

# PLAZIT-POLYGAL INC.

## 16MM 5-WALL STORM PANEL

### INSTALLATION ANCHORAGE DETAILS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

**GENERAL NOTES:**

1. THIS PRODUCT HAS BEEN EVALUATED TO COMPLY WITH THE CURRENT PROVISIONS OF THE 7th EDITION (2020) FLORIDA BUILDING CODE (FBC) INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AND IS BASED ON TESTING CONDUCTED TO TAS 202, TAS 201 & TAS 203 TEST PROTOCOLS PER TEST REPORT NO. NCTL-210-4125-02 BY NCTL, ORLANDO, FL.
2. 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.
3. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF THE INSTALLATION METHODS DEVIATE FROM THESE APPROVED DETAILS THIS WOULD REQUIRE FURTHER INVESTIGATION BY A LICENSED OR REGISTERED DESIGN PROFESSIONAL.
4. PER SECTION 2413 OF THE 7th EDITION (2020) FBC, ON ANY SIDE OF AN OPENING, THE MAXIMUM SIDE CLEARANCE BETWEEN THE SHUTTER AND A WALL OR INSET SURFACE SHALL BE 1/4 INCH. ANY DISTANCE IN EXCESS OF 1/4 INCH SHALL REQUIRE END CLOSURE OR SHUTTER OVERLAP, WHERE APPLICABLE. SHUTTER OVERLAP SHALL BE A MINIMUM OF 1.5 TIMES THE SIDE CLEARANCE BETWEEN THE SHUTTER AND WALL. THE INSTALLATION DETAILS SHOWN IN THIS PRODUCT APPROVAL DOCUMENT MEET THIS REQUIREMENT WHEN INSTALLED AS SHOWN.
5. PER SECTION 1709.9.3 OF THE 7th EDITION (2020) FBC, THE MANUFACTURER PRODUCT LABEL (EMBOSSSED OR PRINTED) SHALL BE SPACED NOT MORE THAN EVERY 3 LINEAL FEET ON EACH PANEL. THE LABEL SHALL BE APPLIED BY THE HOLDER OF THE PRODUCT APPROVAL AND SHALL FACE THE EXTERIOR OR OUTSIDE. THE LABEL SHALL INCLUDE THE INFORMATION REQUIRED NY SECTION 1709.9.2 OF THE 7th EDITION (2020) FBC.
6. MATERIALS: POLYGAL PANEL IS STANDARD GRADE POLYCARBONATE
7. ALL FASTENERS, NUTS AND WASHERS SHALL HAVE A CORROSION RESISTANT COATING OR BE STAINLESS STEEL.
8. PANELS ARE SHOWN INSTALLED VERTICALLY. THEY MAY BE INSTALLED HORIZONTALLY WHERE APPLICABLE.
9. MINIMUM PANEL SEPARATION TO GLASS MUST BE 2-7/8" BETWEEN PANEL AND WINDOW GLAZING OR FRAMING COMPONENTS. THE MINIMUM SEPARATION SHOWN INCLUDES THE 1 INCH MINIMUM SEPARATION AT MAXIMUM DEFLECTION WITH COMPONENTS OF FRAMES OF COMPONENTS REQUIRED BY SECTION 2413.2 OF THE 7th EDITION (2020) FBC.

**ANCHOR NOTES:**

1. SEE ANCHOR INSTALLATION CHART THIS SHEET FOR APPROVED ANCHOR TYPES, EMBEDMENTS, EDGE DISTANCES AND SUBSTRATES.
2. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
  - 2.1. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42 (NON-HVHZ) AND 0.55 (HVHZ).
  - 2.2. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
  - 2.3. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90 MEDIUM WEIGHT WITH MIN. COMPRESSIVE STRENGTH OF 1500 PSI OR 2000 PSI (SEE ANCHOR INSTALLATION CHART).

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**ANCHOR INSTALLATION CHART**

Anchor Manufacturer and Type	Size	Substrate	Edge Distance	Depth of Embedment
<b>ELCO PanelMate® Pro, Plus, TVAS</b>	1/4"	Concrete : 2,500 PSI	2.50"	1.75"
			1.00"	2.00"
			2.50"	2.00"
		CMU: 2,000 PSI	2.00"	1.25"
			3.00"	1.25"
			0.75"	1.875"
<b>ITW Tapcon Storm Guard (SG)</b>	1/4"	Wood: SG 0.42 (non-HVHZ) and 0.55 (HVHZ)	2.00"	1.50"
			1-1/4"	1"
			2-1/2"	1"
		Concrete : 2,500 PSI	1-1/4"	1-3/4"
			2-1/2"	1-3/4"
			1-1/4"	1-1/4"
CMU: 1,500 PSI	2-1/2"	1-1/4"		

**POLYGAL INC.**  
1100 BOND STREET  
CHARLOTTE, NC 28208

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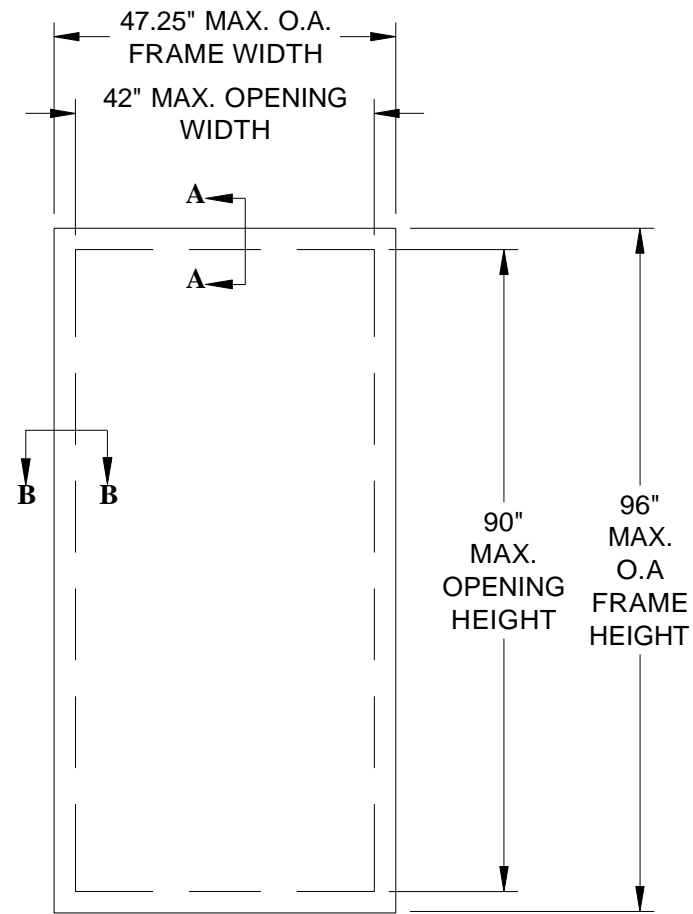
**POLYGAL 16MM CLEAR STORM PANEL**  
**L.M. IMPACT (HVHZ)**  
**GENERAL NOTES AND ELEVATION**

DRAWN: <b>JRM</b>	DWG NO. <b>NL-0117</b>	REV <b>1</b>
SCALE <b>NTS</b>	DATE <b>10/24/18</b>	SHEET <b>1 OF 6</b>

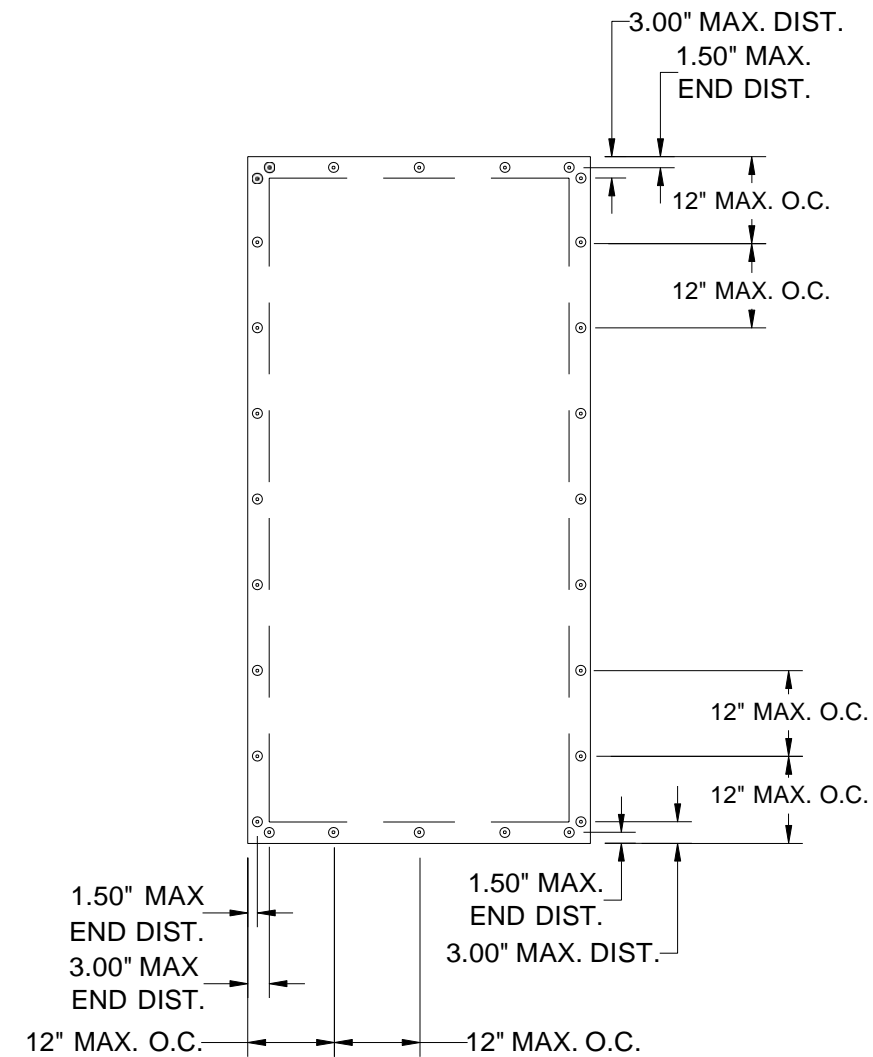
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



ELEVATION  
POLYGAL 5-WALL 16MM  
EXTERIOR VIEW



ANCHOR LAYOUT  
INTERIOR VIEW

NOTES  
1. MAXIMUM PANEL SIZE: 47.25" X 96"

DESIGN PRESSURE RATING	IMPACT RATING
+ 45.0 PSF / -45.0 PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

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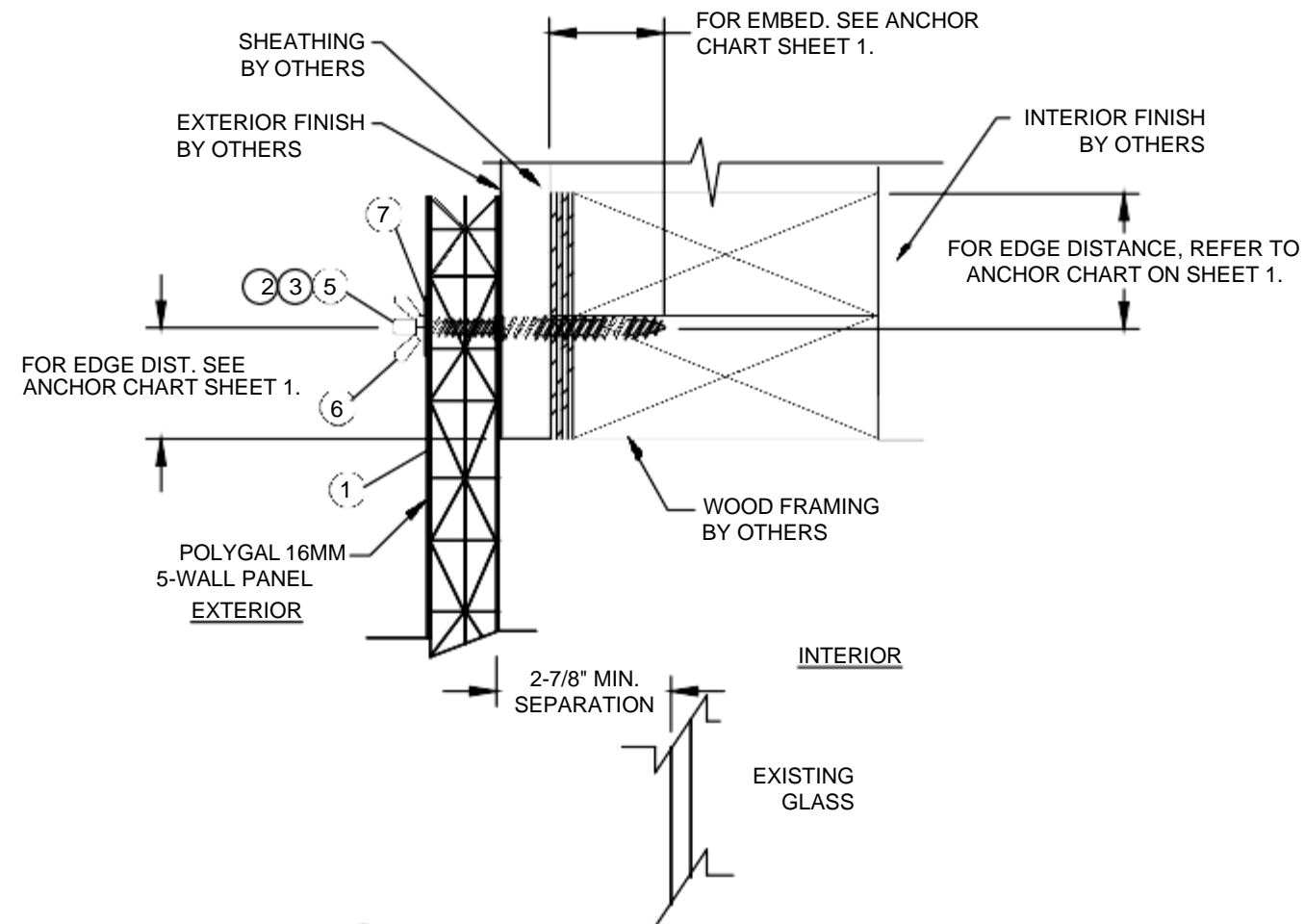
**POLYGAL 16MM CLEAR STORM PANEL**  
**L.M. IMPACT (HVHZ)**  
**ELEVATION AND ANCHOR LAYOUT**

DRAWN: <b>JRM</b>	DWG NO. <b>NL-0117</b>	REV <b>1</b>
SCALE <b>NTS</b>	DATE <b>10/24/18</b>	SHEET <b>2 OF 6</b>

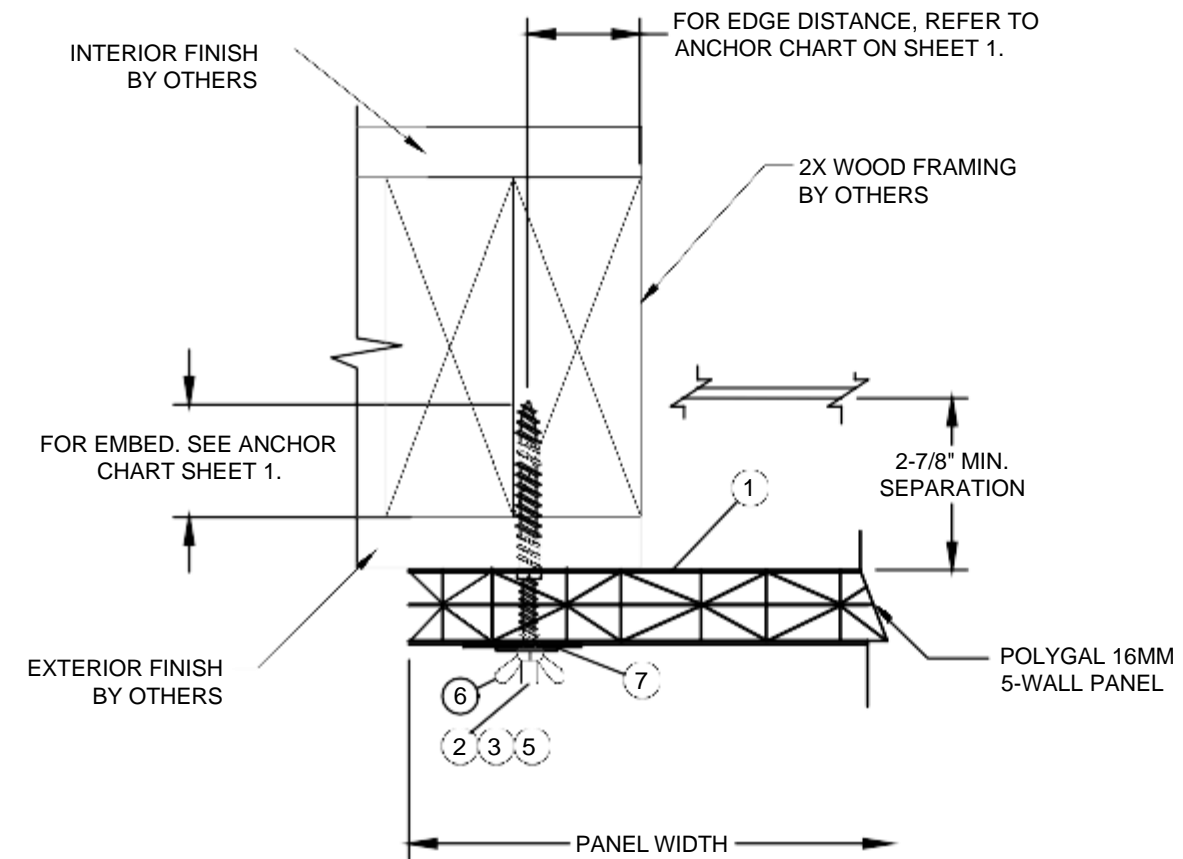
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**A**  
**3**  
**VERTICAL SECTION**  
**WOOD FRAME SUBSTRATE**  
**WALL MOUNT INSTALLATION**



**B**  
**3**  
**HORIZONTAL SECTION**  
**WOOD FRAME SUBSTRATE**  
**WALL MOUNT INSTALLATION**

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1100 BOND STREET  
CHARLOTTE, NC 28208

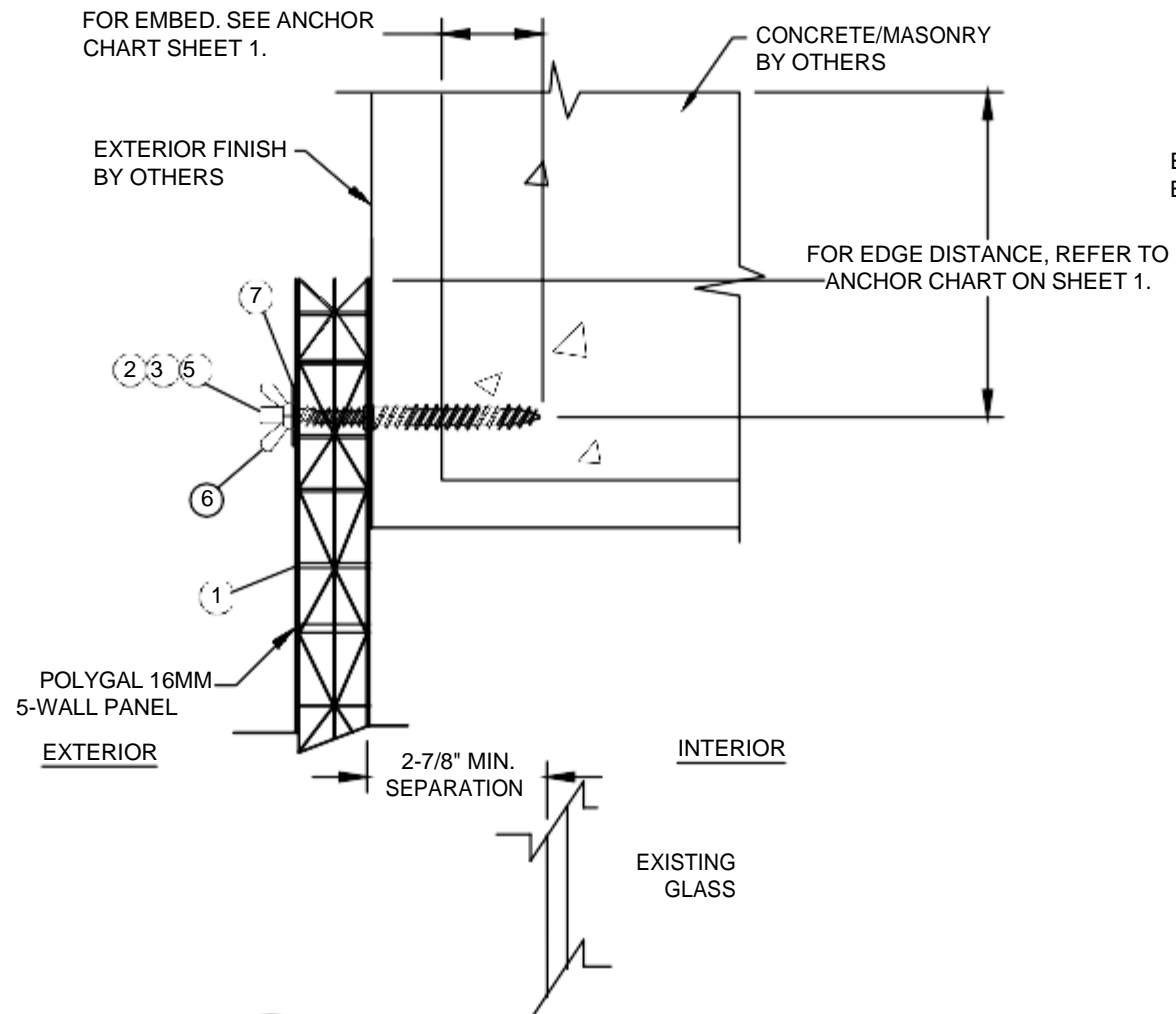
**POLYGAL 16MM CLEAR STORM PANEL**  
**L.M. IMPACT (HVHZ)**  
**INSTALLATION DETAILS- WOOD FRAME**

DRAWN: <b>JRM</b>	DWG NO. <b>NL-0117</b>	REV <b>1</b>
SCALE <b>NTS</b>	DATE <b>10/24/18</b>	SHEET <b>3 OF 6</b>

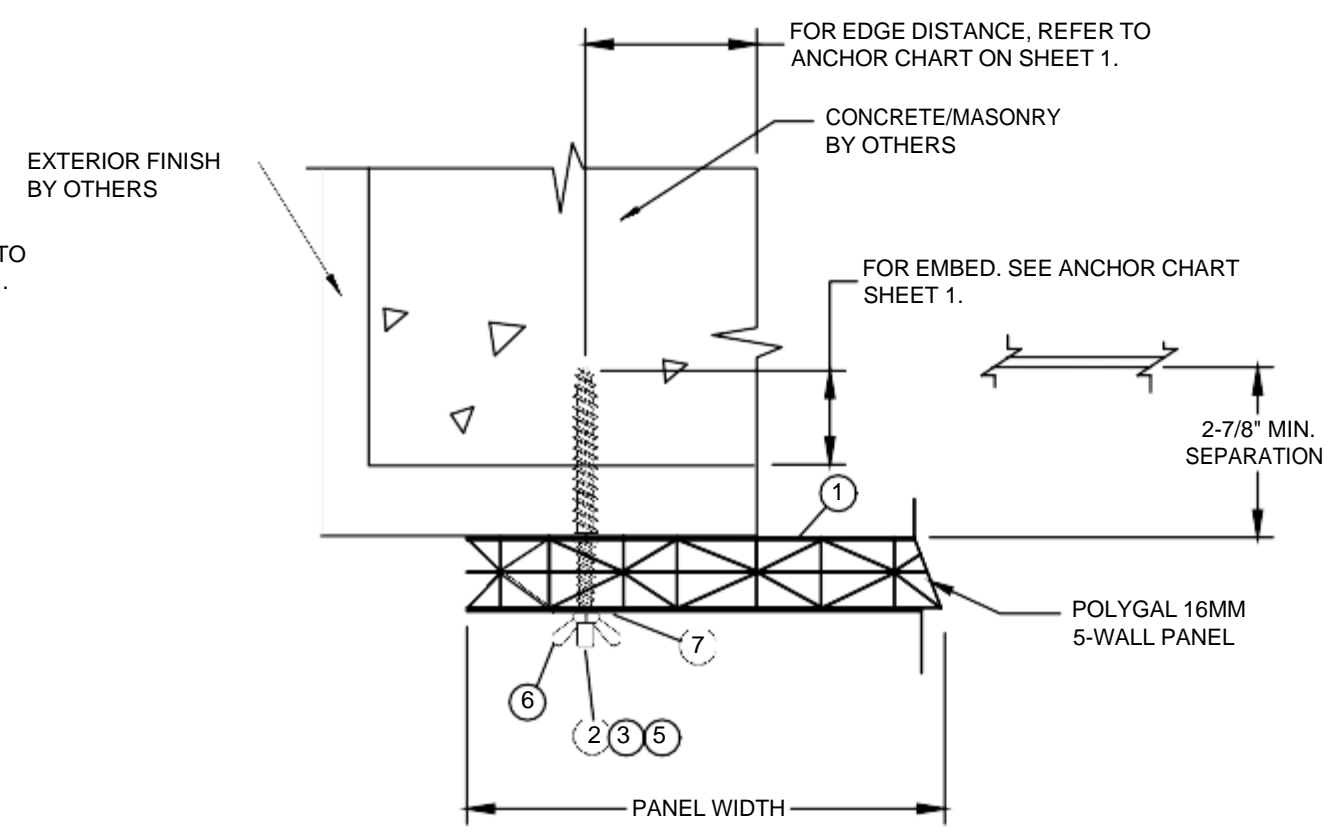
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**A**  
**4**  
**VERTICAL SECTION**  
**CONCRETE SUBSTRATE**  
**WALL MOUNT INSTALLATION**



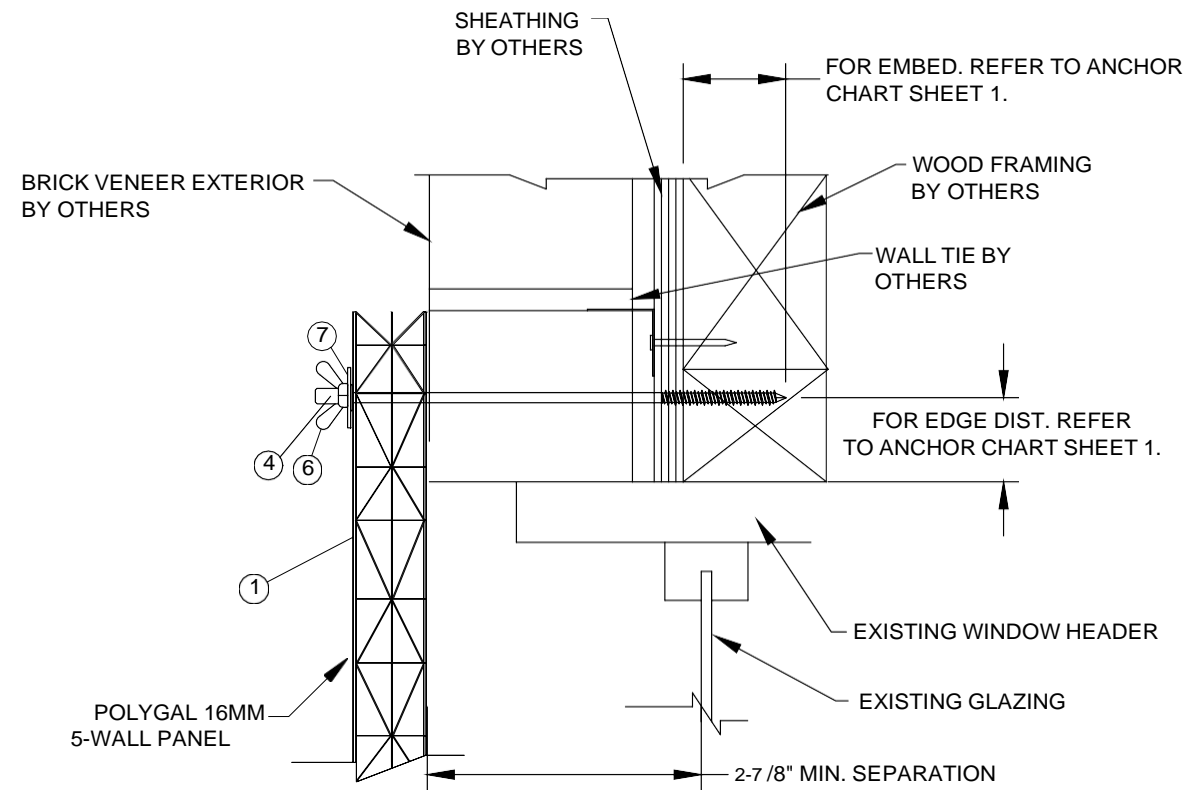
**B**  
**4**  
**HORIZONTAL SECTION**  
**MASONRY/CONCRETE SUBSTRATE**  
**WALL MOUNT INSTALLATION**

POLY GAL INC. 1100 BOND STREET CHARLOTTE, NC 28208		
POLY GAL 16MM CLEAR STORM PANEL L.M. IMPACT (HVHZ) INSTALLATION DETAILS- MASONRY/CONC.		
DRAWN: JRM	DWG NO. NL-0117	REV 1
SCALE NTS	DATE 10/24/18	SHEET 4 OF 6

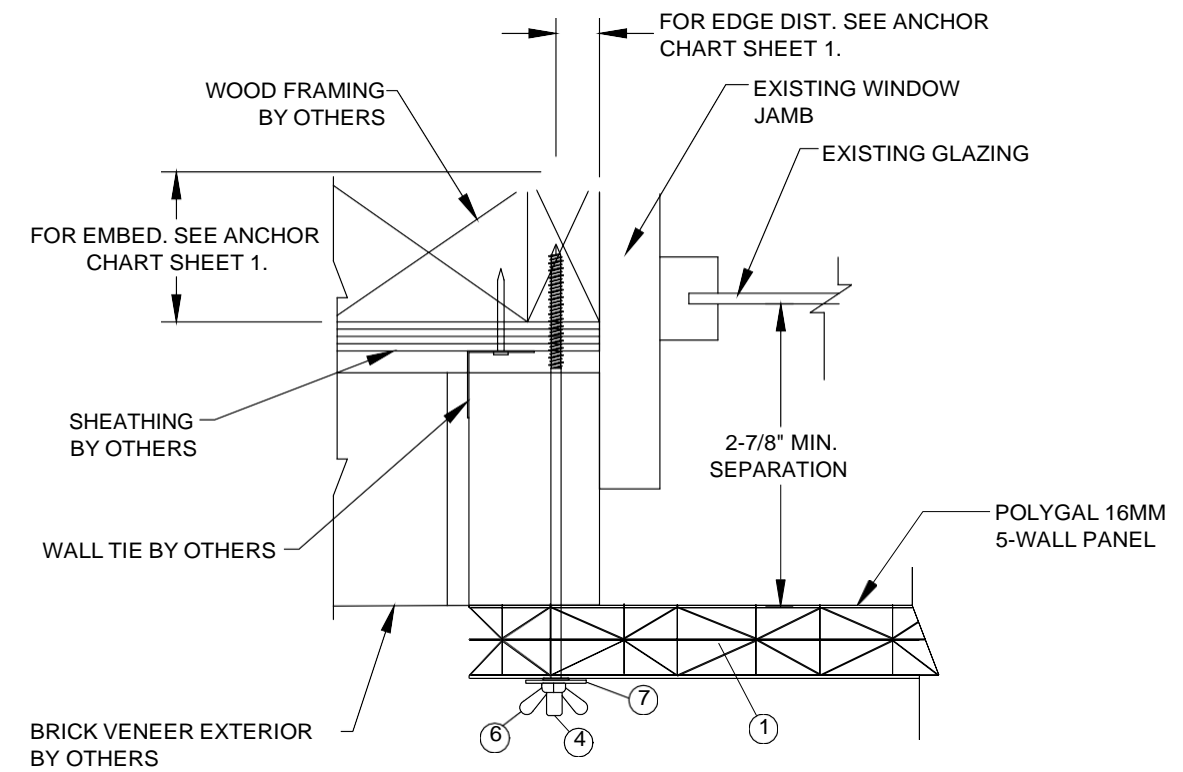
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**A**  
**5** **VERTICAL SECTION**  
**SOLID BRICK VENEER ANCHORING**  
**WALL MOUNT INSTALLATION**



**B**  
**5** **HORIZONTAL SECTION**  
**SOLID BRICK VENEER ANCHORING**  
**WALL MOUNT INSTALLATION**

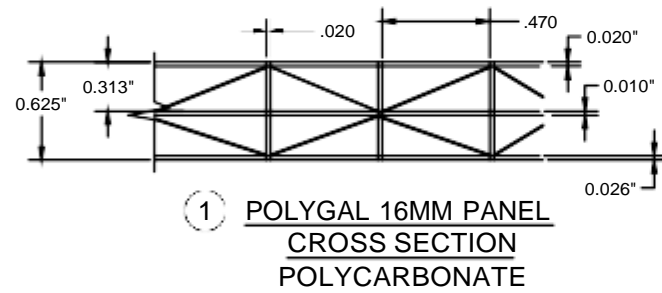
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POLYCAL INC. 1100 BOND STREET CHARLOTTE, NC 28208		
POLYCAL 16MM CLEAR STORM PANEL L.M. IMPACT (HVHZ) INSTALLATION DETAILS- BRICK VENEER		
DRAWN: JRM	DWG NO. NL-0117	REV 1
SCALE NTS	DATE 10/24/18	SHEET 5 OF 6

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REVISIONS			
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PART NO.	DESCRIPTION	MANUFACTURER
1	16MM 5-WALL, POLYCARBONATE	POLYGAL INC.
2	1/4" PANELMATE PRO	ELCO
3	1/4" PANELMATE PLUS	ELCO
4	1/4" PANELMATE PRO TVAS	ELCO
5	1/4" TAPCON SG	REDHEAD / ITW BUILDEX
6	1/4"-20 WING NUT, MATERIAL SHALL BE COMPATIBLE WITH ANCHOR (PART NO. 2 OR 3)	-----
7	1/4" FLAT WASHER, 1-1/4" O.D., MATERIAL SHALL BE COMPATIBLE WITH ANCHOR (PART NO. 2 OR 3)	-----

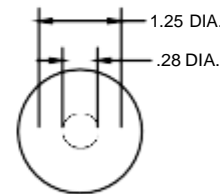


⑥ 1/4"-20 WING NUT STEEL



② ③ 1/4" PANELMATE PRO OR PLUS

⑤ 1/4" TAPCON SG



⑦ 1/4" WASHER (1/16" THICK)



④ 1/4" PANELMATE TVAS

POLYGAL INC. 1100 BOND STREET CHARLOTTE, NC 28208		
POLYGAL TITAN SKY 16MM CLEAR STORM PANEL L.M. IMPACT (HVHZ) BILL OF MATERIALS & COMPONENTS		
DRAWN: JRM	DWG NO. NL-0117	REV 1
SCALE NTS	DATE 10/24/18	SHEET 6 OF 6

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