

## The Practices of Architecture and Engineering

### **What is Architecture?**

Architecture is legally defined in Manitoba as "the planning or review for others of the erection, enlargement, or alteration of buildings."<sup>1</sup> 1 Aside from specific exceptions, only architects may perform the architectural design of a building.

### **What are the exceptions?**

There are three major exceptions allowed for in the Architects Act of Manitoba:

1. Engineers are permitted to engage in the practice of professional engineering as it relates to buildings.<sup>2</sup>
2. For buildings exempted from Part 3 of the Manitoba Building Code, anybody may perform the architectural design.<sup>3</sup>
3. For some prescribed building occupancies and sizes, engineers are permitted to provide and take responsibility for the architectural design. These are:
  - Arenas with a fixed seating capacity of 1,000 people or less, and
  - Industrial buildings.<sup>4</sup>

### **What is Engineering as it relates to buildings?**

The Practice of Professional Engineering includes the design and inspection of building elements that requires the application of engineering principles, and which concerns the safeguarding of life or health of the public.

### **Which drawings must be sealed by an architect?**

Aside from the building exceptions noted above, all architectural drawings must be prepared and sealed by an architect. These include, but are not limited to, building elevations and floor plan layouts.

### **Which drawings must be sealed by an engineer?**

Structural, electrical, and mechanical drawings must be sealed by an engineer.

### **What about drawings describing compliance of the building design for Part 3 and Part 5 of the Manitoba Building Code?**

Drawings for life safety elements as well as building envelope elements often entail an overlap between the practices of architecture and engineering. Some requirements under Part 3 and Part 5 entail technical analysis and may constitute the practice of engineering.

e.g. Building envelope design is taught to and mastered by both architects and engineers alike.

Plans describing the design of these elements may therefore be submitted by an engineer.

However, since the design of the building envelope is integral to the architectural design of a building, the design of these elements must be in accordance with the architect's design for buildings where an architect is required.

### **What about example elements such as guardrails and sprinkler systems?**

The structural analysis of a guardrail and the mechanical analysis of a sprinkler system constitute the practice of professional engineering and must be performed by a professional engineer.

However, as described above, these elements affect the architectural design of the building and must be in accordance with the architect's design, for buildings where an architect is required.

---

<sup>1</sup> 1(1) of C.C.S.M. c. A130 (The Architects Act)

<sup>2</sup> 15(1.1)(a) of C.C.S.M. c. A130 (The Architects Act)

<sup>3</sup> 25(1) of C.C.S.M. c. A130 (The Architects Act) Table 2.2.2.3. of B93 – M.R. 31/2011(Manitoba Building Code)

<sup>4</sup> 15(1.1)(b) of C.C.S.M. c. A130 (The Architects Act) and Table 2.2.2.3. of B93 – M.R. 31/2011(Manitoba Building Code)

## Appendix A – Extract from Manitoba’s Building Code

BUILDINGS AND MOBILE HOMES

B93 — M.R. 31/2011

**Table 2.2.2.3.**  
**Professional Designers Required**  
**Forming Part of Sentence 2.2.2.3.(1)**

<b>Building Classification</b>	<b>Designers Required*</b>
<b>Group A: Assembly Occupancies</b> (except for Group A, Division 3: Arenas with a fixed seating capacity of 1,000 people or less)	<i>Architect</i> and <i>Professional Engineer</i>
<b>Group A, Division 3: Arenas</b> <i>Building</i> with a fixed seating capacity of 1,000 people or less	<i>Architect</i> or <i>Professional Engineer</i>
<b>Group B: Care or Detention Occupancies</b>	<i>Architect</i> and <i>Professional Engineer</i>
<b>Group C: Residential Occupancies</b> <i>Building</i> exceeding 600 m <sup>2</sup> in <i>building area</i> or exceeding 3 <i>storeys</i> in <i>building height</i>	<i>Architect</i> and <i>Professional Engineer</i>
<b>Group D: Business and Personal Services Occupancies</b> <i>Building</i> exceeding 600 m <sup>2</sup> in <i>building area</i> or exceeding 3 <i>storeys</i> in <i>building height</i>	<i>Architect</i> and <i>Professional Engineer</i>
<b>Group E: Mercantile Occupancies</b> <i>Building</i> exceeding 600 m <sup>2</sup> in <i>building area</i> or exceeding 3 <i>storeys</i> in <i>building height</i>	<i>Architect</i> and <i>Professional Engineer</i>
<b>Group F, Division 1: High Hazard Industrial Occupancies</b>	<i>Architect</i> or <i>Professional Engineer</i>
<b>Group F, Division 2 and Division 3: Medium and Low Hazard Industrial Occupancies</b> <i>Building</i> exceeding 600 m <sup>2</sup> in <i>building area</i> or exceeding 3 <i>storeys</i> in <i>building height</i>	<i>Architect</i> or <i>Professional Engineer</i>

\* The required designer(s) must be skilled in the type of work concerned.