



All Weather Insulated Panels

Subject: TCA’s adhesion test on All Weather Insulated panels coated with Texcote TC600 and Primer 27

Test Method: Two 10”X10” steel panels, coil coated with two different paints, were provided by All Weather Insulated Panels. These panels were coated with 5 different paint systems

1. TC600 at coverage of 50 sqft/gallon with no primer
2. Primer 27 solvent base at coverage of 350 sqft/gallon
3. Primer 27 water base at coverage of 350 sqft/gallon
4. TC600 at coverage of 50 sqft/gallon with Primer 27 solvent base at coverage of 350 sqft/gallon
5. TC600 at coverage of 50 sqft/gallon with Primer 27 water base at coverage of 350 sqft/gallon

A cure of 1 week at room temperature was maintained before adhesion test, ASTM D3359 (Measuring Adhesion by Tape Test) Method B (Cross-Cut Tape Test). This Method B requires scribing eleven parallel lines into the paint film, 2 mm apart, using a sharp razor blade. An identical number of lines are then scribed perpendicular to the first set of lines, resulting in a lattice pattern. Permacel 99 adhesive tape is firmly rubbed onto the cross-cut area and the tape then removed briskly. The extent of paint flaking, if any, is then determined and rated according to a scale provided in the ASTM method. The ratings range from 5B (no flaking), to 0B (flaking in excess of 65% of the cross-cut area) was used. The scale used for the rating is included in the test results.

Test Results: Following are the results, organized by paint system.

	Coverage	DC131W-151 Imperial White	DC1097 Epoxy Backer
TC600 only	50 sqft/gal	5B	5B
Primer 27 solvent base only	350 sqft/gal	5B	4B
Primer 27 water base only	350 sqft/gal	5B	3B
TC600 with Primer 27 solvent base	50 sqft/gal with 350 sqft/gal	5B	4B
TC600 with Primer 27 water base	50 sqft/gal with 350 sqft/gal	5B	4B

Scale table

5B	The edge of the cuts are completely smooth; none of the squares of the lattice is detached
4B	Small flakes of the coatings are detached at intersections, less than 5% of the area is affected.
3B	Small flakes of the coatings are detached along edges and at intersections of cuts. The area affected is 5 to 15% of the lattice.
2B	The coating has flaked along the edges and on parts of the squares. The area affected is 15 to 35% of the lattice.
1B	The coating has flaked along the edges of cuts in large ribbons and whole squares have detached. The area affected is 35 to 65% of the lattice.
0B	Flaking and detachment worse than Grade 1.

Conclusion: Over all, TC600 with no primer is the best results on both panels. Both type of Primer 27 adhere well to the panel # DC131W-151 and OK for the panel # DC1097.

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