



[THIS DEPARTMENT IS DESIGNED TO FURNISH INFORMATION SUITED TO THE REQUIREMENTS OF THE BUILDING TRADES. READERS ARE INVITED TO ASSIST IN MAKING IT AS HELPFUL AS POSSIBLE BY CONTRIBUTING OF THEIR EXPERIENCE, AND BY ASKING FOR PARTICULAR INFORMATION WHICH THEY MAY AT ANY TIME REQUIRE.]

#### Preparing for Roughcast.

To prepare the outside of a frame building for roughcasting, great care should be taken to have the ground work dry and well put together. If possible, the framework should be erected on a stone or brick foundation, but where this cannot be done and where the building must rest on timber posts or piles, the posts or piles should be put in the ground at least four feet, or deeper in places where frost would likely strike deep enough to lift the posts. These posts should not be more than eight feet apart—six feet would be much better—and they should be of good size, not less than eight inches in diameter. Where posts are used, their tops should not be more than six inches above the ground grade, and they should be leveled off all round to receive the sills. While two tiers of 2 x 4 inch scantling would answer very well—if bedded in mortar—for the sills of a balloon frame on a stone or brick foundation, it will not do to make use of anything less than timbers having a 6 x 6 inch section for sills that are to rest on posts, as lighter timber would be apt to sag between the posts, to the detriment of the building, and the roughcasting in particular. The studding employed in building a balloon frame which is intended to be boarded inside and outside, need not be closer than three feet, but the boarding should be dry, the edges laid as close as possible, and the whole well nailed to the studding. It is not necessary that the boarding be nailed on diagonally, as is practised in some communities, as horizontal boarding, if joints are kept tight and the whole well nailed, has all the advantages of strength and rigidity that diagonally laid boarding has; besides, the former method is more economical in material and labor. If the groundwork is now ready to receive the lathing, in accordance with the foregoing, the first thing to do is to cover the whole boarding with one of the many kinds of building paper—it is suggested that “tarred” paper be used, though this is optional—wrapping it well around the corners, and around the studding and boarding at all the openings before the frames are placed in position. Much of the warmth of the house depends on the honest and thorough manner in which this papering is performed, therefore great care should be exercised in doing the work. Strips of lath may be nailed here and there on the paper to hold it in place until the lathing proper reaches it. The lathing should then be nailed on at an angle of about 45° with the line of foundation. The laths should be spaced to about one inch apart and should be well nailed to the boarding. This will not only hold the paper rigid in place, but it will aid very much in strengthening the whole structure. Another tier of lath must then be nailed over the first lathing, and must

be put on diagonally in a contrary direction to the first lathing. This should be well nailed to the other lath, thus bracing the building in the opposite way. When the work is well done, the walls will be quite rigid and immovable. It is considered by old hands the better way to leave out the window and door frames until after the first layer of lath is nailed on. This admits a “key” of the plaster to get in behind the outside casings, cutting off any chance for wind making its way into the house from behind the window or door frames. Of course, the second layer of lath would have to be fitted against the casings, which will require to be thick enough to receive lath and two coats of plaster. Water table, corner boards and cornice boards may be nailed in place over the paper before any lath is put on, but they must be sufficiently thick to receive two thicknesses of lath and two coats of plaster, or be padded out with band mouldings, or like the casings, have the thickness of a lath as furring behind them. One of the main things to be considered in planting finished stuff on a building to be roughcast is to have all the work nailed well to the boarding and timbers.

#### Roughcasting.

THE first coat for this kind of work should consist of rich lime mortar, with a large proportion of cow's hair well mixed through it. The mortar should be made at least four days before being used, and longer if possible. The plasterer when applying the mortar should be sure and use pressure enough to force the mortar well into the keys or interstices of the lathing in order to give it good bonding. The face of the work must then be scratched to form a key for the second coat, which must not be put on before the first coat is thoroughly dried out. The mortar for the second coat is made the same as for the first coat, and is applied in a similar manner, with the exception that the wall must be sprinkled with clean water before the second coat is put on, in order to keep the second moist and soft until the “dash” or roughcast is put on. The dash, or roughcast, is composed of fine gravel, washed clean, and perfectly free from all earthy particles, and mixed with pure lime and water until the whole is of a semi-fluid consistency. This is mixed in a tub or pail, and is dashed against the wall with a wooden float about five or six inches square. While the plasterer throws on the dash, with the float in his right hand, he holds in his left a common white-wash brush, which he dips into the dash from time to time and then brushes over the mortar and roughcast, which gives them, when finished, a regular, uniform color and appearance. For 100 yards of roughcasting, finished as above described, the following quantities will be required: 1,800 laths, 12 bushels of lime, 1½