Protective Linings for Industrial Applications 2600 Neville Road, Pittsburgh, PA 15225 Phone: 412-771-3300 Fax: 412-771-3323 www.linersystems.com





RE-PRO & E-Z DUMP BODY LINERS

INSTALLATION MANUAL & WARRANTY MANUAL WITH CARE & MAINTENANCE GUIDE

Please read WARRANTY before installing liner. Please read ENTIRE manual BEFORE installing liner.

CONTINUOUS LENGTH DUMP BODY LINERS FOR USE WITH:

RE-PRO Heavy Duty Rock Liners (8, 10, 12 ft) E-Z Medium Duty Economy Liners (8, 10, 12 ft)

MOUNTING TYPE:

Front Float Mount

WARRANTY VOIDED if liner installed with grooves facing down.

NO WARRANTY on E-Z Liner Material.

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WARRANTY

RE-PRO Dump Body Liner material is warranted at the time of original purchase to be free from defects in material and workmanship. This Warranty becomes effective from the time the customer takes possession of said Liner. Warranty includes fused seams if utilized under normal use and service for up to four years, or to within 1/8" of the original thickness, whichever comes first.

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

The Warranty applies only to the replacement or repair of RE-PRO Liner Sheets at an authorized location designated by American Made Liner Systems. The customer shall prepay any shipping charges involved in getting Liners in whole or in part back to a designated location.

This Warranty does not cover any RE-PRO Liner material that has been repaired or altered by other than American Made Liner Systems' employees, or which has been installed or used other than as outlined in American Made's published Installation Instructions.

THIS WARRANTY CANNOT BE CHANGED OR ALTERED BY AN EMPLOYEE OR REPRESENTATIVE OF AMLS, NOR CAN OTHER WARRANTIES BE GRANTED.

AMLS is not bound by any Warranty to incur labor costs in repairing or replacing Liner Sheets.

OTHER THAN STATED, AMERICAN MADE LINER SYSTEMS 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.

AMERICAN MADE LINER SYSTEMS MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OR MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE.

WARRANTY CONDITIONS:

- (1) Liner must be installed in accordance with American Made Liner Systems' Installation Instructions.
- (2) Propane heaters, heated bodies or other flame throwing devices may not be activated in units equipped with Liners.

Liner failures caused from improper installation, use, or maintenance are not covered under this Warranty.

WARRANTY COVERAGE CHART		PERCENT COVERED BY WARRANTY		
LINER MATERIAL	MONTHS	1/2"	3/8"	1/4"
RE-PRO	1-12	100%	100%	100%
RE-PRO	13-36	100%	100%	
RE-PRO	37-48	100%	100%	
E-Z LINER	NO WAI	NO WARRANTY ON E-Z LINER MATERIAL		

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CARE & MAINTENANCE:

To ensure a successful installation, you will need to carefully follow the installation instructions. To help keep your Re-Pro or E-Z Liner performing properly, here are some key preventative maintenance steps you must follow. If you have any questions or comments about your lining systems before, during, or after installation, please call us at 412-771-3300.

Coverstrips:

Properly installed coverstrips at the outer edges of your liner leave enough room for it to expand and contract freely under the strips. Improper installation of coverstrips can result in the liner popping out from under the strips because too much room was left for expansion. Not enough room will cause the liner to jam under the coverstrips, possibly resulting in the liner kinking, etc. Any such situation needs to be corrected immediately. Remove any bulk materials that may get lodged up under the coverstrips. This will keep the area free for the thermal expansion and contraction needed by the liner. Periodically check for and remove bends, dents, or kinks in the coverstrips.

Material Under the Liner:

Your liner will be attached only at the front, and not all the way down. This may allow material to get underneath the liner, so be sure to clean out rear section on a regular basis to reduce premature wear and cross contamination. Material under the liner will cause accelerated wear and can cause holes in the liner. Check regularly.

Wall Kits:

If you did not install a wall kit with your liner, you may continue to experience some load sticking due to exposed metal surfaces. Wall liners can be installed at any time after initial installation if this occurs.

Summer Use:

During warm weather, polymer liners will expand, and some lifting will take place. This is normal, and will not affect the performance of the liner.

Winter Use:

If your liner is installed during cold weather, you may occasionally have to use a stick release agent (such as release foam, calcium chloride, etc.) during the "wear in" period of the liner. After the first few weeks, the liner will become "slicker" and provide the characteristic stick release for many hauling applications.

Hauling Limits:

These liners are NOT designed to handle hot asphalt. Doing so will cause performance problems and invalidate the warranty.

Re-Pro Limits:

Any loads over 180°F Sharp Scrap Metals

E-Z Limits:

Rock or Stones Any loads over 120°F Applications requiring daily abrasive hauls

Repair of Liner:

Due to the unique characteristics of our liners, repairs can be made in the event of damage or wear. Survey and measure the area you wish to repair, then give us a call.

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INTRODUCTION:

Installation of a Re-Pro or E-Z continuous length bedliner is easy when following the step-by-step instructions in this manual. However, some important precautions must be taken to ensure a smooth installation. Read this manual thoroughly before starting the installation process. AMLS is not responsible for improperly installed liner systems. IF CROSS CONTAMINATION IS AN ISSUE...PLEASE CALL IMMEDIATELY BEFORE INSTALLING YOUR LINER.

CHECK AND PREPARE DUMP BODY: Condition of dump body: The body should be structurally sound. If the bed is used and has deep valleys or dents between the ribs (3/4" or greater), they should be pounded up or patched...please call your customer service representative if you have any questions. Any holes and rips in the bed should also be patched.

<u>CLEAN OUT THE BODY:</u> The body should be clean (swept out or high pressure washed) prior to installation. Any unusual attachments to the floor, doghouse, or wall, such as shovel holders, vibrators, etc., should be removed or ground down as needed.

<u>ALUMINUM BEDS:</u> No special preparation is needed beyond meeting the bed condition criteria described above, unless corrosive materials are hauled. Then follow steps for steel.

STEEL BEDS: Steel bodies should be coated with rust preventative paint or tar based undercoating before liner installation to prevent rusting.

PREPARE FOR INSTALLATION:

Check Your Liner Kit. Your kit will include the following:

- (1) Roll of Material
- (1) Box of Fasteners
- (1) Package of Metal Edge Protectors Aluminum or Steel (8ft sections)
- (2) Flat Stocks Aluminum or Steel

IMPORTANT: The metal edge protectors (coverstrips) are packaged separately from the pallet containing the liner roll. Always check liner contents when delivered. If any contents are missing, notify the carrier immediately.

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Unroll the Liner: The liner should be unrolled for at least 8 hours prior to installation. Put weights on the ends to hold flat. Every effort should be made to do the installation in a heated garage. **Temperature should be at least 75°F.** The warmer the liner material, the easier the installation will be.

Manpower: Installation is usually a two-man job, although a third person is helpful.

Get Tools Ready. You will need the following tools:

- (1) Electric Circular Saw (Skillsaw) with a carbide or steel blade
- (1 or 2) Electric Drills 3/8" or larger and drill bits
- (1) Jig Saw or Sawzall
- (1) Caulk Gun
- (3-6) Cargo Jacks/Load Locks
- (1) Chalk Line

- (1) Large Hammer
- (1) Tape Measure
- (1) Razor Knife
- (1) Piece of Cardboard (approx. 2'x3')
- (1) 2 ft Carpenter Square
- (1) Pair Safety Glasses
- (1) Silicone Sealant

ALWAYS WEAR SAFETY GLASSES AND TAKE PROPER PRECAUTIONS WHEN USING TOOLS DURING INSTALLATION

HEAT! HEAT! HEAT! HEAT! HEAT!

Have a Heated Garage: For installations during the winter, it is **VERY IMPORTANT** to have a heated garage (75°F or higher) or area to work in. If you have to work outdoors, we recommend tarping over the dump, and using a torpedo heater or a blow heater to keep the liner warm during installation, otherwise the liner will bubble more during the summer months.

You're ready to start. With the necessary tools and materials at hand, you are ready to start. For simplicity, the example used in this installation guide is of a 16 ft liner kit.

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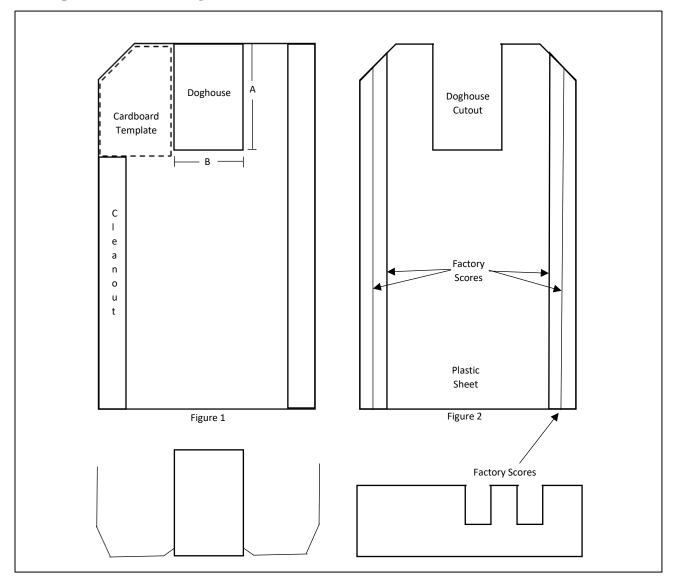


LAYOUT DUMPBED AND CUT OUT FOR DOGHOUSE

TOOLS NEEDED: Tape Measure, Razor Knife, Circular Saw, White Marker, Chalk Line, Carboard

- 1. Measure the depth of the doghouse for dimension A. Measure the width of the doghouse for dimension B as shown in Figure 1.
- 2. Make a template for the nose (if required) by squaring a piece of cardboard to the front of the body and doghouse. Force the cardboard to conform to any curvature in the front of the body. Use a razor knife to cut along the crease just made.
- 3. Using the dimensions A & B from the doghouse, find center of sheet and cut out as shown in Figure 2. Cut opening about ½" to ½" larger on each side to allow from some expansion of material.
- 4. Using the cardboard template, place along "A" of sheet. Cut any curvature in plastic as needed.

REMEMBER: Don't cut sheet to length at this time – the sheet should be longer than the body. The factory scores should be facing upward and line up with the cleanouts, unless you have a cross contamination issue, in which case you should contact your dealer or AMLS before installing. The ideal temperature is 75-80 degrees or warmer.



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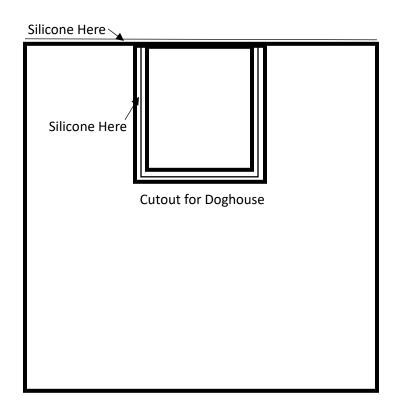




LAY IN LINER SHEET & CUTOUT FOR DOGHOUSE

TOOLS NEEDED: Silicone, Caulk Gun, Chalk Line, White Marker, Tape Measure

- 1. Lift sheet into dump bed as shown below. It should be cut to allow about ¼" around the perimeter of the doghouse. **This will be the time to trim the sheet if necessary.** Once sheet fits, pull it back if needed and complete Figure # 2.
- 2. After any adjustments are made, clean the area around the front of body and lay a bead of silicone around the doghouse and perimeter of front of body. You may use two smaller beads of silicone instead of one heavy one. **Do Not Silicone the rear of Liner Sheet.**
- 3. Refer to figure on the next page for fastening layout. Mark the sheet for the fasteners with a marker. Call your AMLS representative if you have any questions regarding this step.



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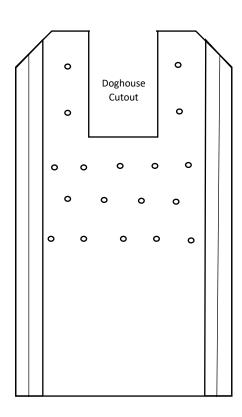
FASTENER LAYOUT – "FLOATING FRONT MOUNT SYSTEM"

TOOLS NEEDED: 3/8" Drill, Impact Wrench, Markers, Screws, Tape Measure

This system works well when installing in cold weather situations. It is also beneficial if very fine materials are being hauled. Because fasteners are holding the Liner at the front of the dump body, it allows the sheet to remain relatively flat during temperature fluctuations. When installing with this method, you can always add fasteners at a later date. With this method, you may notice a slight "winging" of material at the back end due to the lack of fasteners, as well as possible shifting of rear portion of Liner which may cause some warping. In addition, material can also gather under the rear section, causing the need to clean out regularly. This system is not recommended for hauling very heavy materials.

Trailer Length	Cutback Liner from Tailgate	Staggered Rows of Fasteners in Front of Doghouse
Up to 20'	3"	1-2
21' – 34'	4"	3-4
35' – 40'	4-1/2"	5-6

The above chart is to be used as a reference. Install temperature, Liner thickness, etc. call all have an effect on expansion.



Install Fasteners Around Doghouse. If Doghouse is over 2' long, install 2 Fasteners on each side. If Doghouse is under 2' long, install 1 Fastener on each side.

Measure down 12-18" below Doghouse. (Check to make sure you do not hit a rib.) Install 5 fasteners, evenly spaced across the liner.

Measure 12-18" below first full row of fasteners. (Check to make sure you do not hit a rib.) Install 4 Fasteners, evenly spaced across the liner.

Measure 12-18" below second full row of fasteners. (Check to make sure you do not hit a rib.) Install 5
Fasteners, evenly spaced across the liner.

- 1. Install staggered rows of fasteners, per chart above, toward rear of body. Fasteners should be placed no more than 2-8 ft in front of Doghouse.
- 2. Install 1-2 rows of fasteners along the side of the Doghouse as shown.

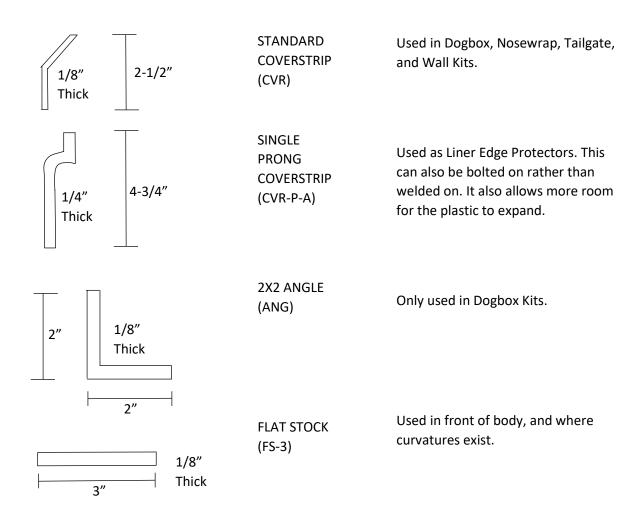
IMPORTANT: Cut the end of the liner at the tailgate shorter than the body per the chart shown above prior to fastening the sheet down.

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METAL EDGE PROTECTOR GUIDE



Metal Edge Protectors are a key component in the long-term success of the Liner System. They help eliminate material infiltration around the Liner. If you are attempting to install yourself and do not have the welding capabilities, it is recommended to take your dump truck or trailer to a local weld shop and have the Metal Edge Protectors installed as shown on the following page.

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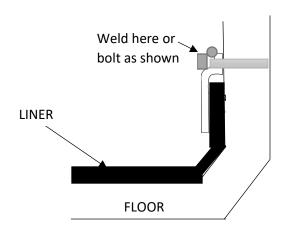




INSTALL METAL EDGE PROTECTORS

INSTALL COVERSTRIPS TO WALL:

- 1. NOTE: IT IS VERY IMPORTANT TO HOLD THE PLASTIC FLAT INTO THE CLEANOUT AREA AND ALONG THE WALL AND FLOOR WHILE WELDING OR BOLTING THE COVERSTRIPS SUPPLIED WITH THE LINER.
- 2. Measure 3-1/2" from the top of the liner at front and rear and chalk a line. This line is where the coverstrip is welded or bolted on.
- 3. Start at rear of body. Have someone hold the coverstrip in place while you "tack" in place.
- 4. Butt 8 ft sections together and continue toward front.
- 5. Once tacking is complete, either stitch weld or continuous weld the entire length.
- 6. NOTE: If you are installing a wall kit, you do not need to continuous weld...a stitch weld will be sufficient.
- 7. See diagram below for installation of coverstrips.



INSTALL FLAT STOCK AROUND DOGBOX

1. Install flat stock around dogbox as shown in image below.

