Division 8 – Openings

08.1. General

a. Doors and hardware are to be coordinated with the requirements of the SECURITY SECTION IN CHAPTER THREE of these standards and APPENDIX T-ELECTRONIC ACCESS CONTROL & CONDUIT DIAGRAMS.

b. The A/E shall specify all hardware in a separate hardware section. Storefront door hardware shall be included in this hardware section and not in the storefront specification.

08.2. Exterior Building Entry Doors

a. The A/E shall consider wind direction, microclimate conditions and wind pressures when designing building entrances. Entry doors in the north and east facades of buildings are subject to high winds. Consider ways to provide windscreens for all exterior doors, but especially the north and east.

b. All exterior building entries shall be arranged using a vestibule or “airlock” to avoid excessive exchange of conditioned indoor and unconditioned outdoor air.

08.3. Interior Doors

a. Clear glazed vision panels shall be used in all classroom and stair doors.

b. When double doors are necessary at card access locations, provide a removable mullion.

c. Wood doors shall be solid core and shall be reinforced for all hardware including closers; prime or seal all hardware cut outs and top and bottom of door. All

a. In general window frames shall be thermally broken 2” x 4-1/2” heavy commercial aluminum windows, flush dry glazed from the interior.
b. In residence halls, if fiberglass windows are being considered as a design option, discuss with the Department of Design and Construction during schematic design.
c. Prior to acceptance by the University, proposed manufacturers must provide to the ODU Project

building room numbers are to have been finalized and approved by the University Space Manager, prior to this meeting.

f. The A/E shall specify all required hardware for each opening. One manufacturer shall be scheduled with two other acceptable manufacturers listed. All hardware shall be approved by the University. A complete hardware schedule and full set of specifications is required at the owner review working drawing submission, which is prior to BCOM Working Drawing submission.

g. Prior to shop drawing submission, a hardware coordination meeting is to be scheduled by the general contractor to include the ODU project manager, the A/E, user groups, ITS and the Facilities lock shop to discuss project specific issues related to lock functions, coordination and delivery. The Contractor shall prepare the final keying schedule based on this meeting that clearly indicates how the University's final instructions on keying of locks has been fulfilled and submit it as part of the hardware submittal process.

h. The General Contractor shall procure all cylinders and cores and install same. Construction cores may be installed by the contractor during construction, but shall be removed prior to beneficial occupancy.

i. Furnish three (3) keys per lockset or as directed by the ODU Project Manager.

j. Single Source Responsibility: Obtain each type of hardware latch and locksets, hinges, closers, etc. from a single manufacturer.

    i. Hardware Finishes:

        1. The designations used to indicate hardware finishes are those listed in ANSI/BHMA A156.18, "Materials and Finishes," including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.

            a. Continuous Hinges: 628 (US28) Clear Anodized Aluminum
            b. Door Closers: 689 Powder Coat Aluminum
            c. Door Stops: 626 (US26D) Satin Chrome Plated Brass/Bronze
            d. Exit Devices: 626 (US26D) Satin Chrome Plated
            e. Flush Bolts: 626 (US26D) Satin Chrome Plated Brass/Bronze
            f. Hinges (Exterior): 630 (US32D) Satin Stainless Steel
            g. Hinges (Interior): 626 (US26D) Satin Chrome Plated Steel
            h. Locks: 630 (US32D) Satin Stainless Steel
            i. Overhead Holders: 630 Satin Stainless Steel
            j. Protective Plates: 630 (US32D) Satin Stainless Steel
            k. Pull Plates: 630 (US32D) Satin Stainless Steel

    ii. Heavy Weight and Standard Weight Hinges:

    iii. Concealed Bearing 5 Knuckle Full Mortise Hinges.

    iv. Lifespan Bearing System

    ~~v. Painted Hinges are not acceptable.~~

    ~~vi.~~v. Non-removable pins (NRP) – All locations

    ~~vii.~~vi. Concealed Electric Hinges

        1. Heavy Weight
        2. Concealed Bearing 5 Knuckle Full Mortise Hinge
        3. Concealed wires
        4. Concealed switches
        5. Shop weld junction box before frame is set

ii. 5/8” x 1-3/8” x 2-7/8” bolt with a 1-3/8” throw made of eight ply laminated stainless steel. Center ply to be an alumina-cerami

2. If there are a series of doors, both doors in the series must have automatic openers. Each door shall open independently.
3. Automatic Door Operators and switch shall be hard-wired into the emergency circuit and be provided with battery backup.
4. Field adjustable
5. Adjustable Spring Force
6. Non Handed
7. Full or low energy
8. Acts as a mechanical closer for manual operation in the event power is off.
9. Controller configuration via Bluetooth Technology

~~xxvi.~~xxv. Gaskets

1. All classroom doors shall receive screw on sound gaskets (no self-adhesive)

~~xxvii.~~xxvi. Automatic Door Bottoms

1. Are acceptable

~~xxviii.~~xxvii. Rain Drip guards

1. Provide 1 ½" high x 2 ½" deep (min) rain drip guard in clear anodized at all exterior doors that are installed in a flush application (i.e. without any building overhang).

~~xxix.~~xxviii. Electromagnetic Door Holders

1. Recessed wall mount or surface wall mount depending on application.
2. Reinforce Door at hold open.

~~xxx.~~xxix. Long Door Pulls

1. Provide a contrasting finish in the grip zone.
2. 1" Diameter
3. Offset Pulls with round ends

~~xxxi.~~xxx. Networked Hardwired electronic Locks