

The interior face of walls should be carefully jointed and made as smooth as possible to prevent dust accumulation. Window and door openings should be accurately and carefully spaced. It means no extra cost and adds greatly to the appearance of the building. Wherever possible the frames should be built into the walls, and in addition the joints scraped, caulked with oakum and pointed. Anent this matter of caulking: The writer recently heard it remarked that Canadians apparently desired their buildings to be hermetically sealed.

In so far as uncontrollable events are concerned, this is probably quite true for most structures are equipped with sufficient controllable vents in the way of doors, windows, etc. to give any ventilation required.

#### ROOFING.

In regard to the matter of roofing much could be said, as slate, terra cotta, concrete, iron, all find more or less favour, but are objectionable owing to their cost, weight, etc. The wooden board roof, covered with tarred felt and asphalt, is probably more generally used than any other, its low first cost being probably its principal recommendation, although when properly laid it gives good service. From an insurance point of view it is considered objectionable, some serious fire damages being attributable to the board and composition tarred roof.

The engineering department of the New England Mutual Insurance Companies recently issued a pamphlet favourably commenting upon a roof called 'Ferroidace.' Mr. Brown, vice-president of the Brown Hoisting Machinery Co., is credited with having thought out this construction. It consists of iron, specially corrugated into a dovetail form, and plastered upon both the upper and lower sides with a mixture of two parts of sand and one of Portland cement, the lower side containing a proportion of lime and hair. When completed the top surface is painted with two coats of a special non-drying paint, which renders the roof quite water-tight. The total thickness of the covering being about  $1\frac{1}{4}$ ". This form of roof is said to cost about twenty-five to thirty per cent. more than the ordinary board or plank and composition covering. It is contended that it resists fire well, but has a conductivity six to eight times that of 2" spruce plank, from which it may be concluded that there would be considerable trouble from condensation, and unless the form could be changed to eliminate this it is a question if it would be very generally adopted.

In the matter of flooring it has been found that for ground covering something more rigid and durable than the 2" or 3" plank laid upon cedar sills was required. Brick and many forms of con-