

## 1 GENERAL

### 1.01 REFERENCES

- .1 American Association of Textile Chemists and Colorists (AATCC)
  - .1 AATCC Test Method 16-[2004], Colorfastness to Light.
  - .2 AATCC Test Method 134-[2006], Electrostatic Propensity of Carpets.
  - .3 AATCC Test Method 171-[2005], Carpets: Cleaning of; Hot Water Extraction Method.
  - .4 AATCC Test Method 175-[2008], Stain Resistance: Pile Floor Coverings.
  - .5 AATCC Test Method 189-[2007], Fluorine Content of Carpet Fibers.
- .2 ASTM International
  - .1 ASTM D 297-[93(2006)], Standard Test Methods for Rubber Products-Chemical Analysis.
  - .2 ASTM D 3936-[05], Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering.
- .3 Canadian General Standards Board (CGSB)
  - .1 CAN/CGSB-4.2 No. 22-[2004], Textile Test Methods - Colourfastness to Rubbing (Crocking).
  - .2 CAN/CGSB-4.2 No.27.6M-[2004], Textile Test Methods - Flame Resistance - Methemine Tablet Test for Textile Floor Coverings.
  - .3 CAN/CGSB-4.2 No. 76-[94]/ISO 2551: [1981] , Textile Test Methods - Machine-Made Textile Floor Coverings - Determination of Dimensional Changes Due to the Effects of Varied Water and Heat Conditions.
  - .4 CAN/CGSB-4.2 No.77.1-[94]/ISO 4919:[2000] , Textile Test Methods - Carpets - Determination of Tuft Withdrawal Force.
  - .5 CAN/CGSB-4.129-[93(R1997)], Carpets for Commercial Use.
- .4 Carpet and Rug Institute (CRI)
  - .1 CRI Carpet Installation Standard [2009].
  - .2 CRI Green Label Indoor Air Quality Testing Program.
  - .3 CRI Green Label Plus Indoor Air Quality Testing Program.
- .5 Environmental Choice Program (ECP)
  - .1 CCD-152-[2009], Flooring Products, Commercial Non-modular Textile Flooring.
- .6 Health Canada
  - .1 C.R.C., c.923-[10], Hazardous Products Act - Carpet Regulations, Part II of Schedule 1.
- .7 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
  - .1 Material Safety Data Sheets (MSDS).
- .8 National Floor Covering Association (NFCA)
  - .1 National Floor Covering Specification Manual [2007].
- .9 Underwriters' Laboratories of Canada (ULC)
  - .1 CAN/ULC-S102-[07], Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

---

Common Area Carpet

Replacement

CARPET TILE

SECTION 09 68 13

Joseph Ghiz Building

Page 2

Summerside, PEI

2019-01-22

Project No. R.100709.001

---

- .2 CAN/ULC-S102.2-[07], Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings and Miscellaneous Materials and Assemblies.

## **1.02 ADMINISTRATIVE REQUIREMENTS**

- .1 Pre-Installation Meetings:
  - .1 Convene pre-installation meeting 1 week prior to beginning on-site installation with Contractor's Representative, Ghiz Building Manager PWGSC Project Manager and Consultant in accordance with Section 01 14 10 - Project Meetings to:
    - .1 Verify project requirements.
    - .2 Review installation and substrate conditions.
    - .3 Review manufacturer's written installation instructions and warranty requirements.

## **1.03 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's instructions, printed product literature and data sheets for each carpet tile, carpet protection, subfloor patching compound and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
  - .1 Submit drawings stamped and signed by Contractor.
  - .2 Information on shop drawings to indicate:
    - .1 Nap: direction, open edges, special patterns.
    - .2 Cutouts: show locations where cutouts are required.
    - .3 Edgings: show location of edge moldings and edge bindings.
- .4 Samples:
  - .1 Submit for colour selection, review and acceptance of each unit.
  - .2 Samples will be returned for inclusion into work.
  - .3 Submit 4 tile samples of each type of carpet tile specified, base and divider strips.
- .5 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .6 Test and Evaluation Reports:
  - .1 Certified test reports showing compliance with specified performance characteristics and physical properties.
- .7 Manufacturer's Instructions: submit manufacturer's installation and storage instructions.
- .8 Manufacturers Reports:
  - .1 Manufacturer's Field Reports: submit manufacturer's written reports within 3 days of review, verifying compliance with specifications.

- .9 Sustainable Design Submittals:
  - .1 Construction Waste Management:
    - .1 Submit project Waste Management Plan highlighting recycling and salvage requirements.
    - .2 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating that 75% of construction wastes were recycled or salvaged.
  - .2 Recycled Content:
    - .1 Submit listing of recycled content products used, including details of required percentages or recycled content materials and products, showing their costs and percentages of post-consumer and post-industrial content, and total cost of materials for project.
  - .3 Low-Emitting Materials:
    - .1 Submit listing of adhesives used in project, showing compliance with VOC and chemical component limits or restriction requirements.
- .10 Qualification Statements:
  - .1 Compliance: to CAN/ULC-S102 and CAN/ULC-S102.2.
  - .2 Tuft bind: meets requirements of CAN/CGSB-4.129 when tested to CAN/CGSB-4.2 No.77.1.

#### **1.04 CLOSEOUT SUBMITTALS**

- .1 Submit in accordance with Section 01 77 00 - Closeout Procedures.
- .2 Operation and Maintenance Data: submit operation and maintenance data for installed products for incorporation into manual.
- .3 Warranty Documentation: submit warranty documents specified.
- .4 Carpet Reclamation:
  - .1 Co-ordinate carpet reclamation.
  - .2 Schedule of carpet reclamation activities indicating following:
    - .1 Detailed sequence of removal work.
    - .2 Inventory of items to be removed and reclaimed.
    - .3 Proposed packing and transportation measures.
  - .3 Reclamation agencies' records indicating receipt and disposition of used carpet.
  - .4 Certification: Reclamation Agency to verify in writing that used carpet was removed and recycled in accordance with [carpet] manufacturers' reclamation program.
    - .1 Record off-site removal of debris and materials and provide following information regarding removed materials.
      - .1 Time and date of removal.
      - .2 Type of material.
      - .3 Weight and quantity of materials.
      - .4 Final destination of materials.

#### **1.05 MAINTENANCE MATERIAL SUBMITTALS**

- .1 Extra stock materials: deliver to Owner extra materials from same production

---

Common Area Carpet

Replacement

CARPET TILE

SECTION 09 68 13

Joseph Ghiz Building

Page 4

Summerside, PEI

2019-01-22

Project No. R.100709.001

---

run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Section 01 77 00 - Closeout Procedures.

- .1 Quantity: provide minimum 5% of:
  - .1 Carpet tile:
  - .2 Rubber base:
- .2 Delivery, storage and protection: comply with Owner's requirements for delivery and storage of extra materials.

## **1.06 QUALITY ASSURANCE**

- .1 Qualifications:
  - .1 Manufacturer: capable of providing field service representation during construction and approving application method.
  - .2 Flooring Installer:
    - .1 Experienced in performing work of this Section who has specialized in installation of work similar to that required for this project.
    - .2 Certified by carpet manufacturer prior to tender submission.
    - .3 Must not sub-contract labour without written approval of PWGSC Project Manager.
    - .4 Responsible for proper product installation, including floor testing and preparation as specified and in accordance with carpet manufacturer's written instructions.

## **1.07 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
  - .1 Store materials off ground indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Store materials protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.
  - .3 Store and protect carpet tile and adhesive in original containers or wrapping with manufacturer's seals and labels intact.
  - .4 Store and protect carpet tile and accessories in location as directed by PWGSC Project Manager.
  - .5 Store carpet and adhesive at minimum temperature of 18 degrees C and relative humidity of maximum 65% for minimum of 48 hours before installation.
  - .6 Prevent damage to materials during handling and storage. Keep materials under cover and free from dampness.
  - .7 Safety: comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials.
  - .8 Replace defective or damaged materials with new.
- .4 Develop Construction Waste Management Plan related to Work of this Section.

- .5 Packaging Waste Management: remove for reuse and return by manufacturer of pallets, crates, padding, and packaging materials as specified in Construction Waste Management Plan in accordance with Section [01 74 22] - Construction/Demolition Waste Management and Disposal.

## **1.08 SITE CONDITIONS**

- .1 Ambient Conditions:
  - .1 Moisture: ensure substrate is within moisture limits and alkalinity limits recommended by manufacturer. Prepare moisture testing and provide report to PWGSC Project Manager.
  - .2 Temperature: maintain ambient temperature of not less than 18 degrees C from 48 hours before installation to at least 48 hours after completion of work.
  - .3 Relative humidity: maintain between 10% and 65% for 48 hours before, during and 48 hours after installation.
  - .4 Ventilation:
    - .1 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.

## **1.9 WARRANTY**

- .1 Manufacturer's warranty: submit, for Consultant's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to and does not limit other rights Owner may have under Contract Documents.
- .2 Warranty period: 1 year on installation and labour and 15 year on material, commencing on date of substantial performance of work.
  - .1 Warranty covers labour and repair or replacement of defective components for 1 year after date of substantial performance. Warranty on carpet to be 15 year Standard.

## **2 PRODUCTS**

### **2.01 MATERIALS**

- .1 Manufacturers:
  - .1 Ensure manufacturer has minimum [5] years experience in manufacturing components similar to or exceeding requirements of project.
- .2 Description:
  - .1 Carpet and Accessories:
    - .1 64% minimum Post-industrial, 2% Post-consumer recycled content.

### **2.02 PERFORMANCE**

- .1 Flammability: certified for flammability to Health Canada regulations under "Hazardous Products - Carpet Regulations", Part II of Schedule 1. Passes Methenamine Pill Test (DOC-FF1-70).

---

Common Area Carpet

Replacement

CARPET TILE

SECTION 09 68 13

Joseph Ghiz Building

Page 6

Summerside, PEI

2019-01-22

Project No. R.100709.001

---

- .2 Flame Spread: maximum flame spread rating 300 when tested to CAN/ULC-S102.2.
- .3 Smoke Development: 450 or less per ASTM E 662.
- .4 Dry Breaking Strength: to ASTM D 2661, minimum acceptable tear strength in both length and width:
  - .1 11.3 kg for carpets installed.
- .5 Wear: maximum 10% of pile face fiber by weight for 10 years.
- .6 Edge Ravel: none for 10 years.
- .7 Static Resistance: permanent static control to AATCC 134, 3000 V maximum at 20% RH and 22 degrees C.
- .8 Static Generation: less than 3.0 kV per AATCC 134 for 10 years.
- .9 Tuft Bind: Tuft Lock: to CAN/CGSB-4.129, minimum acceptable 3.6 for loop pile product.
- .10 De-lamination of Secondary Backing: Lamination Strength of Secondary Backing: to ASTM D 3936, minimum acceptable peel strength of 1.6 kg/25 mm.
- .11 Stain resistance: to AATCC 175, 8.
- .12 Soil Resistance: [[350] ppm fluorine minimum] [Fluorine Durability Level to AATCC 189].
- .13 Colourfastness to light:  $\geq$  4.0 @60AFUs to [AATCC 16 - E].
- .14 Indoor Air Quality Certification: certified to CRI Green Label Plus #GLP0820 IAQ requirements.

## 2.03 FABRICATION

- .1 Type 1: The Standard by Interface, product 1467302500, pattern Non-Directional, colour to be selected from standard range, size 500 mm x 500 mm.
- .2 Face construction:
  - .1 Tufted textured loop.
- .3 Pile Surface Appearance:
  - .1 Level loop: textured.
- .4 Pile fibre: to [CAN/CGSB-4.129].
  - .1 Nylon: Post consumer content.
    - .1 Type: Nylon 6.6.
- .5 Face Fiber Content: 100% Nylon.
- .6 Face Fiber Denier: minimum 18.
- .7 Dyeing Method: 100% solution dyed.
- .8 Yarn Manufacturer: Universal.

- .9 Dye Lots: Mergeable.
- .10 Soil / Stain Protection: Protekt.
- .11 Preservative Protection: Intersept.
- .12 Tufted Carpet Backing: to CAN/CGSB-4.129.
  - .1 Primary backing:
    - .1 Polypropylene: Loop Pile Carpet: GlasBac.
- .13 Stitches: 30.2 ends/10 cm.
- .14 Gauge: 47.2 ends/10 cm.
- .15 Pile Weight Density: 267.7 g/cu m.
- .16 Finished Pile Height: minimum 3 mm average.
- .17 Pile Thickness: 1.9 mm
- .18 Tufted Yarn Weight: minimum 509 g/cu m.
- .19 Performance Rating: [3.0] minimum at [12,000 cycles to Hexapod test] [22,000 cycles to Vetterman test].
- .20 Dimensional Stability: AACHEN Din 54318 < 10%.
- .21 Traffic Classification: Severe.
- .22 Fibre Modification Ratio: 1.7 to 1.9.
- .23 Preservative Efficacy: (AATCC 174 Parts 2&3) 99% reduction / no mold 7 days. (ASTM E-2471) complete inhibition.

## **2.04 ACCESSORIES**

- .1 Base:
  - .1 Rubber Wall Base:
    - .1 102 mm high rubber cove wall base.
    - .2 Pre-manufactured outside and inside corners.
    - .3 Thickness to be 3.2 mm.
- .2 Edge Strips:
  - .1 Metal:
    - .1 Designed for carpet being installed.
    - .2 Floor flange minimum 38 mm wide, face minimum 16 mm wide.
    - .3 Finish: clear anodic coating.
- .3 Transition Mouldings:
  - .1 Carpet edge / reducer strip:
    - .1 Carpet to painted concrete.
    - .2 Carpet to VCT.
    - .3 Carpet to porcelain tile.
- .4 Carpet protection: non-staining heavy duty kraft paper.

- .5 Subfloor patching compound: Portland cement base filler, mix with latex and water to form cementitious paste.

### **3 EXECUTION**

#### **3.01 INSTALLERS**

- .1 Use experienced and qualified technicians to carry out assembly and installation of tile carpet.

#### **3.02 EXAMINATION**

- .1 Examine conditions, substrates and work to receive work of this Section.
- .2 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for carpet tile installation in accordance with manufacturer's written instructions.
  - .1 Inform PWGSC Project Manager of unacceptable conditions immediately upon discovery.
  - .2 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from PWGSC Project Manager.

#### **3.03 PREPARATION**

- .1 Subfloor Preparation:
  - .1 Inspect concrete and access flooring and determine special care required to make it suitable for carpet.
  - .2 Fill and level cracks 3 mm wide or protrusions over 0.8 mm with appropriate and compatible latex patching compound.
  - .3 Comply with manufacturer's written recommendations for maximum patch thickness.
  - .4 Prime large patch areas with compatible primer.
  - .5 Ensure concrete substrates are cured, clean and dry.
  - .6 Ensure concrete substrates are free of paint, dirt, grease, oil, curing or parting agents, and other contaminants, including sealers, that interfere with the bonding of adhesive.
- .2 Surface Preparation: prepare surface in accordance with manufacturer's written recommendations.
  - .1 Prepare floor surfaces in accordance with CRI Carpet Installation Standard.
- .3 Tile Carpeting Preparation:
  - .1 Pre-condition carpeting: following manufacturer's written instructions.
- .4 Demolition / Removal:
  - .1 Remove and return carpet for recycling / reclamation in accordance with Section 01 74 22 - Construction/Demolition Waste Management and Disposal and with Waste Reduction Workplan. Co-ordinate with PWGSC

Project Manager.

- .2 Vacuum used carpet before removal.
- .3 Maintain possession of removed used carpet.
- .4 Remove used tiles and pack in pallets. Use effective packing techniques to maximize amount of material in container.
- .5 Sort only clean, dry carpet tiles for reclamation. Clean is defined as carpet free from demolition debris, asbestos contamination, garbage, knife blades and tack strips.

### **3.04 INSTALLATION**

- .1 Install carpet tiles in accordance with manufacturer's written instructions, and CRI Carpet Installation Standard and co-ordinate with specifications
- .2 Install carpet tile as per manufacturer's recommendation. This can include quarter-turn 90 degree format, monolithic, random, quarter turn ashlar, horizontal, herringbone or vertical ashlar.
- .3 Snugly join carpet tiles in completed installation.
  - .1 Measure distance covered by 11 carpet tiles (10 joints) and ensure distance is in compliance with manufacturer specifications.
  - .2 Do not trap yarn between carpet tiles.
- .4 All carpet to be loose-laid on access flooring panels with adhesive tabs at adjoining corners. It is not required that tiles align with access panels.
- .5 Ensure finished installation presents smooth wearing surface free from conspicuous seams, burring and other faults.
- .6 Use material from same dye lot.
  - .1 Ensure colour, pattern and texture match within visual areas.
- .7 Fit around architectural, mechanical, electrical and telephone outlets, and furniture fitments, around perimeter of rooms into recesses, and around projections.
- .8 Install carpet tiles to underfloor duct system and to access covers.
- .9 Install carpeting in pan type floor access covers.
- .10 Extend carpet tiles into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- .11 Install carpet tiles smooth and free from bubbles, puckers, and other defects.
- .12 Protect exposed carpet tile edges at transition to other flooring materials with suitable transition strips.
- .13 Base Installation: Adhesive as recommended by manufacturer.

### **3.05 SITE QUALITY CONTROL**

- .1 Site Tests and Inspections:

---

Common Area Carpet

Replacement

CARPET TILE

SECTION 09 68 13

Joseph Ghiz Building

Page 10

Summerside, PEI

2019-01-22

Project No. R.100709.001

---

- .1 Co-ordinate site test with Section 01 45 00 - Quality Control.
- .2 Manufacturer's Field Services:
  - .1 Co-ordinate manufacturer's services with Section 01 45 00 - Quality Control. Have manufacturer review work involved in handling, installation / application, protection and cleaning of its products, and submit written reports, in acceptable format, to verify compliance of work with Contract.
  - .2 Manufacturer's field services: provide manufacturer's field services, consisting of product use recommendations and periodic site visits for inspection of product installation, in accordance with manufacturer's instructions.
  - .3 Schedule site visits:
    - .1 After delivery and storage of products, and when preparatory Work, or other Work, on which the Work of this Section depends, is complete but before installation begins.
    - .2 Twice during progress of Work at 25% and 60% complete.
    - .3 Upon completion of Work, after cleaning is carried out.
  - .4 Obtain reports within 3 days of review and submit immediately to PWGSC Project Manager.

### 3.06 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
  - .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
    - .1 Vacuum carpets clean immediately after completion of installation.
- .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 22 - Construction/Demolition Waste Management and Disposal
  - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### 3.07 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Prohibit traffic on carpet for period of 24 hours minimum after installation and until adhesive is cured.
- .3 Install carpet protection to satisfaction of PWGSC Project Manager.
- .4 Repair damage to adjacent materials caused by tile carpeting installation.

### 3.08 ATTACHMENTS

- .1 Schedules:
  - .1 Type 1 Carpet: Loose-lay tile on access floor system and rubber cove wall base.

---

Common Area Carpet

Replacement

CARPET TILE

SECTION 09 68 13

Joseph Ghiz Building

Page 11

Summerside, PEI

2019-01-22

Project No. R.100709.001

---

**END OF SECTION**