

MERIDIAN[®]

SECONDARY CONTAINMENT SYSTEM



meridianmfg.com/secondarycontainment



ASSEMBLY MANUAL

PRODUCT REGISTRATION FORM



Attention Dealers:

You can register products online through the Dealer Login: <http://dealers.meridianmfg.com/login/>

It is mandatory to register your product in order to qualify for future warranty claims that may arise. Knowingly falsifying information on this form will result in the voiding of the product warranty.

You may scan/photograph this completed form (must be legible), email it to: register@meridianmfg.com
A copy of this form may also be mailed to Meridian Manufacturing Inc.

Buyer's Name _____	Dealer's Name _____
Address _____	Address _____
City, Prov/State _____	City, Prov/State _____
Postal/Zip Code _____	Postal/Zip Code _____
Phone Number _____	Phone Number _____

Note: Registering a product in multiple entry format is only allowed when the product has the same model number and the same dealer, however each serial number must be legibly listed for each unit. Delivery dates for a multiple entry must be within a one month time frame.

Product Information: _____

Model Number _____	Serial Number _____
Invoice Date _____	

Important: Please send this form to the Meridian Manufacturing Inc. location which built this product being registered. If you require further assistance call you're dealer or the Meridian outlet nearest to your location.

We want to thank you for purchasing a Meridian manufactured product. Whether this is your first Meridian purchase or you have been a customer for years, you are now part of the Meridian community of customers and we appreciate your business.

It is important that you now complete the product registration information and this form indicating you have received delivery. This registration and information is necessary to ensure you have access to warranty and product updates in the event it be required in the future.

Registration can be completed by using this form or visiting your dealer who will complete the form online. You will be given access to the Meridian community and become eligible for updates, special offers and prizes.

Again thank you for choosing Meridian.

I have thoroughly instructed the buyer on the above described equipment. The review included the content of this manual, equipment care, adjustments, safe operation and warranty policy.

Date _____ Dealer's Signature _____

The above equipment and this manual have been received by me. I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date _____ Buyer's Signature _____

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TABLE OF CONTENTS

DESCRIPTION	PAGE
Section 1: INTRODUCTION	1-1
Section 2: SAFETY	2-1
2.1 General Safety	2-2
2.2 Assembly Safety	2-2
2.3 Work Safety	2-2
2.4 Personal Protective Equipment	2-2
2.5 Safety Decals	2-3
2.5.1 Decal Application	2-3
2.6 Safety Decal Location	2-3
Section 3: BEFORE YOU START	3-1
3.1 Important Notes	3-1
3.2 Design and Assembly Considerations	3-1
3.2.1 Fluid Density	3-1
3.2.2 Support Post Spacing	3-1
3.2.3 Soil Conditions	3-2
3.2.4 Wall Penetrations	3-2
3.2.5 Liner	3-2
3.3 Planning and Timing	3-2
3.4 Product Storage	3-3
3.4.1 Rust on Galvanized Parts	3-3
3.4.2 Storage Guidelines	3-3
3.4.3 If Parts Become Wet	3-4
3.5 Check Your Shipment	3-5
3.6 Shortage and Damaged	3-5
3.7 Tools and Equipment	3-5
3.8 Order Optional Equipment	3-6

continued on next page

TABLE OF CONTENTS

DESCRIPTION	PAGE
Section 4: ASSEMBLY	4-1
4.1 Site Planning	4-1
4.1.1 General Site Planning.	4-1
4.1.2 Marking System Perimeter.	4-1
4.1.3 Marking Support Post Locations: ZGD	4-4
4.1.4 Marking Support Post Locations - Posts.	4-8
4.2 Support Post Assembly - ZGD	4-9
4.2.1 Before Wall Sheet Assembly	4-9
4.2.2 Together with Wall Sheet Assembly.	4-9
4.3 Support Post Assembly - Hat-Shaped Post	4-11
4.3.1 Concrete.	4-11
4.3.2 Before Wall Sheet Assembly	4-13
4.3.3 After Wall Sheet Assembly.	4-14
4.4 Liner Preparation and Installation	4-15
4.4.1 Preparing the Liner.	4-15
4.4.2 Top Mount Installation	4-15
4.4.3 Bottom Mount Installation	4-16
4.5 Wall Sheet Assembly	4-17
4.5.1 17”, 24”, 34”, 47” Wall Sheet Assembly	4-17
4.5.2 67” Wall Sheet Assembly.	4-18
4.6 Wall Sheet Corner or Curved Assembly.	4-20
4.7 System Dimension Calculations	4-21
4.7.1 Quick References.	4-21
4.7.2 Round.	4-21
4.7.3 Rectangle.	4-21
4.7.4 Oblong	4-21
4.8 Optional Accessories.	4-22
4.8.1 Cross-Over Stairs and Ladder	4-22
4.8.2 Sand Door	4-23
Section 5: PARTS.	5-1
5.1 Wall Sheets	5-1
5.2 Corners	5-3
5.3 Posts	5-4
5.4 Zero-Ground Disturbance (ZGD) Pads.	5-5
5.5 ZGD Braces	5-5
5.6 Liner Clamps	5-6
5.7 Recommended Bolt Assembly	5-7
Warranty Statement	

Section 1: INTRODUCTION

Thank you for choosing a Meridian Manufacturing Inc. Secondary Containment system. Safe, efficient assembly means that everyone who will be involved must read this manual.

Information provided herein is of a descriptive nature. Consistent with Meridian's policy of continued research and development of our products, we reserve the right to modify the equipment design and specifications and change information contained in this publication without any preliminary notice.

Keep this manual for future reference and to pass on to new operators or owners. Call Meridian Manufacturing Inc, your dealer, or distributor if you need assistance, information, additional/replacement copies, or a digital copy of this document.

Disclaimer:

These instructions are based on standard assembly. A few popular options are described.

Many options change the location and arrangement of parts.

Your situation may necessitate a change from the described instructions.

IMPORTANT:

Parts lists, drawings and schematics are shipped, along with this manual.

Refer to them, as you read this manual for specific details;

such as, measurements, fasteners to use, and position of components.

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Section 2: SAFETY

3 Big Reasons why safety is important to you:

- Accidents Disable and Kill
- Accidents Cost
- Accidents Can Be Avoided

The Safety Alert Symbol means:



The Safety Alert Symbol identifies important safety messages about the containment system and in this manual.

The following signal words are used in this manual to express the degree of hazard for areas of personal safety.

When you see the symbol and/or the signal words described below, obey the accompanying message to avoid possible injury or death.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations. Typically for machine components which, for functional purposes, cannot be guarded.



Indicates a hazardous situation, if not avoided, could result in death or serious injury. This word identifies hazards that are exposed when guards are removed. It may be used to alert against unsafe practices.



Indicates a hazardous situation, if not avoided, could result in minor or moderate injury. It may be used to alert against unsafe practices.



Indicates practices or situations which may result in the malfunction of, or damage to equipment.



Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

2.1 GENERAL SAFETY

You are responsible for the safe use and maintenance of this containment system. Good safety practices not only protect you, but also those around you. All accidents can be avoided.

- Use this containment system for its intended purposes.
- This containment system is not intended for use by children.
- Do not modify the structure in any way without written permission from the manufacturer. Any unauthorized modification of the containment system will void the warranty.

2.2 ASSEMBLY SAFETY

- All platforms, ladders, stairways, fixed ladders, cages, handrails, and guardrails must be clean and free of all debris. Remove anything which may cause accidental tripping and/or falling. Keep the assembly area clean and orderly.
- Keep all persons not involved in assembly away from work area.
- Stay away from overhead obstructions.
- Provide adequate space for forklifts and hoists to move components, large and small, around the structure.
- Components can be heavy and awkward. Always wear protective equipment to prevent cuts, scrapes, and pinching.

2.3 WORK SAFETY

- Keep all platforms, ladders, stairways, fixed ladders, cages, handrails, and guardrails clean and free of all debris. Remove anything which may cause accidental tripping and/or falling. Keep the work area clean and orderly.
- This structure holds liquid and is a drowning hazard. Keep ladder guards, manway hatch lid, and barriers locked to prevent unauthorized persons or children from climbing and/or entering the structure.
- Mount signage around structure to indicate that this structure is off limits. No unauthorized persons allowed.
- Keep structure in good repair, to prevent sharp edges and corners from becoming hazards.

2.4 PERSONAL PROTECTIVE EQUIPMENT

The following Personal Protective Equipment (PPE) should be worn at all times when assembling or working the area:



Safety Glasses



Coveralls



Hard Hat



Steel-Toe Boots



Work Gloves

2.5 SAFETY DECALS

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible. See Figure 1.
- Replaced parts must display the same decal(s) as the original parts.
- Replacement safety decals are available free of charge from your distributor, dealer, or the factory.

2.5.1 Decal Application:

1. Be sure the application area is clean and dry. Ensure the surrounding temperature is above 10°C (50°F).
 - a. Remove all dirt, grease, wax from surface.
 - b. Clean with a non-ammonia based cleaner.
 - c. Wipe the clean surface with isopropyl alcohol on paper towel, and allow to dry.
2. Determine the exact position before you remove the backing paper.
3. Peel a small portion of the split backing paper.
4. Align the decal over the specified area. Use a squeegee to carefully press the small portion, with the exposed adhesive backing, into place.
5. Slowly peel back the remaining paper and carefully smooth the rest of the decal into place.
6. Small air pockets can be pierced with a pin and smoothed out using the squeegee, or a piece of sign backing paper.

2.6 SAFETY DECAL LOCATION

Safety decals are attached to the structure in a visible and convenient location for readability. A safe workplace requires that you familiarize yourself with the various safety decals and the areas or functions that the decals apply to. You should also be aware of the safety precautions that must be taken to avoid injury, death, or damage.



Fig 1 - Safety decal

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Section 3: BEFORE YOU START

3.1 IMPORTANT NOTES

Plan your site and system accordingly, taking into account local requirements, access, system capacity, layout, liner requirements, and drainage. The following is an incomplete list of important notes:

- Check with your local jurisdiction for civic, state/provincial, and federal regulatory guidelines for secondary containment prior to assembly.
- Proper drainage around the outside of the containment ring prevents soil erosion from standing water buildup.
- Proper removal of standing water inside of the containment ring prevents reduced effective capacity of the system.

3.2 DESIGN AND ASSEMBLY CONSIDERATIONS

3.2.1 Fluid Density:

Meridian's standard secondary containment system is designed for the secondary containment of liquids with a specific gravity of 1.0 or less, via gradual release/flooding. This equates to a fluid density of 62.4 lb/ft³ (1,000 kg/m³). There is also an option to upgrade to a system that is designed for the containment of liquids with a specific gravity of 1.4 or less. This equates to a fluid density of 87.4 lb/ft³ (1,400 kg/m³). The system is not designed for primary containment.

3.2.2 Support Post Spacing:

Meridian's standard secondary containment system is designed with support posts located around the perimeter of the system. The number of support posts required is determined by the space between each post and the system shape. The support post spacing is a factor of the fluid density contained and the height of the system. The support posts come in the form of zero-ground disturbance (ZGD) pads and braces or hat-shaped channels (posts) set into concrete.

3.3 PLANNING AND TIMING

3.2.3 Soil Conditions:

Soil conditions will vary by region. Guidelines for support post piers provided in this manual are for specific soil conditions. It is the owner's responsibility to consult a qualified professional to certify the site soils as suitable or to recommend adjustments. The guidelines should be met or exceeded, or warranty may be void.

- Sand/gravel with some clay and silt – dense:
 - Unit Weight = 120 lb/ft³
 - Cohesion = 50 lb/ft²
 - Friction Angle = 36°
- Clay/silt with some sand – stiff:
 - Unit Weight = 125 lb/ft³
 - Cohesion = 250 lb/ft²
 - Friction Angle = 24°

3.2.4 Wall Penetrations:

Any cuts into the wall sheets should be centred as much as possible on the wall sheet. Additional support posts should be placed on either side of the opening.

It is the owner's responsibility to seal the opening thoroughly to maintain system integrity.

3.2.5 Liner:

The sub-base, liner, and any other protective layers should be chosen to be compatible with the product being stored.

Consult with local jurisdictions, the liner manufacturer, and the liner installer to confirm compatibility.

Before unpacking the product and before construction begins, pre-planning is recommended.

It is advisable to construct a diagram of accessories and their relative location before construction.

- Consult with the owner as to preferred location of the manufacturer's sign. The sign is usually set to face the road or the yard.
- Consideration of the locations of accessories, such as but not limited to crossover stairs, pipes, and access hatches, must be given.
- Penetrations through wall sheets must not be made on a vertical or horizontal bolt seam. Penetrations should be located towards the centre of a wall sheet, so that any holes and collars/flanges do not interfere with any structural bolt hole locations. It is also necessary to support any equipment that is attached to the containment system if it is excessively heavy and cannot support itself.

Some things to consider during construction of the secondary containment system:

- Position the geotextile layer and the liner in the centre of the system before assembly of the wall sheets.
- Before the liner is attached to the wall sheet, make sure all wall sheet bolts are tightened and that the support system is in place properly.

3.4 PRODUCT STORAGE

3.4.1 Rust on Galvanized Parts:

- Galvanized surfaces will develop a durable zinc oxide layer naturally over time as the surface interacts with carbon dioxide. The zinc oxide layer is characterized as the dull grey appearance that weathered galvanized surfaces get.
- White rust may form when moisture is allowed to collect on galvanized surfaces that have yet to develop this durable zinc oxide layer. This may happen when parts are not well-ventilated or well-drained.
- White rust is not a structural concern if its development is stopped in the early stages. A light film or powder residue can occur after a period of heavy rainfall or temporary improper storage.

If white rust begins to develop:

- First, ensure proper storage, separate parts and wipe off any moisture.
- Second, apply a thin layer of petroleum jelly or food-grade oil to the entire part using a clean cloth.

Due to safety concerns with assembly and use, this is not recommended for such parts as stairs.

- If parts are left exposed to moisture, white rust can progress into red rust. Red rust can cause degradation in the steel and become a structural concern. Any part that has red rust should be replaced immediately.

3.4.2 Storage Guidelines:

- Start assembly as soon as possible.
- If considerable time is involved between delivery and erection time, inside storage is recommended.
- Keep all bundles dry before assembly. All hardware boxes should be stored inside, as they are not waterproof and will allow parts inside to become wet.
- Keep bundles off of the bare ground by raising them 6 to 8 inches off the ground on wood blocks or timbers.
- Store curved wall sheets “hump up”. See Figure 2.

All other bundles should be stored so they are well-sloped to promote good drainage.

- Temporary storage can be provided by a simple frame supporting a waterproof tarp. See Figure 3.

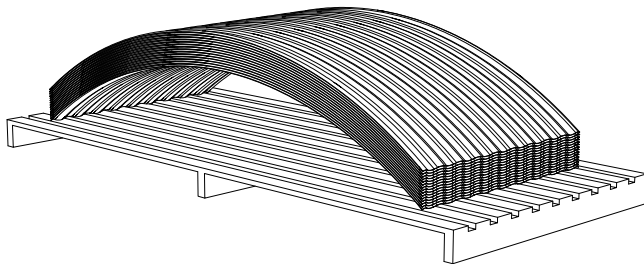


Fig 2 - Wall sheets elevated and hump up

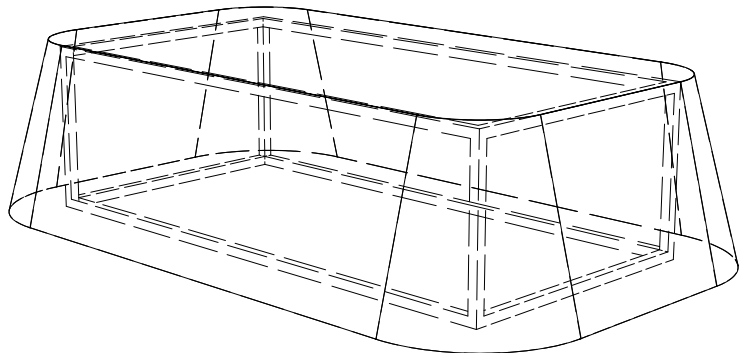


Fig 3 - Tarp over frame

3.4.3 If Parts Become Wet:

- If bundles become wet or submerged, they should be opened as soon as possible and separated to dry until assembly. Allow parts to drain while maintaining proper bracing to avoid damage or injury from parts falling over. See Figure 4.

An optional thin layer of petroleum jelly or food-grade oil may be applied to the entire part using a clean cloth.

Due to safety concerns with assembly and use, this is not recommended for such parts as stairs.

- If hardware boxes become wet or submerged, parts should be removed, dried, and stored in a new box that is dry.

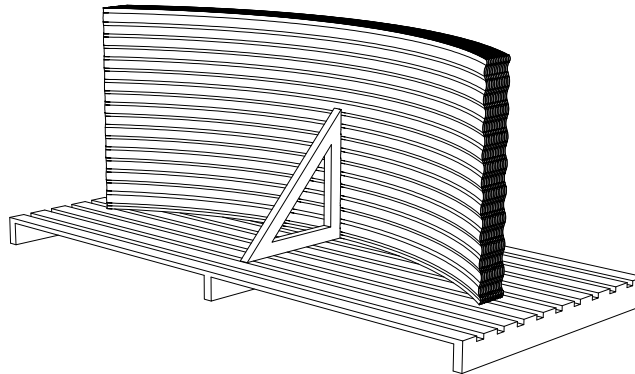


Fig 4 - Brace parts to allow draining

3.5 CHECK YOUR SHIPMENT

- Upon delivery, check all parts and packages against the packing list. Ensure that all items have arrived and that none are damaged.
- Do not begin assembly with missing or damaged parts.
- When you are satisfied that all parts are in good condition, lay the parts out for convenient access.
- Carefully read and understand this installation manual before proceeding with assembly.

3.6 SHORTAGE AND DAMAGED PARTS

- Report shortages or damaged parts immediately to the delivery carrier, followed within ten days by a confirmation letter requesting inspection by that carrier, if required.
- Order necessary parts immediately to ensure that assembly will not be held up.
- All parts will be charged for and credit will be issued by the party at fault. No credit will be issued if delivery invoices are signed and received in good condition.

3.7 TOOLS AND EQUIPMENT

Use quality tools and equipment. Use them safely and correctly for their intended use. The tools and safety equipment for this application should include, but are not limited to:

- Tools:
 - Impact tools
 - Power drills and drill bits
 - Sockets
 - Large-pocket carpenter pouch
 - 8 inch (20 cm) metal tapered punches (for aligning bolt holes)
 - Construction grade step and extension ladders
 - 6-point wrenches (Imperial, box end)
 - Transit level
 - Tape measure 100' minimum
 - Tek screw driver 3/8"
 - Survey ground marking paint
 - Tube caulking applicator
 - Heavy duty utility knives
 - Spring clamps
 - Banding cutters
 - Generator
 - Skid loader
 - Shovel
 - Cut resistant gloves
 - Cord or rope and pegs
- Safety Equipment:
 - Properly-stocked first-aid kit
 - Personal protective equipment (PPE) like safety glasses, steel-toed boots, hard hats, work gloves
 - Cable, chain, or rope to tie down parts in case of wind during assembly

3.8 ORDER OPTIONAL EQUIPMENT

- Optional equipment such as fittings, liner, crossover stairs, etc, should all be on site and checked before assembly starts.
- Plan your assembly in advance, so all equipment and supplies are on site and no delays will be experienced.
- For details, see installation manuals supplied with the optional equipment.

Section 4: ASSEMBLY

4.1 SITE PLANNING

4.1.1 General Site Planning:

- The site must be sufficiently level and clear of obstacles that will impede assembly by distorting wall sheets or creating unsafe conditions. There will be no high or low spots that will result in parts like pads or wall sheets being unsupported along the length of the parts.
- System capacity is based on level ground. If the ground is not level, the system capacity will decrease accordingly.
- The site must be packed soil that is capable of supporting the system. A 4" packed sand base with soil to soil static friction with a minimum coefficient of 0.5 should be sufficient. But it is recommended to consult a professional to certify that the soil conditions are suitable.
- The site must be maintained throughout the life of the system. Soil erosion should be prevented if possible, or corrected immediately. In particular, the soil around support pads or posts.
- It is recommended to fill the interior of the system with sand spread evenly above the liner. This protects the liner while also providing wind loading resistance.
- It is also recommended to backfill the outside of the system, enough to cover any exposed support pads, while also offering additional wind loading resistance.

4.1.2 Marking System Perimeter:

There are 3 main shape configurations: round, rectangle, and oblong.

4.1.2.1 Round:

Marking the ground, see Figure 5 for more details:

1. Find the centre of your system and mark the ground with spray paint.
2. Using a string or measuring tape anchored to the centre, mark out the perimeter of your system with spray paint.
3. If support posts or pads are required, see relevant sections to determine how many are needed and mark those locations with spray paint, making sure to extend the lines out far enough to see clearly.

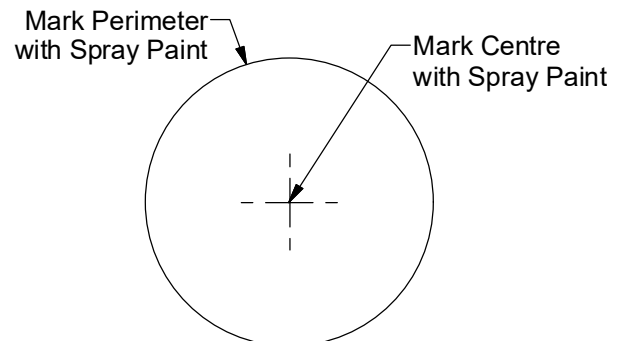


Fig 5 - Round system outline

4.1.2.2 *Rectangle:*

Marking the ground:

1. Find the point of your first corner and mark the ground with spray paint.
2. Using a string or measuring tape anchored to the first corner point, mark out the second and third corner, based on the overall length and width of the system.
3. Using either the second or third corner, mark out the fourth/last corner. See Figure 6.
4. To ensure your sides are parallel with square corners, measure diagonally from the corner 1 to corner 4, and from corner 2 to corner 3. Both measurements should be equal. Adjust your corner locations until measurements are correct. See Figure 7.
5. Using a string anchored to each corner, mark the perimeter of the system with spray paint. Do not attempt this without the string, as it is difficult to keep a straight line over the distance.
6. From each corner point, measure either 6 feet (for radius corners) or 10 inches (for 90° corners) and mark it on the ground. This is the location of where the corner ends and the straight sheets start. See Figure 8.
7. See relevant section to determine how many support posts or pads are required and mark those locations from where each corner ends with spray paint, making sure to extend the lines out far enough to see clearly. See Figure 8.
 - Work either clockwise or counter-clockwise but not both.

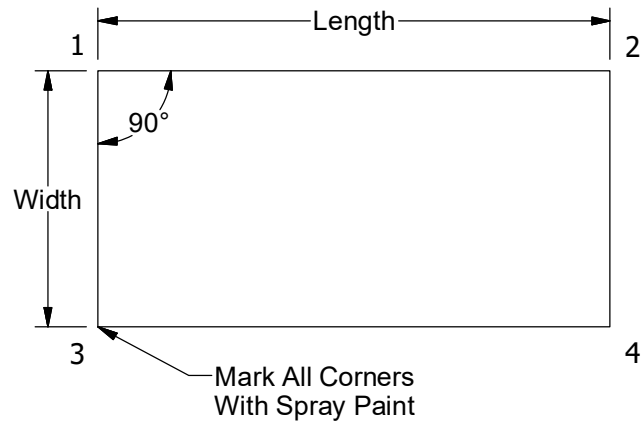


Fig 6 - Rectangle corner points

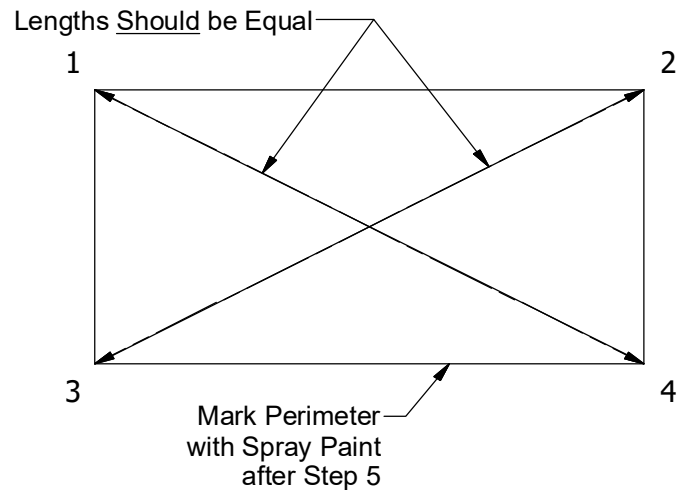


Fig 7 - Rectangle diagonal dimension check

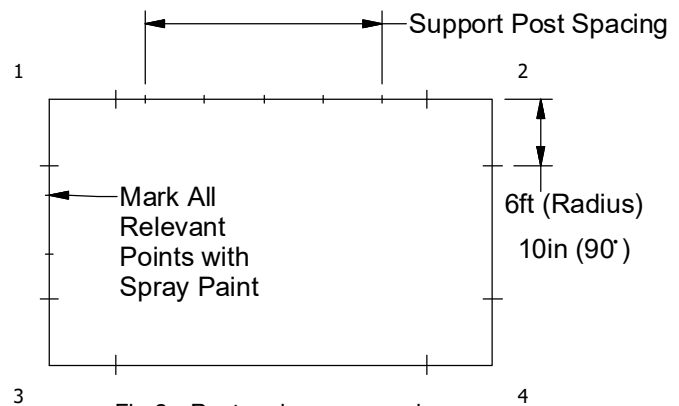


Fig 8 - Rectangle corner ends

4.1.2.3 *Oblong*:
Marking the ground

1. Consider that an oblong system is a rectangle system with a half round system on each end.
2. Find the point of your first corner (where the half round meets a straight side) and mark the ground with spray paint.
3. Using a string or measuring tape anchored to the first corner point, mark out the second and third corner, based on the overall length of the straight side of the system and width (i.e. diameter) of the system.

Tip:

The overall length of the straight side can be calculated by taking the overall length of the system minus the width (diameter) of the system.

4. Using either the second or third corner, mark out the fourth/last corner. See Figure 6.
5. To ensure your sides are parallel with square corners, measure diagonally from the first corner to the fourth, and from second to third. Both measurements should be equal. Adjust your corner locations until measurements are correct. See Figure 7.

6. Using a string anchored from corner 1 to corner 2, mark the line with spray paint. Do not attempt this without the string, as it is difficult to keep a straight line over the distance. Repeat for corners 3 to 4.
7. Find the centre point between corners 1 and 3, and mark the ground with spray paint. Repeat for corners 2 and 4.
8. Using a string or measuring tape anchored to the centre points, mark out the half circle of each oblong end, going from corner 1 to 3 and from corner 2 to 4. See Figure 9.
9. See relevant section to determine how many support posts or pads are required. Mark those locations, from where each half round meets a straight side, with spray paint. Make sure to extend the lines out far enough to see clearly.
 - Work either clockwise or counter-clockwise but not both.



Fig 9 - Oblong system outline

4.1.3 Marking Support Post Locations: Zero Ground Disturbance (ZGD)

4.1.3.1 - 17" High Systems: Specific Gravity < 1.4

1. Starting from where the corner ends on your first side, measure 38" from the corner. This is the location of the first support post.
2. Continue from the first post with another post every 76" until you reach the end.
 - **Note:** If the post interferes with a vertical wall sheet seam, move the post closer to the previous post.
3. The distance between the last support post and the second corner will vary but should be less than 38". If it is more than that, add another support post near the corner.
4. Repeat steps 1-3 with the other sides. See Figure 10 for more details.

4.1.3.2 - 24" High Systems: Specific Gravity < 1.4

1. Starting from where the corner ends on your first side, measure 38" from the corner. This is the location of the first support post.
2. Continue from the first post with another post every 76" until you reach the end.
 - **Note:** If the post interferes with a vertical wall sheet seam, move the post closer to the previous post.
3. The distance between the last support post and the second corner will vary but should be less than 38". If it is more than that, add another support post near the corner.
4. Repeat steps 1-3 with the other sides. See Figure 10 for more details.

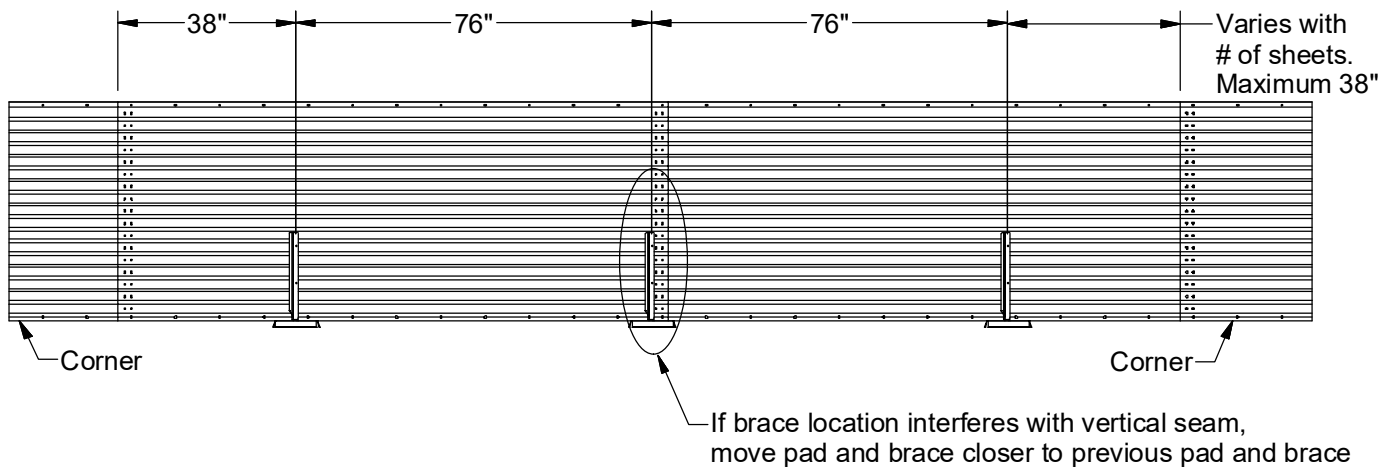


Fig 10 - ZGD Support Post Spacing for 17" and 24" (all systems), 34" (standard systems), 47" (SG < 1.0 standard systems)

4.1.3.3 - 34" High Systems:
Specific Gravity < 1.4

1. Starting from where the corner ends on your first side, measure 38" from the corner. This is the location of the first support post.
2. Continue from the first post with another post every 76" until you reach the end.
 - **Note:** If the post interferes with a vertical wall sheet seam, move the post closer to the previous post.
3. The distance between the last support post and the second corner will vary but should be less than 38". If it is more than that, add another support post near the corner.
4. Repeat steps 1-3 with the other sides. See Figure 10 for more details.

Specific Gravity < 1.4 (Optional Upgrade)

1. For systems with higher risks or requirements, installers can opt to install a support post every 57", beginning 28.5" from where the corner ends. Otherwise, follow the instructions for the standard 34" high system (specific gravity < 1.4).
2. The distance between the last support and the second corner will vary but should be less than 28.5". If it is more than that, add another support post near the corner. See Figure 11 for more details.

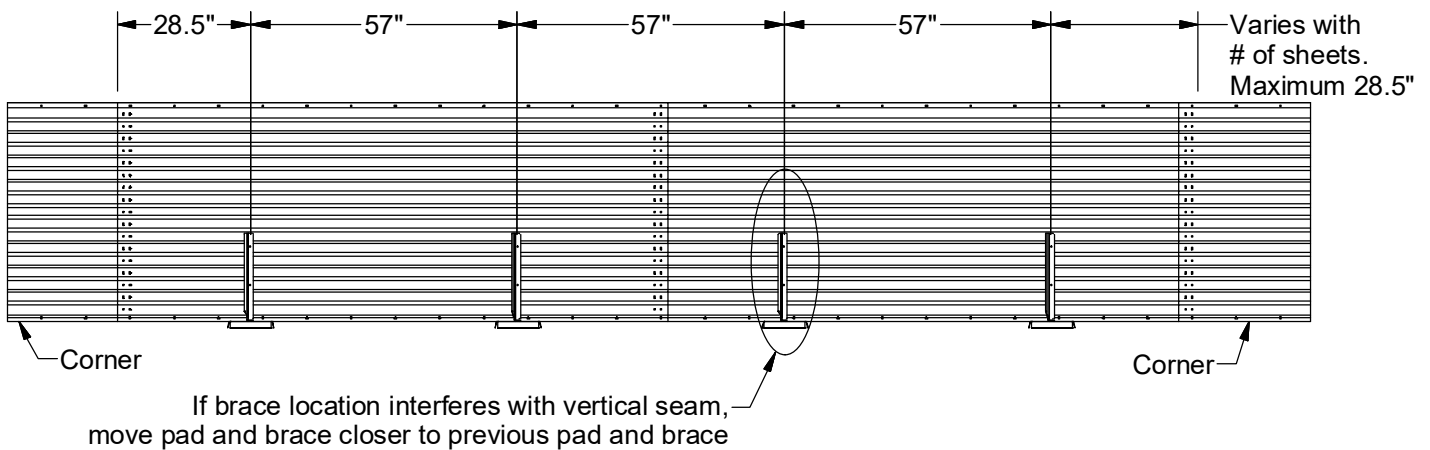


Fig 11 - ZGD Support Post Spacing for 34" (optional upgraded systems), 47" (SG < 1.0 optional upgrade systems and SG < 1.4 standard systems)

4.1.3.4 - 47" High Systems:

Specific Gravity \leq 1.0

1. Starting from where the corner ends on your first side, measure 38" from the corner. This is the location of the first support post.
2. Continue from the first post with another post every 76" until you reach the end.
- **Note:** If the post interferes with a vertical wall sheet seam, move the post closer to the previous post.
3. The distance between the last support post and the second corner will vary but should be less than 38". If it is more than that, add another support post near the corner.
4. Repeat steps 1-3 with the other sides. See Figure 10 for more details.

Specific Gravity \leq 1.0 (Optional Upgrade)

1. For systems with higher risks or requirements, installers can opt to install a support post every 57", beginning 28.5" from where the corner ends. Otherwise, follow the instructions for the standard 47" high system (specific gravity < 1.0).
2. The distance between the last support and the second corner will vary but should be less than 28.5". If it is more than that, add another support post near the corner. See Figure 11 for more details.

Specific Gravity < 1.4

1. Starting from where the corner ends on your first side, measure 28.5" from the corner. This is the location of the first support post.
2. Continue from the first post with another post every 57" until you reach the end.
- **Note:** If the post interferes with a vertical wall sheet seam, move the post closer to the previous post.
3. The distance between the last support post and the second corner will vary but should be less than 28.5". If it is more than that, add another support post near the corner.
4. Repeat steps 1-3 with the other sides. See Figure 11 for more details.

Specific Gravity < 1.4 (Optional Upgrade)

1. For systems with higher risks or requirements, installers can opt to install a support post every 38", beginning 19" from where the corner ends. Otherwise, follow the instructions for the standard 47" high system (specific gravity < 1.4).
2. The distance between the last support and the second corner will vary but should be less than 19". If it is more than that, add another support post near the corner.

4.1.3.5 - 67" High Systems:
Specific Gravity ≤ 1.4

1. Starting from where the corner ends on your first side, measure 19" from the corner. This is the location of the first support post.
2. Continue from the first post with another post every 38" until you reach the end.
 - **Note:** If the post interferes with a vertical wall sheet seam, move the post closer to the previous post.
3. The distance between the last support post and the second corner will vary but should be less than 19". If it is more than that, add another support post near the corner.
4. Repeat steps 1-3 with the other sides. See Figure 12 for more details.

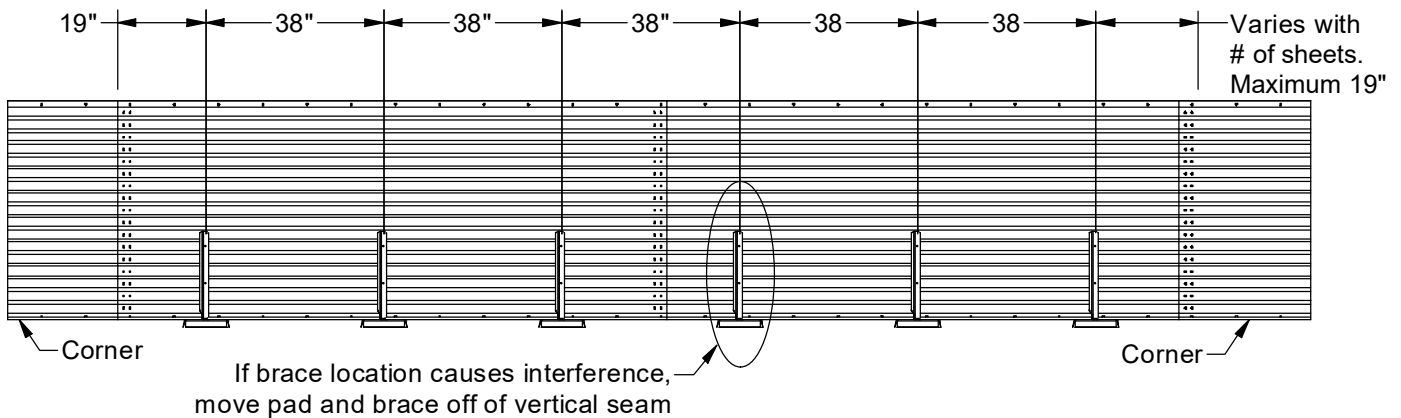


Fig 12 - ZGD Support Post Spacing for 47" (optional upgraded systems), and 67" (all systems)

4.1.4 Marking Support Post Locations **Hat-Shaped Post:**

4.1.4.1 - 17" High Systems:

All 17" high systems using hat-shaped posts with concrete piers follow the same support post spacing as their zero-ground disturbance (ZGD) counterparts. See Section 4.1.3.1 for details.

4.1.4.2 - 24" High Systems:

All 24" high systems using hat-shaped posts with concrete piers follow the same support post spacing as their zero-ground disturbance (ZGD) counterparts. See Section 4.1.3.2 for details.

4.1.4.3 - 34" High Systems:

All 34" high systems using hat-shaped posts with concrete piers follow the same support post spacing as their zero-ground disturbance (ZGD) counterparts. See Section 4.1.3.3 for details.

4.1.4.4 - 47" High Systems:

All 47" high systems using hat-shaped posts with concrete piers follow the same support post spacing as their zero-ground disturbance (ZGD) counterparts. See Section 4.1.3.4 for details.

4.1.4.5 - 67" High Systems:

All 67" high systems using hat-shaped posts with concrete piers follow the same support post spacing as their zero-ground disturbance (ZGD) counterparts. See Section 4.1.3.5 for details.

4.2 SUPPORT POST ASSEMBLY - ZERO-GROUND DISTURBANCE (ZGD)

4.2.1 Before Wall Sheet Assembly:

1. Assemble the ZGD support posts by bolting the ZGD brace to the ZGD pad using four 3/8 x 1" washers, bolts, and nuts for all system heights, except for 67" which uses six.
2. Place them on the spray paint lines for the support post locations. Line up the vertical flange of brace with the spray paint line for the wall sheet. See Figure 13 for details.

4.2.2 Together with Wall Sheet Assembly:

1. As wall sheets are being assembled around the system, also assemble the ZGD brace to the wall sheet using 1/4 x 1-1/2" Self-Tap Screws as shown in Figure 14 and 15.
 - Drill from the inside of the system to the outside so that the sharp tip of the screw is on the outside to prevent damage to the liner when it is installed.
2. Keep a level on the ZGD brace as you drill to ensure that it is 90° vertical and not skewed to the left or right.
3. Screws should be installed as vertically centred as possible to the ZGD brace flange and as horizontally centred as possible in the valley of the wall panel corrugation (viewed from the inside of the system) to have maximum contact with the ZGD brace.
4. Cover the tips of screws with vinyl caps provided.

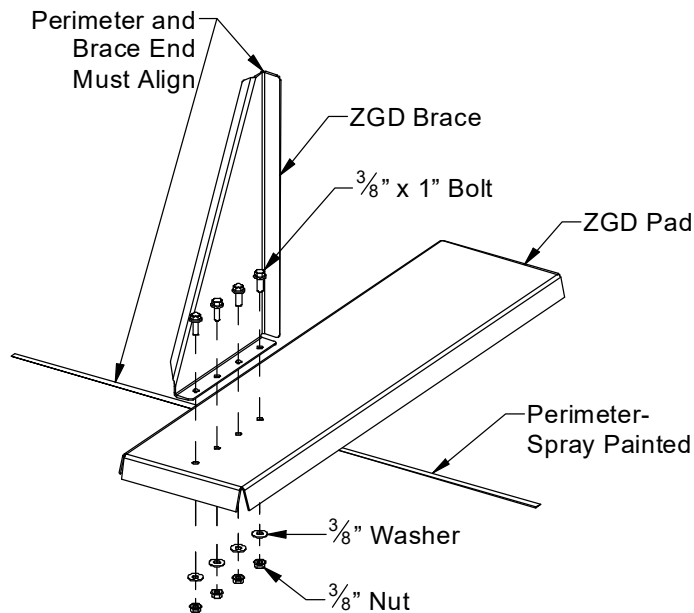


Fig 13 - ZGD pad and brace assembly

Note:

If backfilling is done, the bottom screws on a 17" system will likely end up being buried. This is not an issue unless future access to the screw is required.

One recommendation is to do a walk around the system after back fill to dig out the space around the screw.

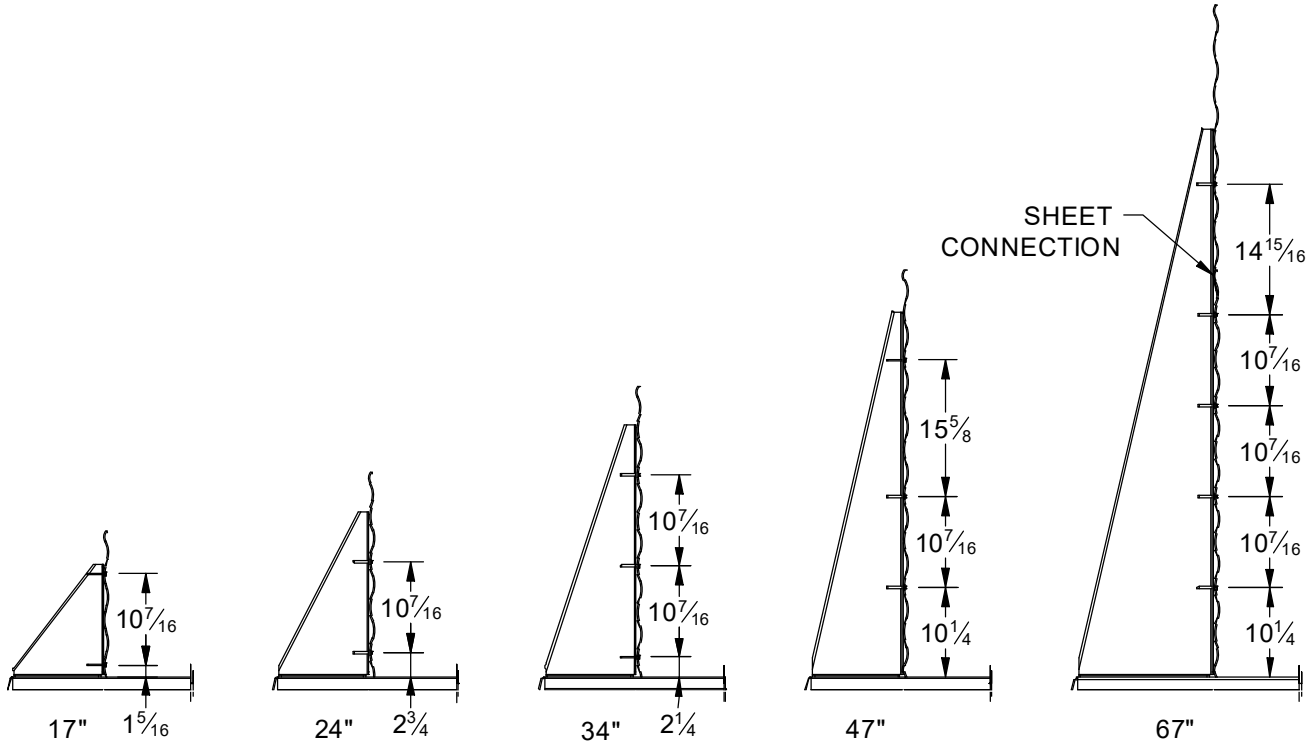


Fig 14 - Wall panel to ZGD brace screw location top mount

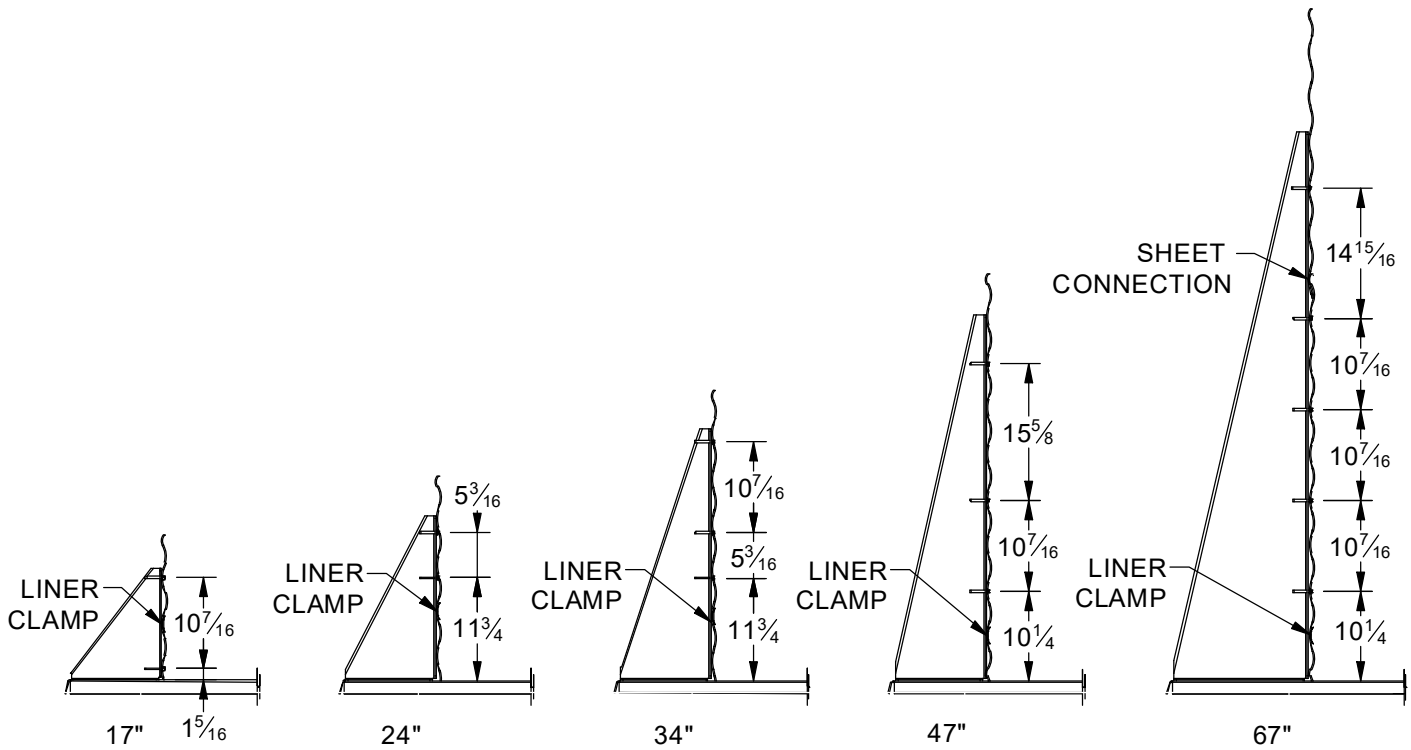


Fig 15 - Wall panel to ZGD brace screw location bottom mount

4.3 SUPPORT POST ASSEMBLY: HAT-SHAPED POST

4.3.1 Concrete:

- Some areas may have issues with frost causing the hat-shaped posts to lift, in turn causing the containment system itself to lift and potentially damage the liner. Extending the concrete pier down to below the frost line, usually 5 to 8 feet, can help eliminate this problem. Consult a qualified professional who is familiar with the local soil.

- See Figure 16. All concrete piers shall:
 - Have a minimum 28-day compressive strength of 3,000 psi
 - Be a minimum of 16” diameter
 - Have 4 x #4 vertical rebars with a minimum 40 ksi tensile strength
 - Have 6 x #4 horizontal rings of rebars with a minimum 40 ksi tensile strength at 3”, 9”, 15”, 21” and 27” from grade and also one 3” from the bottom of the concrete pier
 - Have the hat-shaped support post embedded a minimum of 24”
 - Have a minimum of 3” clear space all around the hat-shaped support post

Table 1 - Concrete Piers in sand/gravel with some clay/silt – Dense

System Height (in)	SG	Minimum Pier Depth (in)	Post Length (in)
17	1.0	34	39
24		49	42
34		73	52
47		89	62
67		107	82
17	1.4	40	39
24		59	42
34		85	52
47		104	62
67		125	82

Table 2 - Concrete Piers in clay/silt with some sand – Stiff

System Height (in)	SG	Minimum Pier Depth (in)	Post Length (in)
17	1.0	27	39
24		32	42
34		54	52
47		71	62
67		89	82
17	1.4	27	39
24		41	42
34		67	52
47		84	62
67		108	82

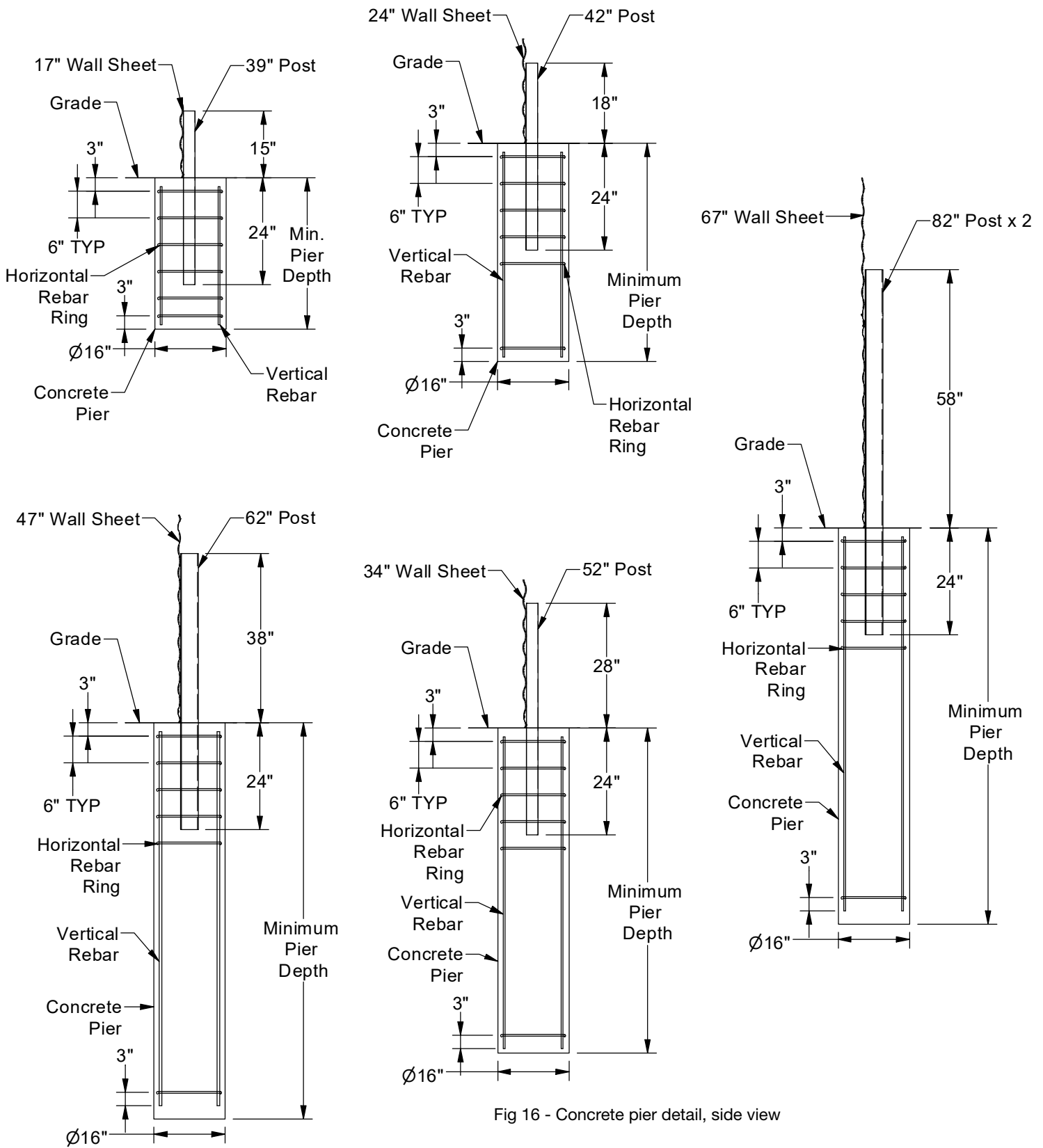


Fig 16 - Concrete pier detail, side view

4.3.2 Before Wall Sheet Assembly:

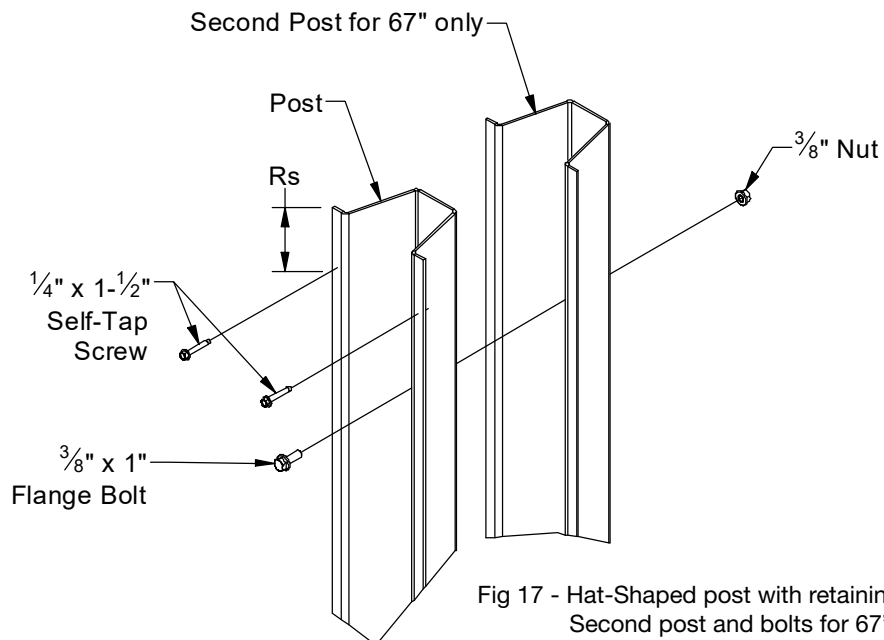
1. Using spray paint lines for support post locations, drill concrete pier holes on the outside of the system and install rebar.

This step could also be taken after wall sheet assembly by loosely assembling wall sheets and moving them individually as concrete pier holes are drilled one by one.

2. If installing 67" system:
Each post location is comprised of two posts bolted together with 3/8 x 1" bolts. See Figure 17.
3. Prepare the hat-shaped posts by drilling a 1/4 x 1-1/2" self-tap screw into each flanged wings of the post, approximately 3-8" from one end (See Table 3). These retaining screws will work with the support post clips in the next section to prevent the support post from slipping into the concrete pier while concrete is setting. See Figure 17.
4. Mark the post 24" from the other end to act as a guideline. This is the minimum distance the post must be embedded in the concrete pier.

Table 3 - Retaining Screw Location

System Height (in)	Rs - Retaining Screw Location From Top of Post (in)
17	2
24	5.75
34	5.75
47	6
67	1.75



4.3.3 After Wall Sheet Assembly:

1. Fill concrete pier holes and insert posts, making sure the previously installed retaining screws are facing up and not in the concrete. The two flanged wings of the post should face the wall sheet.
2. Slide a support post clips up (from the bottom) of each side of the hat-shape post, until they are stopped by and sit against the retaining screws.
3. Attach the wall sheets to the clips with 1/4 x 1-1/2" self-tap screws. See Figure 18, 19, 20.
 - Drill from the inside of the system to the outside so that the sharp tip of the screw is on the outside to prevent damage to the liner when it is installed.
4. Keep a level on the post as you drill to ensure that it is 90° vertical and not skewed to the left or right.
5. Cover the tips of screws with vinyl caps provided.

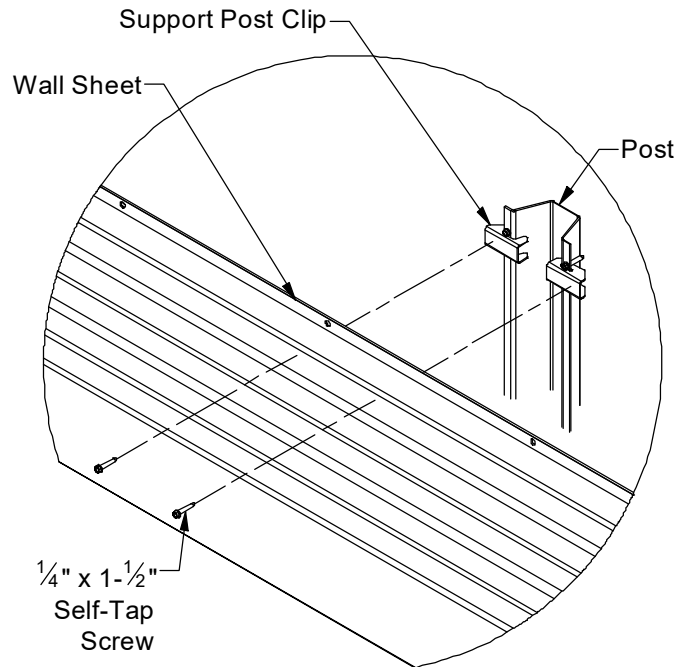


Fig 19 - Support post clip installation, Detail B

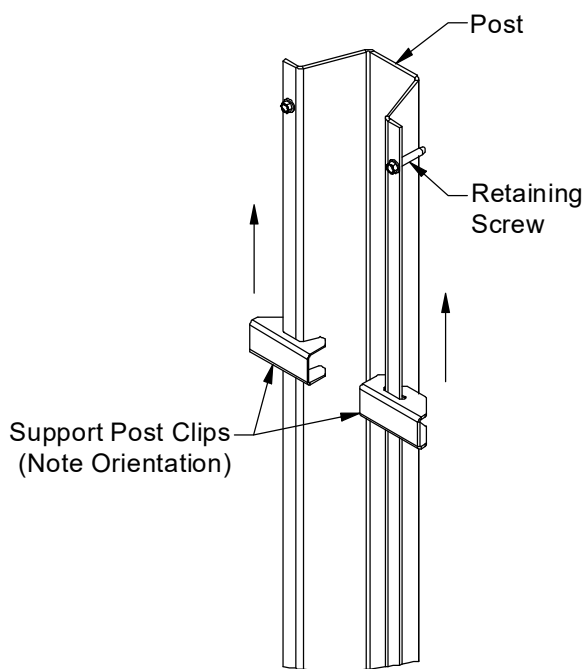


Fig 18 - Support post clip installation, Detail A

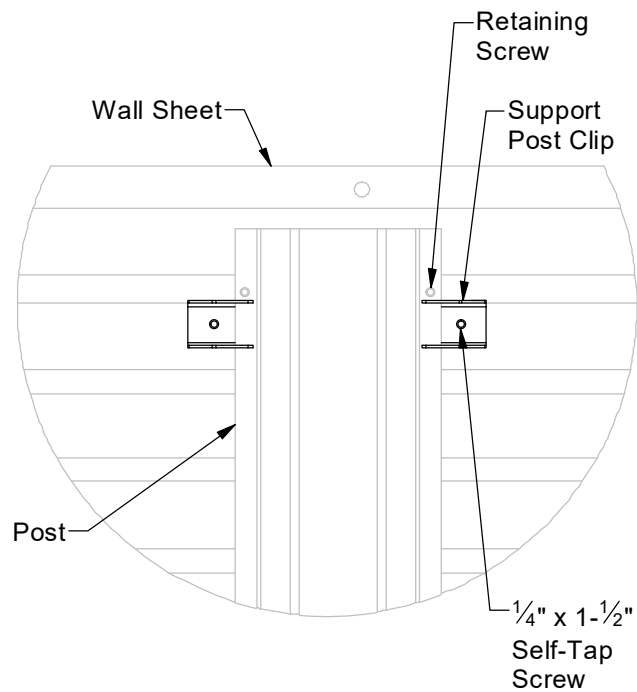


Fig 20 - Support post clip installation, Detail C

4.4 LINER PREPARATION AND INSTALLATION

4.4.1 Preparing the Liner:

1. Unroll the base layer of geotextile, liner, and top layer geotextile (where applicable) and position them evenly over the system perimeter spray paint outline.
2. Fold back the geotextiles and liner towards the center of the system, so that there are 4 to 5 feet of working space between the outline and the liner.
 - Exact folding technique will vary by supplier.
3. Proceed to Section 4.5 Wall Sheet Assembly and return to this section to finish either the top mount or bottom mount liner installation.

4.4.2 Top Mount Installation:

1. Unfold the liner from the center of the system.
2. Bring the base layer of geotextile and liner up the wall sheet, ensuring the liner fully meets the wall sheet without any space in the corner where wall sheet meets ground. See Figure 21. While at the same time, make sure to leave slack/bunching in all areas before draping the liner over the wall sheet.

Note:

The slack allows for adjustments while installing the liner clamp and also allows the system to fill up with liquid without pulling down the liner (during a tank failure).

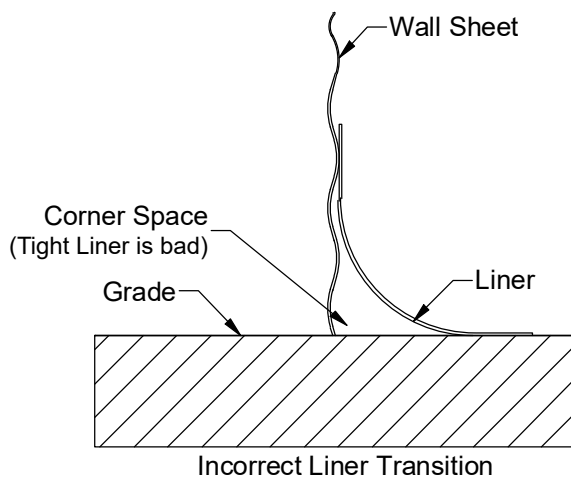
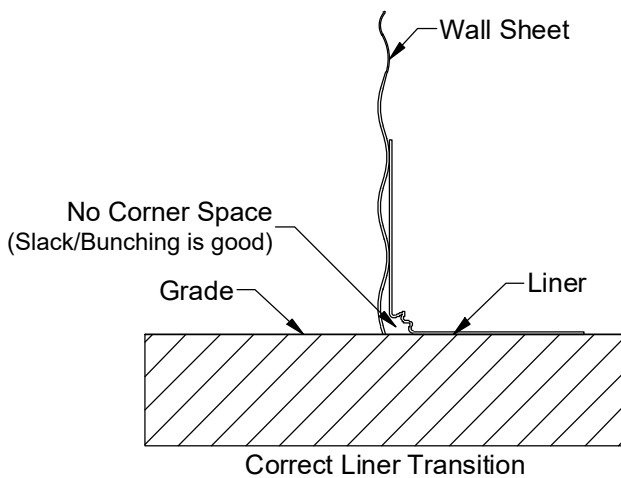


Fig 21 - Correct and incorrect liner transition

3. If the system requires pipe penetrations, refer to the manufacturer's instructions for installation.
 4. Use the top mount liner clamp to sandwich the liner between the clamp and the wall sheet. The clamp flange should face outwards with the "V" in the angle fitting into the corrugation valley of the wall sheet. See Figure 22.
- Make sure the holes on the liner clamp line up with the holes on the wall sheet.
5. Use a taper punch tool to bore holes through the liner, aligning with the liner clamp and wall sheet holes.
 6. Finish the assembly using 3/8 x 1" bolts and nuts, making sure the bolt head is on the inside of the system.
 7. Trim away excess liner.

4.4.3 Bottom Mount Installation:

1. Based on the liner clamp location seen in Figure 15, apply two 3” strips of caulking tape vertically into the valley of the corrugation, making sure to butt up against the vertical edge of the overlapping wall sheet.
2. Apply caulking tape horizontally around the perimeter of the system in a continuous line, in the same corrugation valley. The tape from this step will overlap the strips from previous step. See Figure 23.
3. Unfold the liner from the center of the system.
4. Bring the liner up the wall sheet, ensuring the it fully meets the sheet without any space in the corner where the wall meets ground. See Figure 21.

While at the same time, make sure to leave slack/bunching in all areas before pulling the liner up the wall sheet.

5. Use the bottom mount liner clamp to sandwich the liner between the clamp and the wall sheet/caulking tape. Assemble using 1/4 x 1-1/2” self-tapping screws at every 6” intervals around the perimeter of the system, or as needed. See Figure 24.
6. Trim away excess liner.
7. Apply caulking bead where liner clamp and wall sheet meet up around perimeter of system.

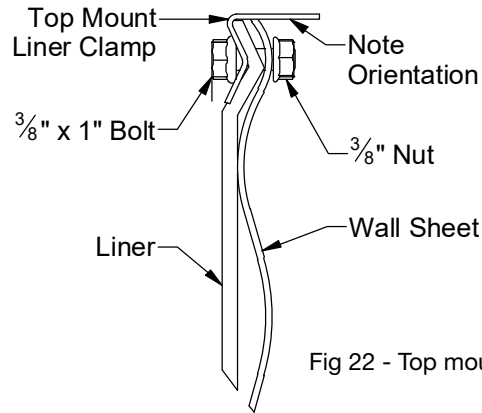


Fig 22 - Top mount liner detail

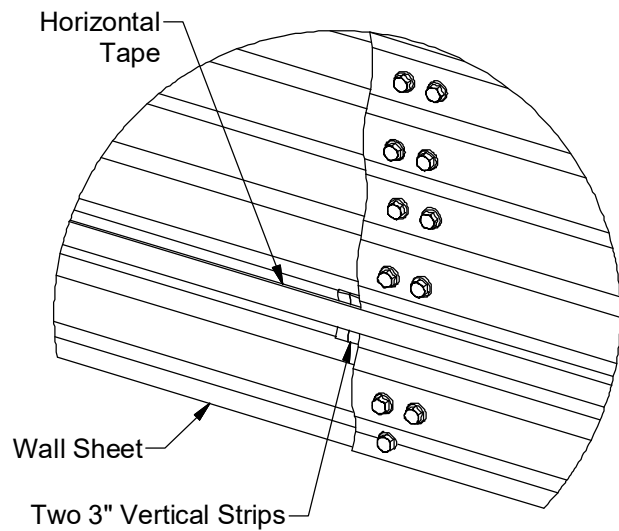


Fig 23 - Bottom mount caulking tape

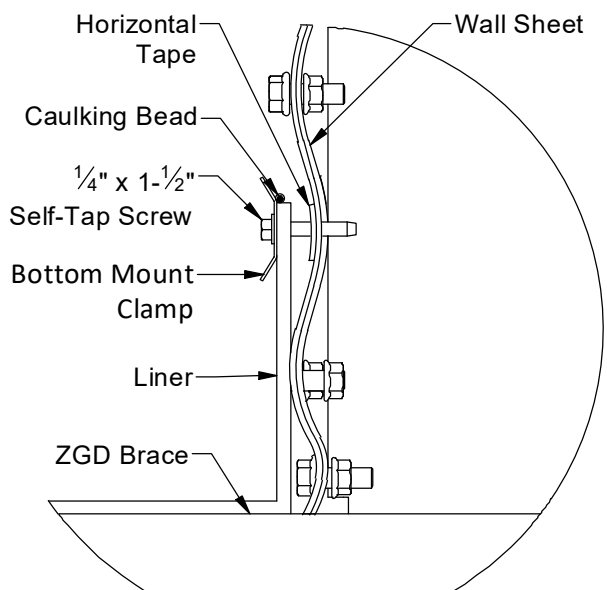


Fig 24 - Bottom mount liner detail

4.5 WALL SHEET ASSEMBLY

4.5.1 - 17", 24", 34", 47" Wall Sheet Assembly:

1. Place wall sheets one at a time using the spray paint lines as guides. If the system uses Zero-Ground Disturbance (ZGD), place the wall sheets on top of the ZGD pads, butting up against the ZGD braces.
2. Overlap the wall sheets in a consistent direction.
3. Assemble the wall sheets together at the vertical seams using 3/8 x 1" bolts and nuts loosely tightened.
 - If the system uses a bottom mount liner, apply caulking tape to the outer vertical edge of the wall sheet towards the inside of the system before bolting together. See Figure 25.
4. Also follow instructions in Section 4.2 or Section 4.3 for Support Post Assembly, as wall sheets are being assembled.

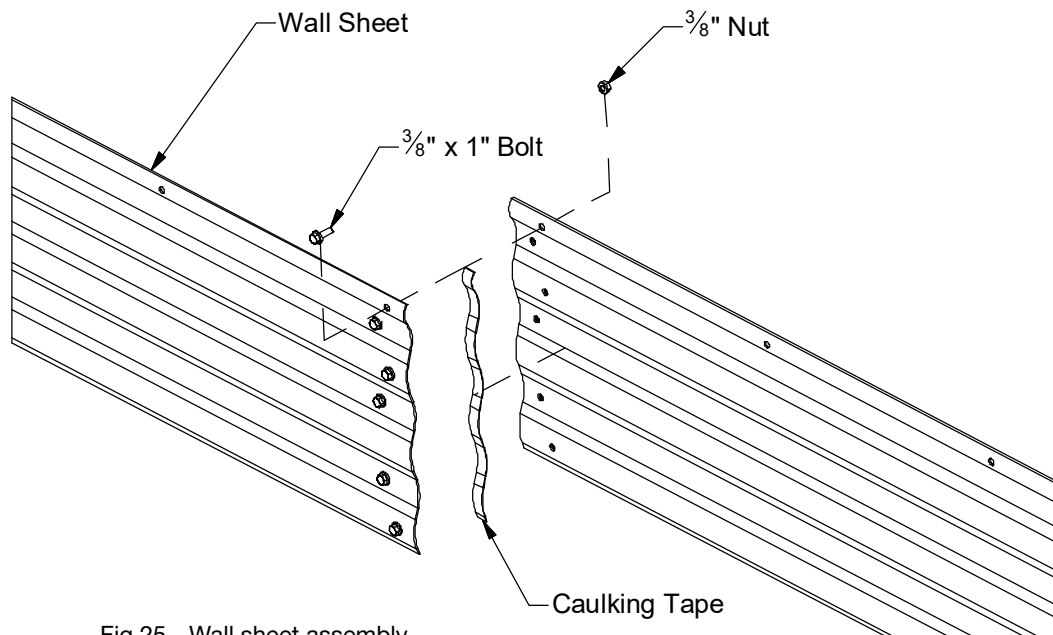


Fig 25 - Wall sheet assembly

4.5.2 - 67" Wall Sheet Assembly:

1. Place 47" bottom wall sheets one at a time using the spray paint lines as guides. If the system uses Zero-Ground Disturbance (ZGD), place the wall sheets on top of the ZGD pads, butting up against the ZGD braces.
2. Overlap wall sheets in a consistent direction.
3. Assemble the wall sheets together at the vertical seams using 3/8 x 1" bolts and nuts loosely tightened.
 - If the system uses a bottom mount liner, apply caulking tape to the outer vertical edge of the wall sheet towards the inside of the system before bolting together. See Figure 25.
4. **For round systems:**
 To assemble the top wall sheets, position the bottom horizontally center hole of the 24" wall sheet, with the top holes on the vertical seams of the 47" wall sheets.
 - This ensures that the two tiers do not overlap vertical seams.
5. Assemble the 24" wall sheets together at the vertical seams and the two tiers together at the horizontal seams, using 3/8 x 1" bolts and nuts loosely tightened.
 - If the system uses a bottom mount liner, apply caulking tape to the outer vertical edge of the wall sheet towards the inside of the system before bolting together. See Figure 25.
6. (Optional) There will be extra bolt holes on the 24" wall sheets that do not have corresponding holes on the 47" wall sheets. In order to achieve a closer fit with the corrugations on the wall sheets, installers may drill through the 47" wall sheets and use extra 3/8 x 1" bolts in these locations. See Figure 26, Detail B
7. Also follow instructions in Section 4.2 or Section 4.3 for Support Post Assembly, as wall sheets are being assembled.

For oblong and rectangular systems:

To assemble the top wall sheets, start at one end at the corner of the system or end of the round portion of the oblong. Match up the trio of bottom corner holes on the 24" wall sheet with the trio of top corner holes on the 47" wall sheet. See Figure 26, Detail A.

- If the bottom 47" tier of the system only has long sheets, then start and end the top 24" tier with short wall sheets. See Figure 27
- If the bottom 47" tier of the system has 1 half sheet on the end, then start the top 24" tier with a half sheet and end with a long sheet. See Figure 28
- This applies to the straight portion of rectangular and oblong systems, and round portion of oblong systems.

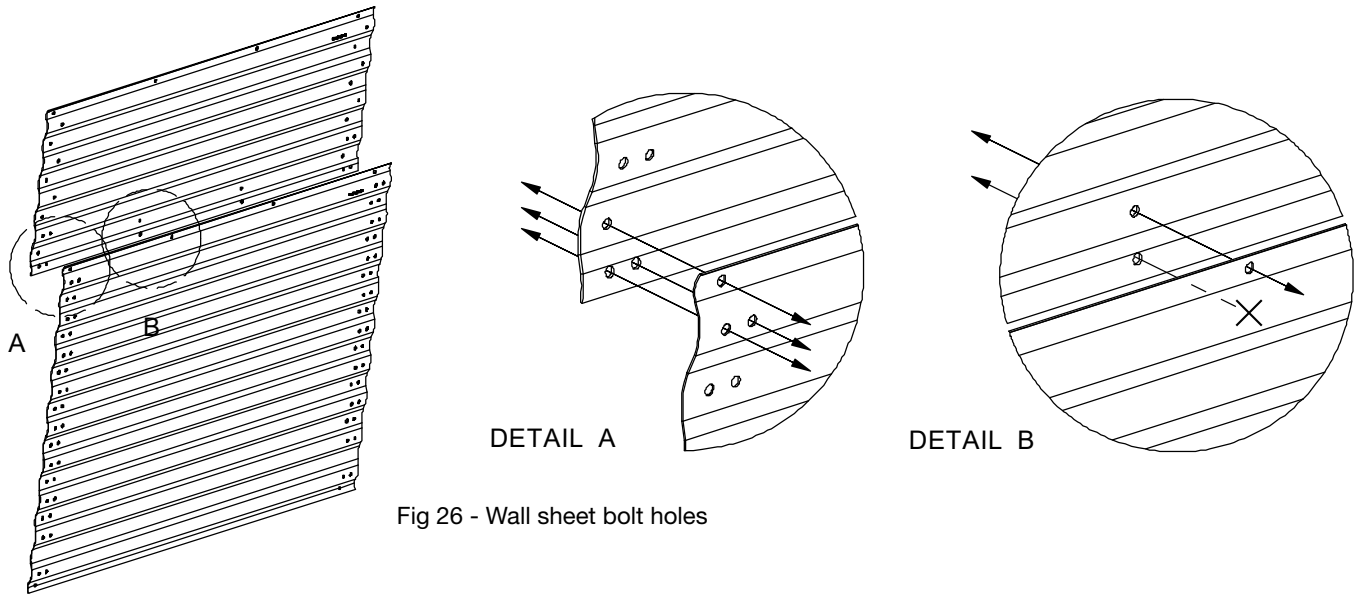


Fig 26 - Wall sheet bolt holes

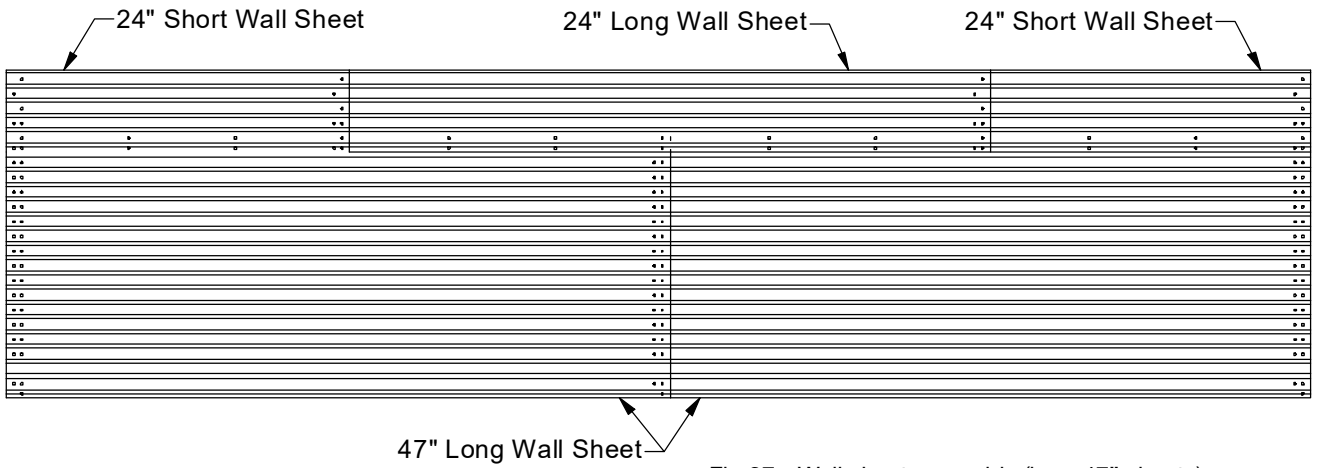


Fig 27 - Wall sheet assembly (long 47" sheets)

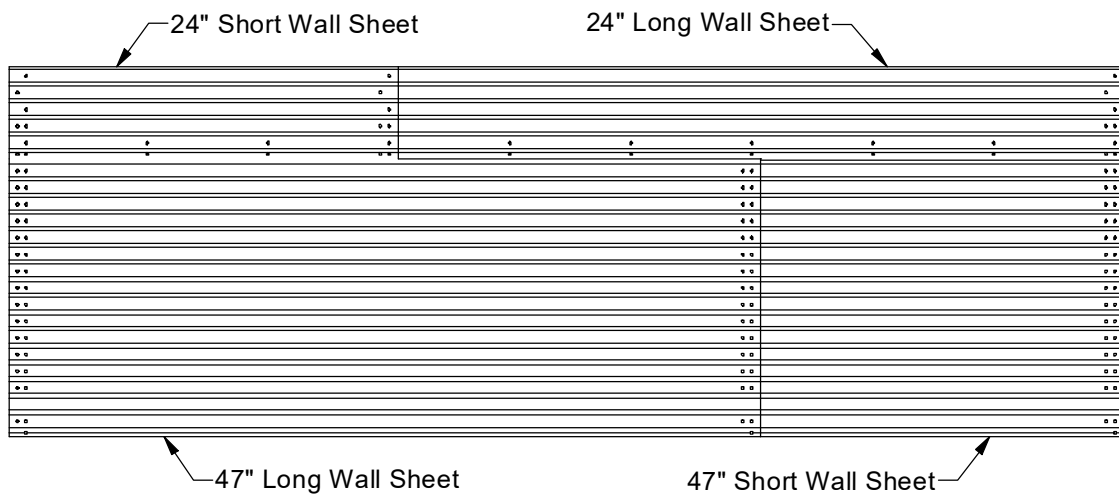


Fig 28 - Wall sheet assembly (long and short 47" sheets)

4.6 WALL SHEET CORNER OR CURVED ASSEMBLY

Install curved wall sheets or wall sheet corners using the same instructions from Section 4.5.

Install curved wall sheets or wall sheet corners towards the outside of the straight wall sheets.

Note - 67" System only: Install wall sheet corner braces on the outside of the 47" & 24" corners, centered vertically over the seam.

4.7 SYSTEM DIMENSION CALCULATIONS

4.7.1 Quick References:

- Long Sheet Length = 113.375"
- Short Sheet Length = 56.6875"
- Radius Corner Length = 72"
- 90° Corner Length = 10"

Note:

Calculations are all in inches.
To convert to feet, divide by 12.

4.7.2 Round:

- Diameter = (113.375") divided by (3) divided by (Pi) multiplied by (Nominal diameter)

$$D = \frac{113.375''}{3\pi} D_{\text{nom}}$$

4.7.3 Rectangle:

- Width or Length = (Number of straight long wall sheets) multiplied by (Long sheet length)
Plus (Number of straight short sheets) multiplied by (Short sheet length)
Plus (Corner Length) multiplied by (2)

$$W \text{ or } L = (N_{\text{Long}} \times 113.375'') + (N_{\text{Short}} \times 56.6875'') + (72'' \text{ or } 10'' \times 2)$$

4.7.4 Oblong:

- Width = (Oblong diameter)
- Length = (Number of straight long wall sheets) multiplied by (Long sheet length)
Plus (Number of straight short sheets) multiplied by (Short sheet length)
Plus (Oblong diameter)

$$L = (N_{\text{Long}} \times 113.375'') + (N_{\text{Short}} \times 56.6875'') + D$$

- Oblong diameter = (113.375") divided by (3) divided by (Pi) multiplied by (Nominal diameter inches)

$$D = \frac{113.375''}{3\pi} D_{\text{nom}}$$

4.8 OPTIONAL ACCESSORIES

4.8.1 Cross-Over Stairs and Ladder:

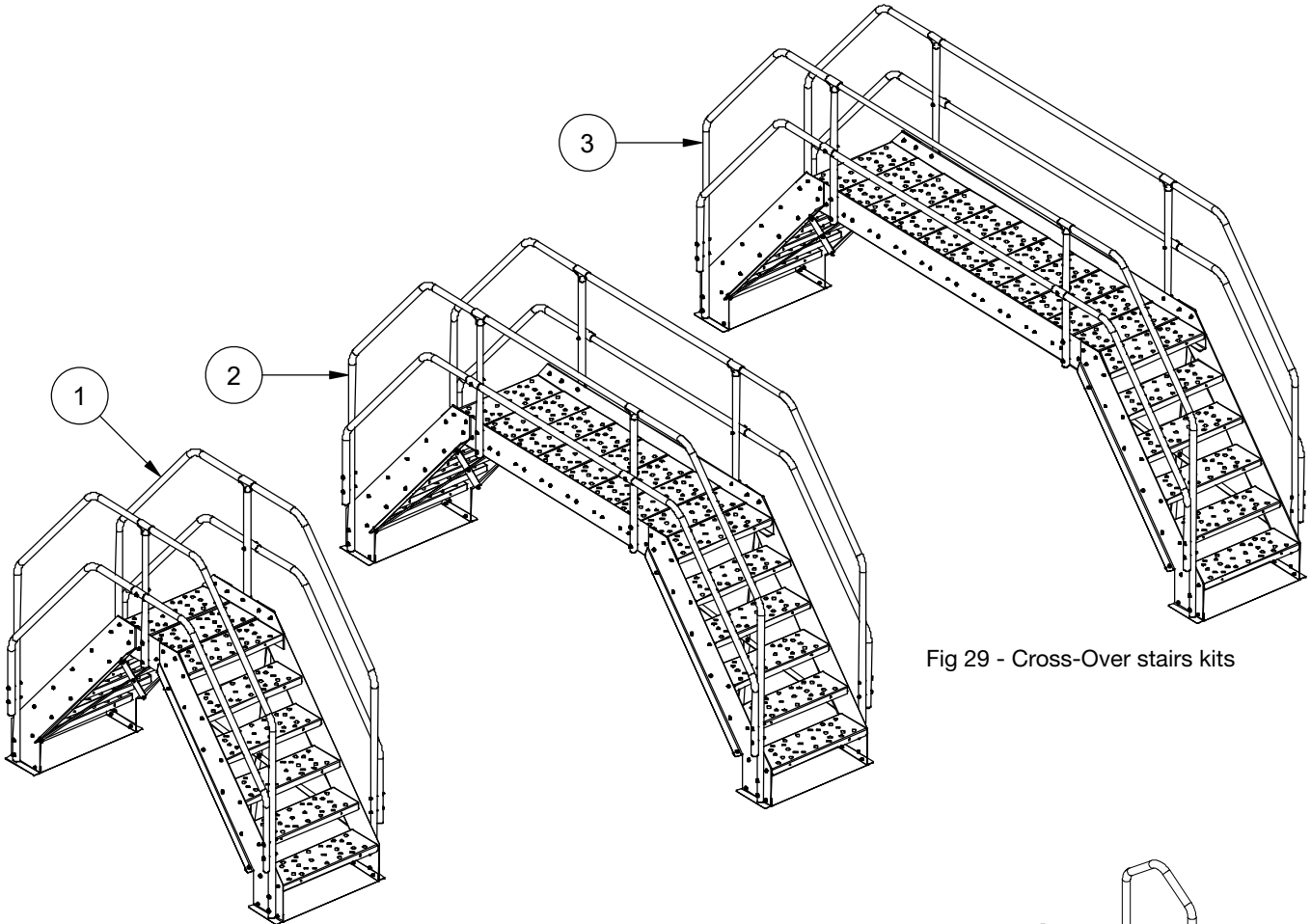


Fig 29 - Cross-Over stairs kits

Table 5 - Cross-Over Stair and Ladder Kits

ITEM	PART #	DESCRIPTION
1	13000008936	Cross-Over Stairs Kit - 49" x 30"
2	13000008948	Cross-Over Stairs Platform Kit - 4'
3	13000008949	Cross-Over Stairs Platform Kit - 6'
4	130000010723	Cross-Over Stairs Kit - 74" x 30" (not shown)
5	130000012195	Cross-Over Ladder 49"

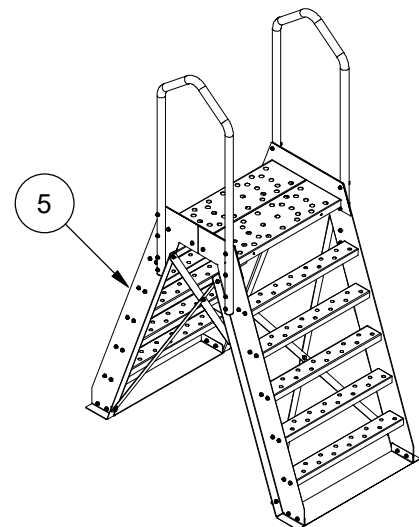


Fig 30 - Cross-Over ladder

4.8.2 Sand Door:

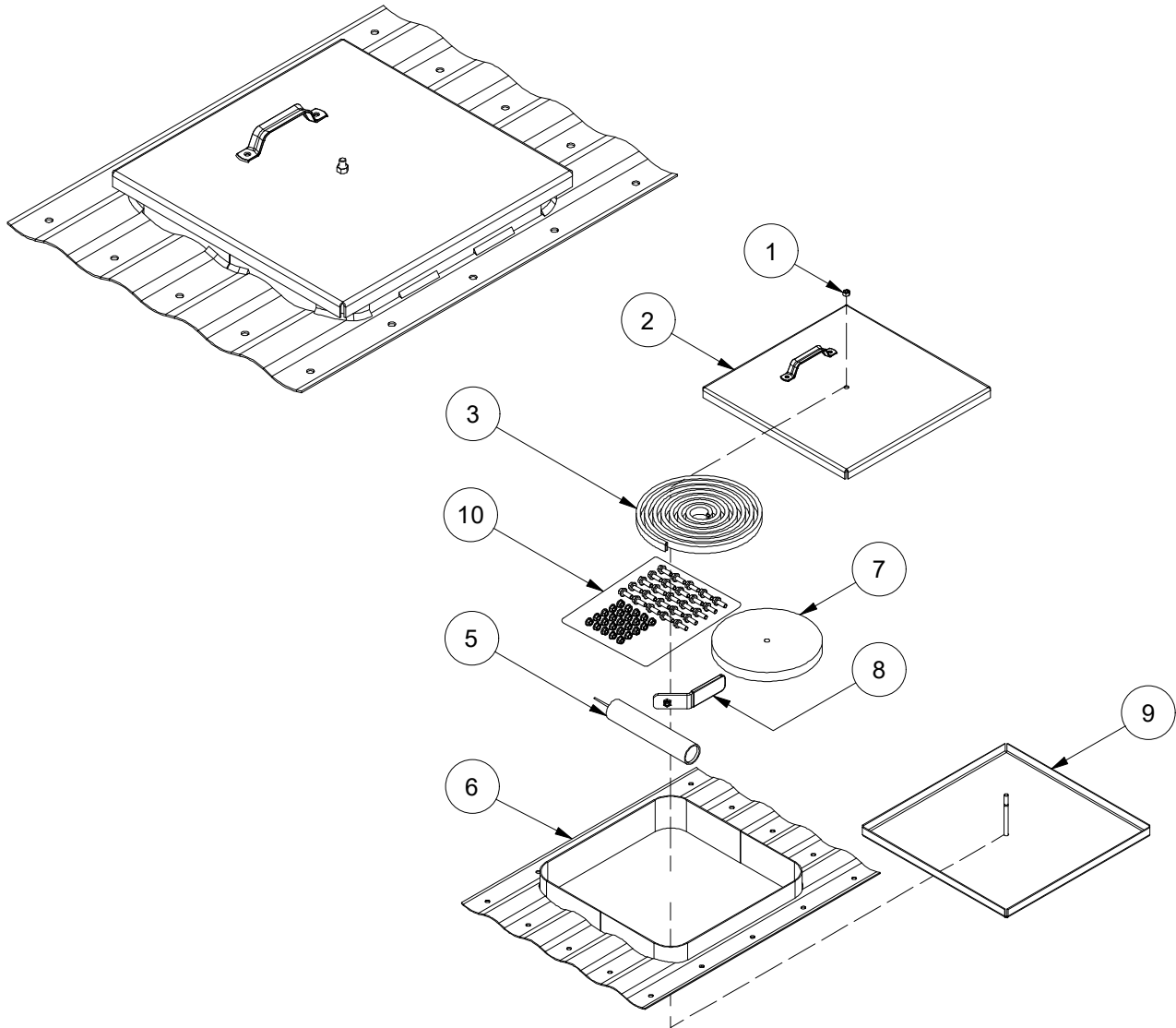


Table 6 - Containment Sand Door Kit

ITEM	PART #	DESCRIPTION
1	13072500006	Hex Nut 3/8-16 Gr 5
2	13000009639-00	CNMT2 SAND DOOR 1
3	13000009724-00	GASKET EPDM BULB 3/8 OD X 1/8 EDGE TRIM
4	N/A	Removed as per ECO 31-6201
5	3079504060	CAULKING TUBE DYNOMIC GREY 300ml
6	13000009637-00	CNMT2 SAND DOOR WALL SHEET FRAME
7	3004300060	CAULKING BUTYL TAPE 30' ROLL 1/8 X 1
8	13000009641-00	CNMT2 LATCH HANDLE WITH NUT AND GRIP
9	13000009640-00	CNMT2 SAND DOOR 2
10	3071605056-25	Bolt Bin 3/8-16 x 1 GR 8 c/w Washer & Flange Nut 25/Bag

Follow these instructions to install the sand door:

1. With the access cover doors removed, position the door frame against the wall, between the braces or posts.
 - To correctly mark the door cut-out onto the corrugated sheet, insert a 3/8 x 2" bolt through each corner hole in the frame.
 - **IMPORTANT:** Position the door so that the ends of all four corner bolts line up either on the peaks or on the valleys of the corrugations.
 - Holding the door in position, use a marker to trace the outline of the square, door cut-out onto the wall panel.
2. Cut the square out of the wall panel.
 - Be sure to cut about a half-inch to the outside of the marked outline to ensure that the access door collar will fit through.
 - However, do not remove excessive material (more than 3/4"), especially at the bottom or top of the panel.
3. Remove the four 3/8 x 2" bolts from the corners.
4. Insert the access door through the cut hole and line it up to the corrugations on the wall panel.
 - If the corrugations aren't nesting together turn the access door around.
 - Once the access door is in position, hold it in place and mark the 4 corner bolt holes onto the wall panel.
5. Drill the 4 corner holes with a 7/16" drill bit.
6. Attach the door to the wall at the four corner locations to accurately use it as a template for the remaining holes.
7. Drill out the other 12 holes around the door frame, and remove the door from the wall sheet.
 - File down any burrs.
8. Add butyl tape around the perimeter of the 16 holes on the wall panel so that the contained liquid cannot reach the bolts.

Note:

 - If the access door is installed on the inside of the containment system, install around the outside of the holes.
 - If the access door is installed on the outside, install around the inside of the holes.
9. Fit the access door into position, lining up the 16 perimeter holes.
 - Bolt to the containment system sheet with the 3/8 x 1" bolts found in the hardware package.
 - **IMPORTANT:** Install the bolts with the heads on the inside of the containment system.
10. Install the 70" gasket onto the lip of the access door collar, on the inside of the containment system.
 - Seal where the ends come together with silicone caulking (not included).
11. Install the cover doors.
 - Place the cover door (with the welded bolt) to the inside of the containment system.
 - The door (with the handle) goes to the outside.

Section 5: PARTS

5.1 WALL SHEETS

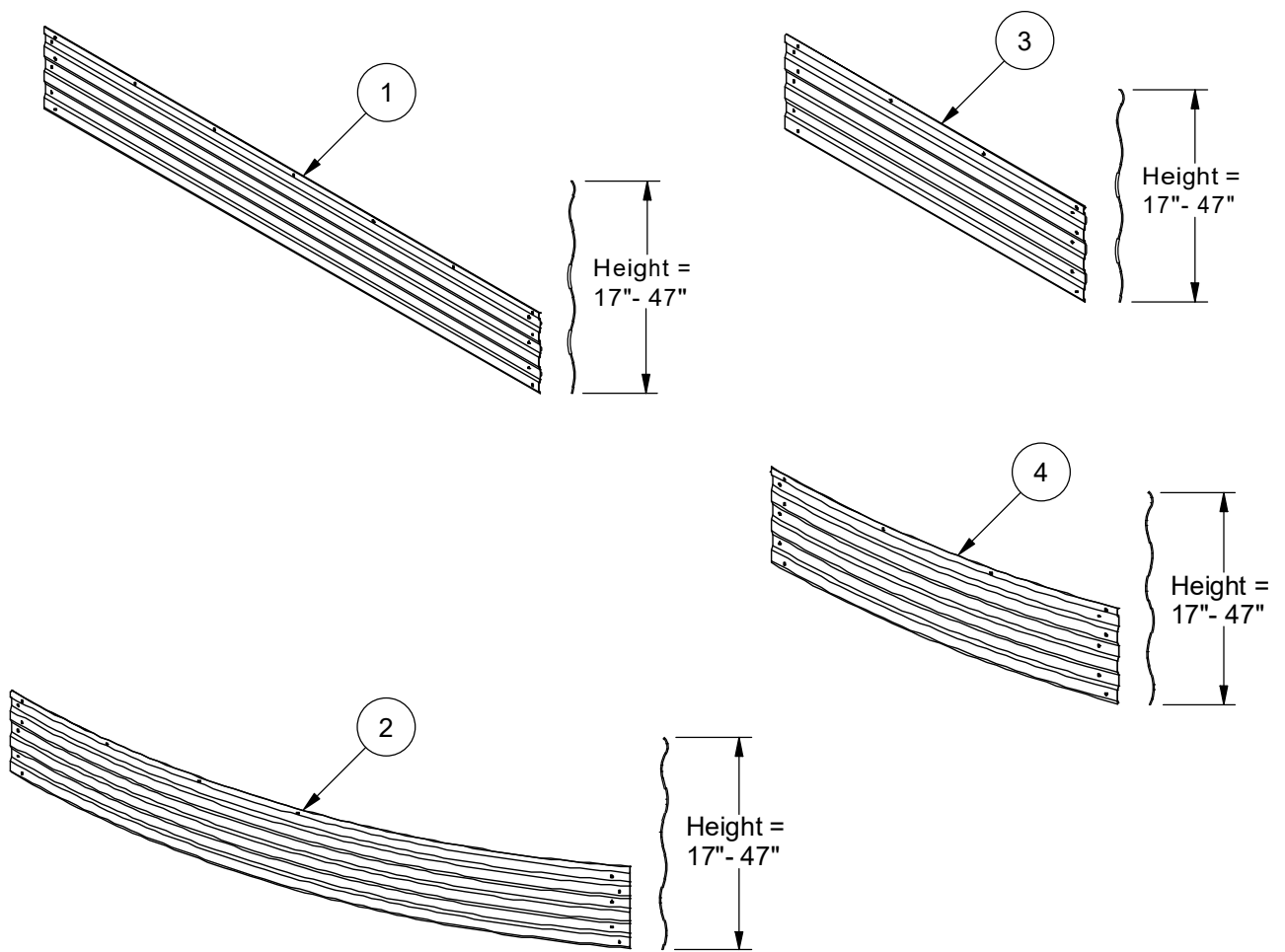


Fig 31 - Wall sheets

Table 7 - Wall Sheet Parts List

ITEM	PART #	DESCRIPTION
1	13000008478	17" Long Sheet 15GA
	13000008484	24" Long Sheet 15GA
	13000008490	34" Long Sheet 15GA
	13000008496	47" Long Sheet 15GA
	130000010531	24" Long Sheet 15GA - 67" System
	130000010533	47" Long Sheet 15GA - 67" System
	13000008356	17" Long Sheet 12GA
	13000008334	24" Long Sheet 12GA
	13000008336	34" Long Sheet 12GA
	13000008609	47" Long Sheet 12GA
	130000010530	24" Long Sheet 12GA - 67" System
	130000010532	47" Long Sheet 12GA - 67" System
2	13000008478	17" Long Sheet 15GA – curved
	13000008484	24" Long Sheet 15GA – curved
	13000008490	34" Long Sheet 15GA – curved
	13000008496	47" Long Sheet 15GA – curved
	130000010531	24" Long Sheet 15GA - 67" System - curved
	130000010533	47" Long Sheet 15GA - 67" System - curved
	13000008356	17" Long Sheet 12GA – curved
	13000008334	24" Long Sheet 12GA – curved
	13000008336	34" Long Sheet 12GA – curved
	13000008609	47" Long Sheet 12GA – curved
	130000010530	24" Long Sheet 12GA - 67" System - curved
	130000010532	47" Long Sheet 12GA - 67" System - curved
3	13000008897	17" Short Sheet 15GA
	13000008898	24" Short Sheet 15GA
	13000008899	34" Short Sheet 15GA
	13000008900	47" Short Sheet 15GA
	130000010544	24" Short Sheet 15GA - 67" System
	130000010542	47" Short Sheet 15GA - 67" System
	13000008901	17" Short Sheet 12GA
	13000008902	24" Short Sheet 12GA
	13000008903	34" Short Sheet 12GA
	13000008904	47" Short Sheet 12GA
	130000010545	24" Short Sheet 12GA - 67" System
	130000010543	47" Short Sheet 12GA - 67" System
4	13000008897	17" Short Sheet 15GA – curved
	13000008898	24" Short Sheet 15GA – curved
	13000008899	34" Short Sheet 15GA – curved
	13000008900	47" Short Sheet 15GA – curved
	130000010544	24" Short Sheet 15GA - 67" System - curved
	130000010542	47" Short Sheet 15GA - 67" System - curved
	13000008901	17" Short Sheet 12GA – curved
	13000008902	24" Short Sheet 12GA – curved
	13000008903	34" Short Sheet 12GA – curved
	13000008904	47" Short Sheet 12GA – curved
	130000010545	24" Short Sheet 12GA - 67" System - curved
	130000010543	47" Short Sheet 12GA - 67" System - curved

5.2 CORNERS

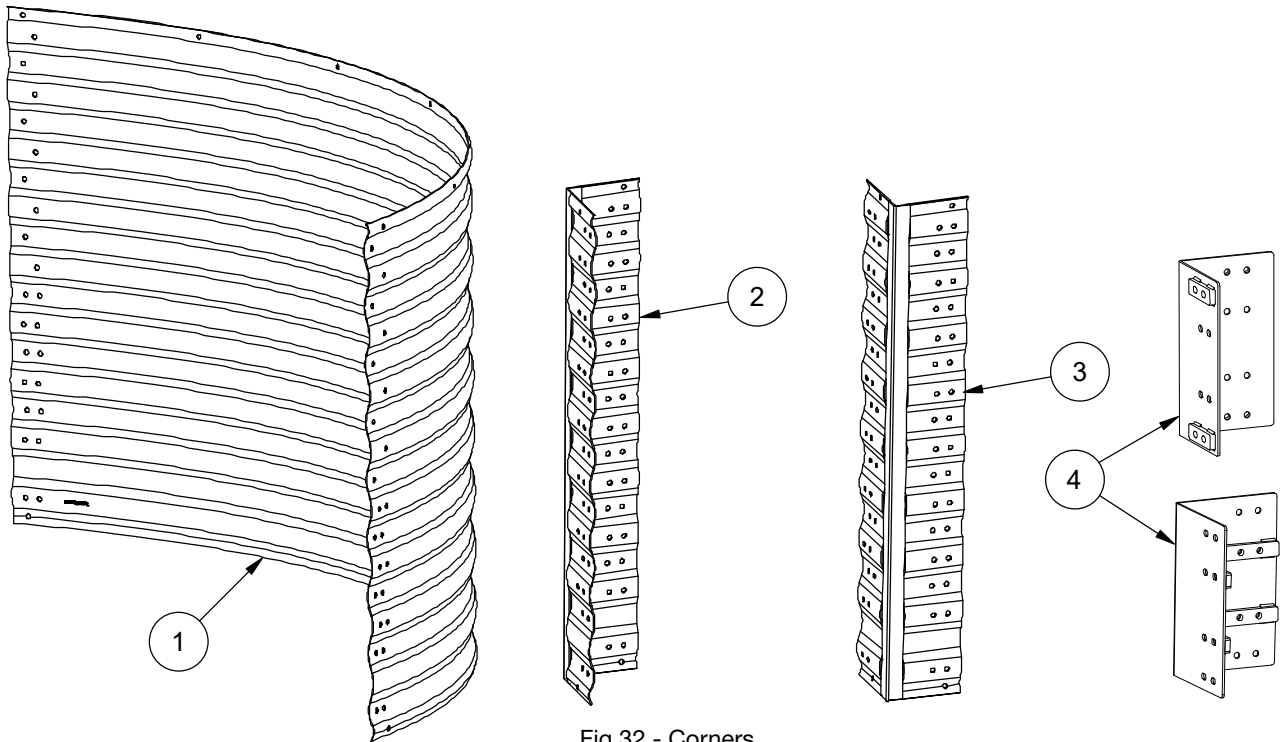


Fig 32 - Corners

Table 8 - Corner Parts List

ITEM	PART #	DESCRIPTION
1	13000008479	17" Radius Corner
	13000008485	24" Radius Corner
	13000008491	34" Radius Corner
	13000008497	47" Radius Corner
	130000010534	24" Radius Corner - 67" System
	130000010535	47" Radius Corner - 67" System
2	13000008419	17" Square Corner
	13000008423	24" Square Corner - 24"
	13000008427	34" Square Corner
	13000008611	47" Square Corner - 47" and 67" System
	130000012272	24" Square Corner - 67" System
3	13000008418	17" Square Corner - Inside
	13000008422	24" Square Corner - Inside - 24"
	13000008426	34" Square Corner - Inside
	13000008612	47" Square Corner - 47" and 67" System
	130000012273	24" Square Corner - Inside - 67" System
4	130000012644	67" System Corner Brace
	130000012816	67" System Corner Brace - Inside

5.3 POSTS

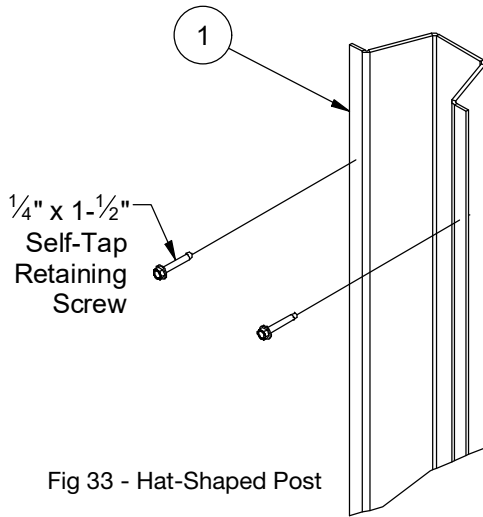


Fig 33 - Hat-Shaped Post

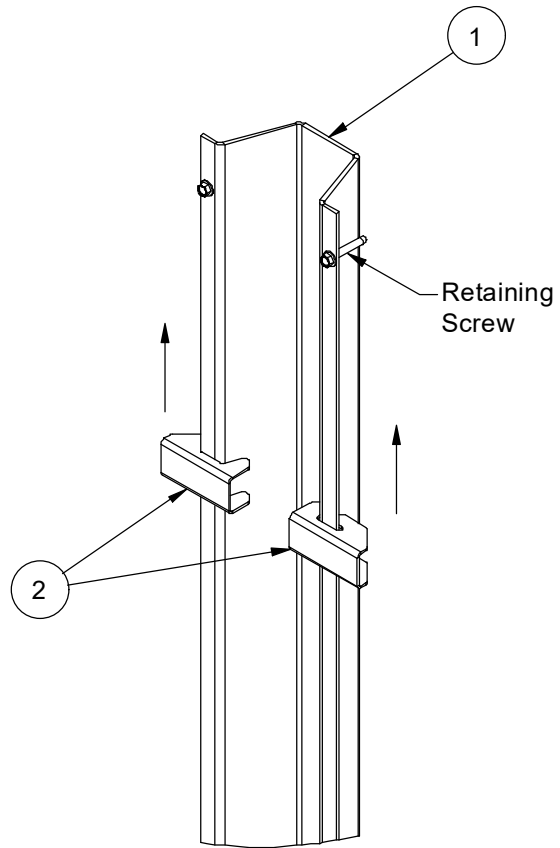


Fig 34 - Hat-Shaped post and clips

Table 9 - Post List

ITEM	PART #	DESCRIPTION
1	130000010279	Post - 39"
	13000008302	Post - 42"
	13000008300	Post - 52"
	13000008299	Post - 62"
	130000010676	Post - 82"
2	13000008301	Support Post Clip

5.4 ZERO-GROUND DISTURBANCE (ZGD) PADS

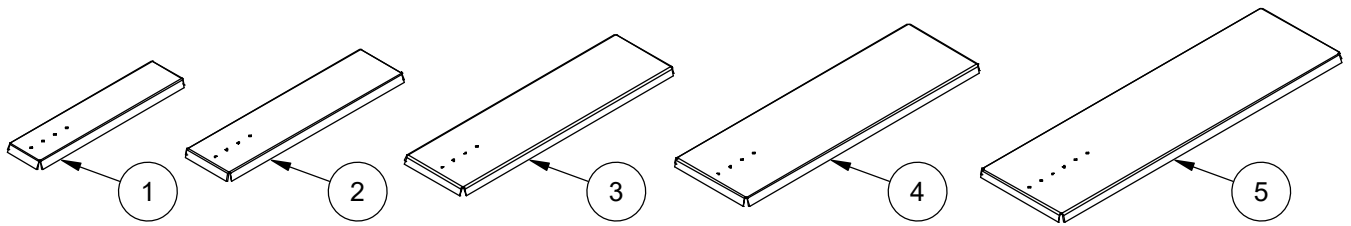


Fig 35 - ZGD pads

Table 10 - ZGD Pad Parts List

ITEM	PART #	DESCRIPTION
1	13000008309	17" ZGD Pad 12GA
2	13000008315	24" ZGD Pad 12GA
3	13000008310	34" ZGD Pad 10GA
4	13000008312	47" ZGD Pad 10GA
5	130000010537	67" ZGD Pad 10GA

5.5 ZERO-GROUND DISTURBANCE (ZGD) BRACES

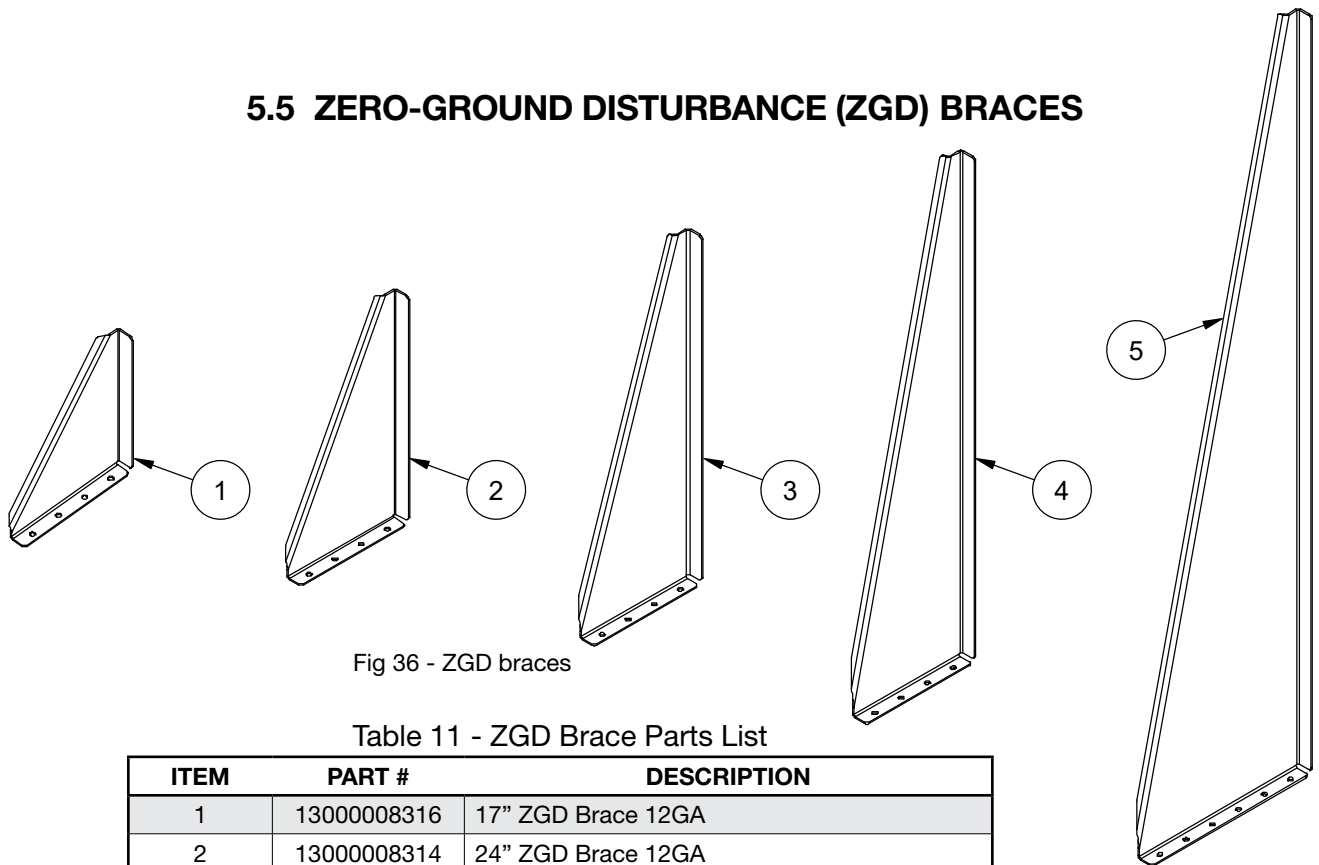


Fig 36 - ZGD braces

Table 11 - ZGD Brace Parts List

ITEM	PART #	DESCRIPTION
1	13000008316	17" ZGD Brace 12GA
2	13000008314	24" ZGD Brace 12GA
3	13000008311	34" ZGD Brace 10GA
4	13000008313	47" ZGD Brace 10GA
5	130000010537	67" ZGD Brace 10GA

5.6 LINER CLAMPS

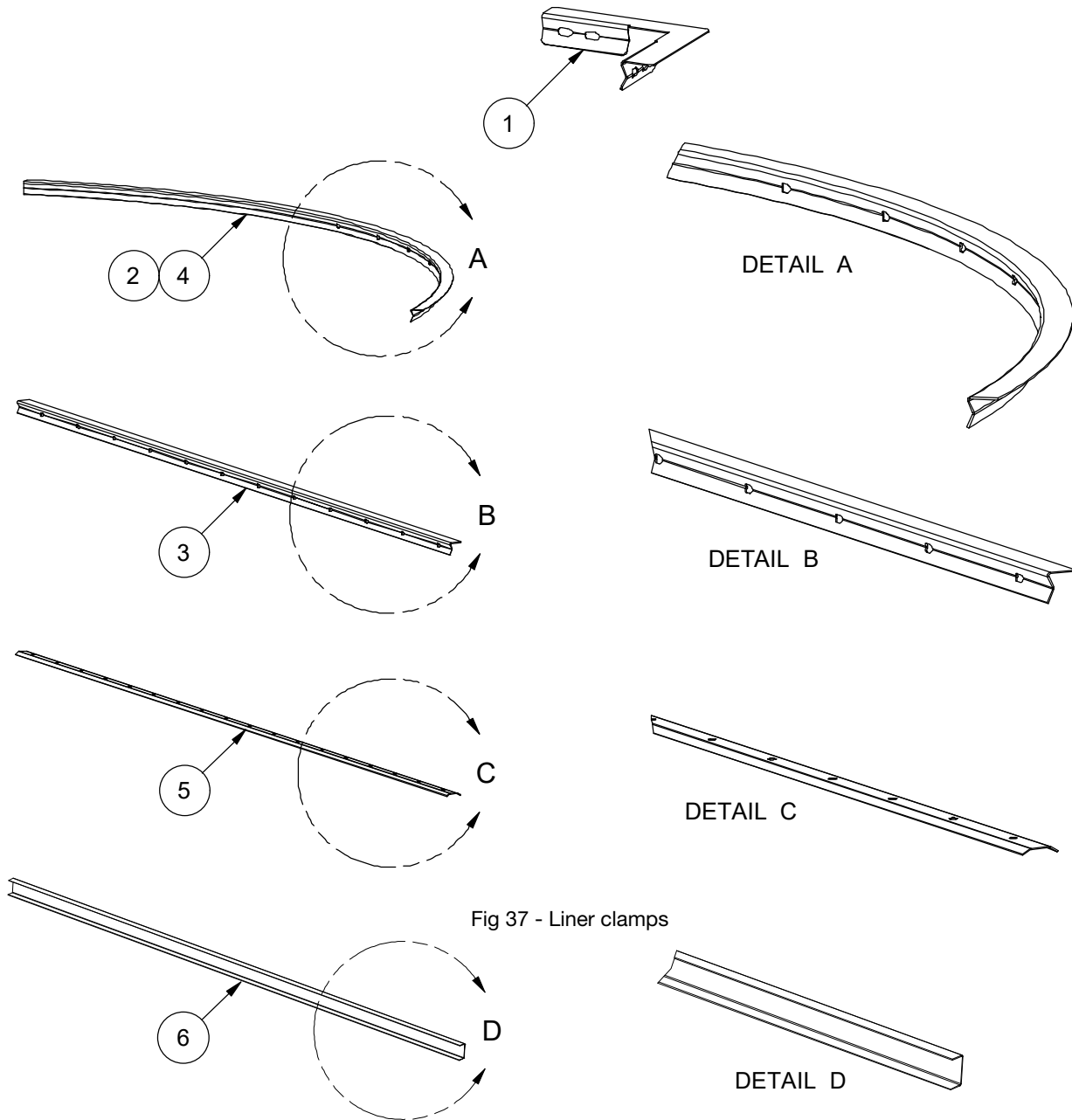


Fig 37 - Liner clamps

Table 12 - Liner Clamp Parts List

ITEM	PART #	DESCRIPTION
1	13000008914	Top Mount Square Corner Clamp
2	3021202535	Top Mount Radius Corner Clamp
3	3020102535	Top Mount Clamp
4	302xx02535	Top Mount Clamp - Curved
5	13000008962	Bottom Mount Clamp
6	130000012155	CNMT2 Cap Top Mount Clamp

5.7 RECOMMENDED BOLT ASSEMBLY

When tightening bolts, tighten the nut (NOT the bolt) until a “snug-tightened condition” is achieved. This is defined in **Specification for Structural Joints Using ASTM A325 or A490 Bolts (June 2004)** as:

“The snug-tightened condition is the tightness that is attained with a few impacts of an impact wrench or the full effort of an ironworker using an ordinary spud wrench to bring the connected plies into **firm contact**.”

Properly tightening the bolt will result in compressing the sealing washer noticeably. This is a requirement and all assembly crew members must be made aware of how to achieve a “snug-tightened condition” using common building tools. See Table 13 for minimum impact wrench torque capacity necessary to achieve “snug-tightened condition” for bolts in the assembly process.

If caulking is being used at any joints, it is important that the bolts are tightened enough to squeeze the caulking and bring the surfaces of the parts into firm contact with each other. This is especially important to monitor when installing bolts in temperatures approaching -10°C (14°F).

Do not substitute bolts in place of those supplied by Meridian.

**ALWAYS TIGHTEN THE NUT,
NOT THE BOLT!**

Table 13 - Recommended Impact Gun Torque Capacity for Snug-Tightened Condition Bolts

BOLT DIAMETER (in)	BOLT GRADE	GRADE MARK	RECOMMENDED TORQUE CAPACITY		
			in-lb	ft-lb	Nm
3/8	8.2		520	43	58

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WARRANTY STATEMENT

1. Meridian Manufacturing Inc, hereafter referred to as Meridian, guarantees its products against any defects in materials or workmanship for a period of twelve (12) months from the date of purchase, provided that the said products are set up according to its instructions and recommendations and also that the said products are operated and used in proper conditions and according to its instructions and recommendations.
2. Meridian's responsibility and obligations under this warranty shall be limited to replacement of parts and shall not extend to parts, equipment or accessories that are component parts of Meridian's products but that are manufactured by other manufacturers. Those manufacturers' warranty will apply to such parts, equipment or accessories. Any parts set up by reason of the application of this warranty shall be amenable to the terms of this warranty except that the period of twelve (12) months applicable to such parts shall be preemptory and that upon termination of the said period, warranty shall be null and void, for any purpose whatsoever with respect to the said parts substituted to it before the termination of the said period of twelve (12) months.
3. This warranty shall not extend to loss and damage to content of the products, neither to property or loss of revenue. Moreover, it shall not extend to bodily injuries, including death, sustained by any person or animal.
4. The purchaser shall give notice to Meridian, without delay, of any damage or defects to its products that he may ascertain before they are set up, otherwise this warranty will not apply to such damage or defects.
5. Any modification or incorporation whatsoever made to products, except those authorized or recommended by Meridian, shall void this warranty; this warranty shall not apply to damages resulting from improper installation or erection of products by purchaser.
6. This warranty is the sole and only warranty and it is in lieu of any other warranty, express or implied, statutory or not.
7. Any claim under this warranty shall be notified in writing to Meridian's head office within thirty (30) days from the failure.

Specifications and descriptions are subject to change without notice.

Register your product at: www.meridianmfg.com
For warranty information send an email to: warranty@meridianmfg.com

WARRANTY REQUEST PROCEDURE

1. The product must be registered with Meridian Manufacturing Inc.
2. The purchaser must contact the dealer, from where the unit was purchased, immediately upon discovery of any defects.
3. A completed Warranty Request (Claim) Form must be submitted by the dealer to the Meridian's warranty representative for review and any subsequent course of action.
 - Warranty requests must be completed with ALL required information in order it to be considered for approval.
 - Send photographs of the entire piece of equipment, and of the specific area of concern.
4. Warranty repair work will only be performed by Meridian or an approved representative of Meridian. Warranty work completed prior to Meridian's approval will NOT be honoured. Failure to follow this procedure may affect any or all of this warranty.
5. All warranty requests will be adjudicated at the sole discretion of Meridian and in accordance with the terms and conditions of the warranty.



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