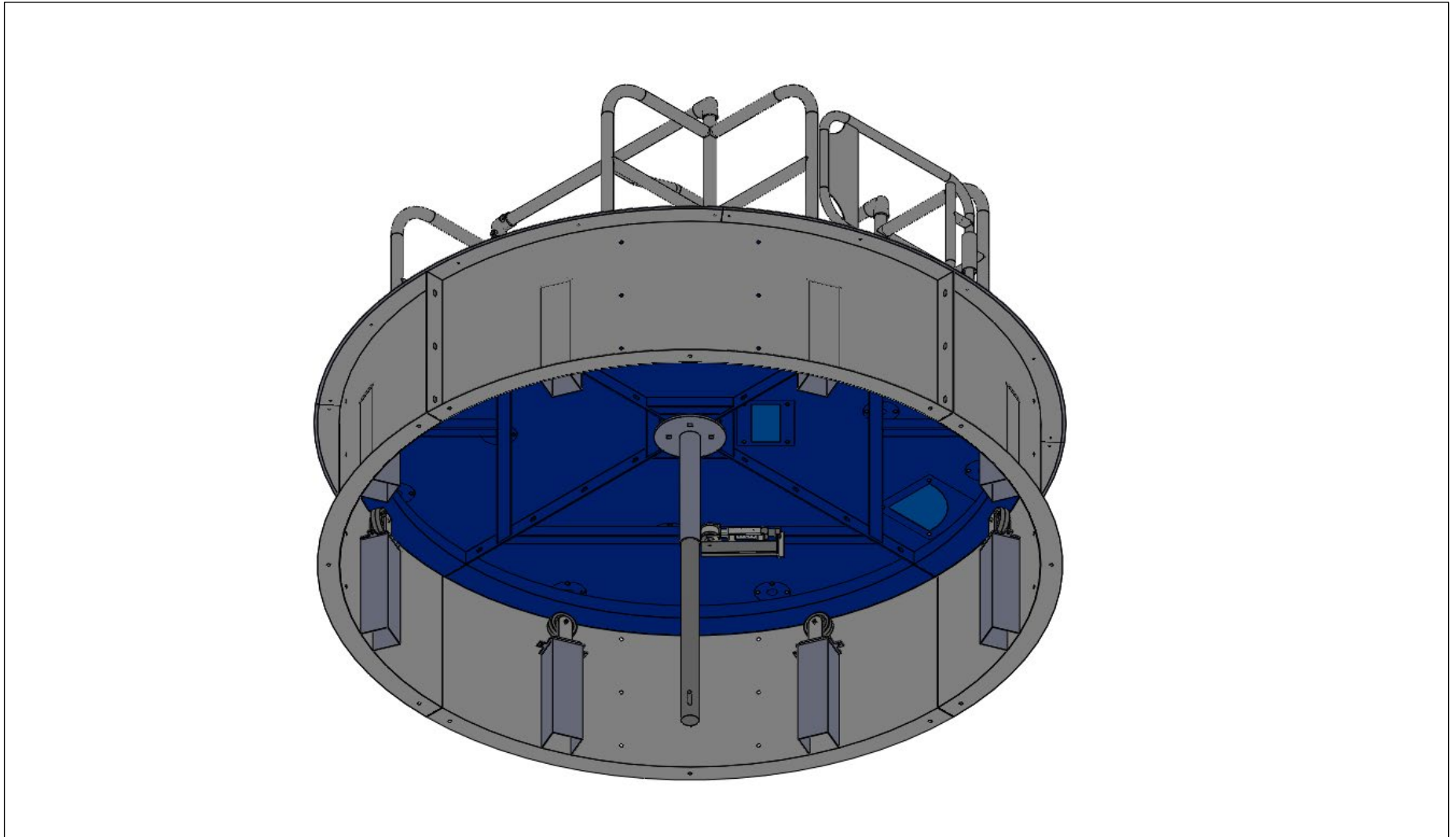
DRAINAGE

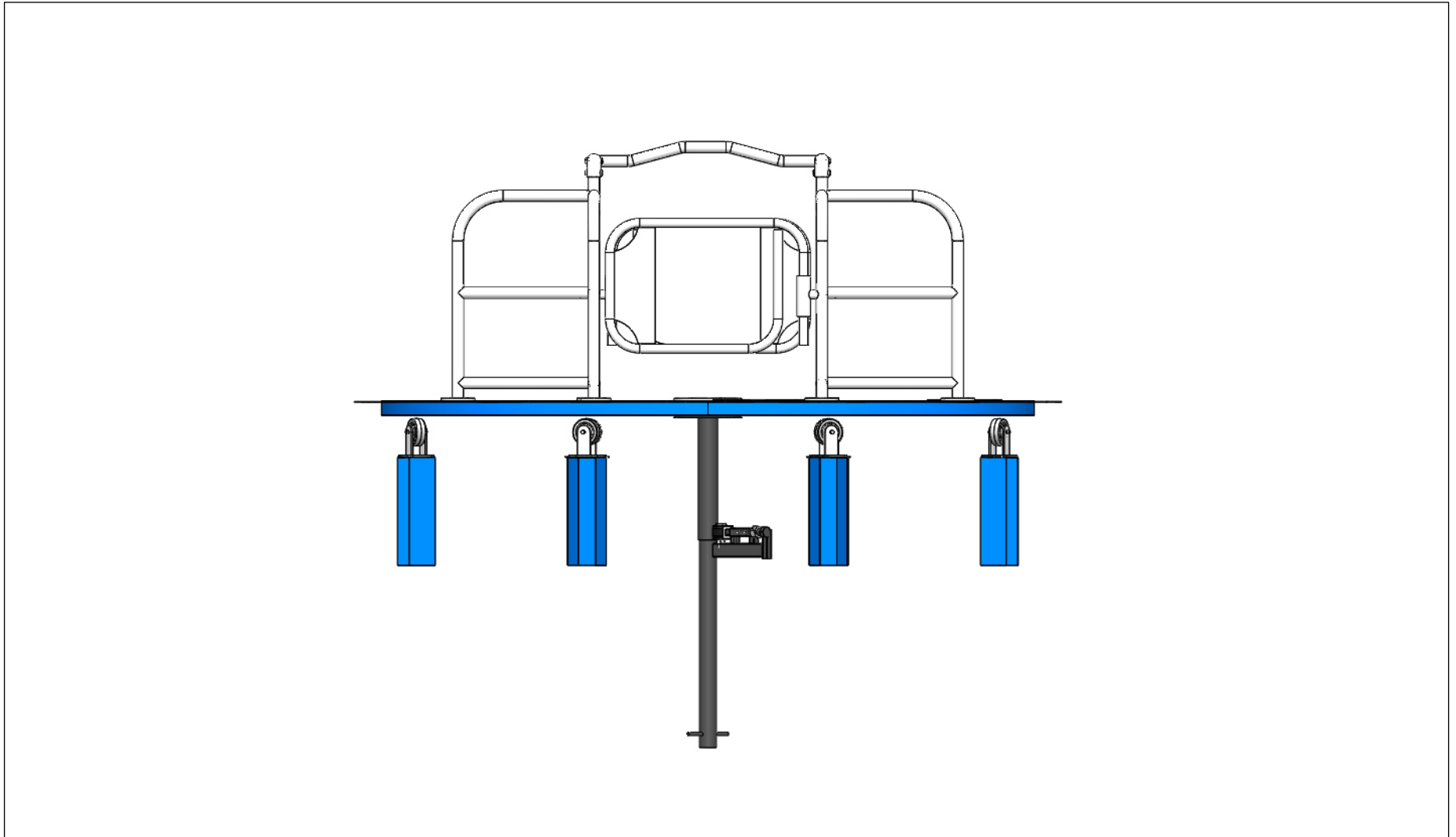
A drainage system is recommended for underneath the accessible merry go round. The area underneath the merry go round platform is recessed into the ground and may not drain naturally. Drainage should be installed below the excavated area. Suggestion: Seek a local landscaping provider for drainage options.

NOTE

Access panels in the merry go round deck are installed for assembly/maintenance.







SPECIFICATIONS

- Deck – 12ga HRPO welded steel deck
- Deck Coating – Thermoplastic/Vinyl (depending on when ordered)
- Handrail Coating – Electrostatically applied and oven cured polyester powder coating
- Post Assembly – 2 1/2" OD solid steel shaft with machined pocket for bearing.

SPECIAL SAFETY & ASTM COMPLIANCE NOTES

- **UNIT IS DESIGNED FOR *POUR IN PLACE RUBBER SAFETY SURFACING OR RUBBER MATS*. USE OF ANY OTHER SAFETY SURFACING WILL VOID THE MANUFACTURERS WARRANTY AND COULD CAUSE AN INJURY.**

INSTALLATION TIPS & TROUBLE SHOOTING

- **UNIT IS DESIGNED FOR *POUR IN PLACE RUBBER SAFETY SURFACING OR RUBBER MATS*. USE OF ANY OTHER SAFETY SURFACING WILL VOID THE MANUFACTURERS WARRANTY AND COULD CAUSE AN INJURY.**
- Apply Loctite to all bolts during assembly prior to completely tightening them.
- Do not use impact gun as Stainless Steel hardware can occasionally be difficult to use particularly if you need to take them out to make an adjustment. It is recommended that you add a drop of oil to bolts that may have to be removed before you install them.
- Do not tighten bolts all the way until the unit is completely assembled, and all components are square and level.
- Identify and separate all parts by referencing the detail drawings and the parts list.
- As you unpack and separate the components, set the components on top of the cardboard sheets that were used for packing and shipping to prevent damage to the components. This is particularly true for all Powder Coated and Thermoplastic coated components.

INSTALLATION STEPS

__1. Once the desired location has been determined while keeping a 20' diameter use zone in mind, dig a 12' x 12' square hole to a depth of 28". At the center of that hole dig an additional 16" diameter hole, 2' deep for the footing (or 4 ½' from the top of the safety surfacing height). (***SEE IMAGES ON PREVIOUS PAGE***)

__2. Build the 10' x 10' square retaining frame to pour the 4" concrete slab to support the merry go round perimeter wall. It is also suggested to build a 2' x 2' square retaining frame to isolate the post hole allowing the ability to adjust the alignment of the post.

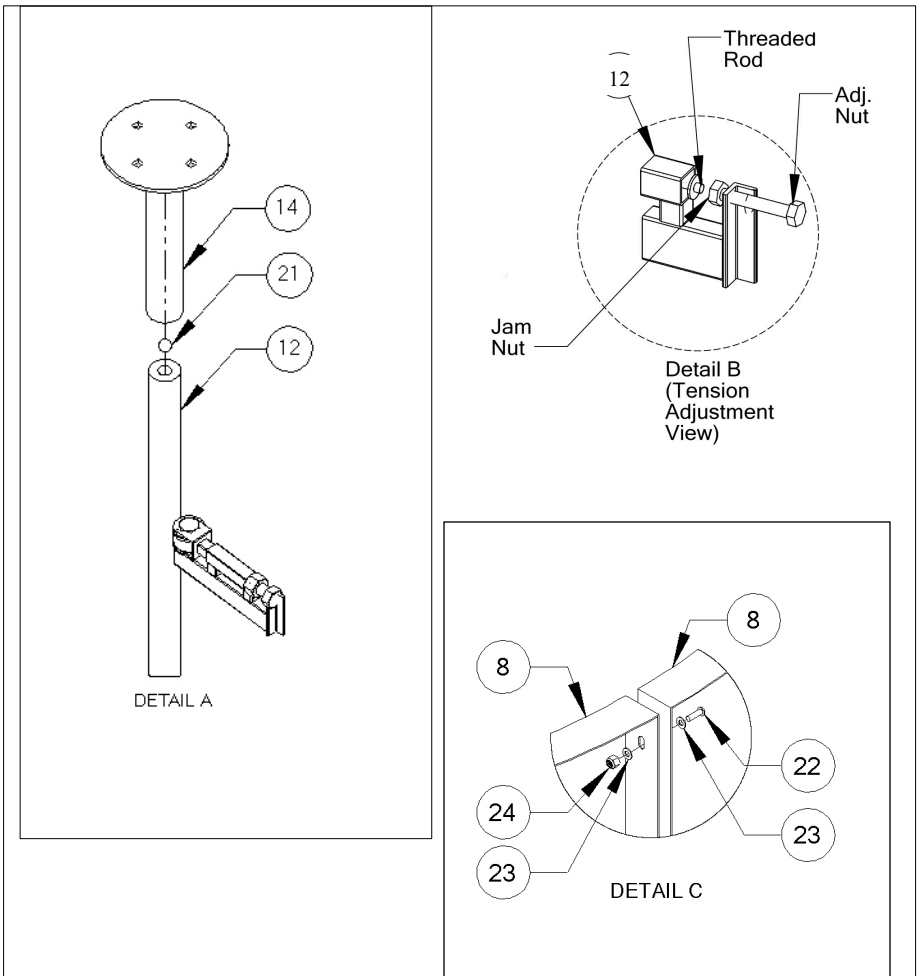
__3. When pouring concrete, pour the 10' x 10' square first without the 2' square for the post. Allow to cure.

__4. After all loose material is removed from the hole for the post, add 2" of dry concrete and blocking material to the bottom of the hole to support the post. Place the post assembly (12) with the bearing pocket facing up and out of the hole. Plumb and level post **21 5/8"** from the top of the 10' x 10' square pad. **NOTE: Post must be perfectly level in all directions before adding concrete for safety and durability of the product. The top of the post needs to be 21 5/8" from the top of the concrete slab once poured.**

__5. Add concrete to hole, crown the top of the concrete down and away from the post to help prevent water build up around the post. Periodically check the post to ensure it is level while concrete is curing. Brace the post into position if necessary. Before installing remaining MGR components, wait till concrete is completely cured based on supplier's instructions. **NOTE: Post must be perfectly level in all directions before adding concrete for safety and durability of the product. The top of the post needs to be 21 5/8" from the top of the concrete slab once poured.**

__6. After concrete has cured, place the Ball Bearing (21) into the pocket on the post and coat the bearing with general purpose grease. Next slide the Hub assembly (14) onto the post. **(Refer to detail A)**

__7. Setup 3 of the 4 Perimeter Ring Sections (8) on the concrete slab circling the post, 4' from the post. Arrange the sections with the wheel bracket flush with the concrete. Attach sections together using 3/8" x 1 1/4" Button Head Bolts (22), 3/8" Flat Washers (23), and 3/8" Nylon Lock Nuts (24). Hand tighten bolts, only. Permanently tightening of these bolts will happen in step 23. Tightening now may warp the flange of the perimeter wall in the following steps. Only assembling 3 of the 4 allows easier access to assemble the decks. **(Refer to detail C)**

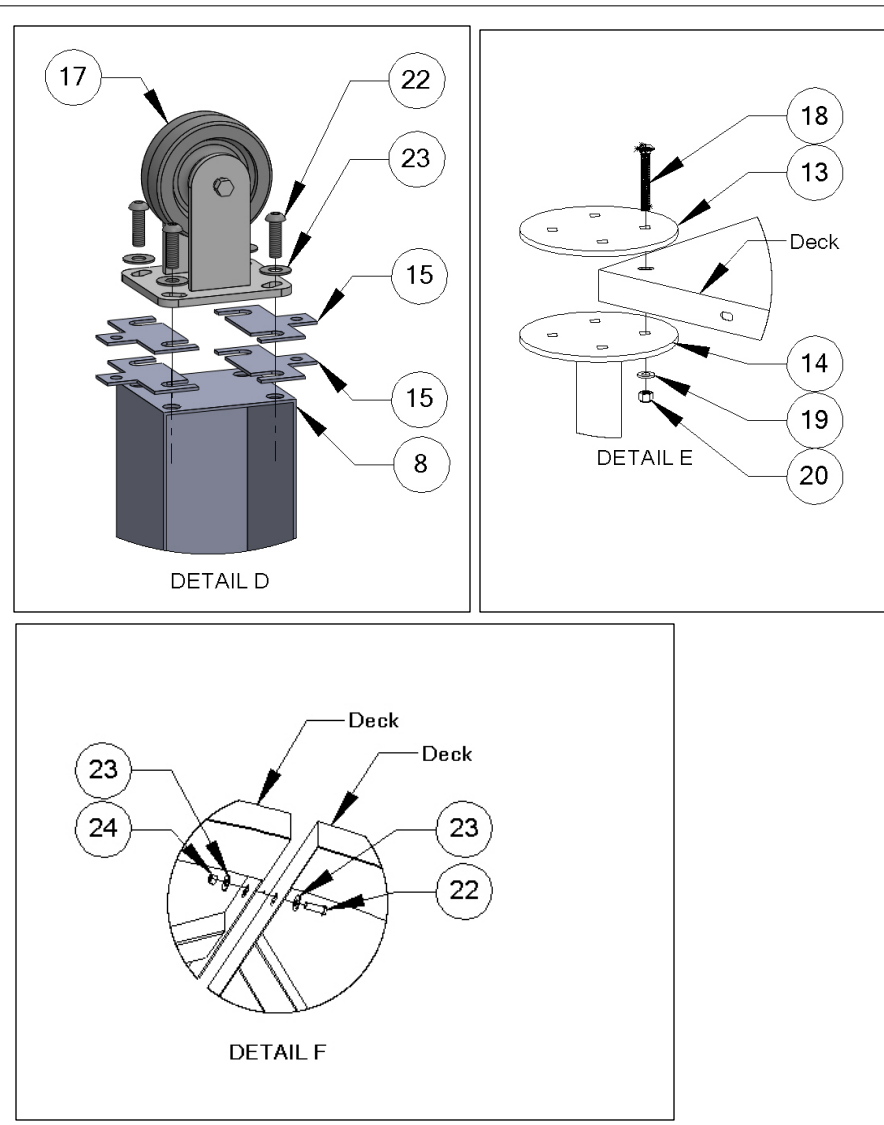


__ 8. Attach the 4 ½” Casters (17) to the Perimeter Ring Sections (8) using 3/8” x 1 ¼” Button Head Bolts (22) and 3/8” Flat Washers (23). Insert Wheel Bracket Shims (15). Factory installed rivet nuts are on the Perimeter Wall’s wheel bracket for easy assembly. Do not tightened. **(Refer to detail D)**

__ 9. Set a Right QTR Deck (2) onto the Hub Assembly (14) and the casters (17) already attached to the Perimeter Ring Section (8). Attach the Center Hub Disk (13) and the QTR Deck to the Hub Assembly (14) using a ½” x 4” Carriage Bolt (18), a ½” Flat Washer (19), and a ½” Nylon Lock Nut (20). **(Refer to detail E)**

__ 10. Level the deck by adjusting shims. This 1st deck will determine number of shims required for each caster assuming the concrete is level. Tighten the carriage bolt.

__ 11. Set a Left QTR Deck (1) on each side of the Right QTR Deck (2). Repeat step 9.



USING THE IMAGES TO THE RIGHT, ENSURE THE EDGES OF EACH DECK ARE FLUSH TO THE NEXT DECK TO PREVENT SERIOUS INJURY

__12. Attach decks together using 3/8" x 1 1/4" Button Head Bolts (22), 3/8" Flat Washers (23), and 3/8" Nylon Lock Nuts (24). Ensure the perimeter of the decks are flush to each other. Tighten bolts. **(Refer to detail F)**

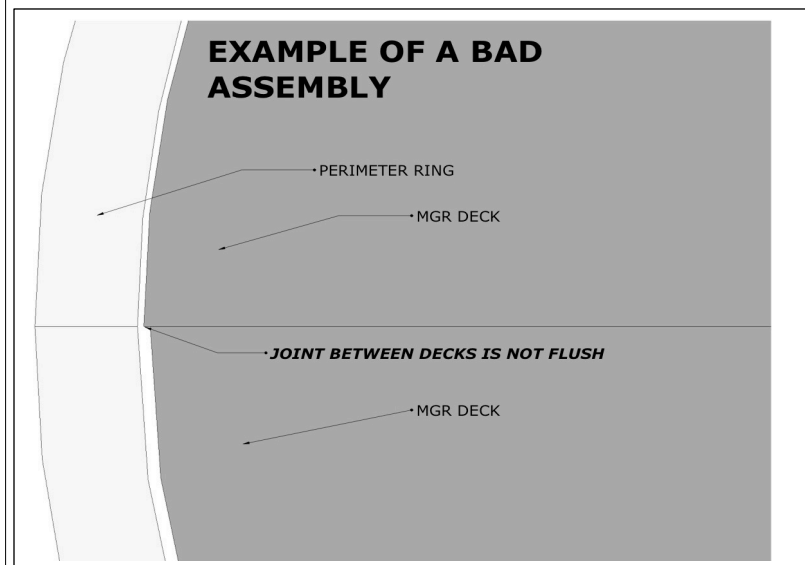
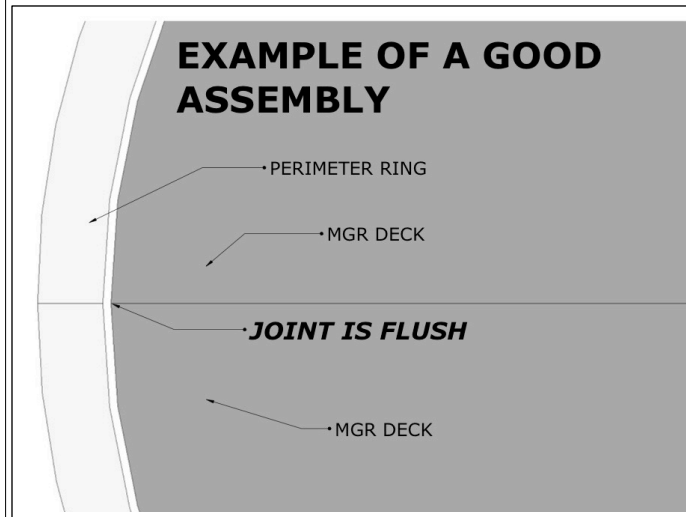
__13. Rotate the 3 attached decks allowing room to assemble the remaining Right QTR Deck w/ Access (3). Repeat step 9, 10, and 12.

__14. Attach the 4 1/2" Casters (17) to the remaining Perimeter Ring Section (8) repeating step 8.

__15. Set the last Perimeter Ring Section to complete the ring circle. Attach to the other section repeating step 7.

__16. The diameter of the Perimeter Ring is 1" larger than the merry-go-round. Center the Perimeter Ring.

__17. Level the deck. Use the Perimeter Maintenance Access cutout to adjust shims by rotating the deck. When level, re-tighten all bolts except bolts that are attaching the perimeter wall sections to each other.

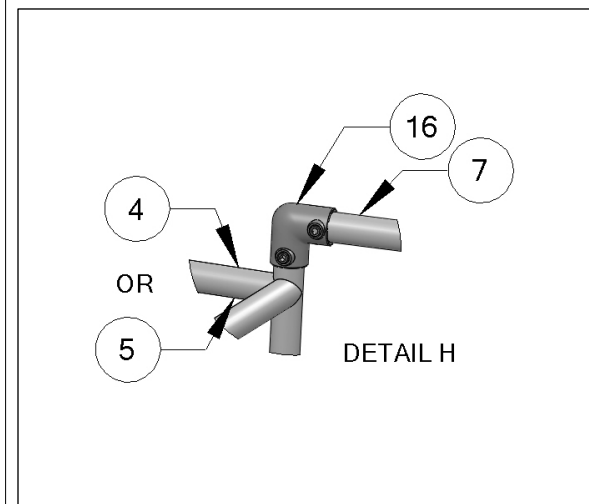
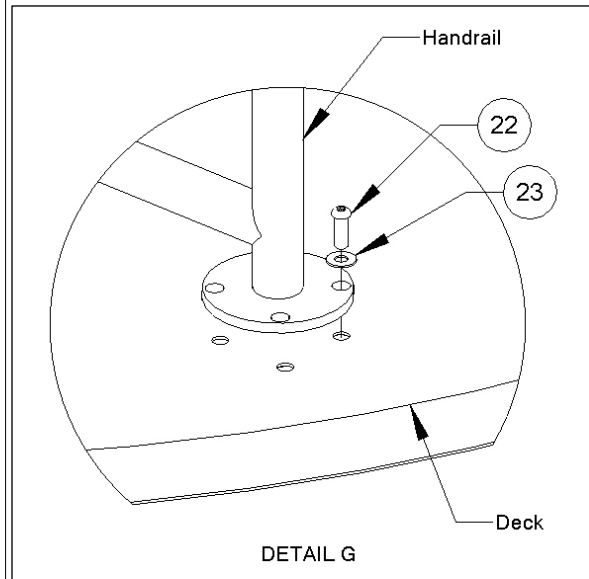


18. Attach a Right Handrail (5) to the Right QTR Deck w/ Access (3) using 3/8" x 1 1/4" Button Head Bolts (22) and 3/8" Flat Washers (23). Factory installed rivet nuts are on the decks for easy assembly. Do not tighten. **(Refer to detail G)**

19. Repeat step 17 for the 3 handrails. Right Handrails go on Right QTR decks, and Left Handrails go on Left QTR decks.

20. Once all four handrails have been positioned, attach the Upper Handrail (7) to the four handrails using Elbow Rail Fittings (16). When the four Elbow Rail Fittings are in position on the main handrail, tighten set screws on the elbows and the bolts attaching the handrails to the deck. **(Refer to detail H)**

Installation Tip: A 2"x4" can be used to pry if holes do not align perfectly due to welding draw.

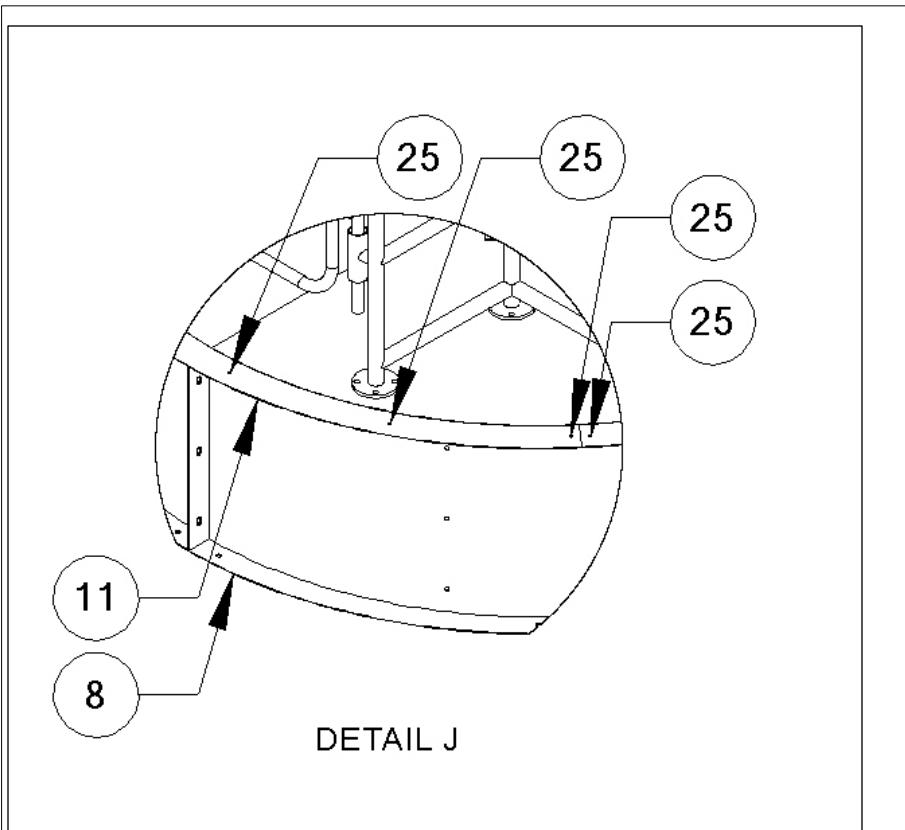


21. Set the four ADA Perimeter Ring Top Trim (11) on top of the assembled ADA Perimeter Ring Section (8). Note: the diameter of the MGR is 96", the diameter of the ring barrier is 97", and the diameter of the ring top trim plate is 96 1/4". The top trim plate is installed to close the gap to 1/8" off the MGR. The maximum gap allowed is 3/16". Offset the top trims' seams from the ring section seams by 30° to 45°. Pre-drill ring section locations with a #7 drill. Attach with 20 self-tapping tamper resistant screw (25). (Refer to detail J)

22. With the Perimeter Ring (8) centered around the merry go round, drill 3/8" holes into the concrete for the 3/8" x 4" Concrete Anchors (26). Use the predrilled holes in the Perimeter Ring's lip as a guide. Install the Concrete Anchors and tighten the nut.

23. Tighten all bolts holding the perimeter ring sections together.

24. **Governor Tension Adjustment:** Back off the jamb nut on the governor assembly (attached to post assembly) and turn the adjustment nut until the rubber wheel is pushing firmly onto the sleeve of the hub assembly. Once wheel is firmly against the hub, tighten the jamb nut to secure it into position. (Refer to detail B)



BACKFILL AND INSTALL SURFACING

Once the merry go round assembly has been installed, backfill evenly around the perimeter wall. We recommend that you backfill with clean rock. If dirt is used, allow to settle before installing the safety surfacing.

Backfill to the height needed for the safety surfacing and surfacing base.

After the area has been backfilled, install the safety surfacing.

