1.0 GENERAL REQUIREMENTS

1.1 Inspection of Work – All surfaces prepared by others shall be inspected by the tile installer before starting tile work and all unsatisfactory conditions reported to the Administrative Authority. Starting tile work by the tile installer shall be considered as acceptance of surfaces prepared by others.

1.2 Surfaces – All surfaces to receive tile work shall be clean, structurally sound, and conform in every way to the local Building Code.

(**Note:** No tile work shall proceed until the pan and drain construction has been inspected and approved by the Administrative Authority, where required.)

2.0 MATERIALS

2.1 Tile Quality and Grade – Tile shall comply with American National Standard Specification for Ceramic Tile, A137.1 (equivalent to and incorporating U.S. Dept. of Commerce Simplified Practice Recommendation, R61-61 and Federal Specification SS-T-308b, Tile, Floor, Wall, and Trim Units, Ceramic).

2.2 Cement – Cement shall be portland cement type I or type II, conforming to ASTM C150.

2.3 Sand – Sand shall be damp, clean and graded ASTM C778.

2.4 Water – Water shall be potable.

2.5 Reinforcing shall be 3 inch x 3 inch (76 mm x 76 mm), 13 x 13 gage or 1-1/2 x 2 (38 mm x 51 mm) mesh, 16 x 13 gage steel wire, conforming to ASTM A82 and A185.

2.6 Asphalt shall conform to Federal Specification A-A-50694 or ASTM D1227.

2.7 Plastic Roof Cement shall conform to Federal Specification SS-C153.

2.8 Waterproof Felt Membrane – The waterproof felt membrane shall be at least 15 lb. (6.8 kg) asphalt saturated felt, conforming to ASTM D2626.

2.9 Plastic Membrane shall comply with ANSI A118.10.

2.10 Other Membranes – Where the Administrative Authority approves their use, non-metallic sub-pans or linings of lead sheets weighing not less than 4 lbs. per sq. foot (191.5 Pa) and copper pans of at least No. 24 B & S gage may be used.

2.11 Waterproofing Admixture – The mortar bed of the receptor shall be mixed with a waterproof admixture, approved by the Administrative Authority in the amounts allowed by such approval.

2.11.1 Currently Approved Mortar Additives

Anti-Hydro – 1 qt. (0.95 I) per sack of cement.
Plastiment – 1 lb. (0.5 kg) of powder per sack of cement.
Plastiment – 2 oz. (56.7 g) of fluid per sack of cement.
Sika 3A – 1 qt. (0.95 I) per sack of cement
Suconem (Red Label) – 1 pint (0.47 I) per sack of cement.

3.0 INSTALLATION

3.1 Drains – An approved type drain with sub-drain shall be installed with every such shower membrane. Flange of each sub-drain shall be accurately set exactly level with sloping sub-floor and shall be equipped with a clamping ring or other approved device to make a tight connection between the membrane and the sub-drain. The sub-drain shall have weep holes into the waste line. The drain shall be of such design that there will be not less than 2 inch (51 mm) depth from the top of the sub-drain flange to top of the strainer. A ring of absorbent material must be placed around the weep holes to keep them open when the finish materials are installed. [UPC 412.0]

3.2 Sloping Sub-Floor and Membrane – All lining materials shall be pitched not less than one quarter (1/4) inch per foot (20.8 mm/m) to weep holes in the sub-drain by means of a smooth and solidly formed sloping sub-base. All such lining materials shall extend upward on the side walls of the tub to a point not less than four (4) inches (102 mm) above the top of the finished dam or threshold and shall extend outward over the top of the rough threshold and be turned over and fastened on the outside face of the rough threshold. All ledge tops within four (4) inches (102 mm) above the rough threshold shall be covered with the lining material. Non-metallic sub-pans or linings shall be built-up on the job site and shall consist of not less than three (3) layers of standard grade fifteen (15) pound (6.8 kg) asphalt impregnated roofing felt. The bottom layer shall be mopped to the formed sub-base with hot asphalt and each succeeding layer thoroughly hot-mopped to that below, on the basis of twenty (20) pounds (9.1 kg) of asphalt per layer per square. All corners shall be carefully fitted and shall be made strong and watertight by folding or lapping, and each corner shall be reinforced with suitable woven glass fiber