

SECTION 09 62 29

HARDWAX OIL PREFINISHED CORK TILE FLOORING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Pre-finished, pre-glued [pre-stained] Cork Tile Flooring

B. Related sections:

List other specification sections dealing with work directly related to this section and for other types of flooring materials abutting the cork 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 6 patterns and 88 available colors or selected custom-matched colors**, adhesive used in installation of flooring and finish data. **b. Accessories.**
2. Shop Drawings: Include direction of flooring, flooring patterns and color layout, and 1:1 scale sectional details of **accessories and** transitions to other flooring materials.
3. Samples:
 - a. 12 inch (300 mm) long piece of pre-finished cork tile material in selected pattern and in specified stock or custom color-matched color.
 - b. **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 01780–Closeout Submittals the following items:

1. Maintenance Instructions and Letter of Warranty.

C. LEED V4 Submittals:

1. Materials and Resources: Building product disclosure and optimization – sourcing of raw materials (up to 2 pts): 93% pre-consumer recycled cork content
2. Indoor Environmental Quality: Low-emitting materials (up to 3 pts): Cork flooring contact adhesive data indicating it has a VOC of less than 80 g/L.
3. Indoor Environmental Quality: Acoustic performance (up to 2 pts): Cork's unique cellular structure improve the acoustic performance of a space.
4. Materials and Resources: Building product disclosure and optimization – material ingredients (up to 2 pts): Cork material ingredients are publicly documented and contain no hazardous materials

1.3 QUALITY ASSURANCE

A. Qualifications:

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

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Reference Section 01 66 00–Product Storage and Handling Requirements.
- B. Do not deliver or install cork parquet tiles until trowel trades are complete; building is enclosed and weather-tight; and permanent heating, air conditioning, ventilating and lighting are installed and operating.
- C. Store pre-glued cork parquet tiles on edge no more than three boxes high at job site in dry, well-ventilated area. During storage and installation, maintain temperature and relative humidity to level consistent with those conditions which will prevail when building is occupied. In most cases, this means maintaining temperature range of 60 degrees to 85 degrees Fahrenheit and relative humidity range of 50% to 70%. In order to reach this climate, use heating or air conditioning for appropriate length of time prior to beginning installation.

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 cork flooring and flooring material 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

- A. Structural Warranty: 25 years against delamination, separation, buckling or cupping as a result of a manufacturing defect when installed and maintained in accordance with manufacturer's installation instructions.
- B. Finish Warranty: 5 years against wear through to the underlying cork flooring or separation from the flooring when installed and maintained in accordance with manufacturer's installation and maintenance instructions: one coat of our hardwax universal oil 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 discoloration of the stain over time.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. DuroDesign Flooring Inc.
4999 Rue Louis-B.-Mayer
Laval, Québec, Canada H7P 0E5
Website: <http://www.durodesign.com/>
- Toll free: (888) 528-8518
Tel.: (450) 978-3403
Fax: (514) 317-5704
e-mail: info@durodesign.com

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

- 1. Distributor/Dealer:

Choose cork pattern and colors below

- B. Cork Tile Flooring:
 - 1. **Cork flooring for residential or commercial**
 - a. **Pattern:** [Baltico] [Barriga] [Cleopatra] [Cleopatra Negra] [Edipo] [Marmol]
 - b. **Color:** [Natural] [DuroDesign Color Name] [Natural and colored as shown on Drawings].
- C. Substitutions: None Permitted.

2.2 MATERIALS

- A. Cork Flooring:
 - 1. Installation Style: Installation by contact adhesive method. Tiles are pre-glued by manufacturer.
 - 2. Size: 11-13/16 inches (300 mm) wide by 23-5/8 inches (600 mm) long by 5/16 inch (8 mm) thick.

3. Edge: Square.
4. Composition: 100% high-density cork with no polyvinylchlorides (PVC)
5. Density: minimum 500 kg/m³ (31 lbs/ft³)
6. Finish: two coats Hardwax Oil
7. Physical Property Performance Requirements:
 - a. Acoustical Performance: on 8" concrete slab STC 58 IIC68 NC30
 - b. Acoustical Performance: on 8" concrete slab w/ drop ceiling: STC60 IIC73 NC30
 - c. Flammability: ASTM E 648: Class I Interior Floor Finish rating per NFPA 101.
 - d. Smoke Density: ASTM E 622: Maximum 270 in flaming mode; 330 in non-flaming mode.
 - e. Compressive recovery: ISO 9727 With loading of 38.5 lbs/in²- Initial: 10% Residual: 1.5% after 1 hour Breaking tension on traction: no less than 11 lbs/in²
 - f. Shock Absorption: UNE 56 817 74 Initial maximum indentation < 0.19 mm Maximum indentation after 1 hour < 0.08 mm
 - g. Slip Resistance: ASTM F 1679, English XL test: Average Dry Slip Index: 0.630.
 - h. Abrasion Resistance: ASTM D 4060, CS-17 Taber abrasive wheels: Final wear-through: Minimum 12,600 cycles.
 - i. Formaldehyde: None added

2.3 ACCESSORIES

- A. Subfloor filler: Portland cement-based as recommended by cork flooring manufacturer.
- B. Adhesive: Supplied with cork tile by manufacturer.

Insert accessories such as baseboards, transition strips, 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 cork flooring will be installed.
 1. Verify that subfloor is structurally sound, clean, dry, and free of contaminants that would interfere with bonding of the cement-based patching compound (such as concrete curing compounds, waxes or oils).
 2. In wood frame structures, do not begin installation of cork flooring until structure has been dried out, with moisture content of wood subfloors between 6 and 10 percent.

Following two paragraphs apply only to cork flooring installed over concrete substrates.

3. Concrete slab to be a minimum of 28 days old and dry. Flooring must not be installed if vapor pressure exceeds 3 lbs. per 1000 square feet in 24 hours as tested according to ASTM F 1869 (calcium chloride test method). Preferably the slab should be tested according to ASTM F 2170 (Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes) Flooring must not be installed if the relative humidity inside of the concrete slab exceeds 75%.

4. 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. Grind and/or fill subfloor using methods and materials appropriate to the subfloor construction to eliminate humps and depressions exceeding 1/8 (3 mm) inch in 10 feet (3048 mm).
- B. Sweep and then thoroughly vacuum surfaces immediately 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. Cork Flooring: Install in accordance with manufacturer's complete installation instructions. Details below are a summary only.
- B. Roll out contact adhesive onto to floor with a short-nap paint roller. Allow to dry fully. A second coat may be necessary on porous surfaces.
- C. Lay flooring in the direction(s)/pattern(s) as shown on Drawings.
- D. For a blended appearance select pieces randomly from several boxes.
- E. **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 cleaning and 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 and finish if required.

- B. Cover and protect completed cork flooring from further construction traffic with heavy kraft-paper or other suitable covering. Do not use non-breathable sheet or film. Maintain protection throughout remainder of construction period.

END OF SECTION

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