



**Apex 55
CSI Specifications
Section 09 65 16**

POLYFLOR CANADA

THIS DOCUMENT IS ONLY INTENDED AS A GUIDE FOR THE CREATION AND / OR MODIFICATION OF THE CSI THREE-PART ARCHITECTURAL GUIDE SPECIFICATION DOCUMENT.

PLEASE BEAR IN MIND THAT IT IS YOU WHO IS RESPONSIBLE FOR THE ACCURACY OF ALL PROJECT SPECIFICATIONS, INCLUDING ANY POLYFLOR GUIDE SPECIFICATIONS THAT YOU USE FROM THIS DOCUMENT.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and / or general provisions of Contract, including any General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

1.2 SUMMARY

1.2.1. Section Includes:

A. Resilient Slip Resistant Vinyl Sheet Flooring and Accessories.

1.2.2. B. Description of Work: Extent of Resilient Slip Resistant Vinyl Sheet
Is shown on the drawings and in Materials and Room finish
Schedule.

1.3 SUBMITTALS

1.3.1 Product Data: Submit Manufacturers' technical data sheets for each type of product (e.g. sheet / Tile) and any accessories.

1.3.2. Samples for initial selection purposes: Submit Manufacturer's standard colour charts (shade card) illustrating the full range of formats, colours, patterns, etc.

1.3.3. Samples for verification purposes: Submit samples of each type of format/colour/pattern, etc. (Plus, accessories)

1.3.4. LEED Submittals: Product Data for Credit EQ 4.1: Where adhesives are included, attach printed VOC statement including composition and chemical components.

1.3.5. Certification of Fire Performance: submit an Independent Test certification acceptable to relevant

authorities proving that the product complies with the latest fire test performance criteria – ASTM E648

1.3.6. Submit at least two copies of the relevant maintenance instructions and practices for each product and/or accessory.

1.3.7. Site Conditions: Maintain temperatures of between 65°F (18°C) and 81°F (27°C) in all areas to receive the product(s) for at least 48 hours before the installation commences; during the entire installation process; and for at least 24 hours following installation. should be safely secured in an upright position; (6 ft 6” widths only) and stored, together with the adhesive, at a minimum temperature of between 65°F (18°C) and 81°F (27°C) for at least 24 hours prior to installation. Do not install resilient flooring product(s) until all other finishing operations have been completed. Resilient Flooring product(s) should not be installed directly to concrete slabs until the slab has sufficiently cured and is sufficiently dry (80% in accordance with ASTM F170) to achieve a suitable adhesive bond. Notify Client’s Agent / Architect immediately of any unsatisfactory conditions.

1.4 QUALITY ASSURANCE – MANUFACTURER QUALITY CREDENTIALS:

ISO 9001 Certified
ISO 14001 Certified
BES 6000 Certified

1.5 Mockups: Provide resilient products with mockups specified in other Sections.

PART 2 – PRODUCTS

MANUFACTURER

Polyflor Canada Inc
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Mississauga
Ontario
L4V 1C5
Canada

Telephone +1 905 364 3000
Email sales@polyflor.ca
Web <http://www.polyflor.ca>

2.1 The Resilient Sheet Flooring shall be Polysafe **Apex 55** as supplied by Polyflor Canada Inc. of Mississauga, Ontario, Canada. Polysafe **Apex 55** is recommended for heavy traffic areas that require a hard-wearing flooring which is attractive and easy to maintain. The Flooring shall be (3.0mm) thickness in a roll width of 6’ 6” (2m); and comply with ASTM F1303 Standard Specification for Vinyl Sheet Covering with a backing; and ISO 13845 & ISO 10874. The Flooring shall incorporate a polyurethane reinforcement (PUR) to enable a polish-free maintenance program. The Flooring shall be suitable for use with Underfloor Heating, where a maximum temperature of 81°F (27°C) is recognized as the upper limit.

2.2 Test Data:
ASTM F1303 - Standard Specification for Sheet Vinyl Floor Covering with Backing
ASTM F137 Flexibility – 1.5” Passes
ASTM F925 Excellent - Chemical Resistance Chart available upon request
ASTM F970 Static Load Limit – Passes ≤0.005 in. @750 psi

ASTM F1514 Resistance to Heat – $\Delta E \leq 8$
 ASTM F1515 Resistance to Light – $\Delta E \leq 8$
 ASTM D2047 Static Coefficient of Friction – ≥ 0.8
 RRL Pendulum Test ≥ 55 (wet test – 4S Rubber / Slider 96)
 ASTM E648 Flammability (Critical Radiant Flux) NFPA Class 1 ($>0.45 \text{ W/cm}^2$)
 CAN ULC S-102.2 Fire Test (Canada) Pass – Flame spread <300 ; Smoke Developed <500
 Commercial Warranty – 12 Years

- 2.3 Installation Materials Adhesives: Only use Manufacturer approved adhesives. Contractor to submit a list of Polyflor approved adhesives to the Architect for approval. Application – follow the adhesive manufacturer's installation instructions. Use only Polyflor matching heat welding rod and Ejecta Accessories.
- 2.4 Installation Qualification: Contractors for floor covering installation should be professional installers, experienced in managing commercial flooring projects and qualified to install the various flooring materials specified.

PART 3 EXECUTION

EXAMINATION

- 3.1 Inspection: Contractor to inspect subfloor surface to determine suitability e.g. Smooth and free from cracks, holes, ridges, coatings or other defects that may impair adhesion performance or appearance.
- 3.2 Concrete subfloors – Contractor to check substrate for compliance with ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring, and determine dryness and adhesion by carrying out bond and moisture tests as recommended by Polyflor.

3.3 PREPARATION

- A. Prepare substrates according to Polyflor's written instructions to ensure proper adhesion of Resilient Flooring.
 1. Prepare concrete substrates in accordance with ASTM F 710.
 - a. Concrete floors must be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, film-forming curing compounds, silicate penetrating curing compounds, sealing, hardening or parting compounds, alkaline salts, excessive carbonation or laitance, mold, mildew, and other foreign materials that may affect dissipation rate of moisture from the concrete, discoloration or adhesive bonding.
 - b. Mechanically remove contamination on the substrate that may cause damage to the resilient flooring material. Permanent and non-permanent markers, pens, crayons, paint, etc., must not be used to write on the back of the flooring material or used to mark the substrate, as they could bleed through and stain the flooring material.
 - c. Perform moisture testing as recommended by the manufacturer. Proceed with installation only after substrates have been tested and meet the minimum requirements from the manufacturer in accordance with ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride or ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
 - d. A pH test for alkalinity must be conducted on the concrete floor prior to installation, with results between 7 and 9. If the test results are not within the acceptable range, then installation must not proceed until the problem has been corrected.
 2. Wood subfloors must have a minimum 18" (45.7 cm) of cross-ventilated space beneath the bottom of

the joist.

- a. The floor must be rigid, free of movement.
- b. Single wood and tongue and groove subfloors should be covered with ¼" (6.4 mm) or ½" (12.7 mm) APA approved underlayment plywood.
 - 1) Use ¼" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less.
 - 2) Use ½" (12.7 mm) thick underlayment panels for boards with a face width wider than 3" (76 mm).
- B. Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayment.
- C. Fill cracks, holes, depressions and irregularities in the substrate with good-quality Portland cement-based underlayment levelling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- D. Floor covering shall not be installed over expansion joints.
- E. Do not install resilient products until they are the same temperature as the space where they are to be installed.
 - 1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
- F. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

3.4 RESILIENT SHEET FLOORING INSTALLATION

- 3.4.1 Comply with the manufacturer's written instructions for installing resilient sheet flooring.
- 3.4.2 Resilient Sheet Flooring:
 - 3.4.2.1 Install with Polyflor approved adhesive specified for the site conditions and follow the adhesive label for proper use.
 - 3.4.2.2 Install rolls in sequential order following roll numbers on the labels.
 - 3.4.2.3 Reverse non-pattern sheets as referenced in the Polyflor Installation Instructions.
 - 3.4.2.4 Roll the flooring in both directions using a 100 pound three-section roller.
 - 3.4.2.5 Vinyl sheet flooring must be welded.

Note: It is recommended to heat-weld seams to provide a more sterile and water-tight seam.
 - 3.4.2.6 Polyflor Resilient Sheet Flooring may be flash-coved.
 - 3.4.2.6.1 Use Polyflor Ejecta CF38 Cove Filler Strip.
 - 3.4.2.6.2 Net fit the flooring material into the appropriate Polyflor CS cove cap.

3.5 CLEANING AND PROTECTION

- 3.5.1 Comply with the manufacturer's written instructions for cleaning and protection of resilient products.
- 3.5.2 Perform the following operations immediately after completing resilient product installation:
 - 3.5.2.1 Remove adhesive and other blemishes from exposed surfaces. Sweep and vacuum surfaces thoroughly.

- 3.5.2.2 Damp-mop surfaces to remove marks and soil.
- 3.5.3 Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during the remainder of the construction period.
- 3.5.3.1 No traffic for 24 hours after installation.
- 3.5.3.2 No heavy traffic, rolling loads, or furniture placement for 72 hours after installation.
- 3.5.4 Wait 72 hours after installation before performing initial cleaning.
- 3.5.5 A regular maintenance program must be started after the initial cleaning.

END OF SECTION 09 65 16