

CLIENT: US Polymers
910 Bandini Blvd.
Commerce, CA 90040

Test Report No: RJ8315

Date: December 15, 2021

SAMPLE ID: The Client identified the following test materials as **Duramax PVC Wall Panels.**

SAMPLING: Test Samples were submitted directly by the client.

DATE OF RECEIPT: Samples were received on November 2, 2021

TESTING PERIOD: December 13, 2021 and December 14, 2021

AUTHORIZATION: Quote 21MB10252 authorized by Ben Panaristo on October 36, 2021.

TEST PROCEDURE: Material correlation was determined from testing in accordance with ASTM D4226-16 *Procedure A, Standard Test Methods for Impact Resistance of Rigid Poly (Vinyl Chloride) (PVC) Building Products.*

TEST RESULTS: Detailed test results are presented in the subsequent pages of this report.

Prepared By



Madelaine Karpuzyan
Engineering Technician

**Signed for and on behalf of
QAI Laboratories**

Jason Friedrich P.E.
Engineering Manager

Test Specimen and Procedure

Testing was performed in accordance with ASTM D4226-16, Procedure A. Prior to testing, the specimens were conditioned for a minimum of 40 hours under $73.4 \pm 3.6^{\circ}\text{F}$ and $50 \pm 10\%$ relative humidity. A Duramax PVC strip measuring 5-inches x 16-inches with an average thickness of 0.042-inches was placed in an impactor test machine. To determine the thickness, values were taken at five uniform points down the length of the specimen and an average value was calculated. Using a standard falling 8-pound weight and an impactor head with configuration C.125, the PVC was impacted for an initial six times to determine the approximated starting point of the test at 3-inches. Once the starting height was determined the specimen was then impacted 20 times with each impact measuring 1.5" apart. The Bruceton Staircase Method was used to determine the failure level.

Test Results and Findings

Mean Failure Height (in)	Standard Deviation (in)	Mean Failure Energy (in-lbf)	Normalized Mean Failure Energy (lbf)
4.333	0.796	34.667	828.157

APPENDIX: Photos of Specimen tested in accordance with ASTM D4226-16 Procedure A, Standard Test Methods for Impact Resistance of Rigid Poly (Vinyl Chloride) (PVC) Building Products



Photo 1: - Duramax PVC Wall Panels



Photo 2: Impact Tester with configuration C.125 head

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Photo 3: Typical Ductile Failure

End of Report

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