

SECTION 09 62 19.12 – DECORATIVE LAMINATE FLOORING
[SECTION 09626 - DECORATIVE LAMINATE FLOORING]**PART 1 - GENERAL****1.1 SUMMARY**

- A. Section Includes:
 - 1. High-pressure decorative laminate flooring.
 - 2. Stairs and steps.
 - 3. Underlayment and vapor barrier.
 - 4. Trims and Moldings.
- B. Related Sections:
 - 1. Finishing and curing of concrete slabs: Section 03 30 00 [03300].
 - 2. Wood substrates: Section 06 10 00 [06100].
 - 3. Waterproofing membranes: Division 7.

1.2 SYSTEM DESCRIPTION

- A. Commercial floating floor system consisting of laminate planks and tiles with Tap-N-Lock™ mechanically interlocking profile glued together with Wilsonart® BlueFusion® Adhesive and installed over Wilsonart Commercial Cushion. Only Wilsonart Commercial Cushion is approved for commercial installations of Wilsonart Flooring. Failure to use Wilsonart BlueFusion Adhesive and Wilsonart Commercial Cushion could result in loss of product warranty.
- B. Flooring system subject to movement caused by environmental changes and expands and contracts with changes in humidity.
- C. Vapor barrier required over concrete and cement based subfloors including ceramic tile and terrazzo. Wilsonart Commercial Cushion features an attached vapor barrier.

1.3 SUBMITTALS

- A. Comply with Section 01 30 23 [01330], unless otherwise indicated.
- B. Product Data:
 - 1. Detailed specification of construction and fabrication.
 - 2. Manufacturer's installation instructions.
 - 3. Manufacturer's detailed recommendations for handling, storage, installation, protection, and maintenance.
- C. Shop Drawings: Installation details including location and layout of each type of flooring and accessory.
- D. Samples: Full range of colors and patterns.
- E. Contract Closeout Submittals: Comply with Section 01 78 00 [01700].
 - 1. Maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Firm experienced in installation or application of systems similar in complexity to those required for this Project, including specific requirements indicated.
 - 1. Acceptable to or authorized by manufacturer.
- B. Source Limitations: Obtain materials and products from single source.
- C. Mock-ups: Prepare mock-ups for Architect's review and to establish requirements for layout and expansion control.
 - 1. Correct areas or modify method of installation as directed by Architect to comply with specified requirements.
 - 2. Maintain mock-ups accessible to serve as a standard of quality for this Section.
 - 3. Mock-up Size: 10 foot (3m) square.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver flooring materials in unopened cartons or bundles.
- B. Protect flooring from damage.

1.6 PROJECT CONDITIONS

- A. Maintain relative humidity planned for building occupants and an ambient temperature between 70°F (21°C) and 75°F (24°C) in spaces to receive flooring for 48 hours prior to and during installation. After installation, maintain relative humidity and ambient temperature planned for building occupants.
- B. Install decorative laminate flooring after other finishing operations, including painting, have been completed.
- C. Do not install or use this product at temperatures less than 55°F (12.8°C) or greater than 100°F (37.8°C).
- D. Do not install or use this product where humidity is routinely less than 35% or greater than 65%.

1.7 WARRANTY

- A. Furnish manufacturer's limited 5 year commercial warranty for wear, stain, and fade.

1.8 EXTRA MATERIALS

- A. Furnish extra materials that match products installed, packaged with protective covering, and labeled describing contents.
 1. Decorative Laminate: Equal to 1 percent of amount installed for each pattern and color indicated.
 2. Exact-match Aluminum, Laminate Wrapped Base Board, Quarter-Round and Vinyl Trim: Minimum 12 lineal feet (3.6m) of each vinyl profile used. Minimum 8 lineal feet (2.4m) of each exact-match aluminum profile used. Laminate Wrapped trims are 95 inches (2400mm) in length.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Wilsonart Flooring, a Division of Wilsonart International, Inc., (800) 433-3222, wilsonartcontractflooring.com.

2.2 HIGH-PRESSURE DECORATIVE LAMINATE FLOORING

- A. Composite panel consisting of high-pressure laminate surfacing and high-pressure laminate balancing backer bonded to high density fiberboard (HDF) core with moisture resistant adhesive.
 1. Wide Planks measuring 7.70 inches wide by 46.45 inches long x 0.290 inches thick (196mm x 1180mm x 7.4 mm).
 2. Narrow Planks measuring 4.97 inches wide by 46.45 inches long x 0.290 inches thick (126mm x 1180mm x 7.4 mm).
 3. Tiles
 - a. *Square* measuring 15.45 inches square by 0.290 inches thick (392mm x 392mm x 7.4mm).
 - b. *Rectangular* measuring 7.70 inches wide by 18.28 inches long x 0.290 inches thick (196mm x 464mm x 7.40mm).
- B. Performance Standard Compliance:
 1. ASTM C1028, Slip Resistance: Wet and dry: ≥ 0.8 .
 2. ASTM D2047, Slip Resistance (neolite sole): $\mu \geq 0.7$.
 - a. ADA Mark 1 Protocol: $\mu \geq 0.8$.
 3. ASTM E90, Sound Transmission Class: STC ≥ 51 .
 4. ASTM E492, Impact Insulation Class: IIC ≥ 55 .
 5. ASTM E648, Critical Radiant Flux: Type 1.
 6. ASTM E662, Smoke Density, Flaming and non-flaming: ≤ 450 .
 7. ASTM E1333 Formaldehyde Release (Large Chamber): ≤ 0.10 ppm free per ANSI A208.2.
 - a. Materials produced after January 1, 2009 comply with 17 California Code of Regulation 93120.2(a) for formaldehyde limits in California.
 8. NALFA LF-01: 3.1, Static Load Limit: $\geq 1,500$ psi.
 9. NALFA LF-01: 3.2, Thickness Swell: $\leq 7\%$

10. NALFA LF-01: 3.3, Light Resistance: No effect.
11. NALFA LF-01: 3.4, Cleanability/Stain: 9 / No effect.
12. NALFA LF-01: 3.5, Large Diameter Ball Impact: 105 inches.
13. NALFA LF-01: 3.6, Small Diameter Ball Impact: 30 inches.
14. NALFA LF-01: 3.7, Wear Resistance (Taber): $\geq 2,500$ cycles.
15. NALFA LF-01: 3.9, Castor Chair Resistance: $\geq 25,000$ cycles.
16. NEMA LD3-3.10, Radiant Heat: > 200 seconds.
17. Third-Party Certifications:
 - a. GREENGUARD® Indoor Air Quality Certified
 - b. Forest Stewardship Council™ Registration SCS-COC-002415: FSC Mixed Sources
 - c. Scientific Certification Systems (SCS) Registration SCS-MC-002029 for a minimum of 70% pre-consumer recycled wood fiber content.

2.3 CUSHION

- A. Wilsonart Commercial Cushion: Black High Density Crosslinked TPO Foam with 6 mil Polyethylene moisture barrier film with sound absorbing molecules and fortified with antimicrobial agent.
 1. Wilsonart Commercial Cushion must be used in commercial installations of Wilsonart® Flooring.

2.4 ACCESSORIES

- A. Adhesive: Premixed, water-based adhesive. Use only to glue planks and seal cut edges of flooring planks. Wilsonart BlueFusion Adhesive must be used.
- B. Flooring Spacers: Maintain spacing between flooring and walls or other perimeter vertical surfaces.
- C. Silicone Sealant: Seal gaps, around metal door frames and flooring edges and in areas where moisture is present.

2.5 MOLDING TRIM

- A. Expansion: Used in doorways or thresholds to join two areas of laminate flooring (exact- match aluminum).
- B. Transition: Used to join laminate flooring to other flooring materials of varying heights (exact-match aluminum).
- C. End Cap: Used at exterior doorways to finish space at end of laminate flooring (exact- match aluminum).
- D. Carpet Transition: Used to join laminate flooring to carpet materials of varying heights (exact-match aluminum).
- E. Base Board: Trim around wall base (laminate wrapped).
- F. Quarter-Round: Covers gap at walls and other fixed vertical surfaces (laminate wrapped).
- G. One Step®: Complete stair tread including nosing for contained (boxed) stairways (laminate wrapped).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions and identify conditions detrimental to proper or timely completion.
- B. Verify concrete slabs and terrazzo are dry according to ASTM F 1869 with maximum moisture emission rate of 5 pounds (2.3k) per 1,000SF (93m²) per 24 hours.

Edit Note for Health Care Installations: *In addition to typical gluing procedures, many healthcare applications with higher topical moisture levels require additional gluing procedures. Review the latest version of Wilsonart's Tap-N-Lock Commercial Installation Guide for installing an additional bead of adhesive along the top of the tongue. These procedures meet AHA Code 7.28.B5 for healthcare applications; as well as offer increased moisture protection at the seam for areas where topical moisture might be introduced.*

Outside of healthcare: *There are other applications such as corridors and areas where topical moisture might be introduced that require adhesive be applied to the top of the tongue. Consult your local distributor for proper guidelines.*

3.2 PREPARATION

- A. Concrete slabs: Grind high spots and fill low spots to provide a maximum 3/16-inch (5mm) deviation in any direction when checked with a 10-foot (3m) straight edge.
- B. Wood Subfloors: Fill voids to provide a maximum 3/16-inch (5mm) deviation in any direction when checked with a 10-foot (3m) straight edge.
- C. Vinyl Substrate: Verify vinyl is tightly fastened to subfloor. Vinyl shall be smooth, flat and clean. Fill voids to provide a maximum 1/8-inch (3mm) deviation in any direction when checked with a 10-foot (3m) straight edge.
- D. Remove wood floors on concrete subfloor prior to installation.
- E. Remove carpeting on subfloor prior to installation.

3.3 CUSHION INSTALLATION

- A. Install Wilsonart Commercial Cushion in accordance with manufacturer's installation instructions.
- B. Butt Wilsonart Commercial Cushion edges together, but not overlap. Tape the seams between each row of padding with 2-inch (50mm) polyethylene or foil tape.

3.4 FLOOR INSTALLATION

- A. Install flooring planks parallel to the long direction of the room. Verify strip flooring direction with Architect before starting installation.
- B. Install flooring symmetrically about room center line unless otherwise indicated. Lay planks from right to left.
- C. Stagger end joint locations a minimum of 10-12 inches (250-300mm).
- D. Fit flooring neatly to vertical interruptions. Follow shape of interrupting item when joint will remain exposed.
- E. Install divider strips where flooring terminates at centerline of doors and adjacent to other materials or unfinished floor areas.
- F. Expansion Space: Provide expansion space at walls and other obstructions and terminations of flooring of not less than 1/4-inch (6mm), unless otherwise indicated on Drawings.
- G. Accessories:
 - 1. Install accessories as indicated or required.
 - 2. Nail trim to wall; do not nail to flooring.
- H. Seal flooring penetrations and perimeters at wet areas with silicone sealant.
- I. Gluing Procedures:
 - 1. Apply a 3/32-inch (2mm) continuous bead of Wilsonart BlueFusion Adhesive in the long and short groove sides of the Tap-N-Lock profile.
 - 2. Do not fill groove completely with adhesive.
 - 3. Seal cut edges of material with Wilsonart BlueFusion Adhesive.

3.5 STAIRS AND STEPS

- A. Install stairs and steps in compliance with manufacturer's installation instructions.
- B. Use planks for risers.

3.6 DOOR FRAMES

- A. Undercut wood door frames and allow for 1/4-inch minimum (6mm) expansion clearance.
- B. Do not undercut metal door frames, cut floor panels to fit around frames. Provide 3/16-inch (5mm) expansion space and fill with color-matched perimeter sealant.
- C. Provide transitions at interior metal door applications.

3.7 PIPE HOLES

- A. Drill a hole in the flooring 1/2-inch (13mm) larger than the pipe diameter to allow for movement.
- B. For tiles and for pipes on the short side of planks, saw straight through the center of the hole.

- C. For pipes located on the long side of a plank or very close to the edge of the tile, saw in toward the hole at 45° angle.
- D. Cut groove with router & Wilsonart Router Bit. Insert Wilsonart Loose Tongue in groove after applying a bead of BlueFusion Adhesive.
- E. Apply liberal amounts of adhesive to the cut piece of flooring and press into position using the pull bar.

3.8 TRIM PROFILES

- A. Install moldings and trim in accordance with manufacturer's instructions.
- B. Adhere molding with construction mastic and/or mechanical fasteners when joining another flooring material.
- C. Adhere Transition and End Cap to subfloor with construction mastic and/or mechanical fasteners.
- D. Adhere Expansion to subfloor with construction mastic and/or mechanical fasteners. Connect lengths of Expansion together. Do not install over padding.

3.9 PROTECTION

- A. Cover installed flooring to protect it from damage or during remainder of construction period. Use heavy kraft-paper or other suitable covering.
- B. Maintain flooring in compliance with Manufacturer's Maintenance Guidelines.

END OF SECTION 09626 [09 62 19.12]