

1.0 **GENERAL**

1.1 **Related Work and UBC Guidelines**

- .1 Section 03 33 00 Architectural Concrete
- .2 Section 07 00 10 Building Envelope – General Requirements
- .3 Section 07 25 00 Weather Barriers
- .4 Section 07 40 00 Cladding
- .5 Section 08 00 10 Openings – General Requirements
- .6 Section 09 90 00 Painting and Coating
- .7 Divisions 26 and 28
- .8 Section 27 05 05 Communication Rooms Design Guidelines

1.2 **Related External Documents**

1. Latest edition of the British Columbia Building Code (BCBC), including accessibility requirements.
2. Canadian Steel Door Manufacturers Association (CSDMA), Recommended Specifications for Commercial Steel Doors and Frames.
3. Fire-Rated Door Assemblies: CAN/ULC-S104-10 - Standard Method for Fire Tests of Door Assemblies; CAN/ULC-S105-09 - Standard Specification for Fire Door Frames Meeting the Performance Required by CAN4-S104; labeled and listed by ULC, cUL, Warnock Hersey, or other testing agency.
4. NFPA 80 for installation of fire rated doors and frames.

1.3 **Description**

1. Section includes hollow metal doors (HMD), insulated metal doors (IMD) and pressed steel frames (PSF).

1.4 **Coordination**

1. The Guidelines apply to all work completed within buildings on both the UBC Vancouver and UBC Okanagan campuses unless stated otherwise.
2. In instances where conflicts are found between these guidelines and provincial regulations or codes, please notify the UBCV Technical Review Team Architect or UBCO Facilities Management.
3. These guidelines are intended to be read by design consultants and their content integrated into construction drawings and specifications. Construction documents are not to reference the technical guidelines directly.
4. The Coordinating Registered Professional (CRP) is required to coordinate these requirements with other disciplines.
5. Provide door and door hardware schedules for review by UBC Access and Security and Locksmith Shop prior to tender and Building Permit.
6. Genie or manlift access requirements will need to be coordinated if only providing single exterior doors due to security reasons. Review with UBC Access and Security.

1.5 **Submittals**

1. Design phase:
 - .1 Submit required documents to consultants in accordance with Section 013300 Submittal Procedures
 - .2 For Construction Office projects only, provide paint colour samples for review.
2. Handover – O&M submittals:
 - .1 Provide final reviewed door shop drawings and colour specifications for painted doors.
 - .2 Provide door hardware list and location.
 - .3 Provide manufacturer installation instructions and test data, for fire rated doors.

2.0 DESIGN AND PERFORMANCE REQUIREMENTS

2.1 Design Requirements

- .1 Standard and minimum door size shall be 915 mm wide x 2,134 mm high x 44 mm thick (3'-0" x 7'-0" x 1 3/4").
- .2 Maximum door height: 2,134 mm (7'-0"). A variance will need to be granted for over-height doors.
- .3 All materials should be shop fabricated and finished, with no field cutting of materials allowed.
- .4 Glazed doors must have stiles and rails. No glazed doors with only top and bottom rails or patch hardware. Stile width of glazed doors shall be 127 mm (5") x 45mm (1 3/4") minimum to accept surface-mounted panic hardware and mortise locksets.
- .5 Doors must have mid-rails if equipped with panic hardware and exit devices.
- .6 Avoid exterior double doors where security is a requirement. Exterior exit doors with panic hardware or 'pass out' locksets must be singles with in their own frames.
- .7 Provide lockable removable mullions at double doors where extra width is required such as for genie or manlift access into the interior, moving equipment and supplies, etc.
- .8 [Where](#) single entrance doors [are ganged together](#), in such instances, ensure width of doors can accommodate the passage of a genie or manlift access into the interior, moving equipment and supplies, etc.
- .9 Frames to be fully-welded. A variance will need to be granted for knock-down frames.
- .10 For security reasons from within a building, provide for EXIT alarms on certain Exit-Only doors.
- .11 Provide electrical pathways to mid hinge, strike and header of frames for future electrification of openings. Must include pull string to each pathway
- .12 Provide back boxes for electrical wire or conduits.
- .13 [Standard procedures to be followed for concealed door frames within the drywall assembly such as EzyJamb door frames are as follows:](#)
 - .1 [Concealed door frames shall not be used for exterior doors.](#)
 - .2 [As cracks develop quite often on drywall assembly over the door frames, use concealed door frames for rooms that do not require frequent usage. Since wear and tear on the drywall installation is minimized, this in turn reduces cracking.](#)
 - .3 [Door type and height should be considered when considering the use of concealed door frames. Follow manufacturer's installation requirements for jamb installation, fastening and hinge type.](#)

2.2 Performance Requirements

- .1 Doors shall be designed to have a 25-year service life.

3.0 MATERIALS

3.1 Product Selection

- .1 Interior Doors: *shall be* 18 gauge (1.2 mm), galv. to ZF075 wiped zinc coating, honeycomb structural core.
- .2 Exterior Doors: shall be 18 gauge (1.2 mm), galv. to Z275 (G90) zinc coating, insulated polyurethane insulation core.
- .3 Interior Frames: shall be 16 gauge (1.6 mm), galv. to ZF075 wiped zinc coating; galvanizing on anchors to match frames.
- .4 Exterior Frames: shall be 16 gauge (1.6 mm), galv. to Z275 (G90) zinc coating, galvanizing on anchors to match frames.
- .5 Finishes: All new doors scheduled to be painted are to be hollow metal. Finish paint coat must be applied before final hardware install.

END OF SECTION