RULE 323.1. ARCHITECTURAL COATINGS. (Adopted June 19, 2014, Effective January 1, 2015)

A. Applicability

- 1. Except as provided in Section B, this rule is applicable to any person who:
 - a. Supplies, sells, or offers for sale any architectural coating for use within the District; or
 - b. Manufactures, blends, or repackages any architectural coating for use within the District; or
 - c. Applies or solicits the application of any architectural coating within the District.
- 2. Rule 323.1 shall be effective on January 1, 2015.
- 3. Rule 323, Architectural Coatings, shall remain in effect in its entirety until January 1, 2015. A coating manufactured prior to January 1, 2015 may be sold, supplied, or offered for sale for up to three years after January 1, 2015, provided that the coating complied, at the time of manufacture, with all applicable provisions in Rule 323 as revised November 15, 2001. Such coating may also be applied at any time, both before and after January 1, 2015. This Section does not apply to any coating that does not display the date or date code required by Section E.1.a of this rule.

B. Exemptions

- 1. The requirements of this rule shall not apply to the following:
 - a. Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.
 - b. Any aerosol coating product.
- 2. With the exception of Section F, this rule shall not apply to any architectural coating sold in a container with a volume of one liter (1.057 quarts) or less provided:
 - a. The coating containers are not bundled together to be sold as a unit that exceeds one liter (1.057 quarts), excluding containers packed together for shipping to a retail outlet, warehouse, or a military distribution or redistribution facility.
- 3. Any architectural coating operation that is not conducted as part of a business is exempt from the requirements of Section D.4 of this rule.
- 4. Early Rule 323.1 compliance provision:

Prior to January 1, 2015, any coating that meets the definition in Section C for a coating category listed in Table 323.1-1 and complies with the corresponding VOC limit in Table 323.1-1 and with the Most Restrictive VOC limit in Section D.2 and the corresponding Labeling Requirement in Section E, if applicable, shall be considered in compliance with this rule and exempt from Rule 323.

5. With the exception of Sections E and F, this rule shall not apply to any coating that contains less than 20 grams of VOC per liter (0.17 pounds of VOC per gallon) of coating, less water and less exempt compounds, as applied.

C. Definitions

See Rule 102, Definitions, for definitions not limited to this rule. For the purposes of this rule, the following definitions shall apply:

"Ablative Coating" means any coating that chars when exposed to open flame or extreme temperatures, as would occur during a rocket launch. The ablative char surface serves as an insulative barrier, protecting underlying coatings or surfaces from the heat or open flame.

"Adhesive" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

"Aerosol Coating Product" means any pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marking applications.

"Aluminum Roof Coating" means any coating labeled and formulated exclusively for application to roofs and containing at least 84 grams per liter of coating (0.7 pound per gallon of coating) of elemental aluminum pigment. Pigment content shall be determined in accordance with South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings By X-Ray Diffraction," incorporated by reference in Section G.5.c of this rule.

"Appurtenance" means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including, but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

"Architectural Coating" means any coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule.

"Asphalt" means the dark-brown to black cementitious material (solid, semi-solid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

"Basement Specialty Coating" means any clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces. **Basement Specialty Coatings** shall meet the following criteria:

- a. Coating shall be capable of withstanding at least 10 pounds per square inch of hydrostatic pressure, as determined in accordance with ASTM Designation D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry," ASTM International; which is incorporated by reference in Section G.5.k of this rule; and
- b. Coating shall be resistant to mold and mildew growth and shall achieve a microbial growth rating of 8 or more, as determined in accordance with ASTM Designation D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber," ASTM International, and ASTM Designation D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation," ASTM International; incorporated by reference in Section G.5.q of this rule.

"Bay Area Air Quality Management District Method 41 (Revised 2005), "Materials Containing Parachlorobenzotrifluoride" means the test method adopted by the Bay Area Air Quality Management District as of June 19, 2014.

"Bay Area Air Quality Management District Method 43 (Revised 2005), "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials" means the test method adopted by the Bay Area Air Quality Management District as of June 19, 2014.

"Bitumens" means any black or brown materials, including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

"Bituminous Roof Coating" means any coating which incorporates bitumens that is labeled and formulated exclusively for roofing.

"Bituminous Roof Primer" means any primer which incorporates bitumens that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

"Bond Breaker" means any coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

"Coating" means any material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

"Colorant" means any concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

"Concrete Curing Compound" means any coating labeled and formulated for application to freshly poured concrete to perform one or more of the following functions:

- a. Retard the evaporation of water; or
- b. Harden or dustproof the surface of freshly poured concrete.

"Concrete/Masonry Sealer" means any clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:

- a. Prevent penetration of water; or
- b. Provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light; or
- c. Harden or dustproof the surface of aged or cured concrete.

"Driveway Sealer" means any coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

- a. Fill cracks; or
- b. Seal the surface to provide protection; or
- c. Restore or preserve the appearance.

"Dry Fog Coating" means any coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

"Exempt Compound" means any compound identified as exempt under the definition of "Volatile Organic Compound (VOC)." Tertiary-butyl acetate, also known as t-butyl acetate or tBAc, shall be considered exempt as a VOC only for purposes of VOC emissions limitations or VOC Content requirements and shall be considered a VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements which apply to VOCs. Exempt compounds content of a coating shall be determined by Environmental Protection Agency Method 24 or South Coast Air Quality Management District Method 303-91 (Revised 1996), "Determination of Exempt Compounds," incorporated by reference in Section G.5.h and Section G.5.g of this rule, respectively.

"Faux Finishing Coating" means any coating labeled and formulated to meet one or more of the following criteria:

- a. A glaze or textured coating used to create artistic effects, including, but not limited to: dirt, suede, old age, smoke damage, and simulated marble and wood grain; or
- b. A decorative coating used to create a metallic, iridescent, or pearlescent appearance that contains at least 48 grams of pearlescent mica pigment or other iridescent pigment per liter of coating as applied (at least 0.4 pound per gallon); or
- c. A decorative coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter of coating as applied (less than 0.4 pound per gallon), when tested in accordance with the South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings By X-Ray Diffraction," incorporated by reference in Section G.5.c of this rule; or
- d. A decorative coating used to create a metallic appearance that contains greater than 48 grams of elemental metallic pigment per liter of coating as applied (greater than 0.4 pound per gallon) and which requires a clear topcoat to prevent the degradation of the finish under normal use conditions. The metallic pigment content shall be determined in accordance with the South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings By X-Ray Diffraction," incorporated by reference in Section G.5.c of this rule; or
- e. A clear topcoat to seal and protect a Faux Finishing coating that meets the requirements of Section a, b, c, or d above. These clear topcoats shall be sold and used solely as part of a Faux Finishing coating system, and shall be labeled in accordance with Section E.1.d of this rule.

"Fire-Resistive Coating" means any coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The Fire Resistive category includes sprayed fire resistive materials and intumescent fire resistive coatings that are used to bring structural materials into compliance with federal, state, and local building code requirements. Fire-Resistive coatings shall be tested in accordance with ASTM Designation E119-07, "Standard Test Methods for Fire Tests of Building Construction and Materials," ASTM International, incorporated by reference in Section G.5.a of this rule. Fire Resistive coatings and testing agencies shall be approved by building code officials.

"Flat Coating" means any coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D523-89(1999), "Standard Test Method for Specular Gloss," ASTM International, incorporated by reference in Section G.5.b of this rule.

"Floor Coating" means any opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces that may be subject to foot traffic.

"Form-Release Compound" means any coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

"Graphic Arts Coating or Sign Paint" means any coating labeled and formulated for hand-application by artists using brush, airbrush, or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.

"High Temperature Coating" means any high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204 degrees Celsius (400 degrees Fahrenheit).

"Industrial Maintenance Coating" means any high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed in Section a through e below, and labeled as specified in Section E.1.e of this rule:

- a. Immersion in water, wastewater, or chemical solutions, including aqueous and nonaqueous solutions, or chronic exposure of interior surfaces to moisture condensation; or
- b. Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions; or
- c. Frequent exposure to temperatures above 121 degrees Celsius (250 degrees Fahrenheit); or
- d. Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleansers, or scouring agents; or
- e. Exterior exposure of metal structures and structural components.

"Low Solids Coating" means any coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material as recommended for application by the manufacturer. The VOC Content for Low Solids Coatings shall be calculated in accordance with the definition of "**VOC Actual**" within Section C of this rule.

"Magnesite Cement Coating" means any coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

"Manufacturer" means any person, company, firm, or establishment who imports, blends, assembles, produces, packages, repackages, or re-labels any architectural coating, not including retail outlets where labels or stickers may be affixed to architectural coating containers or where colorant is added at the point of sale.

"Manufacturer's Maximum Thinning Recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

"Mastic Texture Coating" means any coating labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (at least 0.010 inch) dry film thickness.

"Medium Density Fiberboard (MDF)" means any composite wood product, panel, molding, or other building material composed of cellulosic fibers, usually wood, made by dry forming and pressing of a resinated fiber mat.

"Metallic Pigmented Coating" means any coating that is labeled and formulated to provide a metallic appearance. Metallic Pigmented coatings shall contain at least 48 grams of elemental metallic pigment (excluding zinc) per liter of coating as applied (at least 0.4 pound per gallon), when tested in accordance with South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings By X-Ray Diffraction," incorporated by reference in Section G.5.c of this rule. The Metallic Pigmented Coating category does not include coatings applied to roofs or Zinc-Rich Primers.

"Multi-Color Coating" means any coating that is packaged in a single container and that is labeled and formulated to exhibit more than one color when applied in a single coat.

"Multicomponent Coating" means any coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

"National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures"" means the test method adopted by the Transportation Research Board as of June 19, 2014.

"Nonflat Coating" means any coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D523-89(1999), "Standard Test Method for Specular Gloss," ASTM International, incorporated by reference in Section G.5.b of this rule.

"Nonflat - High Gloss Coating" means any nonflat coating that registers a gloss of 70 or greater on a 60degree meter according to ASTM Designation D523-89(1999), "Standard Test Method for Specular Gloss," ASTM International, incorporated by reference in Section G.5.b of this rule. Nonflat – High Gloss coatings shall be labeled in accordance with Section E.1.i.

"Particleboard" means any composite wood product panel, molding, or other building material composed of cellulosic material, usually wood, in the form of discrete particles, as distinguished from fibers, flakes, or strands, which are pressed together with resin.

"Pearlescent" means exhibiting various colors depending on the angles of illumination and viewing, as observed in mother-of-pearl.

"Plywood" means any panel product consisting of layers of wood veneers or composite core pressed together with resin. Plywood includes panel products made by either hot or cold pressing (with resin) veneers to a platform.

"Post-Consumer Coating" means any finished coating generated by a business or consumer that have served their intended end uses, and are recovered from or otherwise diverted from the waste stream for the purpose of recycling.

"Pretreatment Wash Primer" means any primer that contains a minimum of 0.5 percent acid, by weight, when tested in accordance with ASTM Designation D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," ASTM International, incorporated by reference in Section G.5.d of this rule, that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

"**Primer, Sealer, and Undercoater**" means any coating labeled and formulated for one or more of the following purposes:

- a. To provide a firm bond between the substrate and the subsequent coatings; or
- b. To prevent subsequent coatings from being absorbed by the substrate; or

- c. To prevent harm to subsequent coatings by materials in the substrate; or
- d. To provide a smooth surface for the subsequent application of coatings; or
- e. To provide a clear finish coat to seal the substrate; or
- f. To block materials from penetrating into or leaching out of a substrate.

"Reactive Penetrating Sealer" means any clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers shall penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate. Reactive Penetrating Sealers line the pores of concrete and masonry substrates with a hydrophobic coating, but do not form a surface film. Reactive Penetrating Sealers shall meet all of the following criteria:

- a. The Reactive Penetrating Sealer shall improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance shall be verified on standardized test specimens, in accordance with one or more of the following standards, incorporated by reference in Section G.5.r of this rule: ASTM Designation C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile," or ASTM Designation C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone," or ASTM C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units," ASTM International; and
- b. The Reactive Penetrating Sealer shall not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate. This performance shall be verified on standardized test specimens, in accordance with ASTM Designation E96/E96M-05, "Standard Test Methods for Water Vapor Transmission of Materials," ASTM International, incorporated by reference in Section G.5.s of this rule;
- c. Products labeled and formulated for vehicular traffic surface chloride screening applications shall meet the performance criteria listed in the National Cooperative Highway Research Report 244 (1981), incorporated by reference in Section G.5.t of this rule; and
- d. Containers for Reactive Penetrating Sealers shall be labeled in accordance with Section E.1.g of this rule.

"Recycled Coating" means any architectural coating formulated such that it contains a minimum of 50 percent by volume of post-consumer coating, with a maximum of 50 percent by volume of secondary industrial materials or virgin materials.

"Roof Coating" means any non-bituminous coating labeled and formulated for application to roofs for the primary purpose of preventing water penetration, reflecting ultraviolet light, or reflecting solar radiation.

"Rust Preventative Coating" means any coating formulated to prevent the corrosion of metal surfaces for one or more of the following applications:

- a. Direct-to-metal coating; or
- b. Coating intended for application over rusty, previously coated surfaces.

The Rust Preventative category does not include the following:

- a. Coatings that are required to be applied as a topcoat over a primer; or
- b. Coatings that are intended for use on wood or any other non-metallic surface.

Rust Preventative coatings are for metal substrates only and shall be labeled as such, in accordance with the labeling requirements in Section E.1.f of this rule.

"Secondary Industrial Materials" means any products or by-products of the paint manufacturing process that are of a known composition and have economic value but can no longer be used for their intended purpose.

"Semitransparent Coating" means any coating that contains binders and colored pigments and is formulated to change the color of the surface, but not conceal the grain pattern or texture.

"Shellac" means any clear or opaque coating formulated solely with the resinous secretions of the lac beetle, *Laccifer lacca*, and formulated to dry by evaporation without a chemical reaction.

"Shop Application" means any application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

"Solicit" means to require for use or to specify, by written or oral contract.

"South Coast Air Quality Management District Method 303-91 (Revised 1996), "Determination of Exempt Compounds," August 1996," means the test method adopted by the South Coast Air Quality Management District as of June 19, 2014.

"South Coast Air Quality Management District Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials" means the test method adopted by the South Coast Air Quality Management District as of June 19, 2014.

"South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction" means the test method adopted by the South Coast Air Quality Management District as of June 19, 2014.

"Stain" means any semitransparent or opaque coating labeled and formulated to change the color of a surface but not to conceal the grain pattern or texture.

"Stone Consolidant" means any coating that is labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants shall penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants shall be specified and used in accordance with ASTM Designation E2167-01, "Standard Guide for Selection and Use of Stone Consolidants," ASTM International, incorporated by reference in Section G.5.u of this rule. Stone Consolidants are for professional use only and shall be labeled as such, in accordance with the labeling requirements in Section E.1.h of this rule.

"Swimming Pool Coating" means any coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

"Tint Base" means any architectural coating to which colorant is added after packaging in sale units to produce a desired color.

"Traffic Marking Coating" means any coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces, including, but not limited to, curbs, berms, driveways, parking lots,

sidewalks, and airport runways.

"Tub and Tile Refinish Coating" means any clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and Tile Refinish coatings shall meet all of the following criteria:

- a. The coating shall have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder. This shall be determined on bonderite 1000, in accordance with ASTM Designation D3363-05, "Standard Test Method for Film Hardness by Pencil Test," ASTM International, incorporated by reference in Section G.5.m of this rule; and
- b. The coating shall have a weight loss of 20 milligrams or less after 1000 cycles. This shall be determined with CS-17 wheels on bonderite 1000, in accordance with ASTM Designation D4060-07, "Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser," ASTM International, incorporated by reference in Section G.5.n of this rule; and
- c. The coating shall withstand 1000 hours or more of exposure with few or no #8 blisters. This shall be determined on unscribed bonderite, in accordance with ASTM Designation D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation," ASTM International, and ASTM Designation D714-02e1, "Standard Test Method for Evaluating Degree of Blistering of Paints," ASTM International, incorporated by reference in Section G.5.0 of this rule; and
- d. The coating shall have an adhesion rating of 4B or better after 24 hours of recovery. This shall be determined on unscribed bonderite, in accordance with ASTM Designation D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation," ASTM International, and ASTM Designation D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test," ASTM International, incorporated by reference in Section G.5.1 of this rule.

"Veneer" means any thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

"Virgin Materials" means any materials that contain no post-consumer coatings or secondary industrial materials.

"Volatile Organic Compound (VOC)" means any compound containing at least one (1) atom of carbon, except for the following exempt compounds:

- a. acetone
- b. ammonium carbonate
- c. carbon dioxide
- d. carbon monoxide
- e. carbonic acid
- f. dimethyl carbonate
- g. ethane
- h. metallic carbides or carbonates
- i. methane
- j. methyl acetate
- k. methyl chloroform (1,1,1-trichloroethane)
- 1. methyl formate; HCOOCH₃
- m. cyclic, branched, or linear completely methylated siloxane compounds
- n. methylene chloride
- o. parachlorobenzotrifluoride
- p. perchloroethylene (tetrachloroethylene)

- q. the following four classes of perfluorocarbon (PFC) compounds:
 - i. cyclic, branched, or linear, completely fluorinated alkanes,
 - ii. cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,
 - iii. cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and
 - iv. sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- r. propylene carbonate
- s. tertiary-butyl acetate; $C_6H_{12}O_2$ ("acetic acid, 1,1-dimethylethyl ester")
 - Tertiary-butyl acetate (also known as t-butyl acetate or tBAc) shall be considered exempt as a VOC only for purposes of VOC emissions limitations or VOC Content requirements and shall be a VOC for purposes of all recordkeeping, emissions reporting,

photochemical dispersion modeling, and inventory requirements which apply to VOCs.

- t. CFC-11 (trichlorofluoromethane)
- u. CFC-12 (dichlorodifluoromethane)
- v. CFC-113 (1,1,2-trichloro-1,2,2-trifluoroethane)
- w. CFC-114 (1,2-dichloro 1,1,2,2-tetrafluoroethane)
- x. CFC-115 (chloropentafluoroethane)
- y. HCFC-22 (chlorodifluoromethane)
- z. HCFC-31 (chlorofluoromethane)
- aa. HCFC-123 (1,1,1-trifluoro 2,2-dichloroethane)
- ab. HCFC-123a (1,2-dichloro-1,1,2-trifluoroethane)
- ac. HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane)
- ad. HCFC-141b (1,1-dichloro 1-fluoroethane)
- ae. HCFC-142b (1-chloro-1,1 difluoroethane)
- af. HCFC-151a (1-chloro-1-fluoroethane)
- ag. HCFC-225ca (3,3-dichloro-1,1,1,2,2-pentafluoropropane)
- ah. HCFC-225cb (1,3-dichloro-1,1,2,2,3-pentafluoropropane)
- ai. HFC-23 (trifluoromethane)
- aj. HFC-32 (difluoromethane)
- ak. HFC-43-10mee (1,1,1,2,3,4,4,5,5,5-decafluoropentane)
- al. HFC-125 (pentafluoroethane)
- am. HFC-134 (1,1,2,2-tetrafluoroethane)
- an. HFC-134a (1,1,1,2-tetrafluoroethane)
- ao. HFC-143a (1,1,1-trifluoroethane)
- ap. HFC-152a (1,1-difluoroethane)
- aq. HFC-161 (ethylfluoride)
- ar. HFC-227ea (1,1,1,2,3,3,3-heptafluoropropane)
- as. HFC-236ea (1,1,1,2,3,3-hexafluoropropane)
- at. HFC-236fa(1,1,1,3,3,3-hexafluoropropane)
- au. HFC-245ca (1,1,2,2,3-pentafluoropropane)
- av. HFC-245ea (1,1,2,3,3-pentafluoropropane)
- aw. HFC-245eb (1,1,1,2,3-pentafluoropropane)
- ax. HFC-245fa(1,1,1,3,3-pentafluoropropane)
- ay. HFC-365mfc (1,1,1,3,3-pentafluorobutane)
- az. HFE-7000; $n-C_3F_7OCH_3$; (1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane)
- ba. HFE-7100; (CF_3) ₂CFCF₂OCH₃; (2-(difluoromethoxymethyl)-1, 1, 1, 2, 3, 3, 3-
- heptafluoropropane) or C₄F₉OCH₃; (1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane) bb. HFE-7200; (CF₃)₂CFCF₂OC₂H₅; (2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-
- heptafluoropropane) or $C_4F_9OC_2H_5$; (1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane)
- bc. HFE-7300; (1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane)
- bd. HFE-7500; (3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2- (trifluoromethyl) hexane)

"VOC Actual" means the weight of VOC per volume of coating and it is calculated with the following equation:

VOC Actual =
$$\frac{(W_s - W_w - W_{ec})}{(V_m)}$$

Where:

"VOC Content" means the weight of VOC per volume of coating. VOC Content is "**VOC Regulatory**," as defined in Section C of this rule, for all coatings except for those in the Low Solids category. For coatings in the Low Solids category, the VOC Content is "**VOC Actual**," as defined in Section C of this rule. If the coating is a multicomponent coating, the VOC Content is "**VOC Regulatory**" as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC Content shall include the VOCs emitted during curing.

"VOC Regulatory" means the weight of VOC per volume of coating, less the volume of water and exempt compounds. It is calculated with the following equation:

VOC Regulatory =
$$\frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})}$$

Where:

VOC Regulatory = grams of VOC per liter of coating, less water and exempt compounds (also known as "Coating VOC")

- W_s = weight of volatiles, in grams
- W_w = weight of water, in grams
- W_{ec} = weight of exempt compounds, in grams
- V_m = volume of coating, in liters
- V_w = volume of water, in liters
- V_{ec} = volume of exempt compounds, in liters

"Waterproofing Membrane" means any clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate. Waterproofing Membranes are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. Waterproofing Membranes shall meet the following criteria:

- a. Coating shall be applied in a single coat of at least 25 mils (at least 0.025 inch) dry film thickness; and
- b. Coatings shall meet or exceed the requirements contained in ASTM Designation C836-06, "Standard Specification for High Solids Content, Cold Liquid Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course," ASTM International, incorporated by reference in Section G.5.p of this rule.

The Waterproofing Membrane category does not include topcoats that are included in the Concrete/Masonry Sealer category (e.g., parking deck topcoats, pedestrian deck topcoats, etc.).

"Wood Coating" means any coating labeled and formulated for application to wood substrates only. The Wood Coatings category includes the following clear and semitransparent coatings: lacquers; varnishes; sanding sealers; penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. The Wood Coatings category also includes the following opaque wood coatings: opaque lacquers; opaque sanding sealers; and opaque lacquer undercoaters. The Wood Coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces; or coatings intended for substrates other than wood.

Wood Coatings shall be labeled "For Wood Substrates Only," in accordance with Section E.1.j of this rule.

"Wood Preservative" means any coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

"Wood Substrate" means any substrate made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood products do not include items comprised of simulated wood.

"Zinc-Rich Primer" means any coating that meets all of the following specifications:

- a. Coating contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids; and
- b. Coating is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings; and
- c. Coating is intended for professional use only and is labeled as such, in accordance with the labeling requirements in Section E.1.k of this rule.

D. Standards

1. VOC Content Limits:

- a. Except as provided in Sections D.2 or D.3 of this rule, no person shall manufacture, blend, repackage, supply, sell or offer for sale, for use within the District, nor solicit for application or apply within the District any architectural coating that has a VOC Content in excess of any corresponding limit specified in Table 323.1-1.
- b. For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table 323.1-1, the VOC Content limit shall be determined by classifying the coating as a Flat coating, a Nonflat coating, or a Nonflat High Gloss coating, based on its gloss, as determined by the method specified in Section G.5.b and the corresponding Flat, Nonflat, or Nonflat High Gloss coating VOC limit shall apply.
- 2. **Most Restrictive VOC Limit:** If a coating meets the definition in Section C of this rule for one or more specialty coating categories that are listed in Table 323.1-1, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat High Gloss coatings, but shall meet the VOC limit for the applicable specialty coating listed in Table 323.1-1.

With the exception of the specialty coating categories specified in Sections D.2.a through D.2.k, if a coating is recommended for use in more than one of the specialty coating categories listed in

Table 323.1-1, the most restrictive (or lowest) VOC Content limit shall apply. This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf.

- a. Aluminum roof coatings;
- b. Bituminous roof primers;
- c. High temperature coatings;
- d. Industrial maintenance coatings;
- e. Low solids coatings;
- f. Metallic pigmented coatings;
- g. Pretreatment wash primers;
- h. Shellacs;
- i. Wood coatings;
- j. Wood preservatives; and
- k. Zinc-rich primers.

3. Sell-Through of Coatings:

A coating manufactured prior to January 1, 2015 may be sold, supplied, or offered for sale for up to three years after January 1, 2015, provided that the coating complied, at the time of manufacture, with all applicable provisions in Rule 323 as revised November 15, 2001. Such coating may also be applied at any time, both before and after January 1, 2015. This Section does not apply to any coating that does not display the date or date code required by Section E.1.a of this rule.

4. **Painting Practices:**

All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.

5. **Thinning:** No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Table 323.1-1.

E. Container Labeling Requirements

- 1. Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections E.1.a through E.1.c on the coating container (or label) in which the coating is sold or distributed, and as applicable, the information in Sections E.1.d through E.1.k.
 - a. **Date Code:** The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a

date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the California Air Resources Board.

- b. **Thinning Recommendations:** A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation shall specify that the coating is to be applied without thinning.
- c. **VOC Content:** Each container of any coating subject to this rule shall display one of the following values in grams of VOC per liter of coating:
 - i. Maximum VOC Content as determined from all potential product formulations; or
 - ii. VOC Content as determined from actual formulation data; or
 - iii. VOC Content as determined using the test methods in Section G.2 of this rule.

If the manufacturer does not recommend thinning, the container shall display the VOC Content, as supplied. If the manufacturer recommends thinning, the container shall display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent coating, the container shall display the VOC Content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC Content shall include the VOCs emitted during curing. VOC Content shall be determined as defined in Section C.

- d. **Faux Finishing Coatings:** The labels of all Clear Topcoats for Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system."
- e. **Industrial Maintenance Coatings:** The labels of all Industrial Maintenance coatings shall prominently display the statement "For industrial use only" or "For professional use only" or "Not for residential use" or "Not intended for residential use."
- f. **Rust Preventative Coatings:** The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only."
- g. **Reactive Penetrating Sealers:** The labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer."
- h. **Stone Consolidants:** The labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant For Professional Use Only."
- i. **Nonflat High Gloss Coatings:** The labels of all Nonflat High Gloss coatings shall prominently display the words "High Gloss."
- j. **Wood Coatings:** The labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only."
- k. **Zinc Rich Primers**: The labels of all Zinc Rich Primers shall prominently display the statement "For industrial use only" or "For professional use only" or "Not for residential use" or "Not intended for residential use."

F. Recordkeeping and Reporting Requirements

1. **Sales Data:** A responsible official from each manufacturer shall upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. The responsible official shall within 180 days provide information, including, but not limited to:

- a. the name and mailing address of the manufacturer;
- b. the name, address and telephone number of a contact person;
- c. the name of the coating product as it appears on the label and the applicable coating category;
- d. whether the product is marketed for interior or exterior use or both;
- e. the number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart);
- f. the VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multicomponent product, provide the VOC content as mixed or catalyzed;
- g. the names and CAS numbers of the VOC constituents in the product;
- h. the names and CAS numbers of any compounds in the product specifically exempted from the VOC definition, as listed in Section C of this rule;
- i. whether the product is marketed as solventborne, waterborne, or 100% solids;
- j. description of resin or binder in the product;
- k. whether the coating is a single-component or multicomponent product;
- 1. the density of the product in pounds per gallon;
- m. the percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition, as listed in Section C of this rule;
- n. the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition, as listed in Section C of this rule; and
- o. For any product containing tertiary-butyl acetate, the product's tertiary-butyl acetate content in grams of tertiary-butyl acetate per liter, and the number of gallons per year sold in California.
- 2. All sales data listed in Section F.1 above shall be maintained by the responsible official for a minimum of three years. Sales data submitted by the responsible official to the Executive Officer of the Air Resources Board may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations Sections 91000-91022.

G. Compliance Provisions and Test Methods

- 1. **Calculation of VOC Content:** For the purpose of determining compliance with the VOC Content limits in Table 323.1-1, the VOC Content of a coating shall be determined using the procedure described in the appropriate Section C definition. The VOC Content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content shall be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content shall be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent coating, the VOC Content shall be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC Content shall include the VOCs emitted during curing.
- 2. **VOC Content of Coatings:** To determine the physical properties of a coating in order to perform the calculations in the Section C definition for VOC Actual for low solids coatings or the Section C definition for **VOC Regulatory** for all other architectural coatings, the reference method for VOC Content is the Environmental Protection Agency Method 24, incorporated by reference in Section G.5.h, except as provided in Sections G.3 and G.4. An alternative method to determine the VOC Content of coatings is South Coast Air Quality Management District Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," incorporated by reference in Section G.5.i. The exempt compounds content shall be determined by South Coast Air Quality Management District Method 303-91 (Revised 1996), "Determination of Exempt Compounds," or the Bay Area Air Quality Management District Method 43 (Revised 2005), "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," or the Bay Area Air Quality Management District Method 41 (Revised 2005), "Materials Containing Parachlorobenzotrifluoride," as applicable, incorporated by reference in Sections G.5.g, G.5.e, and G.5.f, respectively. To determine the VOC Content of a coating, the manufacturer may use the Environmental Protection Agency Method 24, or an alternative method as provided in Section G.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC Content, the Method 24 test results will govern, except when an alternative method is approved as specified in Section G.3. The Control Officer may require the manufacturer to conduct a Method 24 analysis.
- 3. **Alternative Test Methods:** Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section G.2, after review and approved in writing by the staffs of the District, the California Air Resources Board, and the Environmental Protection Agency, may also be used.
- 4. **Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of Environmental Protection Agency Method 24 (40 CFR part 59, subpart D, appendix A), incorporated by reference in Section G.5.j. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.
- 5. **Test Methods:** The following test methods are incorporated by reference herein, and shall be used to test coatings subject to the provisions of this rule:
 - a. **Fire Resistance Rating:** The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E119-07, "Standard Test Methods for Fire Tests of Building Construction and Materials," ASTM International (see Section C, Fire-Resistive Coating).

- b. **Gloss Determination:** The gloss of a coating shall be determined by ASTM Designation D523-89 (1999), "Standard Test Method for Specular Gloss," ASTM International (see Section C, Flat Coating, Nonflat Coating, and Nonflat High Gloss Coating).
- c. **Metal Content of Coatings:** The metallic content of a coating shall be determined by South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section C, Aluminum Roof, Faux Finishing, and Metallic Pigmented Coating).
- d. Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," ASTM International (see Section C, Pretreatment Wash Primer).
- e. **Exempt Compounds Siloxanes:** Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section G by Bay Area Air Quality Management District Method 43 (Revised 2005), "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," *BAAQMD Manual of Procedures,* Volume III, adopted November 6, 1996 (see Section C, Volatile Organic Compound (VOC), and Section G.2).
- f. **Exempt Compounds Parachlorobenzotrifluoride (PCBTF):** The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section G by Bay Area Air Quality Management District Method 41 (Revised 2005), "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," *BAAQMD Manual of Procedures,* Volume III, adopted December 20, 1995 (see Section C, Volatile Organic Compound (VOC), and Section G.2).
- g. **Exempt Compounds:** The content of exempt compounds shall be analyzed by South Coast Air Quality Management District Method 303-91 (Revised 1996), "Determination of Exempt Compounds," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section C, Volatile Organic Compound (VOC), and Section G.2).
- h. **VOC Content of Coatings:** The VOC Content of a coating (actual and regulatory) shall be determined by Environmental Protection Agency Method 24 as it exists in appendix A of 40 *Code of Federal Regulations* (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings" (see Section G.2).
- Alternative VOC Content of Coatings: The VOC Content of coatings (actual and regulatory) may be analyzed either by Environmental Protection Agency Method 24 or South Coast Air Quality Management District Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section G.2).
- j. **Methacrylate Traffic Marking Coatings:** The VOC Content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedure in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (June 30, 1999) (see Section G.4).
- k. **Hydrostatic Pressure for Basement Specialty Coatings:** ASTM Designation D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below

Grade Applications Applied to Masonry," ASTM International (see Section C, Basement Specialty Coating).

- Tub and Tile Refinish Coating Adhesion: ASTM Designation D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation," ASTM International, and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test," ASTM International (see Section C, Tub and Tile Refinish Coating).
- m. **Tub and Tile Refinish Coating Hardness:** ASTM Designation D3363-05, "Standard Test Method for Film Hardness by Pencil Test," ASTM International (see Section C, Tub and Tile Refinish Coating).
- n. **Tub and Tile Refinish Coating Abrasion Resistance**: ASTM Designation D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser," ASTM International (see Section C, Tub and Tile Refinish Coating).
- Tub and Tile Refinish Coating Water Resistance: ASTM Designation D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation," ASTM International, and ASTM Designation D714-02e1, "Standard Test Method for Evaluating Degree of Blistering of Paints," ASTM International (see Section C, Tub and Tile Refinish Coating).
- p. **Waterproofing Membrane**: ASTM Designation C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course," ASTM International (see Section C, Waterproofing Membrane).
- q. Mold and Mildew Growth for Basement Specialty Coatings: ASTM Designation D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber," ASTM International, and ASTM Designation D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation," ASTM International (see Section C, Basement Specialty Coating).
- r. **Reactive Penetrating Sealer Water Repellency:** ASTM Designation C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile," ASTM International, or ASTM Designation C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone," ASTM International, or ASTM Designation C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units," ASTM International (see Section C, Reactive Penetrating Sealer).
- s. **Reactive Penetrating Sealer Water Vapor Transmission:** ASTM Designation E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials," ASTM International (see Section C, Reactive Penetrating Sealer).
- t. **Reactive Penetrating Sealer Chloride Screening Applications:** National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures" (see Section C, Reactive Penetrating Sealer).
- u. **Stone Consolidants:** ASTM Designation E2167-01, "Standard Guide for Selection and Use of Stone Consolidants," ASTM International (see Section C, Stone Consolidant).
- 6. **Environmental Protection Agency Test Method in Effect:** The Environmental Protection Agency test methods in effect on June 19, 2014 shall be the test methods used to meet the requirements of this rule.

Table 323.1-1

VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

Limits are expressed as **VOC Regulatory**, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

COATING CATEGORY	VOC Content Limit
	(Grams of VOC per
	Liter of Coating)
Flat Coatings	50
Nonflat Coatings	100
Nonflat – High Gloss Coatings	150
Specialty Coatings	
Ablative Coatings	250
Aluminum Roof Coatings	400
Basement Specialty Coatings	400
Bituminous Roof Coatings	50
Bituminous Roof Primers	350
Bond Breakers	350
Concrete Curing Compounds	350
Concrete/Masonry Sealers	100
Driveway Sealers	50
Dry Fog Coatings	150
Faux Finishing Coatings	350
Fire-Resistive Coatings	350
Floor Coatings	100
Form-Release Compounds	250
Graphic Arts Coatings or Sign Paints	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low Solids Coatings ¹	120
Magnesite Cement Coatings	450
Mastic Texture Coatings	100
Metallic Pigmented Coatings	500
Multi-Color Coatings	250
Pretreatment Wash Primers	420
Primers, Sealers, and Undercoaters	100
Reactive Penetrating Sealers	350
Recycled Coatings	250
Roof Coatings	50
Rust Preventative Coatings	250
Shellacs:	
• Clear	730
• Opaque	550
Stains	250
Stone Consolidants	450

¹ Limit is expressed as **VOC Actual**.

COATING CATEGORY	VOC Content Limit (Grams of VOC per Liter of Coating)
Swimming Pool Coatings	340
Traffic Marking Coatings	100
Tub and Tile Refinish Coatings	420
Waterproofing Membranes	250
Wood Coatings	275
Wood Preservatives	350
Zinc-Rich Primers	340