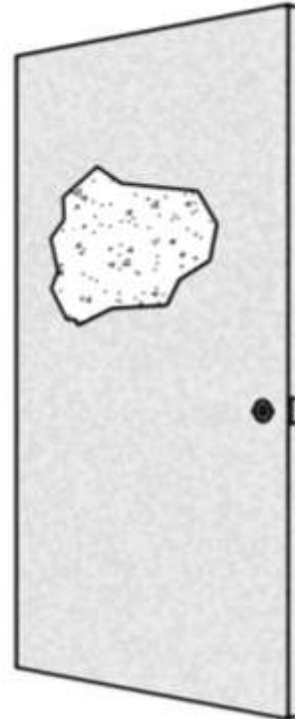


ENGINEERING DETAILS for STANDARD **SERIES HP Full Flush 1 3/4" Doors** **SERIES CHP Seamless 1 3/4" Doors**

Specifications

1. HP doors shall be formed from two 16 or 18 gage A60 Galvannealed Steel per ASTM A924 and A653 and shall be 1-3/4" thick.
2. CHP doors shall be formed from two 14,16 or 18 gage A 60 Galvannealed steel per ASTM A924 and A653 and shall be 1-3/4" thick.
3. Doors shall have a core of rigid Polystyrene. The core shall have a nominal density of 1.0 #/ft³, with an "R" factor of 7.12. The door panel shall develop a "U" factor of 0.014.
4. HP doors shall have vertical mechanical interlocking seams on hinge and lock edges. There shall be no seam on the faces of door.
5. CHP doors shall have no seams on the faces or edges of doors. Vertical edges of doors shall be continuously seam- welded full height of the door.
6. Exterior doors shall be capped to retard moisture penetrating the door.
7. All hinge reinforcements shall be 3/16" thick.
8. All doors shall be internally reinforced with a 12 gage plate both sides of the door for application of surface applied door closures and holders.
9. Glass light moulding shall be Pioneer standard steel moulding, with no exposed screws on the secure side of door.
10. Louvers shall be Pioneer standard design for application required.
11. All doors shall be cleaned and given one coat of baked –on rust- inhibitive metal primer in compliance with ANSI A250.10-2004
12. All fire rated doors, where indicated, shall be manufactured in accordance with UL or WHI procedures and bear the appropriate classification mark (label).
13. Door construction complies with ANSI A250.8-2003 (SDI 100)
14. Doors shall be packaged to minimize damage in transit and handling.
15. Hardware reinforcements are in accordance with ANSI A 250.6-2003. Locations are in accordance with ANSI/BHMA A156.115

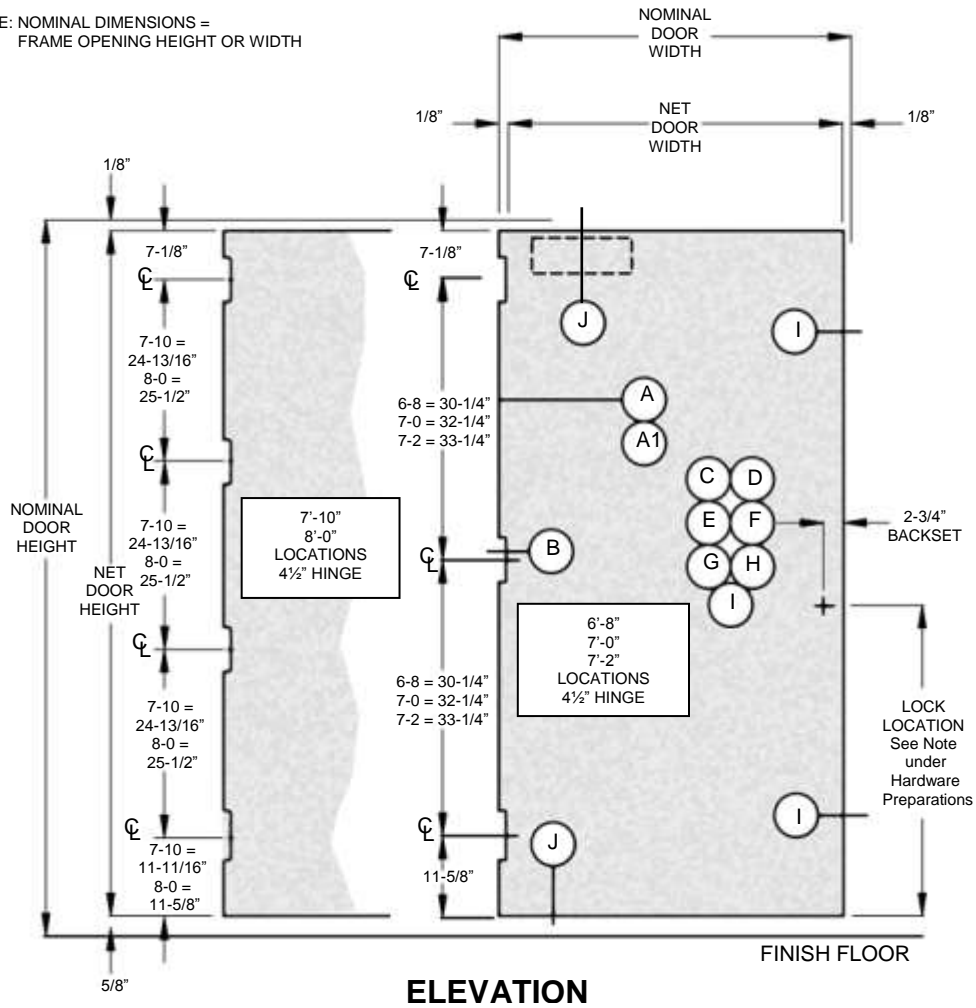


Insulation Values

Factor	Definition		
K	The rate at which heat flows thru a material. Values for insulation are normally based on one inch thickness of a single homogeneous material and are expressed in BTU/ft ² /°F/hr/inch.		
C	The rate at which heat flows thru a material of any given thickness. The "C" factor at one inch = "K" factor. The "C" factor of the same material at three inches is 1/3 of the "K" factor; at two inches the "C" factor is 1/2 the "K" factor.		
U	The overall coefficient of heat transfer (conductivity) for all elements of construction (as well as environmental factors). A "U" factor is determined by adding the "C" factors of the various individual materials making up the composite structure. Units are expressed as BTU/ft ² /°F/hr.		
R	A measure of the resistance to heat flow. As the thickness of the insulation material increases, the resistance to the heat flow increases. See the following common insulation materials for typical "R" factors:		
	Material	1" thick	2"thick
	Urethane	7.0	13.0
	Polystyrene	4.1	8.0
	Fiberglass (1# or less)	4.0	8.0
	Vermiculite	2.0	3.6
			3"thick
			20.0
			12.0
			12.0
			5.5

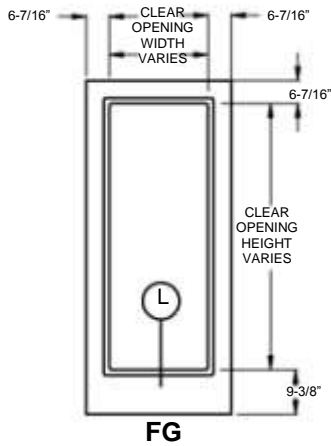
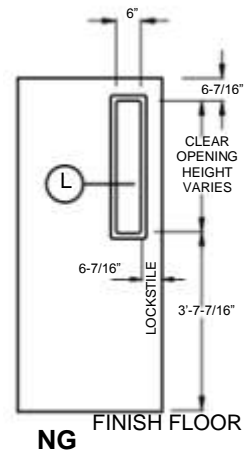
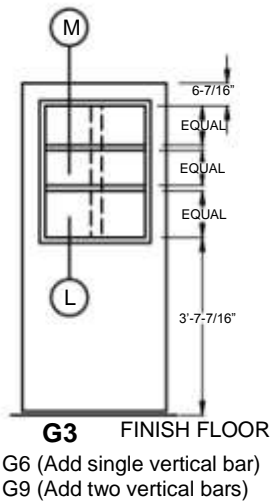
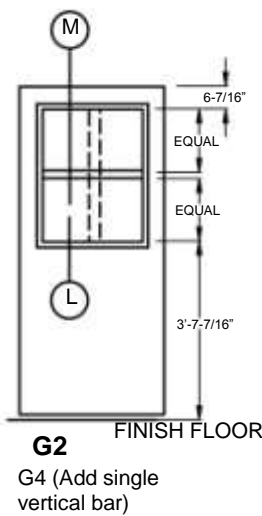
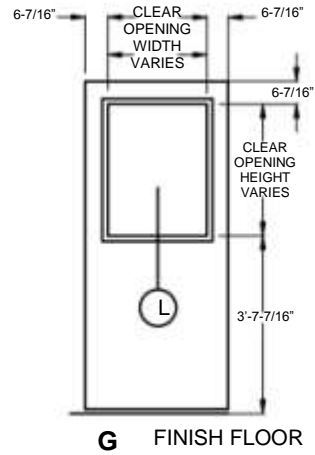
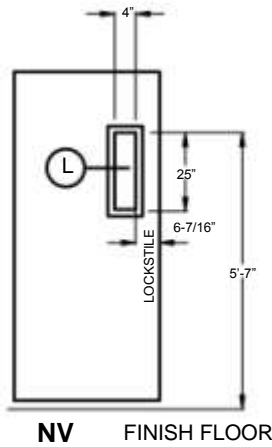
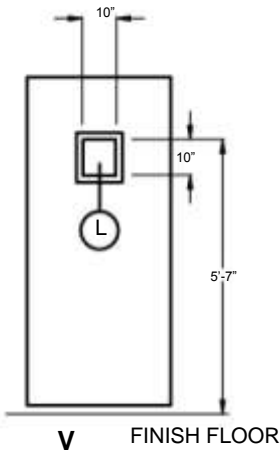
**Standard SERIES HP Full Flush and
SERIES CHP Seamless 1 3/4" Doors**

NOTE: NOMINAL DIMENSIONS =
FRAME OPENING HEIGHT OR WIDTH

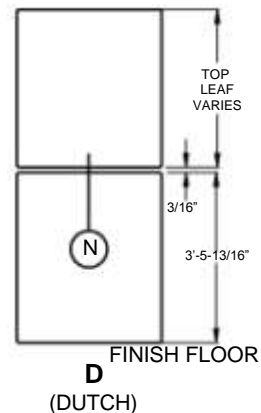
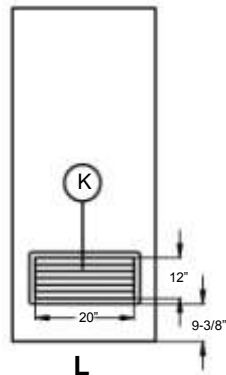


TECHNICAL DATA – DOORS

HP & CHP SERIES



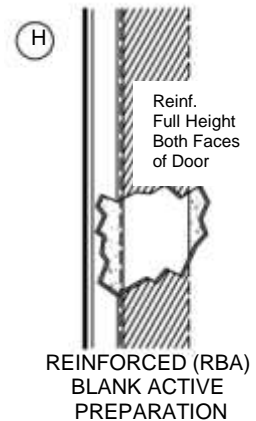
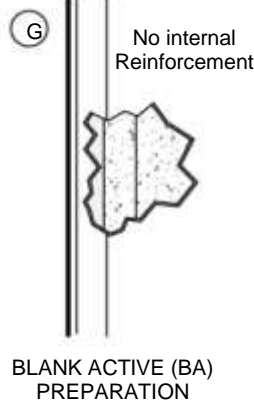
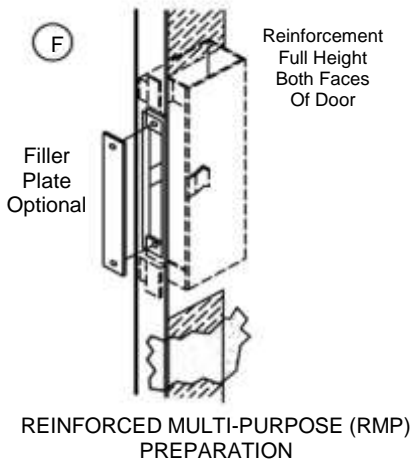
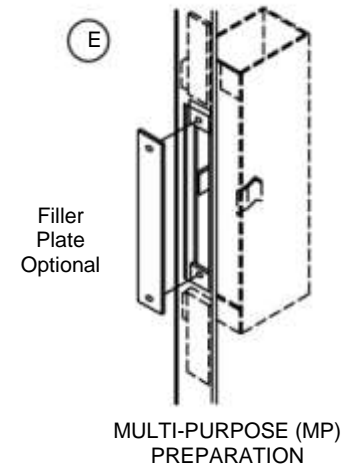
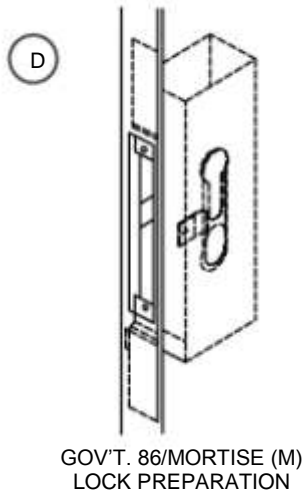
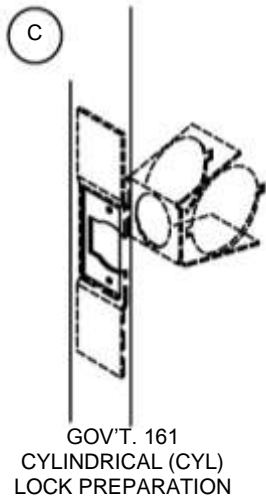
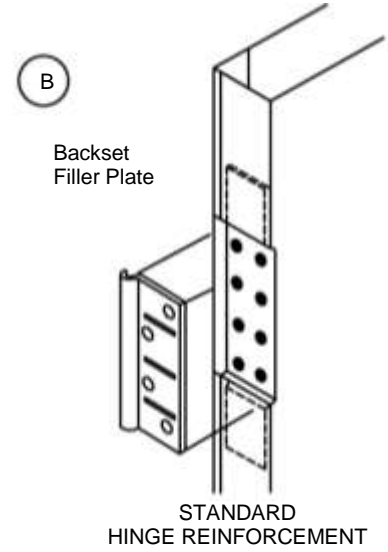
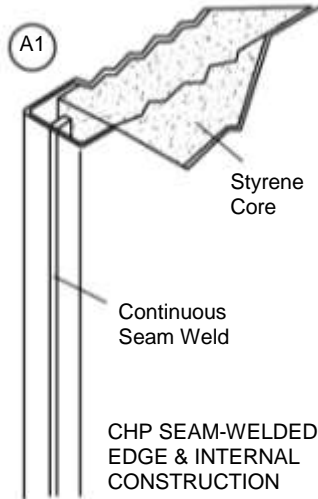
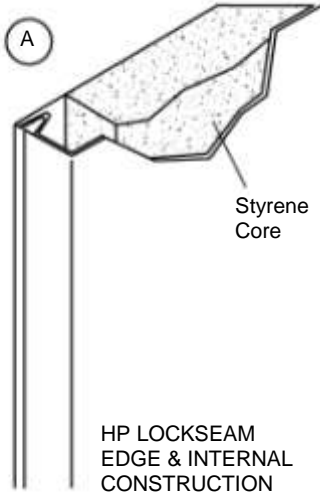
NOTE: 12" x 12" Louver standard for 2' -0" & 2'-4" door – all others 20" x 12", 20" x 24" Louver available

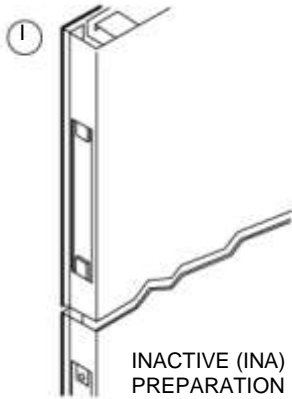


TECHNICAL DATA – DOORS

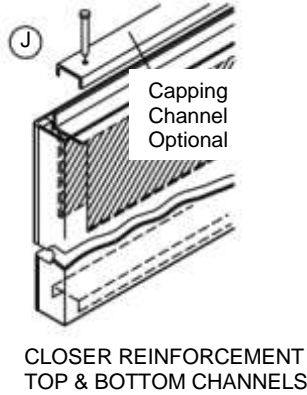
HP & CHP SERIES

MANUFACTURING DETAILS: FULL FLUSH & SEAMLESS DOORS

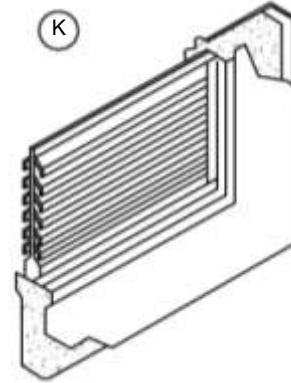




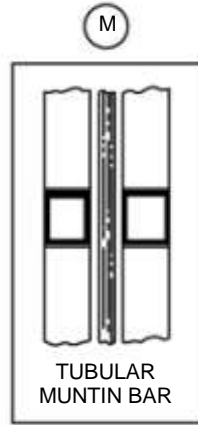
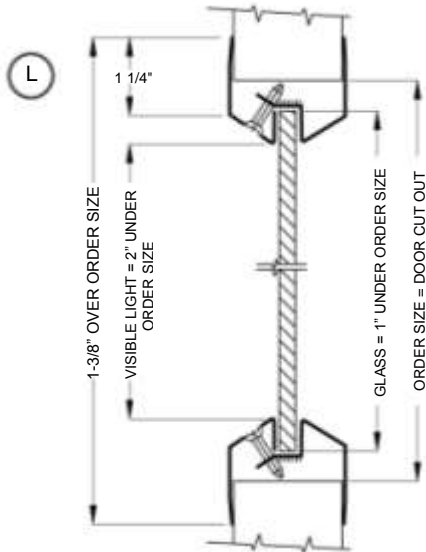
INACTIVE (INA)
PREPARATION



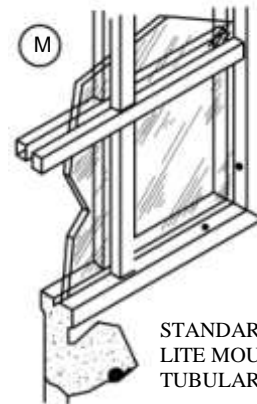
CLOSER REINFORCEMENT
TOP & BOTTOM CHANNELS



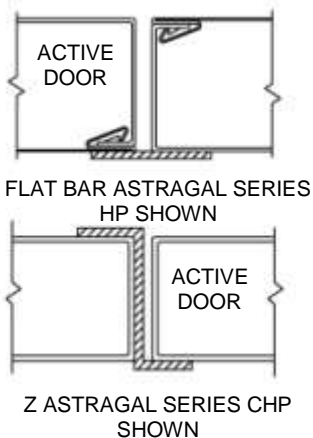
STANDARD
LOUVER



TUBULAR
MUNTIN BAR

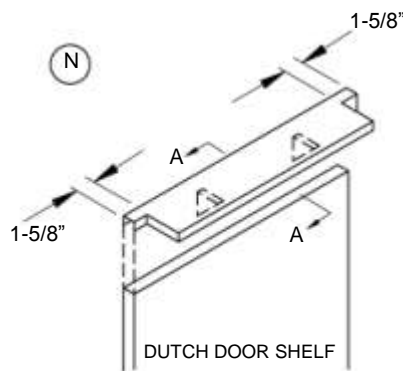


STANDARD STEEL GLASS
LITE MOULDING WITH
TUBULAR MUNTIN BAR

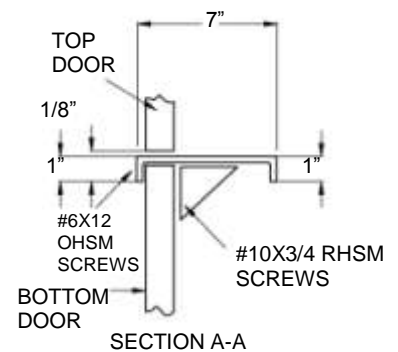


FLAT BAR ASTRAGAL SERIES
HP SHOWN

Z ASTRAGAL SERIES CHP
SHOWN



DUTCH DOOR SHELF



SECTION A-A

STANDARD HARDWARE PREPARATIONS

HINGES: Doors are mortised and reinforced for application of regular weight(0.134) or heavy weight(0.180) 4½" x 4½" full mortised template butt hinges; 1½" pair @ 6'8", 7'0" and 7'2" doors: 2 pair @ 7'10" and 8'0" doors. All hinge reinforcements are 3/16" thick; Top hinge on Series CHP is reinforced with a high frequency back-up reinforcement.

LOCKS:

Active Doors to be prepared as follows:

1. Gov't 161 Cylindrical (CYL) Lock/Latch, with 2-¾" backset.
2. Universal Gov't 86 Mortise (M) Lock/Latch (to be used with full escutcheon trim), with 2-¾" backset.
3. Multi-purpose (MP) preparation consisting of a Gov't 86 edge preparation, with lock reinforcement installed. No cutouts on the faces of the door.
4. Reinforced Multi-purpose (RMP) preparation consisting of Gov't 86 edge preparation, with lock reinforcement installed. The lock stile to be reinforced full height of the door on both sides. The hinge stile is reinforced on both faces at panic device height. No cutouts on the faces of the door.
5. Blank Active (BA) preparation provides a totally blank lock stile — no lock preparation and no internal reinforcements. No cutouts on edges or faces of door.
6. Reinforced Blank Active (RBA) preparation provides a totally blank lock stile — no lock preparation. The lock stile to be reinforced full height of the door on both sides. The hinge stile is reinforced on both faces at panic device height. No cutouts on the faces of the door.

Inactive Doors to be prepared as follows:

1. Inactive (INA) preparation consisting of two ANSI A156.115 flushbolts – 12" top and bottom rod dimension on doors up to and including 7'-2", 12" bottom and 18" top on doors over 7'-2" and up to and including 7'-6" bottom and 24", 36" or 48" top as required for doors over 7'-6". A 12" top rod dimension is optionally available on 7'-10" and 8'-0" doors. Inactive door is provided with an ASA 4-7/8" strike preparation (no lip cutout – to maintain reversibility of door). Net door width is 1/8" greater than active door.
2. Blank Inactive (BI) preparation provides a totally blank lock stile — no lock preparation and no internal reinforcements. No cutouts on edges of faces of the door. Net door width is 1/8" greater than active door.
3. Reinforced Blank Inactive (RBI) preparation provides a totally blank lock stile — no lock preparation. The lock stile to be reinforced full height of the door on both side. The hinge stile is reinforced on both faces at panic height. No cutouts on faces of the door. Net door width is 1/8" greater than active door.

LOCK LOCATION: All Locks located to conform to standard 38" of strike on frame.

CLOSERS AND HOLDERS: All Doors are reinforced internally both sides of the door for application of most types of surface applied closers and holders. A 12 Ga. reinforcement plate 4 ½" high measured from top of door and 16" long measured from a point 1-7/8" from the door jamb will accommodate most of the door closers currently manufactured and used on hinge side installations.

NOTES

In order to provide our customers with the finest products, manufactured in the most up to date manner, Pioneer Industries reserves the right to make design or specific construction changes without notice.

Doors are individually cartoned in corrugated cardboard and banded with straps. Muntin Bars for multiple glass lights are factory installed.

Doors are prime finished. Factory prefinished doors are optionally available.

Doors are reversible, within the limits of the type and application of the required hardware. Handed doors, for any application, are optionally available.

Pairs of doors are furnished as two individual doors.

Fire Rated Doors — See Fire Rated Section for critical information and details.

TECHNICAL DATA – DOORS

HP & CHP SERIES

* CONSULT FACTORY FOR OTHER SIZES

STANDARD SIZES*		
DOOR OPENING HEIGHT	DOOR OPENING WIDTH	
	SINGLE	PAIR
	2'-0"	
	2'-4"	4'-8"
	2'-6"	5'-0"
6'-8"	2'-8"	5'-4"
7'-0"	2'-10"	5'-8"
7'-2"	3'-0"	6'-0"
7'-10"	3'-4"	6'-8"
8'-0"	3'-6"	7'-0"
	3'-8"	7'-4"
	3'-10"	7'-8"
	4'-0"	8'-0"