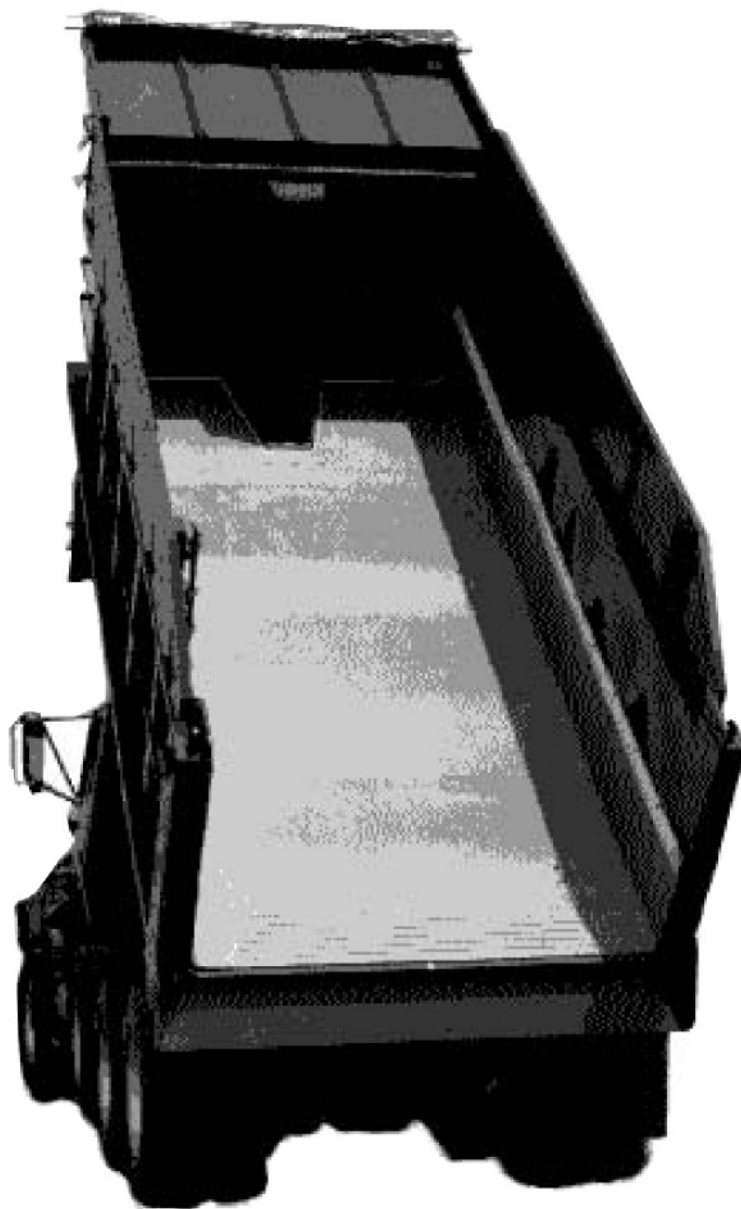


QuickSilver[®]

THE RIGHT BRAND

INSTALLATION GUIDE



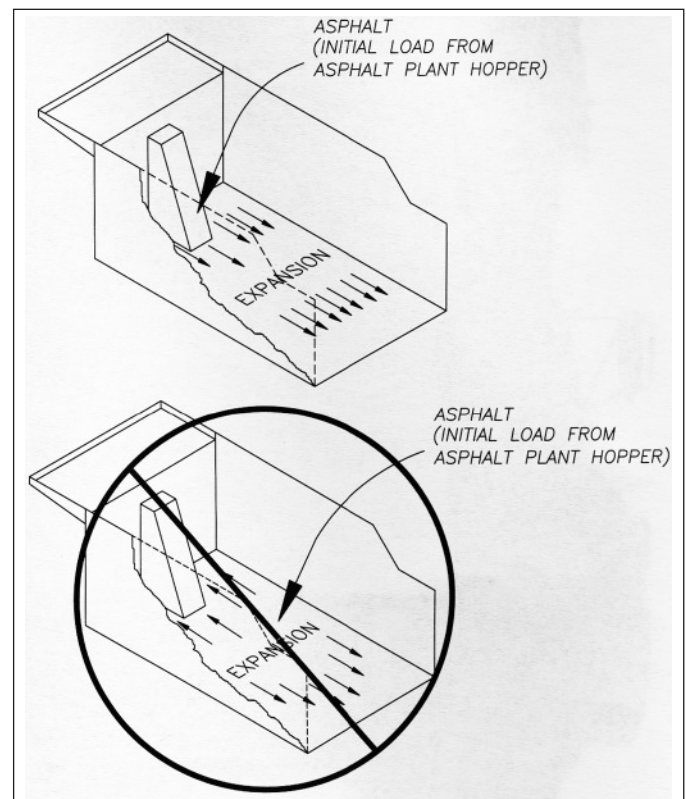
PREVENTATIVE MAINTENANCE

After proper installation of your *QuickSilver* liner, attention to these areas of preventive maintenance will help maintain performance and extend the life of your liner.

- **Liner Trapped under Leading Edge Protector**
If the liner is not allowed to expand freely, buckling can occur. Periodically check for and remove bends, dents or kinks in the leading edge protector. It's also important to remove bulk materials that may have become lodged between the protector and liner. These conditions could trap the liner, preventing movement needed for thermal expansion.
- **Material Trapped under Liner**
Material under the liner can cause accelerated wear and can cause holes in the liner. Fines can accumulate during unloading or tailgate closing. Check daily for fines under the liner and remove them.
- **Asphalt Emulsion Build-up on Liner**
Bulk materials can stick to emulsion build-up. Emulsion used as an asphalt binder can accumulate on the liner. Use a chemical release agent (check local regulations for proper usage), or rotate asphalt with abrasive loads to wear away the buildup.

- **Liner Buckling (see drawing below)**
Incorrect loading patterns of hot products can cause buckling and liner failure. Dropping the first load in the center can cause buckling of the liner towards the front. To reduce the risk, place the first dump in the very front of the body (on the doghouse). Subsequent loads should be front to back.

LINER FAILURES CAUSED FROM IMPROPER USE, MAINTENANCE OR INSTALLATION ARE NOT WARRANTIED.



PREPARATION

- Circular saw: carbide tipped, crosscut blade
 - Reciprocating saw, or saber saw and wood blades
 - 1/2 drive drill
 - 5/16 drill bit
 - 1/2 drill bit
 - 1 wood spade bit
 - Welding equipment: aluminum/steel
 - Scribe
 - China marker
 - Chalk line
 - Tape measure (length of dump body)
 - 5 straight edge
 - Builder's square
 - C-clamps or vise grips
 - Hammer
 - Sledge hammer
 - Wood blocks
 - Step ladder
 - Broom
 - Extension cords
 - Portable grinder or wire wheel
- Optional:**
- Hand router with 1/2 bit
 - Quadrant counterbore tool (Part No. 06010000133)
 - Caulk Gun and silicon or urethane caulk
 - Liner positioning device
- Note: When doing installation, use appropriate safety equipment**

PREPARATION

Complete the following preparations before installing the *QuickSilver* liner:

- Clean and dry the trailer bed thoroughly.
- Repair the dump body. Patch all holes and thin metal. Waves or dents can cause accelerated liner wear. Repair floor waves or dents greater than 1/2". Welding should not be done on body parts directly touching installed *QuickSilver*.
- Remove the tailgate and prop it safely away from the installation.
- Have the capability to raise the block and dump body for access to the underside.
- Uncoil and lay out *QuickSilver* sheet 24 hours before installation. Place the curl edge down so the sheet will flatten.



The preferred symbol on the following pages indicates the installation method that has brought the best results. *QuickSilver* liners are guaranteed as noted in the Warranty, if installation methods are those shown in this manual, and if users follow normal use and preventative maintenance practices.

INSTALLATION

STEP 1. Measure length of Body/Trailer, Measure length of liner.

STEP 2. Cut liner length 1/2" per 10' in 'cold loads', 1" per 10' in 'asphalt'.

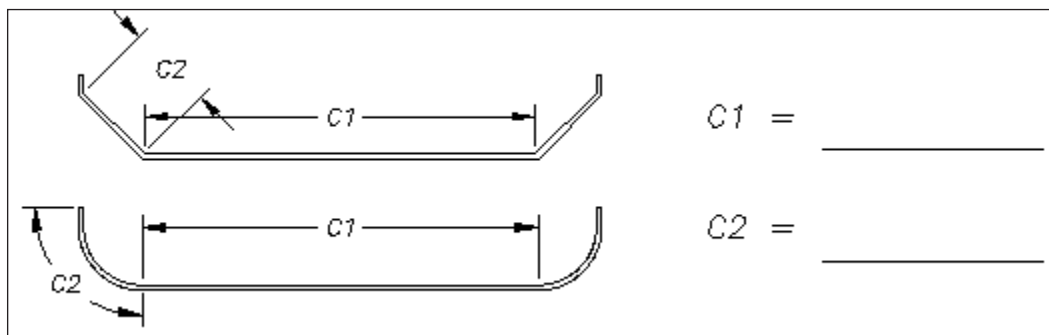
example: Body/Trailer length = 20', 'cold load' liner length = 19' 11",
'asphalt' liner length = 19' 10"

STEP 3. Cut out the Doghouse/Bulkhead from the liner.

- Helpful hint: Make a cardboard template for one side of the doghouse, flipping the template over should match the other side of the doghouse.
- Mark centerline of liner and Body/Trailer floor, both front and rear.
- Measure the length and width of doghouse, mark accordingly from the centerline mark on front of liner.
- Align your cardboard template (step 3a.) with the front edge of liner and doghouse markings (step 3c.) and draw your pattern to cut from.
- Cut your doghouse/bulkhead pattern with a circular saw.

STEP 4. Score the liner (3/8" and 1/2" thick liners only).

- Measure the distance between cleanouts, "C1".
- Measure the distance of the cleanout width, "C2".



INSTALLATION

c.) Mark your dimensions on the liner, front and rear, and snap a chalk line the length of the liner between dimensions.

d.) Set your circular saw depth to score at $\frac{2}{3}$ the thickness of the liner.

example: $\frac{3}{8}$ " liner = $\frac{1}{4}$ " deep score.

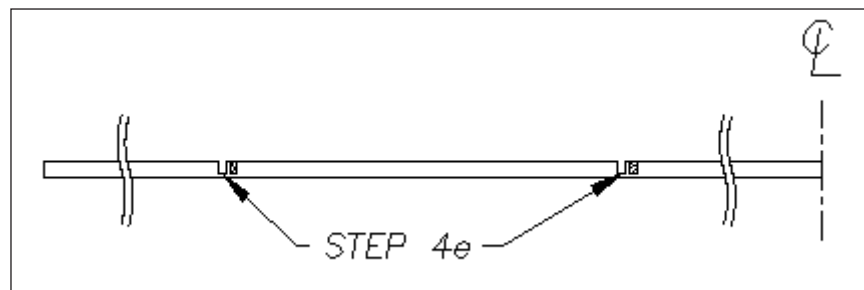
$\frac{1}{2}$ " liner = $\frac{5}{16}$ " deep score.

suggestion: Test your score depth on a scrap piece of liner from step 3e.

e.) Score the liner on the chalk lines made in step 4c.

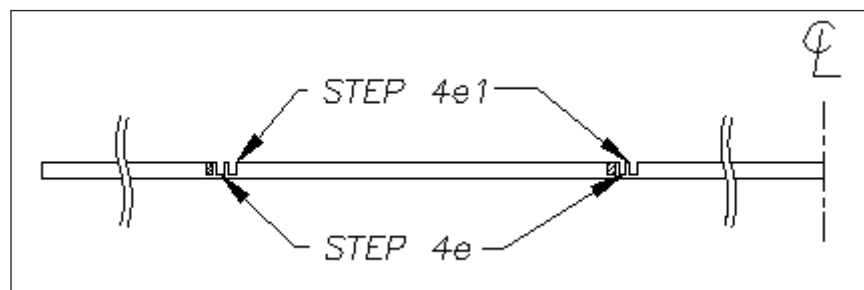
45 degree cleanout with $\frac{3}{8}$ " thick liner

1.) Make an additional score $\frac{1}{8}$ " from scores made in step 4e toward centerline of liner (see example)



45 degree cleanout with $\frac{1}{2}$ " thick liner

2.) Follow step 4e1 above, then add an additional score opposite of step 4e1 (see example)



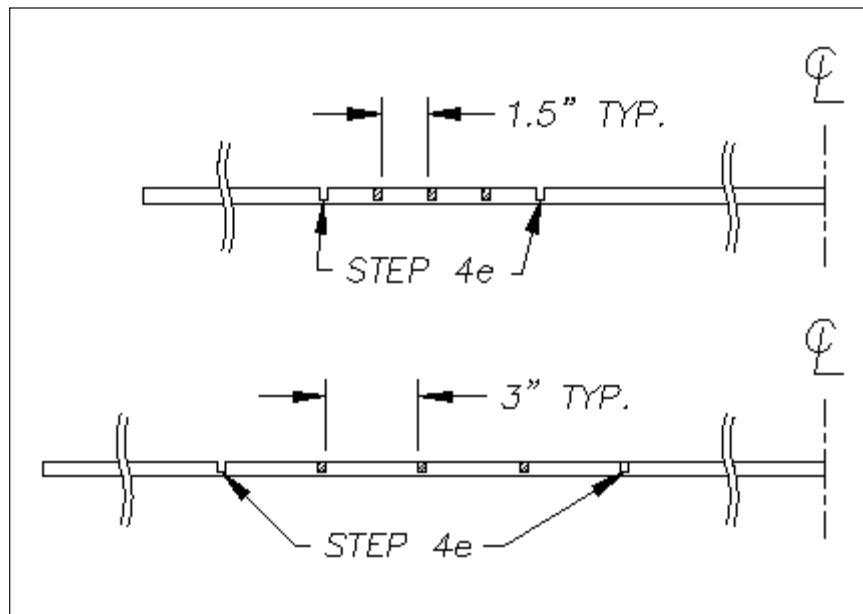
INSTALLATION

Radius Cleanouts w/3/8" thick liner

1.) Use the chart to properly space your scores

6" Radius = 1-1/2" space between scores

12" Radius = 3" space between scores



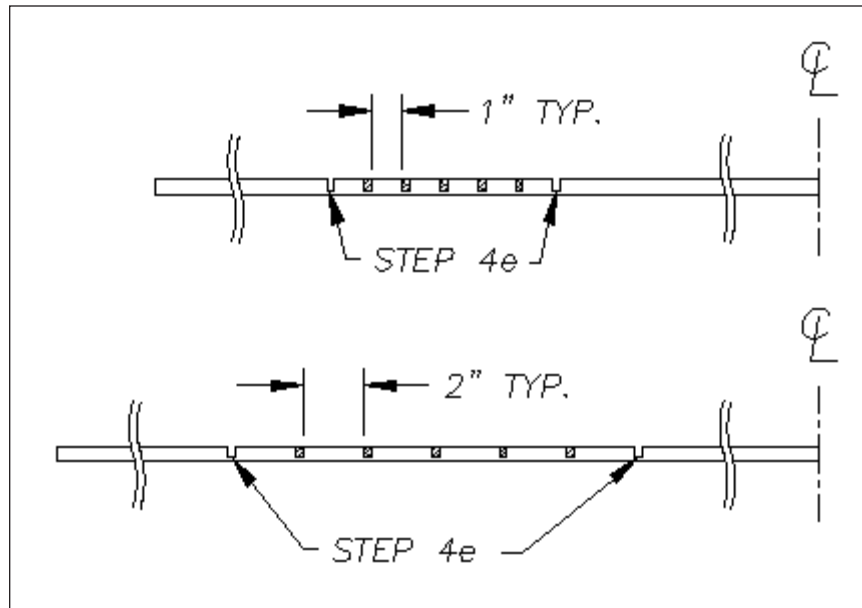
INSTALLATION

Radius Cleanouts w/1/2" thick liner

1.) Use the chart to properly space your scores.

6" Radius = 1-1/2" space between scores

12" Radius = 3" space between scores



90° degree corners (body/trailer w/no cleanout plates) 3/8" thick

1.) 4 scores, 1/8" apart, centered on 90° degree corner

90° degree corners (body/trailer w/no cleanout plates) 1/2" thick

1.) 5 scores, 1/8" apart, centered on 90° degree corner

INSTALLATION

STEP 5. Fold the Liner

(suggested tools: C-Clamps, Come-A-Long Ratchet)

- a.) Place 2 C-Clamps (1 on each side of liner) 5' – 6' from front of liners
- b.) Place 2 more C-Clamps (1 on each side of liner) 6' from C-Clamps placed in Step 5a.
- c.) Connect Come-A-Long/Ratchet Strap to C-Clamps in Step 5a and Draw tight the liner into a U-Shape
- d.) Repeat Step 5c on the C-Clamps placed in Step 5b.

STEP 6. Install the liner into the Body/Trailer

(suggested tools: forklift, overhead hoist/crane, loading dock, 4-6 strong men)

- a.) Remove, swing, or raise the tailgate in order to slide the liner in the body/trailer. It is **recommended** that removing the tailgate is safest if it is not hydraulically operated.
- b.) Slide the liner into the body/trailer with one or a combination of the above suggested tools.
- c.) Once your liner is completely inside the body/trailer, release and remove your Come-A-Long/Ratchet straps and C-Clamps used in Step 5.

STEP 7. Center and Secure the liner. (S6: Drill, 5/16" drill bit, 1/2" wrench, T-40 torx)

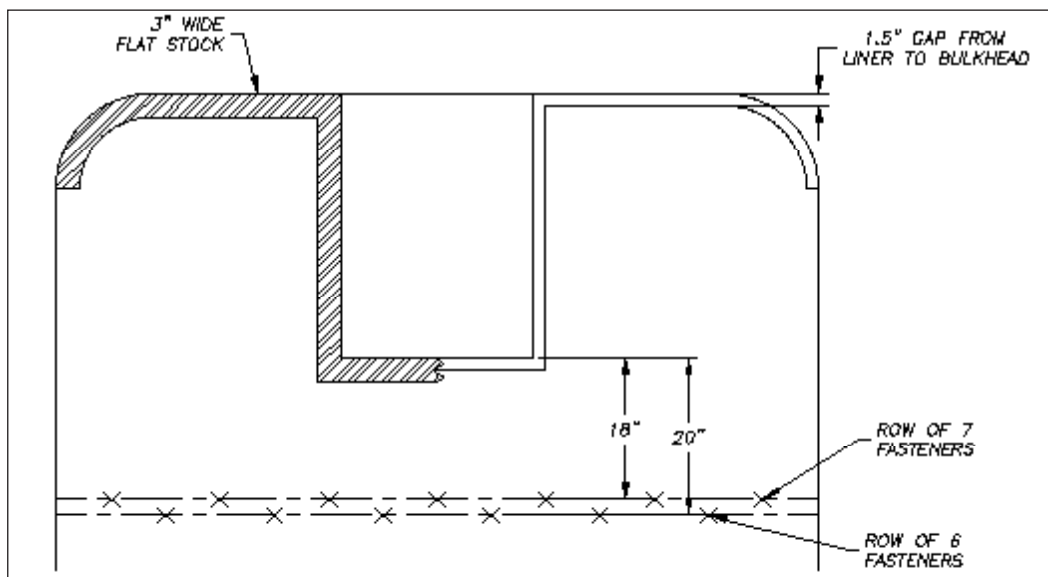
- a.) Center the liner with the body/trailer using the centerline marks made in Step 3b
- b.) Secure the liner to the floor at the rear of the body/trailer with a C-Clamp. If it is not possible to use a C-Clamp, run a self-tap screw through the liner to the floor. Note, if the self-tap screw method is used, it is important to remove the screw when installation of the liner is finished.

INSTALLATION

STEP 8. Bolt the Liner to the Floor.

Asphalt installation (use diagram Q1 to reference step a-h)

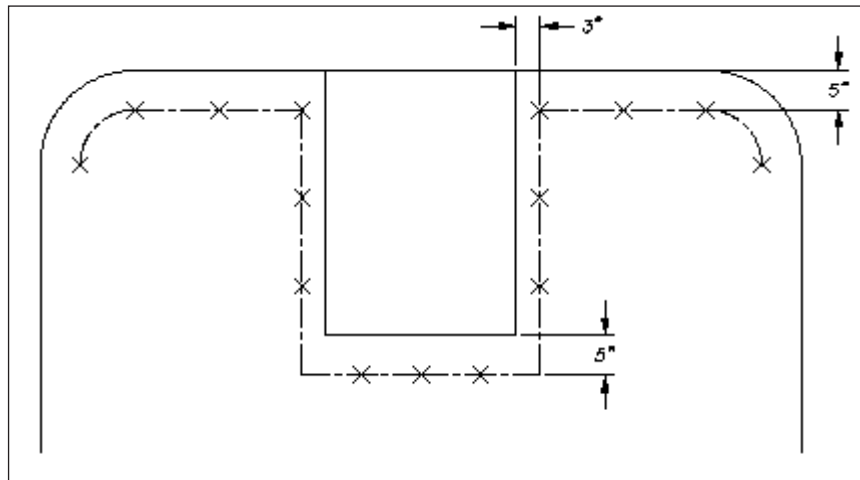
- a.) Space the front edge of the liner 1" from the bulkhead of the body/trailer. In this step you will need to cut an additional 1-1/2" off the rear of liner.
- b.) Using a tape measurer, Measure 18" from the rear of the doghouse toward the rear of the liner and make a mark. Measure an additional 2" from the 18" mark (20" from doghouse).
- c.) Draw a line across the liner (side to side) at the 18" and 20" marks.
- d.) On the 18" line, mark the center, mark each side 5" inward from the innermost score, then evenly space 2 marks on each side between center and side marks (total of 7 marks on 18" line).
- e.) On the 20" line, make marks evenly between marks made in Step 8d. (total of 6 marks on 20" line)
- f.) Drill 5/16" holes on all 13 marks made in Steps 8d & 8c
- g.) Nut & bolt tight holes made in Step 8f.
- h.) Weld 3" wide flat-stock around the bulkhead & doghouse on top of the liner.



INSTALLATION

Cold Load Installation (Use Diagram Q2 to Reference Steps a-h)

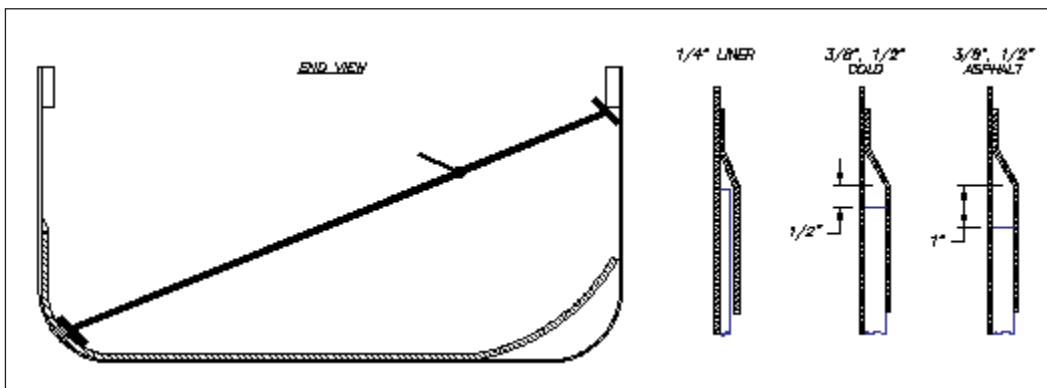
- a.) Make sure front edge of liner is as close to the bulkhead & doghouse as possible
- b.) Draw a line 5" from front edge of liner and behind doghouse behind.
- c.) Draw a line 3" from edge on each side of doghouse
- d.) Evenly space 3 marks on all 3 lines drawn in Step 8b
- e.) Evenly space 2 marks on both lines drawn in Step 8c
- f.) Drill 5/16" holes on all 13 marks made in Steps 8d & 8e
- g.) Nut & bolt tight holes made in Step 8f.
- h.) Weld 3" wide flat stock around the bulkhead & doghouse on top of the liner.



INSTALLATION

STEP 9. Install Leading Edge Protector

- a.) Compress the liner (one side at a time) (see fig. 1) to the floor using load jacks or Port-A-Power(s). The length of the B/T
- b.) Weld, bolt or glue the leading edge protector to the sidewall of the B/T. For proper placement use diagrams below. NOTE: It is recommended that if you bolt or weld only behind the exterior posts, to apply silicone between the sidewall and the leading edge protector
- c.) Repeat Steps 9a & 9b on opposite side of B/T.

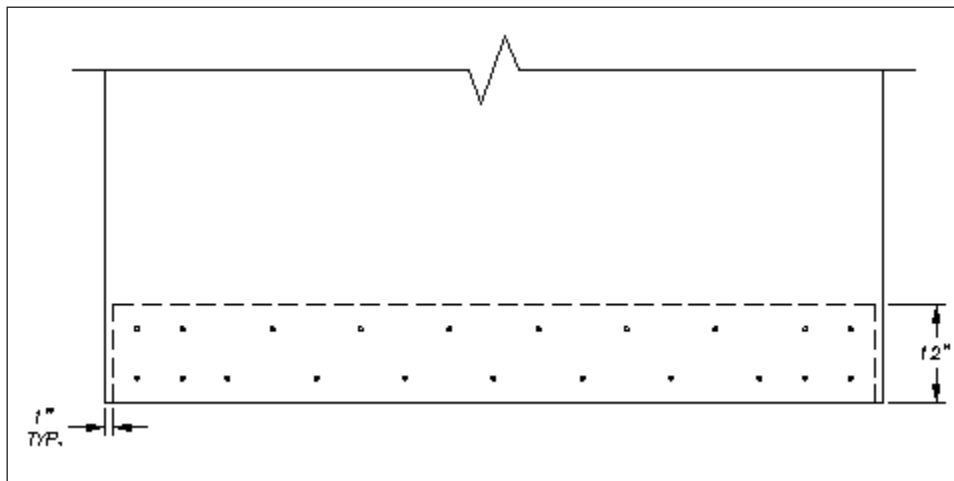


STEP 10. Remove self-tap screw (if used in Step 7b)

INSTALLATION

STEP 11. Installation of asphalt hold-down plate

- a.) Use 11-gauge steel sheet to construct the hold-down plate
- b.) The length of the plate should be 2-inches less than the floor width
- c.) The depth of the hold-down plate is always 12-inches
- d.) Use counter bore tool and weld washers to attach the hold-down plate to the bottom of the liner as illustrated below (all locations are approximate):



WARRANTY

3 Year Warranty - QuickSilver®

2 Year Warranty - DuraPro

Your *QuickSilver*® or DuraPro industrial dump body liner material is warranted to the original purchaser to be free from defects in material and workmanship, including the fusion weld seam, under normal use and service for a period as indicated on the following chart from the date of proper installation, or to within 1/8" remaining liner material, whichever comes first.

Months	1/4"	3/8"	1/2"	Liner
1-12	100%	100%	100%	DuraPro, <i>QuickSilver</i> ®
13-24	-	100%	100%	DuraPro, <i>QuickSilver</i> ®
25-36	-	-	100%	<i>QuickSilver</i> ® only

This warranty does not apply to the design or workmanship of the installation or application performance.

The warranty is expressly limited to the replacement or repair of *QuickSilver*® and DuraPro products at an authorized dealer location, or such other place as Quadrant Engineering Plastic Products may designate. All *QuickSilver*® /DuraPro liners or parts of *QuickSilver*® / DuraPro liners returned to Quadrant Engineering Plastic Products, or to a location designated by Quadrant Engineering Plastic Products for factory inspection of possible defects in workmanship or material, shall be sent with all transportation charges prepaid.

This warranty does not apply to any *QuickSilver*® / DuraPro liner material of Quadrant Engineering Plastic Products which has been repaired or altered outside of Quadrant Engineering Plastic Products or which has been installed or used other than in accordance with the printed instructions for *QuickSilver*® / DuraPro liners from Quadrant Engineering Plastic Products. **NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.**

This warranty does not obligate Quadrant Engineering Plastic Products to bear the cost of labor in replacing defective parts. No other obligation is assumed or authorized to be assumed with respect to other products of Quadrant Engineering Plastic Products other than herein set forth.

OTHER THAN STATED ABOVE, QUADRANT ENGINEERING PLASTIC PRODUCTS, DOES NOT ASSUME ANY OTHER LIABILITY, INCLUDING BUT NOT LIMITED TO, LIABILITY FOR SECONDARY CHARGES, EXPENSES FOR INSTALLATION OR REMOVAL, OR ANY OTHER CONSEQUENTIAL LOSSES OR DAMAGES.

QUADRANT ENGINEERING PLASTIC PRODUCTS, MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE.

***QuickSilver*® / DuraPro Linings from Quadrant Engineering Plastic Products**

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