

Division 8 – Doors & Windows

08050 – Basic Door and Window Materials and Methods

1. Has a minimum door leaf size of 3'-0" x 7'-0" been specified for both interior and exterior doors?
(Specific drawing sheet #/specification page # _____)
2. Has the door height been standardized at 7'-0" (rather than 6'-8")?
(Specific drawing sheet #/specification page # _____)
3. If fume hoods or other large equipment are included in the project, or may be required in the future, have doors been sized to allow for moving the items in and out? Have both exterior and interior doors been addressed for this requirement?
(Specific drawing sheet #/specification page # _____)
4. Has at least one main entry door accessible from adjacent sidewalks by wheelchair (the accessible path) and does it display the proper handicapped signage? Have all other entry doors been provided with proper signage per ADA/ANSI standards to direct handicapped persons? All doors must comply with ADA/Florida Building Code requirements for size, opening/closing force, time delay on closer-equipped doors, etc.
(Specific drawing sheet #/specification page # _____)
5. Do all exterior doors comply with Florida Building Code (wind loading, etc.) and all other applicable codes?
(Specific drawing sheet #/specification page # _____)
6. Do all doors used as means of egress (including those in corridors) that require vision panels have approved vision panels installed to meet NFPA 80 and other applicable code requirements?
(Specific drawing sheet #/specification page # _____)
7. Do all operable items on exterior doors have an integral finish --not applied, painted, baked on, etc.?
(Specific drawing sheet #/specification page # _____)
8. Are all doors requiring fire ratings clearly identified on the schedule and have frames and hardware been coordinated to match the required rating?
Specific drawing sheet #/specification page # _____)
9. Are all doorways numbered? Door numbers shall relate to the adjacent room numbers.
Specific drawing sheet #/specification page # _____)
10. Has the following been specified (coordinate with Division 9 – Finishes): For solid-core wood doors and hollow metal doors 2'8" to 4'0" wide (200 lb. max.), rough framing shall be 20-ga. steel studs and runners. For heavy doors up to 4'0" wide (300 lb. max.), two 20-ga. studs shall be used. For doors over 4'0" wide, double doors and extra-heavy doors (over 300 lb.), framing shall be specially designed by the A/E to meet load conditions. Rough framing for all doors in fire-rated partitions shall be 20-ga. studs and runners.
Specific drawing sheet #/specification page # _____)

08110 - Steel Doors and Frames

1. Do hollow metal frames have mitered or coped and welded corners? Knock down frames are not preferred.
(Specific drawing sheet #/specification page # _____)
2. Have exterior HM frames been specified to be at least 14 Gauge hot-dipped galvanized?
(Specific drawing sheet #/specification page # _____)
3. Have interior HM frames been specified to be at least 16 Gauge galvanized?
(Specific drawing sheet #/specification page # _____)
4. Are all exterior HM doors Extra Heavy Duty, Seamless? Glazing if used must be non-reflective. Has weatherstripping been specified on all exterior doors?
(Specific drawing sheet #/specification page # _____)
5. Are all interior HM doors Heavy Duty, Seamless?
(Specific drawing sheet #/specification page # _____)
6. Exterior louvered HM doors are not allowed. Has this been coordinated with the engineers?
(Specific drawing sheet #/specification page # _____)

08210 - Wood Doors

1. Do all wood doors meet the ANSI/WDMA I.S.1A Standard for Architectural Wood Doors?
(Specific drawing sheet #/specification page # _____)
2. Are all wood doors solid core? Hollow core doors are not approved.
(Specific drawing sheet #/specification page # _____)
3. Has the A/E specified that doors shall contain no added urea-formaldehyde resins?
(Specific drawing sheet #/specification page # _____)
4. Are all wood doors 1-3/4" solid core?
(Specific drawing sheet #/specification page # _____)
5. Do all doors meet the requirements of NFPA 80 and 101 where applicable, and are they able to use standard locksets?
(Specific drawing sheet #/specification page # _____)
6. Where cutouts for closers are required, has the head rail been specified to be not less than 6 inches?
(Specific drawing sheet #/specification page # _____)
7. If hardwood edges are desired have they been clearly specified with the thickness given?
(Specific drawing sheet #/specification page # _____)
8. Do all doors used as means of egress (to include corridors) and all fire rated doors that require vision panels have approved vision panels installed to meet NFPA 80 and other applicable code requirements?
(Specific drawing sheet #/specification page # _____)

9. Is wood door quality clearly specified as well as approved manufacturer's names? At least 3 manufacturers must be specified.
(Specific drawing sheet #/specification page # _____)

08400 – Entrances and Storefronts

1. Has it been specified that all entrances, storefronts, and windows shall be clear anodized aluminum finish?
(Specific drawing sheet #/specification page # _____)
2. Has a medium stile entrance door been specified? Narrow stile is not allowed (interior doors also).
(Specific drawing sheet #/specification page # _____)
3. Do all entrances comply with Florida Building Code (wind loading, etc.) and all other applicable codes? Narrow stile doors are not allowed in any condition.
(Specific drawing sheet #/specification page # _____)

08500 - Metal Windows

1. Has consideration been given to the provision of operable windows as a means of ventilation in the event that air conditioning equipment is not in operation? Are operable windows provided with positive locking devices?
(Specific drawing sheet #/specification page # _____)
2. Have all classroom windows, unless otherwise advised by the FAU Facilities Planning Project Manager, been equipped with audiovisual blinds or acceptable window coverings? Has this been coordinated with Division 12 – Furnishings?
(Specific drawing sheet #/specification page # _____)
3. Have guardrails at all full height glass panels been specified in accordance with applicable codes?
(Specific drawing sheet #/specification page # _____)
4. Are all exterior windows specified to comply with Florida Building Code requirements? (Wind loading, etc.)
(Specific drawing sheet #/specification page # _____)

08700 - Finish Hardware

1. Is the hardware schedule included in the specification? (This is to avoid change orders and delay in taking bids. A completely itemized schedule is preferred, i.e., not a group listing.) A cash allowance for finish hardware shall not be used unless otherwise authorized.
(Specific drawing sheet #/specification page # _____)

Locksets

2. Has the lockset manufacturer for all FAU work (except Housing and Residential Life Department) been specified to be Sargent Manufacturing Co. only with no substitutes allowed?
(Specific drawing sheet #/specification page # _____)
3. Has the lockset manufacturer for all FAU Housing & Residential Life Department work been specified to be Best Access Systems only with no substitutes allowed?
(Specific drawing sheet #/specification page # _____)

- 4. Have mortise locksets been specified and are they Sargent 8200 series with L lever handles, LN roses, and removable cores?
(Specific drawing sheet #/specification page # _____)
- 5. Have the removable cores been specified to be Sargent 6-pin old style with FAU restricted keyway for Boca Raton and Northern Campuses projects?
(Specific drawing sheet #/specification page # _____)
- 6. Have the removable cores been specified to be Sargent 5-pin new style with FAU restricted keyway for Broward Campuses projects?
(Specific drawing sheet #/specification page # _____)
- 7. Does the specification state that the hardware supplier must be authorized by Sargent and approved in writing by FAU?
(Specific drawing sheet #/specification page # _____)

Butts

- 8. Have 5-knuckle, button tip, full mortise, template type stainless steel ball bearing butts with non-rising loose pins been specified?
(Specific drawing sheet #/specification page # _____)

Exit Devices

- 9. Has Von Duprin type 99 or comparable, in finish compatible with door been specified? Have aluminum or steel removable mullion at all lockable pairs of doors, interior and exterior been provided? At exterior pairs of aluminum doors, have Kawneer Panic Guard, or comparable, entrances been specified?
(Specific drawing sheet #/specification page # _____)
- 10. Have exit devices been specified to be Sargent 8800 series rim-type?
(Specific drawing sheet #/specification page # _____)
- 11. Have all electrically controlled exit devices been specified to have steel dogging screws and to be 2-wire?
(Specific drawing sheet #/specification page # _____)
- 12. Do all building entrance/exit doors contain exit devices with concealed vertical rod? Surface vertical rods for exit devices are not acceptable due to handicapped interference.
(Specific drawing sheet #/specification page # _____)

Closers

- 13. Are closers specified to be surface applied Sargent 351 series or LCN 4040 series (both interior and exterior doors)? Is the cover finish powder coat aluminum enamel?
(Specific drawing sheet #/specification page # _____)
- 14. Are closers at interior doors specified to be mounted on the room side of doors so as not to be visible from corridors, lobbies, and other public spaces?
(Specific drawing sheet #/specification page # _____)
- 15. Has it been specified that all closers shall comply with Florida Building Code and ADA requirements for closing strength, speed, (and delayed action if required) and

A/E has verified that closers specified will meet this requirement?
 (Specific drawing sheet #/specification page # _____)

Stops

16. Are wall-mounted convex rubber bumpers with concealed fasteners specified? At drywall partitions, has solid blocking been specified within the stud space? Floor stops are to be used only where wall bumpers cannot be used.
 (Specific drawing sheet #/specification page # _____)

Kickplates

17. Are 8 inch high stainless steel kickplates specified on doors subject to severe use? Office doors generally do not require kickplates.
 (Specific drawing sheet #/specification page # _____)

Provisions for Noise Control

18. Has weatherstripping been called for at heads, jambs, and sills at machine room and other doors where excessive noise is anticipated? Has the A/E determined if surface applied automatic door bottoms are be required?
 (Specific drawing sheet #/specification page # _____)

Hardware for Metal Entrance Doors

19. Is all hardware for metal entrance doors furnished under this Division 8 – Doors & Windows (unless otherwise noted)? Has it been specified that the hardware supplier furnish to the door manufacturer templates or the actual hardware?
 (Specific drawing sheet #/specification page # _____)

Thresholds

20. Do all thresholds meet Florida Building Code and ADA requirements? Are thresholds at trash, receiving, recycling rooms, etc., that will require regular movement of wheeled carts as low as possible (if required at all) and shaped to allow easy movement of carts?
 (Specific drawing sheet #/specification page # _____)

Finish (unless otherwise noted)

21. Have interior finishes been specified to be brushed stainless steel (US32D) or brushed chrome (US26D)? Have exterior finishes been specified to be brushed stainless steel (US32D)? Have accessories been specified to have compatible finishes?
 (Specific drawing sheet #/specification page # _____)

Standards and Approved Equals

22. For each item except locksets and closers, has one manufacturer been specified and scheduled as the standard and, whenever possible, two other manufacturers whose products are PROVEN EQUAL?
 (Specific drawing sheet #/specification page # _____)

23. Has a complete list of items proposed as the standards, together with manufacturers' names and with the names of manufacturers whose products are equals, been included in the hardware schedule? This schedule must be approved

by the Owner at 50% Construction Documents.
 (Specific drawing sheet #/specification page # _____)

Keys and Keying

24. Is each lock cylinder compatible with specified hardware and with existing university hardware and keying systems?
 (Specific drawing sheet #/specification page # _____)

25. Has the A/E specified that the Contractor shall schedule a keying meeting six (6) months prior to Substantial Completion? Attendees will be the Contractor, FAU Facilities Planning Project Manager, user group representative(s), hardware subcontractor, and Sargent rep.
 (Specific drawing sheet #/specification page # _____)

26. Is each lock cylinder operated by one of the following keying system:
 a. One (1) new Master Key established for this project (if applicable).
 b. Existing Grand Master Key.
 c. Existing Great Grand Master Key.
 (Specific drawing sheet #/specification page # _____)

27. Has it been specified that key bows shall be stamped on one side "PROPERTY OF STATE OF FLORIDA - DO NOT DUPLICATE" and on the other side with keyset symbol?
 (Specific drawing sheet #/specification page # _____)

28. Has the final keying been reviewed with the university prior to issuance to the Contractor?
 (Specific drawing sheet #/specification page # _____)

29. Have the keys been provided as follows (verify for each project):
 a. No Grand Master Keys.
 b. Ten (10) Master Keys.
 c. Ten (10) keys for each Submaster established.
 d. Four (4) Change Keys per lock.
 e. Provide Change Key blanks at a quantity of two (2) times the total quantity of cores provided for the project. ("S" bow, stamped).
 f. Twelve (12) Construction Master Keys "CMK".
 (Specific drawing sheet #/specification page # _____)

30. Has it been specified that each project shall be a Construction Master Key project? All locks shall be shipped to the jobsite operated only by the Construction Master Key. Permanent keys, together with the Key Bitting Record, shall be sent via registered mail direct from the factory to: FAU Facilities Planning Dept., Project Manager (name), Florida Atlantic University, 777 Glades Road, Building CO-69, Room 107, Boca Raton, Florida, 33431.
 (Specific drawing sheet #/specification page # _____)

Automatic Door Opener

31. Has an electric-powered automatic door opener been scheduled for each major exterior entry to the building? Only one door leaf needs to be provided with the

automatic opener when the entry consists of multiple doors. Standard operator is Nabco Gyro Tech GT-500 system. Activators are Linear transmitters-receivers. Transmitters are battery powered. Pushplates are 6 ¼" diameter brushed stainless steel with engraved handicap symbol. Microswitch and transmitter fit within a standard 4" square junction box. Verify transmitter frequency is 310MHz.
(Specific drawing sheet #/specification page # _____)

08720 - Schedules

1. Does the hardware schedule relate to the FAU-approved room numbering system (see Division 10 – Specialties, Section 10400 – Identifying Devices)?
(Specific drawing sheet #/specification page # _____)
2. Has the keying system been reviewed with the users and the FAU Facilities Planning Project Manager?
(Specific drawing sheet #/specification page # _____)

08730 – Card Access Control System

1. Has a complete, operable, tested and certified Card Access Control System (C.A.C.S.) been specified?
(Specific drawing sheet #/specification page # _____)
2. Is the specified system Software House-C. Cure 800 System?
(Specific drawing sheet #/specification page # _____)
3. Has the C.A.C.S. been designed and specified to connect to and interface with the Campus Central Control System through the campus data system?
(Specific drawing sheet #/specification page # _____)
4. Has the Campus Central Control System been analyzed to verify capacity for the proposed new access control system? If the Central Control System requires an upgrade of hardware or software to function properly campus-wide after the addition of the proposed new access control system, has the upgrade been designed and specified as a part of this project?
(Specific drawing sheet #/specification page # _____)
5. Has it been specified and scheduled that an adequate number of exterior entry doors are controlled by card readers and connected to the C.A.C.S.? A/E shall confirm locations with FAU Project Coordinator.
(Specific drawing sheet #/specification page # _____)
6. Has it been specified and scheduled that all exterior doors are connected to the C.A.C.S. and monitored for open-close conditions?
(Specific drawing sheet #/specification page # _____)
7. Has it been specified that all exterior doors not normally locked all of the time (such as stairways, secondary emergency exits, etc.) are connected to the C.A.C.S. and are equipped with electric locks so the FAU Police can remotely lock-down and unlock buildings through the C.A.C.S?
(Specific drawing sheet #/specification page # _____)
8. Have all wiring/cabling, operating devices, door contactors, relays, controls panels, boxes, grounds, and testing been specified to be performed by a system-manufacturers' factory-trained and certified installer?
(Specific drawing sheet #/specification page # _____)

- 9. Have all C.A.C.S. devices been shown on the construction documents and has the A/E coordinated all electrical requirements with the electrical drawings and specifications, including raceways in door frames and j-boxes?
(Specific drawing sheet #/specification page # _____)
- 10. Has a campus data port been provided at the C.A.C.S. Building panel location?
(Specific drawing sheet #/specification page # _____)
- 11. Has a 4' x 4' x 3/4" plywood backboard been specified to mount the C.A.C.S. equipment?
(Specific drawing sheet #/specification page # _____)
- 12. Has a dedicated 110v/20A circuit been provided at the C.A.C.S. building panel location?
(Specific drawing sheet #/specification page # _____)
- 13. Has the C.A.C.S. building panel and all hardware on the C.A.C.S. system been tied into the building's emergency power supply, and if the building does not have an emergency generator has a UPS been specified that will provide a minimum of 24 hours of backup power?
(Specific drawing sheet #/specification page # _____)

08800 - Glazing

- 1. Has each glass type been noted clearly and concisely on the drawings with a "Type Number"? Lengthy descriptions do not go on the drawings, but are to be in the specifications.
(Specific drawing sheet #/specification page # _____)
- 2. Has each glass type been precisely defined in the specifications?
(Specific drawing sheet #/specification page # _____)
- 3. Where glass is used in in toilet, bathroom, etc., windows, is it obscure?
(Specific drawing sheet #/specification page # _____)
- 4. Is all window glass replaceable from inside the building wherever feasible?
(Specific drawing sheet #/specification page # _____)
- 5. Does all glass meet the requirements of the Florida Building Code, Life Safety Code, and all other applicable codes? (Wind loading, safety glazing, etc.)
(Specific drawing sheet #/specification page #-_____)
- 6. Has it been specified that windows should be glazed in the closed position and left closed for several weeks? (This applies particularly to awning or projected types.)
(Specific drawing sheet #/specification page # _____)
- 7. Has it been specified that all exterior glass on the Boca Raton campus shall be "Atlantica" spectrally selective tinted glass by PPG (green tint - formerly Solargreen), or approved equal? Standards for 1/4" (6mm) monolithic glass are: 67% visible light transmittance, 0.52 solar heat gain coefficient, 0.61 shading coefficient.
(Specific drawing sheet #/specification page # _____)

End of Division 8 – Doors & Windows.