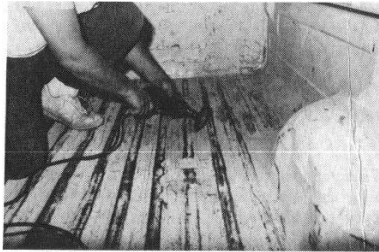


# Lava-Liner

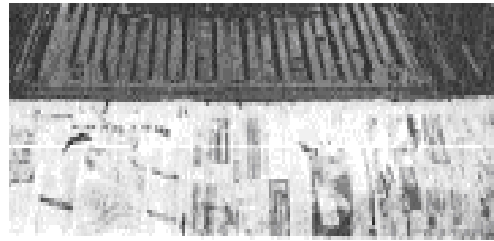
## Instructions for Application



### SURFACE PREPARATION

#### Cleaning the Surface

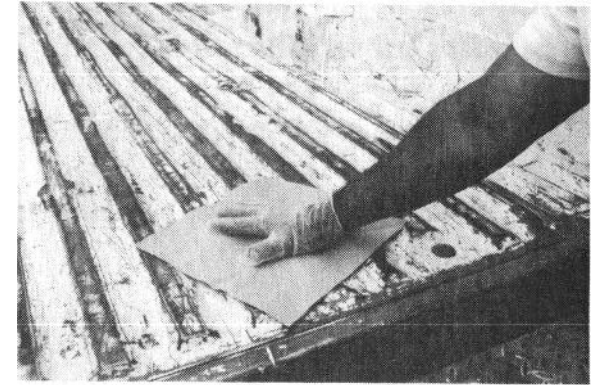
1. All surfaces to be coated with Lava-Liner are to be clean and free from wax, dirt, grease, loose paint or rust.
2. Prepare each surface by lightly abrading the area to be coated with a wire brush, sand blasting or sandpaper to insure a solid substrate.
3. Clean the surface by blowing off the area or by sweeping clean and then wiping with a rag to remove dust and fine particles. It is important to always wear protective eye wear when cleaning the surface and while applying Lava-Liner. (Hint - Solvent, mineral spirits or alcohol should be used to wipe down the surface and obtain a clean surface.)
4. Allow the cleaned surface to dry completely so that there is no moisture or water present on the surface to be coated. This is especially important near joints and edges where two metal surfaces come together and are not completely welded or sealed.
5. ALL SURFACES TO BE COATED MUST BE CLEAN AND DRY



### SURFACE PREPARATION

#### Taping and Protecting Areas

1. All surfaces that are not to be coated with Lava-Liner must first be protected by covering them with tape, paper or other protective measures.
2. Lava-Liner is extremely hard to remove once cured and care must be taken in order to prevent over brushing, spraying or to avoid roller splash-back during application.
3. To remove Excess Lava-Liner while it is still soft or liquid from areas that are not intended to be coated, see "Clean-Up" at the end of these instructions.
4. Taping areas which are not intended to be protected with Lava-Liner should be covered with masking tape or the area can be protected using a wax or silicon release agent.
5. Solvent or mineral spirits can be used to cleanup spills or over-applications.

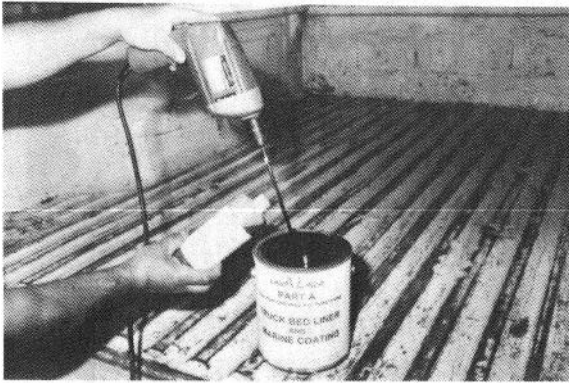


### SURFACE PREPARATION

#### Wipe Down and/or Blow Off

1. Surfaces which have been prepared by Sanding, abrading or wire brushing should be wiped down with a cloth to remove any residual dust or loose material.
2. The use of clean mineral spirits (Naphtha) or solvent should be made to assist in the removal of all particulates that may remain on the surface to be coated as well as used to remove any grease, wax or oil. Wear appropriate protective clothing when handling solvents or mineral spirits.
3. A compressor may be used to blow away or a vacuum may be used to accumulate and remove any particulate material remaining after surface preparation is completed. Be sure to wear protective clothing and chemical goggles when blowing matter into the air.

## Instructions for Application (Cont.)



### MIXING

#### Preparing Lava-Liner for Application

1. Keep Lava-Liner cool and dry prior to application.
2. Lava-Liner is a two-component polyurethane. Your Lava-Liner sample kit contains two containers. Part "A" is contained in the metal can (500 g). Part "B," the activator, is contained in the HDPE plastic bottle. Lava-Liner comes in one and five gallon kits. Mixing of one gallon kits is illustrated in these instructions.
3. The metal can with the Part "A" has not been filled to the top in order to accommodate the addition of Part "B"
4. Pour the contents of the Part B bottle into the can containing the Part A component.
5. The Part B will settle to the bottom and must be mixed in a manner that will cause it to thoroughly blend throughout the mixture using a slow speed drill. (Approximately 500 RPM)
6. Mechanically mix both components thoroughly by using a slow speed drill and the

paint mixing bit in the can for at least 3 minutes and no more than 5 minutes.

7. CAUTION. After mixing, the pot life is only 20 minutes. Lava-Liner must be applied immediately after mixing. High heat or humidity can cause Lava-Liner to set up more quickly.

8. Lava-Liner is pre-proportioned. The addition of additional Part B will not increase the set up time of the material. The failure to use all the Part B will result in an incomplete cure of the urethane pre-polymer.

9. Do not allow moisture to be entrained in the system. Part B will react with moisture and will form bubbles in the urethane and cured material will be similar to polyurethane foam.

#### Application Tips and Recommended Equipment



### APPLICATION BRUSH OR ROLLER

1. In order to obtain adequate protection and coverage on vertical surfaces, two coats should be applied before coating the horizontal surfaces. Vertical surfaces should be coated first with approximately 25 thousands (.0025)

of an inch per coat. The first coat should be allowed to set for approximately 1 hour or until tacky and will not run with an additional coat.

2. If using a roller, use a very short nap and avoid back rolling to prevent entrapment of air and causing bubbles to form in the material.
3. Before application, use hand cream and latex gloves to protect hands against exposure. Although not toxic, Lava-Liner will stain and is very hard to remove once it has cured.
4. To remove from skin, use mineral spirits or a non toxic hand cleaner that will dissolve hydrocarbon oils. Also, WD40 will work well.
5. Do not attempt to hand mix the material. Use a mechanical drill and mixing propeller to cause complete blending. Hand mixing causes entrapment of air and will not provide a smooth surface.

### PREPARING SAMPLES

1. To prepare samples, use a picture frame with glass or plastic. Coat the plastic or glass with automotive wax and allow to dry. Do not remove the wax.
2. Mix the Lava-Liner and pour evenly over the surface and roll the material out or tilt the picture frame so that the Lava-Liner rolls over the surface in a even coat.
3. Place the frame on a level surface to cure. The product should cure over night and be kept in an area that does not have high heat or direct

exposure to sun and is out of the wind or where it may be wet.

4. The cured product (Approximately 8 hours) will form a rubber like coat and can be cut with a razor knife into strips.

5. All urethanes take approximately 30 days to cure fully but are 99% cured within a couple of days. Adhesion continues to strengthen for about 30 days.

6. Adhesion is increased by using Lava-Liner Adhesion Promoter as a flash primer. This is a flammable liquid so was not sent via Air Express. You will be able to get the necessary materials for this locally with the exception of the proprietary additive which we will provide.