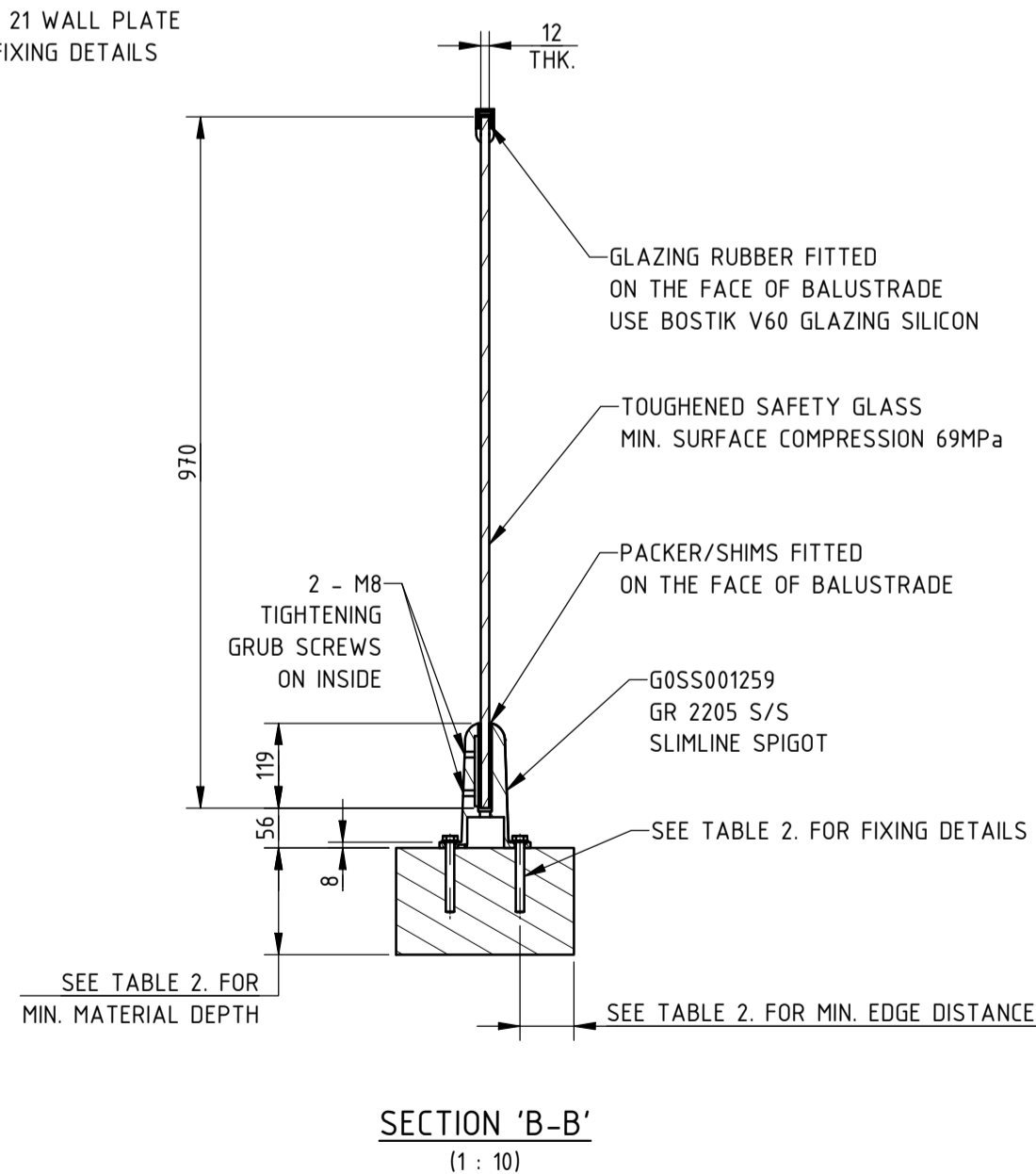
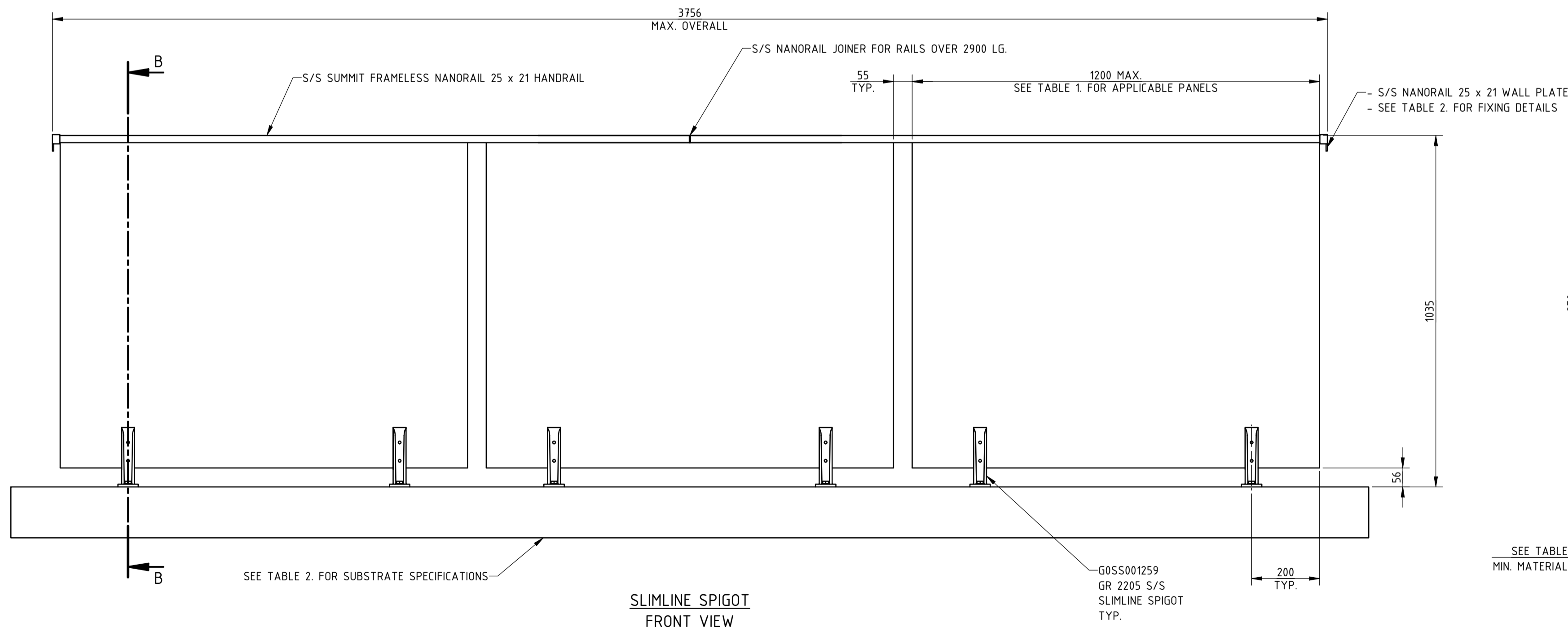
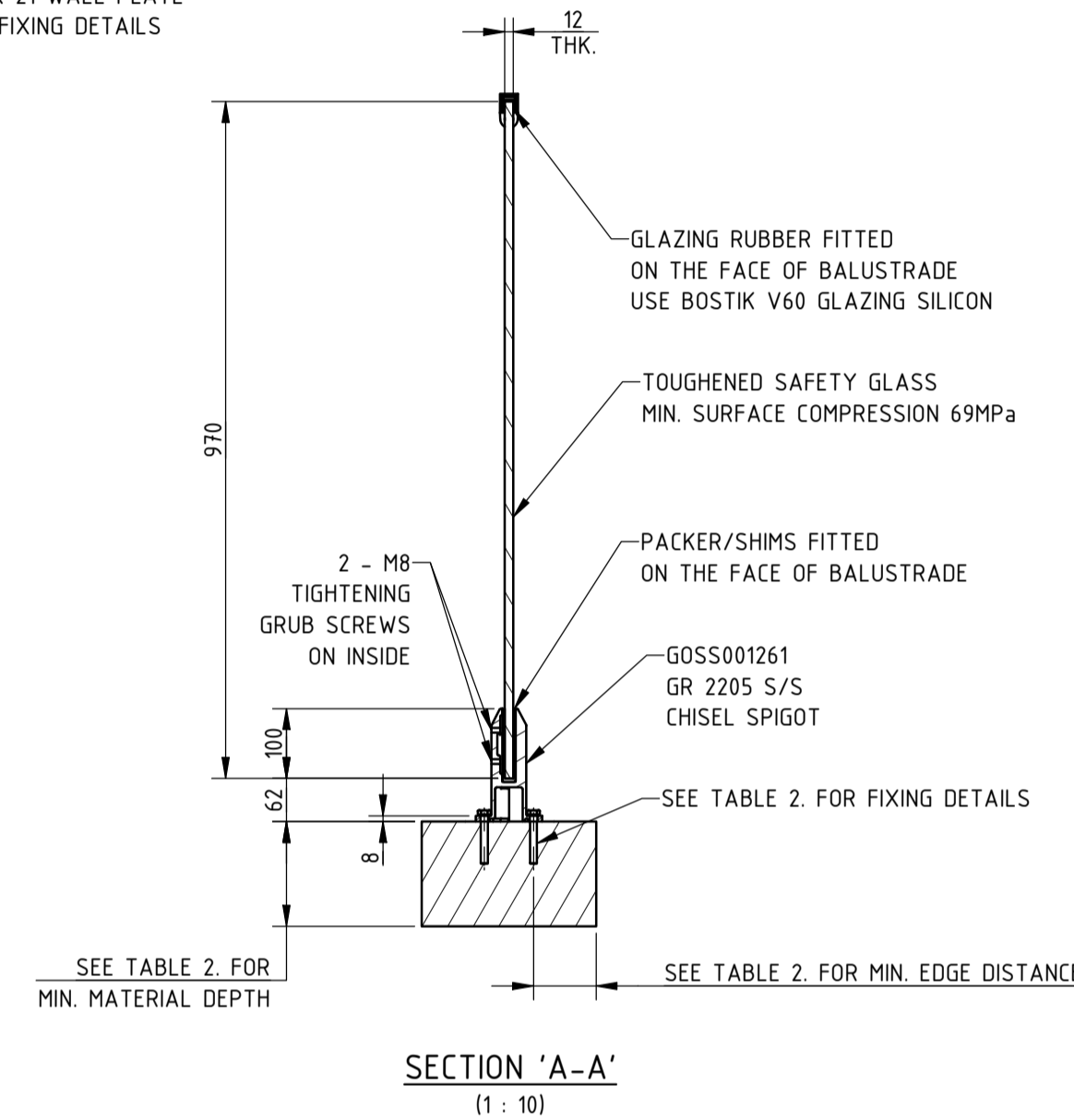
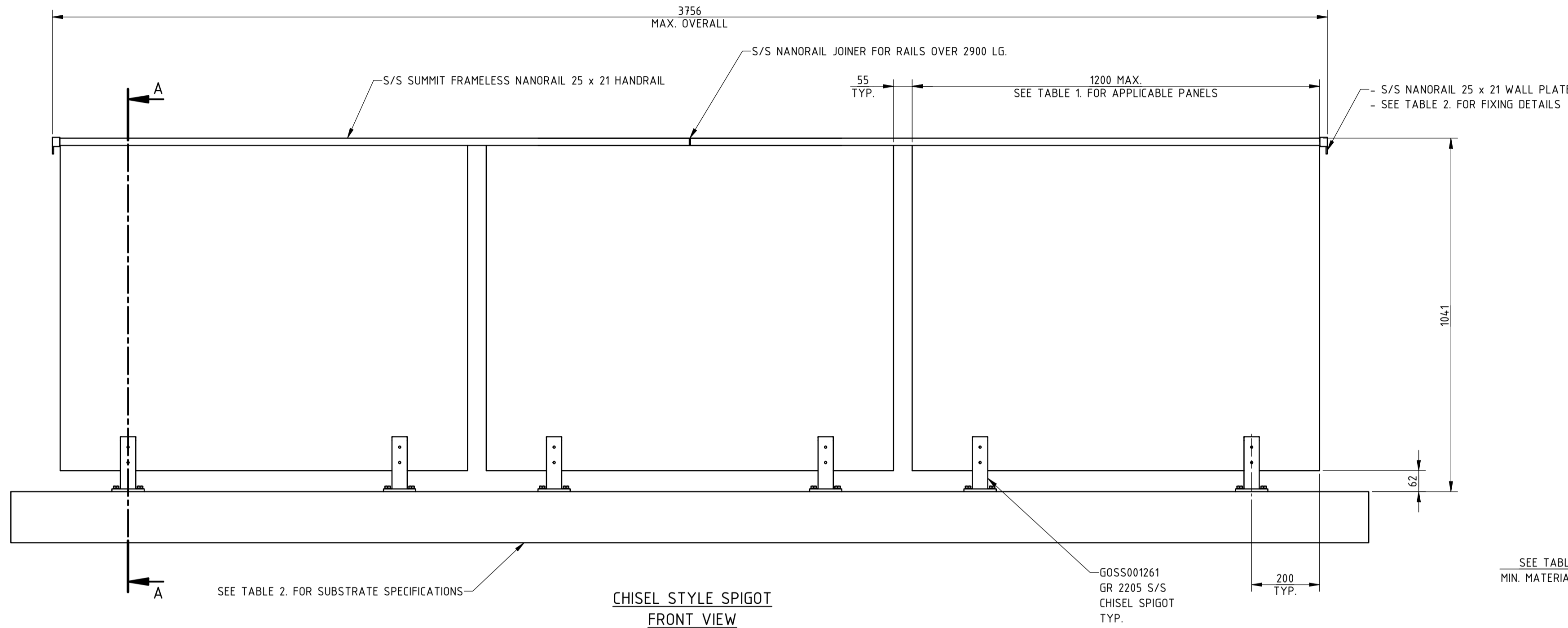


IF IN DOUBT - PLEASE ASK

TABLE 1. SUITABLE GLASS PANELS	
Description	
Heat Soaked Glass Balustrade Panel 1200W x 970H 12mm	
Heat Soaked Glass Balustrade Panel 1000W x 970H 12mm	
Heat Soaked Glass Balustrade Panel 1000W x 970H 12mm	
Heat Soaked Glass Balustrade Panel 900W x 970H 12mm	
Heat Soaked Glass Balustrade Panel 800W x 970H 12mm	
Heat Soaked Glass Balustrade Panel 700W x 970H 12mm	
Heat Soaked Glass Balustrade Panel 600W x 970H 12mm	
**Heat Soaked Glass Balustrade Panel any size panel in 50mm increments between 600W up to 1200W	

ATTACHMENT	TENSILE REACTION	SHEAR REACTION	TABLE 2. ANCHOR DATA PER SUBSTRATE TYPE			NOTES
			CONCRETE	TIMBER	BRICK	
SLIM LINE SPIGOT	5.43 kN	1.75 kN	ANCHOR: 2x M12 CS1216055 RAMSET ANCHOR STUD C/W WASHER OR EQUIVALENT ADHESIVE: RAMSET CHEMSET 502 RE0502P600 OR EQUIVALENT MIN. EMBEDMENT: 100mm MIN. EDGE DISTANCE: 90mm MIN. MATERIAL THICKNESS: 150mm MIN. MATERIAL GRADE: 25MPa (NON-CRACKED)	ANCHOR: 2x M12 S/S COACH SCREWS MIN. EMBEDMENT: 120mm MIN. EDGE DISTANCE: 85mm MIN. MATERIAL THICKNESS: 130mm + SHANK LENGTH MIN. CONDITION TYPE: JD4 JOINT GROUP AS PER CLAUSE 4.2.3.4 OF AS 1720.1:2010	N/A	
CHISEL STYLE SPIGOT	3.5 kN	0.9 kN	ANCHOR: 4x M10 CS1013055 RAMSET ANCHOR STUD C/W WASHER OR EQUIVALENT ADHESIVE: RAMSET CHEMSET 502 RE0502P600 OR EQUIVALENT MIN. EMBEDMENT: 75mm (NON-CRACKED) MIN. EDGE DISTANCE: 70mm MIN. MATERIAL THICKNESS: 150mm MIN. MATERIAL GRADE: 25MPa (NON-CRACKED)	ANCHOR: 4x M10 S/S COACH SCREWS MIN. EMBEDMENT: 90mm MIN. EDGE DISTANCE: 70mm MIN. MATERIAL THICKNESS: 100mm + SHANK LENGTH MIN. CONDITION TYPE: JD4 JOINT GROUP AS PER CLAUSE 4.2.3.4 OF AS 1720.1:2010	N/A	
WALL PLATE	1.8 kN	1.25 kN	ANCHOR: 1x M8 S/S ROD HILTI HIT-V-R OR EQUIVALENT ADHESIVE: HILTI HIT-HY 200-R OR EQUIVALENT MIN. EMBEDMENT: 80mm (NON-CRACKED) MIN. EDGE DISTANCE: 40mm MIN. MATERIAL THICKNESS: 110mm MIN. MATERIAL GRADE: 25MPa (NON-CRACKED)	ANCHOR: 1x 14G S/S SCREW MIN. EMBEDMENT: 45mm MIN. EDGE DISTANCE: 63mm MIN. MATERIAL THICKNESS: 50mm + SHANK LENGTH MIN. CONDITION TYPE: JD4 JOINT GROUP AS PER CLAUSE 4.2.3.4 OF AS 1720.1:2010	ANCHOR: 1x M6 S/S ROD HILTI HIT-V-R/HAS-E-R OR EQUIVALENT ADHESIVE: HILTI HIT-HY 70 OR EQUIVALENT MIN. EMBEDMENT: 80mm MIN. EDGE DISTANCE: 50mm +REFER TO HILTI HIT-HY 70 DATA SHEET FOR APPLICABLE BRICK MATERIAL AND SIZES FOR USE OF ANCHORS & INJECTION MORTAR	- WALL PLATE IS NOT SUITABLE FOR ATTACHMENT TO CLADDING. - MUST BE FIXED THROUGH TO STRUCTURAL COMPONENT ON THE HOUSE FRAME - DRILL OUT HOLE TO SUIT M8 STUD WHEN FIXED TO CONCRETE WALL.



- DESIGN NOTES:**
- D1. DESIGN LIFE 50 YEARS (RECOMMEND INSPECTION EVERY 10 YEARS BY A COMPETENT PERSON OR AFTER A SIGNIFICANT WEATHER EVENT AT OR ABOVE "SL" SITE WIND SPEEDS)
  - D2. WIND LOAD IN ACCORDANCE WITH AS/NZS 1170.1:2002 - TABLE 3.3 C3 - AREAS WITHOUT OBSTACLES FOR MOVING PEOPLE AND NOT SUSCEPTIBLE TO OVER-CROWDING AND AS/NZS 1170.2:2011 - REGION A AND B (AUSTRALIA), TERRAIN CATEGORY 1
  - D3. MAX INSTALLATION HEIGHT: 10m
  - D4. 3 PANEL GLASS ARRANGEMENT PER SECTION, UP TO 1200 X 970MM PANELS TO A MAXIMUM SPAN OF 3756MM BETWEEN SUPPORTS
  - D5. V<sub>sif,β</sub> SITE WIND SPEED - ULS: 63.37m/s, SLS - 53.7m/s. (NON CYCLONIC WINDS)
  - D6. BALUSTRADE SYSTEM SUITABLE FOR BUILDING CLASSIFICATIONS 1-5
  - D7. BALUSTRADE SYSTEM COMPLIES WITH AS 1288 CLAUSE 3.2.1, 3.2.2, 3.3.1(a) AND 3.3.1(c)

- DESIGN EXCLUSIONS:**
- DE1. CONCRETE STRUCTURE.
  - DE2. TOUGHENED SAFETY GLASS.
  - DE3. CYCLONIC WIND REGIONS.

<b>GRG CONSULTING ENGINEERS</b>	
CERTIFIED BY:	G. GIBSON
RPEQ No:	07587
CPEng No:	1302262
RBP CIVIL:	EC41474
RBP MECH:	EM41473
CERTIFICATION No:	DC-704
PROJECT No:	20-3169
DATE:	26/02/2021

**CONSTRUCTION ISSUE**

REV.	BY	DATE	DESCRIPTION	CHK'D	APP.
3	JL	26/02/2021	ADDED DETAILED FIXING SPECIFICATIONS	JL	GRG
2	JL	21/12/2020	FOR CONSTRUCTION	JL	GRG
1	JAS	17/12/2020	CLIENT REVIEW AND APPROVAL ISSUE	JL	--

DWG No.	DESCRIPTION

**GRG CONSULTING ENGINEERS**

ACN 099 978 239 ABN 11 099 978 239

P.O. BOX 2815 NEWFARM, QUEENSLAND 4005

Phone: 07 3085 1000 Email: mail@grgengineers.com.au

DESIGNED:	J. LU	21/12/2020
DRAWN:	J. STORER	17/12/2020
DWG. CHECKED:	J. LU	17/12/2020
PROJ. CHECKED:	S. BOLLAND	21/12/2020
APPROVED:	G. GIBSON	23/12/2020
SCALE:	1:10 U.N.O	DO NOT SCALE

ALL DIMENSIONS IN mm.

CLIENT: PROTECTOR PREMIUM

PROJECT: BALUSTRADE SPIGOT CERTIFICATION

**SLIMLINE AND CHISEL BALUSTRADE SPIGOT**

**GENERAL ARRANGEMENT AND DETAILS**

**3 x GLASS PANELS**

DRAWING NUMBER	<b>20-3169-001</b>
REVISION:	<b>3</b>
THIRD ANGLE PROJECTION	<b>A1</b>