Part 1  General

1.1  Summary

.1  Unless otherwise indicated, follow the standards below when specifying Metal doors and frames. These standards are not intended to replace professional judgment.

1.2  Design Requirements

.1  The minimal width for all interior and exterior doors is 915 mm and the minimal height is 2135 mm unless there are other constraints. Door heights shall match the existing doors in that area.

.2  The minimal width for all mechanical room doors is 1200 mm. If the clearance is not wide enough for the door to open, specify two doors with one being 915mm of width and the other the width to complete the opening.

.3  Interior frame configuration shall allow a minimum 150 mm between the edge of the frame and the adjacent wall on the hinge side to accommodate coat hooks and hangers behind the door.

.4  Steel exterior door shall be used only for low traffic areas such as exit doors not normally operable. All other exterior doors shall be wood.

.5  For service rooms, mechanical rooms or when a fire resistance of 45min or more is required, specify fire rated doors and frames with ULC labels.

.6  For rooms with special acoustical requirements, specify doors and frames filled with acoustical insulation. Specify required hardware to meet acoustical needs.

.7  For aluminum doors and frames, refer to section 08 11 16.

.8  Doors which are located along the principal circulation arteries of buildings shall have vision panels integrated into the doors, or sidelights wherever possible, ensuring proper visibility for persons moving in either direction. For fire-rated doors, the glazed area shall not exceed the maximum allowable area as stipulated by the Quebec Construction Code. The size and location of the glazed area within the door shall be appropriate for people in wheelchairs, and shall be coordinated so as not to conflict with the specific hardware requirements of the door.

.9  Laboratories:

   .1  To allow for easy moving of equipment from/to the laboratory, doors shall be at least 1070 mm wide by 2135 mm high (42" x 84").

   .2  Laboratory exit doors must have a glass panel or a sidelight to prevent collisions of persons entering / exiting (low enough for people in wheelchair to see through)

   .3  Doors and frames in laboratories must be metal

   .4  Entrance door to laboratories shall be equipped with a door holder for laboratory information and entry caution card.
1.3 Guarantee

.1 Do not design doors which will void the guarantee because of oversized cut outs or insufficiently sized stiles and rails.

Part 2 Products

2.1 Preferred Products

.1 For products with Environmental Product Declarations (EPDs), which may contribute to LEED® v4 MR Credit Building and Disclosure Optimization – Environment Product Declarations, refer to:

.1 UL Environment [http://productguide.ulenvironment.com/]

.2 For products with health product declarations (HPDs) and/or manufacturer inventories that meet the requirements for LEED® v4 MR Credit Building Product Disclosure and Optimization – Material Ingredients, refer to:

.1 Declare Product Database [www.living-future.org/declare-products]
.2 HPD Library [http://hpd.smithgroupjr.org/]

.3 For products with recycled content that may contribute to LEED® v4 MR Credit Building Product Disclosure and Optimization – Sourcing of Raw Materials, refer to the following websites:

.1 SCS Global Services [www.scsglobalservices.com/certified-green-products-guide]
.2 Green Circle Certified [http://greencirclecertified.com/database/]

.4 Materials that are locally sourced (extracted, manufactured, and purchased) within 160 km (100 miles) are preferred and will increase cost values for credit calculations in the Materials and Resources Building Product Disclosure and Optimization credits.

2.2 Accessories

.1 Specify 3 rubber stud bumpers per door leaf on the lockset jamb and 2 at the head of double doors. Type SR64 as manufactured by “IVES” or approved equivalent.

.2 Specify metal riveted Fire labels

.3 Specify burglar proof glass bead.

2.3 Frame Fabrication

.1 Exterior frames and mechanical room frames: 1.6 mm (16 gage) welded type construction.

.2 Interior frames at 1.2 mm (18 gage) welded type construction.

.3 For all door frames wider than 915mm, specify a 1.9mm (14 gage) welded type construction.
.4 Manufacturer’s nameplates on frames and screens are not permitted.

.5 Specify insulated exterior frame components with polyurethane insulation.

.6 Specify reinforcement for hardware.

2.4 Frames: Welded Types

.1 Grind welded joints and corners to a flat plane, fill with metallic paste and sand to uniform smooth finish.

.2 Spot welding is forbidden

2.5 Doors: Hollow Steel Construction

.1 Exterior doors: Hollow steel construction on each face sheet from 1.6 mm sheet steel. The interior shall consist of rigid urethane, hot laminate and thermal resistance 0.7 m² co/w. Factory finished with a coat of rustproof paint containing zinc chromate.

.2 Interior doors: Hollow steel construction on each face sheet from 1.2 sheet steel.

2.6 Fire-rated Assemblies:

.1 Provide units that are labelled and listed for rating indicated, by Underwriters’ Laboratories.

2.7 Anchors and Accessories:

.1 Manufacturer’s standard units. Specify galvanized items for units built into exterior walls, complying with ASTM A 153.

Part 3 Execution

3.1 Installation-General

.1 Specify labelled steel fire rated doors and frames to NFPA 80 except where specified otherwise.

.2 Specify installation of doors and frames conforming to the CSDFMA Installation Guide.

END OF SECTION