

RED TOP® Brand Gypsum Plaster

Preparation

In cold weather, all glazing should be completed and the building heated to a minimum of 55 °F (13 °C) before gypsum base or lath and plaster installation. The temperature of the building must be maintained in uniform range above 55 °F for an adequate period prior to application of plaster, while plastering is being done, and until plaster is dry. Heat should be well distributed in all areas, with deflection or protective screens used to prevent concentrated or irregular heat on the plaster surfaces.

Ventilation and air circulation should be provided to properly dry the plaster subsequent to plaster applications and proper set. This can be accomplished by keeping windows open sufficiently to provide air circulation in glazed buildings; in enclosed areas lacking normal ventilation, provisions must be made to mechanically remove moisture-laden air.

If glazed sashes are not in place and the building is subject to hot, dry winds or temperature differentials from day to night of 20 °F (11 °C) or more, openings must be screened with cheesecloth or similar material.

Application

**Mixing
Conventional
Plaster**

RED TOP Brand Gypsum Plaster and RED TOP Brand Two-Purpose Plaster are mixed with various types of aggregate for hand or machine application, depending on the strength and other performance characteristics required for the specific project. See the tables for mix proportions and performance.

RED TOP Brand Gypsum Plaster and RED TOP Brand Two-Purpose Plaster	Mix Proportion ⁽²⁾	Comprehensive Strength psi—dry ⁽¹⁾	Weight lb./cu. ft.—dry	Conductivity (k)
mixed with sand	100:2	875	107	5.51
mixed with sand	100:2-1/2	750	108	—
mixed with sand	100:3	650	109	5.60
mixed with perlite	100:2	700	48	1.64
mixed with perlite	100:3	525	41	1.31
mixed with vermiculite	100:2	465	48	1.74
mixed with vermiculite	100:3	290	41	1.42

(1) Average laboratory results. Figures may vary slightly for products from individual mills. Tested in accordance with ASTM C472.

(2) Aggregate is in cu. ft. per 100 lbs. of plaster.

Approximate Coverage—sq. yd./ton

RED TOP Brand Gypsum Plaster and RED TOP Brand Two-Purpose Plaster	Applied over a base of:		
	Gypsum Lath	Metal Lath	Unit Masonry
mixed with sand ⁽¹⁾	180-232	114-148	140-181
mixed with perlite ⁽¹⁾	176-224	112-143	137-174
mixed with vermiculite ⁽¹⁾	171-215	109-137	133-168

(1) Range; varies by volume of aggregate mixed with plaster (2.0, 2.5 or 3.0 cu. ft.).



**Mixing
Conventional
Plaster (cont.)**

Maximum Recommended Proportions

Plaster Base	Number of Coats	Types of Coats	Maximum Quantity of Aggregate in cu. ft. to be Used with 100 lbs. of Neat Gypsum Plaster			
			Under Smooth Trowel Finishes		Under Texture Finishes	
			Sand ⁽¹⁾	Perlite	Sand ⁽¹⁾	Perlite
Gypsum Lath	3	scratch brown	2 3	2 2	2 3	2 3 ⁽²⁾
		basecoat	2-1/2	2	2-1/2	2
Metal Lath	3	scratch brown	2 3	— —	2 3	2 2
		Unit Masonry	3	3 3	3 3	3 3
	2	basecoat ⁽³⁾	3	3	3	3

(1) Approximately six No. 2 shovels of sand equal 1 cu. ft. One shovel equals 15 lb.

(2) Only if applied 1" thick; otherwise 2 cu. ft.

(3) Basecoat applied scratch and double-back.

Note: In a construction system with plaster applied over metal lath, perlite or vermiculite aggregates are not recommended for use in the basecoat plaster, unless a float texture or acoustical finish is used.

**Applying
Basecoat**

Mix basecoat plaster by hand or in a mechanical mixer to a uniform consistency. Apply the basecoat plaster by hand or machine. Unit masonry surfaces that exhibit high suction shall be moderately wetted immediately before plastering. Monolithic concrete surfaces should be treated with USG™ Plaster Bonder prior to basecoat application.

For two-coat work over gypsum lath, masonry and monolithic concrete, apply the RED TOP Brand Gypsum Plaster base (first) coat with sufficient material and pressure to form a good bond to the base and to cover well; then double back to bring the plaster out to grounds. Straighten to a true surface with a rod and darby without the use of additional water and leave it rough to receive the finish (second) coat.

For three-coat work, apply the RED TOP Brand Gypsum Plaster scratch (first) coat with sufficient material and pressure to form good full keys on metal lath, and good bond on other bases, and then cross-rake. Apply brown (second) coat after scratch (first) coat has set firm and hard. Bring out to grounds and straighten to a true surface with a rod and darby without the use of additional water. Leave the brown coat rough to receive the finish (third) coat.

Trademarks

The following trademarks used herein are owned by United States Gypsum or a related company: RED TOP, USG.

Note

Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for information.

Notice

We shall not be liable for incidental or consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than their intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from the date it was or reasonably should have been discovered.

SAFETY FIRST!

Follow good safety practices. Read material safety data sheets and related literature on products before specification and/or installation.

