

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- .1 Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

- .1 Definition: AFinish Hardware@ includes items known commercially as finish hardware which are required for swing, sliding and folding doors, except special types of unique and non-matching hardware specified in the same section as the door and door frame.
- .2 Extent of finish hardware required is indicated on drawings and in schedules.
- .3 Types of finish hardware required include, but are not limited to, the following:

- Butt Hinges
- Lock cylinders and keys
- Lock and latch sets
- Weatherstripping for exterior doors
- Power assisted door openers
- Thresholds

1.03 QUALITY ASSURANCE

- .1 Manufacturer: Obtain each type of hardware (ie. Latch and locksets) from a single manufacturer, although several may be indicated as offering products complying with requirements.
- .2 Supplier: A recognized architectural finish hardware supplier, with warehousing facilities, who has been furnishing hardware in the project=s vicinity for a period of not less than 2 years, and who is, or who employs an experienced architectural hardware consultant who is available, at reasonable times during the course of the work, for consultation about project=s hardware requirements, to Owner, Architect and Contractor.
- .3 Fire-Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA Standard No. 80 and local building code requirements. Provide only hardware which has been tested and listed by UL or FM for types and sizes of doors required and complies with requirements of door and door frame labels.

1.04 SUBMITTALS

- .1 Product Data: Submit manufacturers' technical product data for each item of hardware in accordance with Division-1 section ASubmittals@. Include whatever information may be necessary to show compliance with requirements and include instructions for installation and for maintenance of operating parts and finish.

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

- .2 Hardware Schedule: Submit final hardware schedule in manner indicated below. Coordinate hardware with doors, frames and related work to ensure proper size, thickness, hand, function and finish of hardware.
 - .1 Final Hardware Schedule Content: Based on finish hardware indicated, organize hardware schedule into hardware sets@ indicating complete designations of every item required for each door or opening. Include the following information:
 - .1 Type style, function, size and finish of each hardware item.
 - .2 Name and manufacturer of each item.
 - .3 Fastenings and other pertinent information.
 - .4 Location of hardware set cross-referenced to indications on
 - .5 Drawings both on floor plans and in door and frame schedule.
 - .6 Explanation of all abbreviations, symbols, codes, etc., contained in schedule.
 - .7 Mounting locations for hardware.
 - .8 Door and frame sized and materials.
 - .9 Keying information.
 - .3 Submittal Sequence: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work (e.g., hollow metal frames) which is critical in the project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by finish hardware, and other information essential to the coordinated review of hardware schedule.
 - .4 Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner=s final instructions on keying of locks has been fulfilled. It is the intent that the cylinder locks in this project shall be keyed to match other doors in the building. The Contractor will be required to coordinate this with the Owner.
 - .5 Samples if Requested: Prior to submittal of the final hardware schedule and prior to final ordering of finish hardware, submit one sample of each type of exposed hardware unit, finished as required, and tagged with full description for coordination with schedule.
 - .6 Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factory-prepared for the installation of hardware. Upon request, check shop drawings of such other work, to confirm that adequate provisions are made for proper location and installation of hardware.
- 1.05 PRODUCT HANDLING
- .1 Tag each item or package separately, with identification related to final hardware schedule, and include basic installation instructions with each item or package.
 - .2 Inventory hardware jointly with representatives of hardware supplier and hardware installer until each is satisfied that count is correct.

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

- .3 Deliver individually packaged hardware items at the proper times to the proper locations (shop or project site) for installation.
- .4 Provide secure lock-up for hardware delivered to the project, but not yet installed. Control handling and installation of hardware items which are not immediately replaceable, so that completion of the work will not be delayed by hardware losses, both before and after installation.

PART 2 - PRODUCTS

2.01 SCHEDULED HARDWARE

- .1 The following are acceptable manufacturers for the following hardware types.

Butts:	Stanley
Locksets:	Sargent, Best
Exit Devices:	Von Duprin, Sargent
Closers:	LCN, Sargent
Automatic Door Openers & Actuators:	LCN (no substitutions)
Silencers:	Glynn-Johnson, DCI
Stops:	Glynn-Johnson, DCI
Thresholds:	National Guard
Weather stripping:	National Guard
Miscellaneous Hardware:	Ives, Glynn-Johnson

2.02 MATERIALS AND FABRICATION

- .1 General:
 - .1 Hand of door: Drawings show direction of slide, swing or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
 - .2 Manufacturer=s Name Plate: Do not use manufacturer=s products which have manufacturer=s name or trade name displayed in a visible location (omit removable nameplates), except in conjunction with required UL labels and as otherwise acceptable to Architect.
 - .3 Manufacturer=s identification will be permitted on rim of lock cylinders only.
 - .4 Finish: All hardware to match existing, typical
 - .5 Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for self-tapping sheet metal screws, except as specifically indicated.
 - .6 Furnish screws for installation, with each hardware item. Provide Phillips flat-head

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of such other work as closely as possible, including prepared for paint in surfaces to receive painted finish.

- .7 Provide concealed fasteners for hardware units which are exposed when door is closed, except to extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work, except where it is not feasible to adequately reinforce the work. In such cases, provide sleeves for each thru-bolt or use sex screw fasteners.
- .8 Tools and Maintenance Instructions for Maintenance: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of finish hardware.

2.03 HINGES AND BUTTS

- .1 Templates: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- .2 Screws: Furnish Phillips flat-head or machine screws for installation of units, except furnish Phillips flat-head or wood screws for installation of units into wood. Finish screw heads to match surface of hinges or pivots.
- .3 Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - .1 Steel Hinges: Steel pins.
 - .2 Non-ferrous Hinges: Stainless steel pins.
 - .3 Exterior Doors: Non-removable pins.
 - .4 Out-swing Corridor Doors: Non-removable pins.
 - .5 Interior Doors: Non-rising pins.
 - .6 Tips: Flat button and matching plug, finished to match leaves.
 - .7 Number of hinges: Provide number of hinges indicated but not less than 3 hinges for door leaf for doors 90" or less in height and one additional hinge for each 30" of additional height.
- .4 Acceptable Manufacturers:
 - .1 Stanley
 - .2 McKinney
 - .3 Hager

2.04 LOCK CYLINDERS AND KEYING

- .1 General: Supplier will meet with Owner to finalize keying requirements and obtain final instructions in writing.
- .2 Review the keying system with the Owner and provide the type required (master,

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

- grandmaster or great-grandmaster), either new or integrated with Owner=s existing system.
- .3 Equip locks with cylinders for 6-pin tumbler inserts.
 - .4 Furnish only temporary inserts for the construction period, and remove these when directed.
 - .5 Manufacturer: Subject to compliance with requirements, provide products of:
 - .1 Sargent
 - .2 Best
 - .6 Metals: Construct lock cylinder parts from brass/bronze, stainless steel or nickel silver.
 - .7 Comply with owner=s instructions for masterkeying and, except as otherwise indicated, provide individual change key for each lock which is not designated to be keyed alike with a group of related locks.
 - .8 Permanently inscribe each key with number or lock that identifies cylinder manufacturer key symbol, and notation ADO NOT DUPLICATE@.
 - .9 Key Material: Provide keys of nickel silver only.
 - .10 Key Quantity: Furnish 3 change keys for each lock; 5 master keys for each master system; and 5 grandmaster keys for each grandmaster system.
 - .11 Furnish one extra blank for each lock.

2.05 LOCKS, LATCHES, AND BOLTS

- .1 Strikes: Provide manufacturer=s standard wrought box strike for each latch or lock bolt, with curved lip extended to protect frame, finished to match hardware set.
- .2 Provide roller type strikes where recommended by manufacturer of the latch and lock units.
- .3 Lock Throw: Provide 5/8" minimum throw of latch and deadbolt used on pairs of doors. Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.
- .4 Provide 2" minimum throw on other latch and deadlock bolts.
- .5 Rabbeted Doors: Where rabbeted door stiles are indicated, provide special rabbeted from on lock and latch units and bolts.

2.06 WEATHERSTRIPPING

- .1 General: Except as otherwise indicated, provide continuous weatherstripping at each edge of every exterior door leaf. Provide type, sizes and profiles shown or scheduled. Provide

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

non-corrosive fasteners as recommended by manufacturer for application indicated.

- .2 Replaceable Seal Strips: Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
- .3 Acceptable Manufacturers:
 - .1 National Guard
 - .2 Reese Ent.
 - .3 Pemko

2.07 THRESHOLDS

- .1 General: Except as otherwise indicated provide threshold unit of type, size, and profile as shown or scheduled. ALL FASTENERS TO BE STAINLESS STEEL.
- .2 Provide threshold with vinyl foot seals.
- .3 Acceptable Manufacturers:
 - .1 National Guard
 - .2 Reese Ent.
 - .3 Pemko

2.08 DOOR SILENCERS

All hollow metal frames shall have grey resilient type silencers. Quantity (3) on single doors and quantity (2) on pair of doors.

PART 3 - EXECUTION

3.01 INSTALLATION

- .1 Mount hardware units at heights indicated in Recommended Locations for Builders Hardware for Standard Steel Doors and Frames® by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulation, and except as may be otherwise directed by Architect.
- .2 Install each hardware item in compliance with the manufacturer's instructions and recommendation. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division-9 sections. Do not install surface-mounted items until finishes have been completed on the substrate.
- .3 Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

- .4 Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- .5 Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant.

3.02 ADJUST AND CLEAN

- .1 Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.
- .2 Clean adjacent surfaces soiled by hardware installation.
- .3 Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- .4 Instruct Owner=s Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.
- .5 Continued Maintenance Service: Approximately six months after the acceptance of hardware in each area, the Installer, accompanied by the representative of the latch and lock manufacturer, shall return to the project and re-adjust every item of hardware to restore proper function of doors and hardware. Consult with and instruct Owner=s personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

3.03 HARDWARE SCHEDULE

TYPE #1- Exits Lockable – Aluminum Door – Door #101

2	Only	Continuous Hinges	SL24HD
2	Only	Exit devices	99NL
2	Only	Cylinder	20-001
2	Only	Closers	4111
1	Only	O.H. Stop/Holder	100H
1	Only	Threshold	8425
1	Set	Weatherstrip	A625
1	Only	Sweepstrips	C607

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

TYPE #1A- Exits Lockable – Aluminum Door w/ automatic opener (door #100)

1	Only	Continuous Hinges	SL24HD
1	Only	Exit devices	99NL
1	Only	Cylinder	20-001
1	Only	Electric Strike	9600 [HES]
1	Only	Automatic Operator	4640 [LCN]
1	Only	Exterior actuator	956 x 972-4 [LCN]
1	Only	Interior actuator	956
1	Only	O.H. Stop / Holder	100H
1	Only	Threshold	8425
1	Set	Weatherstrip	A625
1	Only	Sweepstrips	C607

TYPE #2- Vestibule – Non Locking – Aluminum Door (door #103)

2	Only	Continuous Hinges	SL24HD
2	Only	Push Bars	TO BE SELECTED
2	Only	Pulls	TO BE SELECTED
2	Only	Closers	4111 CUSH
1	Only	Threshold	425AL

TYPE #2A- Vestibule – Non Locking – Aluminum Door w/ automatic opener (door #102)

1	Only	Continuous Hinges	SL24HD
1	Only	Push Bars	TO BE SELECTED
1	Only	Pulls	TO BE SELECTED
1	Only	Automatic Operator	4640 [LCN]
2	Only	Interior actuator	956 [LCN]
1	Only	O.H. Stop / Holder	100H
2	Only	Threshold	425AL

TYPE #3- Public Toilet – Multi Stall - Not Rated – Wood door w/ automatic opener (door #105 & #106, set per ea. door)

1	Set	Hinges	CB1901 4.5"
1	Only	Push Plate	70 – 3.5" X 15"
1	Only	Pull Plate	110 X W
1	Only	Automatic Operator	4640 [LCN]
1	Only	Interior actuator	956 [LCN]
1	Only	Closer	4111
1	Only	Kickplate	.050 X 8"
1	Only	Stop	60W/FB13
3	Only	Silencers	64

**ADDITIONS AND RENOVATIONS TO
PENFIELD UNITED METHODIST CHURCH**

**SECTION 08710
DOOR HARDWARE**

TYPE #4- Sanctuary –Rated – Left hand reverse – w/ Closer (door #104)

1	Set	Hinges	CB1900 4.5"
1	Only	Exit devices	99NL
1	Set	Lockset	L9080
1	Only	Closer	4011 X H.O.
1	Only	Kickplate	.050 X 8"
1	Only	Stop	60W/FB13
3	Only	Silencers	64

TYPE #5- Exterior Entrance – (doors #107 & #108)

2	Set	Hinges	CB1961 4.5" NRP
1	Set	Lockset	L9080
2	Only	Closer	4111 CUSH
1	Only	Threshold	8425
1	Set	Weatherstrip	A625
1	Set	Sweepstrip	C607

END OF SECTION 08710