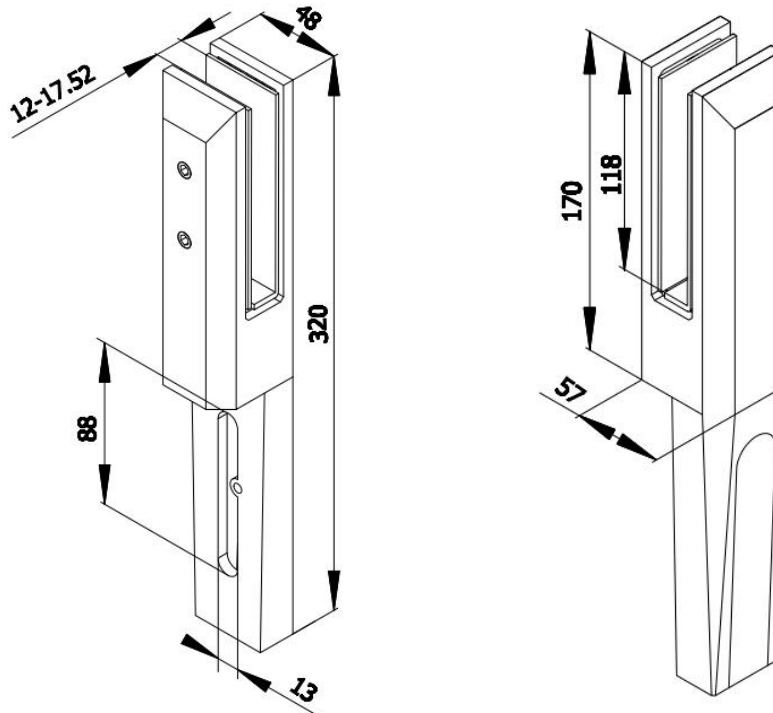


Test Date: 11-May-2021

Product

G064857C Duplex 2205 Y Edge Mounted Spigot

Drawings & Dimensions (mm)



Chemical Composition (%)

CHEMICAL COMPOSITION %									
Grade.	C	Si	Mn	P	S	Cr	Ni	Mo	N
GR 2205	0.025	0.86	1.26	0.021	0.008	21.96	5.52	3.52	0.15

Test method

1. Connect the force measuring device to test object.
2. Place the flat end of the test object against the test component at its most flexible point.
3. Using the force measuring device, apply a force of 200 lbs, 200 lbs plus 1.5 safety factor for 1 minute. Remove the force and measure the zero load displacement.
4. Inspect the component for –
 - (a) breakage or sign of fracture of any component; and
 - (b) loosening of any component that will impair the effectiveness of the panel.

Load Test

Test #1, Steel Plate Size:

39.37 in x 43.3 in x 1/2 in (12 mm) (Width x Height x Thickness)

Install two spigots and spigot spacing: 31.5 in

Test Results

Steel Plate	Top-edge Horizontal	Load	Testing Load	Deflection under load (in)	Permanent deflection after load removed (in)
		lbs	lbs		
W x H 39.37 x 43.3 x 1/2 in	Outward	200	206	1.96	0.20
		300	308	3.86	0.35

Test #2, Glass Panel Size:

59 in x 43.3 in x 1/2 in (12 mm) (Width x Height x Thickness)

Install three spigots and spigot spacing: 21.7 in

Test Results

Glass Panel	Top-edge Horizontal	Load	Testing Load	Deflection under load (in)	Permanent deflection after load removed (in)
		lbs	lbs		
W x H 59 x 43.3 x 1/2 in	Outward	200	207	2.05	0.03
		240	244	2.42	0.13

Test #3, Glass Panel Size:

59 in x 43.3 in x 11/16 in lam.(17.52mm) (Width x Height x Thickness)

Install three spigots and spigot spacing: 21.7 in

Test Results

Glass Panel	Top-edge Horizontal	Load	Testing Load	Deflection under load (in)	Permanent deflection after load removed (in)
		lbs	lbs		
W x H 59 x 43.3 x 11/16 in	Outward	200	208	1.66	0.16
		270	275	2.35	0.19

- (a) No breakage or sign of fracture of any component
- (b) No loosening of any component that will impair the effectiveness of the panel.

The deflection at the point of the load must not exceed the effective height of the support divided by 12 when a load of 200 lbs is reached.

$$\frac{h}{12} = \frac{43}{12} = 3.5(\text{inch})$$

Test Picture



Summary

The results of the tests complied with the requirements of National Building Code 9.8.8.2 [2] and Ontario Building Code 4.1.5.14 [1] and ATSM Standards E985.

Chen Jian / Engineer