PART 0 DESIGN STANDARDS

0.01 GENERAL DESIGN GUIDELINES

A. This standard contains one approved face yarn material and one approved backing material. Substitute or alternate carpet systems shall not be specified without approval of the DPS Project Manager.

B. Carpet appearance shall be an overall multi-color, random tweed. Solid color or patterned carpet may be used only with approval of the DPS Project Manager.

C. Prohibitions

1. Carpeting should be installed only in appropriate classrooms and accessory spaces. Carpet shall not be installed in corridors or other high-traffic areas without specific approval of the DPS Project Manager (In some circumstances, carpet may be installed in corridors of Elementary and Kindergarten through 8th Grade schools.)
2. Carpet shall not be installed in lunchrooms, cafeterias, or other food service spaces.
3. Carpet shall not be installed within two feet of plumbing fixtures.
4. Carpet shall not be installed on stairs or nosings except in low traffic areas where necessary for acoustic performance.
5. Carpet intended for floor installation shall not be installed on vertical surfaces.
6. Carpet tile may be used only in special circumstances with approval of the DPS Project Manager, and shall be adhered with releasable adhesive.
7. Separate carpet cushion shall not be used in any application.
8. Carpet-over-carpet retrofit is discouraged.
9. Prior to specifying carpet for gymnasium flooring, research the suitability of carpet in this application and consult with the DPS Project Manager. Also refer to standard Section 09642.

D. Carpet shall be installed under all movable items and open-bottomed and raised-bottom obstructions. Carpet shall extend into closets and alcoves of rooms to be carpeted, unless other floor finish is indicated for these spaces.

E. Incorporate project-specific installation conditions in the carpet specification, including appropriate specifications for substrate preparation. Specify appropriate underlayments. Gypsum based underlayment products shall not be specified.

F. Coordinate moisture and alkalinity testing requirements with other design and specification requirements.

G. Ensure that resilient base and accessories are specified (not included in this section).

H. For carpet retrofit projects, coordinate removal and reinstallation of furniture and equipment with the scope of the construction contract. Under no circumstances will the custodial staff be allowed to move furniture and equipment for construction purposes. Moving and staging of furniture and equipment will be accomplished by outside vendors or will be included under the general construction contract.

PART 1 GENERAL

1.01 QUALITY ASSURANCE

A. Standard for Installation of Commercial Carpet as published by the Carpet and Rug Institute (CRI).

B. Obtain each type of carpet from one souce and by a single manufacturer.

C. Carpet materials shall be from a single dye lot. Visible differences in color or texture shall be grounds for rejection and replacement with new material at the Contractor's expense.

1.02 SUBMITTALS

A. Minimum 12” x 12” samples of each type of carpet, for Architect’s selection of colors

A. Manufacturer’s test reports

B. For carpet installations over 500 square yards, submit carpet layout drawings showing seam locations, pattern, nap direction, and type of edge treatment. No perpendicular seams shall occur within door openings. Show cross seams.

C. Carpet name, manufacturer, and complete specification data. Submit product data for adhesive and seam welding materials.

D. Manufacturer’s maintenance data. Include methods for maintaining carpet, including stain-removal products and procedures, and precautions for cleaning materials and methods that could be detrimental to finishes and performance.

E. Record finish schedule including material and color designations

1.03 WARRANTY

A. Provide an extended warranty underwritten by the carpet manufacturer for a minimum period of 15 years.

1. Coverage limits shall not be pro-rated at any time during the warranty period.
2. Coverage shall not be restricted to any amount less than the cost of material and labor for complete replacement of carpet.
3. Warranty coverage shall include, at minimum, surface wear exceeding 15% of pile fiber, edge ravel, loss of seam integrity, delamination, loss of adhesion to the floor, yarn pulls, zippering, and moisture penetration.

B. Installation Contractor shall provide a written warranty for a period of two (2) years. Warranty shall guarantee the completed installation to be free from defects in materials and workmanship

1.04 EXTRA MATERIALS

A. Contractor shall deliver extra stock of carpet to Owner’s designated storage space.

B. Extra stock shall include carpet scraps larger than 3’-0” in minimum dimension and uncut full-roll-width pieces equal to two (2) percent of the total area of each type of carpet installed, but not less than the equivalent of eight (8) square yards of each type of carpet installed.

C. Extra stock of roll goods shall be 6’ width only. (If 12’ wide carpet is provided in the initial installation, cut carpet to 6’ width before delivering to Owner.)

PART 2 PRODUCTS

2.01 ACCEPTABLE PRODUCTS

A. Acceptable products listed below are subject to meeting all other requirements of this specification. It shall be the burden of the carpet manufacturer to illustrate compliance with this specification.

1. Tandus (Collins & Aikman)
   a) Acceptable styles:
      i) Guardian
      ii) In Stitches
      iii) Lenox
      iv) Needle & Thread
      v) Runaway
      vi) Sentinel
      vii) Sonar

b) Acceptable backings: Powerbond, Powerbond RS

2. Mannington

a) Acceptable styles:

i) Centerfield III 20 Antron

ii) Everywear

iii) Everywear Plus

iv) Gametime III 20 Antron

v) Lateral Thinking II

vi) Motivation

vii) Viewpoint II

viii) Scenic

b) Acceptable backing: Integra HP RE

2.02 MATERIALS & CONSTRUCTION

A. Face Yarn

1. Yarn: 100% Antron Lumena or Legacy
2. Minimum face yarn weight: 17 oz/sy
3. Weave: Tufted level loop, tufted multi-level loop, or textured loop
4. Gauge: 1/10 inch minimum
5. Average pile density: 5,000 oz/sy minimum per ASTM D418-82

B. Backing

1. Primary backing and bonding agent: 100% synthetic (no SBR latex)
2. Secondary backing (cushion or solid vinyl)

a) Polyvinyl cushion, 18 lb/cu.ft. density, 1/10 inch thickness

b) Solid closed cell non-aqueous polymeric vinyl composite

C. Dimensions: 6’ or 12’ width roll goods

2.03 CARPET ADHESIVES AND ACCESSORIES

A. Sub-floor fillers and underlayments shall be materials approved by the carpet manufacturer.

B. Fillers and underlayments containing gypsum are not acceptable.

C. Adhesives shall be CRI “Green Label” approved.

D. Adhesives shall be non-toxic, low VOC, non-flammable, waterproof, release-type cements as recommended and warranted by the carpet manufacturer for each substrate and installation condition. Mill-applied adhesives are acceptable.

E. Seam welding materials

F. Other accessory items recommended by the carpet manufacturer for each intended application

PART 3 EXECUTION

3.01 PREPARATION

A. Environmental and Substrate Conditions: Includes air temperature, floor temperature, moisture content, and alkalinity testing of new concrete substrates.

1. Testing shall occur both prior to and during installation.

2. Contractor shall perform tests and shall submit test reports to the Owner and Architect.
3. Testing shall be made for each 1,000 s.f. of surface area
4. Air temperature: Minimum of 5 degrees above dew point
5. Floor temperature: Minimum 5 degrees above dew point
6. Floor moisture content: Emission rate of not more than 3 lbs/1,000 sq. ft./24 hrs when tested by calcium chloride moisture test in compliance with CRI 104, 6.2.1 with subfloor tempature not less than 55 degrees F
7. Floor alkalinity: Minimum 9 pH, maximum 11pH

B. Floor Preparation

1. Inspect and prepare substrates prior to the installation of carpet. Do not proceed with installation until unsatisfactory conditions have been corrected, as it constitutes acceptance of substrate.
2. Level subfloor within ¼" in 10 feet, noncumulative, in all directions. Sand or grind protrusions, bumps, and ridges. Patch and repair cracks and rough areas. Fill depressions, cracks, holes as recommended by manufacturer.
3. Remove adhesives, oil, wax, dirt, and other materials that may affect adhesion of carpet.

3.02 INSTALLATION

A. Install carpet wall-to-wall, using continuous lengths and broadest widths possible to minimize the placement of seams in traffic lanes.

B. Cut edges shall be trued and appropriately treated to form invisible and non-raveling joints where exposed.

C. Provide carpet edge guard at every location where edge of carpet is exposed to traffic, except where another device, such as an expansion joint cover system or threshold, is provided with an integral carpet binder bar.

D. Chemically weld seams.

E. No pieces of less than 2' in any dimension shall be installed in corridors and hallways. Pieces of less than 2' in any dimension shall not be used at any location except where such a width is required to complete flooring in excess of full roll widths.

F. Carpet shall be applied by direct glued-down method. Adhesive shall be applied over the entire field area with a clean, notched trowel. Random adhesive application is not acceptable.

G. Roll entire field with a 75-lb. steel roller. Roll carpet slowly and carefully in both directions to assure good adhesive transfer. Roll a second time to eliminate bubbles.

3.03 FIELD QUALITY CONTROL

A. Installed carpet shall be free of spots, dirt or soil, shall be without tears and frayed or pulled tufts, and shall be free of obvious color variations at seams.

B. Carpet shall be smooth and free of humps or air bubbles between carpet and substrate.

C. Such defects that cannot be remedied to the satisfaction of the Architect shall be removed and replaced with new materials by the Contractor.

END OF SECTION 09680