Load Calculations

All of the loads are either above standard-width doors and windows.

There are no point loads above and cavities, and no joists are bedded within the load triangles.

A value of g corresponding to 9.81 N/kg has been assumed.

Front door	
Opening width (mm)	910
Load triangle height (mm)	455
Load triangle area (sq. m)	0.21
Inner skin depth (mm)	102.5
Inner skin density (kg/m3)	1950
Outer skin depth (mm)	#N/A
Outer skin density (kg/m3)	#N/A
Mass within load triangle (kg)	41.38
Load (kN)	0.41

Hall to study	
Opening width (mm)	832
Load triangle height (mm)	416
Load triangle area (sq. m)	0.17
Inner skin depth (mm)	102.5
Inner skin density (kg/m3)	2000
Outer skin depth (mm)	102.5
Outer skin density (kg/m3)	2000
Mass within load triangle (kg)	70.95
Load (kN)	0.70

Kitchen to rear room	
Opening width (mm)	832
Load triangle height (mm)	416
Load triangle area (sq. m)	0.17
Inner skin depth (mm)	102.5
Inner skin density (kg/m3)	2000
Outer skin depth (mm)	102.5
Outer skin density (kg/m3)	2000
Mass within load triangle (kg)	70.95
Load (kN)	0.70

Back door	
Opening width (mm)	832
Load triangle height (mm)	416
Load triangle area (sq. m)	0.17
Inner skin depth (mm)	102.5
Inner skin density (kg/m3)	1950
Outer skin depth (mm)	102.5
Outer skin density (kg/m3)	1950
Mass within load triangle (kg)	69.18
Load (kN)	0.68

WC window	
Opening width (mm)	500
Load triangle height (mm)	250
Load triangle area (sq. m)	0.06
Inner skin depth (mm)	102.5
Inner skin density (kg/m3)	2000
Outer skin depth (mm)	102.5
Outer skin density (kg/m3)	2000
Mass within load triangle (kg)	25.63
Load (kN)	0.25