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 include carpet types CPT-1, CPT-2, or CPT-3.

SECTION 096800 – BROADLOOM CARPETING

1. GENERAL
   * + 1. DESCRIPTION
          1. This section describes direct-glued broadloom carpet, adhesives, and accessories.

Edit the following two paragraphs as appropriate. Delete CPT-1/2/3 from one of the paragraphs below.

* + - * 1. The Port will furnish the following types of carpet:

CPT-1 (Flight 1), large pattern.

CPT-2 (Flight 2), small pattern.

CPT-3 (Boarder), border.

* + - * 1. The Contractor shall provide the following types of carpet:

CPT-1 (Flight 1), large pattern.

CPT-2 (Flight 2), small pattern.

CPT-3 (Boarder), border.

CPT-4.

CPT-6.

* + - 1. 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
      2. REFERENCES
         1. AATCC: American Association of Textile Chemists and Colorists

AATC Testing Method 16: Colorfastness to Light

AATC Testing Method 129: Colorfastness to Ozone in the Atmosphere under High Humidities

AATC Testing Method 164: Colorfastness to Oxides of Nitrogen in the Atmosphere Under High Humidities

AATC Testing Method 171: Carpets: Cleaning of, Hot Water Extraction Method

AATC Testing Method 175: Stain Resistance: Pile Floor Coverings

* + - * 1. ANSI: American National Standards Institute

ANSI Standard 140: Sustainability Assessment for Carpet

* + - * 1. ASTM: American Society for Testing and Materials

ASTM D1335: Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings

ASTM D2859: Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials

ASTM D3936: Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering

ASTM D5252: Standard Practice for the Operation of the Hexapod Tumble Drum Tester

ASTM D5848: Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings

ASTM D6119: Standard Practice for Creating Surface Appearance Changes in Pile Yarn Floor Covering from Foot Traffic

ASTM D6540: Standard Test Method for Accelerated Soiling of Pile Yarn Floor Covering

ASTM D6859: Standard Test Method for Pile Thickness of Finished Level Pile Yarn Floor Coverings

ASTM D7241: Standard Test Method for Pile Thickness of Finished Multilevel Pile Yarn Floor Covering

ASTM D7330: Standard Test Method for Assessment of Surface Appearance Change in Pile Floor Coverings Using Standard Reference Scales

ASTM E648: Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source

ASTM E662: Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials

* + - * 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. OR-OSHA: Oregon Occupational Safety and Health Administration
      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.

Keep the following if CPT-1/2/3 carpet is Contractor-provided, otherwise delete.

For qualified carpet dealer. Submit certification letter from manufacturer.

Keep the following paragraph if CPT-1/2/3 carpet is Contractor-provided, otherwise delete.

* + - * 1. Extra Materials for Testing: See Quality Assurance below for required material.
        2. 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.

If the CPT-1/2/3 carpet is Port-furnished, delete paragraph A and delete all mention of CPT-1/2/3 from remaining paragraphs in the article. In all cases, coordinate the amount of extra material required for each carpet type and the material delivery location with Port Maintenance, and edit accordingly.

* + - 1. EXTRA MATERIALS
         1. Furnish extra stock material and custom carpet production overrun from the same dye lots and runs as each carpet installed. Furnish as standard with the carpet manufacturer in amounts necessary to ensure complete installation without extra seams. The Port will purchase custom carpet overrun material remaining at the end of the work, up to five percent of each carpet type. The price will be the sum of the manufacturer’s invoice and shipping prices to distributor.
         2. Furnish extra stock material for each carpet, in the minimum quantities:

|  |  |
| --- | --- |
| Carpet Type | Extra Stock |
| CPT-1 | 500 square yards |
| CPT-2 | 500 square yards |
| CPT-3 | 500 square yards |
| 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:

CPT-1 and CPT-2: Minimum area of 26 square yards and minimum width of 6 feet.

CPT-3 and 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 minimum requirement.
      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.

Gain Port approval of all related submittals prior to the pre-installation meeting.

Discuss carpet protection requirements for the duration of construction.

Choose between the following two paragraphs. The first is for Port-furnished CPT-1/2/3 carpet types. The second is for Contractor-provided CPT-1/2/3 carpet types.

* + - * 1. Tolerance Inspection:

Upon receipt of custom carpet from the Port, inspect all carpet to verify it meets the pattern variation tolerances for bow, skew/bias, elongation, and trueness of edge, as described in Part 2.

* + - * 1. Factory Inspection:

Review all carpet to verify it meets the pattern variation tolerances for bow, skew/bias, elongation, and trueness of edge, as described in Part 2.

The Port will review manufacturer’s control procedures at the place of carpet fabrication.

Obtain from the manufacturer roll sequencing with a detailed roll sequencing report for every roll and shipment for the use of the installer.

Obtain from the manufacturer, for the use of the installer, the roll length and the following measurements at the beginning (flap), middle, and end of each roll.

Width.

Pattern length of 5 pattern repeats.

Skew.

Keep the following two paragraphs if CPT-1/2/3 carpet is Contractor-provided, otherwise delete both.

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

Roll-out and inspect carpet at time of delivery from the manufacturer.

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 Factory Inspection paragraph above.

If the measurements provided by the manufacturer are found to be accurate, for the first 10 rolls, the Port may suspend the requirement for roll-out inspection at the time of delivery. If after suspension of roll-out inspections factory measurements are found to be inaccurate, roll-out inspections shall resume.

* + - * 1. Carpet Product Testing Intervals: At each 10,000 yards produced, submit extra materials of size at least 12 foot by 12 foot for each custom broadloom carpet type (CPT-1, CPT-2, and CPT-3) to the Port for laboratory testing to confirm performance characteristics.
      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 period of 24 hours at a temperature of 65°F to 95°F prior to installation.
         2. Store adhesives and all accessories needed for carpet installation for a minimum period of 24 hours at a temperature of 65°F to 95°F prior to installation.

If some carpet types are obtained from the Port edit the bracketed information accordingly. If all carpet is obtained from the Port, delete the following article in its entirety.

* + - 1. WARRANTY
         1. Special 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. Exception: There is no materials warranty required for [CPT‑1/2/3/4/5/6].

Keep the following subparagraph if CPT-1/2/3 carpet is Contractor-provided, otherwise delete.

Replacement area shall be:

The failed area all the way to the next change of carpet type in all directions, if such area is less than 135 square yards.

The failed area all the way to the next existing seam in all directions, if such area is more than 135 square yards.

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.

The product’s use or maintenance required to maintain the warranty indicated.

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

* + - * 1. 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

If CPT-1/2/3 is obtained from the Contractor, delete the following article.

* + - 1. PORT-FURNISHED CARPET
         1. The Port will furnish CPT-1, CPT-2, and CPT-3 required for this work.
         2. Determine the amount needed and make a request for it a minimum of 7 days in advance of when Contractor plans to obtain it.
         3. Pick up and transport the carpet from Port maintenance storage facility located near the airport. Coordinate access with the Port.
         4. Return unused carpet to the Port maintenance storage facility at completion of the work. Coordinate with the Port.

The brand name exemption for J&J Industries expires July 31, 2019.

* + - 1. CUSTOM BROADLOOM CARPET SCHEDULE
         1. Broadloom Tufted Carpet: Type CPT-1.

Custom Design Portland Airport.

Manufacturer: J&J Industries, Inc. ([www.jjindustries.com](http://www.jjindustries.com)), no substitutions.

Req Number: 459807-009-01.

Style Number: J07E.

Color, custom #C0427. Background color, green.

Roll Width: 12 feet with complete usable pattern repeats.

* + - * 1. Broadloom Tufted Carpet: Type CPT-2.

Custom Design Portland Airport.

Manufacturer: J&J Industries, Inc. ([www.jjindustries.com](http://www.jjindustries.com)), no substitutions.

Req Number: 459807-013-01.

Style Number: J07F.

Color, custom #C0428. Background color, green.

Roll Width: 12 feet with complete usable pattern repeats.

* + - * 1. Broadloom Tufted Carpet: Type CPT-3.

Custom Design Portland Airport.

Manufacturer: J&J Industries, Inc. ([www.jjindustries.com](http://www.jjindustries.com)), no substitutions.

Req Number: 459807-023-01.

Style Number: J15X.

Color, custom #C0782. Background color, blue.

Roll Width: 12 or 13 feet with complete usable pattern repeats.

Cushion: Proper height to seam up to CPT-1 and CPT-2 with top of pile matching.

* + - 1. CUSTOM BROADLOOM CARPET CHARACTERISTICS
         1. Pattern:

Detailed carpet pattern and texture layout for patterning is available from the Port upon request.

Colors shall be as indicated in the Custom Broadloom Carpet Schedule article.

Pattern and Texture Repeat:

CPT-1 36 inches wide x 29 inches long.

CPT-2 36 inches wide x 29 inches long.

CPT-3 24 inches wide x 24 inches long.

If CPT-1/2/3 is Contractor-furnished, delete “Carpet obtained from the Port was originally purchased using the following” from the beginning of the following subparagraph.

Carpet obtained from the Port was originally purchased using the following pattern variation from manufacturing:

Meet the following non-cumulative tolerances for variations in pattern:

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.

* + - * 1. Yarn:

Filament Type: 100% Encore SD Ultima Type 6 nylon. Twisted at 6.0 TPI Heatset.

Dye Method: 100% solution dyed.

Yarn Color: As indicated in Custom Broadloom Carpet Schedule.

Yarn Size: Follow manufacturer’s standards.

Topical: Pro Tex Fluorochemical.

* + - * 1. Product Assembly:

Tufted nylon cut/loop CPT-1 and CPT-2.

Machine: 1/10 gauge.

Stitch Rate: 11 per inch.

Pile Height: Loop 6/32 inch, average, and cut 8/32 inch, average. Pile height difference between loop and cut shall remain constant at 1/16 inch.

Pile Density: 5500 minimum pile density.

Density = 36 x pile weight (ounce/square yard) / pile thickness (inches).

Backing: Premier Back Plus, a high performance backing system formulated for extremely high traffic.

Total Yarn Weight: 50 ounces/square yard per manufacturer as required to meet test requirements.

Pile Thickness: ASTM D6859 or ASTM D7241.

Selvage Edges: Minimum selvage edge distance after complete pattern shall be 1/2 inch on each side.

Tufted nylon loop CPT-3.

Machine: 1/12 gauge.

Stitch Rate: 11.5 per inch.

Pile Height: Low loop 0.125 inch and high loop 0.218 inch. Pile height difference between low loop and high loop shall remain 0.093 inch.

Pile Density: 5000 minimum pile density.

Density = 36 x pile weight (ounce/square yard) / pile thickness (inches).

Backing: Attached Cushion Endure Back, with proper height to seam up to CPT-1 and CPT-2, a high performance backing system formulated for extremely high traffic.

Total Yarn Weight: 40 ounces/square yard per manufacturer as required to meet test requirements.

Pile Thickness: ASTM D6859 or ASTM D7241.

Selvage Edges: Minimum selvage edge distance after complete pattern shall be 1/2 inch on each side.

* + - * 1. Performance Characteristics:

Foot Traffic: Surface appearance rating per ASTM D6119. Meet a minimum of 3.5.

Pile Weight: Minimum for each carpet type as listed above under yarn weight per ASTM D5848.

Resistance to Delamination: Specimen average of 5 pounds/inch, no delamination, per ASTM D3936.

Tuft Bind: Minimum of 10 lb of force for loop pile and 6 lb of force for cut pile, per ASTM D1335.

Colorfastness to:

Light: AATCC Test Method 16 Part 3-200 AFU. Minimum rating of 5 using AATCC Gray Scale for Color Change.

Atmospheric Contaminants: AATCC Test Method 164 (oxides of nitrogen). Minimum rating of 5.0.

Ozone Contaminants: AATCC Test Method 129 (ozone), Test Method for 2 Cycles. Minimum rating of 5 using AATCC Gray Scale for Color Change.

Stain Resistance with Extraction:

ASTM D6540 and AATCC Test Method 171 (HWE), Test Method to Simulate Removal of Topical Treatments by Hot Water Extraction.

Accelerated Soiling 1, cycle meet 3.5 after vacuum and 5 after extraction.

Accelerated Soiling 3, cycle meet 2.5 after vacuum and 4.5 after extraction.

Accelerated Soiling 5, cycle meet 2.5 after vacuum and 4.5 after extraction.

Texture Appearance Retention and Color Change Rating: Hexapod test method, ASTM D5252, for cycles indicated (8.4 lb tumbler) with a minimum rating as noted using the appropriate Commercial Reference Scale for construction, per ASTM D7330. Test without underpad or brushing.

12,000 cycles (8.4 lb tumbler):

Texture appearance rating, minimum of 3.5.

Color change rating, minimum of 4.

24,000 cycles (8.4 lb tumbler):

Texture appearance rating, minimum of 3.

Color change rating, minimum of 3.5.

48,000 cycles (8.4 lb tumbler):

Texture appearance rating, minimum of 3.

Color change rating, minimum of 3.5.

Stain Resistance: AATCC Test Method 175, Stain Resistance. Minimum rating as noted using the CRI stain battery test.

Coffee, Cola, Cherry Kool-Aid, grape jam, motor oil, fruit juice, ink permanent, lipstick, soil, shoe polish, tea-hot, wine, and ketchup shall meet a 5 after blotting and a 4.5 if cleaned after 24 hours.

Mustard shall meet a 4.5 after blotting and a 3 if cleaned after 24 hours.

Betadine shall meet a 4.5 after blotting and a 3.5 if cleaned after 24 hours.

Flammability:

CPSC FF1-70, federal flammability standard (Methenamine Pill test, ASTM D2859 test method).

Flame Spread, ASTM E648 test method, >0.45 watts/cm2 and/or federal, state, or local requirements, Class 1.

Smoke Density, ASTM E662 test method, rating shall be less than 450 Dm in flaming mode (or meet state requirements).

Static Control (Anti-Static Filaments): Static control by permanent means, maximum electrostatic charge shall be 3Kv. at 20 percent R.H.

Appearance Retention Rating: Severe traffic, 3.5 minimum per ASTM D7330.

* + - * 1. Sustainable Characteristics:

Recyclability of New Carpet: Carpet shall be manufactured of such materials and in such a way so as to allow it to be recycled at the end of its useful life. For example, type 6 and type 6,6 nylons shall not be mixed in the same carpet.

Sustainability: NSF/ANSI Standard 140 certification.

Emissions: Comply with testing and product requirements of CRI’s “Green Label Plus” program.

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 where 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 OR-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:

J&J Carpet: Use XL, J&J Comercialon Premium Carpet Adhesive, or pre-bid approved equal.

All Other Carpet: High solids content that is approved by the carpet manufacturer. Meet requirements of Section 016116.

* + - * 1. Surface Primer: Meet requirements of carpet manufacturer and of Section 016116.
        2. Seam Adhesive: Meet requirements of the carpet manufacturer and of Section 016116,. 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.
          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.
          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.
          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 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.
          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.

Keep the following subparagraph if CPT-1/2/3 carpet is Contractor-provided, otherwise delete.

* + - * 1. Check the accuracy of the factory measurements obtained from the manufacturer. Check for roll length, width, and skew and length of five pattern repeats. Provide to the Port the actual measurements and those obtained from the manufacturer.
        2. 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.
        3. 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.
        4. 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.
        5. 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.
        6. Trim carpet neatly at walls and around interruptions.
        7. Install carpet tight and flat on subfloor, well adhered, with a uniform appearance.
        8. 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.

Coordinate the article below with the drawings and Section 015000.

* + - * 1. Approximately one-third of the carpet installed shall receive a minimum 24-hour adhesive cure where shown on the drawings prior to receiving traffic. To prevent traffic during cure time, install barriers as required in Section 015000, Temporary Facilities and Controls. The other two-thirds of the carpet installed may receive less than 24-hour cure time.
        2. Complete installation of edge strips, concealing exposed edges. Bind-cut edges where not concealed by edge strips.
        3. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
        4. 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:

CPT-3: 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.

CPT-1 and CPT-2 and all standard broadloom 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. Carpet Weight and Stiffness: Take special note that CPT-1, CPT-2, and CPT-3 have an extremely high face weight and stiff/heavy latex coated backing that requires extra effort to achieve pattern trueness and other performance levels specified for this work.
        3. 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.
        4. 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