

BY-LAW NO. 6209/93

**A By-law of THE CITY OF WINNIPEG to
amend The Residential Buildings Fire
Safety By-law No. 4304/86.**

THE CITY OF WINNIPEG in Council assembled, enacts
as follows:

By-law No. 4304/86 amended by By-law No's.
4742/87 and 4958/88 is further amended as follows:

1. By-law No. 4304/86 is amended by deleting Section 17 and substituting the following Section:

"17.(a)All improvements detailed in Schedules "C", "D", and "F" herein, except in Sentences F.4.1.(5) to F.4.1.(7) and Sections F.6., F.7., F.8., and F.9. of Schedule "F", shall be completed by January 1, 1990; and

(b)Sentences F.4.1(5) to F.4.1.(7) and Sections F.6., F.7., F.8., and F.9. of Schedule "F" herein shall be completed by January 1, 1996.

2. By-law No. 4304/86 is amended by deleting Section 21 and substituting the following section:

"21.Where a permit for work necessitated by this By-law has not been obtained prior to the deadline date set forth in Sections 15 to 17 aforesaid, both inclusive, the permit fees shall be double the normal rate set out in The Development Fees By-law No. 5675/91.

3. Schedule "F" of By-law No. 4304/86 is amended as follows:

- (i) Delete Sentence F.4.1.(4) and substitute the following new sentence:

"(4) In every building each elevator shall be provided with additional means to cancel all calls and immediately return the elevator to the street floor upon

- (a) activation of any alarm initiating device of the building fire alarm system; or,

- (b) activation of the key operated switch located in the street floor elevator lobby.

(ii) Add to Section F.4. the following new sentences:

- (5) Where an automatic emergency recall feature is required in accordance with Sentence F.4.1.(4), smoke detectors shall be installed in the elevator lobbies on the recall level so that when activated, the elevators will automatically return directly to an alternate floor level.
- (6) Smoke detectors in Sentence F.4.1.(5) shall be designed as part of the building fire alarm system.
- (7) The alternate floor recall feature in Sentence F.4.1.(5) is not required if the floor area containing the recall level is sprinklered."

(iii) Delete Section F.6. and substitute the following new Section:

"F.6. STANDPIPE AND HOSE SYSTEMS

F.6.1.(1) Every building shall be provided with a wet standpipe and hose system except that an existing dry standpipe without a hose system may be acceptable providing:

- (a) the standpipe is capable of sustaining a water pressure of 345 kPa (50 psi) above the normal working pressure at the most remote outlet; and
- (b) the Fire Department connection is:
 - (i) accessible to the Fire Department;
 - (ii) located so that the unobstructed path between the connection and a hydrant is not more than 122 m (400 ft); and
 - (iii) properly identified.

- (2) When a new standpipe system is required, it shall be installed to current Manitoba Building Code requirements.
- (3) Except as may be permitted by the Commission, all existing wet standpipe systems shall:
 - (a) be provided with a Fire Department connection which:
 - (i) is accessible to the Fire Department;
 - (ii) is located so that the unobstructed path between the connection and a hydrant is not more than 122 m (400 ft);
 - (iii) has an approved check valve located as near as practicable to the point where it joins the system; and
 - (iv) has the pipe between the check valve and the outside hose coupling equipped with an approved automatic ball drip; and
 - (b) be provided with approved 88 mm (3 ½ inch) dial spring pressure gauges located at:
 - (i) the discharge pipe from the fire pump;
 - (ii) the supply connection from the public waterworks system; and
 - (iii) the top of each standpipe; and
 - (c) have all valves controlling water supplies in the standpipe and hose system, except for hose valves, equipped with an electrically supervised switch for transmitting its signal to the annunciator panel in the event of movement of the valve handle; and
 - (d) be capable of sustaining a water pressure of 345 kPa (50 psi) above the normal working

pressure at the most remote outlet.

- F.6.1.(4) Except as may be permitted by the Commission, all wet standpipe systems in building exceeding 36 m (118 ft) high from grade to the top standpipe outlet shall:
- (a) be provided with an automatic pressure maintenance pump except that an existing manually controlled pressure maintenance pump with loss of pressure annunciated may be acceptable;
 - (b) be provided with approved check valves as required to maintain excess pressure; and
 - (c) be provided with a system relief valve if the fire pump shut off pressure plus the static suction pressure exceeds the pressure for which the system components are rated.

(iv) Add the following new Sections:

F.7 FIRE PUMP AND CONTROLLERS

- F.7.1.(1) All wet standpipe systems serving buildings greater than 36 m (118 ft) high from grade to the top standpipe outlet, shall be provided with a listed fire pump and listed automatic fire pump controller.
- (2) For the purposes of Sections F.6. to F.9, both inclusive, "grade" means the elevation at which the fire department pumper vehicle is to be located when it is connected to a fire department connection.
 - (3) In buildings exceeding 36 m (118 ft) in building height from grade to the top standpipe outlet, existing listed fire pumps and controllers are acceptable providing:
 - (a) the pump is capable of providing 37.9 L/s (500 gpm) at 448 kPa (65 psi) residual pressure at the most remote outlet; or

- (b) the pump can meet the discharge and residual pressure required by the Code under which it was installed, except that in no case shall this be less than 18.9 L/s (250 gpm) at 310 kPa (45 psi) residual pressure at the most remote outlet.
- (4) If an existing fire pump is replaced, the new pump shall be sized and installed to current Manitoba Building Code requirements.
- (5) Fire pumps shall be provided with test devices installed according to NFPA-20, 1990 edition.
- (6) Fire pumps shall be supervised by the building fire alarm system according to NFPA-20, 1990 edition.

F.8.EMERGENCY POWER FOR FIRE PUMPS

- F.8.1(1) Except as permitted in Sentences F.8.1.(3) and F.8.1.(4), electrically driven fire pumps in building exceeding 36 m (118 ft) in building height from grade to the top standpipe outlet shall be provided with emergency power.
- (2) Where emergency power is required by Sentence F.8.1.(1), an existing power supply to a listed fire pump and controller is acceptable providing;
 - (a) the existing emergency power supply
 - (i) complies with the Code under which it was installed; and
 - (ii) sufficient power is available to operate the fire pump under maximum load;
 - or
 - (b) alternative power arrangements consistent with the requirements of NFPA-20 area acceptable.
- (3) Where it can be demonstrated to the satisfaction of

the Supervisor of Building Inspections that it is not practical to comply with Sentences F.8.1.(1) and F.8.1.(2), the need to provide emergency power for electrically driven fire pumps may be waived provided these fire pumps are supplied by a separate service in conformance with Rules 32-204 or 32-206 of the City of Winnipeg Electrical By-law No. 5530/90.

- (4) Electrical conductors for the separate service required in Sentence F.8.1.(3) shall be protected against exposure to fire with a minimum 2 hour fire protection rating.

F.9.INSPECTION, TESTING AND MAINTENANCE

- F.9.1.(1) Standpipe and hose systems, and fire pumps shall be inspected, tested and maintained, and records shall be kept of required tests in accordance with the 1990 National Fire Code of Canada.

DONE AND PASSED in Council assembled, this 17th day of December, A.D. 1993.