

INSTALLATION NOTES AND REQUIREMENTS

6” Square Spigot Glass Guard System

1. RECOMMENDED CONFIGURATION OF SPIGOTS BASED ON GLASS GUARD WIDTH:

- THE FOLLOWING TABLE PROVIDES RECOMMENDED SPIGOT SPACING BASED ON THE WIDTH OF THE GLASS GUARD:

Width of Guard	Number of Spigots
6” - 10”	1
10” - 72.8”	2
72.8” - 100”	3

2. INSTALLATION REQUIREMENTS

- SUPPORTING STRUCTURE:**
THE SUPPORTING STRUCTURE TO WHICH THE SPIGOTS ARE TO BE MOUNTED MUST BE ABLE TO WITHSTAND THE DESIGN LOADS AS SPECIFIED IN ARTICLE 4.1.5.14 (LOADS ON GUARDS AND HANDRAILS) OF THE 2024 ONTARIO BUILDING CODE. THE STRUCTURE MUST RESIST A UNIFORMLY DISTRIBUTED HORIZONTAL LOAD OF 0.5 KN/M APPLIED OUTWARD AND A CONCENTRATED HORIZONTAL LOAD OF 1.0 KN APPLIED AT ANY POINT. ALL STRUCTURAL ELEMENTS AND LOAD-BEARING CAPACITY ARE TO BE VERIFIED BY A QUALIFIED PROFESSIONAL ENGINEER.
- WOOD SUBSTRATE FOR LAG BOLT CONNECTION:**
MINIMUM DRY UNTREATED OR DRY PRESERVATIVE-TREATED, UNINCISED SPRUCE-PINE-FIR (SPF) OR EQUIVALENT GRADE WOOD SUBSTRATE IS REQUIRED. WOOD SUBSTRATE MUST BE CAPABLE OF PROVIDING ADEQUATE WITHDRAWAL RESISTANCE FOR LAG BOLTS IN ACCORDANCE WITH CSA O86 "ENGINEERING DESIGN IN WOOD" STANDARDS.
- ATTACHMENT TO NEW BLOCKING:**
NEW BLOCKING ATTACHED TO EXISTING DECK STRUCTURES SHALL BE SECURED USING MINIMUM STAINLESS STEEL 16D 3-1/2" NAILS OR #8 X 3" DECK SCREWS (TYPICAL). ALL FASTENERS MUST MEET CORROSION RESISTANCE REQUIREMENTS FOR THE INTENDED APPLICATION ENVIRONMENT.
- FASTENER SPECIFICATIONS FOR OUTDOOR APPLICATIONS:**
HOT-DIPPED GALVANIZED OR STAINLESS STEEL FASTENERS SHALL BE USED FOR EXTERIOR INSTALLATIONS. HOT-DIPPED GALVANIZED FASTENERS MUST CONFORM TO ASTM A153 STANDARDS. FOR COASTAL OR HIGHLY CORROSIVE ENVIRONMENTS, STAINLESS STEEL 316 GRADE IS RECOMMENDED.
- STAINLESS STEEL SPIGOT FOR EXTERIOR USE :**
STAINLESS STEEL SPIGOTS SHALL BE USED FOR ALL EXTERIOR APPLICATIONS TO ENSURE LONG-TERM DURABILITY AND CORROSION RESISTANCE IN OUTDOOR ENVIRONMENTS.
- MULTIPLE GLASS GUARD CONNECTIONS:**
WHEN MULTIPLE GLASS GUARDS ARE INSTALLED IN SERIES, PROPER GLASS-TO-GLASS CONNECTIONS BETWEEN ADJACENT GUARDS MUST BE PROVIDED TO MAINTAIN STRUCTURAL CONTINUITY AND PREVENT DIFFERENTIAL MOVEMENT UNDER LOAD.

3. APPLICABLE CODES

- DESIGN LOAD COMPLIANCE:**
THE SPIGOT ANCHORING SYSTEM IS DESIGNED IN ACCORDANCE WITH ARTICLE 4.1.5.14 (LOADS ON GUARDS AND HANDRAILS) OF THE 2024 ONTARIO BUILDING CODE, WHICH ADOPTS THE NATIONAL BUILDING CODE OF CANADA 2020. THE SYSTEM MUST RESIST THE SPECIFIED LOADS: 0.5 KN/M UNIFORMLY DISTRIBUTED HORIZONTAL LOAD AND 1.0 KN CONCENTRATED HORIZONTAL LOAD.
- TIMBER CONNECTION DESIGN:**
LAG BOLT WITHDRAWAL RESISTANCE AND TIMBER CONNECTION CAPACITY ARE CALCULATED IN ACCORDANCE WITH CSA O86 "ENGINEERING DESIGN IN WOOD" (CURRENT EDITION). CALCULATION ARE COMPLETED FOR THE FOLLOWING CONDITIONS: MINIMUM DRY UNTREATED OR DRY PRESERVATIVE-TREATED, UNINCISED SPRUCE-PINE-FIR (SPF)
- CONCRETE ANCHORING DESIGN:**
CONCRETE ANCHORING AREA DESIGNED IN ACCORDANCE WITH CSA A23.3 "DESIGN OF CONCRETE STRUCTURES" AND MANUFACTURER SPECIFICATIONS FOR POST-INSTALLED ANCHORS. CONCRETE WITH MINIMUM COMPRESSIVE STRENGTH OF 25MPA IS CONSIDERED IN THE CALCULATIONS.

4. PROFESSIONAL VERIFICATION REQUIREMENTS

- STRUCTURAL ENGINEERING VERIFICATION:**
IF SUBSTRATES ARE DIFFERENT THAN INDICATED HEREIN: A LICENSED PROFESSIONAL ENGINEER MUST VERIFY THAT THE SUPPORTING STRUCTURE, ANCHORAGE SYSTEM, AND ALL CONNECTIONS ARE ADEQUATE TO RESIST THE DESIGN LOADS SPECIFIED IN ARTICLE 4.1.5.14 OF THE 2024 OBC PRIOR TO INSTALLATION. THE ENGINEER SHALL PROVIDE WRITTEN CONFIRMATION OF STRUCTURAL ADEQUACY.
- SITE-SPECIFIC ASSESSMENT:**
ALL INSTALLATIONS REQUIRE SITE-SPECIFIC EVALUATION TO VERIFY SUBSTRATE CONDITIONS, EXISTING STRUCTURAL CAPACITY, AND PROPER LOAD TRANSFER PATHS.
- BUILDING PERMIT AND INSPECTION:**
INSTALLATION OF SPIGOT-MOUNTED GLASS GUARD SYSTEMS TYPICALLY REQUIRES A BUILDING PERMIT. CONSULT WITH LOCAL BUILDING AUTHORITIES TO CONFIRM PERMIT REQUIREMENTS. INSTALLATION MUST BE INSPECTED AND APPROVED BY THE LOCAL BUILDING OFFICIAL OR AUTHORIZED INSPECTOR.

5. GUARD SYSTEM REQUIREMENTS (SECTION 9.8.8)

- (OBC 2024 – SECTION 9.8.8)
THE GLASS GUARD SYSTEM SHALL COMPLY WITH OBC 2024 SECTION 9.8.8 AND APPLICABLE LOADING REQUIREMENTS OF SECTION 4.1.5.14.

LOCATION REQUIREMENTS

- GUARDS SHALL BE PROVIDED WHERE THE DIFFERENCE IN ELEVATION BETWEEN ADJACENT WALKING SURFACES EXCEEDS 600 MM.

MINIMUM GUARD HEIGHTS

(MEASURE VERTICALLY FROM FINISHED WALKING SURFACE TO TOP OF GUARD)

- 1070 MM (42") – COMMERCIAL AND MULTI-UNIT RESIDENTIAL BUILDINGS
- 900 MM (36") – WITHIN A SINGLE DWELLING UNIT
- 900 MM (36") – EXTERIOR GUARDS SERVING A SINGLE DWELLING UNIT WHERE WALKING SURFACE IS ≤ 1.8 M ABOVE GRADE
- 1500 MM (59") – EXTERIOR STAIRS AND LANDINGS MORE THAN 10 M ABOVE GRADE
- CONTRACTOR SHALL VERIFY REQUIRED GUARD HEIGHT BASED ON OCCUPANCY AND SITE CONDITIONS.

6. GLASS REQUIREMENTS:

- GLASS PANELS SHALL BE 12 MM TEMPERED SAFETY GLASS FOR RESIDENTIAL SINGLE DWELLING APPLICATIONS WITH PANEL WIDTH ≤1500 MM AND MAX SPIGOT SPACING 1200 MM O.C.
- ALL OTHER APPLICATIONS SHALL USE 13.52 MM LAMINATED TEMPERED SAFETY GLASS (SGP RECOMMENDED).
- GLASS SUPPLIER SHALL VERIFY COMPLIANCE WITH OBC 2024 GUARD LOADING.

7. CLAMPS

GLASS-TO-GLASS RAILING BRACKET REQUIREMENTS

PROVIDE STAINLESS STEEL GLASS-TO-GLASS RAILING BRACKET WHERE ADJACENT PANELS. BRACKETS SHALL BE SUITABLE FOR EXTERIOR GUARD APPLICATIONS AND INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PROVIDE APPROPRIATE ISOLATION BETWEEN METAL COMPONENTS AND GLASS.

CORNER RAILING BRACKET REQUIREMENTS

WHERE REQUIRED, PROVIDE PROVIDE STAINLESS STEEL GLASS-TO-GLASS RAILING BRACKETS TO MAINTAIN ALIGNMENT AND CONTINUITY OF GLASS PANELS AT CORNERS. INSTALL PER MANUFACTURER REQUIREMENTS.

WALL RAILING BRACKET REQUIREMENTS

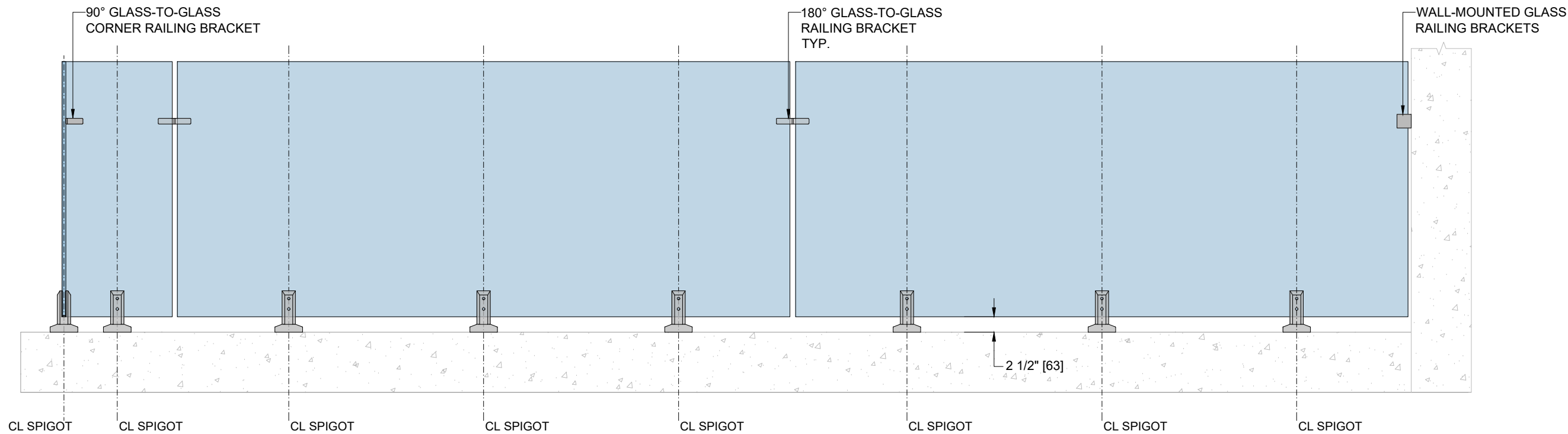
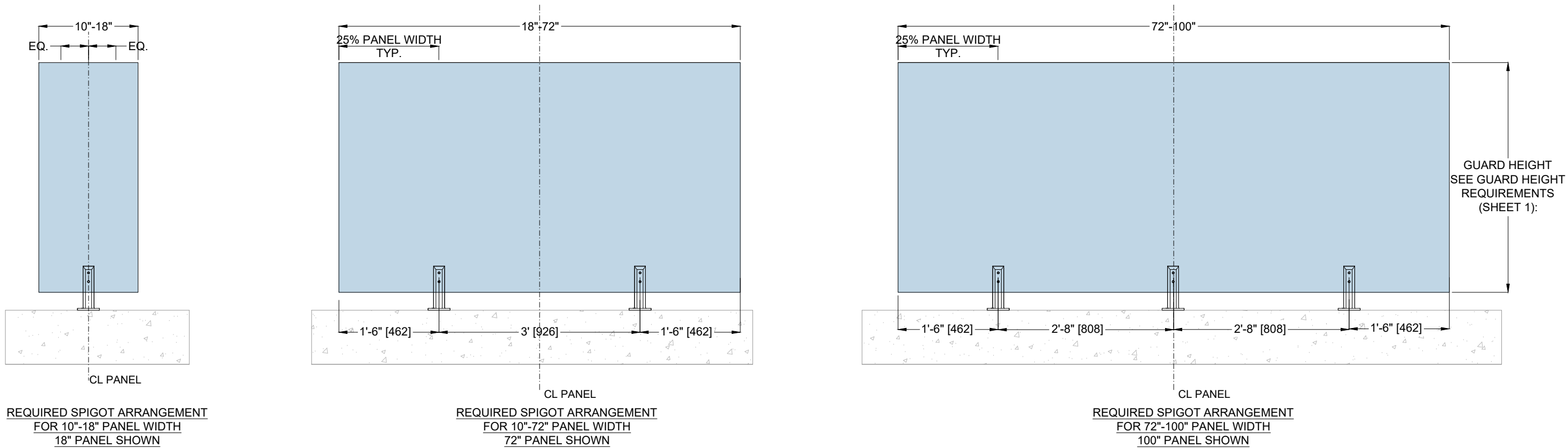
PROVIDE STAINLESS STEEL WALL-MOUNTED GLASS RAILING BRACKETS AT WALL TERMINATIONS. ANCHORAGE TO SUIT SUPPORTING SUBSTRATE. VERIFY SUBSTRATE ADEQUACY PRIOR TO INSTALLATION.

TOP RAIL (IF PROVIDED)

WHERE A TOP RAIL IS PROVIDED, IT SHALL BE CONTINUOUS ALONG THE GUARD LENGTH AND SUITABLE FOR EXTERIOR APPLICATIONS. INSTALL IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. GUARD SYSTEM SHALL COMPLY WITH REQUIRED GUARD LOADING WHETHER TOP RAIL IS PROVIDED OR NOT.

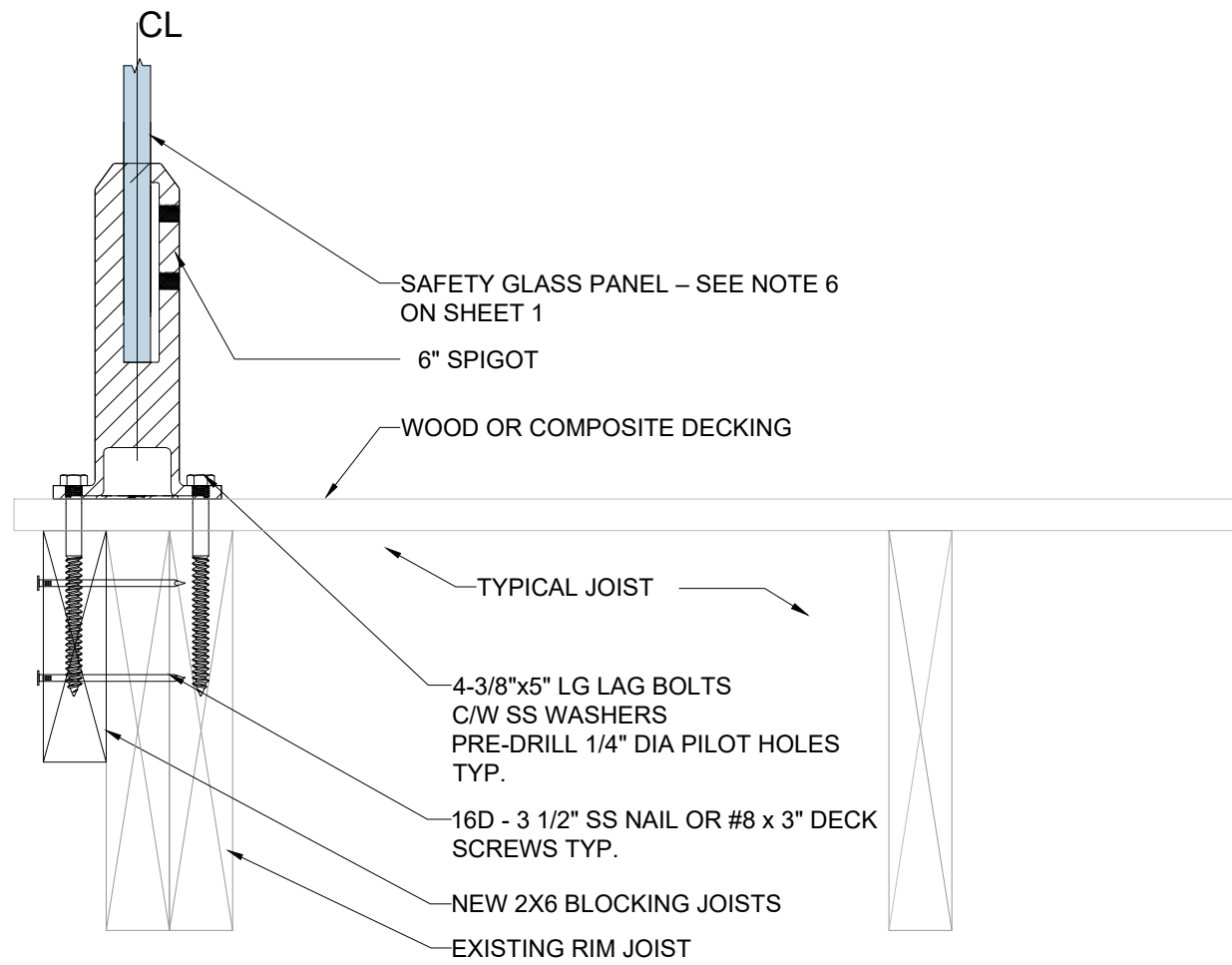
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	www.fmfglasshardware.com	DWG SCALE NTS DATE: FEB/16/2026	FMF GLASS HARDWARE Certified by: KGEngineering	REV: 0 SHEET: 1of4
	info@fmfglasshardware.com			



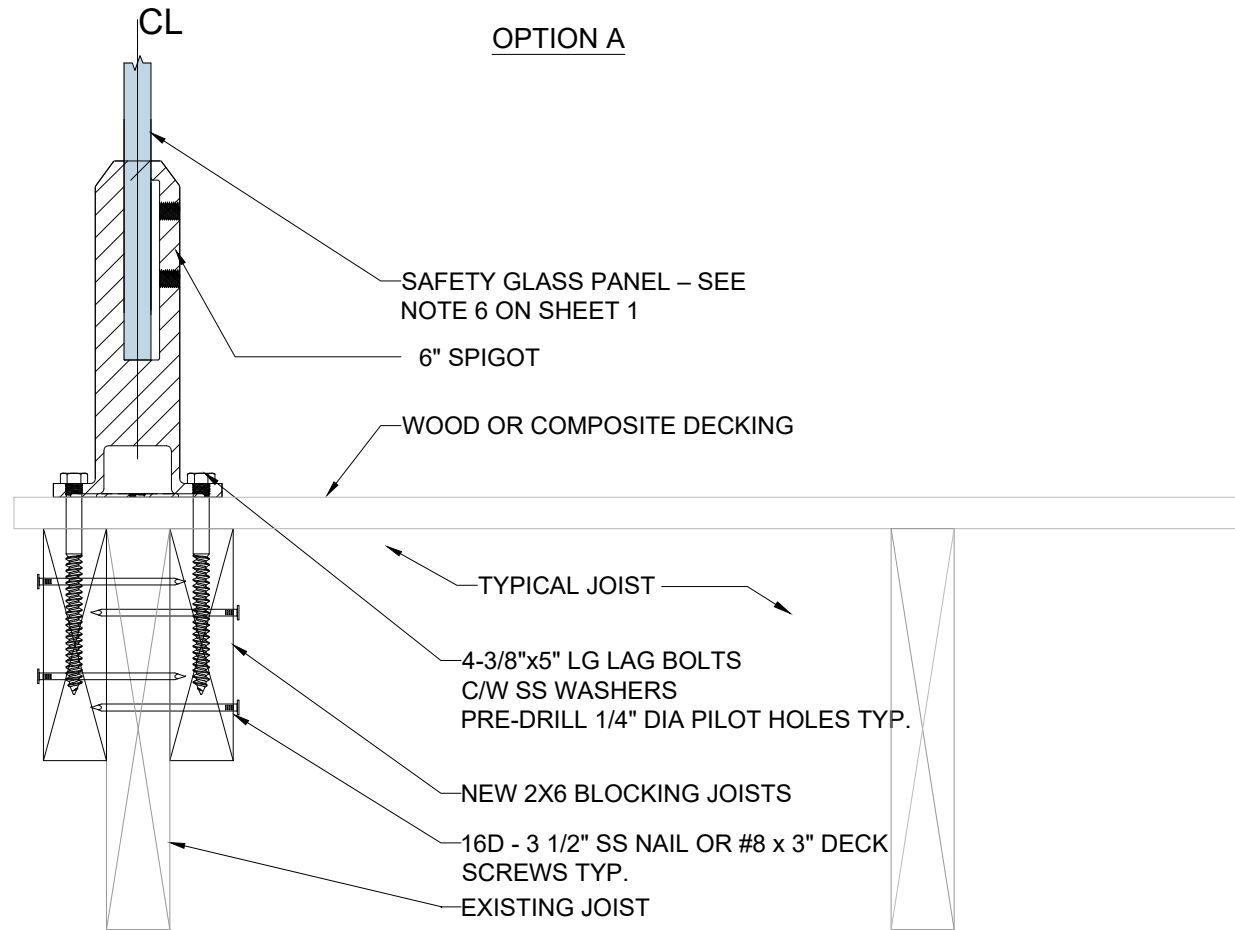


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	info@fmglasshardware.com		DATE: FEB/16/2026		Certified by:
					

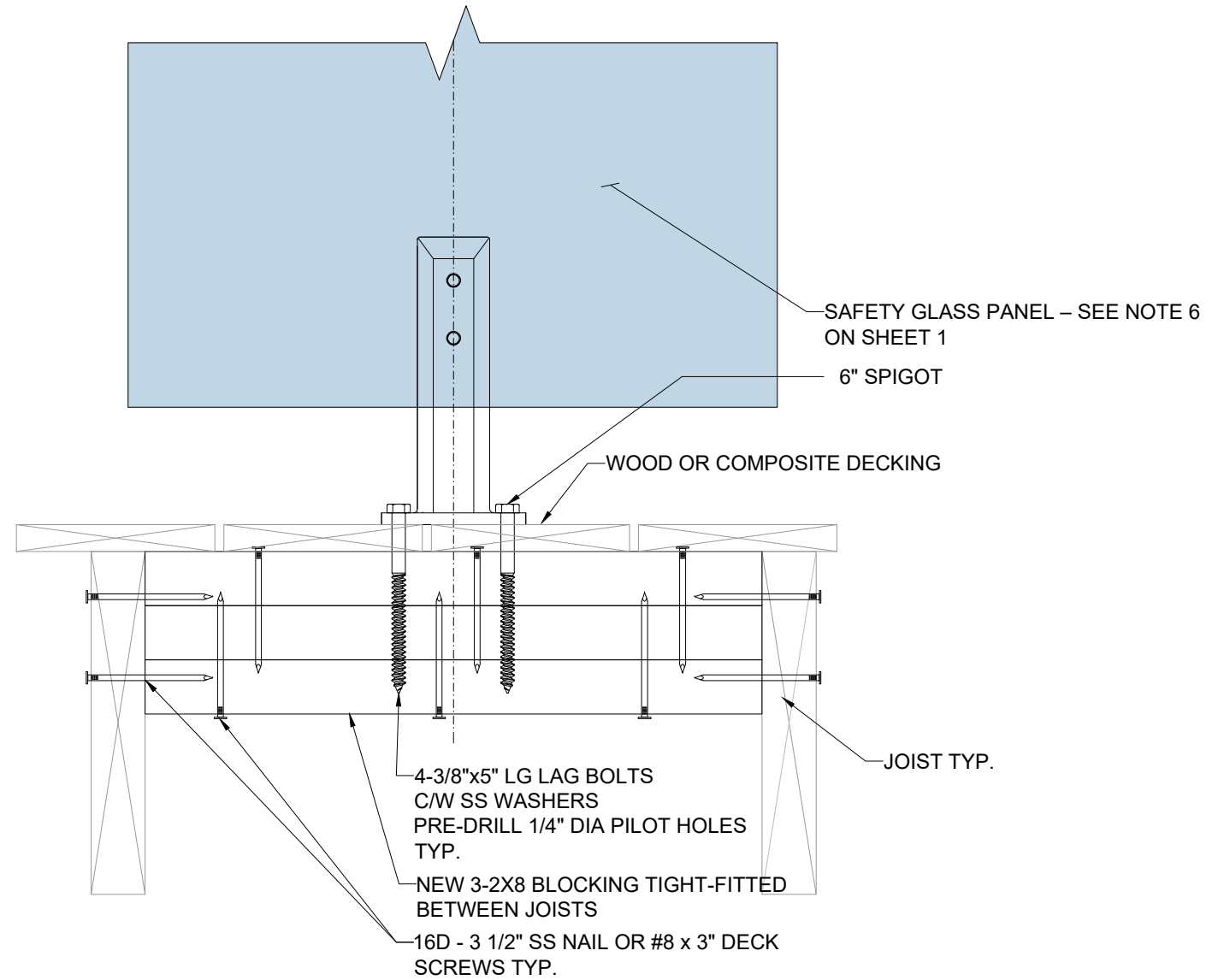




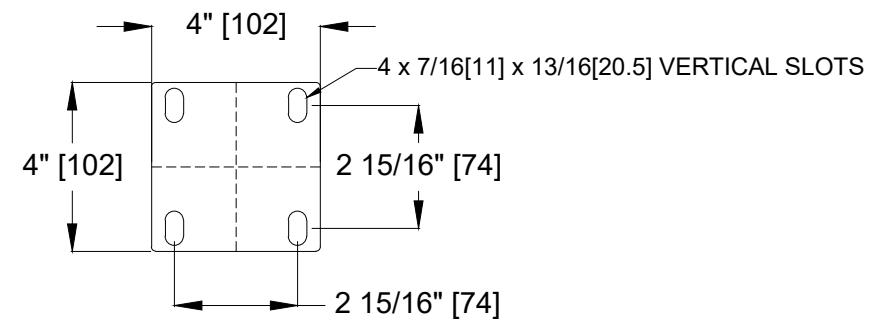
OPTION A



OPTION C

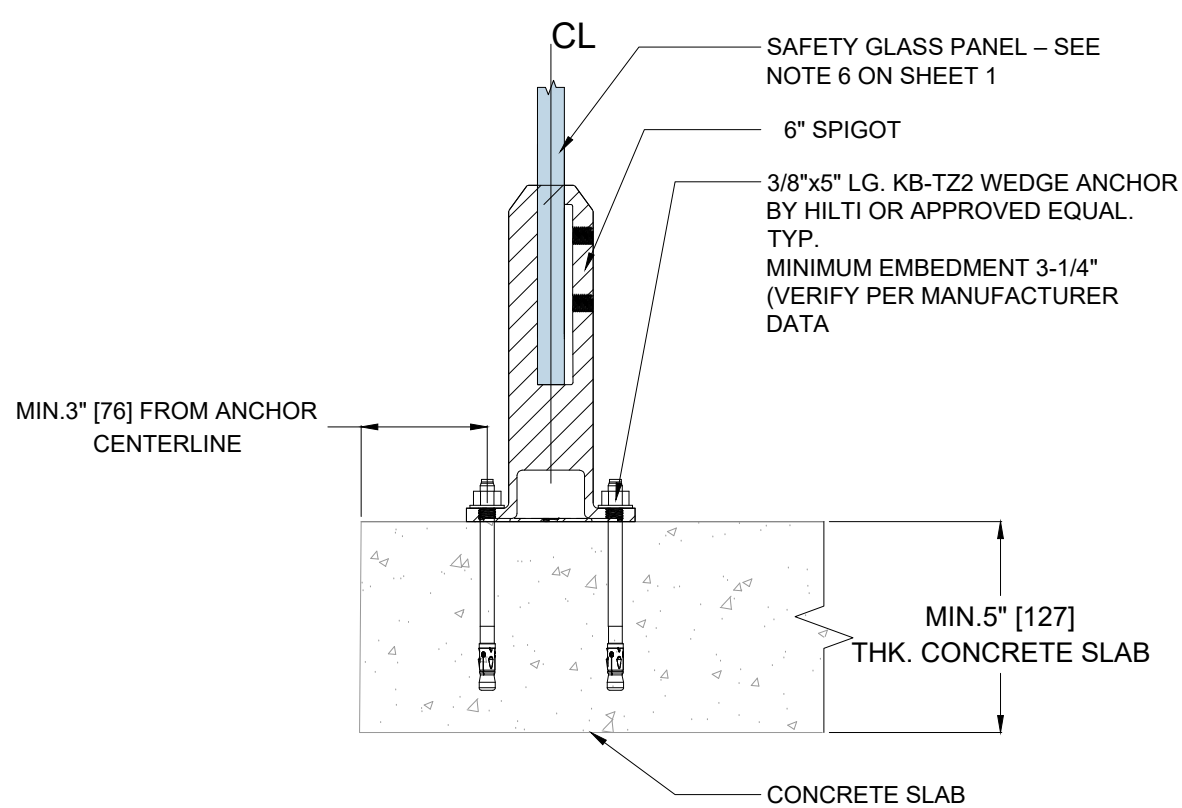


OPTION B (BLOCKING
BETWEEN JOISTS)

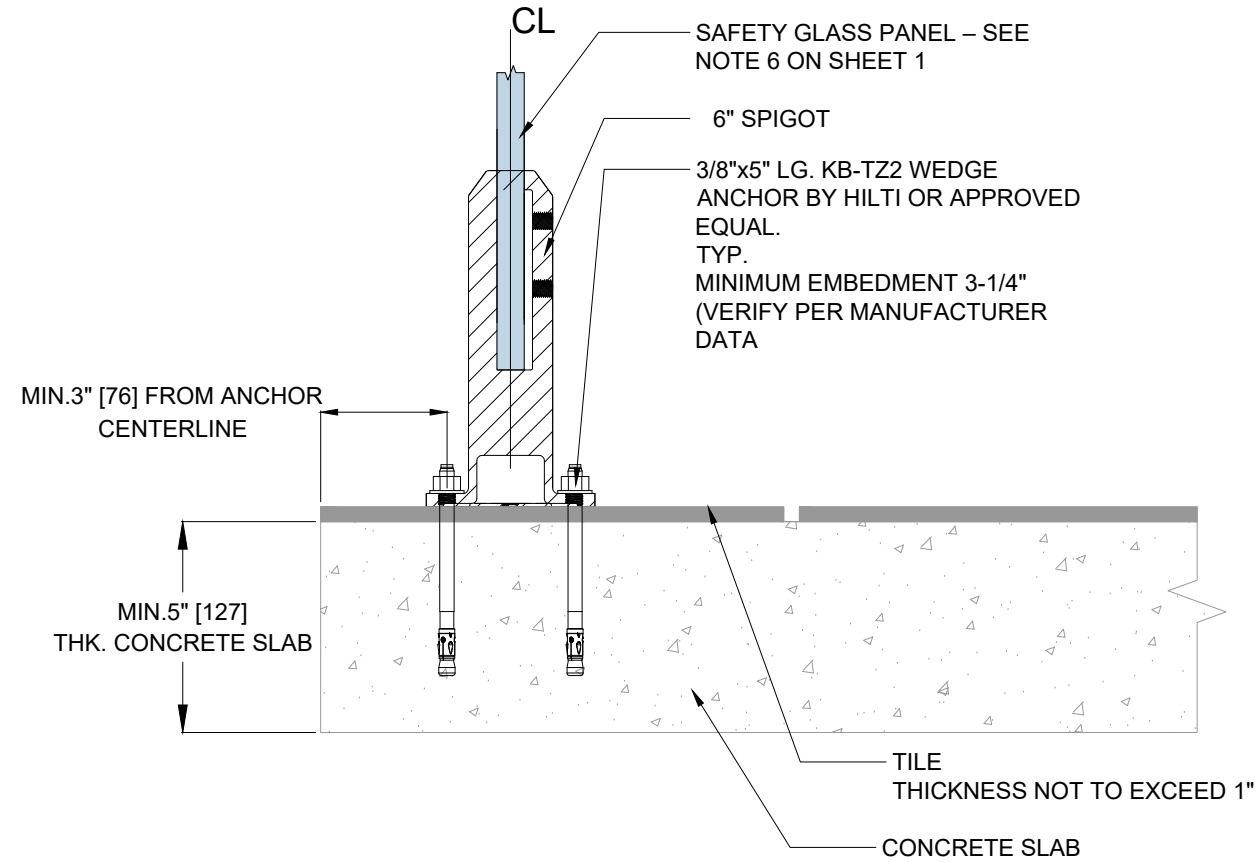


SPIGOT BASE PLATE

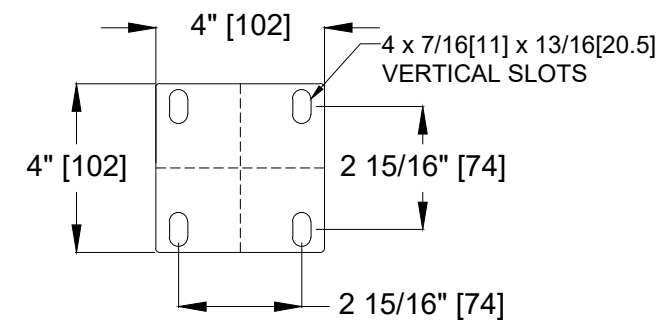
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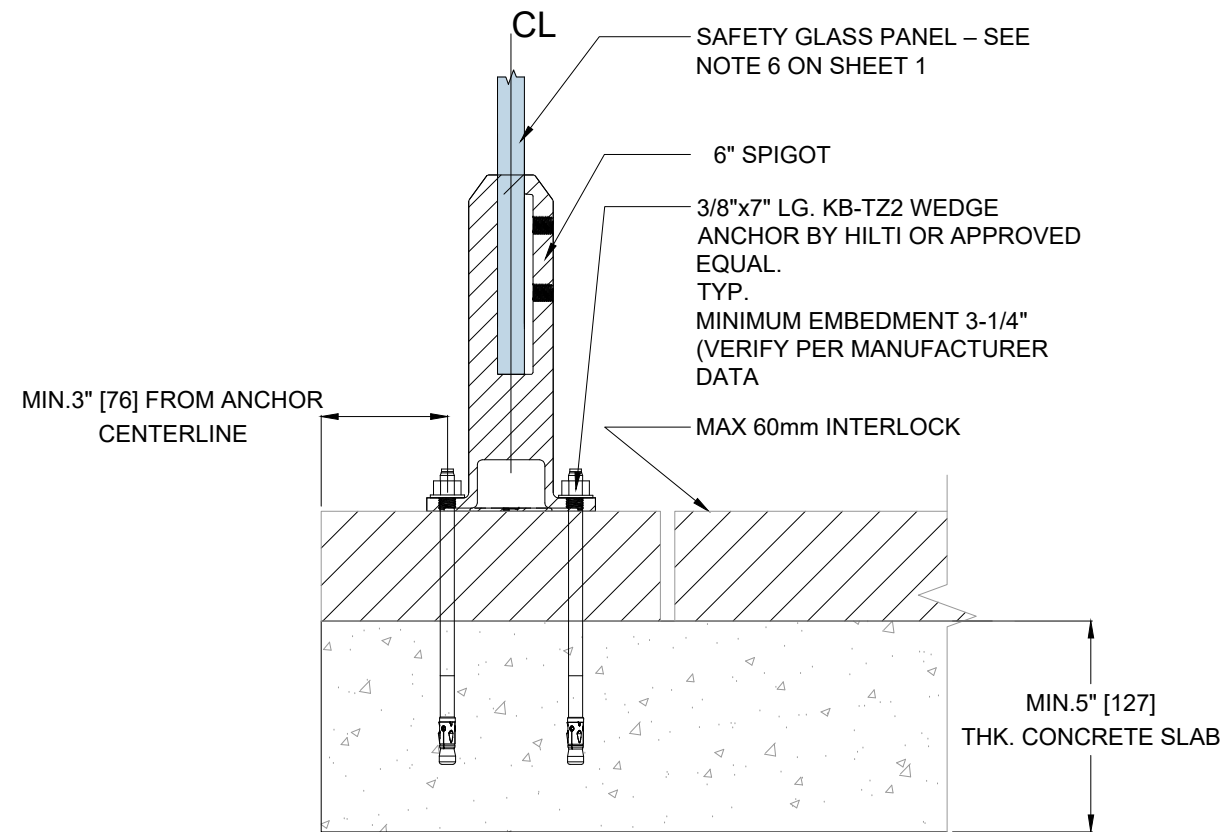
OPTION A



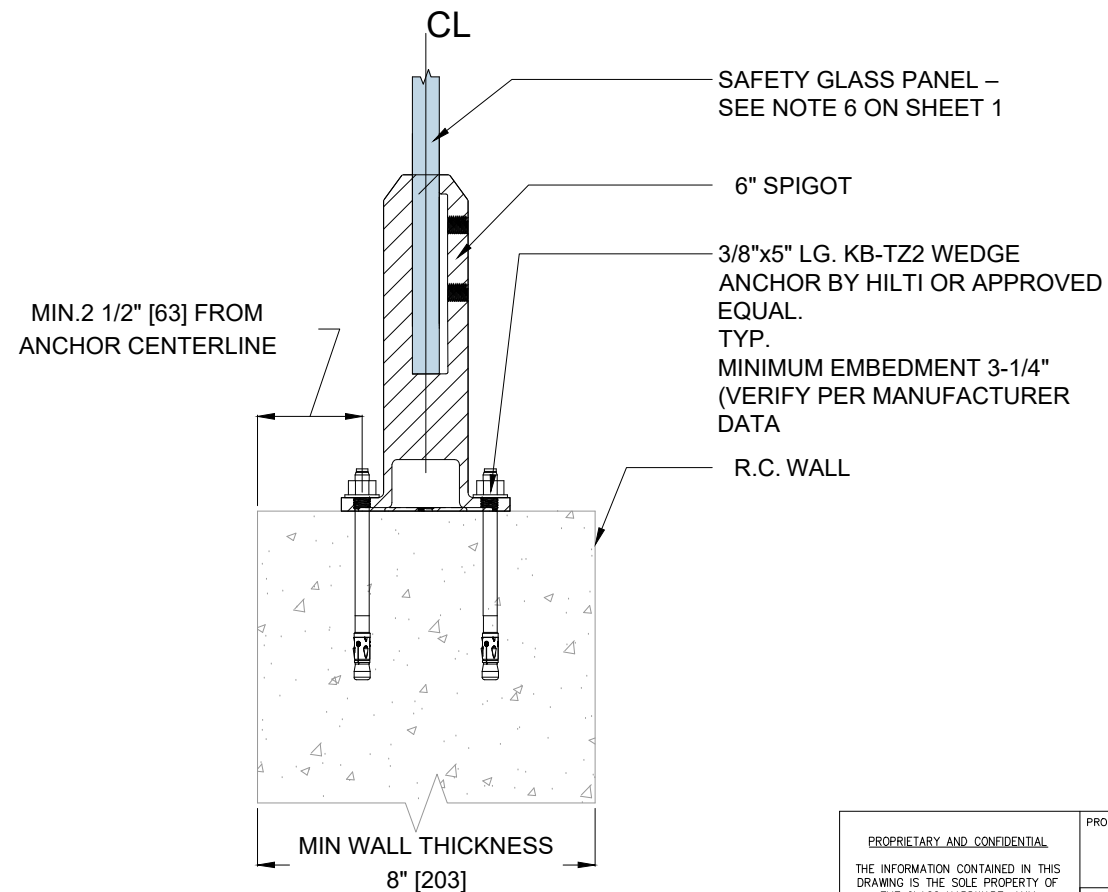
OPTION B



SPIGOT BASE PLATE



OPTION C



OPTION E

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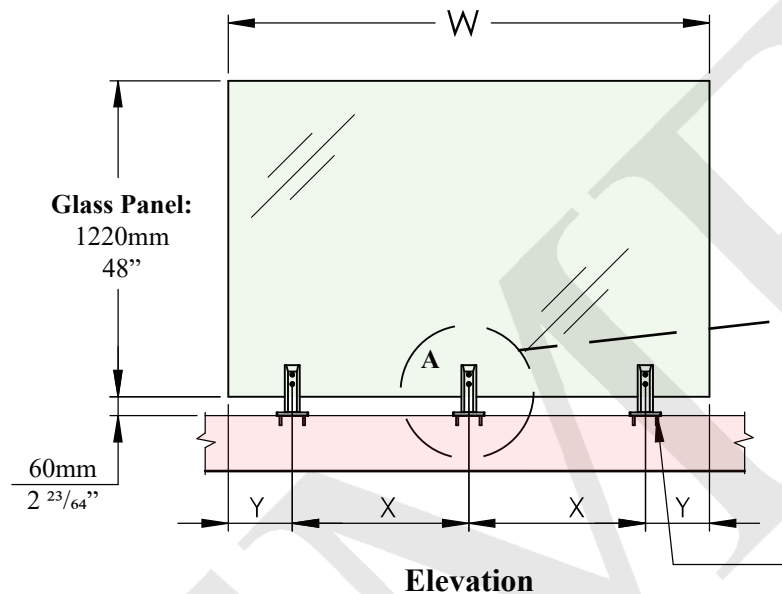
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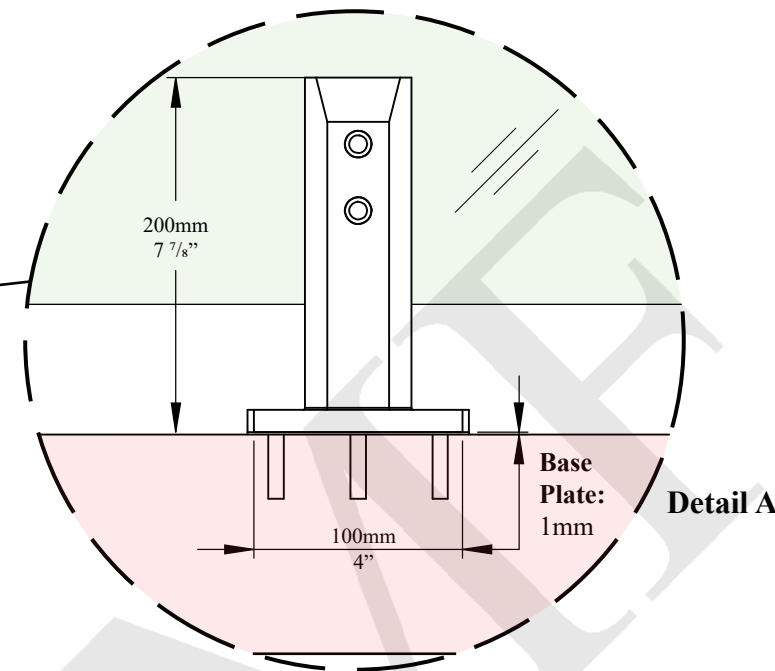


On Wood Surface:

- Lag bolt 3/8"x5"
- Optional: 3/8" thru-bolt or threaded rod with flat washers and nuts

Fasteners Recommended on Concrete Surface:

- Wedge anchor 3/8"x4"



W (Inches)	X (Inches)	Y (Inches)	No. of Spigots
72	27	9	3
60	22	8	3
48	32	8	2
36	22	7	2
26	14	6	2

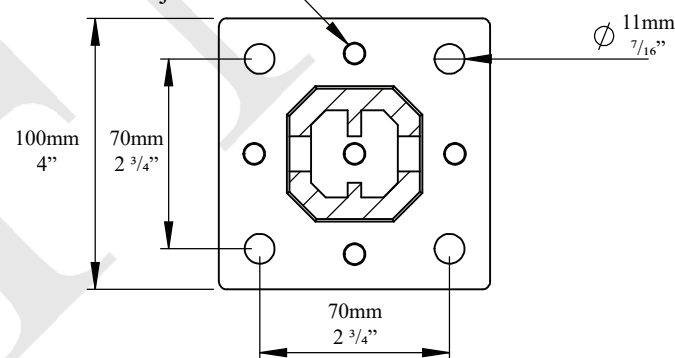
Glass Panel Height (Max.): 48"

W (Glass Width): 26" Minimum

X= 36" Maximum

Y= 6" Minimum - 9" Maximum

Set screws for
the spigot level
adjustment



Top View

General Notes:

- The installed glass thickness must be 1/2" or 12mm and must be safety tempered.
- Recommendation is for hardware components only. Mounting the post to the base structure is a site condition and the installers must ensure that the fasteners are strong enough to resist the design weight.
- The base material to which the posts are being mounted must resist the design weight.

NOTES:

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PRODUCT NAME:

8" Square Spigot

PRODUCT MODEL NUMBER:

SPI-8SA

DWG NO.

SPI-8SA_1

UNIT:

MM

DATE:

01.22

DRAWN BY:

FMF

DWG SIZE/SCALE

A4/NTS

**FMF GLASS
HARDWARE**

REV.

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