

*MARTIN TESTING LABORATORIES (MTL)*  
**PAINTS AND COATINGS TESTING CAPABILITIES**

4724 Arnold Ave.  
McClellan, CA 95652-1346  
Tel (916) 920-4110

[www.martintesting.com](http://www.martintesting.com)

P.O. Box 2019  
N. Highlands, CA 95660  
Fax (916) 920-4390

---

**Liquid Coating Properties**

*Composition*

VOC Content, ASTM D2369  
Water Content, ASTM D4017

*Physical Properties*

Calculating Physical Constants of Coatings, ASTM D5201  
Density, ASTM D1475  
Flash Point, ASTM D3278, D3941, D3278, D3934  
Odor, ASTM D6165

*Storage and Aging*

Settling, ASTM D869  
Package Stability, ASTM D1849  
Freeze-Thaw for Waterborne, ASTM D2243  
Freeze-Thaw for Lacquers, ASTM D2337  
Skinning, ASTM D154, FTMS Method 3021  
Coarse Particles and Foreign Matter, ASTM D185  
Condition in Container, FTMS Method 3011  
Storage Stability at Extreme Temperatures, FTMS Method 3019  
Storage Stability, FTMS Method 3022

**Application and Film Formation Properties**

*Brushing Properties*

Brushing Properties, FTMS Method 4321  
Comparison of Brush Drag, Latex Paints, ASTM D4959  
Visual Examination of Brushouts, ASTM D344

*Dry Time*

Drying, Curing and Film Formation, ASTM D1640  
Drying Times Using Mechanical Recorders, ASTM D5895

*Flow/Consistency Characteristics*

Viscosity – Brookfield, ASTM D1343, FTMS Method 4287  
Ford Cups, ASTM D1200  
Zahn Cups, ASTM D4212, D3794

*Hiding Power & Spreading Rate*

Hiding Power, ASTM D2805  
Hiding Power (Contrast Ratio), FTMS Method 4122  
Wet-to-Dry Hiding Change: ASTM D5007

*MARTIN TESTING LABORATORIES (MTL)*  
**PAINTS AND COATINGS TESTING CAPABILITIES**

4724 Arnold Ave.  
McClellan, CA 95652-1346  
Tel (916) 920-4110

[www.martintesting.com](http://www.martintesting.com)

P.O. Box 2019  
N. Highlands, CA 95660  
Fax (916) 920-4390

---

*Leveling*

Draw-down, ASTM D4062  
NYPC Leveling Test (Blade)

*Pot Life*

Rheological Properties of Non-Newtonian Materials by Rotation, ASTM D2196

*Roller Coating Properties*

Roller Coating Properties, FTMS Method 4335

*Sag Resistance*

Using a Multi-Notch Applicator, ASTM D4400  
Baker Method, FTMS Method 4493  
Multinotch Blade, FTMS 4494

*Spatter Resistance*

Paint Spatter Resistance From Roller Application, ASTM D4707

*Spraying Properties*

Spraying Properties, FTMS Method 4331

*Wet Film Thickness*

Measurement, ASTM D1212  
By Notch Type Gages, ASTM D4414

**Dried/Cured Film Properties**

*Adhesion to Substrate*

Scrape Adhesion, ASTM D2197  
Tape Test (Wet), ASTM D3359  
PATTI Test, ASTM D4541  
Adhesion to Plastic by Direct Tensile Testing, ASTM D5179  
Lacquer Lifting Test, FTMS Method 6251  
Self-Lifting Test, FTMS Method 6252  
Wet Tape Test, FTMS Method 6301

*MARTIN TESTING LABORATORIES (MTL)*  
**PAINTS AND COATINGS TESTING CAPABILITIES**

4724 Arnold Ave.  
McClellan, CA 95652-1346  
Tel (916) 920-4110

[www.martintesting.com](http://www.martintesting.com)

P.O. Box 2019  
N. Highlands, CA 95660  
Fax (916) 920-4390

---

*Appearance and Finish*

Gloss, Specular; ASTM D523  
Degree of Rusting, ASTM D610  
Degree of Checking, ASTM D660  
Degree of Cracking, ASTM D661  
Degree of Erosion, ASTM D662  
Degree of Blistering, ASTM D714  
Degree of Flaking, ASTM D772  
Degree of Chalking, ASTM D4214  
Evaluation of Specimens Subject to Corrosion, ASTM D1654  
Color Differences, ASTM D2179  
Color, ASTM D2244, D1729, E308  
Gloss or Sheen Uniformity, ASTM D3928  
Yellowness Index, ASTM E313  
Reflectance Factor and Color by Spectrophotometry, ASTM E1349  
20 Degree Specular Gloss, FTMS Method 6104  
60 Degree Specular Gloss, FTMS Method 6101  
85 Degree Specular Gloss, FTMS Method 6103  
Lightness Index Difference, FTMS Method 6122  
Color Difference of Opaque Materials, FTMS Method 6123  
Yellowness Index, FTMS Method 6131

*Chemical Resistance, Industrial*

Solvent and Fuel Resistance, ASTM D2792  
Stain and Reagent Resistance, ASTM D3023  
Acid and Mortar Resistance, ASTM D3260  
Solvent Rubs, ASTM D5402  
Hydrocarbon Resistance, FTMS Method 6011

*Chemical Resistance, Household*

Household Chemicals, ASTM D1308  
Detergent Resistance, ASTM D2248

*Corrosion Resistance*

Salt Spray, ASTM B117  
Acetic Acid Salt Spray, ASTM B287  
Modified Salt Spray Testing, ASTM G85  
Filliform Corrosion, ASTM D2803  
Cyclic Salt Fog/UV Exposure, Coated Metal, ASTM D5894

*MARTIN TESTING LABORATORIES (MTL)*  
**PAINTS AND COATINGS TESTING CAPABILITIES**

4724 Arnold Ave.  
McClellan, CA 95652-1346  
Tel (916) 920-4110

[www.martintesting.com](http://www.martintesting.com)

P.O. Box 2019  
N. Highlands, CA 95660  
Fax (916) 920-4390

---

*Dirt Resistance*

Quantifying Dirt Collection, ASTM D3719

*Dirt Removal Ability*

Washability Properties, ASTM D3450  
Practical Washability, ASTM D4828  
Stain Removal from Multicolor Lacquers, ASTM D2198  
Washability, FTMS Method 6141

*Environmental Resistance (Atmosphere)*

Temperature Change Resistance, ASTM D1211  
Cracking Resistance, ASTM D2246  
100% Humidity, ASTM D2247  
Humid-Dry Cycling, ASTM D3459  
Humidity Test, FTMS Method 6201

*Film Flexibility*

Mandrel Bend Test, ASTM D522  
Tensile Properties, ASTM D2370  
Impact Test, ASTM D2794  
Flexibility, FTMS Method 6221  
Knife Test, FTMS Method 6304

*Film Thickness*

Measurement, ASTM D1005  
Measurement Over Ferrous Substrates, ASTM D1186  
Nonconductive Coatings Over a Non-Ferrous Metal Base, ASTM D1400  
Protective Coatings by Destructive Methods, ASTM D4138

*Hardness*

Indentation Hardness, ASTM D1474  
Pencil Hardness, ASTM D3363

*Heat Resistance*

High Temperature Surface Coatings, ASTM D2485  
Heat Resistance of Polymer Linings, ASTM D5499  
Heat Resistance, FTMS Method 6051

*MARTIN TESTING LABORATORIES (MTL)*  
**PAINTS AND COATINGS TESTING CAPABILITIES**

4724 Arnold Ave.  
McClellan, CA 95652-1346  
Tel (916) 920-4110

[www.martintesting.com](http://www.martintesting.com)

P.O. Box 2019  
N. Highlands, CA 95660  
Fax (916) 920-4390

---

*Hiding of Substrate Surface*

Visual Evaluations of Brushouts, ASTM D344  
Paint Resistance of Architectural Paints, ASTM D2064  
Substrate Print Resistance, ASTM D2091  
Visual Evaluation of Roller Applied Coatings, ASTM D5150  
Dry Opacity, FTMS Method 4121  
Primer Absorption and Topcoat Holdout, FTMS Method 6262

*Penetration of Water Through Coating*

Clear Water Repellant Coatings on Wood, ASTM D5401  
Effect of Water Repellant Treatments on Mortar Specimens, ASTM D5860

*Permeability of Cured Film*

Water Vapor Transmission, ASTM D1653  
Minimum Film Formation Temperature, ASTM 2354

*Sanding Properties*

Sanding Characteristics, FTMS Method 6321

*Staining Resistance*

Evaluation of Clear Wood Sealers, ASTM D1546

*Surface Contact Transfer Effects (Blocking)*

Plasticizer Migration, ASTM D2199  
Block Resistance, ASTM D2793  
Blocking Resistance of Architectural Paints, ASTM D4946  
Pressure Mottling and Blocking Resistance, ASTM D3003

*Stain Transfer Blocking*

Various Methods, Including MTL Method Used in the Testing of Architectural Coatings for the South Coast Air Quality Management District (SCAQMD),  
Please Inquire

*Traction Properties*

Traction of Footwear on Surfaces, ASTM D5859

*Water Resistance*

Immersion, ASTM D870  
Water Fog Water Resistance, ASTM D1735  
Controlled Condensation, ASTM D4585  
Freeze-Thaw Resistance of Water Repellent Treated Mortar, ASTM D5860

*MARTIN TESTING LABORATORIES (MTL)*  
**PAINTS AND COATINGS TESTING CAPABILITIES**

4724 Arnold Ave.  
McClellan, CA 95652-1346  
Tel (916) 920-4110

[www.martintesting.com](http://www.martintesting.com)

P.O. Box 2019  
N. Highlands, CA 95660  
Fax (916) 920-4390

---

*Wear, Mar and Abrasion Resistance*

Falling Abrasive, ASTM D968  
Scrub Resistance, ASTM D2486, FTMS Method 6142  
Chipping Resistance (Gravelometer), ASTM D3170  
Abrasion Resistance (Taber), ASTM D4060, FTMS Method 6192  
Scrub Resistance by Weight Loss, ASTM D4213  
Mar Resistance, ASTM D5178  
Dry Abrasion Mar Resistance of High Gloss Coatings, ASTM D6037

*Weathering Resistance, Accelerated, Laboratory*

Using the QUV Apparatus, ASTM D4587  
Light Stability of Clear Coatings, ASTM D2620

- *Coatings evaluation and analysis, including failure analysis*
- *Please inquire about other test methods or specialized coating's tests*
- *Plus much, much more!*