

Sustainable Flooring's CSI Spec. for Cork Flooring (09650)

PREFINISHED CORK FLOOR TILES

1.03 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer Qualifications:

- a. Use of low-VOC and E0 Compliant adhesives and finishes in manufacturing of all products.
- b. Minimum five years experience in manufacturing and distributing bamboo flooring of the type specified.
- c. Member: National Wood Flooring Association, United States Green Building Council

2. Installer Qualifications:

- a. Minimum three years experience in cork flooring installation.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver flooring to project site in original boxes not less than 5 days prior to start of installation.

1.05 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Installation spaces, flooring and adhesive must be maintained at normal occupancy temperature and humidity levels for minimum 3 days prior to installation.

1.06 WARRANTY

A. Special Warranty:

Warranty: 10 years against any delamination or separation as a result of a manufacturing defect when installed and maintained in accordance with manufacturer's installation instructions.

PART 2 – PRODUCTS

2.01 MANUFACTURER

- A. Sustainable Flooring
4390 Pali Way
Boulder, CO 80301
- Tel: (303)544-6076
e-mail: info@sustainableflooring.com
Web-site: <http://www.sustainableflooring.com>

B. Cork Tile Flooring (select one):

1. Cork Glue-down Tile – Granulated cork particles are compressed together under pressure to form a dense and durable conglomerate used for floor, wall, and ceiling applications.

a. Style: Massive (cork is solid throughout)

1. Pebble
2. Dawn
3. Madrid
4. Algarve
5. Athens
6. Athens Noir
7. Athens Rouge
8. Athens Verde

b. Style: Veneer (thin wear layer, with a massive body)

1. Casablanca
2. Corkstone
3. Country

2. Cork Floating Floor Plank – A floating floor system comprised of 3 independent layers laminated together: a 100% granulated cork acoustical underlayment layer on the bottom, a HDF (High Density Fiberboard) water-resistant core layer, and a wear surface of granulated cork particles are compressed together under pressure to form a dense and durable conglomerate.

a. Style: Massive

1. Traditional
2. Ivory (topical opaque stain)
3. Madrid
4. Chestnut

b. Style: Veneer

1. Harmony
2. Sierra
3. Athens
4. Casablanca
5. Beach
6. Barnacle
7. Driftwood
8. Harmony Brown

C. Substitutions: None Permitted.

2.02 MATERIALS

A. Cork Flooring:

1. Species: Quercus Suber (Cork Oak)

2. Size:

a. Cork Glue-down Tile: 300mm x 300mm x 4mm (approx. 12"x 12" x 1/6");
* any thickness available upon request.

Packaging: 66 square feet/carton

b. Cork Floating Floor Plank: 300mm x 900mm x 11mm (approx. 12" x 36" x 7/16")

Packaging: 21 square feet/carton

3. Edge:

a. Cork Glue-down Tile: Square-edge (standard)

* Beveled edge available for small surcharge on all tiles – specify "beveled"

b. Cork Floating Floor Plank: Tongue and groove; glue-less system

4. Finish (for prefinished): 3 layers – water-based, low-VOC, polyurethane.

5. Physical Property Performance Requirements:

a. Cork Glue-down Tile

1. Composition: 100% cork

2. Density: $\geq 500\text{kg/m}^3$

3. Thermal Insulation: $0.0958\text{ Kcal/m}^3\text{h}^\circ\text{C}$

4. Acoustical Rating: tile on 8" slab with suspended ceiling
STC 58 dB (per ASTM E413-87)
IIC 73 dB (per ASTM E989-89)

5. Fire Behavior: Classification CSTB = M3
(neither spreads flame nor releases toxic gases during combustion)

6. Smoke Density: Specific Optical Density (per ASTM E 662 and NFPA 258)-
Flaming: 148
Non-flaming: 272

7. Compression Recovery: (per ISO 9727; with loading of 38.5 lbs/sq^2)
Initial: 10%; Residual (after 1.5 hours): 1.5%
Breaking tension on traction: no less than 11lbs/ sq. in.

8. Thermal Properties: (per ASTM C 518)
Thermal Conductivity (k) - 0.3490
Thermal Resistance (r) - 0.49
Thermal Resistance/inch - 2.87

9. Dimensional Tolerance:
Length and Width: $\leq 0.5\text{ mm}$
Thickness: $\leq 0.2\text{ mm}$

10. Square-ness: $< 0.3\text{mm}$

11. Wear Resistance: 3.6mg/100 ciclos (loss weight)

12. Water Vapor Transmission: 0.128 grains/h ft^2

13. Permeance: 0.183 perms (per ASTM E 96)

b. Cork Floating Floor Planks

1. Composition/Density:
Bottom layer: Acoustical Underlayment - 184 kg/m³
Middle layer: High Density Fiberboard (≥ 900 kg/m³)
Wear layer: (≥ 450 kg/m³)
2. Flammability: (as per HPVA - unfinished tiles)
Avg. Critical Radiant Flux 0.60 w/cm³
3. Indentation: Initial: (as per ISO 3810 1987)
Initial: 1.7%; Residual: 0%
4. Shock Absorption: (as per UNE 56 817 74)
Initial Maximum Indentation < 0.19 mm
Maximum Indentation after 1 hour < 0.08 mm
5. Formaldehyde: Class E-1 for HDF core layer (E1 materials must contain less than 9mg/100g.) Phenol (No Urea Formaldehyde inclusion acceptable).
6. Acoustical Rating:
8" concrete slab: STC – 58dB, IIC – 68 dB, NC – 30 dB
8" with dropped ceiling: STC – 60dB, IIC – 73 dB, NC – 30 dB

B. Installation Adhesives:

1. Cork Glue-down Tile: low-VOC, water-based contact cement
2. Cork Floating Floor: glue-less

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates upon which flooring will be installed.

1. Verify that subfloor is clean, dry, and free of contaminants that would interfere with adhesive bond.
2. If installing on concrete: Test concrete floors for moisture content using a Calcium Chloride test or Tramex Moisture Encounter meter. Do not install flooring if vapor pressure exceeds 3 lbs per 1,000 sf (15 g per m²) in 24 hours.
 - a. In multiple story buildings, test each floor level where cork flooring will be installed.
 - b. Mark test location(s) on As-Built Drawings.

3. Verify that HVAC system is operating and maintaining occupancy level temperature and humidity conditions.

* If either of the above needs attendance, coordinate with responsible entity to correct unsatisfactory conditions.

3.02 PREPARATION

A. Acclimatization: Open all cartons, and let acclimate for a minimum of 3 days.

B. Fix the substrate so all bumps and depressions are completely leveled for the glue-down tile application, and ensure bumps and depressions are less than 1/8" over 8 feet for the Floating Floor installation application.

3.03 INSTALLATION

A. Cork glue-down Tile:

1. Temperature should be between 60°F and 70°F (15°C and 21°C) with normal levels of humidity during this period as well as during subsequent installation.
2. Follow the manufacturer's laying instructions for application of adhesives. For adhesives requiring a trowel application be sure to use the proper trowel size to ensure the correct amount is applied.
3. Carefully roll tiles with a standard 100 or 150 pound tile roller. Tiles should be rolled a minimum of four times in each direction. To clean excess adhesive from tiles after installation, use a damp cloth if the adhesive is wet or mineral spirits if it is dry.
4. Tiles may be cut with a linoleum or utility knife. Be sure knife is sharp.
5. After installation, restrict heavy traffic for 24 hours or more, depending on type of adhesive used.
6. Urethane or flooring wax can be applied on tiles which are not prefinished immediately following installation. Follow the manufacturer's instructions.

It is quick and easy to install Cork Tiles. Detailed instructions are provided with all orders. Please call or e-mail with any questions.

Note: These directions are general guidelines for floor and/or wall installers. It is the responsibility of the installer to determine the correct adhesive to be used based on job site conditions. It is the installer's responsibility to follow all instructions accurately not only to apply the appropriate amount of adhesive using appropriate applicators (i.e., trowel, brush, etc.) but also to determine proper drying and cure times based on existing conditions at the time of installation.

B. Floating Floor Planks:

1. Before laying the floor ensure proper tolerances of subfloor. If there is any moisture present, lay 100um of plastic sheet with taped 500mm overlap.
2. Cut the doorframes at the bottom to allow the floor to be placed under them.
3. When laying the panels, be sure to leave 8-10mm between the panels and the wall. Very important!
4. Begin each new row with a complete panel.
5. Begin placing the panels so that the (female) side with the groove faces the wall.
6. Cut the last panel of the first row and place the cut-off piece at the beginning of the second row. Make sure that the groove and tongue are facing each other.
7. Apply glue evenly to the groove along the full length and width of each panel.

8. Fit the panels by hand and adjust them by using a piece of wood and a hammer or mallet.
9. Never hammer directly on the panel.
10. Remove any excess glue with a damp cloth.
11. Continue placing panels as above until you get to the last row.
12. The last row may require the panels to be cut lengthwise to fit the floor.
13. Place the panels that need to be cut on top of the last row placed. Make sure that the (male) tongue is facing the wall. Don't forget to apply the wedges.
14. Mark and cut
15. After cutting, apply the glue and fit the panel manually, adjusting it with the help of a crowbar.
16. Remove all wedges and apply a 10mm deep skirting board so as to fully cover the space allowed for the dilation of the panels.

3.04 MAINTENANCE

A. Cleaning: Sweep or vacuum floor frequently to avoid build-up of abrasive particles. Regular mopping is also suggested to keep the floor surface free of dirt and grit. Use a WELL wrung out damp mop (using either just water, or a mixed solution of vinegar and water – one cup of vinegar per gallon of water). If the cleaning solution you are using does not evaporate within minutes, you are using too much.

B. Spills: Clean up spills and excess water immediately. Never flood the floor surface with any liquid or use harsh abrasive cleaners.

C. Furniture: Furniture foot pads are recommended to prevent indentations in the tiles.

D. Entrance Mats: Entrance mats are recommended in order to keep dirt and moisture from coming in contact with the floor. Do not allow a moisture saturated floor mat to remain on the cork floor.

E. Refinishing: Cork floor tiles may be refinished. When the floor starts to show a traffic pattern and signs of wear, the surface of the floor must be recoated with a high quality water based urethane. Follow the finish manufacturer's instructions. Under normal conditions, the protective coating (finish) should last at least 5 years. It is the responsibility of the owner to judge when the floor needs recoating. Most cork decorative patterns are made of thin veneer laminated to a cork base. Failure to maintain the finish could result in irreparable damage. A reapplication of urethane will make the floor look new again and prolong its lifespan. Clean in accordance to Manufacturer's Maintenance Recommendations

3.05 PROTECTION

A. Cover installed flooring 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.

With any questions, or for this in a digital format, contact:

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