

ADITYA BIRLA



HINDALCO

RAILING SYSTEM

TECHNICAL SPECIFICATION

Railing Certified as per

Wind: 2.5 kPa as per ASTM E330

Infill Load Test -4 KN as per ASTM E2353

Uniform Load Test -1.165 KN as per ASTM E2353

Concentrated Load Test -1.170 KN as per ASTM E2353

Short BagTest –Class 1 as per ASTM E2353

Technical information

Max Railing height : 1000mm

Max Railing Width : limitless

Glass Thickness : 15.52 to 17.52 mm

Laminated Glass

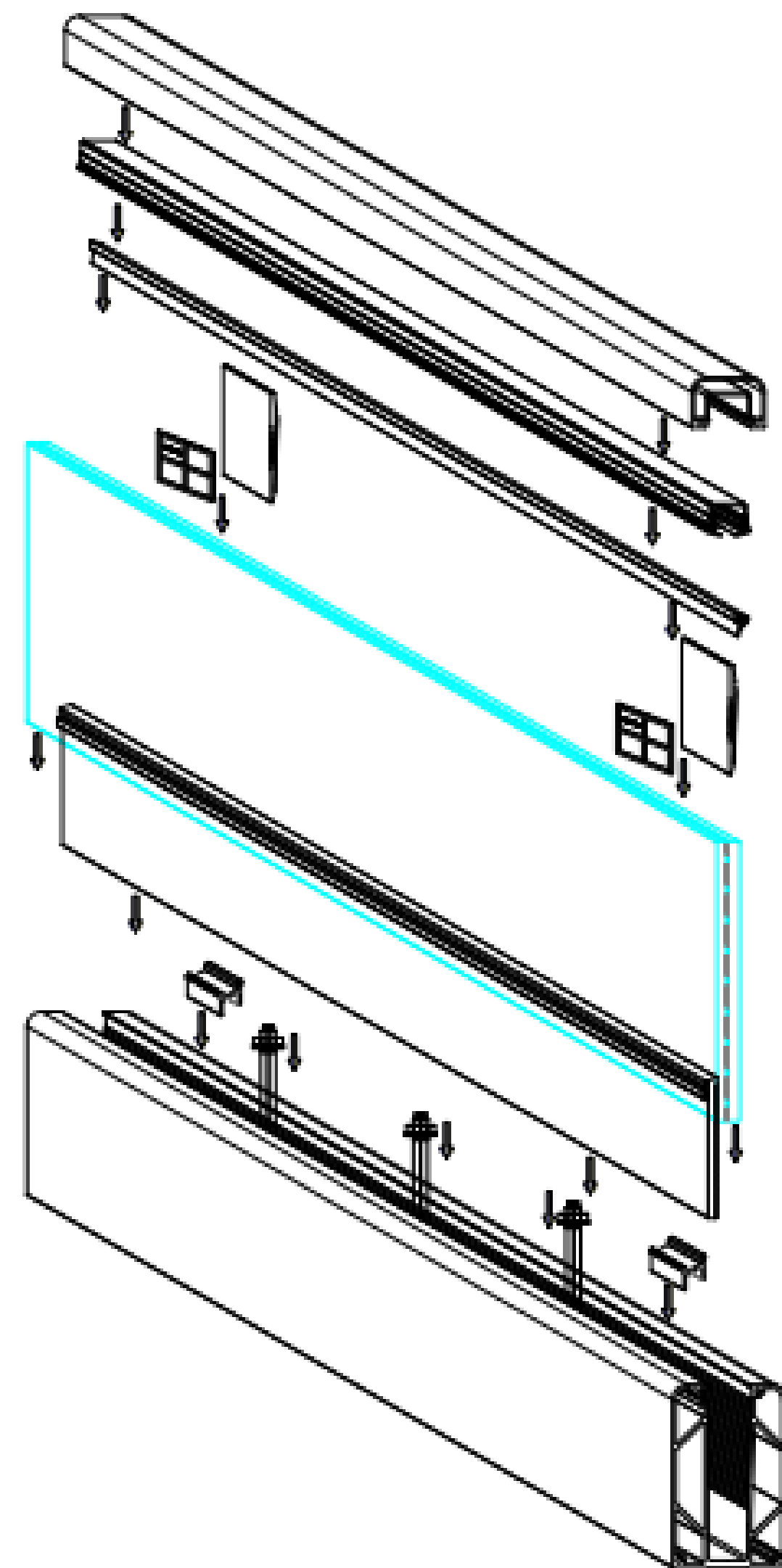
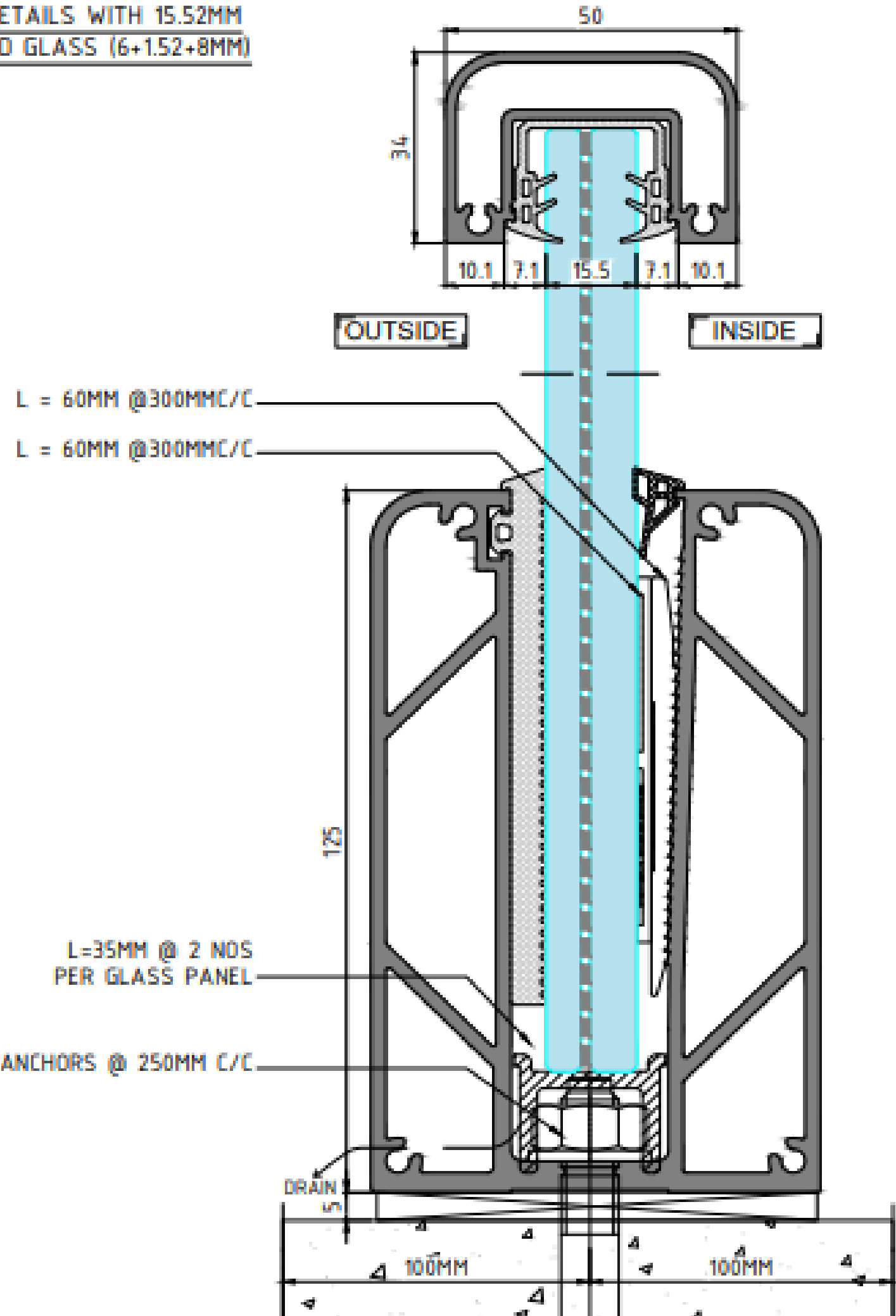
Section height – 125 mm

Maximum Human load -75 kg/mtr



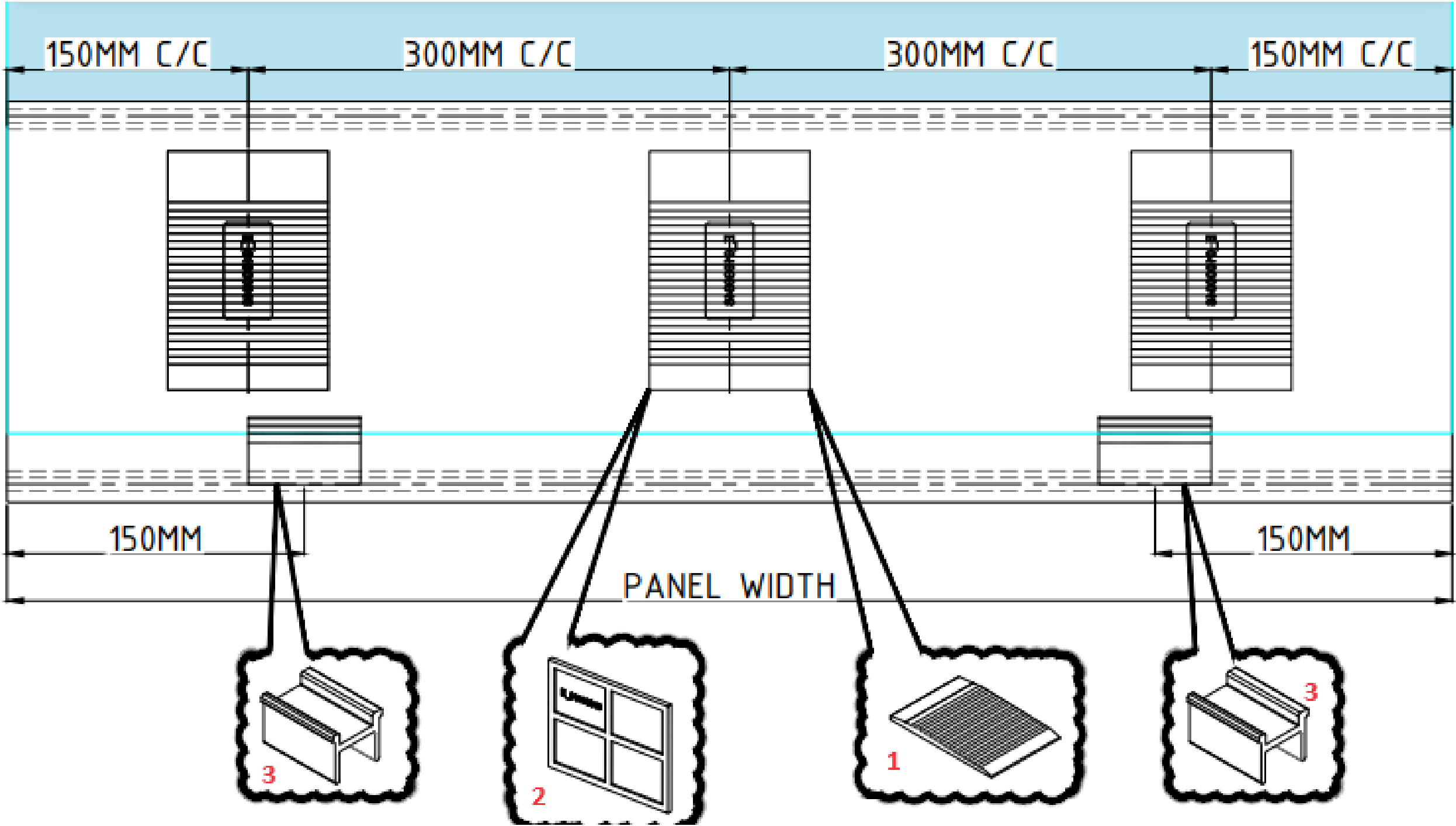
CONCEPTUAL DETAIL

RAILING DETAILS WITH 15.52MM
LAMINATED GLASS (6+1.52+8MM)



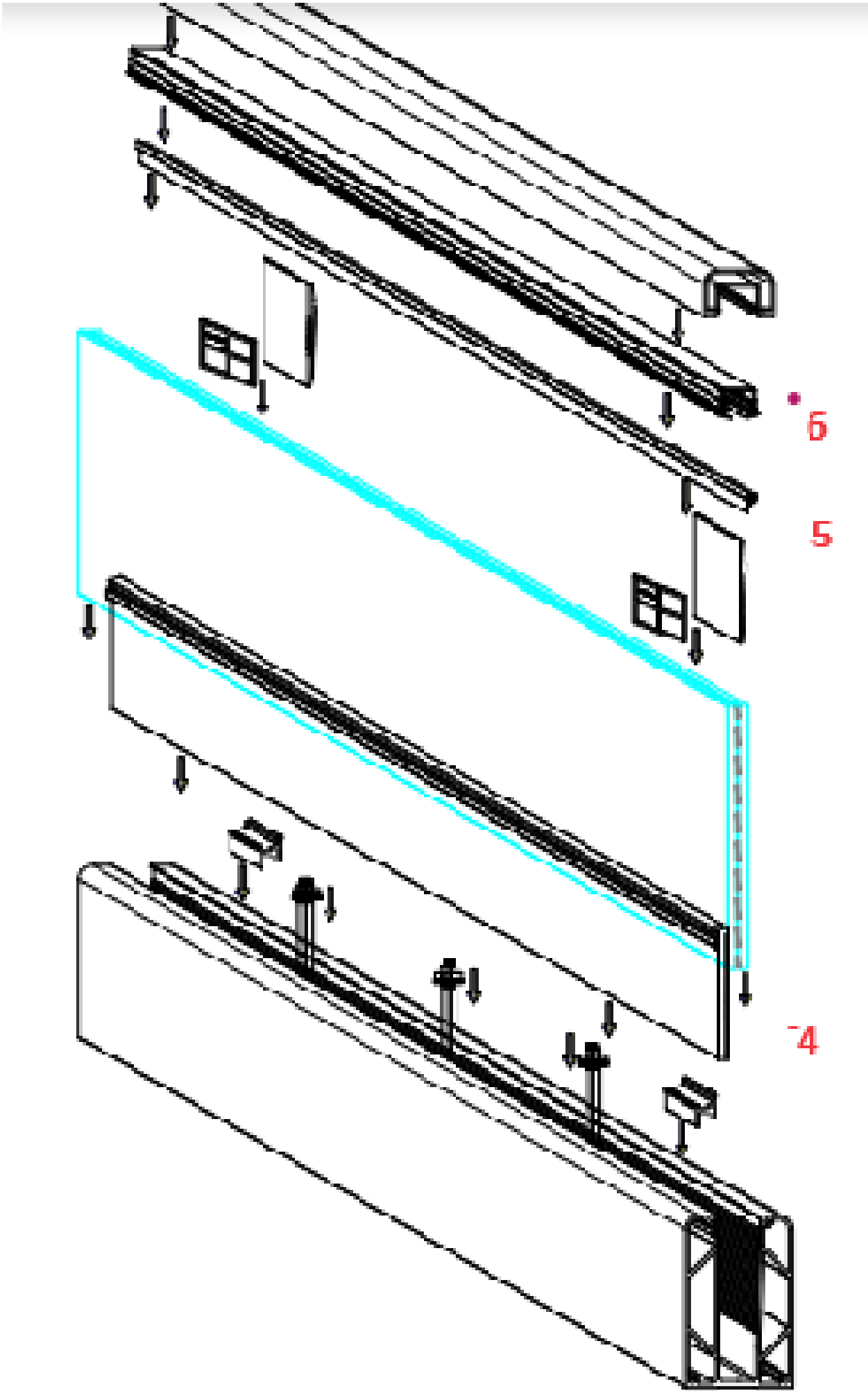
HARDWARE CONSUMPTION / METER LENGTH

Sr. No.	Hardware	Qty.
1	Wedge Block	3 Nos.
2	Packing shim IH371Z222803/ IH371Z2220804	3 Nos.
3	Glass support L=35mm	2 Nos.



HARDWARE CONSUMPTION / METER LENGTH

Sr. No.	Hardware	Qty.
4	Railing Gasket Outside(IH313Z22805)	1 Mtr.
5	Push in Gasket(IH321A22232)	1 Mtr.
6	Top Cover Gasket (IH313Z22800)	1 Mtr.



PRODUCT PHOTOGRAPH



Top Rail will be Rectangular in Shape

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5. SUMMARY OF TEST RESULTS

System : ETE FR RAILING SYSTEM.
Glass : 17.52 mm Laminated glass
(8mm clear toughened + 1.52mm SGP + 8mm clear toughened)

5.1 Horizontal static load to infill glass area (ASTM E-2353)

Test load (N)	Observation	Remarks
4000	Glass is retained in the framing system and remains unbroken	—

Photo (1) shows a view of the horizontal static infill loading test on the specimen.

5.2 Uniform load test (ASTM E-2353)

Test Load (N)	Permissible Limit (mm)	Deflection (mm)	Remarks
1165	59	58	—

Residual deflection of the glass rail at end of the test = 1.9 mm

5.3 Concentrated load test (ASTM E-2353)

Test Load (N)	Permissible Limit (mm)	Deflection (mm)	Remarks
1170	59	58	—

Residual deflection of the glass rail at end of the test = 1.1 mm

5.4 Shot bag traction test (ASTM E-2353)

Shot bag weight and drop height	Observation	Remarks
45.4 Kg Lead bag drop height 1525mm	Glazing unbroken Classification - 1 as per ASTM E 2353	—



ACTUAL TEST PHOTOGRAPH

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7. PHOTOS



Photo (1) - Stainless steel reaction frame for infill test



Photo (2) - Stainless steel reaction frame for uniform load test

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Photo (3) - Stainless steel reaction frame for concentrated load test

