

# **APPENDIX M - SECTION 09685 - CARPET INSTALLATION SPECIFICATION GUIDE**

## **PART 1 - GENERAL**

### **1. Description**

1.1 Generally, this section includes installing commercial grade carpet materials (including roll goods and modular tiles), commercial grade special detached cushion padding, and installation products and accessories manufactured by the carpet materials manufacturer or recommended by the carpet materials manufacturer for use with the intended carpet materials.

1.2. Additionally, this section includes provisions for the installation contractor also to provide commercial grade carpet materials (including roll goods and modular tiles), commercial grade special detached cushion padding and installation products. Products provided by the installation contractor must comply with all requirements of Division 9, Section 09680 - Carpet.

1.3. The extent of carpet work is indicated in the contract documents, drawings, room finish schedules, and as required in this specification section.

1.4. Commercial grade carpet, commercial special detached cushion padding, and carpet manufacturer and/or installation contractor-supplied accessories may be installed with tack-less, stretch-in, Powerbond RS or direct glue.

### **2. Related Documents**

- A. Division 1, Section 01330 - Submittals
- B. Division 1, Section 01600 - Product Requirements
- C. Division 2, sections titled Selective Demolition and Selective Demolition for Interiors for removing existing floor coverings
- D. Division 9, section titled Resilient Wall Base and Accessories for resilient wall base and accessories installed with carpet
- E. Division 9, Section 09680 - Carpet

### **3. References**

- A. Scoping and technical requirements as illustrated in American National Standards Institute (ANSI) A117.1
- B. Americans with Disabilities Act (ADA), 1990
- C. Carpet and Rug Institute: CRI 104 - 1996, Standard for Installation of Commercial Carpet
- D. Minnesota State Building Code, 2000 edition
- E. Textile Products Identification and Labeling Act, 15 USC 70

- F. Uniform Building Code, 2000 edition
- G. Uniform Fire Code, 1997 edition
- H. University of Minnesota Standards and Procedures for Construction, 2002

#### **4. Definitions**

- A. Carpet: Carpet materials, including roll goods and modular tiles, intended for use in commercial and public spaces, with construction, accessibility, fire/life safety ratings, static control, and appearance appropriate for this use.
- B. Carpet Cushion: Detached synthetic rubber or urethane carpet cushion that meets the appropriate minimum standards set by current federal standards.

#### **5. Submittals**

- 5.1. Submit all requested items according to Conditions of the Contract, and administrative procedures and instructions for submittals provided in Division 1, Section 01330 - Submittals.
- 5.2. Submit the manufacturer's written installation recommendations for each type of substrate.
- 5.3. Provide contract shop drawings that indicate the following:
  - A. Extent, condition and types of substrate over which products will be installed
  - B. Extent of existing flooring materials to be removed, and existing flooring materials to remain
  - C. Type/method of installation intended
  - D. Extent of each type of carpet colors and dye lot
  - E. Locations of different colors and patterns, including insets and borders
  - F. Type of seams, patterns, repeat size, location, direction and starting point
  - G. Special notes on required cutouts, and other special installation conditions or methods
  - H. Direction of pile
  - I. Carpet joint details at columns, doorways, walls and partitions, built-in cabinets and furniture, access doors, expansion joints and similar conditions, and unique edges
  - J. Extent of each type of carpet cushion
  - K. Type, color and location of edge, transition and other accessory strips
  - L. Type, color, location and height of base, including serged edge carpet when used as wall base
- 5.4. When specifically requested by the architect of record or the University of Minnesota, submit samples for verification of proposed carpet and cushion materials in 2.25 square foot or larger sizes.

5.5. Provide review, revisions and approvals on project installation diagrams provided to the carpet manufacturer, general contractor and the University of Minnesota.

## **6. Quality Assurance**

### **6.1. Installation Contractor's Qualifications**

6.1.1. The carpet installation contractor must have a physically established local office within the seven county metro area of the University of Minnesota Twin Cities campuses.

6.1.2. The carpet installation contractor's local office shall have a knowledgeable individual specifically assigned to service the architect of record, the general contractor and the University of Minnesota. This individual shall be qualified and authorized to represent the installation contractor in all aspects of the Conditions of the Contract.

6.2. Single Source Responsibility: Provide materials produced or approved by a single manufacturer.

6.3. When requested by the architect of record or the university, perform testing using Underwriters Laboratories or other testing authority pre-approved and accepted by the code authorities having jurisdiction for this work.

6.4. Product Options: Products and manufacturers named in Part 2 establish requirements for product quality in terms of appearance, construction and performance. Other manufacturers' products comparable in quality to named products and complying with requirements may be considered. Refer to Division 1, Section 01600 - Product Requirements and Division 9, Section 09680 - Carpet.

6.5. Mock-ups: When requested by the architect of record or the University of Minnesota, provide and install mock-ups as directed for each type of carpet installation to demonstrate aesthetic effects and qualities of materials and execution. Obtain written approval from the architect of record of mock-ups before starting work. Maintain mock-ups during construction and promptly remove mock-ups when directed. Intact approved mock-ups may become part of the completed work subject to approval of the architect of record.

## **7. Warranty**

7.1. Provide the installation contractor's non-prorated written warranty, signed by an authorized representative of the corporation. The warranty shall state that the contractor agree to repair or replace all carpet materials that do not meet specified installation requirements, or that are found to be otherwise defective. The

contractor shall do so at no charge for materials, freight and labor, including all reasonable costs for moving equipment and furnishings, and with minimal disruption to the university.

7.2. Where the installation contractor is responsible for providing carpet materials, or otherwise required by Conditions of the Contract, provide the carpet manufacturer's published non-prorated written warranty, signed by an authorized representative of the corporation, as required in Division 9, Section 09680 - Carpet.

7.3. The installation contractor's non-prorated warranty shall be in addition to, and shall not in any way diminish, all legal express and implied warranty rights available to the university, including implied warranty of merchantability or fitness for a particular purpose.

7.4. Obligation of Warrantor: The installation contractor shall, within five working days of receipt of claim, designate a representative to inspect the suspected product and evaluate the warranty claim. Any portion of the carpet materials or installation not performing as specified shall be repaired or replaced using products from the manufacturer's current running line where possible, or with a comparable custom product, at the University of Minnesota's sole discretion.

#### 7.5. Claim Procedures for Suspected Non-Conforming or Defective Products

7.5.1. When the end-user encounters a suspected non-conforming or defective product situation, the University of Minnesota shall advise the installation contractor's local representative by telephone first, and follow in writing.

7.5.2. The installation contractor's local representative shall make a joint on-site inspection with the university and the carpet manufacturer's local representative to examine the affected area(s).

7.5.3. If the product deficiencies cannot be determined by visual inspection, and/or a remedy satisfactory to the university cannot be provided, a certified inspector contracted by the installation contractor's representative shall inspect the affected area(s). The inspector shall procure additional special inspections or testing as he/she determines necessary to identify the defect, and/or remedy the problem area(s).

7.5.4. If the suspected product is determined by the certified inspector to be in compliance with the specifications, and performs to all required testing, the end-user shall pay all costs of the inspection and testing.

7.5.5. If the suspected product is determined by the certified inspector to be non-conforming or defective, the installation contractor and carpet manufacturer shall pay all costs of the inspection and testing, and shall provide repair or replacement as specified in the written non-prorated warranties.

## 7.6. Claim Procedures for Stains

7.6.1. When the end-user encounters a staining situation, the affected area(s) must be given proper attention in accordance with the installation contractor's and supplied carpet manufacturer's maintenance prescribed procedures, within 48 hours.

7.6.2. If the staining situation is not correctable by University of Minnesota maintenance personnel using the installation contractor's and supplied carpet manufacturer's maintenance prescribed procedures, a certified inspector contracted by the installation contractor's local representative shall inspect the affected area(s). The inspector shall procure professional cleaning services to attempt to remedy the problem area(s).

7.6.3. If the stain can be removed by the professional cleaning service, the end-user shall pay all costs of the inspection and cleaning.

7.6.4. If the stain cannot be removed, or the carpet is determined by the certified inspector to be non-conforming or defective, the installation contractor and carpet manufacturer shall pay all costs of the inspection, testing and cleaning, and shall provide repair or replacement as specified in the written non-prorated warranties.

## 8. Existing Conditions and Carpet Demolition

8.1. Where required, the installation contractor shall demolish/remove all existing carpets, carpet cushions and accessories.

8.2. Where required, the installation contractor shall remove, store and replace existing furniture, furnishings and detached equipment.

8.3. Obtain verification from the university owner's representative that the existing carpet and other flooring materials have been tested and are negative for asbestos and other hazardous materials.

8.4. Follow the CRI "Carpet Installation Guidelines for Indoor Air Quality" as follows:

8.4.1. Vacuum the old carpet before removing to minimize the amount of dust particles.

8.4.2. Vacuum the floor immediately after the old carpet and cushion have been removed.

8.4.3. Open windows and doors, if possible, for an adequate supply of fresh air. Use window fans, exhaust fans, room air conditioning units or other means for fresh air ventilation during the removal of old carpet and the installation of the new carpet.

8.4.4. Continue operating the ventilation system at normal room temperature for 48 hours to 72 hours after removal and installation.

8.4.5. Verify with the university owner's representative that any building occupants who consider themselves to be unusually sensitive are properly notified so that they can avoid the area or leave the premises entirely while the old carpet is being removed and the new carpet is being installed.

**9. Recycling/Disposal:** The University of Minnesota requires carpet manufacturers, suppliers, contractors and installers to actively participate in environmentally responsible recycling programs.

## **10. Delivery, Storage and Handling**

10.1. Comply with CRI 104, Section 5 - Storage and Handling.

10.2. Allow for timely acclimation and aeration (minimum of 48 hours aeration), prior inspections and cutting/seaming in the carpet installation contractor's workroom. Do not deliver directly from point of manufacture to the work site.

## **PART 2 - PRODUCTS**

### **1. Carpet**

1.1. Where required by Conditions of the Contract, provide carpet and commercial special detached cushion padding as indicated in the contract documents, drawings and finish schedules. Match samples approved by the architect of record and the University of Minnesota.

1.2. To provide a quality standard, subject to compliance with requirements of this section, products manufactured by the following companies may be incorporated into the work: BOLYU Contract, Cambridge Commercial Carpet, Collins & Aikman and Lee's Commercial. Comparable manufacturer's products

also may be allowed. Refer to Division 1, Section 01330 - Submittals, Section 01600 - Product Requirements, and Division 9, Section 09680 - Carpet.

1.3. Where indicated in the drawings and/or finish schedules and where required by the Conditions of the Contract, provide commercial special detached cushion padding. Commercial grade special detached cushion padding shall only be specified if legitimately required by the project program, or required due to specific unfavorable project conditions as determined by the university Facilities Management owner's representative. All carpet cushion padding shall be approved in writing by the university owner's representative, shall meet traffic class for intended application, shall comply with ADA requirements for accessibility, and shall comply with fire/life safety requirements.

**2. Extra Materials:** Generally, the University of Minnesota does not require extra carpet materials to be provided unless it is specifically designated on the individual purchase order, and pre-approved by the university owner's representative for accommodating specific project goals/needs. Where required by the university, the architect of record shall specify extra carpet materials and retainage of scraps as required by Division 9, Section 09680 - Carpet.

### **PART 3 - EXECUTION**

**1. Examination:** After acclimation and before cutting/seaming, the installation contractor's local representative shall thoroughly examine the materials along with the carpet manufacturer's local representative prior to delivery to the work site.

#### **2. Preparation**

2.1. In new construction, all general floor leveling to within 1/8 inch in 10 feet, 0 inches shall be by the general contractor, and shall comply with CRI 104, Section 6 - Site Conditions, as well as with the specified carpet manufacturer's preparation recommendations.

2.2. In rehabilitation and remodeling projects, all general floor leveling may be by either the general contractor or the installation contractor at the request of the general contractor following the same tolerances and standards as for new construction noted above.

2.3. Minor leveling and other floor preparation for installation shall be by the carpet installation contractor in conformance with the specified carpet manufacturer's preparation recommendations.

#### **3. Installation**

3.1. Comply with CRI 104, sections 8 through 13 by applicable installation method.

3.2. Use environmentally responsible, low VOC installation materials. Refer to Appendix GG - Definition of Low VOC Content Levels for specifications.

3.3. Carpet Installation Contractors: All installation shall be performed by individuals pre-certified by the carpet materials manufacturer for installation of proposed products.

3.4. The carpet materials manufacturer shall agree to provide all required installation training and certifications to the designated carpet installation contractors at no cost to the general contractor or the University of Minnesota.

#### **4. Maintenance/Cleaning**

4.1. Clean carpets after installation and protect completed work per CRI 104, Section 15 - Protection of Indoor Installations. Promptly remove protective coverings as directed by the architect of record or the university owner's representative.

4.2. Provide initial and ongoing programmed instruction and training of university maintenance staff on the proper maintenance materials and techniques required for long-term appearance retention and product durability.

**End of Appendix M - Section 09685 - Carpet Installation Specification Guide**  
**University of Minnesota Facilities Management**  
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