PART 1 - GENERAL

1. GENERAL REQUIREMENTS

    1. The General Conditions of the Contract, Supplementary Conditions, and the General Requirements of Division 1, form part of this section, and must be read in conjunction with the requirements of this section and all related sections.

    2. The work of this section, and related work specified in other sections shall comply with all requirements of Division 1 – General Requirements.

2. ENVIRONMENTAL REQUIREMENTS

    1. Provide materials in this specification section based on but not limited to the following criteria:

        .1 Option: Materials of this section may conform to performance standards for recycled material content (7.5% post-consumer + ½ post industrial) and distance to the job site (500 km).

        .2 Requirement: Materials of this section and accessory materials such as adhesives used in their installation must conform to performance standards for low VOC content.

        .3 Requirement: carpet products must meet or exceed the requirements of the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.

    2. Contractor shall reference applicable standards specified in Section 01 61 11 and shall require suppliers to provide documentation to verify conformance to these standards and goals, as required to support the Environmental Plan.

3. SECTION INCLUDES

    1. Provision of all labour, materials, equipment and incidental services necessary to provide carpet floor finish, including primers, mastics and leveling fillers, adhesives, carpet material, underlay, carpet base, accessories, and protection.

4. REFERENCES

    1. CAN/CGSB-4.2- 92, Textile Test Methods.

    2. CAN/CGSB-4.129- 93, Carpets for Commercial Use.

    3. CAN/CGSB-25.20- 95, Surface Sealer Floors.

    4. CAN/ULC-S102- M88, Surface Burning Characteristics of Building Materials and Assemblies.

5. CAN/ULC-S102.2- M88, Surface Burning Characteristics of Flooring, Floor Covering and Miscellaneous Materials and Assemblies.

6. Carpet and Rug Institute (CRI) - Contract Carpet Manual, No.001.

7. Carpet and Rug Institute (CRI) - IAQ Carpet Testing Program.

8. ASTM D 1055- 90, Specification for Flexible Cellular Materials - Latex Foam.

9. ASTM E 84- 95, Test Method for Surface Burning Characteristics of Building Materials.

5. QUALITY ASSURANCE

1. Installer shall have a minimum of five (5) years documented experience in the installation of commercial carpet and be certified by the Manufacturer. Documentation shall be submitted to the Construction manager.

6. SUBMITTALS

1. Submit control submittals in accordance with Section 01 33 00 Submittals.

2. Submit certificate to demonstrate compliance with CAN/ULC S102 and CAN/ULC S102.2.

3. Submit proof that carpet has been tested and passed the Indoor Air Quality (IAQ) Carpet Testing Program requirements of the Carpet and Rug Institute.

4. Manufacturer's Instructions: Provide to indicate special handling criteria, installation sequence, cleaning procedures.

5. <u>Product Data</u>

.1 Submit product data in accordance with Section 01300 – Submittals.

.2 Submit product data sheet for each carpet tile, adhesive, carpet protection and subfloor filler.

.3 Submit WHMIS MSDS - Material Safety Data Sheets acceptable to Labour Canada and Health and Welfare Canada for carpet adhesive and seam adhesive. Indicate VOC content.

6. <u>Samples</u>

.1 Submit samples in accordance with Section 01300 Submittals.

.2 Submit duplicate full size pieces of each type carpet tile, duplicate pieces for each selected colour.

7. <u>Closeout Submittals</u>

.1 Submit operation and maintenance data for incorporation into manual specified in Section 01 77 00 Project Close-Out.

.2 Include information on recycling of carpet including manufacturer's reprocessing program. Indicate which portions of materials are recyclable.

8. Extra Materials

.1 Provide extra materials of carpet tile and adhesives in accordance with Section 01 77 00 Project Close-Out.

.2 Provide minimum 2% of each colour, pattern and type of carpet tile. Provide in one continuous full width roll or from same dye lot.

.3 Extra materials to be from same production run as installed materials.

.4 Identify each package of carpet and each container of adhesive.

.5 Deliver and store where directed by Owner.

7. REGULATORY REQUIREMENTS

1. Prequalification: tested to CAN/ULC-S102.2.

2. Indoor Air Quality: compliance with CRI Indoor Air Quality Program, CRI - IAQ requirements for maximum total volatile chemicals released into air. Label each carpet product with CRI -IAQ label.

8. DELIVERY, STORAGE AND HANDLING

1. Label packaged materials. For tile products indicate nominal dimensions of tile.

2. Store packaged materials in original containers or wrapping with manufacturer's seals and labels intact.

3. Store carpeting and accessories in location as directed by Owner.

4. Prevent damage to materials during handling and storage. Keep materials under cover and free from dampness.

5. Maintain temperature of store room at a minimum of 20C, for at least 24 hours immediately before the installation.

9. WASTE MANAGEMENT AND DISPOSAL

1. Separate and recycle waste materials in accordance with Section 01560 Environmental Protection.

10. PROJECT/SITE ENVIRONMENTAL REQUIREMENT

1. Moisture: ensure substrate is within moisture limits prescribed by manufacturer.

2. Temperature: Maintain ambient temperature of not less than 18°C from 72 hours before installation to at least 72 hours after completion of work.

3. Relative humidity: Maintain relative humidity between 10 and 65% RH for 48 hours before, during and 48 hours after installation.

4. Safety: Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials.

11. VENTILATION

1. Ventilate area of work as directed by Construction manager by use of approved portable supply and exhaust fans.

2. Ventilate enclosed spaces in accordance with Section 01560 Environmental Protection.

3. Provide continuous ventilation during and after carpet application. Run ventilation system 24 hours per day during installation; provide continuous ventilation for 7 days after completion of carpet installation.

12. EXTENDED WARRANTIES

1. System Warranty

.1 Provide manufacturer's certificate warranting the specified carpet products against defects in materials and manufacture including deterioration of backing, delamination, stretching, wrinkling, fading, or other conditions detrimental to appearance or performance, for a minimum period of 10 years from the date of the Certificate of Substantial Performance. Warranty shall cover complete replacement of affected area including carpet, adhesives, and removal/installation costs.

2. Installation Warranty

.1 Provide a written warranty stating that carpet installation is guaranteed against defects for two (2) years from the date of the Certificate of Substantial Performance.

PART 2 - PRODUCTS

1. CARPET TILE

1. 100% nylon loop with bonded monolithic glass backing, carpet squares, anti-microbial and soil/stain resistance treated; CRI certified;

.1 CPT-1 – Tarkett Sweater Knit G0045, Colour Skyfall 77208. 914.4mm x 457.2mm (36" x 18") plank tiles. Installation method: horizontal ashlar or as shown on Architectural drawings.

.2 CPT-2 – Tarkett Gabardine 11511, Colour Skyfall 77208. 914.4mm x 457.2mm (36" x 18") plank tiles. Installation method: horizontal ashlar or as shown on Architectural drawings.

.3 Acceptable alternate by Mohawk, Tandus or Milliken.

.4 Rubber Base: 1/8" (3mm) thick by 4" ht. "tight-lock" rubber base by Johnsonite or equal by Mannington, Roppe or Amtico; use rubber base supplied in roll form not 1220mm (48") lengths.

2. ACCESSORIES

.1 Adhesive: Acrylic release type: recommended by carpet tile manufacturer; Low VOC content in accordance with CRI requirements.

.2 Carpet protection: non-staining heavy duty kraft paper, or cardboard.

.3 Concrete Floor Sealer/Moisture Barrier: Planiseal™ MRB, by Mapei or approved equal product.

.4 Sub-floor Filler and Leveller:

.1 Sub-floor Filler and Leveller: Ardex SD-F Feather Finished Portland Cement based filler by Ardex Engineered Cements and distributed by Centura.

PART 3 - EXECUTION

1. EXAMINATION

1. Examine substrates for defects and determine level of preparation required prior to commencement of installation.

2. Report any major defects such as cracks greater than 1.5mm in width, and variations in elevation greater than 6mm in 3m in any direction or excessive moisture content in concrete slabs.

3. Ensure concrete floors are dry by using test methods recommended by flooring manufacturer, and exhibit negative alkalinity, carbonization or dusting.

4. Moisture test results shall meet or exceed the flooring manufacturer's warranty requirements but in no instance shall exceed 0.4kg/100m2/24 hours. Alkali readings shall be 5 to 9.

2. PREPARATION

1. Remove ridges and bumps.

2. Apply sub-floor filler/patch to low spots and cracks to achieve floor level to a tolerance of 1:500. Allow to cure.

3. Where moisture tests result in values higher than those specified above, apply floor sealer/moisture barrier to concrete floor surface prior to installation. Re-test moisture levels.

4. Prepare floor surfaces in accordance with Contract Carpet Manual, Standard for Installation of Textile Floorcovering Materials No.001.

5. Pre-condition carpeting following manufacturer's printed instructions.

6. Install resilient base before proceeding with carpeting.

3. INSTALLATION

1. Install in accordance with manufacturer's printed instructions and in accordance with Contract Carpet Manual, Standard for Installation of Textile Floorcovering Materials No.001.

2. Install carpeting after finishing work is completed but before Moveable Wall office partitions and telephone and electrical pedestal outlets are installed. Continue carpet installation throughout area where Moveable Walls are to be installed; carpet to be below Moveable Walls.

3. Finish installation to present smooth wearing surface free from conspicuous seams, burring and other faults.

4. Use material from same dye lot. Ensure colour, pattern and texture match within any one visual area.

5. Cut and fit neatly around architectural, mechanical, electrical and telephone outlets, and furniture fitments, around perimeter of rooms into recesses, and around projections.

6. Carpet Tile:

.1 Apply acrylic release type adhesive and install carpet tile in accordance with manufacturer’s written instructions.

.2 Lay tiles with butt seams; 1/3 offset in horizontal ashlar pattern.

4. PROTECTION OF FINISHED WORK

1. Vacuum carpet clean immediately after completion of installation. Protect traffic areas.

2. Prohibit traffic on carpet until adhesive is cured.

3. Install carpet protection to satisfaction of Architect.

End of Section 09 68 13