<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SECTION DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIVISION 09 FINISHES</td>
</tr>
<tr>
<td></td>
<td>SECTION 096816 - SHEET CARPETING</td>
</tr>
</tbody>
</table>

END OF CONTENTS TABLE
DIVISION 09 FINISHES
SECTION 096816 - SHEET CARPETING

SECTION WRITTEN FOR PROJECTS WITH SELECTED CARPET PRODUCTS / 
COMPETITIVELY BID INSTALLATION.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General 
and Supplementary Conditions and Division 01 Specification 
Sections, and other applicable Specification Sections, in 
picular the Related Sections listed below, apply to this 
Section.
B. Related Sections:
1. Section 035416 - Hydraulic Cement Underlayment
2. Section 096500 - Resilient Flooring
3. Section 096813 - Tile Carpeting

1.2 SUMMARY

MODIFY TO SUIT PRODUCT SELECTIONS.
A. Section Includes:
1. Tufted carpet.
2. Woven carpet.
3. Carpet cushion.
B. Work Provided under this section but specified under other 
Sections:
1. Resilient wall base.
2. Resilient transition strips.

1.3 SUBMITTALS
A. Product Data: For each type of product.
1. Include manufacturer's written data on physical 
characteristics, durability, and fade resistance.
2. Include installation recommendations for each type of 
substrate.
3. For installation adhesive, documentation including printed 
statement of VOC content.

INCLUDE BELOW FOR LEED PROJECTS. NOTE THAT REQUIREMENTS ARE 
BASED ON LEED 2009
B. LEED Submittals:
1. Product Data for Credit EQ 4.3:
a. For carpet, documentation indicating compliance with 
testing and product requirements of CRI's "Green Label 
Plus" program.
b. For installation adhesive, documentation including printed statement of VOC content.

C. Shop Drawings: Show the following:
   1. Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet.
   2. Carpet type, color, and dye lot.
   3. Layout and seaming diagrams.
   4. Type of subfloor.
   5. Type of installation.
   6. Pattern of installation.
   7. Pattern type, location, and direction.
   8. Pile direction.
   9. Type, color, and location of insets and borders.
   10. Type, color, and location of edge, transition, and other accessory strips.
   11. Transition details to other flooring materials.

D. Samples: For each of the following products and for each color and texture required.
   1. Submit 18 inch by 27 inch samples of each type, color, pattern and texture of carpet.
   2. Exposed Edge, Transition, and Other Accessory Stripping: 12-inch long samples.

**INCLUDE BELOW FOR ALL PROJECTS.**

E. Affidavits of Compliance to be included in final inspection manual:
   1. Provide manufacturer's letter of certification showing compliance with finish testing and classification requirements referenced by current adopted NFPA 101 "Life Safety Code".
   2. Letter shall include project number, project name, and building name.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of carpet to include in maintenance manuals. Include the following:
   1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
   2. Precautions for cleaning materials and methods that could be detrimental to carpet.

**COORDINATE WITH OCCUPANT PRIOR TO INCLUDING BELOW.**

1.5 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Carpet: Full-width rolls equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd.

1.6 QUALITY ASSURANCE

A. Reference Standards: Products in this Section shall be built, tested, and installed in compliance with the specified quality assurance standards; latest editions, unless noted otherwise.

1. Reference Standards:

REFER TO MICHIGAN BUILDING CODE FOR FURTHER REQUIREMENTS CONCERNING CLASS, FLAME SPREAD AND SMOKE DEVELOPED RATINGS.


MODIFY TO CLASS II IF ALLOWABLE BY CODE AND REQUIRED BY CARPET SELECTION

2. Radiant Panel Test: Meet NFPA Class I.

EDIT AND INCLUDE IF REQUIRED BY PROJECT

3. Static Electricity: 3.0 KV max. at 70 deg. F and 20% RH, AATCC 134.

1.7 FIELD CONDITIONS

A. Comply with CRI 104 for temperature, humidity, and ventilation limitations.

DELETE BELOW FOR TYPICAL INTERIOR RENOVATION WORK.

B. Environmental Limitations: Do not deliver or install carpet until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at occupancy levels during the remainder of the construction period.

RETAIN BELOW FOR PROJECTS WITH NEW CONCRETE.

C. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive, and concrete slabs have pH range recommended by carpet manufacturer.

RETAIN BELOW FOR PROJECTS WITH DEMOUNTABLE PARTITIONS.

D. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet before installing these items.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

EDIT AFTER CARPET IS SELECTED. MATERIALS AND CONSTRUCTION NOT INCLUDED. ASSUMES A SINGLE SELECTION IS MADE FOR EACH TYPE OF
CARPET BASED ON MANUFACTURER AND PATTERN AND THAT ALTERNATIVE CARPETS ARE NOT BID.

A. Acceptable Manufacturers:
   1. Carpet type no. 1: [Manufacturer Name]
      a. Style:
      b. Color:

2.2 INSTALLATION ACCESSORIES

DELETE BELOW IF SECTION 035416 – HYDRAULIC CEMENT UNDERLAYMENT IS INCLUDED.

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet manufacturer.
   BELOW IS TYPICAL. COORDINATE WITH INTERIOR DESIGN.

B. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and is recommended by carpet manufacturer for installation.
   RETAIN FOR ALL PROJECTS
   1. Adhesives shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
   RETAIN "METAL EDGE/TRANSITION STRIPS" PARAGRAPH BELOW UNLESS RESILIENT EDGE STRIPS FOR CARPET ARE SPECIFIED IN SECTION 096513 "RESILIENT BASE AND ACCESSORIES." IF RETAINING, REVISE FINISH OR DESCRIPTION TO SUIT PROJECT AND SHOW WIDTH REQUIREMENTS ON DRAWINGS.

C. Metal Edge/Transition Strips: Extruded aluminum with mill finish of profile and width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

D. Seam Adhesive: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for sealing and taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

2.3 WALL BASE

A. Provide wall base for each area scheduled to receive carpet. Comply with the requirements for wall base specified in Division 9 Section "Resilient Flooring".
PART 3 - EXECUTION

3.1 EXAMINATION
A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, adhesive and floor coating removal, installation tolerances, and other conditions affecting carpet performance. Examine carpet for type, color, pattern, and potential defects.

RETAIN "CONCRETE SUBFLOORS" PARAGRAPH BELOW IF PRODUCTS ARE ADHESIVELY ATTACHED TO CONCRETE SUBFLOORS.

B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:

REVISE FIRST SUBPARAGRAPH BELOW TO INCLUDE SPECIFIC TESTS IF APPLICABLE TO PROJECT.
1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet manufacturer.

INCLUDE BELOW FOR NEW SLABS
2. Subfloor finishes comply with requirements specified in Section 033000 "Cast-in-Place Concrete" for slabs receiving carpet.
3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION
A. General: Comply with CRI 104, Section 7.3, "Site Conditions; Floor Preparation," and with carpet manufacturer's written installation instructions for preparing substrates.

RETAIN OR REVISE FIRST PARAGRAPH BELOW TO SUIT PRODUCT AND PROJECT; DIMENSIONS ARE RECOMMENDED BY CRI.

B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch wide or wider and protrusions more than 1/32 inch unless more stringent requirements are required by manufacturer's written instructions.

REQUIREMENT BELOW IS INTENDED TO LIMIT CLAIMS FOR EXTRAS. INCREASE OR DECREASE AREA PERCENT BASED ON YOUR JUDGMENT, OR DELETE ENTIRELY FOR NEW CONCRETE FLOORS.
1. Patching is required for approximately [not less than] 20 percent of the gross floor area of the Project.

INCLUDE BELOW FOR LARGE AREAS OF PATCHING OR LEVELING. COORDINATE WITH "HYDRAULIC CEMENT UNDERLAYMENT" SECTION.
2. Floor patching and leveling is included in Division 03 Section "Hydraulic Cement Underlayment."

RETAINT BELOW FOR NEW CONCRETE SURFACES

C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet manufacturer.

RETAINT BELOW FOR EXISTING CONCRETE SURFACES

D. Remove existing adhesives per Division 02 Section "Selective Demolition." Remove other coatings as recommended in writing by carpet manufacturer.

E. Broom and vacuum clean substrates to be covered immediately before installing carpet.

3.3 CARPET INSTALLATION

A. General: Comply with CRI 104 and with carpet manufacturer's written installation instructions for the following:

COORDINATE SPECIFIC "INSTALLATION METHOD" REQUIREMENTS WITH INTERIOR DESIGN AND EDIT BELOW. BELOW ARE COMMONLY USED EXAMPLES. OTHER EXAMPLES ARE LISTED IN AIA MASTERSPEC 096816.

1. Carpet Seam Edge Preparation: Comply with CRI 104, Section 8, "Carpet Seam Edge Preparation."
2. Direct-Glue-Down Installation: Comply with CRI 104, Section 9, "Direct Glue-Down Installation."

B. Comply with carpet manufacturer's written recommendations and Shop Drawings for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.

C. Pre-plan installation for proper sequencing with other work.

D. Do not bridge building expansion joints with carpet.

E. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

F. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

G. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, nonstaining marking device.

RETAINT FIRST PARAGRAPH BELOW IF CARPET HAS A PATTERN OR MODIFY TO SUIT PROJECT.
H. Install pattern parallel to walls and borders to comply with CRI 104, Section 15, "Patterned Carpet Installations" and with carpet manufacturer's written recommendations.

RETAIN BELOW FOR HIGH TRAFFIC SEAMS. NOTE THAT SEALED SEAMS MAY NOT BE TOTALLY INVISIBLE.

I. Sealing Edges - Prior to seaming, both trimmed edges of the carpet sections to be joined must be sealed with an manufacturer's recommended seam adhesive. Apply seam adhesive in a manner that encapsulates both primary and secondary backings without contaminating face yarns.

J. Save carpet scraps, defined as mill ends less than 9 feet long and pieces larger than 3 sq. ft. in area and wider than 8 inches, and deliver to Owner's storage space as directed. Dispose of smaller pieces.

DELETE ARTICLE BELOW IF NO WALL BASE INCLUDED OR IF SPECIFIED IN ANOTHER SECTION.

3.4 WALL BASE INSTALLATION

A. Apply wall base in lengths as long as practicable to walls, columns, and all permanent fixtures and where indicated. Mitered outside corners not acceptable. Apply base to fixed laboratory cabinetry as follows:

1. Base cabinet toe spaces.
2. Exposed sides of base cabinets.
3. Filler and closure panels extending to floor.

3.5 CLEANING AND PROTECTING

A. Perform the following operations immediately after installing carpet:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
2. Remove yarns that protrude from carpet surface.

B. Protect installed carpet to comply with CRI 104, Section 16, "Protecting Indoor Installations."

C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer and carpet adhesive manufacturer.

END OF SECTION 096816