SECTION  – tile carpeting

Broadloom carpet is specified separately in Division 09 Section "Sheet Carpeting."

This Section has been edited to include Gensler's Product Sustainability Standards ("GPS Standards") criteria, providing language for only the "Gensler Standard" tier of performance - the required minimum level of performance for sustainable attributes of the product. To include "Market Differentiator" level of performance or for any other questions, please contact your regional specification leader, Tim Taylor, or Kaley Blackstock.

1. GENERAL
   1. summary
      1. This Section includes requirements for supply and installation for tile carpeting.
   2. REFERENCE STANDARDS
      1. American Society for Testing and materials (ASTM):
         1. ASTM F 710-08, Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
         2. ASTM F 1869-10, Standard Test method for measuring moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
      2. Carpet and Rug Institute (CRI), as endorsed by the Canadian Carpet Institute (CCI):
         1. CRI Installation Technical Bulletins.
         2. CRI Green Label Program.
      3. Underwriters Laboratories of Canada (ULC):
         1. CAN/ULC S102.2, Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies.
   3. ADMINISTRATIVE REQUIREMENTS
      1. Coordination: Install carpeting before installing items indicated for installation on top of carpet and after other finishing operations, including painting and ceiling construction, has been completed.
      2. Pre‑installation Conference: Conduct conference at Project site in accordance with requirements of Section 01 31 13 – Project Coordination, to verify project requirements, substrate conditions, patterns and layouts, coordination with other Sections affected by work of this Section, manufacturer's installation instructions and manufacturer's warranty requirements.
   4. submittals
      1. Sustainable Design Submittals: Refer to Division 01 Section 01 81 13 – Sustainable Design Requirements – Embodied carbon.
      2. Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.
      3. Action Submittals: Provide the following submittals before starting any work of this Section:
         1. Product Data: Submit manufacturer's standard product data indicating requirements for installation.
         2. Samples: Submit samples of each type of tile carpeting and adhesive required for the project for confirmation of project requirements.
      4. Informational Submittals: Provide the following submittals during the course of the work:
         1. Certificates: Submit proof of performance for each material specified in this Section as follows:
            1. Indoor Air Quality (IAQ): Confirmation of participation in Carpet and Rug Institute's Carpet Testing Program requirements including certificate number including expiration date; or participation certificate indicating participation in ISO 14001 Registration or Scientific Certification System.
         2. Site Quality Control Test Results: Submit results or moisture emission testing of concrete subfloors prior to installation of flooring. Results shall include comparison of manufacturer's recommended moisture content to actual moisture vapour emission rate.
   5. Informational Submittals

The following requirement is a part of the GPS Standards and is required for all projects, relating to the Global Warming Potential (embodied carbon) limits established for select products. Contractors must submit a Type III EPD to verify that the product does not exceed the embodied carbon limits listed in Part II.

* + 1. Embodied Carbon Reporting: Type III Environmental Product Declarations, per ISO 14025 disclosing the Global Warming Potential of the product from Stages A1 through A3 in accordance with Section 01 81 33 – Sustainable Design Requirements - Embodied Carbon, for products listed under "Embodied Carbon Reporting" in Article "Quality Assurance."

The paragraph below aligns with edits made in January of 2023 to Gensler's master specifications for our GC3 initiative. This requires that contractors complete an EPD Reporting Form, referenced in 01 81 33 – Sustainable Design Requirements - Embodied Carbon" disclosing (checking a box) if an EPD exists for the product, and to provide the EPD.

* + 1. Environmental Product Declaration (EPD) Disclosure Submittals: Completed Environmental Product Declaration Reporting Form in accordance with Section 01 81 33 – Sustainable Design Requirements - Embodied Carbon" for the following product types in this Section:
       1. Trowelable Leveling and Patching Compounds.

The following submittal is a part of the GPS Standards and is required for all projects. This relates to VOC content limit requirements listed in Part II.

* + 1. VOC Content: Product data or laboratory reports showing compliance with VOC content limits.

The following submittal is a part of the GPS standards and is required for all projects. This relates to TVOC emissions testing reports or certificates listed under 'Quality Assurance' for select product types.

* + 1. TVOC Emissions: Laboratory test reports or third-party certificates showing compliance with the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" version 1.2-2017 for products listed under "TVOC Emissions" in Article "Quality Assurance."

The following submittal is a part of the GPS Standards and is required for all projects. This relates to material ingredient disclosure reports listed under 'Quality Assurance' for select product types.

* + 1. Material Ingredient Disclosure: Submit one of the following reports for products listed under "Material Ingredient Disclosure" in Article "Quality Assurance."
       1. Health Product Declaration.
       2. UL Product Lens.
       3. Living Building Challenge Declare Label or Living Product Challenge Label.
       4. EPEA Material Health Statement.
       5. Cradle-to-Cradle v4 Material Health Certificate or multi-attribute certificate.

The following submittal is a part of the GPS Standards and is required for all projects.

* + 1. Sustainability Reporting: Provide the following for resilient sheet products.
       1. Recycled content, including Pre-consumer and post-consumer percentages.
       2. Biobased content.
       3. Manufacturing location.
  1. QUALITY ASSURANCE
     1. Regulatory Requirements: Use only carpeting materials that have been tested and accepted for labelling under ULC S102.2 and meeting requirements of the Authority Having Jurisdiction.

The following requirement is part of the GPS Standards and is required for all projects. This corresponds to the GPS Standards requiring that select products have third-party verified Environmental Product Declarations (EPDs).

* + 1. Embodied Carbon Reporting: For the following product types, obtain products with Type III Environmental Product Declaration (EPD) in compliance with ISO 14025. Industry-wide EPDs must demonstrate that the manufacturer is a member of the publishing body responsible for the production of the EPD.
       1. Carpet Tile: Product-Specific EPDs.

The following requirement is a part of the GPS Standards and is required for all projects. This corresponds to the GPS Standards requiring that select products have testing reports or certificates for the California Department of Public Health (CDPH) Standard Method v1.2-2017 emissions testing ("TVOC emissions").

* + 1. TVOC Emissions: Obtain the following products with publicly available reports or certificates verifying compliance with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" version 1.2-2017, following the private office scenario:
       1. Carpet tile.
       2. Carpet adhesives.

The following requirement is a part of the GPS Standards and is required for all projects.

* + 1. Material Ingredient Disclosure: Obtain the following products with publicly available reports disclosing material ingredients to residuals no greater than 1000ppm:
       1. Carpet tile.
       2. Carpet adhesives.
  1. site CONDITIONS
     1. Ambient Conditions: Maintain temperature and ventilation in work area using permanent heating system, and portable supply and exhaust fans in accordance with manufacturer's requirements and as follows:
        1. Install tile carpeting when wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for project when occupied for its intended use.
        2. Install tile carpeting over concrete subfloor once slabs have cured and are sufficiently dry to bond with adhesive and concrete subfloor have pH range recommended by carpet manufacturer.
  2. warranty
     1. Joint and Several Warranty: Notwithstanding the 12 months warranty period specified in the General Conditions of Contract, the carpet manufacturer's warranty specified in this Section is extended to a period of ten (10) years from date of Substantial Performance.

1. products
   1. materials

SPEC NOTE: Edit the following (CP#'s) to reflect what is listed in the Product and Finish Schedule. Delete paragraphs that are not required on this Project.

* + 1. Tile Carpeting (CP-#): As indicated in Section 09 06 05 – Product and Finish Schedule.
       1. Application: Commercial - Moderate to Heavy Traffic.

The following requirement is a part of the GPS Standards and is required for all projects.

* + - 1. Maximum Embodied Carbon Limit for Carpet Tile: Maximum Global Warming Potential for Production Stages A1 through A3 as defined in Section 01 81 33 – Sustainable Design Requirements - Embodied Carbon": 10.9 kg of CO2eq per m2.
  1. accessories
     1. Adhesive and Seam Cement: Self release type, recommended by tile carpeting manufacturer; low odour based, low VOC.

The following requirement is a part of the GPS Standards and is required for all projects.

* + - 1. VOC Content: Adhesives shall comply with the more stringent VOC content limits of Federal, State, or local authorities having jurisdiction, including California Air Resources Board (CARB), South Coast air Quality Management District Rule 1168 (effective date January 1, 2023).
    1. Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

SPEC NOTE: If Section 09 65 00 – Resilient Flooring, is not required on the Project, consult with the Spec Leader to add a base to this Section.

* + 1. Resilient Accessories: Transition strips, and resilient base as specified in Section 09 65 00 – Resilient Flooring, of types indicated on Drawings and as required to protect exposed edge of carpet; maximum lengths to minimize running joints.

1. execution
   1. examination
      1. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance.
      2. Verification of Conditions (Concrete Substrates): Verify that concrete substrates and conditions are satisfactory for carpet installation and comply with the following specified requirements:
         1. Concrete subfloor complies with ASTM F 710 and moisture emissions are within manufacturer's recommendations in accordance with ASTM F 1869.
         2. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
         3. Slabs are free of cracks, ridges, depressions, scale, and foreign deposits that could affect the quality of the carpet installation.
      3. Pre-installation Testing: Provide three (3) working days notice to the Consultant before commencement of the Work; include cost of testing as a part of the price for work of this Section and as follows:
         1. Do not install flooring over concrete subfloor until slabs have cured and are sufficiently dry to bond with adhesive, as determined by carpet manufacturer's recommended bond and moisture test.
            1. Test pH level of slab and correct surfaces having an alkali content of pH 9 or higher.
      4. Proceed with installation only after unsatisfactory conditions have been corrected.
   2. installation
      1. Install in accordance with manufacturer's printed instructions using material from same dye lot; mix materials to obtain consistent colour, pattern and texture match within any one visual area.
      2. Fit neatly around architectural, mechanical, electrical and telephone outlets, and furniture fitments, around perimeter of rooms into recesses and around projections:
         1. Cut tile carpeting to fit accurately around perimeter of rooms into all recesses and around fixtures.
         2. Make cut outs for floor mounted service boxes, receptacles, switches, hardware where they occur on tile carpeting.
         3. Cut holes as close as possible to allow services to pass through and that trim will completely hide hole when installed.
         4. Cooperate and coordinate with electrical trade to ensure correct location of outlets is obtained.
      3. Install edging strips at all openings or doorways and where tile carpeting abuts other floor covering.

SPEC NOTE: If Section 09 65 00 – Resilient Flooring, is not required on the Project, consult with the Spec Leader to add a base to this Section.

* + 1. Install resilient base as indicated in Section 09 65 00 – Resilient Flooring.
  1. CLOSEOUT ACTIVITIES
     1. Clean-Up: Remove tile carpeting waste and debris from premises and leave installation clean after completion of carpeting operations in an area; protect finished areas from work following installation in accordance with manufacturer's written instructions.
     2. Repairs: Replace damaged or defective tile carpeting at no cost to the Owner.

end of section