

TECHNICAL BULLETIN Alumaguard® Cold Adhesion Testing

Date: August 13, 2001

SUBJECT: Low Temperature Adhesion Testing

PRODUCTS TESTED: Alumaguard – Results apply to <u>ALL</u> Compounds

TEST METHOD: Low Temperature Flex and Overlap Bond Procedure

RESULTS:

Polyguard has concluded it's low temperature test on the **Alumaguard**. The test was done at both -15°F which is our standard testing range and then @ -31.5°F. The results are as follow:

There is very little variance in the testing results at the colder temperature.

Low Temperature Flex Procedure			
Test is done by placing 2 - 1" x 8" samples in freezer @ test temperature - condition for 2 hours. Remove samples separately & immediately bending them 90° over the mandrel at a uniform speed in approximately 2 seconds.			
@	Alumaguard aluminum	100% passed	
-15°F	Alumaguard white	100% passed	
@ -31.5°F	Alumaguard aluminum	5 out of 6 passed	
	Alumaguard white	100% passed	

Overlap Bond Procedure

Test is done by taking 2- 1" x 6" pieces of material, overlapping them then pressing them firmly together to achieve a full bond @77°F. Condition them in the freezer box for 2 hours @ test temperature. They are then pulled apart with the use of a tensile testing machine with a jaw separation rate of 20"/minute results are:

@	Alumaguard aluminum	19.5 lbs. per 1"
-15°F	Alumaguard white	17.2 lbs. per 1"
@	Alumaguard aluminum	14.7 lbs. per 1"
-31.5°F	Alumaguard white	19.3 lbs. per 1"

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This information is based on our best knowledge, but POLYGUARD cannot guarantee the results to be obtained.

