SECTION 096815 – CARPET

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Extent, location and details of each type of carpeting are indicated on drawings, in schedules, and by specifications.

B. Work of this section includes furnishing and installation of carpeting, adhesives and accessories.

C. Perform "outgassing" procedures prior to occupancy and acceptance to free all odors and formaldehyde gassing from carpet. Standard procedure to accelerate the seepage of potential environmental "gassing" of the carpet shall be performed.

1.3 RELATED SECTIONS

A. The following Section contains requirements that relate to this Section:

1. Division 9 Section "Resilient Wall Base & Accessories" for wall base.

1.4 SUBMITTALS

A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.

B. Product Data: Submit manufacturer's product literature and installation instructions for each type of carpeting material and installation accessory required. Include methods of installation for each type of substrate.

1. Submit written data on physical characteristics, durability, resistance to fading and flame resistance characteristics.

C. Installer Affidavit: Submit affidavit signed by dealer and carpet manufacturer to confirm and acknowledge that the installer is approved by the manufacturer to install manufacturer's product and will follow all installation instructions recommended or required by carpet manufacturer. Provide written confirmation that all requirements of Paragraph 1.5 will be followed.

D. Shop Drawings: Submit shop drawings showing carpet layout and seaming diagrams, clearly indicating carpet pile direction, and locations and types of edge strips. Indicate columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet. Show installation details at any special conditions.

E. Samples for Initial Selection Purposes: Submit manufacturer's standard size samples and color yarns showing standard range of colors, textures and patterns available for each type of carpet required. Submit samples in full range of manufacturers standard colors of transition strips and accessory items. Architect to select color.

F. Samples for Verification Purposes: Submit the following:

1. 18"x27" samples of each type of sheet carpeting required.
2. Full-size sample of each type of carpet tile required.

3. 6" long samples of each type exposed edge stripping and accessory item.
4. Prepare samples from same material to be used for the work.

G. Submit certification that carpet adhesive meets the requirements of the MSDE technical bulletin "Carpet and Indoor Air Quality in Schools (1993)" for levels of volatile organic compounds.

H. Manufacturer Guarantee: Provide inspection certification and guarantee from manufacturer confirming installation procedures were followed. Coordinate with warranty offered by manufacturer.

I. Maintenance Manual, Carpeting: Submit manual of carpet manufacturer's complete recommendations for the care, cleaning and maintenance of each type of carpeting.

J. The manufacturer awarded the carpeting contract must provide detailed maintenance procedures within forty-five (45) days of award of contract. Documentation that this program is currently in place must be submitted at the time of bid.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Firm (material producer) with not less than 5 years of production experience, whose published literature clearly indicates general compliance of products with requirements for this section.

B. Installer Qualifications: Firm specializing in carpet installation with not less than 5 years of experience in installation of carpet similar to type, quantity and installation methods required for this project and approved by carpet manufacturer by submitting written affidavit.

C. Single Source Responsibility: Provide material produced by a single manufacturer for each carpet type.

D. Carpet Surface Burning Characteristics: Provide carpet identical to that tested for the following fire performance characteristics, per test method indicated below, by UL or other testing and inspecting organizations acceptable to authorities having jurisdiction. Identify carpet with appropriate markings of applicable testing and inspecting organization.

1. Test Method: DOC FF 1-70
   Rating: Pass
2. Test Method: ASTM E 84
   Flame Spread: 25 or less
   Smoke Developed: 450 or less

E. Certification: Submit manufacturer's certificate stating that materials furnished comply with specified requirements. Include supporting certified laboratory testing data indicating that material meets specified test requirements.

F. The installation of the carpet must be guaranteed by the manufacturer of the carpet. All installation procedures required/recommended by the manufacturer will be followed and only materials supplied by the manufacturer will be used in order to coordinate with warranties offered by the manufacturer.

G. A pre-construction meeting will be held once the contract has been awarded to review proper installation methods and seaming diagrams with manufacturer's mill representative, technical installation technician from the mill, carpet installation company or subcontractors if not indicated by "dealer", construction manager, end user and architect.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in original factory wrappings and containers, clearly labeled with identification of manufacturer, brand name, quality or grade, fire hazard classification, and lot number. Store materials in original undamaged packages and containers, inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, humidity; laid flat, blocked off ground to prevent sagging and warping. Maintain temperature in storage area above 68 degrees Fahrenheit (20 deg. C) at least three days prior to and during installation.

B. Comply with instructions and recommendations of manufacturer for special delivery, storage and handling requirements.

1.7 PROJECT CONDITIONS

A. Substrate Conditions: No condensation within 48 hours on underside of 4-foot by 4-foot polyethylene sheet, fully taped at perimeter to substrate.

B. Substrate Conditions: pH of 9 or less when substrate wetted with potable water and pHydrion paper applied.

1.8 SEQUENCING AND SCHEDULING

A. Sequence carpet installation with other work to minimize possibility of damage and soiling during remainder of construction period.

1.9 MAINTENANCE

A. Maintenance Instructions: Submit three manufacturer's printed instructions for maintenance of installed work, including methods and frequency recommended for maintaining optimum condition under anticipated traffic and use conditions. Include precautions against materials and methods which may be detrimental to finishes and performance.

B. Replacement Materials: After completion of work, deliver not less than 5% of full width of carpet of each type, color, and pattern selected exclusive of material required to properly complete installation. Furnish accessory components; furnish one box each of replacement materials from same production run as materials installed. Package replacement materials with protective covering, identified with appropriate labels.

1.10 WARRANTY

A. Special Project Warranty: Submit a written warranty, executed by the Contractor, Installer and the Manufacturer, agreeing to repair or replace carpeting which fails in materials or workmanship within the specified warranty period. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under the Contract Documents.

1. 10-year stain removal warranty.
2. Lifetime static control warranty.
3. 10-year texture retention warranty.
4. Colorfast warranty which includes 10-year warranty for exposure to sunlight. Five-year warranty for exposure to atmospheric contaminants.
5. Lifetime edge ravel & zippering warranty.
6. Specification Warranty: The manufacturer warrants that the carpet conforms to specifications established for the product identified in the execution section, subject to normal manufacturing tolerances.
7. Five Year Installation Workmanship: Provide special project warranty, signed by contractor and installer, agreeing to repair or replace defective materials and workmanship of carpeting work during 5-year warranty period, without cost to owner, and agreeing to repair or replace other defects beyond

contractor′s/installer′s/manufacturer′s controls at owner′s expense at prevailing rates.

1.11 ENVIRONMENTAL CONDITIONS

A. Airing shall be required during and after carpet installation. The building ventilation system should be continuously operated with maximum outside air for at least 72 hours after the installation is complete. Recirculation of air from area of installation into the HVAC system should be prevented. Reference MSDE Technical Bulletin "Carpet and Indoor Air Quality in Schools (1993)" for more detailed requirements. Items required in this technical bulletin are part of the Contract and will be enforced.

1.12 EXTRA MATERIALS

A. Deliver extra materials to Owner. Furnish extra materials described below matching products installed, packaged with protective covering for storage and identified with appropriate labels. General Contractor is responsible to coordinate turn-in with Board of Education Maintenance.

1. Carpet: Before installation begins, furnish quantity of full-width units equal to 5.0% of amount installed.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Carpet shall be first quality manufacture, the product of one manufacturer. No seconds or imperfects will be acceptable.

B. Carpeting shall be permanently moth-proofed by the manufacturer and non-allergenic.

C. Colors and patterns will be selected from the manufacturer's standard color samples. All carpeting of each color shall be from the same dye lot.

2.2 MANUFACTURERS

A. Acceptable Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include, but are not limited to, the following:

1. Tandus (Basis of Design)
2. Lee
3. Shaw
4. Mohawk
5. Mannington

2.3 ACCEPTABLE PRODUCTS: Equivalent to the following specified as a basis-of-design.

A. CPT 1: Carpet Tile: 36" x 36" No. 1010369-001 by Tandus.

1.	Construction	Pattern Loop
2.	Gauge	5/64
3.	Fiber System	Dynex ® Nylon
4.	Dye Method	95% Solution Dyed / 5% Yarn Dyed
5.	Primary Tufting Substrate	Synthetic Non-Woven

B. CPT 2: Carpet Tile: Plexus Color II No. 02875 by Tandus.

1.	Construction	Symtexd
2.	Gauge	1/13
3.	Fiber System	Dynex SD® Nylon / Dynex ® Nylon
4.	Dye Method	50% Solution Dyed / 50% Yarn Dyed
5.	Primary Tufting Substrate	Synthetic Non-Woven

C. CPT 3: Carpet Tile: 24" x 24" No. 1010369-001 by Tandus.

1.	Construction	Pattern Loop
2.	Gauge	5/64
3.	Fiber System	Dynex ® Nylon
4.	Dye Method	95% Solution Dyed / 5% Yarn Dyed
5.	Primary Tufting Substrate	Synthetic Non-Woven

D. CPT4: Carpet Tile: Abrasive Action II by Tandus.

1.	Construction	Accuweave Patterned Loop
2.	Gauge	1/12
3.	Stitches per Inch	8.0
4.	Tuft Density	96 tufts/sq in
5.	Pile Height Average	0.187 inch
6.	Fiber System	TDX Nylon
7.	Dye Method	100% Solution Dyed
8.	Soil/Stain Protection	Ensure

E. Carpet Color and Certificates: Carpet color shall be selected from manufacturer's stock colors. Contractor shall furnish manufacturer's certification that registers number of rolls furnished were manufactured in accordance with specification requirements, and all from the same dye lot and manufacturer's run.

2.4 CARPET ACCESSORIES

A. Carpet Edge Guard, Non-Metallic: Extruded or molded heavy-duty vinyl or rubber in colors selected by Architect from standard colors.

1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:

   a. Mercer Plastics Company, Inc., Stock #150 Tile - Carpet Joiner, transition strip between VCT and carpet. Color to be selected by Architect from manufacturers standard colors.

B. Carpet Adhesive: Water-resistant, non-staining as recommended by carpet manufacturer, which complies with flammability requirements for installed carpet.

1. Adhesive shall comply with MSDE Technical Bulletin "Carpet and Indoor Air Quality in Schools (1993)" for emitting volatile organic compounds.

C. Seaming Cement: Hot-melt seaming adhesive or similar product recommended by carpet manufacturer, for taping seams and buttering cut edges at backing to form secure seams and preventing pile loss at seams.

D. Miscellaneous Materials: As recommended by manufacturers of carpet and other carpeting products, selected by Installer to meet project circumstances and requirements, and to be submitted to Architect for approval.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates for moisture content and other conditions under which carpeting is to be installed. Notify contractor in writing of major conditions detrimental to proper completion of the work. The carpet contractor shall examine surfaces scheduled to receive carpeting for: excessive voids in cement or subsurface texture that are questionable for long term quality of patch, outlets (electrical or non electrical) that will not be flush with surface once carpeted either prepared by carpet installer or other vendor, debris or other defects that will adversely affect the execution and quality of the new carpet installation. The contractor shall broom clean and prepare floors, at the contractor's expense. Any of these conditions not meeting the carpet installer's approval will be brought to the attention of the CONSTRUCTION MANAGER AND OWNER for their final review and recommendation prior to any carpet installation. Do not proceed until satisfactory conditions have been corrected.

3.2 PREPARATION

A. Repair minor holes, cracks, depressions, and rough areas using material recommended by carpet or adhesive manufacturer. Skim coat all existing substrates with Ardex Feather Finish or equivalent, following manufacturer's instructions for installation.

B. Clear away debris and scrape up cementitious deposits from surfaces to receive carpeting. Apply sealer to prevent dusting.

3.3 INSTALLATION

A. Comply with manufacturer's recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. Follow seaming diagram as submitted and approved. At doorways, center seams under door in closed position; do not place seams perpendicular to door frame, in direction of traffic through doorway. Do not bridge building expansion joints with continuous carpet. NO RAILROADING OF CARPET authorized without approval from end user. Corridors will show directional change of carpet texture rather than seams every 12'. All rooms 12' and under are to be installed in one continuous piece. No fill pieces allowed! No seams shall occur perpendicular to doorways. All meeting rooms/offices of carpet to be installed parallel to the windows. (Carpet to have seams running parallel to the windows.)

B. Extend carpet under open-bottomed obstructions and under removable flanges and furnishings, and into alcoves and closets of each space.

C. Provide cut-outs where required, and bind cut edges properly where not concealed by protective edge guards or overlapping flanges.

D. Install carpet edge guard where edge of carpet is exposed; anchor guards to substrate.

E. Install transition strips between carpet and other flooring materials.

F. Expansion Joints: Do not bridge building expansion joints with continuous carpeting; provide for movement.

G. Glue-Down Installation:

1. The installation of carpet shall be an indication of the contractor's acceptance of the sub floors and the responsibility for any unacceptable finished work caused by the sub floor conditions.
2. Installation of all carpeting shall be by glue down method. Carpet shall be securely bonded to the substrate with adhesive as recommended by carpet manufacturer to assure compliance with warranty requirements. Contractor shall apply adhesive uniformly and cover only that amount of area that can

be covered by carpet within the recommended working time of adhesive. All seams shall be trimmed and fitted in a workmanlike manner and shall be bonded at the time of installation.

3. All cut edges of woven interlock carpets must be buttered with latex, as available by the carpet manufacturer, in addition to sealing seams with seam sealer available through the carpet manufacturer.
4. The carpet must be neatly and tightly fitted into breaks and recesses, against bases, around pipes and penetrations, under saddles and thresholds, under removable flanges and around permanent cabinets and equipment.

5. All carpet is to run in one lengthwise run in corridors. NO RAILROADING of carpet in corridors is allowed. The texture change is acceptable at intersections rather than directional change and seams in corridors.

3.4 CLEANING

A. Remove adhesive from carpet surface with manufacturer's recommended cleaning agent.

B. Remove and dispose of debris and unusable scraps. Vacuum carpet using commercial machine with face-beater element. Remove spots and replace carpet where spots cannot be removed. Remove any protruding facing yarn using sharp scissors.

3.5 PROTECTION

A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer to ensure carpet is not damaged or deteriorated at time of Substantial Completion.

END OF SECTION 096815