

TABLE OF NCCA, ASTM, AND ISO TEST METHODS APPLICABLE TO PREPAINTED METAL

Category	Pre-1996	NCCA 1996-2003	Current NCCA	Current ASTM	Current ISO
General Information					
Coil Coating Glossary	IV-2, X-1	1.1.1	Tool Kit #9	D 16-03	4618-1:1998; 2:1999
Description of Coil Coating Finishes	IV-3	1.1.2		D 16-03	4618-3:1999; 6744:1999; 7142:1984
Liquid Paint Tests - Rheology					
Paint Viscosity-Ford Cup		3.1.1		D 1200-94(2005)	2431:1993 (2431:1993 Cor 2:1999)
Paint Viscosity-Rotating Disk Viscometer		3.1.2		D 2196-05	2884-1:1999; 2:2003)
Paint Viscosity-Zahn Cup		3.1.3		D 4212-99(2005), D 3794-00	2431:1993 (2431:1993 Cor 2:1999)
Liquid Paint Tests - Other Tests					
Density, Weight and Volume Percent Solids		3.2.1	TB #108	D 1475-98(2003), D2369-04, D 2697-03	2811-1-4:1997, 3233:1998 (3233:1998 Cor 1:1999) 3251:2003
Volatile Organic Compound (VOC) Content		3.2.2		D 3960-05	

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Physical Tests - Metal Treatment					
Detection of Hexavalent Cr on Coated Steel	II-7	4.1.1		D 2092-95(2001), D 5723-95(2002)	
Phosphate Coating Weight on CRS	II-1	4.1.2		B 767-88(2001), D5723-95 (2002)	
Phosphate Coating Weight on Coated Steel	II-3	4.1.3		B 767-88(2001), D5723-95 (2002)	
Chromate on Aluminum Alloys	II-2	4.1.4		B 767-88(2001), D5723-95 (2002)	
Chromate on Aluminized Steel	II-8	4.1.5		B 767-88(2001), D5723-95 (2002)	
X-ray Fluorescence		4.1.6		D 5723-95 (2002)	
Physical Tests - Cured Coating (QA Tests)					
DFT, Micrometers	II-4	4.2.1		D 1005-95(2001)	2808:1997
DFT, Eddy Current Gage	II-14	4.2.2		D 1400-00	2808:1997
DFT, Magnetic Flux Gage	II-15	4.2.3		D 1186-01	2808:1997
DFT, Microscopic	II-13	4.2.4		D 4138-94(2001)	2808:1997
Pencil Hardness	II-12	4.2.5		D 3363-00	1518:1992(1)
Impact Resistance	II-6	4.2.6		D 2794-93(2004)	6272-1.2:2002
Wedge Bend	II-10	4.2.7		D 3281-84(1989) (withdrawn; no replacement)	
T Bends	II-19	4.2.8		D 4145-83(2002), D 3794-00	
Draw Test	II-23	4.2.9		D 4146-83(2002)	1520:1999
Cross Hatch Tape Adhesion	II-5, II-16	4.2.10		D 3359-02	2409:1992
Solvent Rub	II-18	4.2.11		D 5402-93(1999)	

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Physical Tests - Cured Coating (other tests)					
Pressure Marking and Blocking	II-17	4.3.1		D 3003-01	4622:1992
Taber Abrasion	II-21	4.3.2		D 4060-01	
Falling Sand Abrasion		4.3.3		D 968-05	
Glass Transition Temperature	II-22	4.3.4			
Dry Heat Test		4.3.5		D 6491-99 (2003)	
Boiling Water Test		4.3.6		D 6665-01	
Durability Tests - Test Selection					
Selection and Preparation of Test Panels	III-5, others	5.1.1		D 1654-05, D 3794-00, D 4147-99(2003)	1514:2004
Durability Tests - Test Selection					
Exterior Exposure Tests	III-9	5.2.1		D 1014-02, G 7-05	2810:2004
Comparison of Outdoor Weathering Sites	III-11	5.2.2			
Comparison of Accelerated Weathering Devices	III-10	5.2.3			
Comparison of Accelerated Laboratory Tests		5.2.4			

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Durability Tests - Accelerated Weathering Tests					
Dew Cycle Weatherometer	III-7	5.3.1		D 3361-01, G 23-96 (withdrawn; replaced by G 152 & G 153)	
Fluorescent UV-Condensation		5.3.2		D 4587-05, G 53-96 (withdrawn; replaced by G 154)	
Durability Tests - Accelerated Laboratory Tests					
Water Resistance	II-20	5.4.1			
Water Immersion	III-1	5.4.2		D 870-02	2812-2:1993
Water Fog	III-4	5.4.3		D 1735-04	
100% Relative Humidity		5.4.4		D 2247-02	
Condensation - Humidity	III-6	5.4.5		D 4585-99	6270-1:1998; 2-2005
Salt Spray (Salt Fog)	III-2	5.4.6		B 117-03	7253:1996
Simulated Acid Rain		5.4.7			
Kesternich (Moist SO ₂)		5.4.8		G 87-02	3231:1993
Cyclic Corrosion		5.4.9			
Filiform Corrosion		5.4.10		D 2803-03	4623-1:2000; 2:2003
Durability Tests - Panel Evaluation					
Specimens Subjected to Durability Tests	III-3	5.5.1		D 610-01, D 714-02, D 1654-05	4628-1-3:2003
Chalk Resistance of Exterior Coil Coatings	III-8	5.5.2		D 4214-98	4628-6:1990
				(Method D 659) (withdrawn 1989; replaced by D 4214)	

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Color and Appearance - Measurement					
Color Measurement	I-1	6.1.1		D 2244-05, D 3964-04	7724-1-3:1984
Glossary of Color and Appearance Terminology		6.1.2		E 284-05a	
Control of Color Standards	I-2, I-7	6.1.3		D 3134-97(2003), D 3964-04 D 5531-05	
Visual Evaluation of Color Differences		6.1.4		D 1499-05, D 1729-96(2003), D 4086-92a(2003)	3668:1998
Instrumental Evaluation of Color Difference		6.1.5		D 2244-05, D 3964-04 E 308-01, E 1164-02 E 1331-04, E 1347-03 E 1349-90(1998)	7724-2-3:1984
Gloss Measurement		6.1.6		D 523-89(1999)	2813:1994