

Test Results

Wall Cladding Panels (for interiors) Type WC1 with Ver-T-Fix System

Test Methods:

Positive and negative wind load tests were carried out on Ver T fix plain panels. The items tested consisted of a 900mm square plain aluminium panel and the Ver T Fix fixing system.

The panel under test was fixed to a steel frame on the vertical edges only by means of the Ver T Fix fixing system. An air bag, connected to pressure control via a manifold, was placed between the panel and a reaction frame. The air bag was located between the face of the panel and reaction frame for the positive wind load, and between the rear of the panel and reaction frame for the negative wind load. Horizontal deflection at the centre of the panel was recorded by means of a cable transducer connected to a datalogger. Pressure was monitored by means of a digital manometer connected to the air inlet manifold.

Pressure was increased steadily in increments, with the deflection readings recorded at each increment, until failure occurred. The failure mode for the positive wind load tests was by shearing of the nibs of the support system. The failure mode for the negative wind load tests was by bending of the nibs on the support system. Loading increments and results are detailed in Tables 8 and 9.

Test Report No. BT07725TGE issued by CERAM Research Limited (now known as Lucideon).

Test Results:

Table 8: Positive Wind Load – Ver-T-Fix System

Load (kPa)	Deflection (mm)
0.0	0.00
0.30	7.21
0.60	10.29
1.05	35.54
1.35	50.14
1.65	61.63
1.95	70.42
2.25	75.63
Failure Load (Kpa)	3.23

Table 9: Negative Wind Load – Ver-T-Fix System

Load (Kpa)	Deflection (mm)
0.0	0.00
0.20	6.99
0.40	9.23
0.60	13.25
Failure Load (Kpa)	0.65

Note:

The above results show Ver T Fix performance levels comfortably exceeding any internal air pressures that are likely to be encountered in buildings.