

Acrovyn® 4000 Crash Rail Impact Testing



January 3, 2011

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

RE: CRASH RAIL 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® SCR-48 Crash Rails 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 mounting styles. Three samples of each mounting style were installed on 5/8" 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 2" (16.53 ft·lb) with subsequent impacts each incremented by 2" (16.53 ft·lb) until a failure occurred. Failure was defined as cracking of the exposed drywall face or product damage resulting in non-serviceability of the product or 3/8" indentation. One product utilized a continuous rigid aluminum retainer and continuous polymer cushion, the other utilized a clip connection. A summary of the evaluations is listed below.

Result	Continuous Retainer Mount	Clip Mount
Failure Height	10"	8"
Failure Type	>3/8" indentation	Drywall Cracked - Cover Serviceable



**SCR-48
 Continuous Retainer**



**SCR-48
 Clip Mount**

Full details of these tests are available in report A4778.03-106-47. 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