



Division 080000

Openings

DESIGN GUIDE

Contents – Division 080000:

081000	Hollow Metal Doors and Frames
082000	Wood Doors and Frames
083000	Specialty Doors and Frames
085000	Windows
087000	Hardware
088000	Glazing

081000 Hollow Metal Doors and Frames

1 Steel Doors and Frames

1.1 General

- A. All hollow metal doors shall be a minimum of 16ga. with reinforcing for all hardware applications.
- B. All hollow metal frames shall be a minimum of 16ga. and fully welded. Knock-down frames are not permitted.
- C. All typical and special frame conditions shall be thoroughly detailed on design drawings.
- D. All metal frames shall be fully grouted with gypsum grout and shall be detailed as such.
- E. All frame details shall include correct wall system for each circumstance. Frames, wall construction, finishes insulation and sealants to be clearly indicated in all details.



- F. All hollow metal frames to be supported by double full height stud each side.
- G. All entry doors and frames shall be hollow metal...
- H. Aluminum storefront doors and frames shall not be permitted except in special instances.

082000 Wood Doors and Frames

1 Wood Doors and Frames

1.1 General

- A. Wood frames are not permitted except when matching existing conditions on remodel projects.
- B. Wood doors shall be hardwood veneer flush, 1 3/4" thick solid core, meeting AWI institutional grade.
- C. Plastic laminate veneers will not be permitted.
- D. When glass panels or vision lites are installed door stiles shall be per manufacturer's requirements to maintain guarantees.
- E. All modifications to wood doors, including edges and hardware preps shall be sealed per mfg's recommendations.
- F. All wood doors shall have a lifetime certificate of guarantee provided to the university.
- G. All frame details shall include correct wall system for each circumstance. Frames, wall construction, finishes, insulation and sealants to be clearly indicated in all details.



083000 Specialty Doors and Frames

1 Access Doors

1.1 General

- A. Design shall include location of all access doors required by bode and/or to areas and equipment that university personnel will need to access for maintenance and/or repair.
- B. All access doors accessible to the public and/or students shall have keyed locks.

085000 Windows

1 General

1.1 General

- A. The use of projections, overhangs, shutters, awnings or other architectural devices are recommended for windows in sunny locations especially in south and west orientations.
- B. Heat gain and reflective glare to adjacent buildings or public areas shall be minimized by design.
- C. All exterior glazing shall be double insulated. With glazing removable from the inside.
- D. All academic or administrative buildings shall have only steel or aluminum windows, no wood windows allowed.
- E. Operable windows are not desired by the university. If operable windows are included in the design a university approved locking mechanism is required.
- F. All specified windows shall meet requirements of the Steel or Aluminum window Institute.



- G. All window frame details shall include correct wall system for each circumstance. Frames, wall construction, finishes, insulation and sealants to be clearly indicated in all details.
- H. Approved colors for glazing are: clear, gray, bronze, and solex (light green).
- I. Solar cool reflective glass shall be gray or bronze.

087000 Hardware

1 General

1.1 Finish Hardware

- A. Locksets shall be as follows:
 - 1. Schlage” brand mortise type locksets and cylindrical locks. Specify “Heavy Duty “ series throughout.
 - 2. Lever handles shall be “Rhodes” or “Sparta” on cylindrical locksets and Schlage 03, 06, or 17 for mortise locksets.
 - 3. Lockset backsets shall be two and three-quarter inches (2 ¾”). All dimensions must conform to ANSI specifications.
 - 4. All cylinders will be Medeco and shall be supplied by the university. Contractor shall be required to provide their own cylinders for temporary use of permanent hardware for security reasons during construction.
 - 5. Interchangeable core locksets are not acceptable.
 - 6. The university shall be responsible for final keying.

With the exception of overhead doors no lock cylinders will be allowed at the base or at the head of any door. This includes aluminum glass entrances or storefront doors.

Deadbolts shall be as follows:

- 1. “Medeco” brand deadbolts throughout. Specify type D-11 (special heavy duty).



2. Deadbolts shall be specified only on doors needing justified extra security.
3. Deadbolt backset shall be two and three-quarters inch (2 $\frac{3}{4}$ "). All dimensions must conform to ANSI specifications.
4. All deadbolts shall have thumb turn on the inside unless otherwise approved by CWU.

Exit devices shall be as follows:

- 1) "Precision", "Apex", or "Von Duprin 98 or 99" brand exit devices.
 - 2) All dogging on exit devices shall be standard $\frac{1}{4}$ turn Allen type.
5. Door Closers and Opening Devices shall be as follows:
- 1) "LCN" brand door closers and automatic assisting devices: Specify models #4041 or #4111 EDA.
 - 2) Finish shall match other hardware.
 - 3) Thru bolts shall be specified for all fire doors.
 - 4) Automatic assisting devices shall be push plate activated. Walkway pads or devices activated on each swing of the doors are not allowed. Power assisted door operators are not allowed.
 - 5) All frames to have silencers.
 - 6) "Pemko" #346A overhead drips shall be specified for all exterior doors exposed to the weather.
 - 7) Wall bumpers shall be "Quality #302. Concave or Convex type depending on the application. Design shall include details showing specific construction for wall bumper backing.
 - 8) Floor bumpers shall be "Glynn-Johnson #FB185.
 - 9) Kick Plates shall be stainless steel. 12" high by the actual width of the door less 2", allowing 1" on each side.



- 10) Hinges shall be “McKinney” or “Stanley” 4 ½” x 4 ½”, ball bearing, full mortise, heavy weight, non-removable pin (NRP).
- 11) All entrance doors shall have piano hinges.
- 12) All external double door openings shall have removable mullions that allow for the installation of rim exit devices. Only doors that must allow for passage of large objects shall be exempted from this requirement, but only with the universities approval. When dbl. door openings are used where an exit device is not possible (i.e. R.H. & L.H. inward opening doors) only manually operated flush or surface bolts at the top and bottom of the inactive door shall be used. A threshold stop is required. Automatic or coordinating dbl. door flush bolt systems of any type shall not be used.
- 13) The specifications shall require a complete set of tools and maintenance instructions as needed for the universities continued maintenance of the hardware system.

088000 Glazing

1 General

1.1 General

- A. All interior glazing shall be single one quarter inch (1/4”).
- B. Laminated horizontal grid wire glass shall be used if safety glass is required.
- C. The use of plastics in lieu of glass is not allowed.
- D. Permanent glass mirror installation shall be done with Mirro Mastic or approved products to facilitate replacement and reglazing.



- E. Sloped glazing systems, suspended glazing systems and skylights are not allowed on campus unless approved prior to incorporation into design.