

079200 - JOINT SEALANTS

- 1. GENERAL
A. SECTION INCLUDES:
1) CLEANING AND PREPARATION OF JOINT SURFACES.
2) SEALANT AND BACKING MATERIALS.
B. SUBMITTALS:
1) PRODUCT DATA: FOR EACH TYPE OF SEALANT TO BE PROVIDED
2) SAMPLES:
A) SUBMIT CURED SAMPLES OF EACH SEALANT TYPE AND COLOR PROPOSED FOR THE WORK.
B) FOR EACH SEALANT TYPE INDICATED FOR "COLOR AS SELECTED," OR FOR WHICH NO COLOR IS INDICATED, SUBMIT COLOR CARD INDICATING AVAILABLE STOCK COLORS FROM MANUFACTURER'S COMPLETE LINE OF PRE-FORMULATED COLORS FOR EACH TYPE OF SEALANT.
C. QUALITY ASSURANCE:
1) VERIFY THAT SEALANTS ARE COMPATIBLE WITH THE SUBSTRATES AND ACCESSORY MATERIALS PROVIDED UNDER OTHER SECTIONS. NOTIFY ARCHITECT OF EVIDENCE OF INCOMPATIBILITY.
D. GUARANTEE: FURNISH EXTERIOR SEALANT MANUFACTURER'S STANDARD GUARANTEE.

- 2. PRODUCTS
A. SEALANTS:
1) TYPE S - NEUTRAL CURE SILICONE SEALANTS:
A) DOW CORNING, 790 SILICONE BUILDING SEALANT, OR *795 SILICONE STRUCTURAL GLAZING AND WEATHERPROOFING SEALANT.
B) PECORA *980 ARCHITECTURAL SILICONE SEALANT.*
C) GENERAL ELECTRIC CO. "ULTRAPRUF II SCS-2900."
D) GENERAL ELECTRIC CO. "SILPRUF."
2) TYPE PT: ASTM C920, TYPE M, GRADE P, CLASS 25; TREMCO "TMC 900", BASF "MASTERSEAL SL 2", PECORA "UREXPAN NR-200", OR APPROVED; STANDARD COLORS AS SELECTED.
3) TYPE PTNS:
A) SEALANTS SHALL MEET THE REQUIREMENTS OF SCAQMD RULE 1168 (MAXIMUM VOC CONTENT OF 250 GRAMS/LITER).
B) BOSTIK CHEM-CALK 2000.
4) TYPE A:
A) SEALANTS SHALL MEET THE REQUIREMENTS OF SCAQMD RULE 1168. (MAXIMUM VOC CONTENT OF 250 GRAMS/LITER).
B) "AC208-SILICONE" BY PECORA (800-523-6688). SELECT STANDARD COLOR TO MATCH ADJACENT FINISHES AS CLOSE AS POSSIBLE.
5) TYPE SM: MILDWEAR RESISTANT SILICONE SEALANT:
A) SEALANTS SHALL MEET THE REQUIREMENTS OF SCAQMD RULE 1168. (MAXIMUM VOC CONTENT OF 250 GRAMS/LITER).
B) *988 SILICONE* BY PECORA (800-523-6688), OR APPROVED. SELECT STANDARD COLOR TO MATCH ADJACENT FINISHES AS CLOSE AS POSSIBLE; CLEAR COLOR, EXCEPT USE WHITE AT WHITE FIXTURES.

- B. ACCESSORY MATERIALS:
1) PRIMER: NON-STAINING TYPE, RECOMMENDED BY SEALANT MANUFACTURER TO SUIT APPLICATION.
2) JOINT CLEANER: NON-CORROSIVE AND NON-STAINING TYPE, RECOMMENDED BY SEALANT MANUFACTURER, COMPATIBLE WITH JOINT FORMING MATERIALS.
3) BACKER ROD: CLOSED OR OPEN CELL FOAM AS RECOMMENDED BY THE SEALANT MANUFACTURER FOR THE APPLICATION; ROUND PROFILE; THICKNESS APPROXIMATELY 130 PERCENT OF JOINT WIDTH.
4) BOND BREAKER: PRESSURE SENSITIVE TAPE RECOMMENDED BY SEALANT MANUFACTURER TO SUIT APPLICATION.

- 3. EXECUTION
A. PREPARATION:
1) CLEAN AND PREPARE JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE ANY LOOSE MATERIALS AND OTHER FOREIGN MATTER WHICH MIGHT IMPAIR ADHESION OF SEALANT.
2) APPLY MASKING TIGHTLY AROUND JOINTS TO PROTECT ADJACENT SURFACES FROM EXCESS SEALANT.
3) PRIME AS REQUIRED FOR PROPER BOND TO SUBSTRATE MATERIALS.
4) BACKING MATERIALS:
A) PLACE BACKER ROD TO ACHIEVE PROPER SEALANT WIDTH/DEPTH RATIOS AND TO PREVENT SEALANT SAG.
B) USE BOND BREAKER WHERE THERE IS INSUFFICIENT DEPTH TO USE JOINT FILLER.
C) DO NOT USE BACKER ROD AND BOND BREAKER AT JOINTS TO RECEIVE TYPE PTNS SEALANT.
B. INSTALLATION:
1) PERFORM WORK IN ACCORDANCE WITH ASTM C1193, UNLESS SPECIFIED OTHERWISE OR RECOMMENDED OTHERWISE BY THE SEALANT MANUFACTURER.
2) JOINT DEPTH:
A) SEALANT BEADS SHALL HAVE A SECTIONAL WIDTH TO DEPTH RATIO OF 2 TO 1, UNLESS SPECIFIED OTHERWISE OR RECOMMENDED OTHERWISE BY THE SEALANT MANUFACTURER.
B) INSTALL TYPE PTNS SEALANT FULL DEPTH IN TILE EXPANSION JOINTS WITH NO BACKER ROD.
3) APPLY SEALANT WITHIN RECOMMENDED TEMPERATURE RANGES. CONSULT MANUFACTURER WHEN SEALANT CANNOT BE APPLIED WITHIN RECOMMENDED TEMPERATURE RANGES.
4) TOOLING:
A) TOOL JOINTS CONCAVE, UNLESS INDICATED OR SPECIFIED OTHERWISE. FINISH FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND SAGS.
B) TOOL TYPE PTNS SEALANT TO MATCH GROUT JOINT.

- C. CLEAN-UP:
1) CLEAN ADJACENT SURFACES FREE OF EXCESS SEALANT AS THE WORK PROGRESSES. USE CLEANING AGENTS RECOMMENDED BY THE SEALANT MANUFACTURER.
2) UPON COMPLETION, REMOVE AND DISPOSE OF MASKING.
D. SCHEDULE:
1) TYPE S: PROVIDE AT ALL EXTERIOR JOINTS, UNLESS SPECIFIED OTHERWISE; STANDARD COLORS AS SELECTED FROM MANUFACTURER'S COMPLETE LINE OF PRE-FORMULATED COLORS.
2) TYPE PT: PROVIDE AT ALL EXTERIOR AND INTERIOR HORIZONTAL JOINTS SUBJECT TO TRAFFIC AND ABRASION, UNLESS SPECIFIED OTHERWISE; STANDARD COLORS AS SELECTED FROM MANUFACTURER'S COMPLETE LINE OF PRE-FORMULATED COLORS.
3) TYPE PTNS: PROVIDE AT ALL EXPANSION JOINTS IN TILE; STANDARD COLORS AS SELECTED FROM MANUFACTURER'S COMPLETE LINE OF PRE-FORMULATED COLORS.
4) TYPE A: PROVIDE AT ALL INTERIOR JOINTS, UNLESS SPECIFIED OTHERWISE.
5) TYPE SM: PROVIDE AT JOINTS AROUND COUNTERTOPS RESTROOM AREAS.

- D. SUBMITTALS:
1) PRODUCT LITERATURE: SUBMIT MANUFACTURER'S PUBLISHED LITERATURE FOR DOORS AND FRAMES.
2) SHOP DRAWINGS:
A) FRAMES: INDICATE CONFIGURATION, ANCHOR TYPES AND SPACINGS, LOCATION OF CUTOUTS FOR HARDWARE, REINFORCEMENT, AND FINISH.
B) DOORS: INDICATE ELEVATIONS, INTERNAL REINFORCEMENT, CLOSURE METHOD, AND CUTOUTS FOR HARDWARE.

- D. QUALITY ASSURANCE:
1) CONFORM TO REQUIREMENTS OF ANSI A250.8.

- 2. PRODUCTS
A. ACCEPTABLE MANUFACTURERS:
1) MEMBERS OF THE STEEL DOOR INSTITUTE AND OF THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURER'S, SUBJECT TO COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
B. MATERIALS:
1) STEEL SHEET: COLD ROLLED ASTM A366, OR HOT ROLLED PICKLED AND OILED SHEET CONFORMING TO ASTM A569.
C. DOORS:
1) ANSI A250.8; SEAMLESS.
2) MINIMUM 18 GAGE FACE SHEETS FOR INTERIOR DOORS.
3) CORE:
A) INTERIOR DOORS: VERTICAL STEEL STIFFENERS WITH SOUND DEADENING FILL BETWEEN STIFFENERS, OR RESIN IMPREGNATED KRAFT PAPER HONEY COMB CORE.
4) PROVIDE CONTINUOUSLY WELDED SEAMLESS EDGES.
5) CUT MORTISES FOR BUTTS USING APPROPRIATE TEMPLATES; UNIVERSAL NON-HANDED PREPARATION OF DOORS IS NOT ACCEPTABLE.
D. FRAMES:
1) DESIGN: DOUBLE EQUAL RABBIT, UNLESS INDICATED OTHERWISE; FULLY WELDED.
2) GAGES:
A) INTERIOR FRAMES: MINIMUM 16 GAGE FOR FRAMES OF DOOR OPENINGS UP TO AND INCLUDING 4 FEET IN WIDTH; 14 GAGE FOR FRAMES GREATER THAN 4 FEET IN WIDTH.
E. FINISH:
1) INTERIOR UNITS: MANUFACTURER'S STANDARD RUST INHIBITIVE PRIMER.

- 3. EXECUTION
A. INSTALLATION OF FRAMES:
1) INSTALL FRAMES IN ACCORDANCE WITH SDI-105.
2) COORDINATE WITH WALL CONSTRUCTION FOR ANCHOR PLACEMENT.
3) INSTALL ACCESSORIES.
4) INSTALL ROLL FORMED STEEL REINFORCEMENT CHANNELS BETWEEN TWO ABUTTING FRAMES. ANCHOR TO STRUCTURE AND FLOOR.
5) INSTALLATION TOLERANCES; MAXIMUM DIAGONAL DISTORTION: 1/16 INCH MEASURED WITH STRAIGHT EDGE, CORNER TO CORNER.
B. DOOR AND HARDWARE INSTALLATION IS SPECIFIED IN SECTION 087100.

- 081400 - WOOD DOORS
1. GENERAL
A. SECTION INCLUDES:
1) FLUSH WOOD DOORS.
2) INSTALLATION OF WOOD DOORS.
B. SUBMITTALS: SUBMIT PRODUCT DATA.
2. PRODUCTS
A. SOLID CORE FLUSH DOORS:
1) AWS SECTION 9, PC-5 OR PC-7 (6 OR 7 PLY CONSTRUCTION; BONDED CORE); PREMIUM GRADE.
2) CORE: SOLID PARTICLEBOARD; FREE FROM ADDED UREA-FORMALDEHYDE FREE.
3) FACE VENEER: MEDIUM DENSITY OVERLAY OR PAINT GRADE BIRCH.
4) 1-3/4 INCH THICK, UNLESS SCHEDULED OTHERWISE.
B. FABRICATION:
1) FABRICATE DOORS TO THE CONFIGURATIONS INDICATED, IN ACCORDANCE WITH THE AWI STANDARDS SPECIFIED.
2) BEVEL LOCK AND HINGE EDGES 1/8 INCH IN 2 INCHES ON ALL SINGLE ACTING DOORS.
3) BOND EDGE BANDING TO SOLID CORE WITH HOT MELT OR RF CURED ADHESIVE.
4) PREFIT AND PREMACHINE DOORS IN ACCORDANCE WITH AWI 1300-S-6. PREMACHINE FOR HARDWARE SPECIFIED IN SECTION 087100.
5) DOORS MAY BE FIELD FINISHED OR SHOP FINISHED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 09900, AT THE CONTRACTOR'S OPTION.
6) FLUSH DOOR BLOCKING: FOR FLUSH DOORS, PROVIDE SOLID LOCK BLOCKS AND SPECIAL BLOCKING AS REQUIRED FOR THE HARDWARE COMPONENTS SPECIFIED ELSEWHERE.

- 3. EXECUTION
A. DOOR AND HARDWARE INSTALLATION IS SPECIFIED IN SECTION 087100.

- 083100 - ACCESS DOORS
1. GENERAL:
A. SECTION INCLUDES:
1) FIRE RATED AND NON-RATED ACCESS DOORS AND FRAMES.
2) DROP-IN GFRG ACCESS PANELS FOR SALES FLOOR CEILINGS.
B. SUMMARY: PROVIDE ACCESS DOORS AND PANELS AS NECESSARY FOR ACCESS TO OVERHEAD DOOR OPERATORS, PLUMBING VALVES AND CLEANOUTS, AND MECHANICAL VALVES AND DAMPERS.
C. QUALITY ASSURANCE:
1) WHERE ACCESS DOORS ARE INSTALLED IN CONSTRUCTION WITH AN HOURLY FIRE RESISTANCE RATING, PROVIDE DOOR AND FRAME ASSEMBLIES LABELED BY UNDERWRITER'S LABORATORY, WARNOCK HERSEY, OR ANY OTHER TESTING LABORATORY APPROVED BY THE LOCAL CODE AUTHORITIES TO MEET THE REQUIREMENTS OF THE FIRE RATED ASSEMBLY.
2. PRODUCTS
A. ACCEPTABLE MANUFACTURERS:
1) MILCOR, INC., LIMA, OH.
2) J.L. INDUSTRIES, BLOOMINGTON, MN.
3) KARP ASSOCIATES, INC., MASPEETH, NY.
4) MM SYSTEMS CORPORATION, TUCKER, GA.
5) NYSTROM, MINNEAPOLIS, MN.
B. DOOR TYPES:
1) FIRE RATED METAL ACCESS DOOR:
A) FLUSH TYPE DESIGN WITH RECESSED FLANGE OR DRYWALL BEAD AT CONTRACTOR'S OPTION.
B) 16 GAGE FRAME; MINIMUM 20 GAGE STEEL WELDED PAN DOOR PANEL INSULATED WITH NON-COMBUSTIBLE FILLER.
C) SELF CLOSING AND SELF LATCHING, WITH INTERIOR LATCH RELEASE.
D) FULLY CONCEALED PIN TYPE HINGES OR CONTINUOUS PIANO HINGE, 175 DEGREE OPENING.
E) RING TURN LATCH; FURNISH 2 AT LATCH EDGES GREATER THAN 30 INCHES IN LENGTH.
F) HOT SMOKE SEAL GASKETING WHERE INDICATED FOR INSTALLATION IN SMOKE PARTITIONS.
2) NON RATED METAL WALL AND CEILING ACCESS DOOR:
A) FLUSH TYPE DESIGN
B) 16 GAGE STEEL FRAME; 14 GAGE STEEL DOOR PANEL
C) FOR INSTALLATION IN DRYWALL: INTEGRAL ATTACHMENT FLANGE AND DRYWALL BEAD FOR FLUSH INSTALLATION.
D) FULLY CONCEALED PIN TYPE HINGES OR CONTINUOUS PIANO HINGE, 175 DEGREE OPENING.
E) HARDWARE: SCREW DRIVER SLOT, QUARTER TURN CAM LOCK FOR INTERIOR LOCATIONS; 2-0" O.C., MAXIMUM.
3) NON RATED CONCEALED DRYWALL ACCESS DOOR:
A) RECESSED TYPE DESIGN.
B) MINIMUM 13 GAGE STEEL FRAME; MINIMUM 16 GAGE STEEL DOOR PANEL RECESSED TO RECEIVE DRYWALL.
C) INTEGRAL ATTACHMENT FLANGE AND DRYWALL BEAD FOR FLUSH INSTALLATION.
D) FULLY CONCEALED PIVOT ROD HINGE.
E) LATCHES: SCREW DRIVER OPERATED CAM LATCH.
4) TOILET ROOM FAUCET POWER SUPPLY ACCESS DOORS: NON-RATED WALL TYPE; 12" X 12" H; STAINLESS STEEL #4 FINISH; ONE PIECE FRAME; CONCEALED HINGE.
C. MINIMUM SIZES: PROVIDE ACCESS DOORS IN SIZES INDICATED. WHEN NOT INDICATED PROVIDE 12" X 12" SIZE FOR HAND ACCESS, AND 24" X 24" SIZE FOR MAN ENTRY.
D. GLASS FIBER REINFORCED GYPSUM (GFRG) ACCESS PANELS:
1) APPROVED PRODUCTS:
A) WIND-LOCK (LEESPORT, PA; 800-872-5625) "STEALTH."
B) CASTLE ACCESS PANELS & FORMS, INC. (CONCORD, ON; 905-738-8089) "GFRG POP-OUT ACCESS PANEL" WITH RADIUS CORNERS.
2) PROVIDE 24-INCH (610 MM) OPENINGS UNLESS NOTED OTHERWISE.

- 3. EXECUTION
A. MARK EACH ITEM OF HARDWARE AS TO DESCRIPTION AND LOCATION OF INSTALLATION IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE.
2) EXPOSED SURFACES OF HARDWARE SHALL BE COVERED AND WELL PROTECTED DURING INSTALLATION, SO AS TO AVOID DAMAGE TO FINISHES.
3) INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS. WHEREVER CUTTING AND FITTING ARE REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, INSTALL EACH ITEM COMPLETELY AND THEN REMOVE AND STORE IN A SECURE PLACE DURING THE FINISH OPERATION. AFTER COMPLETION OF THE FINISHES, REINSTALL EACH ITEM. DO NOT INSTALL SURFACE MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.
4) HARDWARE MOUNTING HEIGHTS: MOUNTING HEIGHTS ARE BASED ON RECOMMENDATIONS OF THE NATIONAL BUILDERS HARDWARE ASSOCIATION (NBHA). GENERALLY, MOUNT HARDWARE UNITS AT THE FOLLOWING LOCATIONS ON EACH DOOR OR DOOR OPENING, EXCEPT AS OTHERWISE INDICATED ON THE DRAWINGS OR REQUIRED TO MEET CODE AND HANDICAPPED REQUIREMENTS. VERIFY ANY CONFLICTS WITH LOCATION OF OTHER HARDWARE FOR PROPER CLEARANCES FOR INSTALLATION PRIOR TO CUTTING OR MILLING FOR SPECIFIED HARDWARE. NOTIFY ARCHITECT IMMEDIATELY IF SUCH CONFLICTS ARE DETERMINED.
A) LATCH AND LOCKSETS: 38 INCHES FINISH FLOOR TO CENTER OF KNOB.
B) DEAD LOCKS: 52 INCHES FINISH FLOOR TO CENTER OF CYLINDER.
C) EMERGENCY EXIT CROSS BAR: 36 INCHES FROM FINISH FLOOR.
D) PUSH/PULL: 42 INCHES FINISH FLOOR TO CENTERLINE OF PUSH/PULL.
E) PUSH PLATE: 1/2 INCH FROM EDGE OF DOOR; 42 INCHES TO CENTER LINE OF PLATE, EXCEPT 45 INCHES WHERE INDEPENDENT OF THE PUSH/PULL.
F) TOP HINGE: 5 INCHES FROM TOP OF DOOR TO TOP OF HINGE.
G) BOTTOM HINGE: 10 INCHES FROM FINISH FLOOR TO BOTTOM OF HINGE.
H) CENTER HINGE: EQUAL DISTANCE BETWEEN TOP AND BOTTOM HINGES.
I) MULTIPLE HINGE LOCATIONS SHALL BE EQUALLY SPACED BETWEEN TOP AND BOTTOM HINGE.
J) WALL STOPS: CENTERLINE OF KNOB OR POINT OF FIRST CONTACT.
K) THRESHOLDS: MOUNT AT EXTERIOR DOORS SUCH THAT SLOPE BREAKPOINT ON THRESHOLD IS AT LEAD EDGE OF DOOR. SET IN FULL BED OF CAULKING MATERIAL.
L) CLOSING: MOUNT FOR MAXIMUM DEGREE OF OPENING OBTAINABLE CONSIDERING OTHER HARDWARE PROVIDED AND OPENING CONDITIONS. SIZE CLOSERS FOR CONDITIONS AND CODE REQUIREMENTS.
M) TRIMP/PROTECTION: KICKPLATE SHALL BE 2" LDW X HEIGHT INDICATED.
N) OTHER HARDWARE ITEMS SHALL BE LOCATED AS RECOMMENDED BY NBHA, OR AS MAY BE SHOWN OR REQUIRED OTHERWISE.
5) ADJUSTING AND CLEANING: ADJUST AND CHECK EACH OPERATING ITEM OF HARDWARE AND EACH DOOR TO ENSURE PROPER OPERATION, CLEAN DOOR AND HARDWARE.
6) HARDWARE GROUPS: AS INDICATED ON THE DRAWINGS.
B. DOOR INSTALLATION:
1) FIT AND PREPARE DOORS FOR INSTALLATION IN ACCORDANCE WITH THE DOOR MANUFACTURER'S PRINTED INSTRUCTIONS.
2) INSTALL DOORS PLUMB AND SQUARE IN ASSOCIATED FRAMES MAINTAINING SPECIFIED CLEARANCES.
3) PROVIDE CLEARANCES OF 1/8 INCH AT JAMBS AND HEADS AND 3/8 INCH FROM BOTTOM OF DOOR TO TOP OF DECORATIVE FLOOR FINISH OR COVERING, EXCEPT WHERE THRESHOLD IS SHOWN OR SCHEDULED PROVIDE 1/4 INCH CLEARANCE FROM BOTTOM OF DOOR TO TOP OF THRESHOLD.
4) INSTALL HOLLOW METAL DOORS IN ACCORDANCE WITH ANSI A250.8 AND HMMMA 840.
5) INSTALL FIRE RATED DOORS IN ACCORDANCE WITH NFPA 80.
6) INSTALL DOORS TO OPERATE FREELY, BUT NOT LOOSELY, FREE FROM HINGE BOUND CONDITIONS, STICKING OR BINDING. DO NOT INSTALL IN FRAMES WHICH WOULD HINDER OPERATION OF DOORS.
7) ENSURE DOORS ARE FREE FROM RATTLING WHEN IN LATCHED POSITION.

- 087100 - DOOR HARDWARE AND INSTALLATION
1. GENERAL
A. SECTION INCLUDES:
1) HARDWARE FOR SWINGING DOORS.
2) DOOR AND HARDWARE INSTALLATION.
B. SUBMITTALS:
1) HARDWARE SCHEDULE:
A) SUBMIT TO THE ARCHITECT, IN TRIPPLICATE, A COMPLETE SCHEDULE OF PROPOSED FINISH HARDWARE. SCHEDULE SHALL BE COMPLETELY DETAILED, SHOWING ALL ITEMS, NUMBERS AND FINISHES FOR ALL HARDWARE FOR EACH SEPARATE OPENING.
B) GENERAL CONTRACTOR TO ORDER ALL HARDWARE IMMEDIATELY UPON APPROVAL OF HARDWARE LIST.
2) PRODUCT DATA: SUBMIT, IN TRIPPLICATE, PRODUCT CUT SHEETS CLEARLY INDICATING HARDWARE TO BE USED.
3) SUPPLIER QUALIFICATIONS: FINISH HARDWARE SHALL BE SUPPLIED BY RECOGNIZED BUILDERS' HARDWARE SUPPLIER WHO HAS BEEN FURNISHING HARDWARE IN THE SAME AREA AS THE PROJECT FOR A PERIOD OF NOT LESS THAN FIVE YEARS. THE SUPPLIER'S ORGANIZATION SHALL INCLUDE CONSULTANTS WHO ARE AVAILABLE AT ALL REASONABLE TIMES DURING THE COURSE OF THE WORK TO MEET PERSONALLY WITH THE OWNER, ARCHITECT, OR CONTRACTOR FOR HARDWARE CONSULTATION. THE SUPPLIER SHALL MAINTAIN A PARTS INVENTORY OF ITEMS SUPPLIED FOR FUTURE SERVICE TO THE OWNER.
C. QUALITY ASSURANCE:
1) GENERAL CONTRACTOR TO BID HARDWARE THAT CONFORMS TO REQUIREMENTS OF THE JURISDICTIONAL CODE AUTHORITIES.
2) WHERE OPENINGS ARE NOTED WITH AN HOURLY FIRE RESISTANCE RATING, PROVIDE HARDWARE COMPONENTS LABELED BY UNDERWRITER'S LABORATORY, OR OTHER TESTING LABORATORY APPROVED BY THE LOCAL CODE AUTHORITIES, TO MEET THE HOURLY FIRE RATING NOTED.
3) HARDWARE SHALL CONFORM TO NFPA 80 FOR FIRE RATED CLASS INDICATED.
D. SUBSTITUTIONS: SUBMIT SUBSTITUTIONS WITH CATALOG FOR ARCHITECT'S APPROVAL IN ACCORDANCE WITH SECTION 016000.
E. WARRANTY: SUBMIT MANUFACTURER'S WARRANTIES STATING HARDWARE ITEMS WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP AS FOLLOWS, FOR A PERIOD COMMENCING ON THE DATE OF SUBSTANTIAL COMPLETION.
1) BUTT HINGES: LIFE OF BUILDING
2) LOCKS AND LATCHES: 2 YEARS.
3) DOOR CLOSERS: 10 YEARS, MECHANICAL; 2 YEARS, ELECTRICAL
4) EXIT DEVICES: 5 YEARS, MECHANICAL; 2 YEARS, ELECTRICAL
2. PRODUCTS
A. MANUAL SWINGING DOOR HARDWARE:
1) TYPE: AS SCHEDULED ON THE DRAWINGS
2) KEYS & KEYING:
A) ALL CYLINDER ITEMS SHALL BE KEYS AS DIRECTED BY THE OWNER.
B) KEYS: FURNISH 3 FOR EACH CYLINDER UNIT.
C) CONSTRUCTION CORES:
(1) CONTRACTOR TO INSTALL LOCKSET WITH CONSTRUCTION CORES.
(2) PROVIDE INTERCHANGEABLE OR REMOVABLE CORES FOR USE DURING THE CONSTRUCTION.
D) PERMANENT CORES: INSTALL OWNER FURNISHED PERMANENT CORES.
3. EXECUTION
A. HARDWARE INSTALLATION:
1) MARK EACH ITEM OF HARDWARE AS TO DESCRIPTION AND LOCATION OF INSTALLATION IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE.
2) EXPOSED SURFACES OF HARDWARE SHALL BE COVERED AND WELL PROTECTED DURING INSTALLATION, SO AS TO AVOID DAMAGE TO FINISHES.
3) INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS. WHEREVER CUTTING AND FITTING ARE REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, INSTALL EACH ITEM COMPLETELY AND THEN REMOVE AND STORE IN A SECURE PLACE DURING THE FINISH OPERATION. AFTER COMPLETION OF THE FINISHES, REINSTALL EACH ITEM. DO NOT INSTALL SURFACE MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.
4) HARDWARE MOUNTING HEIGHTS: MOUNTING HEIGHTS ARE BASED ON RECOMMENDATIONS OF THE NATIONAL BUILDERS HARDWARE ASSOCIATION (NBHA). GENERALLY, MOUNT HARDWARE UNITS AT THE FOLLOWING LOCATIONS ON EACH DOOR OR DOOR OPENING, EXCEPT AS OTHERWISE INDICATED ON THE DRAWINGS OR REQUIRED TO MEET CODE AND HANDICAPPED REQUIREMENTS. VERIFY ANY CONFLICTS WITH LOCATION OF OTHER HARDWARE FOR PROPER CLEARANCES FOR INSTALLATION PRIOR TO CUTTING OR MILLING FOR SPECIFIED HARDWARE. NOTIFY ARCHITECT IMMEDIATELY IF SUCH CONFLICTS ARE DETERMINED.
A) LATCH AND LOCKSETS: 38 INCHES FINISH FLOOR TO CENTER OF KNOB.
B) DEAD LOCKS: 52 INCHES FINISH FLOOR TO CENTER OF CYLINDER.
C) EMERGENCY EXIT CROSS BAR: 36 INCHES FROM FINISH FLOOR.
D) PUSH/PULL: 42 INCHES FINISH FLOOR TO CENTERLINE OF PUSH/PULL.
E) PUSH PLATE: 1/2 INCH FROM EDGE OF DOOR; 42 INCHES TO CENTER LINE OF PLATE, EXCEPT 45 INCHES WHERE INDEPENDENT OF THE PUSH/PULL.
F) TOP HINGE: 5 INCHES FROM TOP OF DOOR TO TOP OF HINGE.
G) BOTTOM HINGE: 10 INCHES FROM FINISH FLOOR TO BOTTOM OF HINGE.
H) CENTER HINGE: EQUAL DISTANCE BETWEEN TOP AND BOTTOM HINGES.
I) MULTIPLE HINGE LOCATIONS SHALL BE EQUALLY SPACED BETWEEN TOP AND BOTTOM HINGE.
J) WALL STOPS: CENTERLINE OF KNOB OR POINT OF FIRST CONTACT.
K) THRESHOLDS: MOUNT AT EXTERIOR DOORS SUCH THAT SLOPE BREAKPOINT ON THRESHOLD IS AT LEAD EDGE OF DOOR. SET IN FULL BED OF CAULKING MATERIAL.
L) CLOSING: MOUNT FOR MAXIMUM DEGREE OF OPENING OBTAINABLE CONSIDERING OTHER HARDWARE PROVIDED AND OPENING CONDITIONS. SIZE CLOSERS FOR CONDITIONS AND CODE REQUIREMENTS.
M) TRIMP/PROTECTION: KICKPLATE SHALL BE 2" LDW X HEIGHT INDICATED.
N) OTHER HARDWARE ITEMS SHALL BE LOCATED AS RECOMMENDED BY NBHA, OR AS MAY BE SHOWN OR REQUIRED OTHERWISE.
5) ADJUSTING AND CLEANING: ADJUST AND CHECK EACH OPERATING ITEM OF HARDWARE AND EACH DOOR TO ENSURE PROPER OPERATION, CLEAN DOOR AND HARDWARE.
6) HARDWARE GROUPS: AS INDICATED ON THE DRAWINGS.
B. DOOR INSTALLATION:
1) FIT AND PREPARE DOORS FOR INSTALLATION IN ACCORDANCE WITH THE DOOR MANUFACTURER'S PRINTED INSTRUCTIONS.
2) INSTALL DOORS PLUMB AND SQUARE IN ASSOCIATED FRAMES MAINTAINING SPECIFIED CLEARANCES.
3) PROVIDE CLEARANCES OF 1/8 INCH AT JAMBS AND HEADS AND 3/8 INCH FROM BOTTOM OF DOOR TO TOP OF DECORATIVE FLOOR FINISH OR COVERING, EXCEPT WHERE THRESHOLD IS SHOWN OR SCHEDULED PROVIDE 1/4 INCH CLEARANCE FROM BOTTOM OF DOOR TO TOP OF THRESHOLD.
4) INSTALL HOLLOW METAL DOORS IN ACCORDANCE WITH ANSI A250.8 AND HMMMA 840.
5) INSTALL FIRE RATED DOORS IN ACCORDANCE WITH NFPA 80.
6) INSTALL DOORS TO OPERATE FREELY, BUT NOT LOOSELY, FREE FROM HINGE BOUND CONDITIONS, STICKING OR BINDING. DO NOT INSTALL IN FRAMES WHICH WOULD HINDER OPERATION OF DOORS.
7) ENSURE DOORS ARE FREE FROM RATTLING WHEN IN LATCHED POSITION.

- 08773 WINDOW FILMS
1. GENERAL
A. SECTION INCLUDES: FIELD APPLIED WINDOW SCREENING FILM.
B. SUBMITTALS:
1) PRODUCT DATA.
2) SAMPLE: MINIMUM 8 X 10 INCH SAMPLE OF FILM.
C. QUALITY ASSURANCE: FILM SHALL BE INSTALLED BY PERSONNEL EXPERIENCED IN THE FIELD INSTALLATION OF SHADING FILMS TO WINDOWS.
2. PRODUCTS
A. WINDOW FILM TYPE AS SCHEDULED "WF-1."
3. EXECUTION
A. PREPARATION: CLEAN GLASS.
B. INSTALLATION
1) FIELD APPLY TO ROOM INTERIOR SIDE SURFACE OF GLAZING AS INDICATED AND AS RECOMMENDED BY THE MANUFACTURER FOR RELEASE ENHANCEMENT PROPERTIES.
2) INSTALL FILM TO EACH DISTINCT PANE AS A SINGLE SHEET, FREE OF SCRATCHES, DIRT, AND IMPERFECTIONS. WHERE PATTERNS ARE SHOWN, TRIM ACCURATELY TO LINE, USING TEMPLATES AS NECESSARY.
3) ACCURATELY TRIM FILM EVEN WITH GLAZING STOPS FOR COMPLETE COVERAGE TO GLAZING PERIMETER.

- DIVISION 09 - FINISHES
092200 - LIGHTGAGE METAL SUPPORT FRAMING
1. GENERAL
A. SECTION INCLUDES:
1) PARTITION FRAMING.
2) SOFFIT FRAMING.
3) SUPPORT AND BACKING FOR WALL MOUNTED RUG FLIPPERS.
B. SYSTEM DESCRIPTION:
1) STRUCTURAL DESIGN: AS INDICATED ON THE STRUCTURAL DRAWINGS.
C. CODE REQUIREMENTS:
1) PROVIDE ASSEMBLIES MEETING THE HOURLY FIRE RATINGS INDICATED AND SPECIFIED. ASSEMBLIES SHALL BE TESTED IN ACCORDANCE WITH ASTM E119, AND SHALL BE APPROVED BY THE LOCAL JURISDICTIONAL CODE AUTHORITIES. COORDINATE INSTALLATION OF OTHER MATERIALS WHICH ARE A PART EACH ASSEMBLY.
2) FIRE RATING REQUIREMENTS TAKE PRECEDENCE OVER THE CONSTRUCTION REQUIREMENTS INDICATED. IN THE EVENT OF CONFLICT, NOTIFY THE ARCHITECT, AND DO NOT BEGIN CONSTRUCTION IN THE AREA OF CONFLICT UNTIL THE CONFLICT HAS BEEN RESOLVED.
3) PROVIDE ALL CALCULATIONS, DRAWINGS, PRODUCT DATA, AND OTHER VERIFICATION AS REQUIRED BY THE JURISDICTIONAL CODE AUTHORITY TO OBTAIN APPROVAL OF THE LIGHTGAGE METAL FRAMING INSTALLATION.
D. QUALITY ASSURANCE:
1) UNLESS INDICATED OR SPECIFIED OTHERWISE, PERFORM WORK IN ACCORDANCE WITH ASTM C754.
2. PRODUCTS
A. NON-LOAD BEARING LIGHT GAGE METAL FRAMING: AS INDICATED ON THE STRUCTURAL DRAWINGS.
B. CHANNELS: HOT OR COLD ROLLED CHANNELS; RUST INHIBITIVE PAINT COATING; SIZES IN ACCORDANCE WITH ASTM C754.
C. ACCESSORIES:
1) SCREWS: SELF TAPPING; LOW PROFILE HEAD; GALVANIZED.
2) HANGER WIRE: ASTM A641; CLASS 1 ZINC COATING; SOFT TEMPER; PRESTRETCHED; 12 GAGE.
D. FIRE RATED TRACK: AS SPECIFIED IN SECTION 07500.
E. PARTITION HEAD COMPENSATING CHANNEL: AS INDICATED ON THE STRUCTURAL DRAWINGS.
F. OTHER FRAMING MATERIALS:
1) PROVIDE OTHER FRAMING MATERIALS IN ACCORDANCE WITH ASTM C754.
2) BACKING: WHERE BACKING FOR WALL-SUPPORTED ITEMS IS INDICATED OR REQUIRED, FURNISH EITHER OF THE FOLLOWING AT CONTRACTOR'S OPTION.
A) SOLID LUMBER OR PLYWOOD IN ACCORDANCE WITH SECTION 061000.
B) 16 GA X 4 INCH WIDE STEEL PLATE OR 20 GA X 6 INCH STEEL STUD. PROVIDE 12 GAGE BACKING PLATES AT HANDRAILS.
3. EXECUTION
A. COORDINATE WITH SECTION 081400 AND 087103 FOR INSTALLATION OF DOOR FRAMES AND HARDWARE.
B. RUNNERS:
1) SECURE RUNNERS WITH FASTENERS AT MAXIMUM SPACING INDICATED ON THE STRUCTURAL DRAWINGS.
2) AT CONCRETE FLOORS, USE POWDER DRIVEN FASTENERS OR DRILLED IN CONCRETE ANCHORS.
3) AT POST TENSIONED CONCRETE ELEVATED SLABS, USE FASTENERS OR ANCHORS APPROVED BY THE LANDLORD. INSTALL IN ACCORDANCE WITH LANDLORDS REQUIREMENTS TO PROTECT INTEGRITY OF POST TENSION TENDONS.
4) TOP TRACK: ATTACH TRACK TO OVERHEAD STRUCTURE WITH ALLOWANCE FOR DEFLECTION AS INDICATED. USE PROPRIETARY COMPENSATING CHANNEL OR DEEP LEG TRACK AT CONTRACTOR'S OPTION, AS NECESSARY TO ACCOMMODATE BUILDING DEFLECTION.
5) UNLESS APPROVED OTHERWISE, AT FIRE RATED PARTITION ASSEMBLIES, USE FIRE RATED TRACKS, FURNISHED FROM SECTION 07500. INSTALL FIRE RATED TRACKS IN ACCORDANCE WITH THE FIRE RATED ASSEMBLY REQUIREMENTS.
6) ALIGN TO TOLERANCES SPECIFIED.
C. UNLESS INDICATED OTHERWISE, INSTALL STUDS VERTICALLY AT 16 INCHES OC, AND NOT MORE THAN 2 INCHES FROM ABUTTING CONSTRUCTION, AT EACH SIDE OF OPENINGS, AND AT CORNERS.
D. FIT RUNNERS UNDER AND ABOVE OPENINGS; SECURE INTERMEDIATE STUDS AT SPACING OF WALL STUDS.
E. BRACE PARTITION FRAMING SYSTEM AND MAKE RIGID. PROVIDE DIAGONAL STUD BRACING AT MAXIMUM 8 FT ON CENTER AT ALL FRAMING WHICH DOES NOT EXTEND TO STRUCTURE.
F. INSTALL DOUBLE STUDS CONTINUOUS FROM FLOOR TO CEILING TRACK AT THE JAMB OF EACH DOOR FRAME AND CASED OPENING. STUDS AT FRAMES SHALL BE NO LESS THAN 20 GAGE. PROVIDE DIAGONAL STEEL STUD BRACING TO STRUCTURE AT EACH JAMB AT PARTITIONS WHICH DO NOT EXTEND TO STRUCTURE.
G. PROVIDE DEFLECTION HEAD CHANNEL DETAIL TO ACCOMMODATE MINIMUM +1/2 INCH DEFLECTION OF DECK ABOVE. AT NON-LOAD BEARING FULL HEIGHT PARTITIONS SUBJECT TO COMPRESSION CAUSED BY OVERHEAD STRUCTURAL DEFLECTION, CUT STUDS 1/2 INCH SHORT FROM FULL HEIGHT. DO NOT RIGIDLY CONNECT STUD TO TOP RUNNER.
H. COORDINATE ERECTION OF STUDS WITH INSTALLATION OF SERVICE UTILITIES. ALIGN STUD WEB OPENINGS.
I. COORDINATE ERECTION OF STUD SYSTEM WITH REQUIREMENTS OF DOOR AND WINDOW FRAMES, FIRE EXTINGUISHER CABINETS, RECESSED TOILET ACCESSORIES, ACCESS DOORS, ACOUSTICAL INSULATION, AND OTHER CONSTRUCTION WITHIN PARTITION.
J. COORDINATE THE INSTALLATION OF FRAMING WITH THE GYPSUM BOARD INSTALLER TO ENSURE SUPPORT AT ALL BOARD EDGES. PROVIDE FRAMING IMMEDIATELY EITHER SIDE OF EXPANSION JOINTS.
K. STUD SPLICING NOT PERMISSIBLE.
L. BACKING: PROVIDE FOR SUPPORT OF WALL MOUNTED ITEMS, INCLUDING OWNER-FURNISHED CASEWORK AND ACCESSORIES.
M. STUD BRIDGING:
1) AT INTERIOR PARTITIONS GREATER THAN 4 FEET IN LENGTH, AND WITH RIGID FACING MATERIAL ON ONE STUD FLANGE ONLY, PROVIDE 3/4" BRIDGING CHANNELS IN HORIZONTAL ROWS AT A MAXIMUM OF 5'-0" ON CENTER FOR THE FULL HEIGHT OF THE PARTITION.
2) INTERIOR FULL HEIGHT PARTITIONS (STUDS EXTENDING FROM THE FLOOR TO THE STRUCTURE ABOVE) WITH RIGID FACING MATERIAL STOPPING 3'-0" OR MORE BELOW TOP OF STUDS - PROVIDE ONE ROW 3/4" BRIDGING CHANNEL HORIZONTALLY AT TERMINATION OF GYPSUM BOARD MATERIAL, AND ONE ADDITIONAL ROW FOR EACH 5'-0" OF EXPOSED STUDS.
3) INSTALL STUD BRIDGING CHANNELS IN LONG LENGTHS, WIRE TYING AND LAPPING THE JOINTS A MINIMUM OF 12" - ATTACH BRIDGING CHANNEL TO EACH STUD AS SHOWN IN MANUFACTURER'S PRINTED INSTRUCTIONS.

- 2. PRODUCTS
A. ACCEPTABLE MANUFACTURERS:
1) MEMBERS OF THE STEEL DOOR INSTITUTE AND OF THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURER'S, SUBJECT TO COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
B. MATERIALS:
1) STEEL SHEET: COLD ROLLED ASTM A366, OR HOT ROLLED PICKLED AND OILED SHEET CONFORMING TO ASTM A569.
C. DOORS:
1) ANSI A250.8; SEAMLESS.
2) MINIMUM 18 GAGE FACE SHEETS FOR INTERIOR DOORS.
3) CORE:
A) INTERIOR DOORS: VERTICAL STEEL STIFFENERS WITH SOUND DEADENING FILL BETWEEN STIFFENERS, OR RESIN IMPREGNATED KRAFT PAPER HONEY COMB CORE.
4) PROVIDE CONTINUOUSLY WELDED SEAMLESS EDGES.
5) CUT MORTISES FOR BUTTS USING APPROPRIATE TEMPLATES; UNIVERSAL NON-HANDED PREPARATION OF DOORS IS NOT ACCEPTABLE.
D. FRAMES:
1) DESIGN: DOUBLE EQUAL RABBIT, UNLESS INDICATED OTHERWISE; FULLY WELDED.
2) GAGES:
A) INTERIOR FRAMES: MINIMUM 16 GAGE FOR FRAMES OF DOOR OPENINGS UP TO AND INCLUDING 4 FEET IN WIDTH; 14 GAGE FOR FRAMES GREATER THAN 4 FEET IN WIDTH.
E. FINISH:
1) INTERIOR UNITS: MANUFACTURER'S STANDARD RUST INHIBITIVE PRIMER.

- 3. EXECUTION
A. INSTALLATION OF FRAMES:
1) INSTALL FRAMES IN ACCORDANCE WITH SDI-105.
2) COORDINATE WITH WALL CONSTRUCTION FOR ANCHOR PLACEMENT.
3) INSTALL ACCESSORIES.
4) INSTALL ROLL FORMED STEEL REINFORCEMENT CHANNELS BETWEEN TWO ABUTTING FRAMES. ANCHOR TO STRUCTURE AND FLOOR.
5) INSTALLATION TOLERANCES; MAXIMUM DIAGONAL DISTORTION: 1/16 INCH MEASURED WITH STRAIGHT EDGE, CORNER TO CORNER.
B. DOOR AND HARDWARE INSTALLATION IS SPECIFIED IN SECTION 087100.

- 081400 - WOOD DOORS
1. GENERAL
A. SECTION INCLUDES:
1) FLUSH WOOD DOORS.
2) INSTALLATION OF WOOD DOORS.
B. SUBMITTALS: SUBMIT PRODUCT DATA.
2. PRODUCTS
A. SOLID CORE FLUSH DOORS:
1) AWS SECTION 9, PC-5 OR PC-7 (6 OR 7 PLY CONSTRUCTION; BONDED CORE); PREMIUM GRADE.
2) CORE: SOLID PARTICLEBOARD; FREE FROM ADDED UREA-FORMALDEHYDE FREE.
3) FACE VENEER: MEDIUM DENSITY OVERLAY OR PAINT GRADE BIRCH.
4) 1-3/4 INCH THICK, UNLESS SCHEDULED OTHERWISE.
B. FABRICATION:
1) FABRICATE DOORS TO THE CONFIGURATIONS INDICATED, IN ACCORDANCE WITH THE AWI STANDARDS SPECIFIED.
2) BEVEL LOCK AND HINGE EDGES 1/8 INCH IN 2 INCHES ON ALL SINGLE ACTING DOORS.
3) BOND EDGE BANDING TO SOLID CORE WITH HOT MELT OR RF CURED ADHESIVE.
4) PREFIT AND PREMACHINE DOORS IN ACCORDANCE WITH AWI 1300-S-6. PREMACHINE FOR HARDWARE SPECIFIED IN SECTION 087100.
5) DOORS MAY BE FIELD FINISHED OR SHOP FINISHED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 09900, AT THE CONTRACTOR'S OPTION.
6) FLUSH DOOR BLOCKING: FOR FLUSH DOORS, PROVIDE SOLID LOCK BLOCKS AND SPECIAL BLOCKING AS REQUIRED FOR THE HARDWARE COMPONENTS SPECIFIED ELSEWHERE.

- 3. EXECUTION
A. DOOR AND HARDWARE INSTALLATION IS SPECIFIED IN SECTION 087100.

- 083100 - ACCESS DOORS
1. GENERAL:
A. SECTION INCLUDES:
1) FIRE RATED AND NON-RATED ACCESS DOORS AND FRAMES.
2) DROP-IN GFRG ACCESS PANELS FOR SALES FLOOR CEILINGS.
B. SUMMARY: PROVIDE ACCESS DOORS AND PANELS AS NECESSARY FOR ACCESS TO OVERHEAD DOOR OPERATORS, PLUMBING VALVES AND CLEANOUTS, AND MECHANICAL VALVES AND DAMPERS.
C. QUALITY ASSURANCE:
1) WHERE ACCESS DOORS ARE INSTALLED IN CONSTRUCTION WITH AN HOURLY FIRE RESISTANCE RATING, PROVIDE DOOR AND FRAME ASSEMBLIES LABELED BY UNDERWRITER'S LABORATORY, WARNOCK HERSEY, OR ANY OTHER TESTING LABORATORY APPROVED BY THE LOCAL CODE AUTHORITIES TO MEET THE REQUIREMENTS OF THE FIRE RATED ASSEMBLY.
2. PRODUCTS
A. ACCEPTABLE MANUFACTURERS:
1) MILCOR, INC., LIMA, OH.
2) J.L. INDUSTRIES, BLOOMINGTON, MN.
3) KARP ASSOCIATES, INC., MASPEETH, NY.
4) MM SYSTEMS CORPORATION, TUCKER, GA.
5) NYSTROM, MINNEAPOLIS, MN.
B. DOOR TYPES:
1) FIRE RATED METAL ACCESS DOOR:
A) FLUSH TYPE DESIGN WITH RECESSED FLANGE OR DRYWALL BEAD AT CONTRACTOR'S OPTION.
B) 16 GAGE FRAME; MINIMUM 20 GAGE STEEL WELDED PAN DOOR PANEL INSULATED WITH NON-COMBUSTIBLE FILLER.
C) SELF CLOSING AND SELF LATCHING, WITH INTERIOR LATCH RELEASE.
D) FULLY CONCEALED PIN TYPE HINGES OR CONTINUOUS PIANO HINGE, 175 DEGREE OPENING.
E) RING TURN LATCH; FURNISH 2 AT LATCH EDGES GREATER THAN 30 INCHES IN LENGTH.
F) HOT SMOKE SEAL GASKETING WHERE INDICATED FOR INSTALLATION IN SMOKE PARTITIONS.
2) NON RATED METAL WALL AND CEILING ACCESS DOOR:
A) FLUSH TYPE DESIGN
B) 16 GAGE STEEL FRAME; 14 GAGE STEEL DOOR PANEL
C) FOR INSTALLATION IN DRYWALL: INTEGRAL ATTACHMENT FLANGE AND DRYWALL BEAD FOR FLUSH INSTALLATION.
D) FULLY CONCEALED PIN TYPE HINGES OR CONTINUOUS PIANO HINGE, 175 DEGREE OPENING.
E) HARDWARE: SCREW DRIVER SLOT, QUARTER TURN CAM LOCK FOR INTERIOR LOCATIONS; 2-0" O.C., MAXIMUM.
3) NON RATED CONCEALED DRYWALL ACCESS DOOR:
A) RECESSED TYPE DESIGN.
B) MINIMUM 13 GAGE STEEL FRAME; MINIMUM 16 GAGE STEEL DOOR PANEL RECESSED TO RECEIVE DRYWALL.
C) INTEGRAL ATTACHMENT FLANGE AND DRYWALL BEAD FOR FLUSH INSTALLATION.
D) FULLY CONCEALED PIVOT ROD HINGE.
E) LATCHES: SCREW DRIVER OPERATED CAM LATCH.
4) TOILET ROOM FAUCET POWER SUPPLY ACCESS DOORS: NON-RATED WALL TYPE; 12" X 12" H; STAINLESS STEEL #4 FINISH; ONE PIECE FRAME; CONCEALED HINGE.
C. MINIMUM SIZES: PROVIDE ACCESS DOORS IN SIZES INDICATED. WHEN NOT INDICATED PROVIDE 12" X 12" SIZE FOR HAND ACCESS, AND 24" X 24" SIZE FOR MAN ENTRY.
D. GLASS FIBER REINFORCED GYPSUM (GFRG) ACCESS PANELS:
1) APPROVED PRODUCTS:
A) WIND-LOCK (LEESPORT, PA; 800-872-5625) "STEALTH."
B) CASTLE ACCESS PANELS & FORMS, INC. (CONCORD, ON; 905-738-8089) "GFRG POP-OUT ACCESS PANEL" WITH RADIUS CORNERS.
2) PROVIDE 24-INCH (610 MM) OPENINGS UNLESS NOTED OTHERWISE.

- 3. EXECUTION
A. MARK EACH ITEM OF HARDWARE AS TO DESCRIPTION AND LOCATION OF INSTALLATION IN ACCORDANCE WITH APPROVED HARDWARE SCHEDULE.
2) EXPOSED SURFACES OF HARDWARE SHALL BE COVERED AND WELL PROTECTED DURING INSTALLATION, SO AS TO AVOID DAMAGE TO FINISHES.
3) INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS. WHEREVER CUTTING AND FITTING ARE REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, INSTALL EACH ITEM COMPLETELY AND THEN REMOVE AND STORE IN A SECURE PLACE DURING THE FINISH OPERATION. AFTER COMPLETION OF THE FINISHES, REINSTALL EACH ITEM. DO NOT INSTALL SURFACE MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.
4) HARDWARE MOUNTING HEIGHTS: MOUNTING HEIGHTS ARE BASED ON RECOMMENDATIONS OF THE NATIONAL BUILDERS HARDWARE ASSOCIATION (NBHA). GENERALLY, MOUNT HARDWARE UNITS AT THE FOLLOWING LOCATIONS ON EACH DOOR OR DOOR OPENING, EXCEPT AS OTHERWISE INDICATED ON THE DRAWINGS OR REQUIRED TO MEET CODE AND HANDICAPPED REQUIREMENTS. VERIFY ANY CONFLICTS WITH LOCATION OF OTHER HARDWARE FOR PROPER CLEARANCES FOR INSTALLATION PRIOR TO CUTTING OR MILLING FOR SPECIFIED HARDWARE. NOTIFY ARCHITECT IMMEDIATELY IF SUCH CONFLICTS ARE DETERMINED.
A) LATCH AND LOCKSETS: 38 INCHES FINISH FLOOR TO CENTER OF KNOB.
B) DEAD LOCKS: 52 INCHES FINISH FLOOR TO CENTER OF CYLINDER.
C) EMERGENCY EXIT CROSS BAR: 36 INCHES FROM FINISH FLOOR.
D) PUSH/PULL: 42 INCHES FINISH FLOOR TO CENTERLINE OF PUSH/PULL.
E) PUSH PLATE: 1/2 INCH FROM EDGE OF DOOR; 42 INCHES TO CENTER LINE OF PLATE, EXCEPT 45 INCHES WHERE INDEPENDENT OF THE PUSH/PULL.
F) TOP HINGE: 5 INCHES FROM TOP OF DOOR TO TOP OF HINGE.
G) BOTTOM HINGE: 10 INCHES FROM FINISH FLOOR TO BOTTOM OF HINGE.
H) CENTER HINGE: EQUAL DISTANCE BETWEEN TOP AND BOTTOM HINGES.
I) MULTIPLE HINGE LOCATIONS SHALL BE EQUALLY SPACED BETWEEN TOP AND BOTTOM HINGE.
J) WALL STOPS: CENTERLINE OF KNOB OR POINT OF FIRST CONTACT.
K) THRESHOLDS: MOUNT AT EXTERIOR DOORS SUCH THAT SLOPE BREAKPOINT ON THRESHOLD IS AT LEAD EDGE OF DOOR. SET IN FULL BED OF CAULKING MATERIAL.
L) CLOSING: MOUNT FOR MAXIMUM DEGREE OF OPENING OBTAINABLE CONSIDERING OTHER HARDWARE PROVIDED AND OPENING CONDITIONS. SIZE CLOSERS FOR CONDITIONS AND CODE REQUIREMENTS.
M) TRIMP/PROTECTION: KICKPLATE SHALL BE 2" LDW X HEIGHT INDICATED.
N) OTHER HARDWARE ITEMS SHALL BE LOCATED AS RECOMMENDED BY NBHA, OR AS MAY BE SHOWN OR REQUIRED OTHERWISE.
5) ADJUSTING AND CLEANING: ADJUST AND CHECK EACH OPERATING ITEM OF HARDWARE AND EACH DOOR TO ENSURE PROPER OPERATION, CLEAN DOOR AND HARDWARE.
6) HARDWARE GROUPS: AS INDICATED ON THE DRAWINGS.
B. DOOR INSTALLATION:
1) FIT AND PREPARE DOORS FOR INSTALLATION IN ACCORDANCE WITH THE DOOR MANUFACTURER'S PRINTED INSTRUCTIONS.
2) INSTALL DOORS PLUMB AND SQUARE IN ASSOCIATED FRAMES MAINTAINING SPECIFIED CLEARANCES.
3) PROVIDE CLEARANCES OF 1/8 INCH AT JAMBS AND HEADS AND 3/8 INCH FROM BOTTOM OF DOOR TO TOP OF DECORATIVE FLOOR FINISH OR COVERING, EXCEPT WHERE THRESHOLD IS SHOWN OR SCHEDULED PROVIDE 1/4 INCH CLEARANCE FROM BOTTOM OF DOOR TO TOP OF THRESHOLD.
4) INSTALL HOLLOW METAL DOORS IN ACCORDANCE WITH ANSI A250.8 AND HMMMA 840.
5) INSTALL FIRE RATED DOORS IN ACCORDANCE WITH NFPA 80.
6) INSTALL DOORS TO OPERATE FREELY, BUT NOT LOOSELY, FREE FROM HINGE BOUND CONDITIONS, STICKING OR BINDING. DO NOT INSTALL IN FRAMES WHICH WOULD HINDER OPERATION OF DOORS.
7) ENSURE DOORS ARE FREE FROM RATTLING WHEN IN LATCHED POSITION.

- 087100 - DOOR HARDWARE AND INSTALLATION
1. GENERAL
A. SECTION INCLUDES:
1) HARDWARE FOR SWINGING DOORS.
2) DOOR AND HARDWARE INSTALLATION.
B. SUBMITTALS:
1) HARDWARE SCHEDULE:
A) SUBMIT TO THE ARCHITECT, IN TRIPPLICATE, A COMPLETE SCHEDULE OF PROPOSED FINISH HARDWARE. SCHEDULE SHALL BE COMPLETELY DETAILED, SHOWING ALL ITEMS, NUMBERS AND FINISHES FOR ALL HARDWARE FOR EACH SEPARATE OPENING.
B) GENERAL