
■ **Scope:**

This guide outlines the requirements of the Manitoba Building Code (“the Code”) for heating, ventilating and air-conditioning (HVAC) systems in a commercial or industrial tenant space (suite) or in a one tenant building. This guide covers only those occupancy classifications defined below.

■ **Terms and Definitions:**

Group A, Division 2 Occupancy:

Assembly occupancies such as clubs, restaurants, churches, schools, and licensed beverage establishments, etc.

Group D Occupancy:

Business and personal service occupancies such as offices, banks, and beauty parlours, etc.

Group E Occupancy:

Mercantile occupancies such as retail stores, shops, and supermarkets, etc.

Group F Occupancy:

Industrial occupancies such as warehouses, factories, repair garages, etc.

Suite:

A single room or series of rooms of complementary use operated under a single tenancy such as a commercial rental unit in a shopping centre or multi-tenant commercial building or a one tenant building. A more detailed definition may be found by referring to Part 1 of the Code.

■ **HVAC Systems:**

1. General ventilation shall be provided in accordance with Sentence 6.2.2.1(2) which states: “Except in storage garages covered by Article 6.2.2.3., the rates at which outdoor air is supplied in buildings by ventilation systems shall be not less than the rates required by ANSI/ASHRAE Standard 62, “*Ventilation for Acceptable Indoor Air Quality.*”

2. Contaminated air ventilation shall be provided in accordance with article 6.2.2.4. which states:
 - “1. Air contaminants released within *buildings* shall be removed insofar as possible at their points of origin and shall not be permitted to accumulate in concentrations greater than permitted in the Industrial Ventilation Manual published by the American Conference of Governmental Industrial Hygienists.
 2. Systems serving spaces that contain sources of contamination and systems serving other occupied parts of the *building* but located in or running through spaces that contain sources of contamination shall be designed in such a manner as to prevent spreading of such contamination to other occupied parts of the *building*.
 3. Heating, ventilating and air-conditioning systems shall be designed to minimize the growth of micro-organisms.”

■ **Application to Existing Suites (ie. Tenant):**

1. A lawfully existing suite will not have to be upgraded to meet the preceding requirements for HVAC systems **except where:**
 - a) the suite is being increased in area,
 - b) the occupant load of the suite is being increased.
 - c) the occupancy classification/use of the suite is being changed.

Most basic building HVAC systems are designed for a general purpose occupancy of an office/retail nature only.

- i. where the business may generate excessive heat and moisture that increases the heating/cooling load, and/or
- ii. objectionable odours, and/or
- iii. fumes.

A separate exhaust and make-up air system, and/or an increased ventilation rate will be required. (MBC 6.2.2.)

2. Where a suite is undergoing renovations, any existing ductwork, supply/return air inlets/outlets shall be relocated/extended as necessary to suit the renovations.

■ **Notes:**

1. The Code contains other requirements for HVAC systems that are not covered in this guide, such as air duct systems, materials, requirements for fire dampers and fire stop flaps, etc. For additional information, refer to the code Parts 3, 6, and 9.
 2. The Plan Examination and Inspection Branches are not permitted to act in the capacity of a design consultant. Therefore, the owner may be required to retain the services of a professional who is skilled in this area of work to provide a design that meets the requirements of the Code.
 3. This guide does not attempt to address every possible situation that could be encountered. HVAC system modifications may be required notwithstanding any of the other requirements outlined in this guide. Please direct any enquiries to the mechanical plan examination section at the location listed on the back of this guide.
 4. **Notice: When makeup air is introduced directly from outdoors it shall be tempered sufficiently to maintain the indoor design temperature.**
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PLANNING, PROPERTY
AND DEVELOPMENT
DEPARTMENT



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MECHANICAL PLAN EXAMINATION

Heating, Ventilating, & Air-Conditioning

***A guide outlining the
HVAC requirements in a
commercial or industrial
tenant space***

Every effort has been made to ensure the accuracy of information contained in this brochure. However, in the event of a discrepancy between this brochure and the governing Manitoba Building Code, the Code will take precedence.