

Acrovyn® 4000 Handrail Impact Testing



August 11, 2010

Mr. Dave Laidacker
 Construction Specialties, Inc.
 4660 Paradise Road
 P.O. Box 378
 Milton, Pennsylvania 17847-0378

RE: HANDRAIL IMPACT LOAD TEST SUMMARY

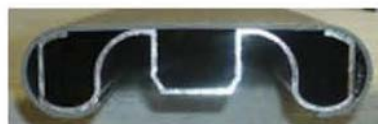
Dear Mr. Laidacker:

Construction Specialties, Inc. contracted Architectural Testing, Inc., an independent test laboratory, to witness testing of their New Acrovyn® 4000 handrail and a competitor handrail at the Milton, Pennsylvania facility. Ram-type impact tests in general accordance with Section 18 of ASTM F 476-84 (Reapproved 2002), *Standard Test Methods for Security of Swinging Door Assemblies* were conducted for the two products. Three samples of each product were mounted to 1/2" thick standard interior drywall sections over steel studs. Each individual sample was secured to a rigid mock wall structure and impacted at its center (99.2 lb impactor per Appendix X.1 of ASTM F 476) starting at a height of 1" (8.27 ft·lb) with subsequent impacts each incremented by 2" (16.54 ft·lb) until a failure occurred. Failure was defined as cracking of the exposed drywall face or metal support damage resulting in non-serviceability of the product. Each product utilized a continuous rigid aluminum retainer. A summary of the evaluations is listed below.

Result	HRB-4CN	Competitor
Failure Height	19"	19"
Failure Type	None - still serviceable	



New Acrovyn® 4000 HRB-4CN



Competitor Model A

Full details of these tests are available in report 98909.01-106-47. If you have any questions regarding this test summary, please feel free to contact me at your convenience.

For ARCHITECTURAL TESTING, INC.

Digitally Signed by: Todd D. Burroughs

Todd D. Burroughs
 Senior Project Engineer - Components / Materials Testing