This master should be used by designers working on Port of Portland construction projects and by designers working for PDX tenants (“Tenants”). Usage notes highlight a few specific editing choices, however the entire section should be evaluated and edited to fit specific project needs.

This master should only be used for PDX projects that do not include CPT-1, CPT-2, or CPT-3 carpet types.

SECTION 096800 – BROADLOOM CARPETING

1. GENERAL
   * + 1. DESCRIPTION
          1. This section describes direct-glued broadloom carpet, adhesives, and accessories.
       2. RELATED WORK SPECIFIED ELSEWHERE
          1. Section 016116, Volatile Organic Compound (VOC) Content Restrictions
          2. Section 017419, Construction Waste Recycling
          3. Section 072613, Moisture Mitigation System
          4. Section 090561, Common Work Results for Flooring Preparation
       3. REFERENCES
          1. ANSI: American National Standards Institute

ANSI Standard 140: Sustainability Assessment for Carpet

* + - * 1. CRI: Carpet and Rug Institute

CRI Carpet Installation Standard

CRI Green Label Testing Program

CRI Green Label Plus Testing Program

CRI Test Method 103: Standard test method for the Evaluation of Texture Appearance Retention of Carpets for Minimum Carpet Standards Program

* + - 1. SUBMITTALS
         1. Product Data: Provide data on adhesives describing physical and performance characteristics and method of installation.
         2. Shop Drawings: Indicate seaming plan, method of joining seams, direction of carpet pile and pattern, location of edge moldings, edge bindings, and the following:

Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet.

Carpet type and color.

Seam locations, types, and methods.

Type of installation.

Pattern type, repeat size, location, direction, and starting point.

Type, color, and location of edge, transition, and other accessory strips.

Transition details to other flooring materials.

* + - * 1. VOC Report: Submit data documenting VOC content of carpet, backing, and adhesives. A copy of the current CRI Approved Products Listing is acceptable.
        2. Carpet Manufacturer’s Installation Instructions: Indicate any special procedures.
        3. Qualification Data:

For qualified installation company and installation crew. Submit certification letter from manufacturer.

For qualified carpet dealer. Submit certification letter from manufacturer.

* + - * 1. Sustainable Characteristics:

NSF/ANSI Standard 140 certification.

Proof of compliance with testing and product requirements of CRI's “Green Label Plus” emissions program.

* + - * 1. Warranties: Special warranties specified in this section.
      1. QUALITY ASSURANCE
         1. Carpet Dealer Qualifications: Company specializing in the installation of commercial carpet with minimum of 10 years of documented experience and approved by manufacturer.
         2. Installer Qualifications: Company specializing in installing commercial carpet with minimum 10 years documented experience and approved by manufacturer.

List at least five projects of successful in-service installations of tufted broadloom carpet in buildings with similar flooring use and wear to that of the Portland International Airport.

Upon request, submit list of references for supervisor performing this work, substantiating that such person has experience working on projects of similar size for a minimum of 10 years.

* + - * 1. Pre-installation Meeting: Conduct the meeting at work site with installers of other work adjoining carpeting including resilient base and representatives of other entities directly concerned with performance of carpet, including Port and product manufacturers.

Review contract documents, submittals, status of coordinating work, proposed installation schedule, and procedures.

Review laydown area and logistics.

Review ambient conditions and ventilation procedures.

All related submittals shall be approved prior to the pre-installation meeting.

Discuss carpet protection requirements for the duration of construction.

* + - * 1. Roll-Out Inspection Upon Delivery:

Notify the Port at least 48 hours in advance of deliveries and coordinate to allow the Port to observe roll-out inspections.

Take pattern measurements to verify pattern is within installation guidelines.

Review to verify carpet meets the tolerances for variation in pattern stated in Part 2.

* + - 1. CONSTRUCTION MOCK-UP
         1. Before installing carpet, install construction mock-up, in location indicated on the drawings, to verify selections made and to demonstrate installation, aesthetic effects, and set quality standards for materials and execution.
         2. Schedule construction mock-up review meeting, at least 5 business days prior to commencing mock-up construction, and include the Port, manufacturer, and installer.
         3. The construction mock-up will be reviewed by the Port to confirm criteria for installation are being met. Approved mockup may, at the discretion of the Port, become part of the completed work if undisturbed at time of substantial completion.
      2. SITE CONDITIONS
         1. Store materials in an area with the same temperature and humidity as the area of installation for a minimum of 24 hours prior to installation.
         2. Store adhesives and all accessories needed for carpet installation for a minimum of 24 hours at a temperature of 65°F to 95°F prior to installation.

Coordinate the amount of extra stock material required for each carpet type and the material delivery location with Port Maintenance, and edit accordingly.

* + - 1. EXTRA STOCK MATERIALS
         1. Furnish extra stock material for each carpet, in the minimum quantities:

|  |  |
| --- | --- |
| Carpet Type | Extra Stock |
| CPT-4 | 300 square yards |
| CPT-6 | 300 square yards |

* + - * 1. The minimum acceptable roll size for meeting the above listed quantities of extra stock material is 20'-0" long by full width.
        2. Deliver extra stock material pre-rolled, taped, and in labelled shipping containers. Deliver to PDX Maintenance facility and obtain a receipt.
        3. At the Contractor’s option and at no additional cost to the Port, the Port will accept unused scraps of the following minimum dimensions:

CPT4: Minimum length of 20 feet and minimum width of 4 feet.

* + - * 1. Dispose of all other unused scraps in accordance with the recycling requirements of the contract documents. Scraps shall not be used to fulfill the extra stock material requirement.
      1. WARRANTY
         1. Warranty for Carpet: Manufacturer’s standard form in which manufacturer agrees to repair or replace components of carpet installation which fail in materials or workmanship within specified warranty period.

Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, loss of tuft bind strength, excess static discharge, lack of color retention, poor wear and staining, change in texture, and delamination.

There shall be no limitations to:

Full warranty coverage due to age of carpet or other deductive warranty considerations or pro-rations.

Duration of adhesive cure time received prior to use of the carpeted area.

Warranty period shall be manufacturer’s standard warranty period or 10 years from date of substantial completion, whichever is greater.

When specifying carpet types other than those listed below, select carpet that is CRI Green Label Plus Testing Program certified.

1. PRODUCTS

The brand name exemption for Tarkett expires March 1, 2021.

* + - 1. STANDARD BROADLOOM CARPET
         1. Broadloom Tufted Carpet: Type CPT-6, tufted nylon.

Product: Monterey Travertine 40009, Tarkett ([www.tarkett.com](http://www.tarkett.com)), no substitutions.

Color: Weathered Plank 02291.

Backing: SuperLok, enriched latex backing.

Nylon: Solution/space dyed.

Dye: 100% solution dyed.

Location: Mezzanine and as otherwise shown on the drawings.

* + - * 1. Meet the following non-cumulative tolerances for variations in pattern (for all standard carpet types):

Bow: 1 1/2 inch in 12 feet.

Skew/Bias: 1 1/2 inch in 12 feet.

Elongation: 1 inch in 12 feet.

Trueness of Edge: 1/2 inch in 12 feet.

The brand name exemption for Tarkett expires March 1, 2021.

* + - 1. WALK-OFF BROADLOOM CARPET
         1. Broadloom Walk-Off Carpet: Type CPT-4.

Product: Abrasive Action II #02578, Tarkett ([www.tarkett.com](http://www.tarkett.com)), no substitutions.

Color: Winter Gray, 19103.

Backing: Powerbond cushion.

Dye: 100% solution dyed.

Face Weight: 24 ounces/square yard.

Gauge: 1/12

Stitches per Inch: 8.0.

Tuft Density: 96 tufts/square inch.

Pile Height Average: 0.187 inch.

Pile Thickness: 0.115 inch.

Density Factor: 7,513 ounces/cubic yard.

Fiber System: TDX nylon.

Soil/Stain Protection: Ensure.

Roll Width: 6 feet.

* + - 1. ACCESSORIES
         1. General:

Accessories shall be those acceptable to the carpet manufacturer and compatible with materials being adhered, non-toxic, low odor, VOC free, solvent free with no alcohol glycol and ammonia, antimicrobial with no hazardous vapors and no carcinogenic material per OSHA regulation 29 CRF 1910-1200, and CRI Green Label certified.

Accessories shall be water-resistant, mildew-resistant, non-staining type to suit products and subfloor conditions indicated, complying with flammability requirements for installed carpet, and recommended or provided by carpet manufacturer.

* + - * 1. Flooring Adhesive: High solids content that is approved by the carpet manufacturer. Meet requirements of Section 016116, Volatile Organic Compound (VOC) Content Restrictions.
        2. Surface Primer: Meet requirements of carpet manufacturer and of Section 016116, Volatile Organic Compound (VOC) Content Restrictions.
        3. Seam Adhesive: Meet requirements of the carpet manufacturer and of Section 016116, Volatile Organic Compound (VOC) Content Restrictions. The seam sealer adhesive applicator shall be one approved by the floor covering manufacturer and that also allows seam adhesive to be applied such that both edges receive adhesive in an equal amount, covering primary and secondary backing without contaminating face yarns.

1. EXECUTION
   * + 1. PREPARATION AND EXAMINATION
          1. Remove existing carpet and adhesive where indicated and in accordance with Section 090561, Common Work Results for Flooring Preparation.
          2. Protect edges of existing flooring. Provide transitions between flooring edge and subfloor where exposed to foot traffic.
          3. Prepare floor substrates for installation of flooring in accordance with Section 090561, Common Work Results for Flooring Preparation.
          4. Verify that subfloor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive carpet.
          5. Verify that subfloor surfaces are dust-free and free of substances that could impair bonding of adhesives to subfloor surfaces.
          6. Perform concrete pull test(s) according to the requirements of Section 090561, Common Work Results for Flooring Preparation.
          7. At the start of each day perform a bond test of carpet installed the previous day. Test according to the requirements and recommendations of the floor covering and adhesive manufacturers.
          8. Verify that substrates are dry enough and ready for carpet installation, as required by the carpet manufacturer, by testing in accordance with Section 072613, Moisture Mitigation System, for moisture and pH. If test results are not within limits recommended by the flooring manufacturer and adhesive materials manufacturer, provide moisture mitigation as specified in Section 072613, Moisture Mitigation System.
          9. Verify that new or relocated floor-mounted utilities are in correct location.
          10. Proceed with installation only after unsatisfactory conditions have been corrected, and corrected conditions have been accepted by the Port.
          11. Prepare carpet prior to installation as recommended by carpet manufacturer.
       2. DIRECT-GLUED CARPET INSTALLATION
          1. Starting installation constitutes Contractor’s acceptance of subfloor conditions.
          2. Install carpet in accordance with manufacturer's instructions and the CRI Carpet Installation Standards.
          3. Verify carpet match to ensure minimal variation between dye lots. Minimal color dye variation is acceptable across borders but not at side or head seams to same pattern.
          4. Lay out carpet runs according to seaming diagram on approved shop drawings. Continuously repeat pattern. Align carpet to proper position. Carpet length between head seams shall be a minimum of 7 feet. Maintain alignment and repeat of pattern across borders.
          5. Where confined configurations, mis-cuts, or other conditions result in a small carpet piece being needed, the minimum distance from the nearest head seam shall be 7 feet, and the piece shall be full width without an additional running seam. Areas of small carpet pieces will not be accepted.
          6. Trim carpet seams with accurate pattern match. Use trim tools best suited to carpet style in accordance with carpet manufacturer's recommendations. Trim edges far enough into material to maintain structural integrity and pattern design. Locate seams as indicated in approved shop drawings. Make cuts true to pattern. Make seam edges tightly abutted without gaps or overlaps. Side seam saddles may be used at doors to reduce waste only if depth of side saddle is 6 inches or greater.
          7. Trim carpet neatly at walls and around interruptions.
          8. Install carpet tight and flat on subfloor, well adhered, with a uniform appearance.
          9. Install carpet smooth, tight, and neat to adjacent vertical surfaces and existing trim where not removed. Gap tolerances at edges:

Adjacent to Vertical Surfaces: 1/32 inch maximum.

Adjacent to Horizontal Non-Carpet Surfaces: 1/64 inch maximum.

* + - * 1. Use all tools, techniques, and methods necessary to achieve pattern match.
        2. Apply surface primer, if required, and adhesive to floor uniformly at rate recommended by manufacturer with the appropriate trowel. After sufficient open time for adhesive to become tacky to the touch, press carpet into adhesive.
        3. Prepare edges of new and existing carpet for seams. Apply seam adhesive in a manner that both edges receive adhesive in an equal amount, covering primary and secondary backing without contaminating face yarns. Seam adjoining carpets following seam adhesive manufacturer’s written instructions.
        4. Roll with appropriate roller for complete contact of adhesive to carpet backing.
        5. Complete installation of edge strips, concealing exposed edges. Bind-cut edges where not concealed by edge strips.
        6. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
        7. Lay out carpet and locate seams in accordance with the approved shop drawings.

Locate seams in area of least traffic, out of areas of pivoting traffic, and parallel to main traffic.

Do not locate seams perpendicular through door openings.

Align run of pile in same direction as anticipated traffic and in same direction on adjacent pieces.

Locate change of color or pattern between rooms under door centerline.

Provide monolithic color, pattern, and texture match within any one area.

* + - * 1. Pattern Trueness of Installation:

Border Carpet: Down the length and across the width maximum variation from true installation is non-cumulative 1/8 inch in 12 feet. Take special care to meet this tolerance as a straight border is essential for an acceptable looking installation.

Standard broadloom field carpets:

Maximum variation from true installation is non-cumulative 1/2 inch in 12 feet or not visible from a standing position for the following pattern conditions:

Bow.

Skew/bias.

Elongation.

Maximum variation from true installation is non-cumulative 1/4 inch in 12 feet or not visible from a standing position for the following condition:

Trueness of edge.

Match all patterns at seam lines.

* + - * 1. Install carpet as one piece in the full width of a stair. Unless allowed otherwise in writing by the Port, the pattern shall be the same on each tread and riser in both width and length. This requires cutting the carpet at the bottom of each riser.
        2. When possible, perform work in areas with heavy traffic early in the shift to maximize cure time before opening for use. This does not apply to areas designated to receive a one day cure.
        3. Do not move wheeled vehicles over uncured carpet.
      1. CLEANING
         1. Remove excess adhesive from floor, base, wall, and other adjacent surfaces without damaging those surfaces. Use the appropriate adhesive remover recommended by adhesive manufacturer.
         2. Remove incidental yarns that protrude from carpet surface or that don't match the color of the carpet.
         3. Clean and vacuum carpet surfaces.

END OF SECTION 096800