Yale Door and Window Solutions

YTR260626

Subject: Yale Frame Bracket: Load bearing test of YFBR75 brackets (without additional bracket on timber)

Requested By: Steve Hall

Testing Started: 22nd May 2026

Test Engineer: Gary Denley
Philip Swinfield

Report By: Philip Swinfield

Head Office and Centre of Excellence for Door Products
Yale Door and Window Solutions
School Street, Willenhall
West Midlands WV13 3PW UK
Tel: +44 (0)1902 366800
Email: info@yaledws.co.uk
www.yaledws.co.uk

Centre of Excellence for Window Products
Yale Door and Window Solutions
Kingsmead Industrial Estate
Princess Elizabeth Way, Cheltenham
Gloucestershire
GL51 7RE UK
Tel: +44 (0)1242 221200

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Sample Information

Profile:	Rehau Calibre
Size (mm):	1200 x 1200
Window Type:	Dummy Vent
Weight:	37kg
Window Bracket:	YFBR75
Fixings to window:	4.8mm x 19mm Pan Head
Fixings to timber:	4.5mm x 50mm CSK Woodscrew

6 Brackets were fitted, 3 on each vertical side.
These were fitted 100mm from the corners and centrally

Procedure

1. The window was pushed outward to its maximum extent, and retaining screws were secured through the brackets into the timber frame.

2. The window was fitted with three metal datum points to measure from, fitted to the left, right and middle of the frame.

3. Initial measurements were recorded at this point.

4. A total weight of 203 kg was added, consisting of 100 kg weights on each side, plus an additional 3 kg for the brackets, chains, and shackles.

5. Measurements were taken after the weights were added.

6. The window was then left undisturbed for 72 hours, and measurements were taken.

7. After 72 hours, the window was left for a total of 96 hours, and measurements were taken again.

8. The added weights were removed, and the window was left undisturbed for 1 minute. Measurements were recorded.

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Drop Measurements

Drop Effect of Adding 203kg To Window				
From	To	Drop (mm)		
		Left	Middle	Right
Window 37kg before test	Window & Weight 37kg at 0 hours	0	0	0
Window 37kg before test	Window & Weight 240kg at 0 hours	2.62	1.91	1.65
Window 37kg before test	Window & Weight 240kg at 72 Hours	2.76	2.32434 1.96	1.96
Window 37kg before test	Window & Weight 244kg at 96 Hours	3.15	2.94	2.22
Window 37kg before test	Window & Weight 37kg at 96 Hours	2.69	1.94	1.48

Fully Weighted Window - Drop Over Time				
From	To	Drop (mm)		
		Left	Middle	Right
Window 37kg before test	Window & Weight 240kg at 0 hours	2.62	1.91	1.65
Window 37kg before test	Window & Weight 240kg at 72 Hours	2.76	2.32434 1.96	1.96
Window 37kg before test	Window & Weight 244kg at 96 Hours	3.15	2.94	2.22

Drop Effect After Removing Additional Weight				
From	To	Drop (mm)		
		Left	Middle	Right
Window 37kg before test	Window & Weight 37kg at 0 hours	0	0	0
Window 37kg before test	Window & Weight 37kg at 96 Hours	2.69	1.94	1.48

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Photographs



Figure 1: Window In Rig with No Weights prior to push test



Figure 2: Window weighted to 240kg

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Figure 3: Metal datum points

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