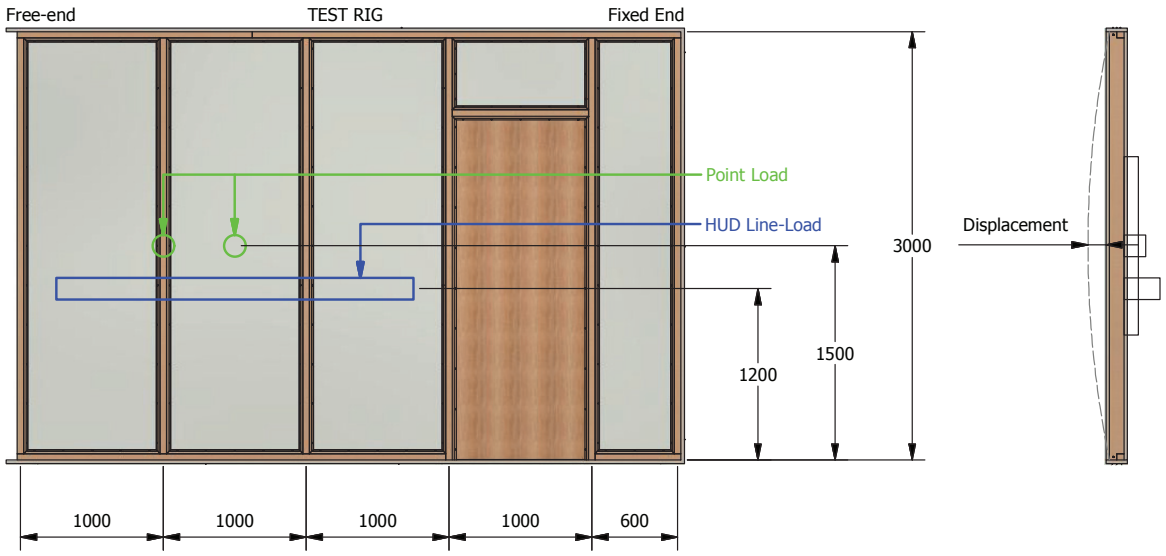
Forza Glazed Timber Framed Screens

Actual Test Results BTC180575 comparison to CAD Finite Element Analysis Simulation

Specimen Elevation and Deflection

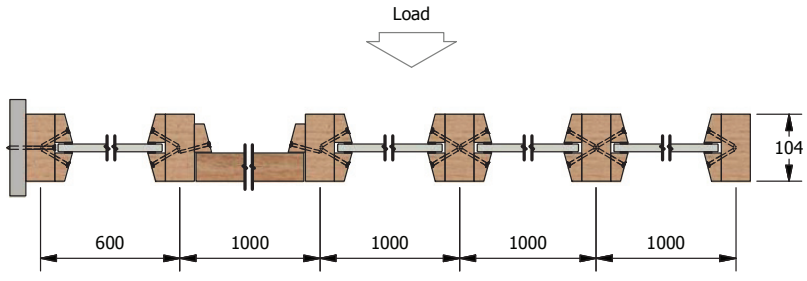


Test	Test Annex BS 5234-2	Applied Load	Result Summary BTC180575 Maximum Displacement	CAD FEA Simulation Maximum Displacement	Margin
Determination of partition stiffness	A	500 N on glass	3.6mm	3.1mm	14%
		500 N on mullion	5.1mm	4.5mm	12%
Determination of resistance to crowd pressure	G	3750 N across mullion	21.1mm	18.7mm	11%

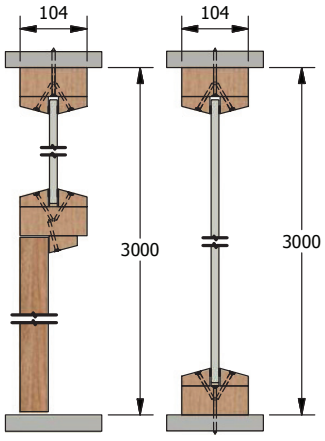
Comparison: Actual results within +15% margin adjustment of FEA.

Details

Mullion



Head and Base



TEST MATERIALS

Glass - GFP12 - 60/0 (Class 2B2)
Glazing Gasket - 12 x 5mm cc Foam
Frame - 104 x 45mm Oak Veneered MDF
Bead - 44 x 27mm Oak Veneered MDF
Door - FCS30 2400 x 950 x 44mm Oak Veneered FD30 core (weight: 62 kg)
Hinge - 1 1/2 pairs 102mm Stainless Steel Butt-hinges
Frame fixings - No.10 x 75mm Timber Screws
Bead fixings - No.10 x 50mm Timber Screws
Hinge fixings - No.10 x 32mm Timber Screws

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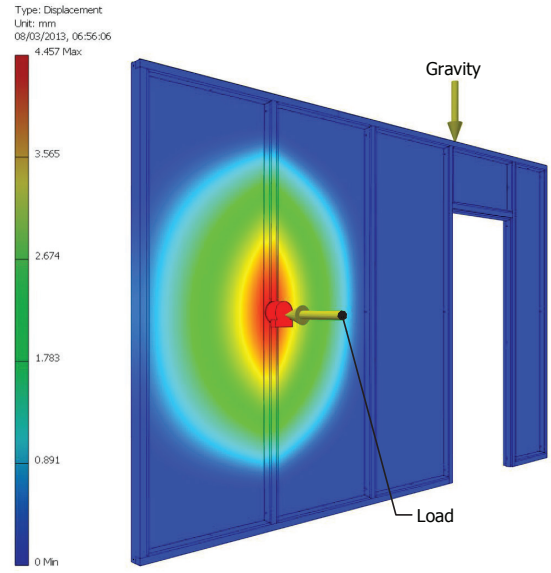
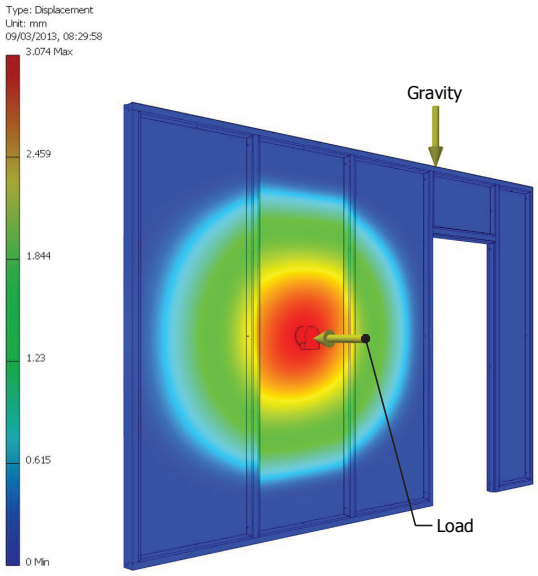
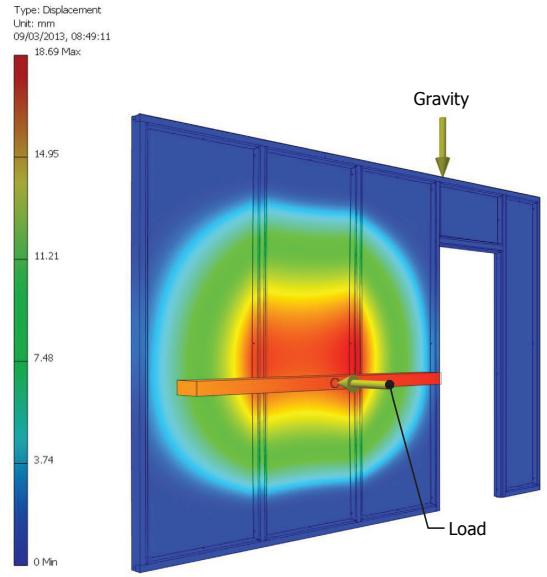
Point Load applied to part of the mullion (kN)
Result displacement = 4.5mm - Imposed Load 500 N



Point Load applied to part of the infill (kN)
Result displacement = 3.1mm - Imposed Load 500 N



Horizontal Uniformly Distributed Line-load (kN/m)(3750N)
Result displacement = 18.7mm - Imposed Load 1.5 kN/m



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