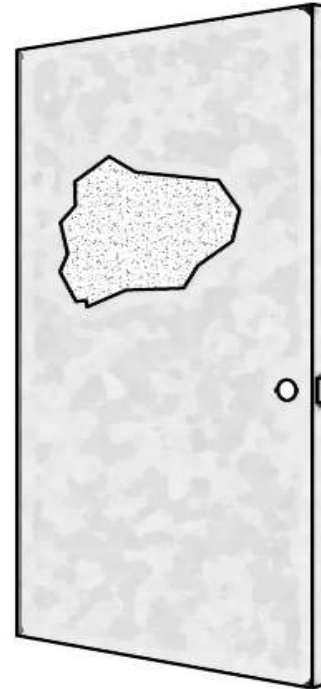


ENGINEERING DETAILS for STANDARD **SERIES HT Full Flush 1 3/4" Doors** **SERIES CHT Seamless 1 3/4" Doors**

Specifications

1. HT doors shall be formed from two 16 or 18 gage A60 Galvannealed steel per ASTM A924 and A653 sheets and shall be 1-3/4" thick.
2. CHT doors shall be formed from two 14 , 16 or 18 gage A60 Galvannealed steel ASTM A924 and A653 sheets and shall be 1-3/4" thick.
3. Doors shall have a core of rigid Urethane, securely bonded to both face sheets developing a dense uniform structure of high insulation values and thermal barrier qualities, structural strength, impact resistance and sound retardation. The core shall have a nominal density of 1.90 #/ft³, with an "R" factor of 11.66. The door panel shall develop a "U" factor of .09.
4. HT doors shall have vertical mechanical interlocking seams on hinge and lock edges. There shall be no seams on the faces of door.
5. CHT 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 rust-inhibitive metal primer in compliance with ANSI A 250.10-2004
12. Doors shall be packaged to minimize damage in transit and handling.
13. Door construction complies with ANSI A250.8-2003 (SDI 100)
14. Hardware reinforcements are in accordance with ANSI A 250.6-2003. Locations are in accordance with ANSI/BHMA A156.115.
15. HT or CHT Series Doors can not bear Fire Rating Label.

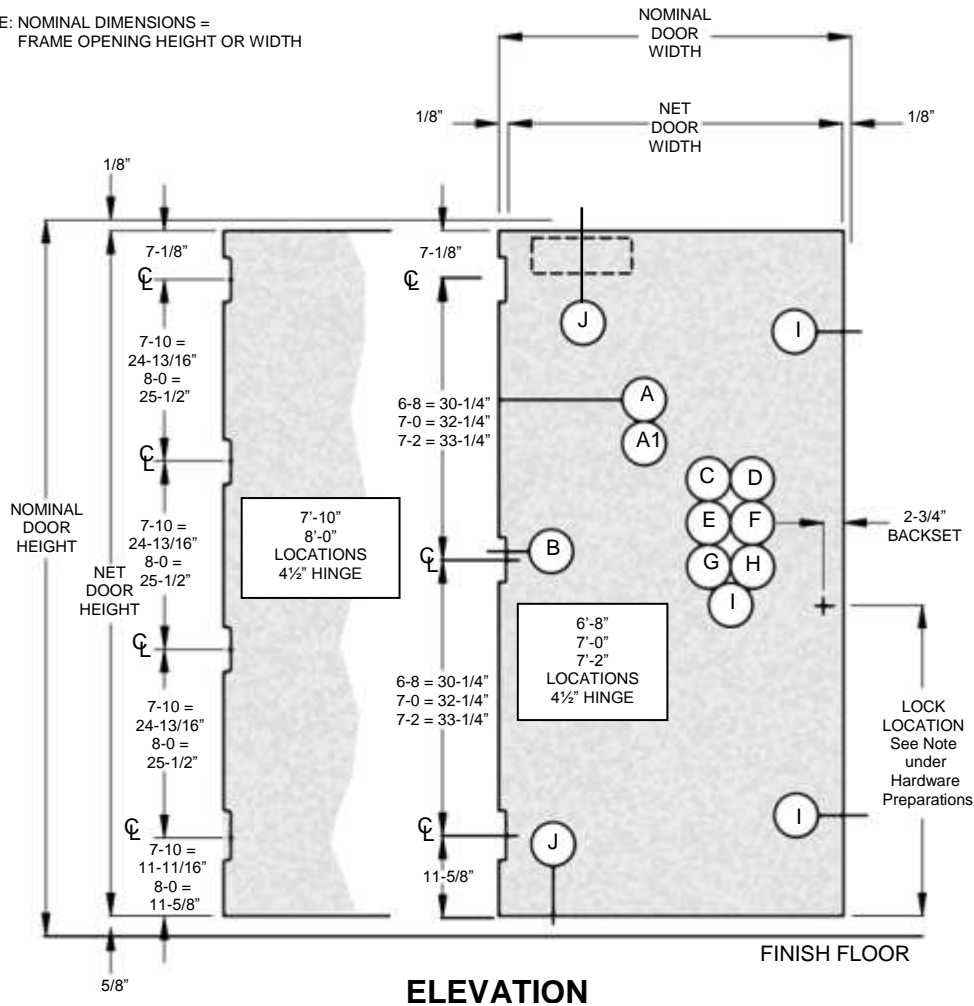


Insulation Values

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	3"thick
	Urethane	7.0	13.0	20.0
	Polystyrene	4.1	8.0	12.0
	Fiberglass (1# or less)	4.0	8.0	12.0
	Vermiculite	2.0	3.6	5.5

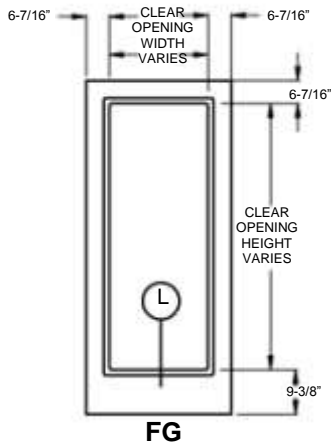
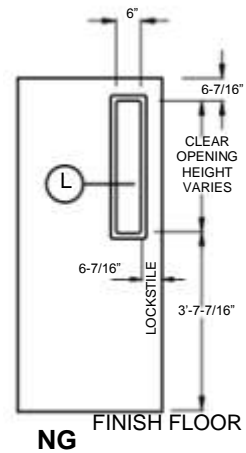
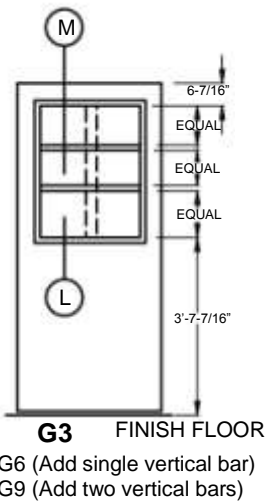
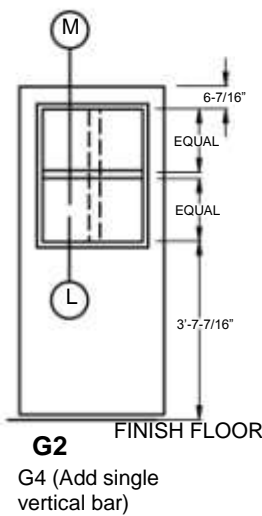
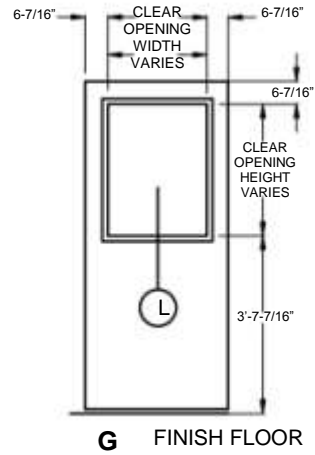
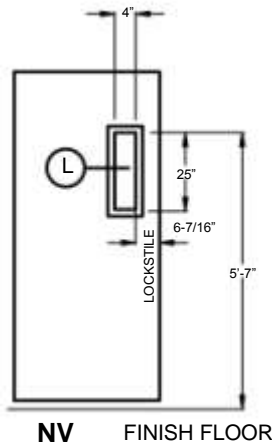
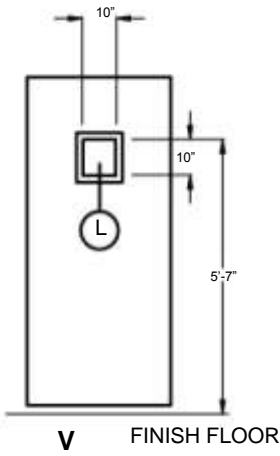
**Standard SERIES HT Full Flush and
SERIES CHT Seamless 1³/₄" Doors**

NOTE: NOMINAL DIMENSIONS =
FRAME OPENING HEIGHT OR WIDTH

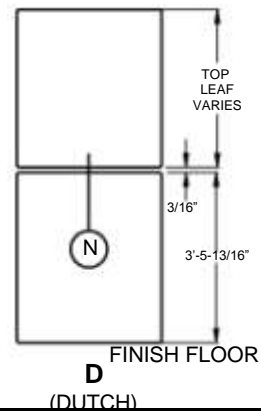
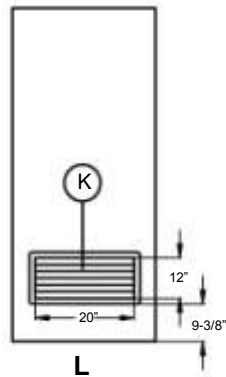


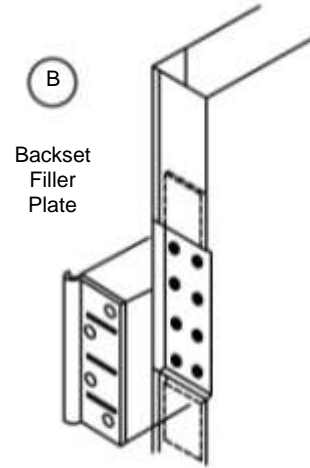
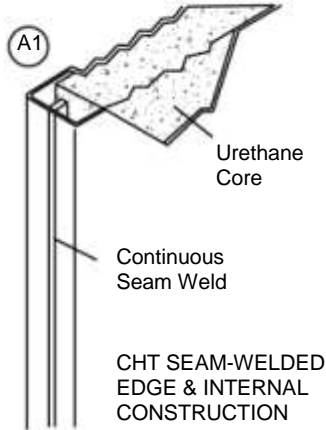
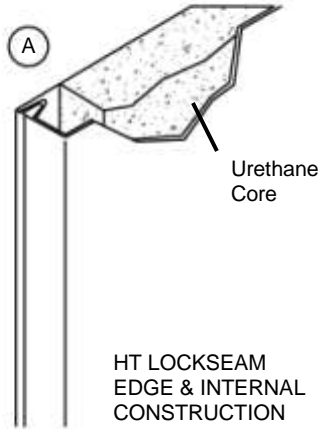
TECHNICAL DATA – DOORS

HT & CHT SERIES

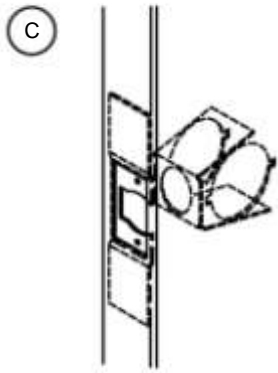


NOTE: 12" x 12" Louver standard for 2' -0" & 2'-4" door – all others 20" x 12", 20" x 24" Louver available

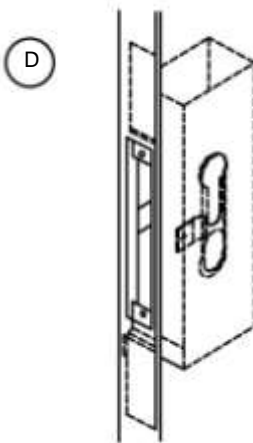




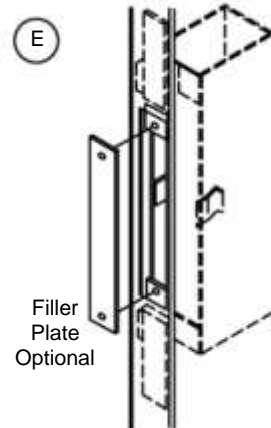
STANDARD
HINGE REINFORCEMENT



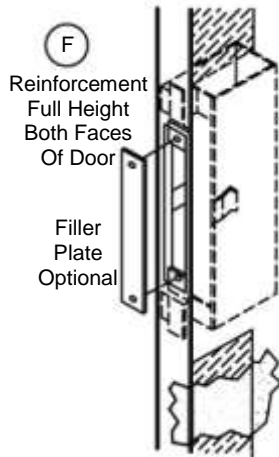
GOV'T. 161
CYLINDRICAL (CYL)
LOCK PREPARATION



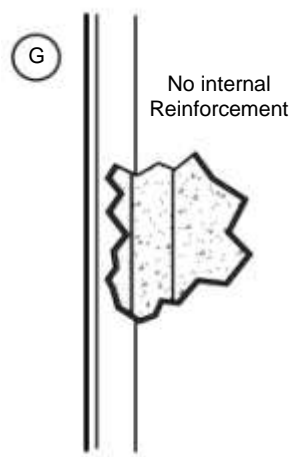
GOV'T. 86/MORTISE (M)
LOCK PREPARATION



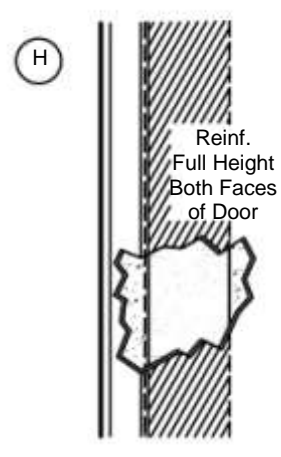
MULTI-PURPOSE (MP)
PREPARATION



REINFORCED MULTI-PURPOSE (RMP)
PREPARATION

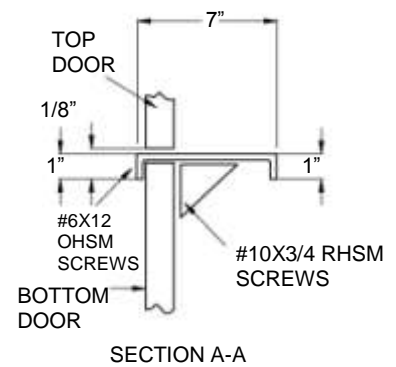
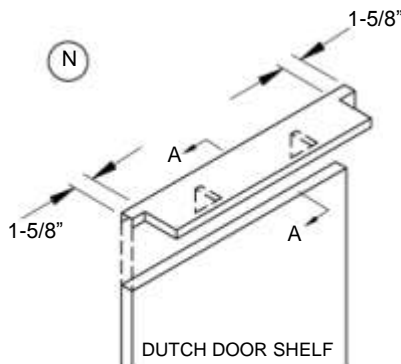
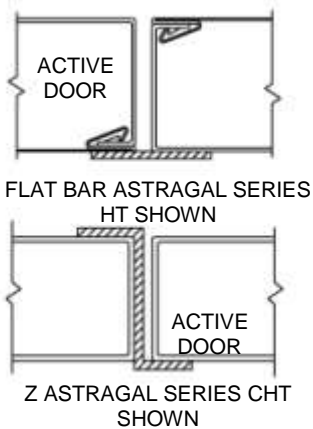
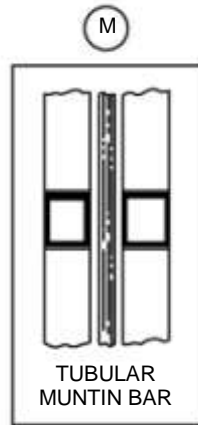
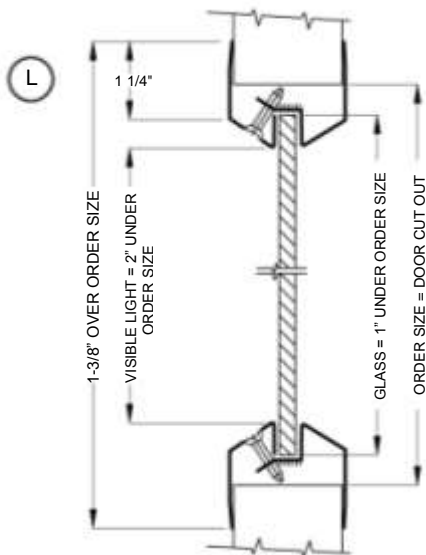
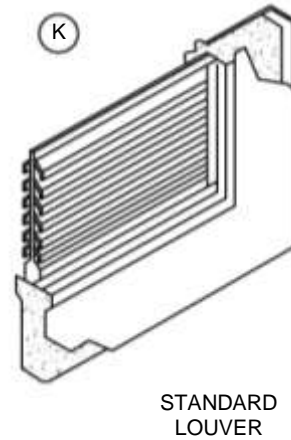
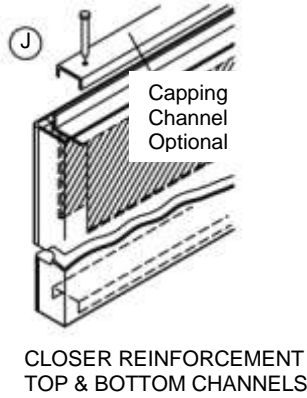
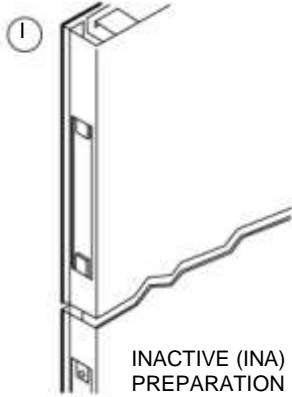


BLANK ACTIVE (BA)
PREPARATION



REINFORCED (RBA)
BLANK ACTIVE PREPARATION

DETAILS CONT'D



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 CHT 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" C 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.

TECHNICAL DATA – DOORS

HT & CHT 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"