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| **Revision History** | |
| **Revision Date** | **Section/Nature of Revision** |
| **7/25/24** | Document issued |

**CARPET TILE**

**PART 1 – GENERAL**

1.1 RELATED DOCUMENTS

1. Division 01 Specification Sections

1.2 SUMMARY

1. This section relates to carpet tile.

1.3 PRE-INSTALLATION MEETING

1. Conduct a pre-construction meeting at the job site prior to the carpet installation. To be scheduled and coordinated by the general contractor to include the subcontractor, the architect and the owner’s representatives.

1.4 SUBMITTALS

1. Product Specification
2. Product Specifications for the Adhesives
3. Shop Drawings
4. Layout Pattern Plans
5. Samples
6. Schedule
7. Qualifications of the Installer

1.5 CLOSEOUT SUBMITTALS

1. Maintenance Instructions
2. Warranty Documents

1.6 QUALITY ASSURANCE

1. Environmental:
2. Green Label Plus Certified
3. Cradle to Cradle Certified
4. NSF 140 Gold
5. Health Product Declaration
6. Declare Label, No Red List Chemicals
7. Installer Qualifications
8. Installer who has been trained in the installation of carpet tile.
9. Manufacturer Qualifications
10. The manufacturer is required to have a published reclamation program for their carpet product at the end of its useful life.
11. The manufacturer’s written product warranty shall be a 15-year prorated commercial warranty covering material and labor for the life of the warranty.
12. Mockups at designated location for architect review and approval.

1.7 MATERIAL STORAGE AND HANDLING

1. Store in protected dry conditions between 65 and 85 degrees.

1.8 SITE CONDITIONS

The following conditions must be maintained for 24 hours prior to, during and permanently after installation:

1. The HVAC System must be operational.
2. The installation site, carpet and adhesive must be between 50°F and 95°F.
3. The installation site’s ambient relative humidity must not fall below 40%.
4. Conduct relative humidity or anhydrous calcium chloride testing. Results must be within the proper range for the manufacturer’s high moisture carpet tile adhesive.
5. Conduct pH testing on the floor in several locations. A reading below 6.0 or above 10.0 requires corrective measures.

**PART 2 – PRODUCTS**

2.1 TESTING REQUIREMENTS

1. Pill Test CPSC FF 1 70: Pass
2. Radiant Panel ASTM E648: Class I
3. NBS smoke ASTM E662 NF: <450
4. Static AATCC 134: <3.5 kv
5. Coefficient of Friction: 0.6 (Meets ADA requirements)

2.2 TILE CARPETING

1. Manufacturers: Shaw Contract, Mohawk, Patcraft, Tarkett, Interface, Milliken
2. Product: carpet tile
3. Construction: multi-level pattern loop, tufted, textured loop
4. Fiber: 100% Nylon - recycled content is preferred
5. Dye Method: 100% solution dyed, digital dyed
6. Backing: PVC Free or standard PVC Free Polyurethane Cushion
7. Protective Treatment: stain and soil topical protection
8. Size: square or rectangular preferred
9. Gauge: 1/12 inch -1/10 inch
10. Stitches: minimum 8.5 per inch
11. Finished Pile Thickness: minimum 0.082 inches
12. Average Density: minimum 5500 per cubic yard
13. Total Thickness: minimum 0.200 inches
14. Tufted Weight: minimum16 oz/yd2
15. TARR Rating: minimum 3.0 TARR ASTM D-5252 Internal Test Methods Not Approved
16. Recycled Content: minimum 35%
17. Product must be manufactured in the USA.
18. Color selections shall be from manufacturer’s standard colors. A design with large-scale pattern and multiple distinct colors is preferred for maintenance purposes.

2.3 INSTALLATION MATERIALS

1. Adhesives: Manufacturer’s recommended high moisture adhesive is preferred in all applications unless noted otherwise. RH - (99%) [ASTM F2170] pH – up to 12 MVER – up to 12.
2. Cushion Backing: For facilities with documented under-slab moisture issues, PVC-free cushion backing is required along with manufacturer’s high moisture adhesive. This combination will result in the following: RH - (100%) [ASTM F2170] pH - (5-14) MVER - [ASTM F1869] The cushion backing must have a minimum density of 7 pounds with a pad weight of 4 oz or greater.
3. Leveling and Patching Compounds: Use a cementitious patching/leveling compound that meets or exceeds the required moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.
4. Flush mounting between different materials is preferred to eliminate transition strips.
5. Cove Base Accessories:

A black and white line with a black line

Description automatically generated with medium confidenceA black and white measuring tape

Description automatically generated with medium confidence1. Angle Profile

2. Detail Profile

**PART 3 – EXECUTION**

3.1 EXAMINATION

1. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content, pH, smoothness and level.
2. If dusting or powdering exists, seal the floor with the manufacturer’s recommended latex primer.

3.2 PREPARATION

1. Substrates shall be smooth, structurally sound, permanently dry, clean and free of all foreign material such as dust, wax, solvents, paint, grease, oils, old adhesive residue, curing and hardening/ curing compounds, sealers and other foreign material that might prevent adhesive bond.
2. Pre-existing Adhesive

1. Subcontractor to remove all pre-existing adhesive.

C. Fill depressions or cracks with a cementitious patching/leveling compound that meets or exceeds the required moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.

D. Flooring considerations:

1. Installing over VCT and VAT: Tiles must be secure to the subfloor. Strip any wax from the surface.
2. Installing over wood subfloors: Prime with the tile manufacturer’s recommended liquid latex primer
3. Installing over raised access flooring: Must be smooth, level, secure and clean. Install carpet tile at an offset from panel seams. Gaps must not exceed 1/16” (1.6 mm).

3.2 LAYOUT AND INSTALLATION

1. A graph of chalk line and chalk line

   Description automatically generatedStart the tile installation as near to the center of the room as possible and position it to use the largest perimeter cut tile size.
2. Snap a chalk line parallel to one major wall bisecting the starting point. It may be necessary to offset the center chalk line to assure perimeter tiles will be at least half size.
3. Snap a second chalk line from the starting point at 90° to the first line. Use a 3-4-5, 6-8-10, or larger triangle depending on the room size. Meters or feet may be used to lay out the triangle in these proportions.
4. Use a full spread of adhesive applied with a 3/8” foam paint roller or 1/16 x 1/32 x 5/64 u-notch trowel. The adhesive must be allowed to dry completely before installing the carpet. Installing it into wet adhesive will result in a permanent bond and may cause the carpet to bubble. Trowel application of adhesive is recommended. Approximate coverage rates are 35-40 yards per gallon when applied with a roller and 28 -33\* yards per gallon when applied with a trowel.
5. Install each full carton and complete an entire pallet before starting another pallet to minimize product variation. Each tile typically has directional arrows on the back. These arrows allow for one-directional or multi-directional installation. Some styles may be large scale or linear in design and require quarter turning. If you are unsure about whether your product requires a quarter turned installation, please contact the manufacturer’s technical department. Numbers within the arrows are for manufacturing purposes and are not related to installation.
6. A graph of a graph

   Description automatically generatedBegin installation at the intersection of two chalk lines. Continue until you complete one quadrant. Proceed to an adjoining quadrant until all four quadrants are completed. Larger areas may require chalk lines bisecting the original four quadrants.
7. Install tiles using the pyramid technique. This gives you multiple alignment checks. If the edges do not align and the misalignment increases with progression of the installation, find and correct the source of the problem.
8. Carpet tiles come in various sizes. The manufacturer’s carpet tile should have directional arrows on the back of the tile. Slide tiles into position to prevent yarn from being trapped between the tiles. Trapped yarn will adversely affect the appearance of the installation and will cause alignment problems.
9. Tiles must fit snugly, but not be compressed. Press the entire surface of the tile to ensure adhesion. Check for the fit by measuring the length of ten full tiles after installation. The measurement must not be less than, or exceed by more than 1/4 inch, the length of the tiles being multiplied by ten. For example: if 24" X 24" tiles are being installed, the measurement should be between 240 and 240 1/4 inches.
10. Measure and cut tiles from the back using a straight edge. Be sure the arrows are pointing in the correct direction.
11. Roll the entire installation with a 75 pound or greater roller to assure the proper adhesion to the substrate.

3.3 MAINTENANCE

1. Post-installation Care

1. Place plywood over the carpet when heavy objects will be moved within 24 hours after installation.

B. Preventative Floor Care

1. Use protective chair mats under chairs with casters.

2. Use soil removal mats at exterior entrances.

3. Use absorbent mats in areas where moisture, oil and grease are present.

C. Routine Maintenance

1. Set a schedule depending on traffic and vacuum regularly.

2. Remove spots with spot removers as soon as they occur.

3. Use encapsulation agents periodically.

4. Clean with hot water extraction periodically.

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| Traffic Level | Vacuum | Spot Removal | Interim Cleaning | Hot Water Extraction |
| Light | 2/week | As needed | As needed | 1/year |
| Moderate | 1/day | As needed | As needed | 1/year |
| Heavy | 1/day | As needed | Monthly | 4/year |
| Extra Heavy | 1/day | As needed | Weekly | Monthly |

**\*\*\*END OF SECTION\*\*\***