greater than ¾in. mesh or less than 19 S.W.G.

Reinforcing should be stretched tight and fixed not less than ¼in. or more than ⅝in. clear of the backing material by the use of special furring nails. Alternatively self-furring lath may be used. Joints in reinforcing should be lapped at least one mesh and should not be made at angles, where the reinforcing should be doubled for at least 12in. each side of the angle.

Diagonal reinforcing at least 12in. by 18in. should be fixed on all corners of openings. Nail spacings should be not more than 6in. along studs and dwangs, and joints should be lashed with 20 S.W.G. galvanised binding wire.

All openings should be adequately flashed with metal flashing.

Sand-cement ratio for plaster should not be less than 3 : 1 by volume and a suitable waterproofing material should be added. The addition of a little lime, not more than 1/10 part by volume, helps to produce a "fat" workable plaster.

The thickness of stucco, which must be applied in two coats or more, should, on non-rigid backing, be not less than 1in. or more than 1½in. On rigid backing these thicknesses can be reduced to ⅝in. and 1in. respectively.

Brick or Concrete Veneer

Wall veneer applied as sheathing to a framed structure consists of a brick or concrete wall, not less than 4in. thick if unreinforced or 3in. if reinforced, resting directly on the foundation.

A space of at least 1½in. must be provided between the timber frame and the veneer, the veneer walls being attached securely to the frame by non-corrodible ties, two to each square yard of wall.

With veneer sheathing the walls should be braced at intervals of not more than 16ft. by adequately braced cross partitions or alternatively the roof should be so braced as to provide strength equivalent to that given by such cross partitions.

Non-corrodible flashing should be built into the veneer where necessary to prevent moisture from penetrating and the veneer walls should not be more than 12ft. high above the top of the foundations.

Standard Code Recommendations

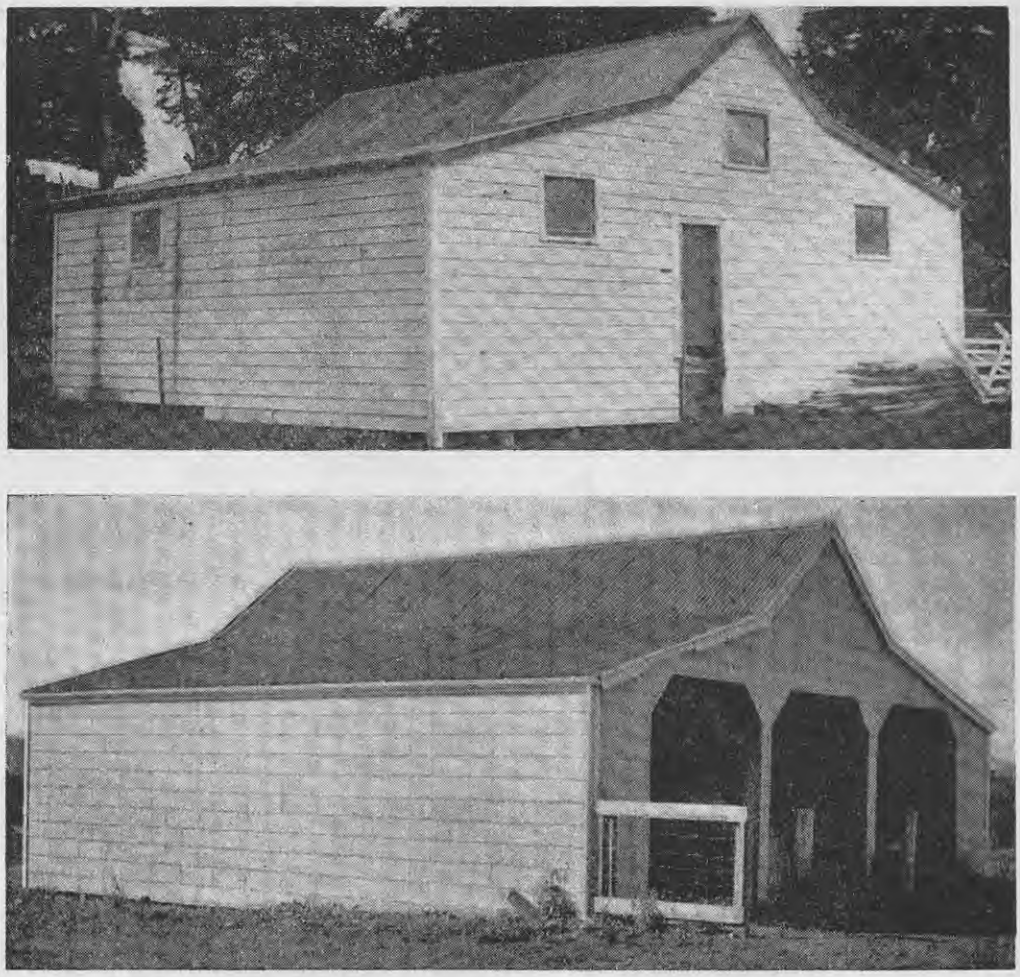
The Standard Code concerning wall sheathing recommends:—

"All exterior walls shall be covered on the outside with approved weather-resisting materials.

"Under all external timber wall coverings in buildings intended for human habitation building paper or other approved waterproof material shall be fixed to the outer faces of the external studs or to the sheathing. At horizontal joints the paper shall be lapped at least 2in. and at perpendicular joints at least 6in. and the waterproof material shall be lapped over and under all flashings to the extent necessary to exclude moisture".

As the function of the roof and sheathing of a building is to provide adequate protection from all weather, the area covered by the building must be so enclosed and protected that no moisture can penetrate through or round the outside coverings. Joints must be provided with adequate lap or sealing, and window and door openings must be adequately flashed or otherwise protected so that the whole exterior sheathing effects a quick run-off for moisture without pockets or unprotected areas through which moisture can penetrate.

A case was experienced by the author in which an outside door facing the prevailing wind, though in itself adequately sealed and protected from driving rain, permitted a large quantity of water to be driven through



Upper—An implement and storage shed in its original sheathing of weatherboarding. Lower—The same shed after the weatherboarding had been covered over with sidings. Sparrow photo.