

CONSTRUCTION OF BUILDINGS.

Reference has been made in these reports at intervals during the past twenty-six years to the unnecessary loss by fire which has occurred owing to the faulty construction of buildings. This is in the main due not to any additional cost of the protective measures which are desirable, but to the fact that the local-authority by-laws have not in most cases any requirements with respect to fire protection.

As a result of the serious earthquakes which have occurred during recent years, the question of building by-laws has been brought prominently before the public, and a number of local authorities have made by-laws providing for earthquake-resisting construction on the lines recommended by the Committee of experts set up by the Government in 1931. It was pointed out in this report last year that effective protection against earthquake involved also the consideration of the fire hazards in building construction.

The question of fire protection of buildings is becoming more important from year to year, since the greater height and floor area of the modern industrial building renders fire-fighting difficult unless reasonable provisions are made. In order to bring the question in concrete form before local authorities which may be contemplating the provision of new building by-laws, the principal requirements which are considered desirable are set out for consideration:—

- (1) The protection of window and other openings from exposure to fire in the same (in light areas, &c.) or in other buildings.

This is best arranged by requiring that window openings shall be protected by wired glass in metal frames, installed to a standard specification, and that doors opening into adjoining buildings and between separate sections of the same building shall be of fire-resisting construction.

- (2) The protection of lifts and stairways to prevent communication of fire through the building.

These are the natural draught outlets for the building, and experience shows that they are a general source of communication of fire from one floor to another.

- (3) The installation of internal fire-fighting water-supply in all buildings of three storeys or more.

This should consist of one or more rising mains fitted with the type of hose-coupling used by the fire brigade operating in the district. First-aid hose-reels are also desirable, and the value of hand extinguishers is emphasized in this report.

- (4) The installation of automatic fire-alarms or sprinkler system in all buildings exceeding specified heights and floor areas.

The reduction in insurance rates obtainable where buildings are protected as suggested above will in most cases more than cover any additional construction cost involved.

FIRE-PREVENTION.

The annual fire-prevention week was held in the early part of 1935 (18th to 23rd March) and there is reason to be satisfied with the results achieved. The publicity matter distributed included posters, householders' circulars, and an instruction card of a permanent character for use in shops, offices, factories, &c. The local authorities and fire-brigade authorities co-operated very satisfactorily, but it would be impossible to carry out this fire-prevention work effectively were it not for the assistance given by the members of the volunteer fire brigades. Arrangements were made in most towns for the brigade to give demonstrations of its work, and the whole of the publicity matter was distributed by the brigadesmen.

One of the most important sections of the propaganda work during fire-prevention week is the giving of lessons to the children in the schools, and in most towns this was undertaken by the brigade officers. In some cases the fire engines were taken to the schools to show the method of giving the alarm and the nature and use of the brigade equipment. Broadcast talks were given from all the principal stations, and the press throughout New Zealand gave considerable prominence to the question both in news items and editorials.

INSPECTIONS.

It was not found possible to make a complete inspection of all the brigades during the year, but the majority were visited at least once. Close touch was kept with the activities of all districts by means of newspaper references, and where necessary several inspections were made. The conditions found were generally satisfactory, and, as indicated elsewhere in this report, a number of the brigades have reached a very high standard so far as is possible within the limitations of the existing organization and equipment.

It is proposed during the coming year to extend the inspection work and to make something in the nature of a fire survey of as many of the fire districts as possible, and to make recommendations to the Boards for the improvement of the organization on the lines