

**Specification Note:**

The following specifications call out the material and default installation requirements necessary for the floor as recommended by the seller. In some cases, local codes, physical requirements or installer recommendation may override these methods and procedures. It is recommended to review the specification with a sales professional before incorporating the specification into the project design. Some options impact installed cost and verification of the design and budget is advised.

For the name of the Owens Regional Territory Director or local distributor in your area, contact Owens Flooring at 715-524-6065 or at [www.owens-flooring.com](http://www.owens-flooring.com).

**SECTION 09 64 33.03**  
**UNFINISHED ENGINEERED WOOD FLOORING**

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**Part 1-GENERAL**

**1.01 SECTION INCLUDES**

- Engineered Hardwood Flooring for residential or commercial applications.
  - Owens Unfinished Signature Collection

**1.02 RELATED SECTIONS**

- Related work specified under other sections. (A cross-reference should be incorporated in these sections.)
  - Concrete and Concrete Finishing ..... Section 03300
  - Rough Carpentry: Wood subfloor ..... Section 06100
  - Finish Carpentry: Adjacent wood Trim..... Section 06200
  - Painting: Clear finishes, field applied ..... Section 09900

**1.03 SUBMITTALS**

- Samples for Initial Selection: brochure that shows full range of species and sizes available.
- Sample for Verification: 2 pieces each for each type of engineered flooring, approximately 11.5” (292mm) long and same thickness and material for the Work. Samples to show, as much as possible, the full range of normal color and texture variations that are expected.
- Installation Instructions: installation instructions for type (nail/staple or glue-down/floating) of installation being performed at the job-site.
- Warranties: Warranty for product specified.

**1.04 QUALITY ASSURANCE**

- Installer Qualifications: An experienced installer who has completed engineered wood flooring similar in material, design, and extent to that indicated for the Project and whose work has resulted in engineered wood flooring installations with a record of successful in-service performance.
- Engineered-Wood Flooring:
  - Plywood substrate:
    - Type: Plywood must be exterior grade Baltic Birch.
    - TSCA TITLE VI compliant: Product must be TSCA TITLE VI compliant.
    - Finger-joints: Plywood must be finger-jointed where needed, and free of any butt or scarf joints.
    - Wear Layer:
      - Type: Hardwood wear layer will be dry sawn lumber sourced from the best specialty mills in the world.
      - Thickness: Harwood wear layer will be 3/16” (4.7mm) thick.
      - Moisture test: Moisture test for lumber use in wear layer must be done in accordance with ASTM-4442 guidelines.
      - Soak cycle tests: Soak cycle test must be performed on laminated product for three (3) days and results must be in accordance with the American National Standard for Engineered Wood Flooring (ANSI/HPVA EF2002) standards.
      - Packaging: Product shipped in ETC32, 200lb burst test cardboard boxes.
      - Origin: Product must be engineered in the U.S.A.

- Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application of workmanship.
  - Finish areas only that are designated by Architect
  - Do not proceed with remaining work until workmanship, color and sheen are approved by Architect.
  - Approved mock-ups may become part of the completed Work if undisturbed at time of Substantial Completion.

### **1.05 DELIVERY, STORAGE AND HANDLING**

- Deliver engineered wood flooring material in unopened cartons.
- Protect engineered wood flooring from exposure to moisture. DO NOT deliver material until after all concrete, masonry, plaster, ceramic tile, and similar wet-work has been completed and allowed to dry thoroughly.
- Store engineered wood in a dry, warm, well ventilated, weather tight location.
- Engineered flooring should be stored in controlled environment in which it will be installed for 5-7 days prior to installation. Carton ends should be opened to allow for acclimation.

### **1.06 PROJECT CONDITIONS**

- Installation site should have HVAC systems in place and should be a consistent room temperature of 60-80° F (16-27° C) and humidity level of 35-55% for 14 days prior, during and after installation.
- The building should be closed in, with all outside doors and windows in place. The wall coverings should be in place and the painting completed except for the final coat on the base molding. If at all possible, delay installation of base molding until flooring installation is complete. All concrete, masonry, framing members, drywall, paint and other wet-work should be thoroughly dry.
- Exterior grading should be complete. To direct flow away from the structure grading should offer a minimum drop of 3" to 10". Do not obstruct the drainage with landscaping materials. All gutters and downspouts should be in place prior to flooring installation.
- Subfloor requirements:
  - **LEVEL/FLAT** - within 3/16" in 10' (5 mm in 3 m) and/or 1/8" in 6' (3mm in 2m).
  - **CLEAN** – Free of debris, loose materials or materials that may release with age such as paint and dry wall materials.
  - **DRY** - Check and document moisture content of the sub-floor using the appropriate moisture test. Concrete sub-floors must be a minimum of 30 days old before testing begins. Concrete must not exceed 4.5 using a Tramex Moisture Encounter meter. Calcium Chloride test results should not exceed 3# 24hr/1000 ft<sup>2</sup>. Wood sub-floors must not exceed 12% and there must be no more than 4% difference between the engineered flooring and the wood sub-floor material. If the sub-floor has excessive moisture apply a suitable moisture retardant that is compatible with the adhesive being used. Contact the adhesive supplier for their recommendation and warranty.

### **1.07 EXTRA MATERIALS**

- 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.
- Engineered wood flooring: Equal to <insert amount> percent of amount installed for each product indicated, but no fewer than <insert number> pieces for each type and finish indicated

## **Part 2 – PRODUCTS**

### **2.01 MANUFACTURERS**

- Acceptable Manufacturer: Owens Flooring, which is located at 105 Plank Road Shawano, WI 54166  
Tel: 715-524-6065 Fax: 715-524-6084 [www.owens-flooring.com](http://www.owens-flooring.com)
- Substitutions: **NOT PERMITTED**

### **2.02 MATERIALS**

- General
  - Species: as specified
    - Engineered flooring products are 5/8" (15mm) total thickness.
    - Dry sawn lumber wear layer to be 3/16" (4.7mm) thick.
    - Flooring will be T&G and End Match

- Depending on Species, engineered flooring available in 2-1/4" to 8" (57 to 200mm) widths.
  - Normal length of material is 1' - 8'
  - Other lengths available on request
- Surface Treatments
  - Wire Brushed available on certain species
  - Hand Scrape available
- Grades:
  - Premium
  - Select
  - #1/Btr
  - #1 Common/character
  - 2<sup>nd</sup> & Btr
  - Character
  - Natural
- Cuts
  - Plain Sawn
  - Rift and Quartered
  - Custom cuts may be available
- Species specifics:
  - Red Oak
    - Cut
      - Plain Sawn
      - Rift and Quartered
      - Other
    - Grades
      - Premium
      - Select
      - #1 common/character
    - Widths
      - 2-1/4" - 8" (57 to 200mm)
  - White Oak
    - Cut
      - Plain Sawn
      - Rift and Quartered
      - Other
    - Grades
      - Premium
      - Select
      - #1 common/character
    - Widths
      - 2-1/4" - 8" (57 to 200mm)
  - Hard Maple
    - Cut
      - Plain Sawn
    - Grades
      - Select White
      - 2<sup>nd</sup> & btr
    - Widths
      - 2-1/4" - 8" (57 to 200mm)
  - American Cherry
    - Cut
      - Plain Sawn
    - Grade
      - Natural
    - Widths
      - 3" - 8" (76 to 200mm)

- Brazilian Cherry
  - Cut
    - Plain Sawn
  - Grade
    - Select
  - Widths
    - 3"-8" (76 to 200mm)
- Eucalyptus
  - Cut
    - Plain Sawn
  - Grade
    - Select
  - Widths
    - 3"-8" (76 to 200mm)
- Hickory
  - Cut
    - Plain Sawn
  - Grades
    - #1/btr
    - Character
  - Widths
    - 2-1/4"-8" (57 to 200mm)
- Santos Mahogany
  - Cut
    - Plain Sawn
  - Grade
    - Select
  - Widths
    - 3"-8" (76 to 200mm)
- Sapele
  - Cut
    - Plain Sawn
  - Grade
    - Select
  - Widths
    - 3"-8" (76 to 200mm)
- Walnut
  - Cut
    - Plain Sawn
  - Grade
    - Select
    - Natural
  - Widths
    - 3"-8" (76 to 200mm)

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- Examine substrates, areas and conditions, with installer present, for compliance with requirements for maximum moisture content, installation tolerances and other conditions affecting performance of installation work.
- If substrate preparation is the responsibility of another contractor, notify the Architect of an unsatisfactory preparation of the floor prior to proceeding.

### **3.02 PREPARATION**

- Subfloor preparation:
  - **LEVEL/FLAT** - within 3/16" in 10' (5 mm in 3 m) and/or 1/8" in 6' (3mm in 2m).
  - **CLEAN** – Free of debris, loose materials or materials that may release with age such as paint and dry wall materials.
  - **DRY** - Check and document moisture content of the sub-floor using the appropriate moisture test. Concrete sub-floors must be a minimum of 30 days old before testing begins. Concrete must not exceed 4.5 using a Tramex Moisture Encounter meter. Calcium Chloride test results should not exceed 3# 24hr/1000 ft<sup>2</sup>. Wood sub-floors must not exceed 12% and there must be no more than 4% difference between the flooring and the wood sub-floor material. If the sub-floor has excessive moisture apply a suitable moisture retardant that is compatible with the adhesive being used. Contact the adhesive supplier for their recommendation and warranty.

### **3.03 INSTALLATION**

- Installation
  - General: Install wood flooring in accordance with manufacturer's written instructions for type of installation (nail/staple or glue down) procedure.
    - Recommended adhesives
      - Bostik's Ultra Set Single Step Wood Flooring Adhesive (or equivalent)
  - Pattern: Lay flooring in patterns indicated on drawings or, if not indicated, as directed by the Architect.
  - Expansion Space: Plan the layout for the best visual appearance of the finished floor. Measurements must be made to allow for the width of the flooring plus 1/2" expansion space and must allow for the width of the tongue.
  - Underlayment: Install the underlayment parallel to the starting wall and in the same direction that the flooring will be installed. Do not overlap joints. Underlayment should be cut flush with the walls. Tape all joints using a water resistant tape; allow no wrinkles.
    - Use appropriate underlayment for the job application.
  - Install base at floor perimeter to cover expansion space in accordance with manufacturer's instructions
  - Sand and finish flooring with floor finish specified by Architect.

### **3.04 PROTECTION**

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

### **3.05 MAINTENANCE**

- Please follow specific maintenance instructions provided by the manufacturer of the floor finish used on this job.

END OF SECTION