

SECTION 09930

SEALERS AND TRANSPARENT FINISHES Wood & Concrete

Timber Pro Coatings 2232 E.Burnside Portland, Ore 97214 Phone 888-888-6095 email: usainfo@timberprocoatings.com

Display hidden notes to specifier. Copyright 2008 - 2015 ARCAT, Inc. - All rights reserved

** NOTE TO SPECIFIER ** Timber Pro; wood cleaners, wood finishes, wood stabilizers and concrete sealers.

This section is based on the products of Timber Pro Coatings, which is located at:

Timber Pro Coatings (USA Sales)

2232 E. Burnside Ave. Portland, OR 97214 Toll Free: 888-888-6095 Phone: 503-232-1705 Fax: 503-235-8794

E-Mail: <u>usainfo@timberprocoatings.com</u>
Website: http://www.timberprocoatings.com

Our History - Timber Pro Coatings first opened its doors in 1996 in the great Pacific Northwest. Independently owned manufacturing facilities were set up both in Oregon, USA and British Columbia, Canada. The company officers had a vision: To bring a truly unique exterior wood finish to the market that was not only more durable than traditional wood stains, but also one that was environmentally safe.

Prior to 1996, we were a group of custom builders and wood treating professionals with some very high-end projects to build and maintain. Some of our customers were chemically sensitive, and most of the wood sided homes were being built in extreme weather locations. Unable to find a stain product that met our needs, we were forced to develop one. We enlisted the services of one of the top wood stain formulators in Canada, a PHD graduate from the London School of Coatings. He created for us a unique transparent finish, after we gave him permission to spare no expense for the sake of quality. The first generation of Timber Pro UV Natural Wood Finish was born.

Our efforts resulted in a natural oil resin based, yet water reducible, formula that contained no petroleum derivatives, was enviro-safe and exceptionally durable. Faced with the daunting task of bringing a finish like no other to the market, we set out to establish our niche. In the early years, we were up against tremendous odds. Major brand wood stains with huge budgets eclipsed our meager resources and the public was still wary of "envirosafe" technology. We realized we were "pioneers' and that our best approach was by means of education. We began by educating the end user about wood weathering technology and environmental stewardship. We donated product to Habitat for Humanity

and built relationships in our communities. We aligned ourselves with craftsmen in the log home industry who recognized the value of finish that was both safe and durable, and who were willing to give us a chance. Before too long, homeowners began requesting their builders use our product. Slowly and steadily we gained respect among log home companies, cedar home builders, and the general public at large. By 2001, after our product had been on projects for five years and its durability was a proven fact, we began to experience rapid growth.

Since our inception, we have grown to become one of the most well respected coating manufacturers for the wood siding market, with a full line of wood care products. Many of our early supporters - the true log home craftsmen - have since become some of the largest log home companies in North America, and remain faithful clients. Internationally known architects are specifying Timber Pro UV products for landmark projects such as high-end resorts and universities. We have continued to refine our products over the years, and are 14 years ahead of our closest competitors who are just now bringing their enviro-safe finishes to the log and wood siding world.

Our Goal - We remain a company with a powerful vision. to protect the wood, respect environment, and promote the health of the applicators and home owners alike by manufacturing the highest quality wood finished possible, Timber Pro Coatings UV.

PART 1 GENERAL

1.1 SECTION INCLUDES

** NOTE TO SPECIFIER ** Delete items below not required for project.

- A. Natural oil waterborne wood stain.
- B. Urethane wood finish.
- C. Cleaning, stripping and brightening systems for wood.
- D. Internal wood stabilizer.
- E. Internal concrete sealer.
- F. Masonry top sealer.
- G. Paver stain and sealer.

1.2 RELATED SECTIONS

** NOTE TO SPECIFIER ** Delete any Sections below not relevant to this project; add others as required.

- A. Section 06070 Wood Treatment.
- B. Section 06080 Factory-Applied Wood Coatings.
- C. Section 06200 Finish Carpentry: Wood items for transparent finish.
- D. Section 06400 Architectural Woodwork: Wood items for transparent finish.
- E. Section 09900 Paints and Coatings: Opaque finishes.
- F. Section 09980 Coatings for Concrete and Masonry: Concrete and masonry sealers.

G. Section 13140 - Fabricated Structures: Wood finishes.

1.3 REFERENCES

** NOTE TO SPECIFIER ** Delete references from the list below that are not actually required by the text of the edited section.

A. ASTM D1308 - Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.

** NOTE TO SPECIFIER ** Delete selection samples if colors have already been selected.

- C. Selection Samples: For each finish product specified, two complete sets of color sample brochures representing manufacturer's full range of available colors and finishes.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color and finish on wood of type to be finished.

1.5 QUALITY ASSURANCE

** NOTE TO SPECIFIER ** Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

- A. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation. Do not allow to freeze.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Retailer and Manufacturer: Timber Pro Coatings (USA Sales) which is located at 2232 E. Burnside Ave., Portland, OR 97214. Toll Free: 888-888-6095.

Phone: 503-232-1705. Fax: 503-235-8794. E-Mail: <u>usainfo@timberprocoatings.com</u> Website: www.timberprocoatings.com.

** NOTE TO SPECIFIER ** Delete one of the following two paragraphs. Coordinate with requirements of Division 1 section on product options and substitutions. based on the location of the Project.

- B. Substitutions: Not permitted.
- Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 MATERIALS - GENERAL REQUIREMENTS

- A. Stains and Coatings General:
 - Unless otherwise indicated, provide factory-mixed materials. Mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not reduce, thin, or dilute coatings or add materials unless such procedure is specifically described in manufacturer's product instructions.
 - 2. Supply each material in quantity required to complete entire project's work from a single production run.

2.3 FINISH SYSTEMS

- ** NOTE TO SPECIFIER ** Delete paragraphs not required.
- ** NOTE TO SPECIFIER ** Timber Pro UV exterior finishes have ultraviolet absorbers to help protect wood from graying and fading. Timber Pro UV is recommended for log homes, decks and fences, wood siding, cedar homes, cedar shingles and shakes. This product contributes to 3 LEED credits. Limitations: Waterborne products may cause grain to raise on some HARDWOOD species. We advise a one coat test patch to determine this occurrence.
 - Natural Oil Waterborne Wood Stain: Penetrating wood stain and protectant for interior or exterior wood.

** NOTE TO SPECIFIER ** Retain one of the following two paragraphs.

- 1. Approved Product: Timber Pro Coatings "Log & Siding Formula" (rough sawn siding, aged siding, or shingles)
- 2. Approved Product: Timber Pro Coatings "Log & Siding Smooth Formula" (Used as top clear coat on siding, or use for smooth milled siding or interior wood)
- 3. Approved Product: Timber Pro Coatings Deck & Fence Formula.
- ** NOTE TO SPECIFIER ** Retain the following paragraph if LEED Credits are required for Project. Revise credit category if required.
 - 4. LEED Credit: Credit 4.2 Low-Emitting Materials Paints & Coatings.
 - 5. LEED Credit: Credit 6 Rapidly Renewable Materials.
 - 6. LEED Credit: Credit 5.1 Regional Materials (dependent on project location).
 - 7. Material: Natural, non-toxic, plant-based, 30% non-evaporative oil-malinized resin solids, water-borne (oil-based, water-borne); breathable (allows for water vapor transmission); non-flammable; water clean-up. Finish shall not soften, darken, become sticky or bake out of wood. Finish shall not need to be stripped before maintenance coats are applied.
 - 8. UV Protection: UV reflectors, absorbers, and micro transoxide absorbent pigment.
 - 9. Volatile Organic Compounds (VOCs): 34 grams per liter.
- ** NOTE TO SPECIFIER ** Retain the following paragraph if optional fungicide/algaecide is required.

- 10. Fungicide/Algaecide: 1 percent solution; manufactured by Troy Chemicals.
- 11. Coverage: 100 to 300 square feet (9.3 to 27.9 square meters) per gallon per coat, depending on wood age, species and condition.

** NOTE TO SPECIFIER ** Retain the following paragraph for Clear UV formula. Clear UV formula will protect and seal the wood with slight deepening and enriching of wood's natural color and grain. No long term UV protection with Clear UV formula when applied to wood exposed to direct sunlight. May be used alone on interior wood or soffits under overhang. Also to be specified as a third and final top coat over two coats of transparent series Timber Pro stain on exterior wood siding.

- 12. Finish: Clear UV.
- 13. Finish: Micro-Tint Series Stain (two coats required on exterior wood).

** NOTE TO SPECIFIER ** Retain one of the following three paragraphs for Color.

- a. Colors: Indicated on drawings.
- b. Colors: To be selected by Architect from manufacturer's full range of available colors.
- c. Color as follows:

** NOTE TO SPECIFIER ** Retain one of the following paragraphs.

- 1) Chestnut.
- 2) Hazelnut.
- 3) Koawood.
- 4) Madrone.
- 5) Myrtlewood.
- 6) Pecan.
- 7) Ponderosa.
- 8) Tamarack.
- 14. Finish: Transparent Series Stain (two coats required on exterior wood, top coat of Clear UV Log & Siding Smooth Formula recommended on siding).

** NOTE TO SPECIFIER ** Retain one of the following three paragraphs for Color.

- Colors: Indicated on drawings.
- b. Colors: To be selected by Architect from manufacturer's full range of available colors.
- c. Color as follows:

** NOTE TO SPECIFIER ** Retain one of the following paragraphs.

- 1) TR 01 Oregon Cedar.
- 2) TR 02 Yellow Curry.
- 3) TR 03 Butterscotch.
- 4) TR 04 Charcoal Gray.
- 5) TR 05 Honey.
- 6) TR 06 Red Cedar.
- 7) TR 07 Redwood.
- 8) TR 08 Leather.
- 9) TR 09 Nutmeg.
- 10) TR 10 Khaki.
- 11) TR 11 Natural Gold.
- 12) TR 12 Woodlands.
- 13) TR 13 Antique Pine.
- 14) TR 15 Cafe.
- 15) TR 16 Pinecone.
- 16) TR 17 Lava.
- 17) TR 18 Walnut.
- 18) TR 22 Slate Gray.
- 19) TR 23 Weathered Gray.
- 20) TR 24 Driftwood Gray.
- 21) TR 25 Heartwood.
- 22) TR 28 Light Pine.

- 23) TR 29 Dark Pine.
- 24) TR 31 Pinewood.
- Finish: Semi-transparent Series (2 Coats Required on Exterior Siding):

** NOTE TO SPECIFIER ** Retain one of the following three paragraphs for Color.

- Colors: Indicated on drawings. a.
- Colors: To be selected by Architect from manufacturer's full range of b. available colors.
- Color as follows: C.

** NOTE TO SPECIFIER ** Retain one of the following paragraphs.

- ST 101 Parchment. 1)
- 2) ST 102 Bertero Blaze.
- 3) ST 103 Acorn.
- 4) ST 104 Teak.
- 5) ST 105 Light Oak.
- ST 106 Atlantic Gray. 6)
- 7) ST 107 Caramel.
- ST 108 Mocha. 8)
- 9) ST 109 Mahogany.
- ST 110 Rosewood. 10)
- ST 111 Smoke Blue. 11)
- 12) ST 112 Blue Ridge Gray.
- ST 113 Ebony. 13)
- 14) ST 114 Clear Green.
- 15) ST 115 Deep Green.
- 16) ST 116 Pavestone Red.
- ST 117 Taluswood. 17)
- 18) ST 119 Sage.
- ST 138 Blue Spruce. 19)
- ST 151 Butternut. 20)
- 21) ST 152 Bark.
- 22) ST 153 Blue Heron.
- Finish: Semi-Solid Series (Two Coats Required on Exterior Siding):

** NOTE TO SPECIFIER ** Retain one of the following three paragraphs for Color.

- Colors: Indicated on drawings. a.
- Colors: To be selected by Architect from manufacturer's full range of b. available colors.
- Color as follows:

** NOTE TO SPECIFIER ** Retain one of the following paragraphs.

- 1) SS 201 Silver Birch.
- 2) SS 202 Barnboard.
- 3) SS 203 Tan.
- 4) SS 204 Oxford Brown.
- 5) SS 205 Moss Green.
- 6) SS 206 Avocado.
- SS 207 Mushroom. 7)
- 8) SS 214 Silver Gray.
- 9) SS 222 Cape Cod Gray.
- SS 233 Burgundy. 10)
- 11) SS 240 Heritage Blue.
- 12) SS 242 Navy Blue.
- 13) SS 260 Forest Green.
- SS 268 Hunter Green. 14)

** NOTE TO SPECIFIER ** Timber Pro UV Crystal Urethane is recommended for wood cabinetry, wood doors and windows, interior wood walls, interior logs and railings, and interior wood paneling, trim, beams and wood ceilings. This product contributes to 3 LEED credits. Limitations: Waterborne products may cause grain to raise on some HARDWOOD species. We advise a one coat test patch to determine this occurrence. A pre-application of sanding sealer and a light sanding after first coat of urethane generally eliminates the grain raise prior to applying subsequent coats Timber Pro Crystal Urethane.

- B. Urethane Wood Finish: Waterborne oil-based urethane for wood cabinetry, wood doors and windows, interior wood walls, interior logs and railings, and interior wood paneling, trim, beams, and wood ceilings.
 - 1. Approved Product: Timber Pro UV Crystal Urethane.

** NOTE TO SPECIFIER ** Retain the following paragraph if LEED Credits are required for Project. Revise credit category if required.

- 2. LEED Credit: Credit 4.2 Low-Emitting Materials Paints & Coatings.
- 3. LEED Credit: Credit 6 Rapidly Renewable Materials.
- 4. LEED Credit: Credit 5.1 Regional Materials (dependent on project location).
- 5. Material: Oil-based water-borne urethane; fast drying; non-yellowing; chemical and stain resistant; non-flammable; water clean-up.
- 6. Volatile Organic Compounds (VOCs): 145 grams per liter minus water.
- 7. Chemical Stain Resistance: ASTM D1308.
- 8. Hardness/Abrasion Resistance: In accordance with manufacturers currently published data.
- 9. Coverage: 250 to 500 square feet (23.2 to 46.5 square meters) per gallon per coat, depending on wood age, species and condition.

** NOTE TO SPECIFIER ** Delete finishes not required.

- 10. Finish and Sheen: Clear gloss finish.
- 11. Finish and Sheen: Clear semi-gloss finish.
- 12. Finish and Sheen: Clear satin finish.

2.4 CLEANING AND STRIPPING SYSTEMS FOR WOOD

** NOTE TO SPECIFIER ** Timber Pro UV Strip & Brite removes gray from weathered wood and prepares wood for final finishes. Recommended for removal of dirt, mildew, weathering and oil-based stains and for restoration of logs, wood siding, fences, and decks. Strip & Brite will not remove acrylic or latex finishes. Delete paragraphs not required.

- A. Stripper and Brightener: Two-step system for cleaning and stripping logs, wood siding, fences, and decks.
 - 1. Approved Product: Timber Pro UV Strip & Brite.
 - 2. Material: Biodegradable: shall not contain bleach.
 - a. Part One, Cleaner/Stripper: Potassium hydroxide gel.
 - b. Part Two, Brightener: Citric acid crystalline powder mixed with water.
 - 3. Volatile Organic Compounds (VOCs):
 - a. Cleaner/Stripper: 0 grams per liter.
 - b. Brightener: 0 grams per liter.
 - 4. Coverage:
 - Cleaner: 100 square feet (9.3 square meters) per gallon, full strength;
 200 to 400 square feet (18.6 to 37.2 square meters) per gallon if diluted.
 - b. Brightener: 200 to 300 square feet (18.6 to 27.9 square meters) when mixed with 1.5 gallons of water.

** NOTE TO SPECIFIER ** Timber Pro UV Clean & Brite is an outdoor maintenance cleaner recommended for log homes, wood siding, fences, decks, stone, pavers, aggregate, asphalt or concrete. Clean & Brite is for maintenance cleaning as well as cleaning new wood surfaces before applying finishes. Clean & Brite will not remove previously applied wood finishes.

- B. Cleaner and Brightener: Aids in removal of dirt, mild graying, tannin stains, and environmental stains from exterior wood and masonry surfaces.
 - 1. Approved Product: Timber Pro UV Clean & Brite.
 - Material: Concentrated solution of citric acid, wood detergents and weather stain removers. Biodegradable; product shall not contain bleach or oxalic acid.
 - 3. Coverage: 100 square feet (9.3 square meters) per gallon of diluted product. Average dilution ratio is 1 part Clean & Bright to two parts water.

2.5 WOOD STABILIZER

** NOTE TO SPECIFIER ** Timber Pro UV Internal Wood Stabilizer penetrates bare, untreated wood to harden and densify the wood to prevent water penetration below the surface of the wood. Recommended for softwood species such as cedar, pine, fir, spruce, and redwood used in direct contact with consistent moisture such as fence posts, gardening boxes, shake roofs, decks, wood docks, wood siding and logs. Product does not have UV protection and will not fill or seal cracks or checks in wood. Delete paragraphs not required.

- A. Internal Wood Stabilizer: One time permanent application that chemically hardens and densifies softwood species used as fence posts, shake roofs, decks, wood siding and logs.
 - 1. Approved Product: Timber Pro UV Internal Wood Stabilizer (IWS).
 - Material: Non-toxic liquid penetrates bare, untreated wood with catalyst that
 reacts with alkali in the wood to densify wood with glass crystals; forms an
 internal barrier against water, fungus and other causes of deterioration; shall
 increase bonding of finish coats by 300 percent. Does not contain UV
 protection.
 - a. Discoloration: Product may flush contaminants such as natural tannin out of the wood which will darken or discolor the wood. Discoloration may be removed with Timber Pro UV Clean & Brite.
 - 3. Coverage: 150 to 200 square feet (14 to 18.6 square meters) per gallon. 2 coats recommended.
 - 4. Finish: Clear; leaves no apparent film or permanent visual change to the wood.
 - 5. LEED Credit: Low Emitting Material 4.2.

2.6 MASONRY SYSTEMS

** NOTE TO SPECIFIER ** Timber Pro UV Internal Concrete Sealer (ICS) is not a surface sealant but a penetrating internal sealer. Do not specify this product for painted, sealed, stained or colored concrete or exposed aggregates. Product does not seal cracks. Delete paragraphs not required.

- A. Internal Concrete Sealer: Chemically reactive penetrating concrete sealer and stabilizer for Portland cement concrete, shotcrete, cementitious stucco, and concrete mortar.
 - 1. Approved Product: Timber Pro UV Internal Concrete Sealer (ICS).
 - 2. Material: Non-toxic, non-flammable liquid reacts with free lime and calcium hydroxides to form a silica gel that hydrates into crystalline glass to cure, seal, dust-proof, and waterproof concrete surface; shall hold hydrostatic head; shall increase density, compressive and flexural strength of concrete; shall not alter color or texture of concrete surface; shall increase bonding of finish coats by 300 percent; shall allow application of topping or mastic for floor finishes.
 - 3. Volatile Organic Compounds (VOCs): 0 grams per liter.
 - 4. Coverage: 150 to 200 square feet (14 to 18.6 square meters) per gallon. 1 to 3 coats recommended.
 - 5. Finish: Clear; leaves no apparent film or visual change to the substrate.

6. LEED Credit: Low Emitting Material 4.2.

** NOTE TO SPECIFIER ** Timber Pro UV Masonry Top Sealer is a penetrating surface sealer for concrete and masonry including brick, exposed aggregate, cured asphalt, and sandstone.

- B. Masonry Sealer: Seals and waterproofs concrete, brick, exposed aggregate, asphalt shingles, and sandstone; above and below grade.
 - 1. Approved Product: Timber Pro UV Masonry Top Sealer (MTS).
 - 2. Material: Non-toxic, non-flammable penetrating surface sealer; one coat application; impervious to grease, oils, acids and salts.
 - 3. Volatile Organic Compounds (VOCs): 30 grams per liter.
 - 4. Coverage: 100 to 300 square feet (9.3 to 27.9 square meters) per gallon. One coat only may be applied.
 - 5. Finish: Clear; non-glossy; leaves no apparent film or visual change to the substrate other than slight darkening.
 - 6. LEED Credit: Low Emitting Material 4.2.
- ** NOTE TO SPECIFIER ** Timber Pro Paver Stain and Sealer protects, preserves and enriches porous masonry, pavers and architectural natural stone. Not appropriate for driveways or garage floors where vehicles will be driven.
 - C. Paver Stain and Sealer: Protects, preserves and enriches porous masonry, pavers and architectural natural stone.
 - 1. Approved Product: Timber Pro Paver Stain and Sealer.
 - 2. Material: Low-odor, non-flammable, waterborne oil-base.
 - 3. Volatile Organic Compounds (VOCs): 31 grams per liter.
- 4. LEED Credit: Low Emitting Material 4.2.
 - LEED Credit: Credit 6 Rapidly Renewable Materials.
 - LEED Credit: Credit 5.1 Regional Materials (dependent on project location).

** NOTE TO SPECIFIER ** Select color. Delete colors not required.

- 5. Provide the following color:
 - a. Clear.
 - b. Glacier.
 - c. Jade.
 - d. Amber.
 - e. Brick.
 - f. Earth.
 - g. Ebony.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin application of coatings until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

- B. Apply at coverage rate recommended by manufacturer.
- C. Do not apply to wet or damp surfaces, unless instructed by manufacturer.
- D. Apply without runs, drips, or sags, without brush marks, and with consistent sheen.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION