

# PLYCO CORPORATION

## SERIES 20EV GLAZED STEEL INSWING DOOR (NON-IMPACT)



PLYCO CORPORATION  
P.O. BOX 386  
500 INDUSTRIAL RD.  
ELKHART LAKE, WI 53020  
PH: (920) 876-3611 FAX: (920) 876-3527

### INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN UNLESS OTHERWISE NOTED.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- FOR INSTALLATION INTO WOOD FRAMING USE **#12 WOOD SCREWS** OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE.
- FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY, OR DIRECTLY INTO CONCRETE/MASONRY, USE **1/4 INCH DIAMETER ITW TAPCONS** OF SUFFICIENT LENGTH TO ACHIEVE 1 1/4 INCH MINIMUM EMBEDMENT.
- FOR INSTALLATION INTO STEEL STUD FRAME USE **#12 GR. 5 SELF-TAPPING SCREWS** OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 3 THREADS PENETRATION BEYOND STEEL STRUCTURE.
- FOR INSTALLATION ANCHORS THROUGH HINGES ONLY USE **#10 WOOD SCREWS, 1/4 INCH DIAMETER ITW TAPCONS, OR #10 SELF-TAPPING SCREWS** ADHERING TO EMBEDMENT & EDGE DISTANCE REQUIREMENTS LISTED IN NOTES 5-7 ABOVE.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
  - WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42.
  - CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
  - MASONRY - STRENGTH CONFORMANCE TO ASTM C-90.
  - STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM WALL THICKNESS OF 45 MILS (18 GAUGE).

### GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) AND 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
  - AAMA/WDMA/CSA 101/I.S.2/A440-17
  - ASTM E330-14
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- FRAME MATERIAL: ALUMINUM 6063-T5 & CS-B STEEL
- DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED.
- ALL EXPOSED STEEL COMPONENTS ARE GALVANIZED AND SHOP PRIMED.
- GLASS SHALL MEETS THE REQUIREMENTS OF ASTM E 1300 GLASS CHARTS. SEE SHEET 2 FOR GLAZING DETAIL.

TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	INSTALLATION & GENERAL NOTES
2	ELEVATION, ANCHOR LAYOUT & GLAZING DETAIL
3	VERTICAL SECTIONS
4	HORIZONTAL SECTIONS
5	COMPONENTS & BILL OF MATERIALS

DESIGN PRESSURE RATING				
LOCK TYPE	FRAME SIZE	DESIGN PRESSURE		MISSILE IMPACT RATING
SINGLE POINT	39.75" X 85.38"	+45.0 / -45.0 PSF *	W/O WATER INFILTRATION	NON-IMPACT
SINGLE POINT	51.88" X 85.38"	+30.0 / -30.0 PSF *	W/O WATER INFILTRATION	NON-IMPACT
SINGLE POINT W/ DEAD BOLT	39.75" X 85.38"	+45.0 / -45.0 PSF *	W/O WATER INFILTRATION	NON-IMPACT

\*UNIT SHALL BE INSTALLED AT LOCATION PROTECTED BY OVERHANG SUCH THE OVERHANG RATIO (OH) = OH LENGTH/OH HEIGHT GREATER THAN 1.0 WHERE WATER INFILTRATION IS REQUIRED.

TITLE: SERIES 20EV GLAZED STEEL INSWING DOOR (NON-IMPACT)

INSTALLATION & GENERAL NOTES

PREPARED BY: BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954) 399-8478  
FAX: (954) 744-4738  
WEB: www.buildingdrops.com



REMARKS	BY	DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



HERMES F. NORERO, P.E.  
TEXAS P.E. No 118471  
BUILDING DROPS, INC  
398 E. DANIA BEACH BLVD. # 338  
DANIA BEACH, FL 33004  
TBPE FIRM No. 13734

DATE:	02.13.20	
DWG. BY:	MS	CHK. BY: HFN
SCALE:	NTS	
DWG. #:	PCO030	
SHEET:	1	

TITLE: SERIES 20EV GLAZED STEEL  
 INSWING DOOR (NON-IMPACT)  
 ELEVATION, ANCHOR LAYOUT &  
 GLAZING DETAIL

PREPARED BY:  
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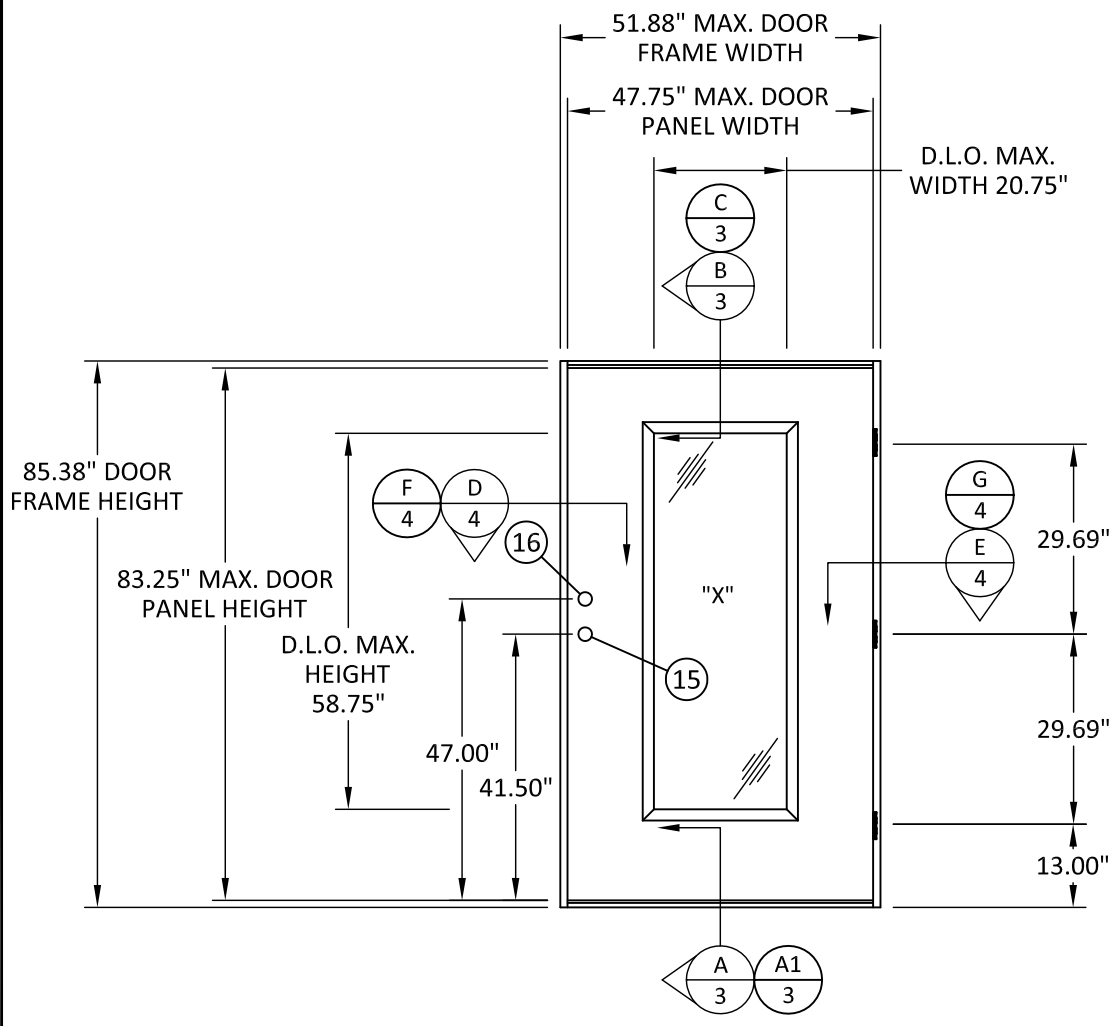
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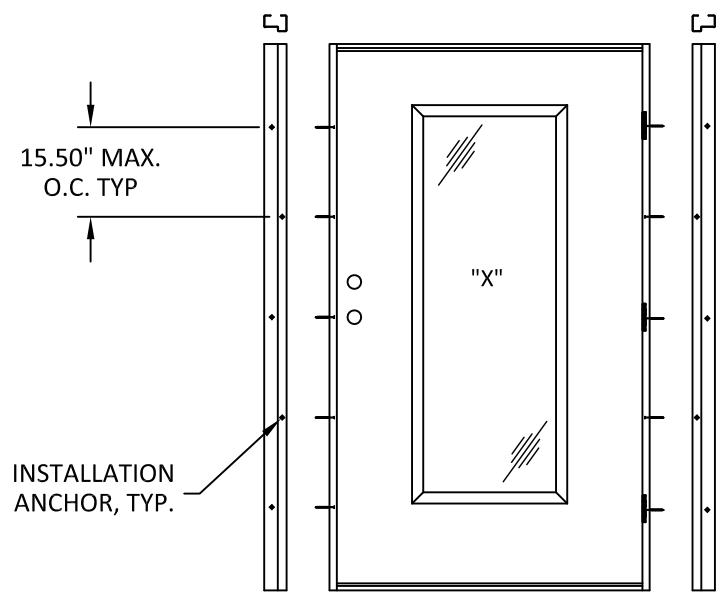
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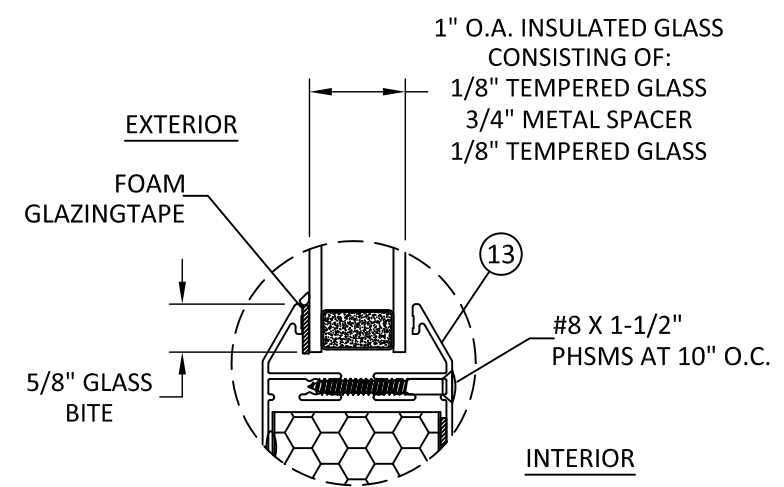
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**ELEVATION**

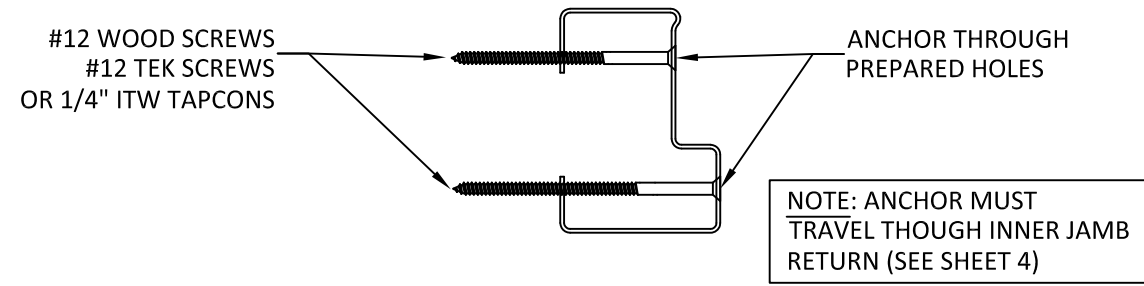


**ANCHOR LAYOUT**

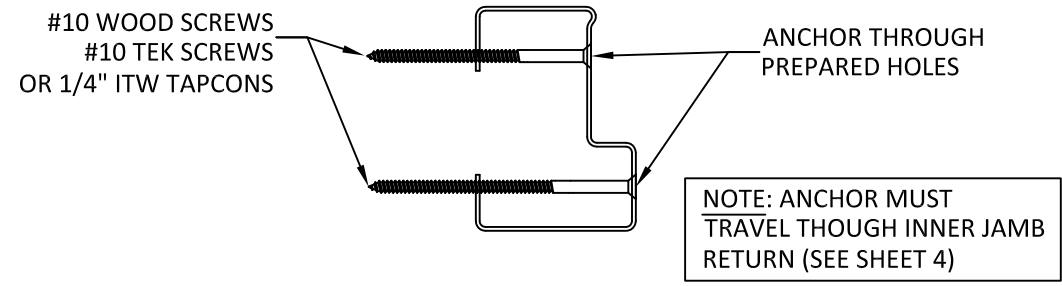


**GLAZING DETAIL 1**

NOTE:  
 1) ALL GLAZING CONFIGURATIONS SHALL COMPLY WITH SAFETY GLAZING REQUIREMENTS OUTLINED IN THE 2018 IBC.



**LOCK JAMB TYP. ANCHOR PLACEMENT**



**HINGE JAMB TYP. ANCHOR PLACEMENT**

3/16/2020 9:35 AM  
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TITLE: SERIES 20EV GLAZED STEEL  
INSWING DOOR (NON-IMPACT)

VERTICAL SECTIONS

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TBPE FIRM No. 13734

DATE: 02.13.20

DWG. BY: MS      CHK. BY: HFN

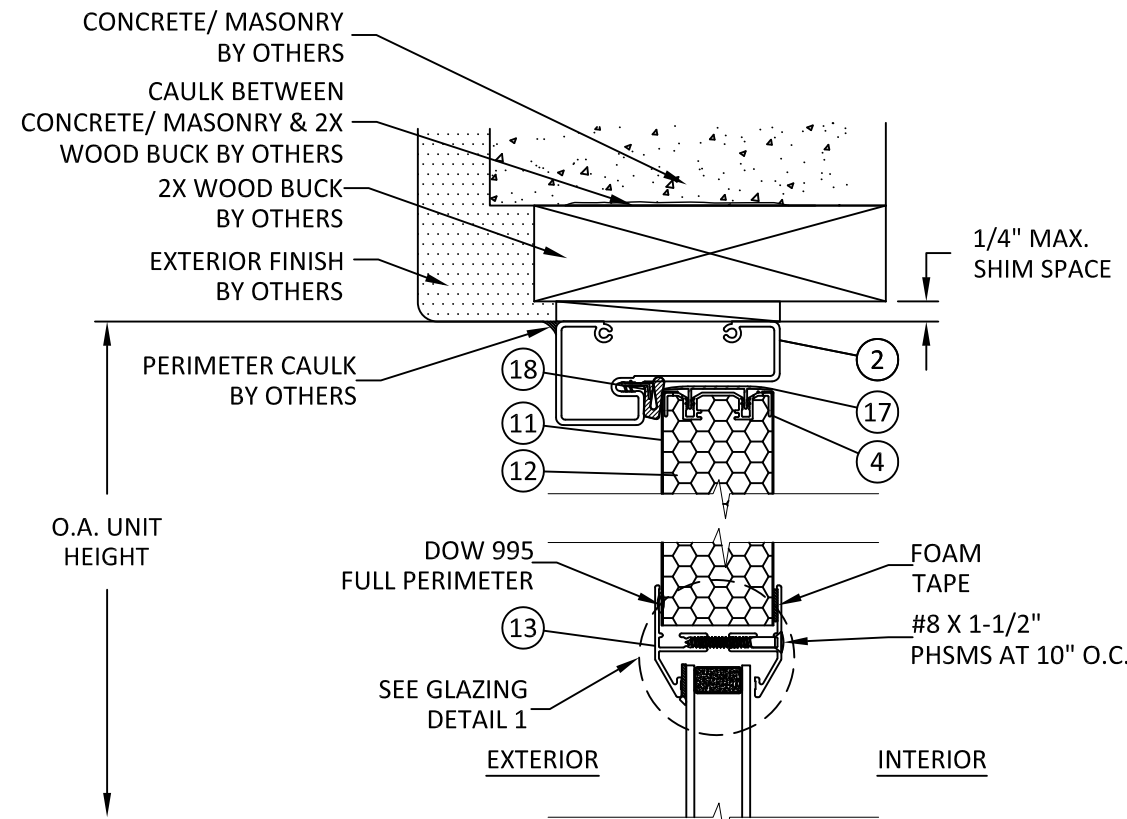
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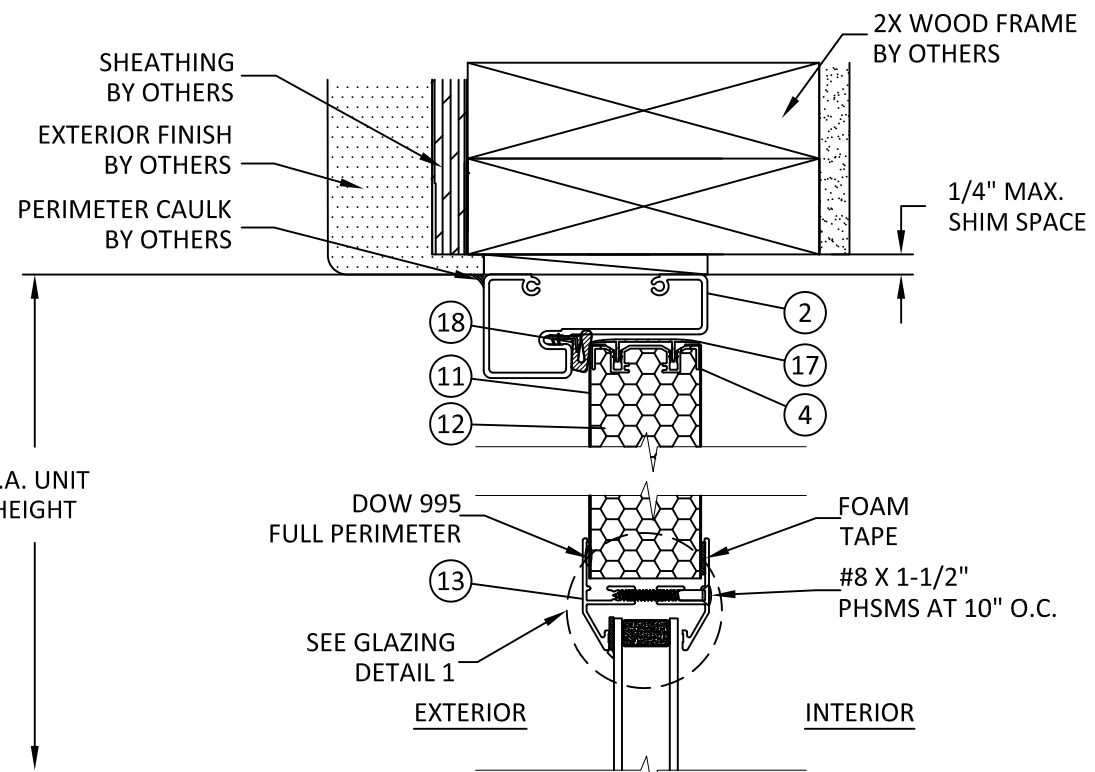
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3

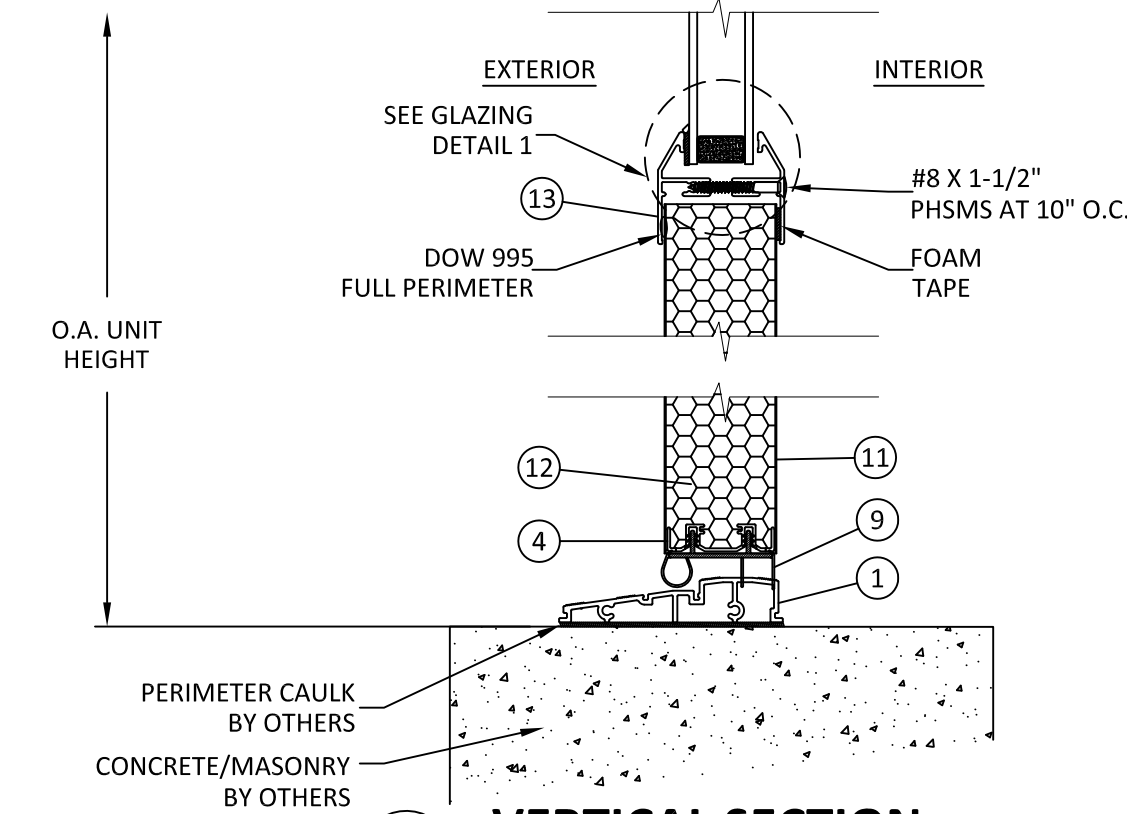
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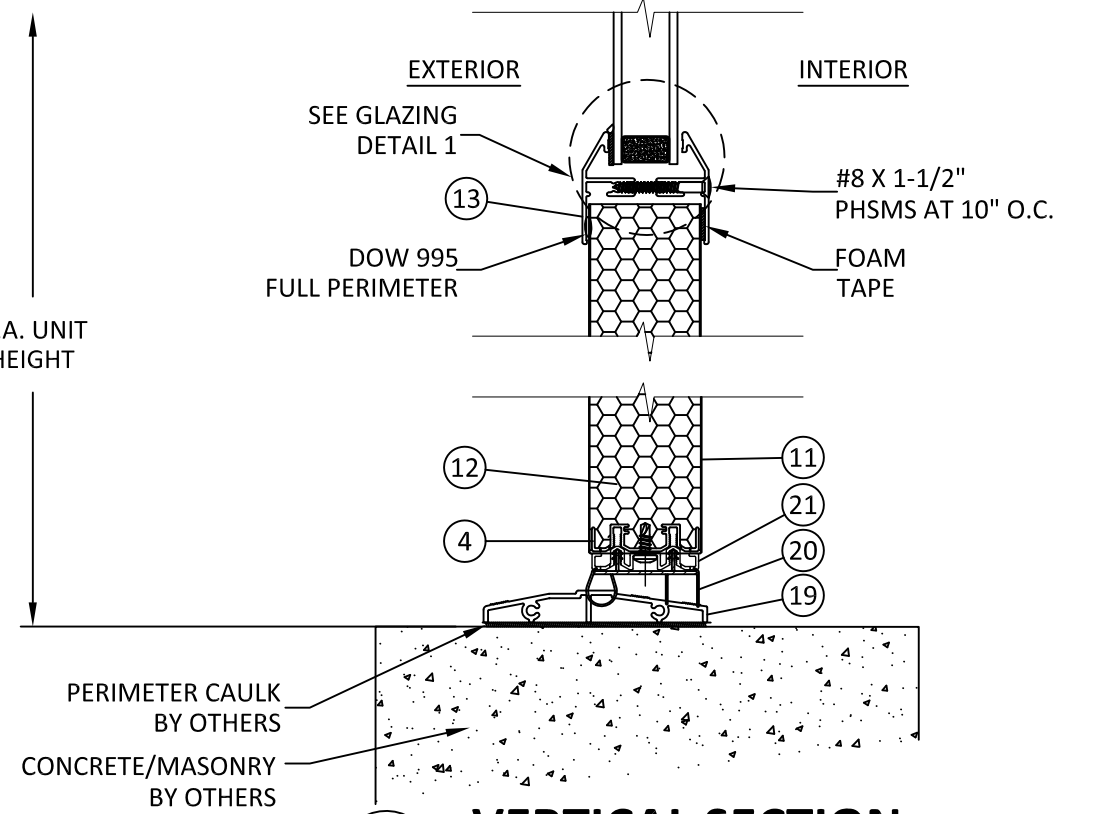
**B**  
**3** VERTICAL SECTION  
HEAD - 2X WOOD BUCK



**C**  
**3** VERTICAL SECTION  
HEAD - 2X WOOD FRAME



**A**  
**3** VERTICAL SECTION  
SILL - CONCRETE/MASONRY



**A1**  
**3** VERTICAL SECTION  
SILL - ADA THRESHOLD (OPTIONAL)

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s:\projects\plyco corp\tli-19-1128 - tli submittal - series 20ev and 95ev gld and opa doors\dws\pco030\pco030.dwg



TITLE: SERIES 20EV GLAZED STEEL INSWING DOOR (NON-IMPACT)  
 HORIZONTAL SECTIONS  
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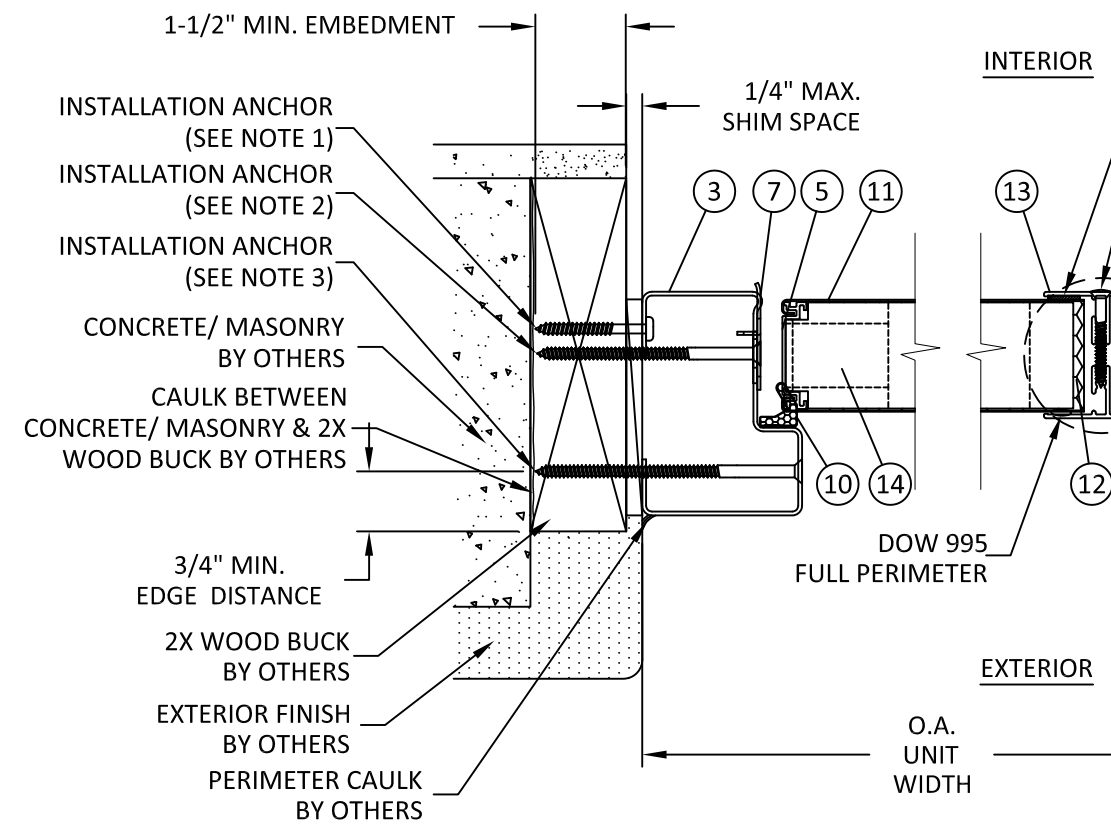
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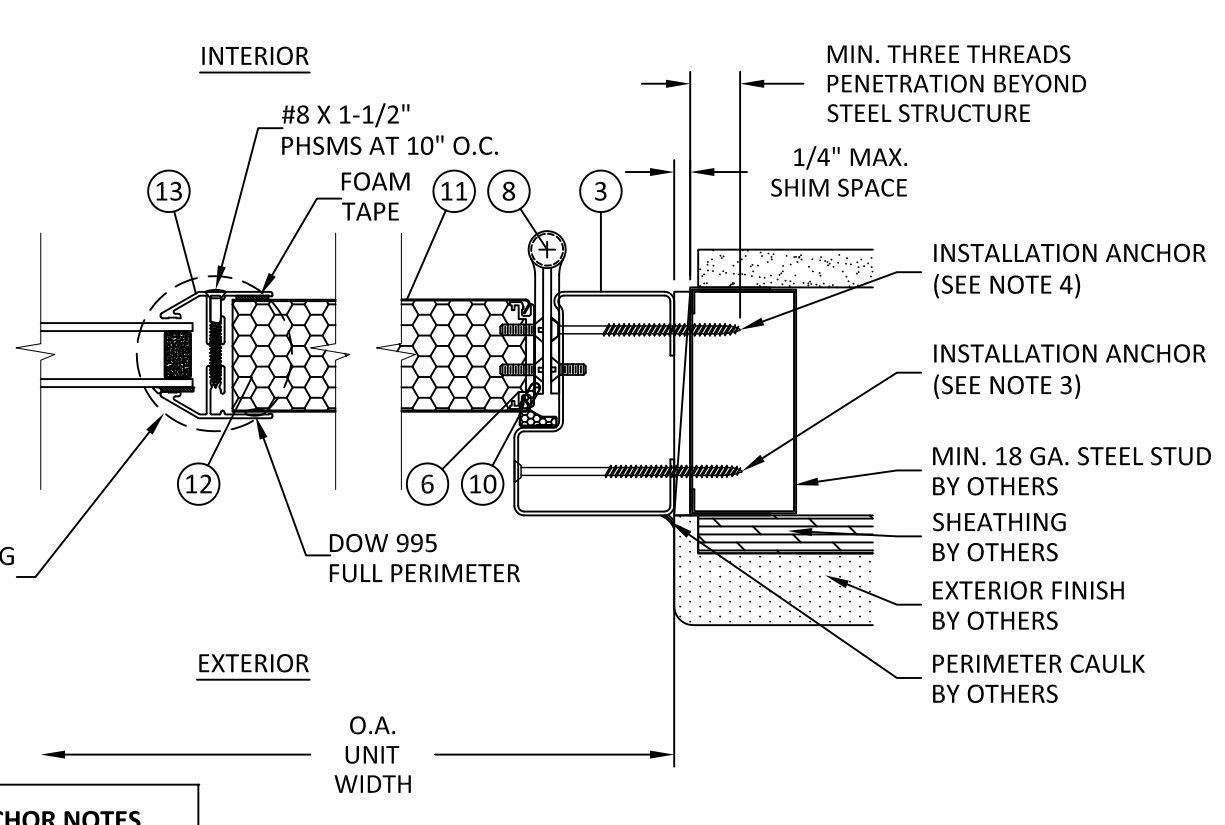
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SCALE:	NTS	
DWG. #:	PCO030	
SHEET:	4	

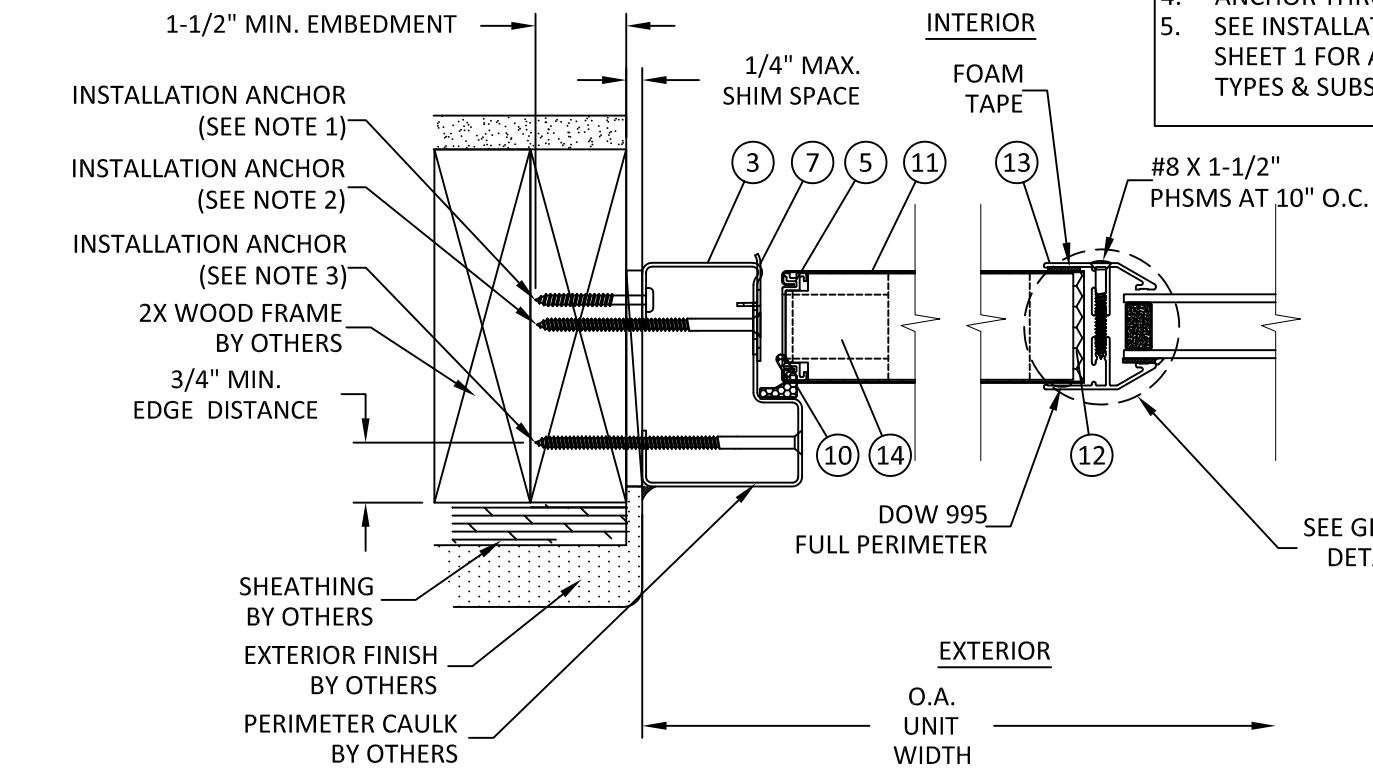


**D**  
**4**  
**HORIZONTAL SECTION**  
 JAMB - 2X WOOD BUCK, TYP.

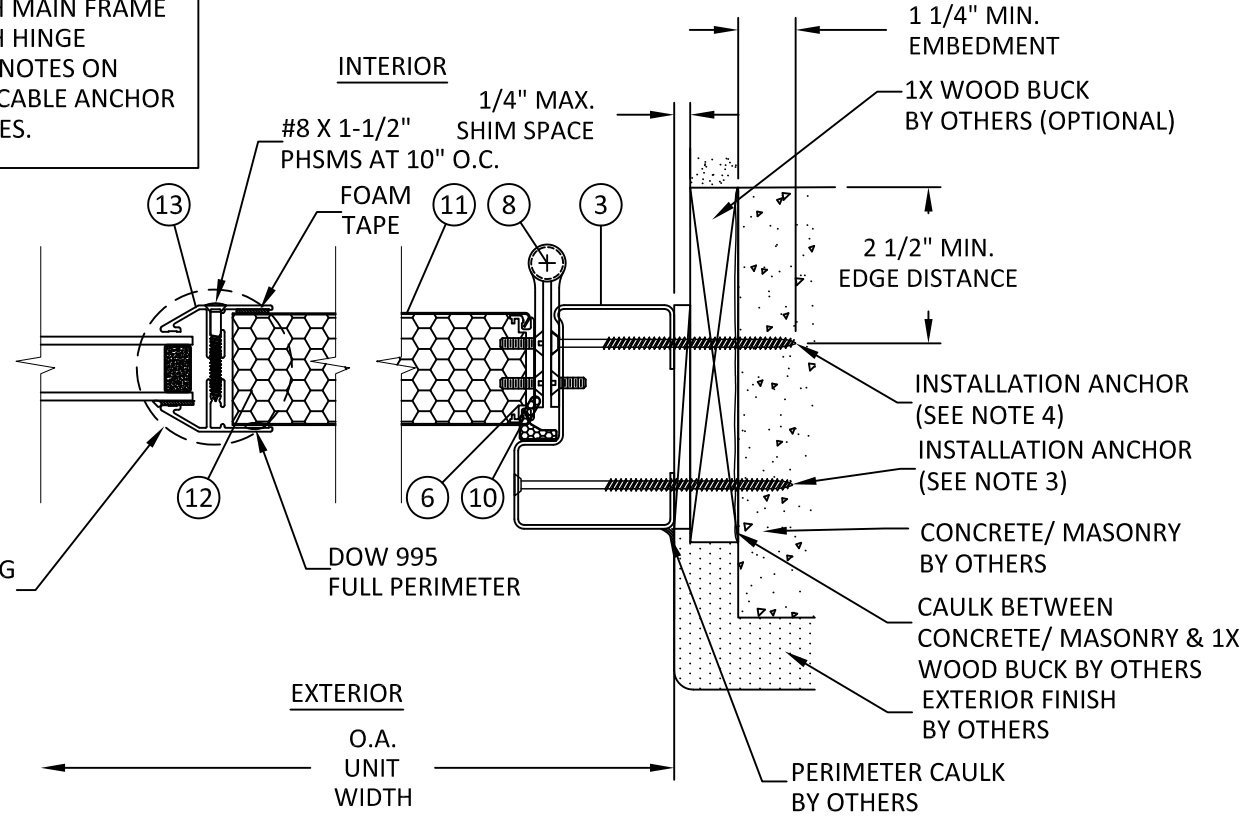
- INSTALLATION ANCHOR NOTES**
1. ANCHOR THROUGH FRAME RETURN AT STRIKE
  2. ANCHOR THROUGH STRIKE-SIDE FRAME
  3. ANCHOR THROUGH MAIN FRAME
  4. ANCHOR THROUGH HINGE
  5. SEE INSTALLATION NOTES ON SHEET 1 FOR APPLICABLE ANCHOR TYPES & SUBSTRATES.



**E**  
**4**  
**HORIZONTAL SECTION**  
 JAMB - STEEL STUD, TYP.



**F**  
**4**  
**HORIZONTAL SECTION**  
 JAMB - 2X WOOD FRAME, TYP.



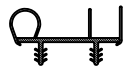
**G**  
**4**  
**HORIZONTAL SECTION**  
 JAMB - MASONRY/CONCRETE, TYP.

## BILL OF MATERIALS

ITEM NO.	DESCRIPTION	PARTS NUMBERS	MATERIAL	MANUFACTURER
1	FRAME SILL	1647	6063-T5	MODERN DOOR
2	FRAME HEAD	1880	6063-T5	MODERN DOOR
3	FRAME JAMB	1539	STEEL	MODERN DOOR
4	HEAD & SILL RAIL	1838-1A	6063-T5	MODERN DOOR
5	STRIKE RAIL	1839	6063-T5	MODERN DOOR
6	HINGE RAIL	1840-B	6063-T5	MODERN DOOR
7	STRIKE PLATE	---	STEEL	MODERN DOOR
8	4" BUTT HINGE	---	STEEL	MODERN DOOR
9	DOOR SWEEP	---	PVC-ALCRYN	MODERN DOOR
10	FOAM FILLED WEATHER SEAL	WS-016	FOAM	MODERN DOOR
11	DOOR SKIN	---	0.021" STEEL	MODERN DOOR
12	PANEL CORE	---	POLYURETHANE	MODERN DOOR
13	LITE-KIT FRAME	HM-23323	6063-T5	MODERN DOOR
14	LOCK BLOCK	---	WOOD	MODERN DOOR
15	LOCKSET	---	STEEL	SCHLAGE
16	DEADBOLT (OPTIONAL)	---	STEEL	SCHLAGE
17	DOOR CAP	---	PVC	MODERN DOOR
18	WEATHER SEAL	9650	PVC	MODERN DOOR
19	ADA SILL (OPTIONAL)	1572	6063-T5	MODERN DOOR
20	DOOR SWEEP	1852	PVC-ALCRYN	MODERN DOOR
21	PANEL SEAL	1929	6063-T5	MODERN DOOR

**NOTE:** ALL EXPOSED STEEL COMPONENTS ARE GALVANIZED AND SHOP PRIMED.

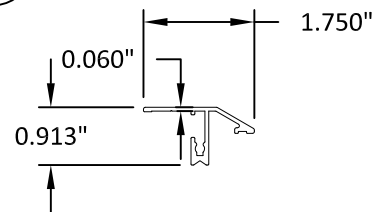
9 DOOR SWEEP  
PVC-ALCRYN



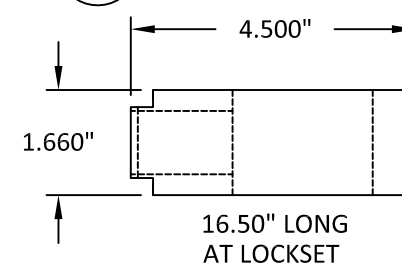
10 FOAM FILLED WEATHER SEAL  
FOAM



13 LITE-KIT FRAME  
ALUMINUM 6063-T5



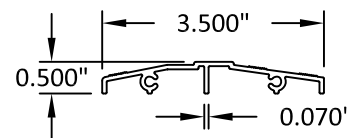
14 LOCK BLOCK  
WOOD



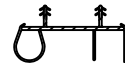
18 WEATHER SEAL  
PVC



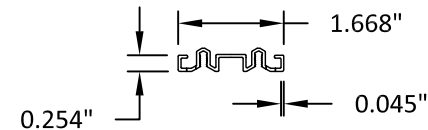
19 ADA SILL (OPTIONAL)  
ALUMINUM 6063-T5



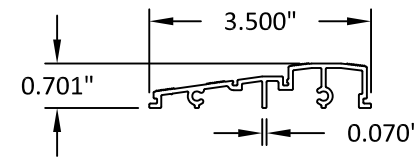
20 DOOR SWEEP  
PVC-ALCRYN



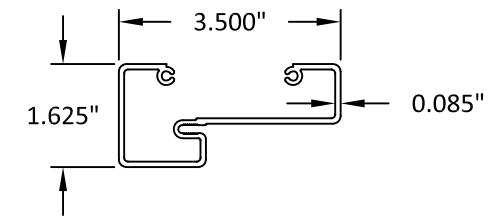
21 PANEL SEAL  
ALUMINUM 6063-T5



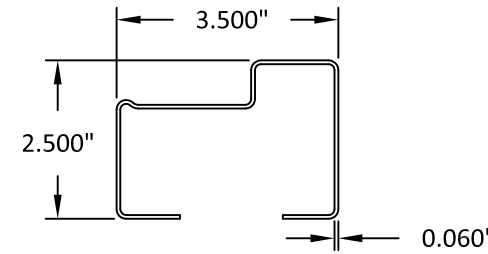
1 FRAME SILL  
ALUMINUM 6063-T5



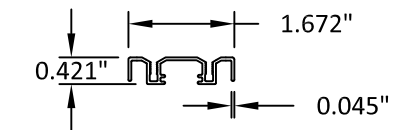
2 FRAME HEAD  
ALUMINUM 6063-T5



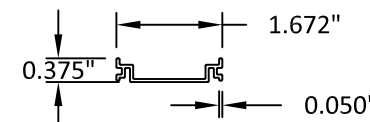
3 FRAME JAMB  
16 GA. STEEL



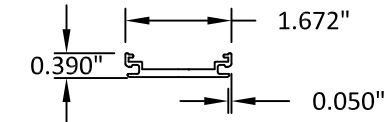
4 HEAD & SILL RAIL  
ALUMINUM 6063-T5



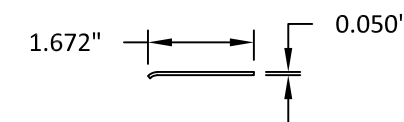
5 STRIKE RAIL  
ALUMINUM 6063-T5



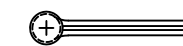
6 HINGE RAIL  
ALUMINUM 6063-T5



7 STRIKE PLATE  
18 GA. STEEL



8 4" BUTT HINGE  
STEEL



ZINC-PLATED MILD STEEL OR  
304 STAINLESS STEEL

17 DOOR CAP  
PVC



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SHEET:

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OF 5

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