

LASCT – Paint Technology I

Course Outline Fall Quarter 2007

Latex Architectural Finishes – Formulation and Raw Materials

Class Meeting are from 5:30 –8:00 PM starting September 27, 2007
Near City Hall, 5550 Harbor St., City of Commerce, CA 90040
Instructor: Matt Wood, Phone (909) 396-7521
Cost for the class is \$150, payable to LASCT at the
first class (one week grace if necessary).

- 9/27 1. History of Paint**
Typical Latex Flat Wall Formulation, Overview of Ingredients and Manufacturing
- 10/4 2. Paint Mathematics**
Solids by Weight Calculations: Solids by Volume, PVC, Spreading Rates, Label Analyses, VOC Calculations, etc.
- 10/11 3. Paint Properties and Common Exterior Failures**
23 Physical Properties and Performance Parameters
- 10/18 4. Formulation Dynamics**
What Distinguishes Paints. Paint Economics from Interior Economy Flat to Exterior Stucco Paint. Concept of CPVC, Dry Hide, TiO₂ Spacing, Pigment/Binder Relationship
- 10/25 5. Properties of Latex Emulsions and Manufacturing**
PVA Homopolymers, Copolymers, Terpolymers. Acrylics, Styrene Copolymers
- 11/1 6. White Hiding and Extender Pigments**
Anatase and Rutile TiO₂ Crystal Types, Grades. Other White Hiding Pigments and Opaque Polymers, Extender Pigments, Indices of Refraction
- 11/8 7. Nine Latex Paint Additives**
Anionic Dispersants, Anti-Foams, Anti-Freeze, Preservatives, Protective Colloids, pH Buffers, Non-Ionic Surfactants, Coalescents, Fungicides.
- 11/15 8. Colored Pigments, Inorganic and Organic**
What Formulators and Tinters Should Know About Color Permanence, Exterior and Interior in Masstone, Intermediate and Pastel Shades.
- 11/22 9. Latex Wall Sealers , Wood Undercoats, Exterior Wood Primers, Block Fillers**
Common Problems with Wood and Masonry Surfaces
- 12/6 10. Latex Paints**
Latex House Paints, Latex Exterior Stains, Elastomeric Roof Coatings, Deck Paints, Latex Semi Gloss Enamels, Interior and Exterior Coatings
- 12/13 Final Exam**