## **American Made Systems, Inc.**



Protective Linings for Industrial Applications



The *hottest*thing in asphalt
today...

# INSTALLATION INSTRUCTIONS

Please read Warranty before installing liner.

Please read ENTIRE manual BEFORE installation.

# **INTRODUCTION**

Installation of ARMOR GREY HT High Temperature Liner System is easy when following the step-by-step instructions in this Manual. However, it is very important that the installation techniques are followed specifically. Read this Manual thoroughly before starting job. American Made Liner Systems is not responsible for improperly installed Liner Systems.

**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 (1" or greater), they should be pounded up or patched...please call your Service Representative if you have any questions. Any holes and rips in the bed should also be patched. Wavy floors will diminish the effectiveness of Liner Systems and may cause premature wear.

**Clean Out Body**: 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.

### PREPARE FOR INSTALLATION

Check the 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 (8 ft Sections)
- (1) Install Instructions and Customer Care Packet

IMPORTANT: The Metal Edge Protectors are packaged separately from the Liner roll. Always check Liner contents prior to install date. If any contents are missing, call carrier as soon as possible.

**Unroll The Liner**: The Liner should be unrolled for at least 2-3 hours prior to installation. Put weights on the ends if needed. Every effort should be made to do this in a heated garage. **Temperature should be at least 75 degrees F.** 

**Note**: The warmer the liner material, the easier the installation will be.

Manpower: Installation is usually a two-man job, though a third person would be helpful.

## **GET TOOLS READY**

You will need the following tools: (Note: Always use safety glasses)

(1) Electric Circular Saw with a Carbide or good steel blade

(1)  $3/8" - \frac{1}{2}$ " Electric Drill/s

(\*) Porta Power (Optional)

(1) Jig Saw or Sawsall

(1) Caulk Gun

(3-6) Cargo Jacks/Load Locks

(1) 1" Hole Saw

(1) Chalk Line

(1) Large Hammer

(1) Tape Measure

(1) Razor Knife

(1) Piece of Cardboard

(1) 2 Ft. Carpenter Square

(1) Pair Safety Glasses

(1) Tube of Silicone Sealant

Heated Garage: **VERY IMPORTANT**: For installation during the winter, it is *necessary* to have a heated garage or work area to work in. We recommend tarping over the dump and using a torpedo or blow heater prior to bolt down to keep the Liner warm. EXCESSIVE BUBBLING CAN OCCUR IF LINER IS INSTALLED WHILE TOO COLD.

What You Need To Begin: With the necessary tools and material at hand, you are ready to start. For simplicity, the example used in the installation is a 20 foot ARMOR GREY HT Liner Kit.

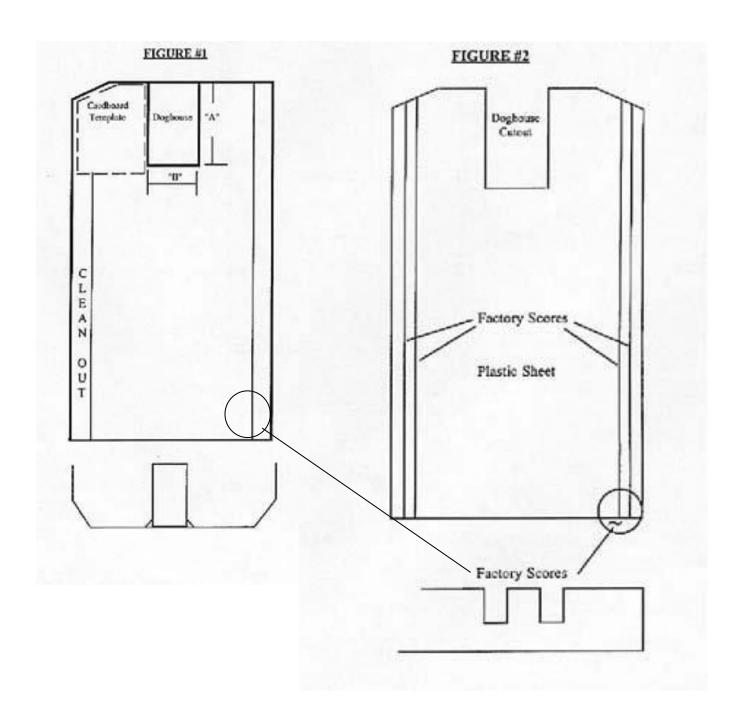
#### **MEASURE DUMP BED & CUT OUT FOR DOGHOUSE TOOLS NEEDED:**

Tools Needed: Tape Measure, Razor Knife, Circular Saw, White Marker, Chalk Line

- (1) Measure the depth of the doghouse for dimension A. Measure the width of doghouse 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 the 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 ARMOR GREY HT sheet and cut out as shown in figure 2.
- (4) Using the cardboard template, place along "A" of sheet. Cut any curvature in plastic as needed.

**IMPORTANT:** Cut the ARMOR GREY HT sheet approximately 1/2" – 3/4"bigger than dogbox to allow for expansion of material. The Factory Scores should be facing upward and line up with cleanouts.

Best installation temperature is 75-85 degrees or warmer.



## **FASTENER LAYOUT**

Tools Needed: 1/2" Drill, Markers, Screws, Tape Measure

#### ARMOR GREY HT MOUNTING SYSTEM

The Front Float Mount System is the only way in which ARMOR GREY HT can be installed. This is due to the expansion of the sheet while hot materials are loaded. The chart below assumes a temperature of 75 degrees Fahrenheit and indicates the distance the liner needs to be trimmed.

**NOTE**: If Steel Hold Down Plate is attached at tailend of liner, cut excess material off front of liner per chart below.

Trailer Length	Cutback Liner At Front	No. of Bolts Around Doghouse
Up to 24 ft	3"	4
25ft - 34 ft	3" – 4"	6
35ft - 40 ft	4" – 5"	8

#### **FASTENER INSTALLATION**

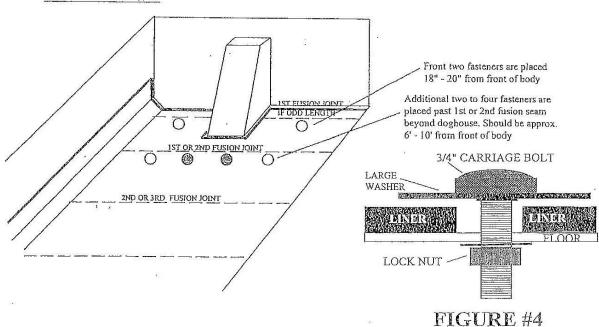
TOOLS NEEDED: 1/2" Drill, Hole Saws, Markers, Wrenches, Tape Measure

#### ARMOR GREY HT MOUNTING SYSTEM

Note: Before making any marks in liner, be sure you are not going to hit a crossmember or beam underneath when drilling holes.

Mark approximate hole pattern as shown in Fig. 3, and use 1" hole saw (provided with kit) to drill through Liner and body. Insert Fasteners as shown in Figure 4. BE SURE SECOND TWO FASTENERS COVER PAST 1<sup>ST</sup> OR 2<sup>ND</sup> FUSION JOINT (Figure 3). FAILURE TO DO SO WILL CAUSE LONGER LINERS TO TWIST OR KINK, **WHICH WILL VOID WARRANTY**.

# FIGURE #3



#### **NOTE: TAIL SECTION WINGING:**

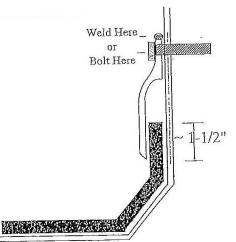
Liner will have a Steel Hold Down Plate attached to tailend to reduce winging.



#### **INSTALLING METAL EDGE PROTECTORS**

Installing Metal Edge Protectors (Cover Strips) on the side wall to allow the proper expansion of ARMOR GREY HT is very important. If enough room is not provided under the Cover Strips, the Liner will hit the top rail and develop a buckle in the center of the sheet. To avoid this, place the Cover Strips approximately 1- 1/2" over the Liner.

NOTE: BE SURE LINER IS COMPLETELY FLAT AGAINST FLOOR AND CLEANOUT OTHERWISE LINER MAY POP OUT FROM UNDER THE COVER STRIPS.



Start at rear of body. Have someone hold Cover Strip while you "tack" in place. Butt 8ft sections together and continue toward front. Once tacking is complete, then either continuous weld or stitch weld the entire length.

You will be provided Flat Stock to weld around perimeter as shown below.

