

LOCAL CONDITIONS AND CONFLAGRATION HAZARDS

Construction encompassed by the old city walls in "Upper Town" is almost exclusively stone or brick. Heights range from $1\frac{1}{2}$ to 5 stories, the greater number being $3\frac{1}{2}$. There are four fireproof and two sprinklered buildings, one fireproof section of an hotel being 1 to 2 stories in height. Some of the sheds and outbuildings are of frame construction.

Outside the city walls in "Upper Town," about 50 per cent. of the total construction is stone or brick-joisted, the remainder being about equally divided between brick-veneer and frame; there are three fireproof and one sprinklered building. Heights range from $1\frac{1}{2}$ to 5 stories, with a few only up to 6, the greater number being $2\frac{1}{2}$ to 3. About 80 per cent. of all buildings in "Upper Town" are residential. The main street in this section runs East and West through the centre and is principally occupied by retail stores. There are a number of religious, scholastic, government and municipal buildings. Surrounding the district just referred to, also along the cliff above the St. Lawrence River and in Belvedere Ward to the West, construction is mostly detached, otherwise it is closely built up. North of the main street (St. John) to the cliff overlooking "Lower Town," the construction is, generally, inferior. The greater part of the frame and veneered buildings are in this section, among which are to be found several manufactories and wood planing mills. In the principal office and wholesale district situated in "Lower Town" on the St. Lawrence River front, and extending West to St. Roch Street on the St. Charles River front, construction is principally stone or brick-joisted, with the exception of the East side of Dalhousie Street, the North side of St. Andrew Street, and on the wharves, where it is principally frame; heights range from 3 to 5 stories. There are 12 fireproof and 4 sprinklered buildings; fireproof buildings are from 4 to 9 stories in height; this section is closely built upon. West of St. Roch Street, bounded North by the cliff, South by the St. Charles River and West by Boulevard Langelier, is situated the principal manufacturing and retail district. This is also the marked congested and conflagration area. The large stores and factories are principally brick-joisted; the total construction in this section consists of about 40 per cent. brick or stone and 60 per cent. frame. Heights range from $1\frac{1}{2}$ to 6 stories; 15 to 20 buildings are sprinklered and there are 3 fireproof buildings. Large planing mills, lumber yards and several large garages are situated in this section. From Boulevard Langelier West to the city limits the construction is almost entirely frame, with some few brick-joisted or veneered buildings scattered throughout. It is closely built up, except on the outskirts and is mostly residential. There are a number of retail stores,

particularly on St. Valier Street, a few important mercantile buildings, heavily stocked warehouses and several manufactories near the western limits along the railway tracks. There are two oil distributing firms with tanks and warehouses, one of which is within 50 feet of a row of frame dwellings, and one less than 200 feet distant from large frame warehouses. Large steel working and railway shops are situated at the western limits. Two manufactories are sprinklered and there are two fireproof buildings 2 and 3 stories in height; in general, heights range from $1\frac{1}{2}$ to 3 stories, the greater number of buildings not exceeding 2 stories.

North of the St. Charles River (former municipalities of Hedleyville and Stadacona) the construction is largely frame, with some brick or brick-veneered buildings. A number of blocks are closely built up, but construction in general is spread over a considerable area, also, with Hedleyville and Stadacona separated by some distance. There are a number of small retail stores situated principally in one block on Canadiere Road, also a few manufactories, lumber yards, planing mills and railway shops. The exhibition grounds are situated at the Northern limits and are used during the summer months as an amusement park. There are two fireproof buildings in this section, one of which is situated on the exhibition grounds; heights range from $1\frac{1}{2}$ to 3 stories.

Throughout the city fireproof buildings are of reinforced concrete or protected steel frame construction. Interior wood trim and exterior wood roofs communicating with the interior are weakening features in nearly all. Seven are office buildings; included among the others is a grain elevator, hotel, apartment house, 2 churches, 2 educational institutions, 1 cold storage plant, 1 four-story garage, 1 public power plant, 1 wholesale hardware house, a railway station and sheds and several government buildings; heights range from 2 to 12 stories. The area of one building exceeds 50,000 square feet and two exceed 20,000 square feet, others range from 1,200 to 12,000 square feet.

Protection to vertical openings is mainly lacking, protection to horizontal openings between sections is generally poor, also windows and doors in exterior walls are mostly unprotected; most of the buildings are equipped with either standpipe and hose or chemical extinguishers, or both.

There are 33 sprinklered properties in the city, also two partial equipments and two equipments out of service. These sprinklered properties are mainly located in "Lower Town," and for the most part are scattered.

An additional weakness is that less than 40 per cent. have a secondary water supply in the shape of a tank or fire pump, so that any breakdown in the city pressure, as reported elsewhere, effects the reliability of the equipment. The