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ABRASION

METHOD: ASTM-D968 – By Falling Abrasive using 100kg Ottawa Sand

RESULT:	<u>Initial Film Thickness</u>	<u>Final Film Thickness</u>	<u>Loss of Thickness</u>
	341 um, dft	314 um, dft	27 um
	345 um, dft	340 um, dft	5 um
	344 um, dft	339 um, dft	5 um

Note: 25.4 um = 1 mil

METHOD: ASTM-D4060 - CS-17 Wheels / 1,000g Load / 1,000 Cycles

RESULT: 29mg loss

ADHESION

METHOD: ASTM D4541 – Pull-Off Strength

RESULT: 700psi over SP-10 Steel Surface
615psi over SP-12 Steel Surface

CHEMICAL RESISTANCE

METHOD: A few drops of a liquid are placed under a watch glass onto the coating surface. Examination of the coating was conducted after 1 day, 1 week, 2 weeks and 1 month. Examined liquids: Na OH solution of pH 12, Na OH solution of pH 13.

RESULT: No alteration of the coating after 1 day, 1 week, 2 weeks and 1 month.

FLEXIBILITY & ELONGATION

METHOD: ASTM D412 – Tensile Strength Properties of Rubber and Elastomers

RESULT:	<u>Peak Tensile Strength</u>	<u>Elongation at Break</u>
	Reinforced – 1,030psi	Reinforced – 150%
	Non-Reinforced – 210psi	Non-Reinforced – 210%

HIGH TEMPERATURE RESISTANCE

METHOD: ASTM-D2485 – Evaluating coatings for high temperatures, coated panels are exposed to 50°C /122°F, 79.4°C / 175°F and 100°C / 212°F for 1 hour and then cooled in air and also in water.

RESULTS:	<u>Temperature</u>	<u>Cooling</u>	<u>Adhesion/Bending</u>
	50°C / 122°F	Water & Air	5B/ Unchanged
	75°C / 167°F	Water & Air	5B/ Unchanged
	100°C / 212°F	Water & Air	5B/ Unchanged



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IMMERSION

METHOD: ASTM-D870 – Panels are immersed in demineralized water at room temperature.

RESULT: No effect after 12 months of continuous immersion.

IMPACT

METHOD: ASTM D2794 – An indenter weighting 1kg is dropped to deform the coating and substrate. Coating thickness, approximately 13 mils, dft.

RESULT: 10 NM Impact Resistance

METHOD Cupping Test (ISO-1520) – A coated panel is indented by means of a ball until the cracking of the coating and/or the panel occurs. The depth of the indentation is the value of the flexibility of the coating. Coating thickness, approx 13 mils dft

RESULT: Depth = 12.65mm (approx. ½"); Steel panel ruptures, coating did not crack.

SURFACE BURNING CHARACTERISTICS

METHOD: ASTM-E84 – Surface Burning Characteristics of Building Materials

RESULT: Class A at 28-32mils, dft.

WATER VAPOR TRANSMISSION

METHOD: ASTM-D1653 – Water transmission of organic coating films. Test method B, wet cup method. Coating thickness, approximately 14 mils, dft.

RESULT: 9.9 grams/24hours - This Equals: 0.3perms / 0.2 metric perms.