



# ARCHITECTS' SPECIFICATIONS FOR UNITED STATES GYPSUM COMPANY'S CEMENT PLASTER

## *In Red Top Bags*

PLAINTIFF'S EXHIBIT

USG-622

### GROUNDINGS

|                          |                |                               |                |
|--------------------------|----------------|-------------------------------|----------------|
| For 3/4 inch Gypsum Lath | To be 3/4 inch | For Wood Lath                 | To be 3/4 inch |
| For 1/2 inch Gypsum Lath | To be 3/4 inch | For Brick and Clay Tile Walls | To be 3/4 inch |
| For Metal Lath           | To be 3/4 inch | For Pyrobar Gypsum Tile Walls | To be 3/4 inch |

### LATHING

**GYPSUM LATH**—(3/4-inch)—applied according to manufacturer's directions.

**WOOD LATH**—To be a good grade of White Pine, Cypress or Spruce lath free from knots, sap or bark. Must be well nailed. Not less than four 3d common nails to each 4 foot lath, driven well home. (Double nailing should be resorted to on very particular jobs, especially if the lath are not up to standard in quality or condition.) Break joints every fifth lath; do not permit ends of lath to butt or overlap; leave at least 1/4 inch space between ends.

**KEY OR CLINCH**—Lath to be placed 3/4 inch to 1 inch apart at sides and ends, on walls and ceilings. (Farther apart may mean loss of material—closer together may not allow for swelling of lath, thus causing buckling. Therefore the standard 3/4-inch to 1-inch key is a good rule to follow.)

### MORTAR

To be any brand of the UNITED STATES GYPSUM COMPANY'S Cement Plaster in Red Top Bags, and to be mixed and applied according to directions of the manufacturer.

## General Directions for Mixing and Applying

Use only clean water, free from alkali and impurities. Keep tools clean. Do not wash tools in mixing water. Do not mix one gauging with another and never retemper plaster that has started to set. Clean mixing box after each gauging. Do not mix more material than can be handily used in about one hour.

**Do not plaster on DRY Wood Lath**; trouble may result. Thoroughly wet lath the day before plastering; then sprinkle one or two hours before plastering.

**WARNING**—Never place plaster on the ground, against damp wall, or store in a damp place. Plaster must be kept dry until used.

During the summer months all openings in buildings should be closed to prevent plaster from drying out before it has set or crystallized. Should white or chalky spots appear, spray them with clean water. In winter, keep plaster from freezing until thoroughly set. After plaster has set and become hard, allow free circulation of air so it will dry quickly. If plastering is done in cold, damp or rainy seasons, use artificial means for drying walls after plaster has set. This is important.

### DIRECTIONS FOR MIXING

Use a clean, tight mortar box, about 3 1/2 x 7 feet and 1 foot deep. Raise mortar box 4 inches at one end. Clean box between gaugings.

#### MECHANICAL MIXERS

A mechanical mixer, if closely attended, makes excellent mortar; frequently, however, no attention is paid to condition of mixer and time of mix. Unless mixer is cleaned regularly quick sets result; the plaster may stiffen in mixer, which continues to churn it about, breaking down the set. Mortar so treated never gains its normal hardness on the wall. Time of mixing may also vary, resulting in variable sets.

Note the following recommendations on the proper use of Mechanical Mixers: 1. Put in the approximate amount of water needed for batch. 2. Put in approximately half the sand required. 3. Put in all of the plaster. 4. Put in the balance of the sand. 5. Clean at regular intervals.

#### QUALITY OF SAND

Use only clean, sharp, dry sand (A.S.T.M. specifications), free from quicksand, loam, dirt and frost. Screen through a 6-mesh screen.

The proportions specified in all cases to be by weight.

The following is a convenient way to arrive at these correct proportions:—

#### TWO TO ONE

Use six 10-quart buckets, struck measure, of sand, to a 100-lb. bag of plaster; and five 10-quart buckets of sand, struck measure to an 80-lb. bag of plaster.

#### THREE TO ONE

Use nine 10-quart buckets of sand, struck measure, to a 100-lb. bag of plaster; and seven 10-quart buckets of sand, struck measure, to an 80-lb. bag of plaster.

First put in a layer of sand, then one of plaster in raised end of box. Hoe dry from one end of the box to the other, then back again, working sand and plaster thoroughly together to a uniform color. Put water in the other end of the box and hoe the plaster into the water, mixing thoroughly. Mix thin at first, then add sufficient dry plaster and sand in proper proportions to bring it to the proper consistency for application.

Do not mix sand and plaster until ready to add the water, as material will work short if sand and plaster are allowed to stand a while before adding water.

#### FOR GYPSUM LATH, WOOD, WIRE AND EXPANDED METAL LATH

Mix 2 parts by weight of clean, sharp, dry sand with 1 part of plaster.

#### FOR BRICK, PYROBAR GYPSUM TILE, CLAY TILE AND SECOND OR BROWNING COAT

Mix 3 parts by weight of clean sharp, dry sand with 1 part of plaster.

### DIRECTIONS FOR APPLYING

#### ON GYPSUM LATH—TWO COAT WORK

Do not wet Gypsum Lath.

First work plaster well into joints, forming perfect keys, and follow immediately with base coat, filling out to grounds. The total thickness of plaster over face of entire wall to be not less than 1/2 inch. Darby to a straight and even surface ready to receive the finish coat. Darby lightly and use water sparingly.

#### THREE COAT WORK

First apply a scratch coat over surface of wall, working plaster well into joints to form perfect keys. As soon as the scratch coat has set, and before it is dry follow with base coat, filling out to grounds. The total thickness of plaster coat face of entire wall to be not less than 3/4 inch. Darby lightly to a straight and even surface ready to receive the finish coat; use water sparingly.

(For Best Results We Recommend Three Coat Work.)

#### ON METAL LATH

Apply a scratch coat, lightly covering the lath and filling meshes. After the scratch coat has set firm and hard but before it is dry, apply the second coat, bringing it to a straight and even surface with rod and darby, ready for finishing coat. Darby lightly and use water sparingly.

#### ON WOOD LATH

Wet lath as shown in "General Directions" above.

Lay plaster on lightly, but with sufficient pressure to obtain a good key, and fill up to grounds as you go along. Darby lightly so as not to force the mortar through the spaces between the lath, and use water sparingly.

Do not apply more at one time than can be darbied before material begins to set.

#### ON BRICK, PYROBAR GYPSUM TILE OR CLAY TILE WALLS

Soak brick or clay tile walls thoroughly—and if necessary sprinkle Pyrobar lightly—to kill suction. Apply sufficient material to fill out to grounds. Bring to a straight and even surface with rod and darby, ready for finishing coat. Darby lightly and use water sparingly.

#### ON CONCRETE SURFACES

Use U S G Bondcrete—the plaster for concrete surfaces.

For Special Information Address

**UNITED STATES GYPSUM COMPANY**  
300 West Adams Street, Chicago, Ill.