

PWA-105: Plastering

Mix: the basecoat (scratch and brown) shall comply with ASTM C-926 for ratios and mix designs of cement, lime and aggregates. It is recommended to allow the plastering contractor to select his preferred mix design as he knows the regional preferences and materials, as long as they fall within the C-926 criteria.

Water ratio: Unlike concrete, the water ratio cannot be predetermined and slump testing is inappropriate for plastering. The plasterer determines the water content that is correct.

Too little or too much water makes the plaster unworkable and virtually impossible to apply. In essence, the mix water is “self” governing. ASTM recognizes this fact and has no water ratio requirement.

Sand Ratio: ASTM requires sand to be no less than 2 ½ parts per cement volume and no more than 5 parts per total cement volume. This is quite variance in allowable tolerance and there is a good reason. Sands, climate and additives can make the aggregate ration alter. In addition, some plasterers find a cement rich scratch coat performs better in their markets. A measuring device should used to verify the sand ratio is in compliance and then a shovel count (no.2 style) is acceptable.

Application:

Scratch Coat: The scratch (first) coat is applied by machine or by hand tool to a nominal thickness of 3/8 inch and raked or scored horizontally. Trim accessories should be wiped down clean to prevent any protractions of cement beyond where the brown coat will be.

The thickness is in name only. Scratch coat that is too thin, is a cement coating that can be easily flicked off the lath when tapped by the index finger after setting. It is necessary to completely cover the water-resistant barrier but not necessary to completely cover the lath in the scratch coat.

Brown Coat: The brown (second) coat is the fill coat. Application is by machine or hand tool. The brown coat shall be darbied or rodded off. Floating is not required. Floating provides densification of the plaster to provide adequate water and shrinkage crack resistance in cement. A continuous layer of foam and lamina makes both the water and crack resistance a moot point.

Double-Back: the code allows the “double-back” method is allowed in PWA 105.

Finish Coat: No finish coat is needed, except over the final lamina used to encapsulate the foam.

Weather application concerns:

Moist Curing: in hot dry weather, moisture curing is required to properly hydrate the cement

Cold: Protect cement from freezing