



PRODUCERS OF  
FLOORING AND SEALER PRODUCTS  
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# Preparation of Subfloor for Receiving Magnesium Oxychloride Flooring

## TECHNICAL BULLETIN

### **Structural Strength and Rigidity of Subfloor**

The subfloor shall be of such design and of sufficient soundness, structural strength, and rigidity to withstand, without deflection or movement, the maximum service conditions to which the finished floor will be subjected.

### **Wood Subfloors For Decks**

The wood subfloor shall be of sound 3/4" exterior grade plywood, free from irregularities, and shall be securely nailed to the supporting structure. To assure proper drainage, joists shall be cut to provide 1" fall in an average 4' deck (never less than 1/8" to 1").

The wood subfloor shall be covered with a layer of 15 pound felt or other suitable membrane. Hot mop is needed beneath felt only when demanded by local building code. The felt shall be laid tight against the subfloor at all points.

One-inch 20 gauge poultry netting, galvanized after weaving, shall be tightly stretched and placed over the membrane. preferably, 2.5 galvanized metal lath or 3.4 black metal lath can be used in place of netting. Netting or metal lath should be lapped not less than 2" and securely nailed or stapled every 6" on center.

Nails for securing netting or metal lath shall be standard #4 blue nails or 1-1/2" galvanized roofing nails. Staples of equivalent holding power may be used.

### **Wood Subfloors For Stairs**

Treads and risers shall be of 3/4" exterior grade plywood and shall be securely nailed to the supporting structure. Each tread shall provide 1/8" fall to assure proper drainage. All treads and risers shall be covered with a membrane as described for wood subfloors. 2.5 galvanized metal lath or 3.4 black metal lath shall be placed over the membrane and securely nailed or stapled every 6" on center. Metal lath should not be lapped less than 2".

### **Concrete Subfloors**

Concrete, cinder concrete, lightweight concrete, grout or other similar highly absorbent surfaces shall be covered over the entire area with a bonding medium having a rubber latex or resin base. The bonding medium shall provide sufficient tensile strength of the bond between the magnesium oxychloride cement and concrete subfloor of not less than 150 psi. The concrete subfloor must provide for sufficient drainage as specified under wood subfloors.

### **Flashing**

Galvanized metal flashing, hot dipped, primed and not thinner than 26 gauge shall be used at all covings and deck edges. Inferior galvanized metal flashing will result in premature corrosion and deterioration.

Direct contact between magnesium oxychloride cement and aluminum must be avoided. It is recommended to protect all aluminum surface that will be in contact with the magnesium oxychloride cement by using a suitable membrane such as duct tape.

### **Waterproofing Stucco**

Prior to application of the magnesium oxychloride, cement all exposed stucco that will come in contact with the cement must be thoroughly waterproofed with Hill Brothers' DB Penetrating or Total Sealer. It is further recommended to apply DB Penetrating or Total Sealer to all stucco walls that are adjacent to the deck for protection from water intrusion.

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