

ARAPAHOE COUNTY SHOWER PAN LINER INSTALLATION

2015 IRC/IPC

Shower pan liners shall be constructed per requirements detailed in the 2015 International Residential Code (IRC P2709) and/or the International Plumbing Code (IPC 417.5), as applicable. Alternate methods and products may be accepted after being submitted for approval by the building department.

- A **“Plumbing Shower Pan” inspection** must be requested and made while the test described at the bottom of this page is on, and the pan is full of water (**BEFORE** the installation of the upper mortar bed and tile) .

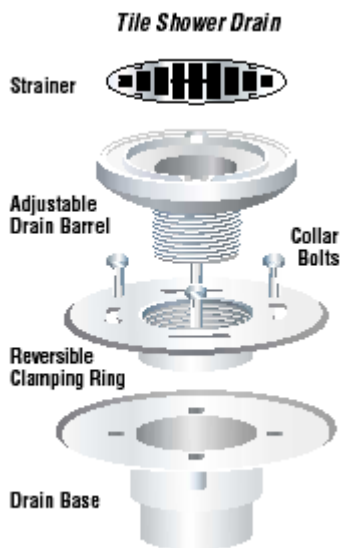
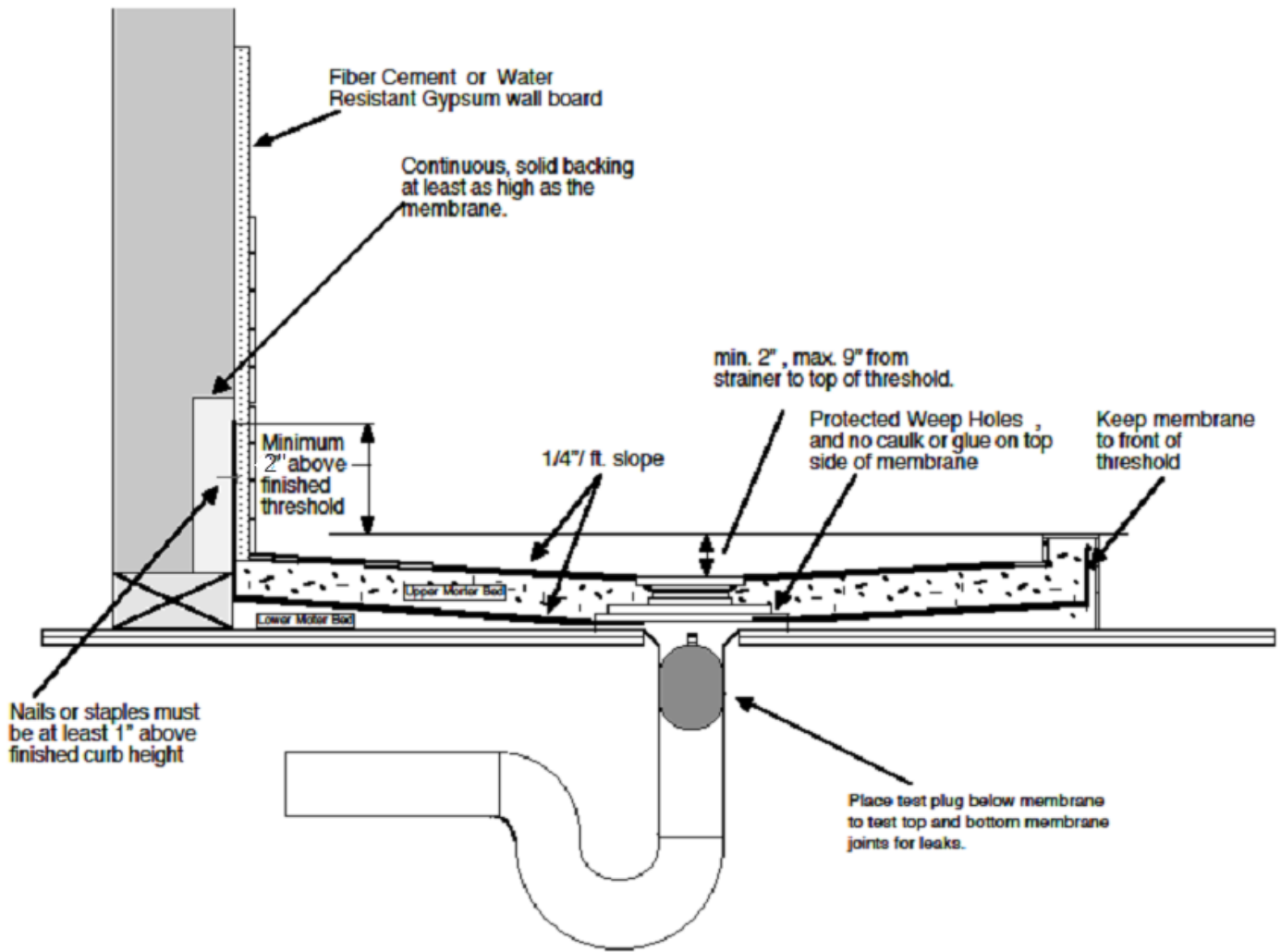
The following information is a summary of shower pan liner installation requirements:

Liner Installation

- The liner is required to be pitched at ¼” per foot to the drain. A permanent sloped bed is to be installed below the liner membrane. Sand or other unstable materials will not be accepted. **(IRC P2709.1)**
- The finished height of the curb shall be a minimum of 2” and a maximum of 9” above the strainer. **(IRC P2709.1)**
- The membrane should rise up the walls of the enclosure to a point at least 2” above the finished height of the threshold, and shall extend not less than 2” beyond or around the rough jambs **(IRC P2709.1)**
- All penetrations of the membrane (including staples & nails) shall be at least 1” above the finished height of the threshold. **(IRC P2709.3)**
- Corners should be made by folding, lapping, or solvent welding with approved material. The membrane shall then be stapled or nailed to secure it in place. **(Manufacturer + 2015 IRC P2709.2.3)**
- The liner membrane shall be fastened to approved continuous backing around the walls of the shower enclosure. **(IRC P2709.3)**
- Joints and seams of liner membrane material shall be made using materials approved and listed for such use, in a manner approved by the manufacturer of the material. **NOTE: PVC and CPE solvents are not interchangeable. Use the proper glue / caulk for the material used.** **(IRC P2709.2.1)**
- Most liner membrane manufacturers make pre-molded inside & outside corners for use with their product. Depending on the application, they may be required. **(IRC P2709.2.1)**
- The membrane shall make a water-tight seal with the drain assembly by means of a clamping ring or other approved means. **(IRC P2709.4)**
- Weep holes in clamping rings must remain unobstructed. Do not caulk the ring to the top side of the membrane (the membrane may be caulked to the drain body on the bottom side of the membrane). **(IRC P2709.4)**
- Receptor drains must be approved **(IRC P2709.4)** and third party tested **(IPC 303.4)**
- Installation instructions and listing & approval information for the liner material and any other products used may be required to be on site for inspection. **(IRC P2709.3.1)**

Testing & Inspection:

- The finished shower pan shall be tested by placing a plug in the drain below the membrane so that the joints on both sides of the membrane are tested (see reverse). **(Manufacturer & County Policy)**
- The membrane pan (without upper mortar bed or tile) shall then be filled with water to a point that is just below the top of the rough threshold, with a minimum 2” water depth **(IRC P2503.6 IPC 312.9)** and a “Plumbing Shower Pan” inspection requested and approved before proceeding any further. **(Manufacturer & County Policy)**



Three-Piece Drain



Example of Pre-molded Membrane Corner