

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The Contractor, Subcontractors, and/or suppliers providing goods or services referenced in or related to this Section shall also be bound by the Documents identified in Division 01 Section "Summary", Paragraph 1.01A, entitled "Related Documents."

1.02 SUMMARY

- A. Section includes:
 - 1. Field-finished wood flooring, including stair treads and risers.
 - 2. Staining and finishing wood flooring, stair treads and risers.
- B. Related Section includes:
 - 1. Division 01 Section "Sustainable Design Requirements."
 - 2. Division 06 Section "Sheathing" for structural panel concrete subflooring and plywood subflooring.
 - 3. Division 06 Section "Interior Architectural Woodwork" for interior and standing and running wood trim.

1.03 SUBMITTALS

- A. Product Data: For each type of product indicated.
 - 1. Provide certification by the manufacturer that finishing products supplied comply with State of Connecticut Ozone Transportation Commission (OTC) regulations controlling use of volatile organic compounds (VOCs).
- B. CTHPB Documentation Submittals: Comply with Division 01 Section "Sustainable Design Requirements" and provide the following in addition to other action submittals:
 - 1. Product Data for Credit 5d: For adhesives and sealants, documentation including printed statement of VOC content.
 - 2. Product Data for Credit 5d: For paints and coatings, including printed statement of VOC content.
 - 3. Product Data for Credit d8: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.
 - 4. Product Certificates for Credit d10: For products and materials required to comply with requirements for regional materials indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include statement indicating cost for each regional material and the fraction by weight that is considered regional.

5. Certificates for Credit d13: Chain-of-custody certificates indicating that products specified to be made from certified wood comply with forest certification requirements. Include documentation that manufacturer is certified for chain of custody by an FSC-accredited certification body. Include statement indicating cost for each certified wood product.
 6. Laboratory Test Reports for Credit b4: For composite wood and agrifiber products, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- C. Samples for Verification: For each type of wood flooring, with finish required, approximately 12 inches long and of same thickness and material indicated for the Work and showing the full range of normal color and texture variations expected.

1.04 QUALITY ASSURANCE

- A. Source Limitations: For field-finished wood flooring, obtain each species, grade, and cut of wood from one source with resources to provide materials and products of consistent quality in appearance and physical properties.
- B. Installer Qualifications: An experienced installer who has completed wood athletic flooring installations similar in material, design, and extent to that indicated for this Project and whose work has resulted in installations with a record of successful in-service performance.
 1. Installer shall be a firm or individual that has been approved by MFMA as an accredited Installer according to the MFMA Accreditation Program.
- C. Hardwood Flooring: Comply with NOFMA's "Official Flooring Grading Rules" for species, grade, and cut.
- D. Build mockup of typical flooring area, including wood base and shoe moldings.
 1. To set quality standards for sanding and application of field finishes, prepare finish mockup of floor area as shown on Drawings.
 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver wood flooring materials in unopened cartons or bundles.
- B. Protect wood flooring from exposure to moisture. Do not deliver wood flooring until after concrete, masonry, plaster, ceramic tile, and similar wet work is complete and dry.
- C. Store wood flooring materials in a dry, warm, ventilated, weathertight location.

1.06 PROJECT CONDITIONS

- A. Conditioning period begins not less than seven days before wood flooring installation, is continuous through installation, and continues not less than seven days after wood flooring installation.
 - 1. Environmental Conditioning: Maintain an ambient temperature between 65 and 75 deg F and relative humidity planned for building occupants in spaces to receive wood flooring during the conditioning period.
 - 2. Wood Flooring Conditioning: Move wood flooring into spaces where it will be installed, no later than the beginning of the conditioning period.
 - a. Do not install flooring until it adjusts to relative humidity of, and is at same temperature as, space where it is to be installed.
 - b. Open sealed packages to allow wood flooring to acclimatize immediately on moving flooring into spaces in which it will be installed.
- B. After conditioning period, maintain relative humidity and ambient temperature planned for building occupants.

1.07 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Wood Flooring: Equal to 3 percent of amount installed for each type of wood flooring indicated.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Hardwood Flooring: Comply with NWFA A500 for species, grade, and cut.
 - 1. Certification: Provide flooring that carries NWFA grade stamp on each bundle or piece.

2.02 FIELD-FINISHED WOOD FLOORING

- A. Solid-Wood, Strip Flooring: Kiln dried to 6 to 9 percent maximum moisture content, tongue and groove and end matched, and with backs channeled (kerfed) for stress relief.
 - 1. Species and Grade: White maple, plain sliced.
 - 2. Face width: 4 inches.
 - 3. Thickness: 5/4- inch.
 - 4. Lengths: Random-length strips complying with applicable grading rules, not less than 48 inches.

2.03 FINISHES

- A. All products shall comply with the VOC content regulations of the Ozone Transportation Commission (OTC) effective in the State of Connecticut, for interior paints and coatings applied at Project site.
- B. Urethane Finish System: Complete water-based system of compatible components that is recommended by finish manufacturer for application indicated.
 - 1. Basis of Design Product: Subject to compliance with requirements, provide **Bona; Bona Traffic HD** or comparable product by one of the following:
 - a. Dura Seal, Sherwin-Williams Company (The).
 - b. Hillyard, Inc.
 - 2. VOC Content: When calculated according to 40 CFR 59, Subpart D (EPA Method 24), as follows:
 - a. Finish Coats and Floor Sealers: Not more than 275 g/L.
 - b. Stains: Not more than 100 g/L.
 - 3. Floor Sealer: Pliable, penetrating type.
 - 4. Finish Coats: Formulated for multicoat application on wood flooring.

2.04 ACCESSORY MATERIALS

- A. Fasteners: As recommended by manufacturer, but not less than that recommended in NWFA's "Installation Guidelines: Wood Flooring."

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas and conditions, with Installer present, for compliance with requirements for maximum moisture content, installation tolerances, and other conditions affecting performance of wood flooring.
 - 1. Verify that substrates comply with tolerances and other requirements specified in other Sections.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Broom or vacuum clean substrates to be covered immediately before product installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.03 INSTALLATION

- A. Comply with flooring manufacturer's written installation instructions, but not less than applicable recommendations in NWFA's "Installation Guidelines: Wood Flooring."
- B. Solid-Wood Flooring: Blind nail flooring to plywood substrate.

3.04 FIELD FINISHING

- A. Machine-sand flooring to remove offsets, ridges, cups, raised grain and sanding-machine marks that would be noticeable after finishing. Vacuum and tack with a clean cloth immediately before applying finish. Keep sanding to a minimum.
 - 1. Comply with applicable recommendations in NWFA's "Installation Guidelines: Wood Flooring."
- B. Fill and repair wood flooring seams and defects.
- C. Apply floor-finish materials in number of coats recommended by finish manufacturer for application indicated, but not less than one coat of floor sealer and three finish coats.
 - 1. For water-based finishes, use finishing methods recommended by finish manufacturer to minimize grain raise.
- D. Cover wood flooring before finishing.
- E. Do not cover wood flooring after finishing until finish reaches full cure, and not before seven days after applying last finish coat.

3.05 PROTECTION

- A. Protect installed wood flooring during remainder of construction period with covering of heavy kraft paper or other suitable material. Do not use plastic sheet or film that might cause condensation.
 - 1. Do not move heavy and sharp objects directly over kraft-paper-covered wood flooring. Protect flooring with plywood or hardboard panels to prevent damage from storing or moving objects over flooring.

3.06 INTERIOR NATURAL-FINISH SCHEDULE

- A. Wood Flooring, Stair Treads and Risers:
 - 1. Satin-Varnish Finish: Two finish coats of clear satin varnish over a sealer coat.
 - a. Sealer Coat: Clear sanding sealer.
 - b. Finish Coats: Interior polyurethane-based clear satin varnish.

END OF SECTION