

## Architectural Design Summary

Project description and address: \_\_\_\_\_

General information:

1. This document **must** be completed and attached to the application submission. When necessary, additional analyses shall be provided and included with the submission.
2. All references refer to the Manitoba Building Code (MBC).
3. Indicate all items that are not applicable.

### Fire Protection, Occupant Safety and Accessibility (MBC Part 3 – Division B)

#### MBC Section 3.1 – General

- a. Major occupancy classification (3.1.2): \_\_\_\_\_  
**Note:** For multi-use/storey buildings, more than one major occupancy classification may be necessary
- b. Other intended occupancy group(s): \_\_\_\_\_  
\_\_\_\_\_
- c. Building area(s) (square metres). For additions, both new and existing areas must be included.  
\_\_\_\_\_
- d. Building height: (number of storeys) \_\_\_\_\_ Facing number of streets: \_\_\_\_\_
- e. Building is sprinklered:  Yes  No
- f. Firewall(s): \_\_\_\_\_ hr fire separation Location (grid line): \_\_\_\_\_
- g. High building (3.2.6):  Yes  No If yes, additional analysis included (check):
- h. Alternative solution(s):  Yes  No If yes, see attachment:
- i. Design occupant load(s) (3.1.17) - specify occupant loads for various spaces, when applicable.  
\_\_\_\_\_  
\_\_\_\_\_

#### MBC Section 3.2 – Building fire safety

##### 3.2.2 – Building size and construction relative to occupancy

- a. Construction article(s) – select from articles 3.2.2.20 to 3.2.2.92  
\_\_\_\_\_  
\_\_\_\_\_
- b. Construction:  Non-combustible  
 Combustible or non-combustible, used singly or in combination  
 Encapsulated mass timber (EMTC) or non-combustible, used singly or in combination
- c. Floor assembly above basement (see 3.2.1.4. & 3.2.1.5) \_\_\_\_\_ (hr) fire separation (FS)
- d. Crawl space (see 3.2.2.9) \_\_\_\_\_
- e. Other floor assemblies \_\_\_\_\_ (hr) fire separation (FS)
- f. Mezzanine assemblies \_\_\_\_\_ (hr) fire resistance rating (FRR)

g. Roof assembly	_____	(hr) FFR
h. Roof assembly (see 3.1.14.2)	_____	
i. Load bearing beams and columns	_____	(hr) FFR
j. Fire blocks (attic - 3.1.11.5)	_____	
k. Fire blocks (crawl space - 3.1.11.6)	_____	
l. Encapsulated mass timber construction (3.1.6)		<input type="checkbox"/> Yes
m. Combination smoke/fire dampers required (3.1.8.7)		<input type="checkbox"/> Yes <input type="checkbox"/> N/A

**3.2.3 – Spatial separation**

See Tables 3.2.3.1. A to E; Sentences 3.2.3.7.(1) & (2); 3.2.3.7.(3) and (4); and Article 3.2.3.8. (CAN/ULC-S134)

**North Wall**

a. Limiting distance (LD) = _____ metres; Exposing building face (EBF) = _____ m <sup>2</sup> (area)			
b. Unprotected openings (allowable) _____ % (specify) > unprotected openings (actual) _____ % (specify)			
c. FRR = _____ (hr)	Construction:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible <input type="checkbox"/> EMTC
	Cladding:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible

**South Wall**

a. Limiting distance (LD) = _____ metres; Exposing building face (EBF) = _____ m <sup>2</sup> (area)			
b. Unprotected openings (allowable) _____ % (specify) > unprotected openings (actual) _____ % (specify)			
c. FRR = _____ (hr)	Construction:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible <input type="checkbox"/> EMTC
	Cladding:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible

**East Wall**

a. Limiting distance (LD) = _____ metres; Exposing building face (EBF) = _____ m <sup>2</sup> (area)			
b. Unprotected openings (allowable) _____ % (specify) > unprotected openings (actual) _____ % (specify)			
c. FRR = _____ (hr)	Construction:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible <input type="checkbox"/> EMTC
	Cladding:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible

**West Wall**

a. Limiting distance (LD) = _____ metres; Exposing building face (EBF) = _____ m <sup>2</sup> (area)			
b. Unprotected openings (allowable) _____ % (specify) > unprotected openings (actual) _____ % (specify)			
c. FRR = _____ (hr)	Construction:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible <input type="checkbox"/> EMTC
	Cladding:	<input type="checkbox"/> non-combustible	<input type="checkbox"/> combustible

Supplementary calculations attached:  Yes

Where unprotected openings are >10% but ≤50%, combustible cladding complies with Articles 3.1.5.5. and 3.1.5.6. [Sentences 3.2.3.7.(3) and (4)]  Yes       N/A

Where unprotected openings are >10% in buildings not more than 3-storeys in building height, foamed plastic insulation used in exterior wall complies with Article 3.2.3.8.  Yes  N/A

**3.2.8 – Mezzanines and openings through floor assemblies**

See MBC Section 3.2.8

- a. Open mezzanine (maximum 40%) [Article 3.2.1.1.(3)]  Yes  N/A
- b. Enclosed mezzanine (maximum 10%) [Article 3.2.1.1.(4)]  Yes  N/A
- c. Interconnected floor space [Sentence 3.2.8.2.(6)]  Yes  N/A
- d. Interconnected floor space (Articles 3.2.8.3 to 3.2.8.9)  Yes  N/A

**MBC Section 3.3 – Safety within floor areas**

- a. Suite separation (Article 3.3.1.1) \_\_\_\_\_(hr) FS
- b. Major occupancy separation (Table 3.1.3.1) \_\_\_\_\_(hr) FS
- c. Public corridor separations (Article 3.3.1.4) \_\_\_\_\_(hr) FS
- d. Dead-end corridor [Article 3.3.1.9.(5)] – maximum 6 m \_\_\_\_\_(m)
- e. Janitor’s room (3.3.1.22) \_\_\_\_\_(hr) FS
- f. Common laundry rooms (3.3.1.23) \_\_\_\_\_(hr) FS
- g. Welding and cutting rooms (3.3.1.26) \_\_\_\_\_(hr) FS
- h. Repair garage (3.3.5.5) 2 hr FS  Yes  N/A
- i. Storage garage (3.3.5.6) 1.5 hr FS  Yes  N/A
- j. Storage of dangerous goods (3.3.6)  Yes  N/A

**MBC Section 3.4 – Exits**

- a. Number of exits provided [3.4.2.1.(1)]: \_\_\_\_\_
- b. Distance between exits (3.4.2.3) = \_\_\_\_\_ m > 1/2 Diagonal \_\_\_\_\_ m
- c. Travel distance (3.4.2.5) = \_\_\_\_\_ m
- d. Exit (3.4.4.1) \_\_\_\_\_ (hr) FS
- e. Exit lobby (3.4.4.2) \_\_\_\_\_ (hr) FS
- f. Exit capacity Stair # \_\_\_\_\_ (3.4.3.2): (width) \_\_\_\_\_mm capacity: \_\_\_\_\_mm/person  
Number of persons/exit: \_\_\_\_\_
- g. Exit capacity Stair # \_\_\_\_\_ (3.4.3.2): (width) \_\_\_\_\_mm capacity: \_\_\_\_\_mm/person  
Number of persons/exit: \_\_\_\_\_
- h. Horizontal exit (3.4.1.6 and 3.4.6.10):  Yes  No
- i. Exit schematic provided (optional):  Yes  No

j. Additional information: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**MBC Section 3.5 – Vertical transportation**

- a. Elevator shaft (3.5.3.1) \_\_\_\_\_(hr) FS
- b. Elevator machine room (3.5.3.3) \_\_\_\_\_(hr) FS
- c. Elevator size (3.5.4.1) - see appendix A \_\_\_\_\_mm x \_\_\_\_\_mm

**MBC Section 3.6 – Vertical service spaces**

- a. Service (furnace) room (3.6.2.1) \_\_\_\_\_(hr) FS
- b. Service (other) room(s) (3.6.2.1) \_\_\_\_\_(hr) FS
- c. Incinerator room(s) (3.6.2.4) \_\_\_\_\_(hr) FS
- d. Refuse (garbage) and recycling storage room(s) (3.6.2.5) \_\_\_\_\_(hr) FS

**MBC Section 3.7 – Washroom fixtures**

See Subsection 3.7.2 and Tables 3.7.2.2 A to C

- a. Occupant load/sex = \_\_\_\_\_ /2 = \_\_\_\_\_ /sex
- b. Female            Water Closet: Number required = \_\_\_\_\_      Number Provided = \_\_\_\_\_  
                           Lavatory: Number required = \_\_\_\_\_      Number Provided = \_\_\_\_\_
- c. Male              Water Closet: Number required = \_\_\_\_\_      Number Provided = \_\_\_\_\_  
                           Lavatory: Number required = \_\_\_\_\_      Number Provided = \_\_\_\_\_

**Note:** Unisex washroom fixture counts shall be based on Section 3.7 tables based on total numbers required per gender

**MBC Section 3.8 – Barrier-free design**

- a. Barrier-free protection (3.3.1.7) \_\_\_\_\_ (specify type) or     N/A
- b. Barrier-free path of travel provided throughout the building (3.8.2.3)             Yes
- c. Barrier-free access to upper floor(s) by elevator – required for buildings >2-storeys in building height (3.8.2.3)             Yes       N/A
- d. Barrier-free washrooms are provided (3.8.2.8)             Yes
- e. Public entrance doors equipped with power door operators (3.8.2.7)             Yes       N/A
- f. Universal washroom provided (3.8.2.8 and 3.8.3.13)             Yes       N/A
- g. Min. 850mm clear width for doors in a barrier-free path of travel (3.8.3.6)             Yes       N/A
- h. Tactile information signs – including exit signs (3.8.3.9)             Yes       N/A

**Building code electrical life safety systems**

- a. 3.2.4 – Fire alarm and detection systems: fire alarm is required             Yes       No
- b. 3.2.7 – Emergency lighting: emergency lighting is required             Yes       No

c. 3.4.5 – Exit signs: exit signage is required	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Fire Paramedic Service – Fire Prevention Branch – MBC/MFC</b>		
<b>3.2.5 – Provisions for Fire Fighting</b>		
a. Access for fire fighting provided to basement, above grade storeys, and roof (3.2.5.1, 3.2.5.2, and 3.2.5.3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. Access routes for firefighter’s vehicles, including turnaround (3.2.5.4, 3.2.5.5, and 3.2.5.6)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. Location of hydrants indicated [3.2.5.5.(2)]	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d. Standpipe system is required (see Article 3.2.5.8 and Table 3.2.5.8.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e. Standpipe system fire department connections indicated [3.2.5.15.(1)]	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f. Sprinkler system fire department connection indicated [3.2.5.15.(2)]	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g. Other conditions: _____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>MBC Subsection 3.2.9 – Integration of fire protection and life safety systems (CAN/ULC-S1001)</b>		
<b>Standard for Integrated Systems Testing of Fire Protection and Life Safety Systems</b>		
Building subject to CAN/ULC-S1001 standard (3.2.9.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**Environmental Separation (MBC Part 5))**

**MBC Section 5.3 – Heat transfer**

a. Placement and types of primary insulation layers in environmental separations (describe):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**MBC Section 5.4 – Air leakage**

a. Air-barrier systems utilized (describe):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**MBC Section 5.5 – Vapour diffusion**

a. Vapour barrier materials used and location (describe):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**MBC Section 5.6 – Precipitation**

a. Roofing and flashing systems (describe):

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\_\_\_\_\_

\_\_\_\_\_

b. Drainage and disposal systems (describe):

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**MBC Section 5.7 – Surface and ground water**

a. Methods used to control surface water (describe):

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a. Methods used to control moisture in the ground (describe):

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b. Penetration of service elements:

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c. Methods used to accommodate penetrations by windows, doors, electrical services, mechanical services, etc. (describe):

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**MBC Section 5.8 – Sound transmission (for dwelling units)**

a. Walls:  Sound transmission class rating (STC), or  Apparent sound transmission class rating (ASTC)

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b. Floors:  Sound transmission class rating (STC), or  Apparent sound transmission class rating (ASTC)

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\_\_\_\_\_  
Affix seal with signature and date