



OzKem Australia Pty Ltd
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ASTM D522 Method B, Testing of ECRA-SH coated aluminium panels

Results of the above testing: as per attached report

This report was prepared and reviewed by:

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Date: 15/02/2011



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Test Report

Client : Pole Star Coils Pvt Ltd.
Contact/Reported to : Mr Viveck Varma
Date : 15.02.2011
Test requirement : ASTM D522 Method B
Reference : D522/S1-5/BC030189
Sample details : THAN Supercoat, Jade Green, Super Hydrophobic (LME)
Substrate : 0.1mm aluminium fin, 150 x 50 mm
Sample number : 5

Test Details : ASTM D522 Method B
Test Conditions : as per ASTM D522 Method B

Abstract

Pole Star Coils Pvt. Ltd has provided 5 green coated samples on standard aluminium finstock for ASTM D522 testing. This report contains the results from one of the required tests outlined in the ASTM D522 "Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings". This is a flexibility test used to evaluate the resistance to cracking of an organic coating on a metal substrate. The testing was performed using five different size cylindrical mandrels (1", 3/4", 5/8", 1/2" and 3/8").

The coating tested was identified as ECRA-SH (LME)
Coating thickness range was within 9 to 10 microns.

Test Results

Mandrel size	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1"	NCD/100%	NCD/100%	NCD/100%	NCD/100%	NCD/100%
3/4"	NCD/100%	NCD/100%	NCD/100%	NCD/100%	NCD/100%
5/8"	NCD/100%	NCD/100%	NCD/100%	NCD/100%	NCD/100%
1/2"	NCD/100%	NCD/100%	NCD/100%	NCD/100%	NCD/100%
3/8"	NCD/100%	NCD/100%	NCD/100%	NCD/100%	NCD/100%

NB: NCD/100% stands for No Cracking Detected; 100% Adhesion.

Test rating

Five samples submitted had passed the test according to the ASTM D522.

Conclusion

Results from the flexibility testing of the Pole Star Coils Pvt. Ltd indicated that **ALL** of the coated finstock panels

PASSED the requirements for the flexibility testing (for each mandrel size) outlined.
The coated panels exhibited excellent flexibility and adhesion to the tested substrate.