

Division 08 - Doors and Windows

08111 – STANDARD STEEL DOORS AND FRAMES –

Insulated hollow metal doors, pressed steel door/window frames, and stick system components for door openings, borrowed lights, casings, transoms, sidelights; with associated louvers, view panels, mouldings, labels, anchors, reinforcements, accessory items.

A – INTERIOR FRAMES – Minimum 14-gauge with 5/8" integral stop; knock-down (KD) type acceptable for interiors; mortised, reinforced, drilled, and tapped for hardware; anchors, connection members, clips reinforcement(s) required by code(s), manufacturer, and **LPS** Property Management Services Department for anchorage and support. All center mullions must be removable type, Vonduprin or Precision

EXTERIOR FRAMES -14 guage galvanized prepped for concealed cont. hinges.

B – DOORS – Full flush panel type, with or without edge seams, no face seams, constructed of two panels minimum, 180-gauge prime commercial cold-rolled stretcher galvanized level steel free of pitting.

EXTERIOR DOORS - Must have Markar 300 series concealed cont. hinges.

01 – CORE – Rock-wool or Fiberglass insulation for sound deadening.

02 – LOUVERS – Fixed, except fusible-link in fire-rated locations.

03 – GLAZING MOULDINGS – Minimum 18-gauge, mitered corners.

C – FINISH – Doors and frames prefinished in kynar/baked enamel acceptable to **LPS** Property Management Services Department, except that revisions or additions to existing facilities may be shop-primed and field-painted to match.

D – LABELS – Agency approved certified or labeled doors, frames, and anchors for minimum ratings required by code.

08211 – FLUSH WOOD DOORS -

A – INTERIOR DOORS – Flush style, SWI Custom grade, SCL-5 core or PC-5 core with 4" (10 cm) stiles, and 6" (15 cm) rails; Rift-Sawn random match Red Oak face veneers with matching solid Red Oak (or as required to match existing) top, bottom, and side edges, for transparent finish to match existing. Fire doors shall have AWI FD ratings of 1½, 1, ¾ hour, and 20 to 30 or 20 minute, per location, meeting UL requirements, ASTM E152 and used in accord with NFPA 80.

01 – LOUVERS – Extruded aluminum alloy AA6063-T5 Duranodic dark bronze finish (or as required to match existing), with fixed 45-degree straight blades; fire rated, dampered, in labeled doors.

02 – VISION PANELS – Tempered or wire glass.

08305 – ACCESS DOORS – Steel, sized and located on Drawings; fire rated where required by Code. 08310 – SLIDING DOORS -are not acceptable to **LPS**. 08330 – COILING DOORS – Interlocking, continuous length without splice, flat slat curtain, electric operated; fire rated where

required by code. 08340 – COILING GRILLES – Aluminum; electric operation. 08360 – SECTIONAL OVERHEAD DOORS – Steel, full flush flat galvanized exterior and interior panels; insulated exterior location(s); galvanized

hardware; weather stripped exterior location(s); electric operated. 08410 – ALUMINUM ENTRANCES AND STOREFRONTS – are not desired by **LPS**. 08500 – WINDOWS -A – **EXTERIOR WINDOWS** may be thermal-break aluminum or hollow metal framed, or vinyl-clad

wood.

B – INTERIOR WINDOWS, borrow-light and vision panels, should be steel hollow metal construction; may be aluminum. **C – OPERABLE WINDOW VENTS** shall be provided, even if building is air conditioned, to allow use of building in event of power outage or energy shortage. Vents shall be in-swing, weather-stripped, shall not project beyond wall line, and shall have positive interior latch. **D – SCREENS** – Metal, vandal resistant, on vent portions of fenestration.

E – GLAZING – Inside glaze with snap-on beads. **F – PROVIDE** natural window light in principal stairways. Keep windows high to reduce glass breakage.

G – FOLLOW requirements of ASHRAE 90 and Colorado Energy code for thermal design of exterior walls; which will affect number and size of windows used. **H – VANDALISM REDUCTION** – Avoid using windows or window walls in areas that are screened from public view.

I – GLASS CLEANING – Provide hinged ventilators above ground level floor areas to allow cleaning of glazing from interior of building. **J – GLASS HEIGHT** – Glazing below 3'0" above floor level is not acceptable, unless approval is obtained from **LPS** Property Management Services Department prior to Construction Documents Phase.

08705 – DOOR HARDWARE -A – MATERIALS/ITEMS: 01 – BUTT HINGES – Full mortise 4½ x

4½ Heavy Duty Steel. BB (Ball Bearing) Bronze or chrome

finish to match existing building hardware. Stanley FBB179, or equivalent Hager, Lawrence, McKinney, Soss. All exterior doors must have Markar 300 series concealed cont. hinges. **02**

– **FLOOR PIVOTS** – Not desired by LPS. **03 – NON-RATED SPRING HINGES** – Not desired by LPS.

04 – FIRE-RATED SPRING HINGES – Not desired by LPS. **05 – LOCK AND LATCH SETS** – Best 93K Series lever locksets without interchangeable core cylinders (no substitutes), with Medeco K3 cylinders or match existing (as determined by **LPS** Property Management Services Department). No interchangeable cores. Satin bronze or satin chrome finish to match existing building hardware. **LPS** Property Management Services will provide keying information.

06 – DEADBOLTS – None required (mortise locks not desired by **LPS**.) **07 – EXIT DEVICES** – Exterior doors: Precision 2100 Series rim exit device, 1700A trim, function to be specified by **LPS** Property Management Services Department (no substitutions); lever handle is required on interior doors to meet ADA guidelines. All other requirements as for Lock and Latch sets. Bronze or chrome finish to match existing building hardware. Center mullions must be Von Duprin keyed removable type KR4954-SP28 or Precision model 822 key removable (no substitutes); no verticle rod exit devices. **08 – CLOSERS** – LCN 4041 door closers (no substitutes) with EDA heavy-duty arm and 90-degree hold-open at all exterior doors, and elsewhere as appropriate. Five-year guarantee against mechanical failure. Bronze or chrome finish to match existing building hardware. Mount all closers at 180 degrees.

09 – STOPS – Glynn-Johnson, Brookline, Trimco. **10 – WEATHER STRIP, SOUND**

STRIP, LIGHT STRIP – Pemko. **a – WEATHER STRIP** all exterior doors and interior

vestibule doors. Pemko PEM 309AP **b –BOTTOM SWEEPS** Pemko PEM 18062CP **11 –**

THRESHOLDS – Brookline, Reese, VonDuprin, Pemko. **12 – FLUSH BOLTS** – Not

desired by **LPS** **13 – PULLS AND PUSH PLATES** – Brookline, Corbin, Quality, Trimco.

14 – KICK PLATES – Brookline, Corbin, Quality, Trimco. **15 – SILENCERS** – Corbin,

Glynn-Johnson, Russwin.

16 – PADLOCKS – Master. Re-keyable 1K keyway

17 – SLIDING, POCKET HARDWARE – Grant, Lawrence, Stanley.

18 – BIFOLD HARDWARE – Grant, Lawrence, Stanley.

19 – ELECTRIC STRIKES – HES. Model 9600 for rim exit devices.

20 – AUTOMATIC DOORS – Where required, shall have LCN Auto Equalizer pneumatic operator (no substitutes) with parallel arm. Bronze or chrome finish to match existing hardware. All actuators are to be hardwired.

21 – DOOR CONTACTS – Must be concealed and pre-approved by **LPS** Property Management Services.

B – HARDWARE SUPPLIER shall have in his employ a member of the American Society of Architectural Hardware Consultants (AHC) who will directly supervise the scheduling, detailing, marking, and delivery of hardware. All installations must meet ADA requirements. Hardware (and keying, if assigned to supplier) must be approved by **LPS** Property Management Services Department locksmith in pre-construction meeting with hardware supplier before submittals and schedules are released for ordering.

C – SECURITY – Certain parts of the building shall be secured from use by unauthorized persons. Mechanical and Electrical Equipment Rooms, Office and Storage Rooms, Kitchen Areas, Attic and Crawl Spaces, and Roofs are to be locked against access by students. Stairs and Corridors and other such spaces should also be similarly secured.

D – COMMUNITY USE – Some areas of a building may be available for community use during non-school hours. In order to confine traffic only to designated areas, it may be necessary to provide roll-up metal gates at certain points in Corridors. Since gates cannot be used at Stairways to restrict access to upper floors, locking exit devices will be required at certain stair doors. Location(s) of both the corridor gates and exit devices must be carefully studied to meet the requirements of each building/addition and the Building Code.

E – THREE BUTT HINGES (1-1/2 pair) minimum are required on each door/leaf.

F – BUILDING ADDITIONS –

01 – HARDWARE FOR ADDITION(S) to existing buildings shall be similar in design to the original hardware with the following exception:

a – USE cylinder locks of the type described elsewhere in this guide specification, rather than mortise locks. Match existing finishes.

02 – REPLACEMENT – If an addition to an existing building is of substantial size or if the old hardware is obsolete or inadequate, it may be feasible to provide for the replacement of existing locks or cylinders with new hardware. Verify in advance with **LPS** Property Management Services Department.

G – MISCELLANEOUS HARDWARE required for window screens, windows, metal lockers, toilet compartments, metal-clad fire doors, rolling grilles, access doors, hatches, and roof scuttles is to be furnished with those items.

H – CABINET HARDWARE – Drawer extension glides, sliding door hangers, and track, sheaves, guides, stops, shelf standards, and support brackets shall be furnished and installed with the Millwork. Lockable cabinets and drawers will use National C8050 Series cam-locks with D8785 keyway (no substitutes), and will be keyed alike per room, or per cubicle in the case of multi-station offices.

I – KEYING –

01 – KEY REQUIREMENTS shall be coordinated with **LPS** Property Management Services Department, who will coordinate with the building Principal.

02 – NUMBER OF KEYS TO BE ISSUED will be determined by LPS Property Management Services department.

03 – HARDWARE SUPPLIER will furnish key cut numbers for each key to **LPS** Property Management Services department.

04 – NEW KEYING will be cut to code using the existing system unless pre-approved by LPS Property Management Services department..

J – MAINTENANCE MANUAL – Furnish three copies of Maintenance Manual covering Finish Hardware for each project. Each manual should consist of printed sheets from the hardware manufacturer, bound in a three-ring binder and properly indexed. A fitting schedule shall be included for master keying.

08800 – GLAZING –

Provide glass and plastic glazing for interior and exterior windows, doors, transoms, entrances, storefronts, sidelights, skylights, window walls, curtain walls, spandrels, borrowed-lite panels, fixed glazed panels, unframed mirrors with associated anchorage accessories.

A – GLAZING shall be new glass, best grade of respective kind, free from flaws, up to grade requirements; each individual piece bearing a label which shall not be removed until professional cleaners have cleaned glass.

B – EXTERIOR GLAZING – Type and thickness required by location to meet Code requirements; insulating in exterior doors and windows. All exterior glazing shall be double-pane insulating glass, with tints and/or coatings as determined by the **A/E** or **DBT** and the building Principal.

C – INTERIOR GLAZING – Wire glass for fire rated openings; safety or wire for all other openings; polycarbonate (Lexan) at gym office windows as approved by **LPS** Property Management Services Department and fire department; thickness of material as recommended by glass manufacturer for size of opening; one thickness throughout is desirable, if possible.

D – CODE REQUIREMENTS – Glazing shall comply with Code and applicable portions of Colorado House Bill No. 1110 concerning the safety of glazing materials in hazardous locations.

E – VISION STRIPS – Required in all doors except Rest Rooms and Storerooms; wire or tempered glass; minimum 6" above panic bars; upper half of door only.

F – MISCELLANEOUS –

01 – GLAZING SEALANT – Silicon rubber, one part elastomeric; acid type for nonporous channel surfaces, nonacid type for porous channel surfaces.

02 – GLAZING GASKETS – Black molded or extruded neoprene of profile and hardness required for water tight construction; complying with ASTM D2000, 2BC 415 to 3BC 620.

03 – GLAZING TAPE – Closed cell, flexible, self-adhesive, nonextruding polyvinyl chloride foam; recommended by manufacturer for exterior, exposed, water tight installation of glass, with only nominal pressure in glazing channel; complying with ASTM D1667.

04 – SETTING BLOCKS – Neoprene, 70-90 durometer hardness, proven compatible with sealants used.

05 – SPACERS – Neoprene, 40–50 durometer hardness, proven compatible with sealants used.

06 – COMPRESSIBLE FILLER ROD – Closed cell or waterproof jacketed rod stock of synthetic rubber or plastic foam, proven compatible with sealants used, flexible, resilient with 5–10 psi (.35 – .7kg/cm²) compression strength for 25 percent deflection.

07 – CLEANERS, PRIMERS, SEALERS – Type recommended by sealant or gasket manufacturer.