



SECTION 09 64 29
PREFINISHED FSC MAPLE FLOORING

General notes to the specifier:

This is a template: edit this specification carefully to suit specific project requirements.

Following guidelines established by the construction specifications institute

This specification section organizes information in three parts:

Part 1 – General: describes administrative and procedural requirements;

Part 2 – Products: describes materials, products, and accessories to be used in the project; and

Part 3 – Execution: describes how these products are to be installed.

Referenced section numbers and titles are based on *Masterformat*, 2004 edition.

This section assumes the project manual contains complete Division 1 documents including Sections 01 33 00–Submittal Procedures, 01 62 00–Product Options, 01 25 00–Substitution Procedures, 01 66 00–Product Storage and Handling Requirements, 01 74 23–Final Cleaning, 01 77 00–Closeout Procedures, and 01 78 00–Closeout Submittals. If the project manual is lacking these sections, additional information should be included under the appropriate articles herein.

Editing guide:

| *italicised paragraphs* are notes to the specifier and should be deleted from final draft.

[square brackets] denote options requiring selection by the specifier- delete unused options.

_____underlined blanks indicate items that may require supplementary information.

Bold face type is used to highlight optional paragraphs and phrases that may be selected or deleted as required. Reformat bold face type when including these elements



PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Prefinished, [pre-stained] solid maple strip flooring installed by the [nail or staple down method.] [glue down method.] [nail or staple and glue-down method.]

- B. Related sections:

List other specification sections dealing with work directly related to this section and for other types of flooring materials abutting the maple flooring

1. **01 35 14 – LEED Credit Summary.**
2. **03 30 00 – Cast-in-Place Concrete: Concrete slab substrate.**
3. **06 10 00 – Rough Carpentry: Wood subfloor.**
4. **06 20 00 – Finish Carpentry: Baseboards and associated trim not otherwise included in this section.**
5. _____ - _____.

1.2 SUBMITTALS

- A. Submit under provisions of Section 01 33 00–Submittal Procedures the following items:

1. Product Data.
 - a. Flooring: Include **complete range of 8 available colours or natural colour or selected custom-matched colours**, adhesive used in manufacture of flooring planks and finish data.
 - b. **Accessories.**
 - c. **Installation adhesive.**
2. Shop Drawings: Include direction of flooring, fastening method, flooring patterns and colour layout, and 1:1 scale sectional details of **accessories and** transition to other flooring materials.
3. Samples:
 - a. 12 inch (300 mm) long piece of pre-finished maple flooring material in natural, specified stock colour or custom colour-matched colour.
 - b. Fasteners.
 - c. **One of each specified accessory, minimum 4 inches (100 mm) long.**
4. Quality Assurance/Control Submittals:
 - a. Qualifications: Proof of manufacturer and installer qualifications.
 - b. Test Reports: Reports for specified Physical Property Performance Requirements.
 - c. Manufacturer's Installation Instructions.

- B. Closeout Submittals: Submit under provisions of Section 01 78 00–Closeout Submittals the following items:

1. Maintenance Instructions.
2. Letter of Warranty.

- C. LEED Submittals:

1. Credit EQ 4.1: Wood flooring adhesive manufacturer's product data indicating that the adhesive used has a VOC of less than 100 (g/L less water).
2. Credit EQ 4.2: Wood flooring coating data indicating finish used has a VOC of less than 275 g/L.
3. Credit MR 7: Provide letter confirming flooring is from FSC-certified sources.



1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications
 - a. Minimum five years experience in the development, manufacture and distribution of high-performance polyurethane floor coatings and stains for wood flooring.
 - 2. Installer Qualifications:
 - a. Minimum three years experience in hardwood flooring installation.
 - b. **Minimum three years experience in installation of hardwood flooring over radiant heating systems.**

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Reference Section 01 66 00–Product Storage and Handling Requirements.
- B. Deliver DuroDesign FSC maple flooring to project site in original packaging not less than 5 days prior to installation start date.

1.5 PROJECT/SITE CONDITIONS

*For a **radiant floor heating system** specify "5 days" in the paragraph below, otherwise specify "72 hours."*

- A. Environmental Requirements: Area to receive flooring, maple flooring material itself **and adhesive** must be maintained at normal occupancy temperature and humidity levels for minimum [72 hours] [5 days] prior to, during and continuously following installation.

1.6 WARRANTY

FOR COMMERCIAL PROJECTS, USE WARRANTY ARTICLES A. AND B. FOR RESIDENTIAL PROJECTS USE WARRANTY ARTICLE C. ONLY.

- A. Structural Warranty: 25 years against manufacturing defects when installed and maintained in accordance with manufacturer's installation instructions.
- B. Finish Warranty: 5 years against wear through to the underlying maple flooring or separation from the flooring when installed and maintained in accordance with manufacturer's installation and maintenance instructions: two coats of MP765 water-base polyurethane is applied yearly for high-traffic retail areas, two to three years for low to medium commercial traffic and five to seven years for residential applications.
- C. Color Warranty: no fading or discolouration of the stain over time.



PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. DuroDesign Flooring Inc.
3229 Nord Autoroute Laval (A-440) Ouest,
Laval, QC H7P 5P2
Website: <http://www.duro-design.com/>
- Toll free: (888) 528-8518
Tel.: (450) 978-3403
Fax: (450) 978-2542
e-mail: info@duro-design.com

| *Insert name, address and phone numbers of local distributor/dealer below.*

1. Distributor/Dealer:

- B. Solid Maple Flooring Strip Type:
a. **Color: [Natural] [DuroDesign Color] [Natural and coloured as shown on Drawings].**

C. Substitutions: None Permitted.

2.2 MATERIALS

- A. Hard Maple Flooring:
1. Species: *Acer saccharum* & *Acer nigrum*
 2. Grade: Pacific (mixture of Select & Better and Natural grades)
 3. Size: [2 ¼ inches (57.2 mm)] [2 ½ inches (63.5 mm)] [3 ½ inches (82.6 mm)] [4 ¼ inches (108 mm)] wide by 49/64 inch (19.5 mm) thick by 10-76 inches (254-1930 mm) long.
 4. Edge: Tongue and groove with micro-v bevel edges.
 5. Back: Channeled for stress-relief.
 6. Factory finish: 6 coats MP 765 water base polyurethane for high traffic use and maximum transparency
 7. Physical Property Performance Requirements:
 - a. Hardness: ASTM D 1037, Janka Ball: Minimum 1450 lbs (6450 N).
 - b. Dimensional Stability: ASTM D 1037: Dimensional change coefficient: 0.00353.
 - c. Density: 48 lbs/ft³ (769 kg/m³)
 - d. Flammability: ASTM E 648: Class I Interior Floor Finish rating per NFPA 101.
 - e. Compressive Strength: parallel to grain: 1470 psi (10.2 MPa)
 - f. Slip Resistance: ASTM F 1679, English XL test: Average Dry Slip Index: 0.630.
 - g. Moisture Content: Kiln dried to 6-8% maximum moisture.
- B. **Adhesive: One-part moisture-cured urethane premium wood floor adhesive.**
- C. **Fasteners:**
1. **1-1/2 Inch (38 mm) Thick Subfloor: 2 inch (50 mm) nails or staples.**
 2. **3/4 Inch (19 mm) Thick Subfloor: 1-1/2 inch (38 mm) nails or staples.**
 3. **1 inch (25 mm) Thick Plywood Subfloor Over Concrete: 1-1/4 inch (32 mm) nails or staples.**

2.3 ACCESSORIES

- A. Subfloor filler: Portland cement-based as recommended by flooring manufacturer.



Insert accessories such as baseboards, transition strips, and thresholds here. Coordinate installation of transition strips to other flooring materials and finished floor heights, if applicable, and determine which flooring installer should provide transition materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates upon which maple flooring will be installed.
 - 1. Verify that subfloor is structurally sound, clean, dry, and free of contaminants that would interfere with bonding of the flooring adhesive (such as concrete curing compounds, waxes or oils).
 - 2. In wood frame structures, do not begin installation of flooring until the moisture content of wood subfloors is at a maximum of 12% and within 4% of the moisture content of the flooring material.

Following three paragraphs apply only to maple flooring installed over concrete substrates.

- 3. Test concrete floors for moisture vapour emission using a Calcium Chloride test. Do not install DuroDesign maple flooring if vapor pressure exceeds 3 lbs per 1,000 square feet (15 g per m²) in 24 hours.
 - 4. Test alkalinity of the concrete slab to confirm it is within adhesive manufacturer's acceptable range.
 - 5. Document test results and mark all test location(s) on As-Built Drawings.
- B. Verify that HVAC system is operating and maintaining occupancy level temperature and humidity conditions.
- C. Report unsatisfactory conditions to Architect and/or General Contractor and correct before proceeding.

3.2 PREPARATION

- A. Acclimatization: Open DuroDesign FSC maple flooring boxes and remove packaging a minimum 3 days prior to start of installation. . Consult manufacturer's installation instructions for complete instructions.
- B. Grind and fill subfloor using methods and materials appropriate to the subfloor construction to eliminate humps and depressions exceeding 1/8 (3 mm) inch in 6 feet (1830 mm).
- C. Clean surfaces thoroughly prior to installation.

3.3 INSTALLATION

Under normal installation conditions, the manufacturer's installation instructions are sufficient. Unusual or unique site or design conditions may demand supplementary information in this article.

- A. Maple Flooring: Install in accordance with manufacturer's complete installation instructions by [nailing or stapling to substrate] [gluing to substrate]. Details below are a summary only.
- B. Lay flooring in the direction(s)/pattern(s) as shown on Drawings.
- C. For a blended appearance select pieces randomly from several boxes.
- D. Allow 3/4 inch (18 mm) space for expansion and movement of maple flooring at walls and permanent obstructions.

Include the following paragraphs if adhesive installation method is used.



- E. Use the "wet lay" or "walk-on-work" installation method as specified by the adhesive manufacturer. Use only adhesive recommended by flooring manufacturer.
- F. Adhere maple flooring strips without gaps. Ensure that each floor strip is completely adhered to substrate.
- G. Immediately remove excess adhesive from pre-finished surface of DuroDesign maple flooring.

| Include the following paragraphs if nailed or stapled installation method is used.

- H. Lay strip maple flooring over wood subfloor parallel with length of room.
- I. Blind [staple][nail] maple flooring to subfloor with power driver. Space fasteners at 6-10" (152-254 mm) and 2" (51mm) from end of boards. Stagger end joints from row to row by a minimum of 12" (305mm).
- J. Accessories: Install using methods appropriate to the accessory and flooring system.**

3.4 CLEANING

- A. Reference Section 01 74 23–Cleaning.
- B. Follow manufacturer's recommended maintenance instructions.

3.5 PROTECTION

- A. Repair or replace defective or damaged work as directed by the Architect. All chipped, scratched or otherwise damaged or defective work will be repaired or replaced. All repairs shall be undetectable. Use manufacturer-supplied touch up stain if required.
- B. Cover and protect completed maple flooring from further construction traffic with heavy kraft-paper or other suitable covering. Do not use non-breathable sheet or film that could cause condensation to form. Maintain covering throughout remainder of construction period.

END OF SECTION

This specification was last updated May 2013.
The most recent revision of this document is available at www.duro-design.com