

SECTION 09650 – RESILIENT FLOORING**Part 1 – General****RELATED DOCUMENTS:**

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

DESCRIPTION OF WORK:

Extent of resilient flooring and accessories is shown on drawings and in Material and Room Finish Schedules.

QUALITY ASSURANCE:

Manufacturer: Provide each type of resilient flooring and accessories as produced by a single manufacturer, including recommended primers, adhesives, sealants and leveling compounds.

Fire Test Performance: Provide resilient flooring which complies with the flooring fire test performance criteria as determined by an independent testing laboratory acceptable to authorities having jurisdiction.

SUBMITTALS:

Product Data: Submit manufacturer's technical data for each type of resilient flooring and accessory.

Samples for initial Selection Purposes: Submit manufacturer's standard color charts in form of actual sections of resilient flooring, including accessories, showing full range of colors and patterns available, for each type of resilient flooring required.

Samples for Verification Purposes: Submit the following samples of each type, color and pattern of resilient flooring required, showing full range of color and pattern variations.

- 12" x 12" samples of sheet flooring
- 6" long samples of resilient bases
- 2 ½" long samples of resilient flooring accessories.
- Other materials, such as stair tread units, etc., as required.

Certification for Fire Test Performance: Submit certification from independent testing laboratory acceptable to authorities having jurisdiction that resilient flooring complies with fire test performance requirements.

Bond and Moisture Tests: Submit location diagrams and results. It is essential that moisture tests be taken on all concrete floors regardless of the age or grade level. Moisture emissions should not exceed 5 lbs.MVER/24 hours/1000 sq.ft. (calcium chloride test method) by conducting moisture tests, around the perimeter of the room, at columns and where moisture may be evident. Calcium chloride tests must be done in accordance with ASTM F-1869 and to instructions. RH moisture tests must not exceed 80% in accordance with ASTM F2170. It is the responsibility of the owner or his agent to provide adequate moisture testing by an independent agency acceptable to the floor covering manufacturer for products specified within this document.

Maintenance Instruction: Submit two copies of manufacturer recommended maintenance practices for each type of resilient flooring and accessory required.

PROJECT CONDITIONS:

Maintain minimum temperature as instructed by material manufacturers but not less than 65 deg. F (18 deg. C) in spaces to receive resilient flooring for at least 48 hours prior to installation, during installation and for not less than 48 hours after installation. Store resilient flooring materials in spaces where they will be installed for at least 48 hours before beginning installation. Subsequently, maintain minimum temperature of 55 deg. F (13 deg. C) in areas where work is completed.

Install resilient flooring and accessories after other finishing operations, including painting, have been completed. Do not install resilient flooring over concrete slabs until the latter have been cured and are sufficiently dry to achieve bond with adhesive as determined by the resilient flooring manufacturer's recommended bond and moisture test. Do not take tests later than ten days prior to scheduled installation. Notify Architect immediately of unsatisfactory conditions.

PART 2 – PRODUCTS**MANUFACTURER:****POLYFLOR LTD.**

(a Halstead Flooring Co.)
P.O. Box 3, Radcliffe New Road,
Whitefield, Manchester, M45 7NR, U.K.

DISTRIBUTOR:**ECORE COMMERCIAL FLOORING
REPRESENTED BY KRS Inc.**

2244 W Bluemound Rd, Suite B
Waukesha, WI 53186
Phone: 262.798.8900
Fax 262.798.7925
Email: info@krsinc.com

Products are available through contract flooring dealers.

RESILIENT FLOORING COLORS AND PATTERNS:

Provide color and patterns as indicated, or if not indicated in Materials Schedule and/or drawings as selected by Architect from manufacturer's standards.

Polyflor Forest FX PUR & Expona Flow PUR Floors

The flooring shall be Polyflor **Forest FX & Expona Flow**, as supplied by Polyflor Ltd of Manchester, England and Distributed by Ecore Commercial Flooring, Lancaster, PA.

Polyflor **Forest FX & Expona Flow** are recommended for heavy traffic areas that require a hard wearing flooring which is attractive, modern and easy to maintain. Such areas include banking, retail showrooms, department stores, hotels, restaurants, leisure centers, universities, hospitals, health clinics, libraries, commercial offices and public reception areas.

The flooring shall be flexible PVC sheet flooring in 2.0mm thickness. It shall have the following laminated construction: circa 0.70mm (0.027") print film layer, and circa 1.23mm (0.048") backing ply. The flooring shall incorporate a specially formulated polyurethane reinforcement, to significantly reduce maintenance costs.

The Polyflor PUR range of products incorporates a polyurethane reinforcement, which protects the floor covering by resisting soiling and scuffing. Combined with the superior closed surface finish, this enhanced protection allows the use of a polish-free maintenance program. This protection ensures that the intensity of the maintenance and overall cleaning costs are significantly reduced.

High vinyl content floorcovering of homogeneous mono-layered construction and a directional design.

Suitable for use with under-floor heating up to 27°C (80.6°F)

High vinyl content with backing: Provide layered vinyl sheet with pattern and color extending through its full wear layer thickness and complying with the following requirements:

Polyflor Forest FX PUR & Expona Flow PUR Floors

<u>Standard:</u>	Comply with ASTM F 1303 (Sheet Vinyl with backing)
<u>Static Load Limit:</u>	ASTM F970 (m), 750 psi
<u>Flame Spread:</u>	ASTM E648 >0.45 watts/cm ² Class 1
<u>Gauge:</u>	2mm (nominal .080")
<u>Wear Layer:</u>	0.70mm (0.027")
<u>Sheet Size:</u>	2 x 20 M (nominal 6 ft. 6 in. x 66 ft)
<u>Abrasion Resistance:</u>	EN 649 – Group T
<u>Coefficient of Friction:</u>	> .6
<u>Indentation Recovery:</u>	EN 433 < 0.10mm (<0.003")
<u>Light Fastness:</u>	≥ 6

The flooring must be available in 2.02M (nominal 6.63') including a 0.2m (0.66") salvage for on-site trimming, to minimize the number of joints.

This product does not accumulate static charges above 2kV and is classified as "anti-static". For specialist applications where there is a requirement to dissipate the electrostatic charge, see the Polyflor ESD product ranges.

Welding Thread: Vinyl thread or rod as produced by the manufacturer of sheet vinyl flooring and intended for heat sealing of joints. Color to match field of sheet vinyl floor covering unless otherwise noted.

ACCESSORIES:

Adhesives: Use only manufacturer approved adhesives. Adhesives are available through flooring dealers or Gerbert Ltd. Submit list of manufacturer approved adhesives to Architect for approval.

PART 3 – EXECUTION

INSPECTION:

Require installer to inspect sub-floor surfaces to determine that they are satisfactory. A satisfactory subfloor surface is defined as one that is smooth and free from cracks, holes, ridges, or coatings preventing adhesive bond and other defects impairing performance or appearance.

Concrete subfloors: Verify that concrete slabs comply with ASTM F710 and the following:

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 flooring manufacturer.

Do not allow resilient flooring work to proceed until subfloor surfaces are satisfactory.

PREPARATION:

Prepare subfloor surface as follows:

Inspection of existing sub-floor: A solid, dry, clean, sub-floor is required for the installation of all Polyflor materials.

Use cementitious leveling and patching compounds as recommended by resilient flooring manufacturer for filling small cracks, holes and depressions and leveling subfloors. This contractor shall be responsible for leveling new or existing floors whose surface varies up to 5/16". Notify Owner, Architect and General Contractor in writing where substrate varies more than above before proceeding with the work. **Gypsum based leveling compounds will not be accepted.**

Use cementitious leveling and patching compounds as recommended by resilient flooring manufacturer for filling small cracks, holes and depression in subfloors.

Remove coatings from subfloor surfaces that would prevent adhesive bond, including curing compounds incompatible with resilient flooring adhesives, paints, oils, waxes and sealers.

Broom clean or vacuum surfaces to be covered, and inspect subfloor.

INSTALLATION:

INSTALLATION, GENERAL:

Installer verification:

All Polyflor materials should be installed by a professional flooring mechanic, preferably one who has attended an installation clinic or a Master Mechanic Training Seminar.

Field verification:

Field verify, prior to installation, exact layout dimensions of all seams, floor patterns, grain directions and insets with Architect. **Start of work without Architect approval of field verification is not permitted** and unauthorized installations shall be replaced at Contractors expense.

Where moveable partitions are shown, install resilient flooring before partitions are erected.

Wooden Sub-Floor: Ensure wooden sub-floor is ventilated and required damp proofing is in place. Fix and replace loose boards.

Install flooring using method indicated in strict compliance with manufacturer's printed instructions. Extend flooring into toe spaces, door reveals and into closets and similar openings.

Scribe, cut and fit resilient flooring to permanent fixtures built in furniture and cabinets, pipes, outlets and permanent columns, walls and partitions.

Maintain reference markers, holes or openings that are in place or plainly marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other non permanent marking device.

Install flooring on covers for telephone and electrical ducts, and other such items as occur within finished floor areas. Maintain overall continuity of color and pattern with pieces of flooring installed on these covers. Tightly cement edges to perimeter of floor around covers and to covers.

Tightly adhere flooring to sub base without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks or other surface imperfections. Hand roll flooring at perimeter of each covered area to assure adhesion.

INSTALLATION OF SHEET FLOORING:

Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.

Install edge strips at unprotected or exposed edges where flooring terminates.

Scribe flooring to walls, columns, cabinets, floor outlets and other apparatus to produce tight joints.

Install flooring under movable partitions under open cabinets without interrupting tile/sheet pattern.

Roll flooring using a 100 Lb. Roller. Repeat.

Lay sheet flooring to provide as few seams as possible with economical use of materials. Match edges for color shading and pattern at seams in compliance with manufacturer's recommendations.

Adhere sheet flooring to substrates using method approved by flooring manufacturer for type of sheet flooring and substrate condition indicated.

Use conventional full spread adhesive method unless otherwise indicated.

Prepare seams in vinyl sheet flooring with manufacturer's special routing tool and heat weld with vinyl thread in accordance with manufacturer's instructions.

Provide cove base where shown on Room Finish Schedule or drawings, including rubber or vinyl top edge strip.

On masonry surfaces or other similar irregular vertical substrates, fill voids between top edge strip cove cap and vertical surface with manufacturer's recommended urethane adhesive filler material, or cementitious leveling compounds.

On all floor penetrations, cutouts and edge conditions, such as door frame, fill voids between sheet flooring and other surfaces with urethane sealant recommended by sheet flooring manufacturer.

Transition section at paving junction: Visedge VR by Howie Green is designed to securely anchor the perimeter of vinyl sheet flooring to prevent the ingress of water at the interface with the screed and to protect the ceramic floor edge profile.

Failure to install and maintain Polyflor products in accordance with recommended procedures can affect the performance of the products. Information and installation booklets are available from your Distributor.

INSTALLATION OF ACCESSORIES:

Apply wall base to walls, columns, pilasters, casework and other permanent fixtures in rooms or areas where base is required. Install base in lengths as long as practicable, with preformed corner units. Tightly bond base to substrate throughout length of each piece, with continuous contact at horizontal and vertical surfaces.

On masonry surfaces, or other similar irregular substrates, fill voids along top edge of resilient wall base with manufacturer's recommended urethane adhesive filler material.

Place resilient edge strips tightly butted to flooring and secure with adhesive. Install edging strips at edges of flooring which would otherwise be exposed. Apply resilient accessories to stairs in strict accordance with manufacturer's installation instructions.

CLEANING AND PROTECTION:

Perform following operations immediately upon completion of resilient flooring:

The Polyflor PUR range of products incorporates a polyurethane reinforcement, which protects the floor covering by resisting soiling and scuffing. Combined with the superior closed surface finish, this enhanced protection allows the use of a polish-free maintenance regime. This protection ensures that the intensity of the maintenance and overall cleaning costs are significantly reduced. The following maintenance instructions are designed to maximize the benefits of the PUR, resulting in lower maintenance costs, without compromising the long term appearance of your floor covering.

- Remove all loose debris.
- Ensure that all traces of adhesive are removed from the surface of the floor covering.
- Sweep or vacuum floor thoroughly. Use an impregnated dust control instrument.
- Damp mop floor with a neutral detergent.
- If required, dry buff with a 1000 rpm plus rotary machine fitted with a suitable clean pad.

RESILIENT FLOORING

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Do not wash floor until time period recommended by resilient flooring manufacturer has elapsed, to allow resilient flooring to become well adhered in adhesive.

Protect flooring against damage during construction period to comply with resilient flooring manufacturer's directions.

Protect flooring against damage from rolling loads for initial period following installation by covering with plywood or hardboard. Use dollies to move stationary equipment or furnishings across floors.

Cover resilient flooring with undyed, untreated building paper until inspection for Substantial Completion.

Clean resilient flooring not more than four days prior to date scheduled for inspections intended to establish date of Substantial Completion in each area of project. Clean resilient flooring by method recommended by resilient flooring manufacturer.

Follow manufacturer's instructions for Routine Maintenance and Daily, Weekly and Periodical Maintenance.

EXTRA MATERIALS:

Furnish extra maintenance materials to Owner. Furnish extra materials from same manufactured lot as materials installed. Deliver to Owner enclosed in protective packaging with appropriate identifying labels.

Tile Flooring: Furnish not less than one box for 50 boxes or fraction thereof, for each type, color, pattern and size installed.

Sheet Flooring: Furnish not less than five linear yards for each type, color and pattern installed.

Resilient Accessories: Furnish not less than ten linear feet for each 500 linear feet or fraction thereof, of each type, size, color and pattern installed.

END OF SECTION 09650

THIS SPECIFICATION GUIDE ISSUED IN JULY 2016 SUPERSEDES ALL PREVIOUS POLYFLOR SPECIFICATION GUIDES.