

July 9, 2026

Project 10013624

Railock LLC.
6444 Portland Ave
Minneapolis, MN 55423

Re: Handrail Bracket Testing

This report is a summary of load testing performed on 3 samples of Railock handrail brackets supplied by the client.

Test Method

Testing was performed according to ICC-ES AC273 section 4.3 and ASTM E935 where applicable and adapted to the components being tested.

Test Samples

Test samples consisted of complete Railock assemblies and were installed to a wood substrate using the manufacturers supplied hardware.

Test Results

The typical test setup used is shown in figure 1 and test results are in table 1 below. The test was performed in both horizontal and vertical directions. A 200 lb load was applied and released to measure deflection followed by loading to 600 lb. Two samples were loaded to failure in the horizontal direction and one in the vertical direction at the conclusion of the testing.

Figure 1: Typical Test Setup

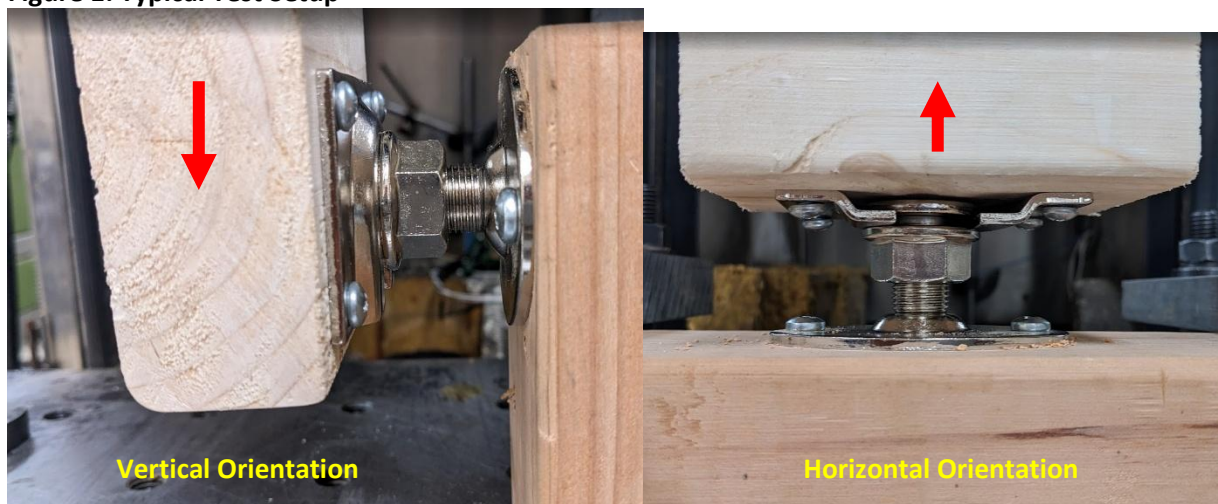


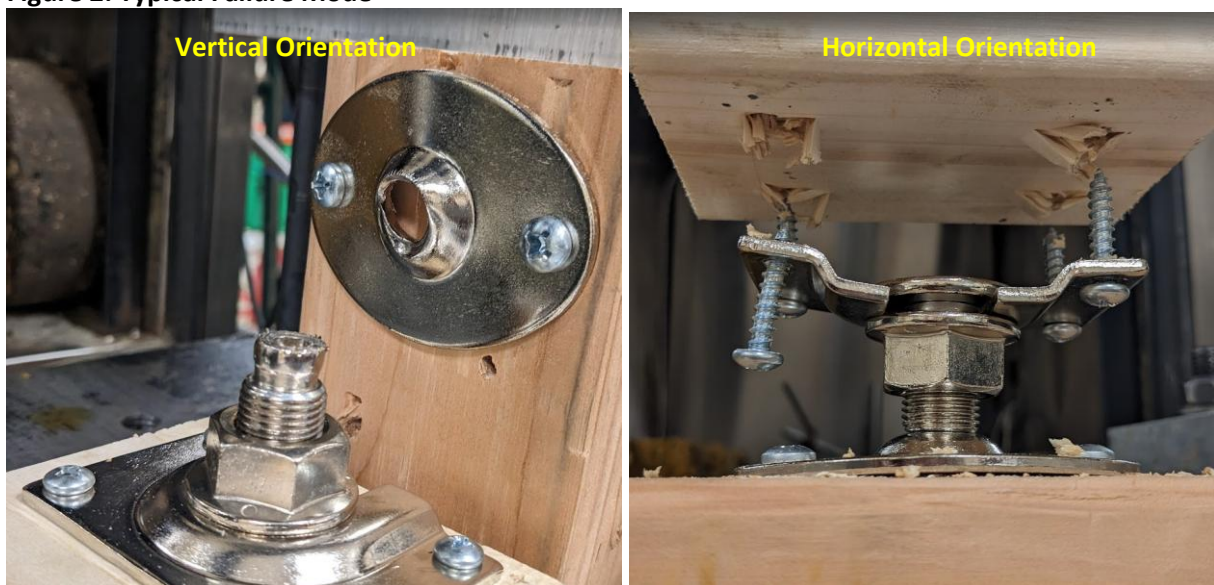
Table 1: Load Test Results

Sample ID/Test Location	Load Direction	Test Load (lbf)	Deflection (in)	Permanent Deflection (in)	Peak Load (lbf)	Acceptance Criteria	Test Result
1	Horizontal	200	0.010	0.003	1,496*	Peak Load > 600 lbf	Pass
2	Horizontal	200	0.011	0.002	1,713*		Pass
3	Horizontal	200	0.010	0.003	600		Pass
1	Vertical	200	0.068	0.019	684*	Peak Load > 600 lbf	Pass
2	Vertical	200	0.065	0.012	600		Pass
3	Vertical	200	0.066	0.015	600		Pass

*sample tested to failure

The typical failure mode for the samples tested to failure are shown in figure 2 below.

Figure 2: Typical Failure Mode



General

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

It has been a pleasure providing these testing services for you. If you have any questions regarding this report, please call Erik Knudson at 952.995.2384.

Sincerely,

BRAUN INTERTEC CORPORATION



Erik J. Knudson
Material Testing Technician