

**| Acrovyn® 4000 Wall Panel Impact Testing – Sure Snap™**



December 2, 2015

Mr. Dustin Gardner  
Construction Specialties, Inc.  
Research and Development  
193 Miller Avenue  
Montgomery, Pennsylvania 17752

Dear Mr. Gardner:

Architectural Testing, Inc., an Intertek company ("Intertek-ATI"), was contracted by Construction Specialties, Inc. to witness wall panel ram impact tests of their SureSnap™ System. Testing was performed at Construction Specialties, Inc.'s facility in Montgomery, Pennsylvania.

The test specimens were evaluated in accordance with accordance with ASTM F476-14, *Standard Test Methods for Security of Swinging Door Assemblies*, Section 18

Panels were individually mounted to 5/8 in. thick drywall using SnapSkru® SPM™ Self-Drilling Drywall Anchors with 1-5/8 in. self-tapping drywall screws mounting the male clip to the drywall. The drywall was mounted to 20 gage steel studs that were placed at 16 in. on center. The female clip was mounted to the SureSnap™ System panel using 3/8 in. Euro Screws, one clip was placed 2 in. in from each edge in the corner of the panel. Once the clips were mounted to the drywall and the back of the panel, the panel was then "clipped" into position by snapping the male clip into the female clip. Each panel was impacted at a starting height of 1 in. (8.27 ft-lb). Subsequent impacts were incremented 1 in. (8.27 ft-lb) higher than the previous impact until a failure occurred. A failure is defined as an indentation greater than 3/8 in. or when the wall was no longer serviceable. This process (compounded impacting) was repeated on each panel using a 99.2 lb ram for impacts. Indentations were measured using a framing square across the impact area and pin gauges between the square and the panel.

Average failure height was 13.33 in. which resulted in an impact energy of 110.22 ft-lb.

*Reference should be made to Intertek-ATI Report No. F2293.02-106-47 for complete test specimen description and results. This summary alone is not a complete report.*

For INTERTEK-ATI:

Digitally Signed by: Dennis Fassnacht

Dennis Fassnacht Jr.  
Technician II  
Components / Materials Testing

Digitally Signed by: Joseph M. Brickner

Joseph M. Brickner  
Laboratory Supervisor  
Components / Materials Testing

DMF:jmb/kf  
cc: F2293.01-106-47