| Acrovyn by Design® Bacteria Testing



January 7, 2014

Mr. Tom Gay Product Development Engineer Construction Specialties, Inc. 193 Miller Avenue Montgomery, PA 17752

RE: Acrovyn By Design Reverse Print Bacteria Test Summary

Dear Mr. Gay,

Construction Specialties, Inc. contracted Biosan Laboratories, Inc., an independent test laboratory, to evaluate their Acrovyn By Design Reverse Print product for resistance to bacteria in accordance with ASTM G22-76 (Reapproved 1996), Standard Practice for Determining Resistance of Plastics to Bacteria (Withdrawn from active status 2002). The Acrovyn By Design Reverse Print samples resisted growth of the Pseudomonas aeruginosa bacterium culture.

Each sample measured nominally 0.040" thick by 2"square.

All curing, conditioning and testing were performed at standard laboratory conditions. The test specimens were placed in Nutrient Agar inoculated with a suspension of *Pseudomonas aeruginosa* (ATCC No. 13388). The test specimens were incubated at 37°C and not less than 85% relative humidity for a period of 21 days and then observed under 40x magnification for their ability to support growth. The rating for this method is growth or no growth. The Acrovyn By Design Reverse Print sample demonstrated No Growth in the ASTM G22-76 (Reapproved 1996), *Standard Practice for Determining Resistance of Plastics to Bacteria* (Withdrawn from active status 2002) test method.

Full details of these tests are available in the report issued December 27, 2013. If you have any questions regarding this test summary, please feel free to contact Biosan Laboratories Inc., at your convenience.

Erica B. Rossmoore Microbiology Supervisor Biosan Laboratories, Inc.