

REQUEST FOR PROPOSAL

Door Replacement Urbandale
High School

INTRODUCTION AND BACKGROUND

PURPOSE OF THE REQUEST FOR PROPOSAL FOR DOOR REPLACEMENT.

Urbandale Community School District is interested in finding door replacement subcontractors to do work in the following areas:

- Replacement of 71 Steel doors and hardware into existing openings for the North and South Gym's in addition some door replacement on the 2nd floor.
- All Hardware for this project needs to be Allegion keeping School District Standards Von Duprin/LCN
- All Steel Doors need to be 16 gage Insulated on Exterior Openings
- Doors must be factory-painted

ADMINISTRATIVE

POINT OF CONTACT

Any questions concerning technical specifications or Statement of Work (SOW) requirements must be directed to:

Name	Zac Wheeler
Address	7111 Aurora Ave.
Phone	(515) 306-4192
FAX	
Email	wheelerz@urbandaleschools.com

DUE DATES

All proposals are due by 4 pm on March 12, 2024. Any proposal received at the designated location after the required time and date specified for receipt shall be considered late and non-responsive. Any late proposals will not be evaluated for award.

GUIDELINES FOR PROPOSAL PREPARATION

PROPOSAL SUBMISSION

Award of the contract(s) resulting from this RFP will be based upon the most responsive bidder(s) whose offer(s) will be the most advantageous to Urbandale Schools in terms of cost, functionality, technical quality, and other factors as specified elsewhere in this RFP.

Urbandale Schools reserves the right to:

- Reject any or all offers and discontinue this RFP process without obligation or liability to any potential Contractor
- Accept other than the lowest priced offer
- Award a contract on the basis of initial bids received, without discussions or requests for best and final offers

Bidders shall submit bid packages containing several parts as set forth below. Bidders will confine submission to those matters sufficient to respond to this RFP and to provide adequate basis for Urbandale Schools to evaluate a bidder's qualifications.

Successful bidder's submission in response to this RFP will be incorporated into the final agreement between Urbandale Community School and the selected bidder(s).

Complete submissions must contain the following:

- 3 references from commercial projects completed in the last year
- Your warranty on workmanship
- Your availability to meet the deadline

The detailed requirements for each of the above-mentioned sections are outlined in this RFP. Bid packages should consist of single copies of each required document (no duplicates necessary). Bids submitted that lack any of the required information or documentation may be deemed incomplete and may not be considered for selection, at Urbandale Schools discretion.

Proposals shall be submitted in a sealed envelope as outlined below, prior to the proposal deadline. Proposals should be signed by an authorized individual to bind the firm, and must be valid for at least 60 days. District will issue a purchase order authorizing work after board approval of the bids. Please submit proposals to:

Urbandale Community School District
Attention: Steve Richman, Director of Business Services
11152 Aurora Ave.
Urbandale, Iowa 50322

Submissions must be received no later than 4:00 p.m. on March 12, 2024 at Urbandale Community School District. Only proposals received at the location below or mailed to the location below will be considered.

Submissions should be addressed to: Urbandale Community School District
11152 Aurora Ave.
Urbandale, IA 50322

Only proposals received at the location above or mailed to the location above in the time frame given will be considered.

Please mark your reply envelopes: "RFP for Door Replacement High School North and South Gyms" and place the name of the company submitting the proposal on the outside of the envelope.

DETAILED RESPONSE REQUIREMENTS

EXECUTIVE SUMMARY

This Request for Proposal is intended to have Replacement of doors to existing door frames

SCOPE FOR WINDOW, SLIDING GLASS DOOR REPAIR AND REPLACEMENTS

Replacement of 71 steel doors and hardware into existing openings for the North & south Gyms & 2nd floor at Urbandale High School.

- All Hardware for this project needs to be Allegion, Keeping School District Standards Von Duprin/LCN
- All Steel Doors need to be 16 gage Insulated on Exterior Openings
- Doors must be factory-painted

- The contractor shall schedule and coordinate with clients within one week of issued purchase order for work to be done, prioritizing health and safety work.
- If any work is estimated to surpass cost limitations, contractor must inform Urbandale schools for approval.
- Job Site Safety: The Contractor shall adhere to the Occupational Safety and Health Administration's (OSHA's) most recently published Safety and Health Regulations for Construction (29 CFR 1926) and general Occupational Safety and Health Standards (29 CFR 1910) for the duration of this contract.
- Contractor is in charge of pulling and paying for all permits needed for the installation of door replacements. Contractor must submit to Urbandale a copy of the permit and final inspection from the city in which the permit was needed.
- The Contractor shall perform all work and orders with due diligence and in good and workmanlike manner and shall complete the work and orders in accordance with industry standards.
- For problems or deficiencies of significant importance or of a continual nature, the Contractor will be given two weeks to correct such problems provided in writing by Urbandale Schools, for regular service calls.
- Contractor must allow for inspection of work completed by a Urbandale Community Schools inspector before payment will be released to contractor.

WARRANTY

A. Manufacturer standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.

1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.

2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer published listings.

a. Mechanical Warranty

1) Exit Devices

a) Von Duprin: 3 years

2) Closers

a) LCN 4000 Series: 30 years

MAINTENANCE

Maintenance Instructions: Furnish a complete set of maintenance instructions as needed for Owner continued maintenance of doors and frames.

A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

B. Turn over unused materials to Owner for maintenance purposes.

MATERIALS

A. Fabrication

1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.

2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.

3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.

B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.

Where fasteners are exposed to view: Finish to match adjacent door hardware material.

HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Ives 5BB series

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.

2. Provide five knuckle, ball bearing hinges.

3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:

a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high

b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high

4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:

a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high

b. Interior: Heavy weight, steel, 5 inches (127 mm) high

5. 2 inches or thicker doors:

a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high

b. Interior: Heavy weight, steel, 5 inches (127 mm) high

6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.

7. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.

8. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:

a. Steel Hinges: Steel pins

b. Non-Ferrous Hinges: Stainless steel pins

c. Out-Swinging Exterior Doors: Non-removable pins

d. Out-Swinging Interior Lockable Doors: Non-removable pins

e. Interior Non-lockable Doors: Non-rising pins

9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

- a. Burns MFG
- b. Rockwood

B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

MORTISE LOCKS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Schlage L9000 Series

2. Acceptable Manufacturers and Products:

- a. No Substitute

B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
3. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
4. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
5. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
6. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide

a request to exit (RX) switch that is actuated with rotation of inside lever.

7. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.

EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Von Duprin 99/33A series

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.

2. Cylinders:

3. Provide grooved touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.

4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.

5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.

6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.

7. Provide flush end caps for exit devices.

8. Provide exit devices with manufacturer approved strikes.

9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.

10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.

11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.

12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
14. Provide electrified options as scheduled.
15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer and Product:
 - a. To match owners existing system
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

KEYING

A. Scheduled System:

1. Existing non-factory registered system:
 - a. Provide cylinders/cores keyed into Owner's existing keying system managed by Owner's locksmith, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference. Contact:
 - 1) Field verify and key cylinders to match owner existing system.

DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. LCN 4040XP series

2. Acceptable Manufacturers and Products:

a. No Substitution

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Burns MFG

b. Rockwood

B. Requirements:

1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Burns MFG

b. Rockwood

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.

2. Sizes plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.

3. At fire rated doors, provide protection plates over 16 inches high with UL label.

OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:

a. Glynn-Johnson

2. Acceptable Manufacturers:

a. Rixson

B. Requirements:

1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.
2. Provide friction type at doors without closer and positive type at doors with closer.

DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button or thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Zero International

2. Acceptable Manufacturers:

- a. Reese
- b. Pemko
- c. National Guard

B. Requirements:

1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.

3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

B. Requirements:

1. Provide;push-in type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

FINISHES

A. FINISH: BHMA 626/652 (US26D); EXCEPT:

1. Hinges at Exterior Doors: BHMA 630 (US32D)
2. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
3. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
4. Protection Plates: BHMA 630 (US32D)
5. Overhead Stops and Holders: BHMA 630 (US32D)
6. Door Closers: Powder Coat to Match
7. Wall Stops: BHMA 630 (US32D)
8. Latch Protectors: BHMA 630 (US32D)
9. Weatherstripping: Clear Anodized Aluminum
10. Thresholds: Mill Finish Aluminum

INSTALLATION

A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
2. Custom Steel Doors and Frames: HMMA 831.
3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A

4. Installation Guide for Doors and Hardware: DHI TDH-007-20

B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.

C. Install each hardware item in compliance with manufacture instructions and recommendations, using only fasteners provided by manufacturer.

D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.

E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.

F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.

H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.

J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:

1. Conduit, junction boxes and wire pulls.
2. Connections to and from power supplies to electrified hardware.
3. Connections to fire/smoke alarm system and smoke evacuation system.
4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
5. Connections to panel interface modules, controllers, and gateways.
6. Testing and labeling wires with Architect opening number.

K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.

L. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.

M. Closer/holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.

N. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.

O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section Joint Sealants

P. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

Q. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

R. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

S. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.

2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.

3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction

B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

Closeout Submittals:

Operations and Maintenance Data: Provide in accordance with Division 01 and include the following:

Complete information on care, maintenance, and adjustment; data on repair and replacement.

Catalog pages for each product.

Name, address, and phone number of local representative for each manufacturer.

Copy of final approved door and frame schedule, edited to reflect conditions as-installed.

Copy of warranties including appropriate reference numbers for manufacturers to identify the project.

Fire-Rated Openings: Provide doors and frames for fire-rated openings that complies with NFPA Standard No. 80, UBC 7-2 1997 or UL10C, Category "A", Positive Pressure Test of Fire Door Assemblies, and requirements of authorities having jurisdiction. Provide only doors and frames that are labeled and listed for ratings indicated by Underwriters Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to the authorities having jurisdiction.

Oversize Fire-Rated Door Assemblies: For door assemblies required to be fire-rated and exceeding sizes of tested assemblies, provide certificate or label from approved independent testing and inspection agency, indicating that door and frame assembly conforms to requirements of design, materials and construction as established by individual listings for tested assemblies.

Temperature Rise Rating: Provide doors that have temperature rise rating of 450 degrees F (232C) or 250 degree F (121 C) maximum in 30 minutes of fire exposure in accordance with local building code.

Project Conditions:

Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.

Door Storage: Store doors in upright position, under cover. Place doors on at least 4 inch high wood sills

or on floors in manner that will prevent rust and damage. Do not use non-vented plastic or canvas shelters which create humidity chamber and promote rusting. If corrugated wrapper on door becomes wet, or moisture appears, remove all packaging immediately. Provide 1/4 inch (6.3) space between doors

to promote air circulation.

Frame Storage: Store frames under cover on 4 inch wood sills on floors in manner that will prevent rust and damage. Do not use non-vented plastic or canvas shelters which create humidity chamber and promote rusting. Store assembled frames in vertical position, 5 units maximum in stack. Provide 1/4 inch space between frames to promote air circulation.

Protection and Damage:

Promptly replace products damaged during shipping with exactly the same products.

Handle doors and frames in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during the course of the Work.

Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

Fasteners

Provide fastenings, anchors and clips as required to secure hollow metal work in place. Provide manufacturers standard screws. Dimple metal work to receive screw heads. Set stops and other non-structural fastenings with manufacturer's standard self-tapping screws.

HOLLOW METAL FRAMES

Manufacturer:

Scheduled Manufacturer: Steelcraft.

Acceptable Substitute: No Substitution.

Requirements:

Provide hollow metal frames as scheduled, and drawn and detailed on plans, with the provisions below.

Cold Rolled Steel Sheets: Commercial quality, stretcher-leveled flatness, cold-rolled steel, free from scale, pitting or other surface defects, complying with ASTM-A1008/A1008M-00 and ASTM-A568 general requirements.

Galvanized Steel Sheets: ASTM-A653, A60 zinc coating. Use galvanized steel sheets for exterior hollow metal frames. Internal reinforcing may be manufactured of hot rolled pickled and oiled steel per ASTM-A568.

Minimum gages of hollow metal frames are specified below in compliance with SDI 100/ANSI A250.8.

Provide heavier gage if required by code, details, specific condition, or to meet specified standards.

Entire

frame and sidelight shall be of same gage. Frames must have been tested and comply with ANSI-A250.4, Level "A", 1,000,000 Cycle Test Criteria.

Level 3 (16 gage): Interior door, transom, and sidelight frames with nominal door width up to 48 inches.

Level 3 (16 gage): Interior window-wall frames and borrowed light frames.

Level 4 (14 gage) Galvanized: Exterior frames.

General: Form to profiles indicated. Where necessary, alternate details will be considered provided design intent is maintained. Consider and provide for erection methods.

Anchorage: Provide a minimum of three (3) anchors per jamb up to 84 inches high. For longer jambs, provide sufficient anchors to permit maximum spacing of 24 inches on center. Provide welded anchors at welded frames unless detailed or noted otherwise. Provide standard and special anchorage items as required. At masonry jambs provide wire anchors. Provide 16 gage angle clips welded in place at bottom

of each jamb with two punched holes for securing frames to floor. Where dictated by fire rating testing laboratory procedures, supply anchors complying with such requirements. All frames shall be provided with two temporary steel spreaders welded to the feet of the jambs to serve as bracing during shipping and handling only. These shall be removed prior to installation and are not to be used for setting of proper frame tolerances.

Extensions: Reinforce transom bars or mullions as necessary to provide rigid installation.

Mullions: Provide mullions straight and without twist of tubular design. For removable mullions provide fastenings of non-ferrous bolts at bottom, with sleeves at head of frame for mullion to clip over.

Clearances: Provide proper clearances at metal frames, including for glass/glazing, gasketing, and sound stripping. Glass Stops: Where specified or indicated on drawings, frames shall be supplied with removable glass

moldings. These shall be formed "U" shaped steel of the same gage as the frame. All stops shall have tightly fitted butted or mitered corners and shall be secured with manufacturer's standard self-tapping screws no more than 10 inches on center or as required, on fire rated frames, by manufacturers labeling authority. Labeled Frames: Construct in accordance with requirements for labeled work. Attach proper metal U.L. or Warnock Hersey label. "B" labeled frames shall be 1-1/2 hour construction.

Embossed labels are not acceptable.

HOLLOW METAL DOORS AND PANELS

Manufacturer:

Scheduled Manufacturer: Steelcraft.

Acceptable Substitute: No Substitution.

Requirements:

Provide flush hollow metal doors as scheduled, and drawn and detailed on plans, with the provisions below. Cold Rolled Steel Sheets: Commercial quality, stretcher-leveled flatness, cold-rolled steel, free from scale, pitting or other surface defects, complying with ASTM-A1008/A1008M-00 and ASTM-A568 general Galvannealed Steel Sheets: ASTM-A653, A60 zinc coating. Use galvannealed steel sheets for exterior flush hollow metal doors with smooth non-wood grain surface and door louvers. Internal reinforcing may be manufactured of hot rolled pickled and oiled steel per ASTM-A568. Minimum gages of flush hollow metal doors are specified below in compliance with SDI 100/ANSI A250.8. Provide heavier gage if required by code, details, specific condition, or to meet specified standards. Doors must

have been tested and comply with ANSI-A250.4, Level "A", 1,000,000 Cycle Test Criteria.

Level 2 (18 gage): Interior doors.

Level 3 (16 gage) Galvannealed: Exterior doors.

Steel Reinforcing: Meeting ASTM-A36/A36M-05 – Standard Specification for Carbon Structural Steel.

Provide to design indicated including: Flush panel doors, cut-outs as indicated, lite kits, and/or door

louvers. Use galvannealed steel at exterior doors. Flush Doors: Reinforce, stiffen and sound deaden.

Provide steel inverted closure at top of doors. Provide manufacturers standard screwed-in steel top cap

at exterior doors, except at doors with concealed overhead stops. Following door construction types are

acceptable. Exterior Doors: Polyurethane core laminated to inside faces of both panels using contact

adhesive accordance with SDI standards tested and complying with ASTM C1363 with a minimum

operable R-

Factor of 2.08.

Interior Doors: Impregnated Kraft honeycomb core, polystyrene core, or polyurethane core laminated to inside faces of both panels using contact adhesive accordance with SDI standards.

Labeled Doors: Mark as required by Underwriters Laboratories or Warnock Hersey. Build in special hardware reinforcements and provide astragals as required.

Vertical Edges: Doors shall be Model 1 full flush – visible seam.

Vertical Edges: Doors shall be Model 2 seamless filled. Construct doors with smooth flush surfaces, without visible joints or seams on exposed faces or stile edges. Door edge seams shall be filled flush.

ACCESSORIES

Glass Trim at Flush: Where scheduled, doors shall be provided with manufacturer's standard trim or vision kits for glass sizes and thickness shown on approved submittals. Provide trim or vision kits, at

doors with glass up to 1/2 inch thick that do not extend beyond the door face. Provide trim or vision kits

at doors with glass over 1/2 inch thick that cap the cutout but do not extend more than 1/16 inch from

the door face. Provide trim or kits of 24 gage cold rolled steel at non-galvanized doors and hot dipped

galvannealed a galvannealed doors. Exposed fasteners are not permitted. Louvers: Provide 1 inch thick

inverted "Y" blade type louvers that are inserted into an opening prepared in the door faces. Louver

blades shall be fabricated from 18 gage cold-rolled steel and welded to a fabricated sub-frame. The

louver is held in place by a retaining frame or shroud furnished with the louver. Glass: Refer to Division

8 - Glass and Glazing for glass types.

FABRICATION

Fabricate doors and frames in accordance with requirements of ANSI A250.8-2003/SDI 100. Fabricate fire rated doors in accordance with requirements of ITS – Warnock Hersey or Underwriters’ Laboratories, with metal label on each door and frame including UBC 7-2 1997 or UL-10C Category “A”.

Typical Frame Reinforcing: Provide steel reinforcement as required for hardware items per manufacturers templates. Provide minimum hinge reinforcement 9 gage by 1-1/2 inch by 9 inch and lock strike reinforcement 16 gage 1 inch by 1-1/2 inch by 4 inch long. Provide similar reinforcement for hardware items as required to adequately withstand stresses, minimum 14 gage, including channel

reinforcement for door closers and closer arms, door holders and similar items. Provide reinforcement and clearances for concealed in-head door closers and mortised locks. Reinforcing as provided for in ANSI-A250.6. Mortar Guards in Frames: For hinge and strike plate cutouts, provide fully enclosed pressed steel cover boxes spot welded to frames behind mortises. Hardware Preparation at Frames: Mortise, reinforce, drill and tap as required for all mortised hardware furnished under Division 8 Finish Hardware and/or Division 26 Security in accordance with a final approved hardware schedule and templates provided by the hardware supplier and/or security supplier (including electric hinges and/or power transfers, door position switches, and other electrified hardware). Drilling and tapping for surface door closers, door closer brackets, and adjusters shall be done in field by hardware installer. Provide metal mortar guards for all mortised cutouts for frames in masonry walls and/or frames being grout filled. Obtain templates from hardware and security suppliers. Provide hardware preparation per ANSI-A250.6. Joining at Frames: At frames with equal width jambs and head, neatly miter on face and cope and butt stops. At other frames, provide same mitered joint wherever possible (at intersection of jamb-head or jamb-sill) and at other locations butt metal neatly. Weld length of entire frame faces and grind smooth. Fabricate so no grind marks, hollow or other out-of-plane areas are visible. At joints of intermediate members (such as mullions and transom bars), provide tight joining, neatly accomplished without holes, burned out spots, weld build up or other defacing work. Fill to close cracks and to preserve shapes. Tightly fit loose stops, to hairline joints. Joints shall be finished and primed. Provide bevel lock edge of single acting swinging doors 1/8 inch in 2 inches. Provide radius edge of double acting swing doors as required by pivot hinge manufacturer. Provide square edge on sliding doors and panels.

Typical Door Reinforcement: Provide steel reinforcement as required for hardware items per manufacturers’ templates. Provide 7 gage steel hinge reinforcements. Provide 16 gage steel lock reinforcements, and 14 gage steel channel or box type closer reinforcement minimum 6 inches high and

20 inches long. Projection weld hinge and lock reinforcements to the edge of the door. Provide adequate reinforcements for other hardware as required. Reinforce doors for surface items such as surface and semi-concealed closers, brackets, surface overhead holders and stops. Reinforcing as provided for in ANSI-A250.6. Hardware Preparation at Doors: Mortise, reinforce, drill and tap as required for all mortised hardware furnished under Division 08 Finish Hardware and/or Division 28 Access Control in accordance with a final approved hardware schedule and templates provided by the hardware supplier and/or security supplier (including a minimum 1/2 inch raceway for electrical hardware, electric hinges and/or power transfers, door position switches, and other electrified hardware). Drill and tap for surface door closers, door closer brackets, and adjusters in field. Obtain templates from hardware and security suppliers.

EXAMINATION

Prior to installation of any doors and frames, examine supporting structure and conditions under which hollow metal doors and frames are to be installed. Correct all defects prior to proceeding with installation.

INSTALLATION

Install doors in accordance with manufacture printed instructions. Securely fasten and anchor work in place without twists, warps, bulges or other unsatisfactory or defacing workmanship. Set hollow metal plumb, level, square to proper elevations, true to line and eye. Set clips and other anchors with Ramset "shot" anchors or drill in anchors as approved. Units and trim shall be fastened tightly together, with neat, uniform and tight joints. Placing Frames: Remove manufacturer's shipping spreader-bars prior to installation. These shall not be used for setting of proper frame tolerances. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set in accordance with ANSI A250.11. After wall construction is complete, remove temporary braces and/or installation spreaders leaving surfaces smooth and undamaged. In masonry construction, building-in of anchors and grouting of frames with mortar is specified in Division 04 Section - Unit Masonry. At in-place concrete or masonry construction, set frames and secure in place using countersunk bolts and expansion shields, with bolt heads neatly filled with metallic putty, ground smooth and primed. Place fire-rated frames in accordance with NFPA 80, and/or manufacturers' follow-up procedure

requirements. Door Installation: Fit hollow metal doors accurately in their respective frames, within following clearances: Jambs and head 1/8 inch, meeting edges pair of doors 1/8 inch, sill where no threshold or carpet 1/4 inch above finished floor, sill at threshold 3/4 inch maximum above finished floor, sill at carpet 1/4 inch above carpet. Place fire-rated doors with clearances as specified in NFPA 80.

ADJUSTING

Final Adjustments: Adjust doors and hardware prior to final inspection and acceptance by the Owner.

Replace defective items including doors or frames that are damaged or unacceptable to the Owner.

Fire Door Assembly Inspection and Testing: Upon completion of the installation, provide functional testing and inspection of each fire door assembly on the project to confirm proper operation and that it meets all criteria of a fire door assembly as per NFPA 80, 2007/2010 edition. Inspections shall be performed by individuals with knowledge and understanding of the operating components of the door being subjected to testing and who are certified by Intertek as a Fire Door Assembly Inspector (FDAI) or a credentialed Architectural Hardware Consultant (AHC). A written report using reporting forms provided by the Door and Hardware Institute shall be maintained and transmitted to the Owner and made available to the Authority Having Jurisdiction (AHJ). The report shall list each fire door throughout the project, and include each door number, location, hardware set used and summary of deficiencies. Schedule fire door assembly inspection within 90 days of substantial completion of the project. Correct all deficiencies and schedule a re-inspection of fire door assemblies which were noted as deficient on the inspection report. Inspector shall re-inspect fire door assemblies after repairs are made. Additional re-inspections which are required due to incomplete repairs will be performed by the inspector at the expense of the Contractor. Prime Coat Touch-Up: Immediately after installation, sand smooth rusted or damaged areas of prime coat and apply touch-up of compatible air-drying primer.

PROTECTION

Provide for the proper protection of doors and frames until the Owner accepts the project as complete.

Damaged or disfigured doors and frames shall be replaced or repaired by the responsible party.