

Fabrication Instructions For Installation Of Fig. 13 Pipe Saddles 1" - 12" Sizes

INTRODUCTION:

These Fabrication Instructions illustrate the procedures that will enable you to bond a 1" – 12" size Figure 13 Pipe Saddle to a Smith Fibercast Pipe. These instructions must be used along with the instructions contained in the Smith Fibercast Weldfast Kit you will be using. Use the following sections included in the Weldfast Kit Instructions:

- Safety Precautions
- Contents of Weldfast Kits
- Storage of Weldfast Kits
- Bonding Environments
- Cold Weather Installation
- Hot Weather Installation
- Site Equipment
- Number of Bonds per Kit
- Tools for Cutting Pipe
- Mixing Weldfast Adhesive
- Applying Weldfast Adhesive
- Joint Cure
- Weldfast Cure Times Chart
- Hydrostatic Testing
- Compressed Air / Gas Testing

SURFACE PREPARATION AND CUTTING SMITH FIBERCAST PIPE:

Prepare the saddle and pipe for bonding. Mark the area to be sanded on the pipe. This can

be done by pushing the saddle firmly against the pipe and marking an area on the pipe about ½" larger all around than the footprint of the saddle.



Using 40-60 grit sanding media in the form of a drum or disc, sand the pipe until the resin-rich glaze is removed. (The bonding surface should have a dull finish with no shiny spots) over the area you have just marked, being careful not to sand too deeply or gouge the pipe surface. Also sand the underside of the saddle.



If a socket saddle is being installed, locate the center of the desired hole in the pipe and drill the proper size hole using a carbide edged hole-saw with a pilot drill. For large sizes, mark the hole location, drill a pilot hole, and finish the larger hole with a sabre type saw driving a grit-edged carborundum, carbide, or diamond blade, or cut it out with a drum sander. Do not use a toothed blade, or force the tool through the pipe wall, as damage to the corrosion barrier may result. Let the tool cut at it's own speed.



If a threaded saddle is being installed, bond the saddle to the pipe as described below prior to drilling the hole in the pipe. Screw a metal pipe nipple into the threaded saddle finger tight prior to carefully drilling the hole in the pipe using the proper size and type drill bit. Again let the tool cut at its natural rate to avoid damage to the corrosion barrier of the pipe. This method

will ensure that the smaller holes will not become clogged with adhesive, which might squeeze out from under the saddle, and the threads will not be damaged during the drilling operation.

Saddle Installation Instructions

HOLE SIZES

The following hole sizes are recommended based on the branch size desired

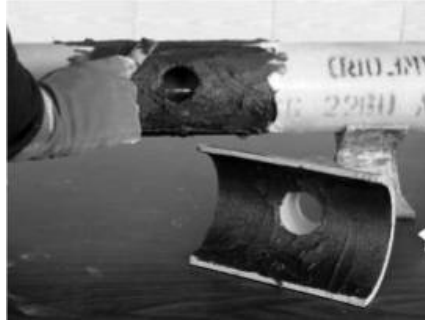
<u>Branch size</u>	<u>Recommended Hole Size</u>
1/2" (iron pipe thread)	3/16"
3/4" (iron pipe thread)	5/8"
1" (iron pipe thread)	7/8"
1" Socket	15/16"
1 1/2" Socket	1 1/2"
2" Socket	2"
3" Socket	3"
4" Socket	4"
6" Socket	6 1/8 "
8" Socket	8 1/8"
10" Socket	10 1/4"

Coat the exposed (cut) edges of the hole with a thin layer of catalyzed adhesive, so that the glass fibers will not be exposed to the corrosive fluids in the piping.



BONDING THE SADDLE TO THE PIPE

Mix the adhesive according to the instructions supplied with the adhesive kit. After properly mixing the adhesive, put a liberal coating of adhesive on the pipe and on the bottom of the saddle. If the hole has been drilled in the pipe, coat the raw edges of the hole at this time.



Put the saddle in place. Press it down against the pipe surface so that the adhesive on the pipe and on the back of the saddle come into contact. Check for square-ness and correct alignment, and make any small adjustments as necessary

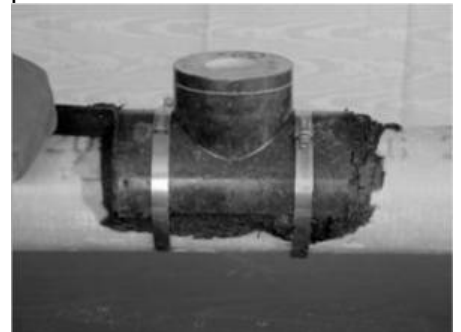


Attach a radiator clamp or band clamp around each side of the saddle branch, so that they extend completely around the

pipe. Tighten these clamps sufficiently to seat the saddle firmly against the pipe. Adhesive should squeeze out evenly around the perimeter of the saddle.



Form this squeezed out adhesive into a neat fillet between the saddle and the surface of the pipe. If any sanded area on the surface of the pipe remains uncovered, place a thin coat of adhesive over it. (This needs not be any more than is necessary to wet the surface.) The clamps may be removed after the joint is cured, or they may be left in place if desired.



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