



Boise State University

Division 08 - Openings

Updated Dec 4, 2023

Summary

The purpose of this document is to provide the design team with an easy to reference document containing Boise State University's guidelines for construction projects on campus and is intended as a resource to inform the design process. This document does not remove responsibility from the designer, preclude the use of engineering judgment, or relieve the designer from meeting all adopted code requirements. Questions, clarifications, or suggestions can be directed to the Boise State University Project Manager (PM).

These guidelines have been developed as a joint effort between the Facilities, Operations and Maintenance (FOM) team and the Architectural and Engineering Services (AES) team to help ensure the resiliency of Boise State's campus by considering maintenance needs, sustainability goals, future expansion, and responsible stewardship of our resources. These guidelines are created from both common industry standards and lessons learned through the practice of engineering and maintenance. They are arranged using the Masterspec Divisions to help facilitate a common language.

Related / Supporting Documents

In addition to this document, see the following Boise State University Guidelines:

1. *Division 26 (under development).*
2. *Division 28 (underdevelopment).*

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Section 080000 – General Openings

This standard does not address all situations. Where discrepancies exist, the designer believes other solutions should be considered, or for specialty situations, consult with the Boise State Project Manager and Facilities team.

Doors

1. Provide 42” exterior doors for building entrances when possible to facilitate easier access through the door for moving furniture, equipment, and other items.
2. All spaces requiring a four (4) foot opening must be a one piece single door. Twelve (12) inch pony doors are not allowed.
3. Provide seven (7) foot tall exterior doors as standard. Eight (8) foot doors may be used to accommodate large equipment.
4. Doors must be pivoting type only. The following door types are not permitted without approval from the Boise State Project Manager and Facilities team:
 - a. Sliding doors.
 - b. Automatic entrance doors.
 - c. Revolving entrance doors.
5. Vinyl and plastic doors are not allowed without approval from the Boise State Project manager and Facilities team.
6. Where the additional width of a pair of doors is required, a keyed removable mullion must be used. All keyed removable mullions must be Von Duprin KR4954.

Section 081113 – Hollow Metal Doors and Frames

Doors

1. Doors: One and three-fourths (1¾) inch thick with welded seamless construction and reinforced for closers, panic/exit devices, and mortise case locks.
 - a. **Interior Doors, Regular Use:** Heavy Duty 18 gauge steel doors meeting ANSI A250 Level 2 and Physical Performance Level B.
 - b. **Interior Doors, Heavy Use:** Extra-Heavy Duty 16 gauge steel doors meeting ANSI A250 Level 3 and Physical Endurance Level A.
 - i. Examples of Heavy Use rooms include: Custodial closets, mechanical rooms, warehouse man doors, etc.
 - c. **Exterior Doors:** Extra-Heavy Duty 16 gauge steel doors meeting ANSI A250 Level 3 and Physical Endurance Level A.

Frames

1. Frames for new construction and retrofits must be mitered, welded and reinforced for butts, closers, and strikes.
 - a. **Interior Frames:** Regular Use, 16 gauge (0.053 inches thick)
 - b. **Exterior Frames:** Heavy Use, 14 gauge (0.067 inches thick)

2. Steel doors and frames must be shop primed and field painted.
3. Knock-down frames are only acceptable for low use areas in a remodel. Knock-down frames are not acceptable in new construction.

Section 081416 – Flush Wood Doors

Construction

1. Interior Wood Doors: One and three-fourths (1¾) inch thick, solid or heavy duty structural core, reinforced for closers, panic/exit devices and mortise case locks.

Door Faces

1. Provide door faces and matching door edges with a hardwood species readily available in the Boise market.

Finish

1. Faces and Edges: Stained and varnished or factory pre-finished.
2. Plastic laminate door faces are not permitted.

Section 083000 – Specialty Doors and Frames

Access Doors and Panels

1. Minimum of 24" x 24" and as required by the building official for access to concealed equipment, valves, etc. Coordinate with other divisions for locations.
2. All access doors and panels must be metal. Plastic access doors or panels are not permitted.
3. Provide access by quarter turn hardware. Keyed or bolted access is not permitted.

Section 084113 – Aluminum Framed Entrances and Storefronts

Aluminum Doors

1. Aluminum doors: Heavy duty, wide stiles with six (6) inch high top rail and ten (10) inch high bottom rails.
2. Aluminum storefront doors must be provided with heavy-duty continuous hinges only.

Aluminum Door Frames

1. All aluminum door frames must be heavy-duty and reinforced for closers and strikes.

Hardware

1. The aluminum door supplier must coordinate and prepare aluminum doors and frames for hardware provided and installed by others.

Section 087100 – Door Hardware

The following door hardware applies to all doors regardless of door material or type.

1. All hardware must be 626 satin chrome finish unless matching an existing hardware finish in an existing building.
2. Provide quarter turn thumb-locks with a lock / unlock indicator on the inside of the door for all classroom and office doors.

Locksets

New Construction

1. Lockset: Schlage L9000-O6A-626 Series Grade 1 mortise locks.
2. Panic Bars: Von Duprin 99 panic devices .
3. Thumb Locks: Schlage N-Series escutcheon model L283-437 with Large ADA Thumbturns model L583-363.

Remodels

1. Lockset:
 - a. Schlage L9000-O6A-626 Series Grade 1 mortise locks.
 - b. Schlage ND Series Grade 1 cylindrical locks (retro-fit of existing doors only).
 - c. Thumb Locks: Schlage N-series escutcheon model L283-437 with Large ADA Thumbturns model L583-363.
4. Panic Bars:
 - a. Von Duprin 99 panic devices .
 - b. Von Duprin 33A panic devices (retro-fit of existing doors only).

Cylinders

Academic Buildings

1. ASSA Brand V10 cylinders are required.
2. The hardware supplier must coordinate master keying with the Boise State Locksmith and Project Manager. The keying of cylinders must be performed by the lockset manufacturer. All keys and cores must be sent directly from the manufacturer to the Boise State Locksmith and must be installed by the Boise State Locksmith.

Housing Buildings

1. Boise State Housing door hardware must be A2 small format I/C core cylinders.

Panic/Exit Devices

1. The Von Duprin 99 Standard stile must be used for all new doors. The Von Duprin 33A Narrow stile must be used for retrofit of existing narrow stile doors only.

Card Access Entries:

1. Von Duprin QEL99 or QEL33 electronic latch retracting units with request-to-exit (RX) switches must be used. Von Duprin Schlage L9000 EU/RX power supplies must be provided. Magnetic and electric strikes are not permitted.
2. Single point latching exit/devices must be used unless requested otherwise by the Boise State Project Manager or Locksmith. Exposed and concealed vertical rods are not permitted.

Door Closers

1. The LCN 4040XP parallel arm must be used for exterior and interior doors. Spring loaded hinges are not allowed as a closing device.

ADA Door Operators

1. The Horton Automatics Series 7000/4000 must be used All ADA activation pads must be hardwired.

Hold Opens

1. Where doors are required to be in the normally open position such as office suites, fire rated doors must be provided with magnetic hold opens connected to the fire alarm system.

Section 088000 – Glazing

Glazing

1. All exterior glazing must be a minimum of double pane insulated, argon gas filled, low emissivity, clear or tinted glazing units. The tint color must be approved by the Boise State Project Manager.
2. Reflective glazing or reflective window film is not permitted.
3. Glazed units must be serviceable from the interior of the building.
 - a. Exception: Glazed units located on the ground level can be serviceable from the exterior.
4. Breaking of existing insulated glazing units to accommodate unit removal and/or access to glazing sealant/tape systems is not permitted.
5. Interior Wet/Dry Method (Tape and Sealant) or Interior Dry Method (Tape and Tape) are permitted.
6. Provide a minimum manufacturer's warranty period of ten (10) years from the date of manufacture for dual seal vertically glazed units. Insulating units in sloped glazing applications must be warranted for a period of five (5) years from the date of manufacture. Warranty must include all costs associated with unit replacement.