

## 0651P POLYFLOR IN RESILIENT FINISHES

### Branded worksection

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### Worksection abstract

This branded worksection *Template* is applicable to resilient sheet and tile laid products supplied by **Polyflor Australia Pty Ltd** as follows:

- Homogenous sheet vinyl with polyurethane coating.
- Homogenous sheet vinyl with slip resistant qualities.
- Heterogeneous sheet vinyl with polyurethane coating.
- Heterogeneous sheet vinyl with acoustic rating.
- Synthetic rubber sheet and tile floorcoverings.
- Semi-flexible vinyl composition tiles.
- Static conductive and dissipative sheet vinyl.
- Flexible sheet vinyl sport flooring.
- Vinyl wall cladding.
- Accessories comprising vinyl weld rod, capping strip, cove former and preformed vinyl skirtings.
- Adhesives.

### Guidance text

All text within these boxes is provided as guidance for developing this worksection and should not form part of the final specification. This *Guidance* text may be hidden or deleted from the document using the NATSPEC Toolbar or the hidden text *Hide* and *Delete* functions of your word processing system. For additional information visit FAQs at [www.natspec.com.au](http://www.natspec.com.au).

### Optional style text

Text in this font (blue with a grey background) covers items specified less frequently. It is provided for incorporation into *Normal* style text where it is applicable to a project.

### Related material located elsewhere in NATSPEC

If a listed worksection is not part of your subscription package and you wish to purchase it, contact NATSPEC.

Related material may be found in other worksections. See for example:

- *0315 Concrete finishes* for substrates.
- *0383 Sheet flooring and decking* for substrates.
- *0541 Access floors*.
- *0612p POLYFLOR KIESEL self-levelling cementitious toppings*.
- *0652 Carpets*.
- *0656 Floor sanding and finishing* for substrates.
- *0657 Resin based seamless flooring*.
- *0822 Wastewater* for fitting to floor wastes.

### Material not provided by POLYFLOR

This branded worksection includes generic material which may not be provided by the Product Partner including:

- Cork tiles.
- Linoleum.
- Corklinoleum.
- Vinyl bench topping.
- Flexible terrazzo tiles.
- Inlaid vinyl sheet.

### Documenting this and related work

You may document this and related work as follows:

- Nominate the locations of finishes and finish abutments and control joints on drawings to your office documentation policy.

- Check lead time for imported selections and consider adding a requirement, in **SUBMISSIONS**, for the builder to verify availability.

Search [www.environmentdesignguide.com.au](http://www.environmentdesignguide.com.au), the Australian Institute of Architect's environmental advisory subscription service for notes on the following:

- Polyvinyl chloride (PVC).

### Specifying ESD

Polyflor consists of the following sustainable product attributes:

- Polyflor's complete range of vinyl flooring options complies with the TVOC standards as tested to the current GBCA's test method achieving maximum points in the IEQ-VOC section of Green Star.
- Polyflor's Homogeneous resilient sheet and Safety vinyl flooring ranges are Green Tag certified by Ecospecifier, achieving maximum points in the Materials – Flooring Calculator section of Green Star with a GreenRate Level A rating.

The following may be specified by retaining default text:

- Natural and biodegradable flooring including linoleum, cork, corklinoleum and rubber.

The following may be specified using included options:

- Scrap recycling, finishes with programs for recycling offcuts.

The following may be specified by including additional text:

- Recycled material, e.g. for PVC and rubber flooring.
- PVC finishes and adhesives low or no VOC emission.
- Planks or tiles not requiring underlays or adhesives, reducing materials for installation.
- Materials recyclable at the end of service life.

Refer to the NATSPEC TECHreport TR 01 on specifying ESD.

## 1 GENERAL

For over 50 years Polyflor have been providing Australia & New Zealand with resilient vinyl flooring without compromising on design and functionality. Their floor coverings are suitable for a variety of commercial and domestic installations. Available in an array of colours and designs, Polyflor's ranges are hard wearing, durable and low maintenance, offering both style and substance. Polyflor's environmentally friendly flooring is GreenTag certified and 100% recyclable. Polyflor really is flooring design for a better environment.

### 1.1 RESPONSIBILITIES

#### General

Requirement: Provide resilient floor coverings supplied by **Polyflor Australia Pty Ltd** to substrates, as documented.

*Documented* is defined in *0171 General requirements* as meaning contained in the contract documents.

### 1.2 COMPANY CONTACTS

#### Polyflor Australia technical contacts

Website: [www.polyflor.com.au](http://www.polyflor.com.au)

### 1.3 CROSS REFERENCES

#### General

Requirement: Conform to the following:

- *0171 General requirements*.

*0171 General requirements* contains umbrella requirements for all building and services worksections.

List the worksections cross referenced by this worksection. *0171 General requirements* references the *018 Common requirements* subgroup of worksections. It is not necessary to repeat them here. However, you may also wish to direct the contractor to other worksections where there may be work that is closely associated with this work.

NATSPEC uses generic worksection titles, whether or not there are branded equivalents. If you use a branded worksection, change the cross reference here.

## 1.4 STANDARDS

### General

Installation: To AS 1884.

### Slip resistance

Classification: To AS 4586.

## 1.5 MANUFACTURER'S DOCUMENTS

### Technical manuals

General: Comply with Polyflor Australia Technical Information Manual and the Polyflor Technical Data Sheets as appropriate for the selected products.

The Technical Information Manual and Data Sheets contain information on the subfloor preparation, adhesives, installation, welding, finishes, chemical resistance and maintenance.

## 1.6 INTERPRETATION

### Definitions

General: For the purposes of this worksection the definitions given in AS 1884 and the following apply:

- Acoustic underlay: A resilient material laid between the structural floor and the flooring material to provide sound isolation.
- Resilient floor coverings classification: To EN ISO 10874 and EN ISO 10581 as follows:
  - . Domestic Class 23.
  - . Commercial Class 33 and 34.
  - . Industrial Class 42 and 43.

EN ISO 10874 classifies resilient floor coverings by level of use for domestic, commercial and industrial applications.

- Substrate: The surface to which a material or product is applied.
- Underlay: A non-structural layer of sheet material or in situ levelling material on the substrate to provide a smooth and level surface.

Edit the **Definitions** subclause to suit the project or delete if not required. List alphabetically.

## 1.7 SUBMISSIONS

### Certification

General: Provide a certificate of compliance for antistatic and conductive floor installations.

### Fire performance

Fire hazard properties: Submit evidence of conformance to PRODUCTS, **FIRE PERFORMANCE**, **Fire hazard properties**.

### Operation and maintenance manuals

General: Submit Polyflor published use, care and maintenance requirements for each type of finish.

### Products and materials

Manufacturer's data: Submit the manufacturer's product data for each type of finish, and the manufacturer's recommendations for its application in the project including the following, as appropriate:

- Thickness and width of sheet or size of tile.
- Adhesive and jointing method.
- Resistance to wear, indentation, chemicals, light and fire.
- Flexibility and bending strength.

Type tests: Submit results, as follows:

Type tests are carried out off-site. However, submission of evidence of a successful type test may be called up here for requirements specified in **SELECTIONS** or **PRODUCTS** when there are no **SELECTIONS**.

- Slip resistance to AS 4586.

### Samples

If the specification does not state selected properties such as colour and texture, the effect of this clause is to require the submission of samples covering the full range of those properties. The specification should define the item with enough

precision, either by description, or by reference to preselected samples, or as a proprietary item, to allow the contractor to identify and price it. Where the covering is specified as a proprietary item, use this clause as a means of confirmation.

Range: Submit labelled samples of resilient finishes illustrating the range of colour, pattern or texture of the product.

Minimum size per sample:

- Sheet: 450 x 450 mm.
- Tiles: A whole tile or 0.09 m<sup>2</sup>, whichever is the greater.
- Linear accessories, (including coving, skirting, stair nosing, protection strips): A piece 300 mm long.
- Welded joints: 300 mm long.

Identification: Label each sample, with brand, product name, and manufacturer's code reference (including the code for each coat of multi-coat work).

Sample panels: Provide sample panels as follows:

- Location: [complete/delete]
- Size (mm): [complete/delete]

Call for sample panels only when large areas are specified. Delete if not required.

Trial set-out: Prepare a trial set-out before fixing.

### Subcontractors

General: Submit names and contact details of proposed suppliers and installers taken from the register of suppliers and installers recommended by Polyflor.

Delete if supplier/installer details are not required.

### Substrate acceptance

Applicator: Submit the installer's certification of the acceptability of the flooring substrate before commencing installation.

### Tests

0171 General requirements covers tests in **Definitions** and calls for an inspection and testing plan under **SUBMISSIONS, Tests**.

Site tests: Submit results, as follows:

- Site slip resistance test of completed installations.
- Surface pH test.
- Moisture content test.

Detail the tests required in **PRODUCTS** or **EXECUTION**, as appropriate, and list the submissions required here.

### Warranties

Requirement: For each type of resilient finish documented, submit the manufacturer and installer warranty.

Warranty terms: [complete/delete]

Describe the requirements of warranties in **PRODUCTS** or **EXECUTION** as appropriate and list the submissions here.

## 1.8 INSPECTION

### Notice

Inspection: Give notice so that inspection may be made of the following:

- Substrate immediately before fixing resilient finishes or underlay.
- Completed underlay, if any.
- Finished surface before applying sealers or polishes (if any).
- Completed installation.

Amend to suit the project adding critical stage inspections required.

Hold points, if required, should be inserted here.

## 2 PRODUCTS

### 2.1 GENERAL

#### Product substitution

Other products: Conform to PRODUCTS, **GENERAL, Substitutions** in *0171 General requirements*.

The *0171 General requirements* clause sets out the submissions required if the contractor proposes alternative products. Refer also to NATSPEC TECHnote GEN 006 for more information on proprietary specification.

#### Product identification

General: Marked to show the following:

- The Polyflor brand name.
- Product type.
- Dimensions and quantity.
- Product reference code and batch number.
- Colour.

Edit the list to suit the project or delete if not required.

### 2.2 FIRE PERFORMANCE

#### Fire hazard properties

Critical radiant flux: Tested to AS ISO 9239.1.

Non-sprinklered buildings: The floor finish must have maximum *smoke development rate* of 750 percent-minutes tested to AS ISO 9239.1.

Refer to NATSPEC TECHnote DES 020 for further information on fire hazard properties.

### 2.3 UNDERLAYS

A thin cementitious type underlay may be used as an isolating barrier of known electrical resistance beneath antistatic or conductive flooring if required. Other special underlay systems are available for the reduction of impact noise, these may be laid directly on the substrate, or over an isolation pad or board, an embedded reinforcing mat is usual. Consult manufacturers of both underlay and floor covering for compatibility and installation requirements.

#### Cementitious

General: Polymer modified cementitious smoothing and self-levelling compound.

Thickness: 3 mm minimum.

Use to correct the substrate. Avoid a feather edge that may curl, by cutting back for a 3 mm minimum thickness. Delete if not appropriate.

#### Fibre cement underlay

Standard: To AS/NZS 2908.2, Type B, category 2 minimum.

Thickness: 5 mm minimum.

#### Wet processed fibreboard (hardboard) underlay

Standard: To AS/NZS 1859.4.

The NCC cites AS/NZS 1859.4:2004.

Classification: General purpose medium board, manufactured specifically as flooring underlay.

Thickness: 5.5 mm.

#### Moisture barrier

If testing to AS 1884 shows the moisture content of the concrete slab exceeds the requirements of AS 1884 or the manufacturer's recommendations, a moisture barrier may be required. See NATSPEC TECHnote DES 008 on the preparation of concrete substrates.

#### General

Description: Water-based moisture barrier to resilient finish and adhesive manufacturer's recommendation, if required.

#### Acoustic underlay

Product: Polyflor Acoustifoam.

Refer to Polyflor for other recommended acoustic underlays.

## 2.4 ADHESIVES

### General

Requirement: To the resilient finishes manufacturer's recommendations.

Kiesel Okatmos Star 100 for all Homogeneous, Heterogeneous and Safety Flooring in dry areas.

Kiesel Okatmos Star 110.

Kiesel Okatmos Star 120 for all heterogeneous tile and plank.

Kiesel Okatmos Star 150+ for heterogeneous tile and plank where pressure sensitive adhesive is required.

Kiesel Okatmos Megastar : - antistatic and conductive applications.

Okamul PU for all products in wet areas.

Special adhesives may be required for antistatic and conductive applications and slabs with high moisture content.

## 2.5 SHEETS AND TILES

### Edges of sheets and tiles

General: Make sure edges are firm, unchipped and machine-cut accurately to size and square to the face, and that tile edges are square to each other.

### Polyvinyl chloride (PVC)

Resilient floor covering, homogeneous: To EN ISO 10581.

Resilient floor covering, heterogeneous: To EN ISO 10582.

Resilient floor covering, jute or polyester felt backing: To EN 650.

Resilient floor covering, with foam layer: To EN 651.

Resilient floor covering, with particle based enhanced slip resistance: To EN 13845.

Resilient floor covering, semi-flexible polyvinyl chloride tiles: To EN ISO 10595.

Product: [complete/delete]

Select from the following Polyflor products and nominate here or in **SELECTIONS** if more than one product:

Homogeneous sheet and tile:

- Classic Mystique PUR.
- 2000 PUR.
- Pearlazzo PUR.
- XL PU.
- Standard XL.
- Polyflor VC Tiles.

Heterogeneous sheet:

- Forest FX Acoustic PUR.
- Forest FX PUR.
- Expona Flow PUR.
- BLOC PUR.

Heterogeneous tile and plank:

- Camaro.
- Affinity.
- Expona Commercial.
- Expona Domestic.
- Expona Superplank.
- Expona Design.
- Simplay.

See also NATSPEC TECHnote DES 001 on slip resistance. Consult the manufacturer on suitability for service conditions, especially for severe conditions such as underfloor heating or high humidity.

### Rubber

Standard:

- Rubber tiles: To EN 12199.
- Rubber sheet: To EN 1817.

Product: [complete/delete]

Select from the following Polyflor products and nominate here or in **SELECTIONS** if more than one product:

- SaarFloor Noppe Stud tile.

### Acoustic sheet vinyl

General: Unbacked flexible sheet vinyl laid over separate closed cell foam acoustic underlay.

- Product: [complete/delete]

See Polyflor acoustic flooring brochure for sheet vinyl suitable for use with Acoustiform underlay. For built up applications using a separate acoustic underlay, a tested system from a single manufacturer is to be preferred to combining products from different manufacturers. Single layer resilient backed sheet vinyl will provide an alternative but with a lower insulation rating.

Refer to NATSPEC TECHnote DES 027 for information on impact sound insulation.

Acoustic foam backed heterogeneous sheet vinyl:

- Product: [complete/delete]

Select from the following Polyflor products and nominate here or in **SELECTIONS** if more than one product:

- Polysafe Wood FX Acoustic PUR.
- Forest FX Acoustic PUR.

### Static control flooring

See NATSPEC TECHnote DES 007 on static control floors.

General: Unbacked flexible sheet with electrical resistance.

Product: [complete/delete]

Select from the following Polyflor products and nominate here or in **SELECTIONS** if more than one product:

- Polyflor SD.
- Finesse SD.
- Finesse EC.
- Conductive ROF.

### Slip-resistant sheet vinyl

Resilient floor coverings, with particle based enhanced slip resistance: To EN 13845.

Slip resistance classification: To AS 4586.

Product: [complete/delete]

Select from the following Polyflor products and nominated here or in **SELECTIONS** if more than one product:

- Polysafe Apex.
- Polysafe Wood FX PUR.
- Polysafe Vogue Ultra PUR.
- Polysafe Standard.
- Polysafe Hydro.Evolve.
- Polysafe Quattro.
- Polysafe Wood FX acoustic.

Heterogeneous tile and plank:

- Expona Control.

See NATSPEC TECHnote DES 001 on Slip Resistance.

### Cork tiles

Standard: To EN 12104.

Most of the cork tiles imported from Portugal are 305 x 305 mm square. Cork is not suitable for very heavy wear although densities over 450 kg/m<sup>3</sup> may be available for heavy contract use.

### Linoleum

Standard: To EN ISO 24011.

### Corklinoleum

Standard: To EN 688.

### Vinyl bench topping

General: Fully flexible homogeneous sheet.

Bench or counter topping grade is available but is less durable than laminate for heavy usage. Antistatic material is available where static control is required, consult with manufacturer for special installation procedures.

#### Flexible terrazzo tiles

General: Marble or granite chips bedded in a flexible thermoset resin matrix, precision ground and polished.

#### Inlaid vinyl sheet

General: A layer of vinyl chips inlaid in a translucent vinyl matrix, bonded to a moisture resistant backing.

#### Vinyl wall cladding

Product: [complete/delete]

Select from the following Polyflor products and nominated here or in **SELECTIONS** if more than one product:

- Polyclad Plus PU.

## 2.6 SYNTHETIC SPORTING SURFACES

### Standard

General: To EN 14904.

Refer to EN 12235 (ball rebound), EN 13036-4 (sliding coefficient of friction), EN 14808 (shock absorption) and EN 14809 (vertical deformation) for additional information on synthetic sporting surfaces.

Product: [complete/delete]

Select from the following Polyflor products and nominated here or in **SELECTIONS** if more than one product:

- Sport 67.

## 3 EXECUTION

### 3.1 SUBCONTRACTORS

#### General

Requirement: Use specialist installers recommended by the material manufacturers.

Contact Polyflor for a list of recommended installers.

### 3.2 PREPARATION

#### Substrates

General: To AS 1884 Section 3.

#### Substrate tolerance table

Property	Length of straightedge laid in any direction	Max. deviation under the straightedge
Planeness	2 m	4 mm
Smoothness	150 mm	1 mm
Projections	50 mm	0.5 mm

Planeness tolerance class: Nominate Class A in the **Flatness tolerance class table** in the *0315 Concrete finishes and 0612 Cementitious toppings* worksections for the locations where resilient finishes are to be installed, as appropriate for the project. It is assumed smoothness and projection tolerance corrections form part of substrate preparation.

#### Concrete substrates

Refer to NATSPEC TECHnote DES 008 on the preparation of concrete substrates. Refer also to CCAA Data Sheet Moisture in concrete and moisture-sensitive finishes and coatings.

Requirement: Do not start installation of the resilient finishes until the concrete substrate conforms to AS 1884 clause 3.1 and the adhesive and resilient finish manufacturers' recommendations.

AS 1884 sets out minimum requirements for surface pH, moisture content and planeness and smoothness of the concrete substrate which should be determined by inspection and testing. The manufacturer's recommendations may exceed these requirements. This worksection requires submission of test results.

Concrete substrate rectification: Conform to the following:



- Surface treatments: Mechanically remove any incompatible surface treatments, including the following:
  - . Sealers and hardeners.
  - . Curing compounds.
  - . Waterproofing additives.
  - . Surface coatings and contamination.

The application of solvent based spray paint and markers during construction should be avoided as these products may cause bleed through to resilient finishes laid on concrete floors.

- Planeness, smoothness, projections: Remove projections and fill voids and hollows with a smoothing, self-levelling compound compatible with the adhesive. Allow filling or levelling compound to dry to manufacturer's recommendations.

**Moisture content rectification:** Provide a moisture barrier to the flooring manufacturer's recommendation.

If a moisture barrier or moisture suppression system is permitted, consider including this *Optional* text. Changes in the design mix of concrete, admixtures and concrete surface finishing techniques, and low VOC adhesives have contributed to increased failure of resilient finishes. Consult the flooring manufacturer.

Cleaning: Remove loose materials or dust.

#### **Timber, plywood and particleboard substrates**

Requirement: Do not start installation of the resilient finishes until the timber, plywood or particleboard substrate conforms to AS 1884 clause 3.2.

Timber, plywood and particleboard substrate rectification: Remove projections. If conformance to the **Substrate tolerance table** cannot be achieved, provide an underlay in brick pattern with joints avoiding substrate joints.

Cleaning: Remove oil, grease, traces of applied finishes and loose materials or dust.

#### **Working environment**

General: Do not start work before the building is enclosed, wet work is complete and dry, overhead work is complete and good lighting is available. Protect adjoining surfaces.

#### **Conditioning**

General: Stabilise the room temperature for seven days before, and two days after, installation of resilient finishes, as follows:

- Areas with air conditioning installed: Run air conditioning at operational temperature.
- Air conditioned areas not operational: Maintain an ambient room temperature range of 15°C to 28°C.
- Non-air conditioned areas: Install at an ambient room temperature range of 15°C to 28°C.
- Underfloor heating: Turn off heating and allow substrate to stabilise at the temperature recommended by the manufacturer.

Set temperature of floor not to exceed 28°C.

Underlay: Expose both faces of each sheet for at least 24 hours before fixing.

Resilient sheet and tile floor coverings: Stack for at least 48 hours before installation.

Slabbing of vinyl sheet: Roll out vinyl sheet and cut to approximate size and condition for 24 hours at more than 18°C.

### **3.3 SHEET AND TILE INSTALLATION**

#### **Sheet set-out**

General: Set out sheets to give the minimum number of joints. Position joints away from areas of high stress. Run sheet joints parallel with the long sides of floor areas, vertically on non-horizontal surfaces.

#### **Tile set-out**

General: Set out tiles from centre of room. If possible cut tiles at margins only, to give a cut dimension of at least 100 mm x full tile width. Match edges and align patterns. Arrange the tiles so that any variation in appearance is minimised.

Amend text if tile layout and joints have been documented.

#### **Joints**

Non-welded: Butt edges together to form tight neat joints showing no visible open seam.

Delete if joints are welded.

### Junctions

General: Scribe neatly up to returns, edges, fixtures and fittings. Finish flush with adjoining surfaces.

### Rolling

General: If rolling is required, roll the finish in multiple directions before the adhesive sets.

Roller size: [complete/delete]

e.g. Linoleum 65 kg, LVT (Luxury vinyl tiles) 45 kg, VCT (Vinyl composite tiles) 68 kg.

### Change of finish

General: Maintain finished floor level across changes of floor finish including carpet.

### Cleaning

General: Keep the surface clean as the work proceeds.

### Finishing schedule

Sheet and tile type	Finish	Rolling after laying

Finish: e.g. Buffable water emulsion polish, Two-pack clear polyurethane (cork); Buffable metallised emulsion polish, Buffing only for slip-resistant sheet (PVC); Two coats buffable metallised emulsion polish (cushion backed sheet vinyl).

### Scrap recycling

Requirement: [complete/delete]

Polyflor provide a site collection bin program for collection of clean installation waste. Refer Recofloor vinyl take-back scheme.

## 3.4 TILING

### Cork tiles

Laying: Provide a water-based latex adhesive. Do not use pins.

Finishing: Sand after laying.

Cork tiles can be sealed or given a clear finish. Two-pack polyurethane will give the floors a harder finish with some loss of resilience. Coordinate with 0671 Painting.

### Rubber tiles

General: Keep tiles flat during storage. Before laying, allow the tiles to relax and decompress, and make sure that the backs are free of loose material.

Adhesive: Provide as follows:

- Horizontal surfaces: Kiesel Okatmos Star 100.
- Stair skirtings, stop ends, external mouldings and vertical surfaces: Kiesel Okatmos Star 100.

Laying: Match edges and align joints and studs. Make sure that the whole surface of the tile or accessory is in contact with the substrate.

Stretcher bond reduces the possibility of the tiles lifting at the point where the four corners join. Chequerboard may be preferred otherwise.

Stair finish: Provide as follows:

- Smallest tiles: Half tile.
- Nosing tiles: Purpose-made matching tread, mosing and riser tile. Accurately scribe, cut and fit to perimeters. Close butt seams.

Rubber nosing tiles are an alternative to forming standard tiles to radius. Proprietary anti-slip PVC or aluminium, or PVC combined riser, nosing and tread are also available. Stair stringer profile with tapered edge is available in 300 mm width

Finishing: Sweep, vacuum, and wash using clean warm water and PH neutral detergent, to remove foreign matter, including protective wax coating. Buff when dry. Provide a suitable polish as recommended by Polyflor in conjunction with buffing.

**3.5 SHEETING**

**Welded joints**

Select from the alternatives and document in the **Welded joints schedule**.

Heat welding: After fixing, groove the seams using a grooving tool and weld the joints with matching filler rod, using a hot air welding gun. When the weld rod has cooled, trim off flush.

Heat welding was developed specifically for homogeneous sheet. It may be used for vinyl chip sheet but will be more conspicuous than cold welding and will not have the same strength as heat welding in homogeneous sheet.

Chemical welding: Apply seaming compound 100 mm wide to the substrate centrally under the seam. Roll the seam until the compound is forced up into the joint. Clean off flush with a damp cloth.

Is less conspicuous and may be preferable for that reason. For heterogeneous vinyl only.

Epoxy jointing: Join seams with epoxy adhesive.

For slip-resistant vinyl sheet.

**Welded joints schedule**

Sheet and tile type	Welding type

**Static dissipative or conductive vinyl flooring**

Installation: As recommended in the Polyflor Technical Information Manual.

The static dissipative requirement will determine the installation method and product. Refer to Polyflor Technical for advice. Provide an earthing system if electrical resistance to earth or a conductive floor is required. The earthing grid will consist of metallic strips laid directly under the flooring material, connection to building is made by a qualified electrician – a backup connection is recommended. Metal fixtures and fittings should be isolated from the flooring. Additional requirements, e.g. earthing rails, placement of switches and outlets outside the area, atmosphere ionisation and humidity controls may be required. Include these under the relevant worksection.

**3.6 VINYL STAIR FINISH**

**General**

Preformed: Provide purpose-made vinyl stair finish combining riser, nosing and tread in the one element. Lay each step consecutively with the joint at the bottom of each riser.

Formed in situ: Fit the sheet vinyl to each tread, and to the riser above, in one piece, coved in the angle. Accurately scribe, cut and fit to stair nosings and perimeters.

**3.7 JOINTS AND ACCESSORIES**

At areas of heavy use, particularly with wheeled traffic, consider specifying a prototype test for the joint product installation using the anticipated wheeled equipment.

**Junctions**

General: Finish junctions tapered to with adjoining surfaces. Where changes of floor finish occur at doorways locate the joint on the centreline of the closed door leaf.

If the floor finish is to be divided into bays, specify here the bay size, dividing strip or joint filler.

**Accessories**

General: Provide purpose-made matching moulded accessories for nosings, coves, skirtings, edge cover strips and finishes at junctions, margins, and angles, if available. Otherwise form accessories from the sheet material. Provide solid backing for radiused coves and nosings.

**Accessories schedule**

Accessory type	Location

Accessory type: Specify required accessories, such as nosings, wedge fillets, tile edge trim, wall and capping trim and state whether they are to be a proprietary item, purpose-made or formed.

For floor wastes to wet areas consult with manufacturer for special requirements, e.g. flanged fittings to clamp over finish, and coordinate with **SANITARY DRAINAGE** in the 0822 Wastewater worksection.

**Edge strips**

General: Provide edge cover strips at junctions with different floor finishes and to exposed edges.

Metal cover strip: Extruded tapered strip 25 mm wide, of the same thickness as the sheet or tile. Fix with matching screws to timber bases or to masonry anchors in concrete bases, at 200 mm maximum centres.

Material: [complete/delete]

Material: e.g. Brass, Stainless steel or Aluminium.

PVC cover strip: Feather edge strip matching the floor finish, fixed with contact adhesive.

Width (mm): [complete/delete]

Width: e.g. 25 mm, 50 mm.

Colour: [complete/delete]

**Control joints**

Location: Provide control joints as follows:

- Over structural control joints.
- At junctions between different substrates.

Depth of joint: Right through to the substrate.

Sealant width: 6 to 25 mm.

Depth of elastomeric sealant: One half the joint width, or 6 mm, whichever is the greater.

**Control joint materials – sheet flooring**

Proprietary slide plate divider strip: Provide interlocking metal plates grouted into pockets formed in the concrete joint edges to finish flush with the flooring surface.

**Control joints schedule – proprietary slide plate**

Property	CJ1	CJ2	CJ3
Location			
Product			
Material			
Insert colour			

Location: State here or show on drawings.

Proprietary slide plate:

- Nominate the product type suitable for the anticipated movement.
- Material: e.g. Stainless steel.
- Insert colour: Nominate colour or omit if there is no insert.

**Vinyl skirting**

Select from the following.

Feather edge: Polyflor moulded PVC skirting section.

Intended for use with PVC or similar flat surface floor finishes. It provides coverage of floor termination at the vertical surface. Occasionally used where partitions are retro fixed over carpet.

Flat skirting: Polyflor flat PVC skirting section.

Intended for use with carpet. It provides a solid margin to assist the carpet laying process. Skirtings may be cut from sheet material but are more costly.

Fixing: Scribe as necessary. Mitre corners. Fix to walls with contact adhesive.

Minimum height: 100 mm.

**Rubber coved skirtings and margins**

General: Form from smooth flat sheet matching the colour and total thickness of the rubber flooring. Scribe and mitre at internal corners.

External corners and stop ends: Provide purpose-made matching moulded pieces.

If moulded pieces are not available to match the rubber floor finish, consider using vinyl skirtings.

**Coved skirtings**

Provide where a continuous surface is required e.g. Wet areas, Wet mopping, Hygiene and clean rooms. A sealant or cover mould may be necessary where the wall finish joins the door jamb profile. The width may require special consideration to provide a sealed overlap where the coving terminates at the door jamb.

Site formed coving: Carry the flooring material up over a profiled coving section to form the skirting and mitre and weld all joints. Make sure the radius of the coving section conforms to the floor finish manufacturer's recommendations for sheeting material and thickness.

If using a contrasting border document in the **Sheet and tile schedule**.

Location: [complete/delete]

State location if not shown on the drawings.

**3.8 TESTING**

0171 *General requirements* covers tests in **Definitions** and calls for an inspection and testing plan under **SUBMISSIONS, Tests**.

**Substrate tests**

Surface pH: Test concrete subfloor for suitability for the installation of resilient floor coverings to AS 1884 Appendix B.

- Maximum pH: 10.

Testing of pH should be carried out after any surface grinding. Freshly exposed concrete has high alkalinity and problems have been encountered overseas.

Moisture content: Test substrate for suitability for the installation of resilient floor coverings to AS 1884 Appendix A.

- Maximum relative humidity of concrete: To AS 1884 Appendix A3.1.2 and A3.1.3.
- Moisture content of timber, plywood and particleboard subfloors: To AS 1884 Appendix A3.2.

Some manufacturers may provide products which can be used on concrete slabs with a moisture content greater than the maximum allowed by AS 1884, or that require a moisture content less than the maximum allowed by AS 1884.

**Completion tests**

Slip resistance testing of completed installation: To AS 4663.

Delete if not required.

**3.9 COMPLETION****Protection of sheet materials**

Finished floor surface: Keep traffic off floors for a minimum of 24 hours after laying until bonding has set, whichever period is the longer. Avoid contact with water for minimum 7 days after laying.

**Reinstatement**

Extent: Repair or replace faulty or damaged work. If the work cannot be repaired satisfactorily, replace the whole area affected.

**Cleaning**

Consult resilient finish manufacturers for cleaning instructions and recommendations on polishing. Polyurethane reinforced vinyls do not require sealing or polishing (they are mopped and dry buffed), and other vinyl floors only require mopping. For installations in existing buildings, consult the building user on current maintenance procedures, type of polish used, and make the new installations compatible as far as possible.

General: Clean the finished surface. Before the date for practical completion, mop and leave the finished surface clean and undamaged on completion.

**Cleaning static control flooring**

General: Do not use sealers, wax or floor polish. Clean using a mild neutral detergent and lukewarm water. Dry buff clean floor using a scrubbing machine with a white nylon pad.

Sealers and polishes affect or destroy the antistatic properties.

### Spare materials

General: Supply spare matching resilient finishes and accessories of each type for future replacement purposes. Store the spare materials on site where directed.

Quantity: At least 1% of the quantity installed.

### Spare material schedule

Material	Quantity	Storage location

### Warranties

General: Manufacturers warranties are available from Polyflor as follows:

- Full system warranty including primers, screeds and adhesives: Maximum 25 years.
- Standard product warranty: 10 years.

Consult or negotiate with manufacturers for warranty terms, and specify only such terms as are actually available.

## 4 SELECTIONS

**Schedules** are a way of documenting a selection of proprietary or generic products or systems by their properties. Indicate their locations here and/or on the drawings. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

### 4.1 PRODUCT SCHEDULE

#### Sheet and tile schedule

Property	RF1	RF2	RF3
Polyflor product			
Colour			
Form			
Tile laying pattern			
Slip resistance classification			
Tactile indicators: Directional: Product			
Tactile indicators: Directional: Colour			
Tactile indicators: Warning: Product			
Tactile indicators: Warning: Colour			
Critical radiant flux			
Underlay			
Skirting			
Cover strips			

RF1, RF2, RF3: These designate each instance or type or location of the item schedule. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Polyflor product selection: Use the link to the Polyflor website for the selection of the floor finish and the product characteristic.

Form: e.g. Sheet or Tile (Vinyl, rubber); Unbacked flexible sheet, Semi-rigid floor tiles, Flexible floor tiles, Inlaid vinyl sheet (PVC).

Tile laying pattern: e.g. Checkerboard or Stretcher bond.

Slip resistance classification: Refer to NATSPEC TECHnote DES 001, SA HB 197 and SA HB 198. Select the slip resistance test and classification to suit the location and application.

Tactile indicators: To AS/NZS 1428.4.1.

- Tactile indicator: Directional: colour: A colour contrast is required, in both wet and dry conditions, between the tactile indicators and the adjacent surface and that the colour provides a luminance contrast to the surrounding surface to AS/NZS 1428.4.1 Appendix E.

Critical radiant flux: Include the appropriate value from BCA Spec C1.10 Table 2 for the building class.

Underlay: e.g. Trowelled, Hardboard, Fibre cement sheet. Consult manufacturers of resilient flooring for recommended underlay for particular applications. State thickness.

Skirting: e.g. Feather edge, Flat or coved vinyl, Coved rubber, or Site formed coving.

**Synthetic sporting surfaces schedule**

Property	SS1	SS2	SS3
Polyflor product			
Underlay			
Skirting			
Critical radiant flux			
Slip resistance classification			
Surface marking method			

SS1, SS2, SS3: These designate each instance or type or location of the item schedule. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Polyflor product selection: Use the link to the Polyflor website for the selection of the floor finish and the product characteristic.

Underlay: Consult Polyflor for recommendations as to the need for, and type of, underlay.

Skirting: e.g. feather edge, flat or coved vinyl, coved rubber, or site formed coving.

Critical radiant flux: Include the appropriate value from BCA Spec C1.10 Table 2 for the building class.

Slip resistance classification: For selections refer to NATSPEC TECHnote DES 001, SA HB 197 and SA HB 198.

**REFERENCED DOCUMENTS**

The following documents are incorporated into this worksection by reference:

AS/NZS 1859		Reconstituted wood-based panels - Specifications
AS/NZS 1859.4	2018	Wet-processed fibreboard
AS 1884	2012	Floor coverings - Resilient sheet and tiles - Installation practices
AS/NZS 2908		Cellulose-cement products
AS/NZS 2908.2	2000	Flat sheets
AS 4586	2013	Slip resistance classification of new pedestrian surface materials
AS 4663	2013	Slip resistance measurement of existing pedestrian surfaces
AS ISO 9239		Reaction to fire tests for floor coverings
AS ISO 9239.1	2003	Determination of the burning behaviour using a radiant heat source
EN 650	2012	Resilient floor coverings. Polyvinyl chloride floor coverings on jute backing or on a polyester felt backing or on polyester felt with polyvinyl chloride backing. Specification
EN 651	2011	Resilient floor coverings. Polyvinyl chloride floor coverings with foam layer. Specification
EN 688	2011	Resilient floor coverings. Specification for corklinoleum
EN 1817	2010	Resilient floor coverings - Specification for homogeneous and heterogeneous smooth rubber floor coverings
EN ISO 10581	2012	Resilient Floor Coverings - Homogeneous Poly (Vinyl Chloride) Floor Covering - Specifications
EN ISO 10582	2017	Resilient Floor Coverings - Heterogeneous poly(vinyl chloride) floor covering - Specifications
EN ISO 10595	2012	Resilient floor coverings. Semi-flexible/ vinyl composition (VCT) poly(vinyl chloride) floor tiles. Specification
EN ISO 10874	2012	Resilient textile and laminate floor coverings. Classification
EN 12104	2000	Resilient floor coverings. Cork floor tiles. Specification
EN 12199	2010	Resilient floor coverings. Specifications for homogeneous and heterogeneous relief rubber floor coverings

EN 13845	2017	Resilient floor coverings - Polyvinyl chloride floor coverings with particle based enhanced slip resistance - Specification
EN 14904	2006	Surfaces for sports areas - Indoor surfaces for multi sports use - Specification.
EN ISO 24011	2012	Resilient floor coverings- Specification for plain and decorative linoleum
<b>The following documents are mentioned only in the Guidance text:</b>		
AS 1428		Design for access and mobility
AS/NZS 1428.4.1	2009	Means to assist the orientation of people with vision impairment - Tactile ground surface indicators
AS/NZS 1859.4	2004	Wet-processed fibreboard
SA HB 197	1999	An introductory guide to the slip resistance of pedestrian surface materials
SA HB 198	2014	Guide to the specification and testing of slip resistance of pedestrian surfaces
BCA Spec C1.10	2016	Fire resistance - Fire hazard properties
CCAA Data Sheet MC	2007	Moisture in concrete and moisture-sensitive finishes and coatings
NATSPEC DES 001	2016	Slip resistance performance
NATSPEC DES 007	2007	Static control floors
NATSPEC DES 008	2015	Preparation of concrete substrates
NATSPEC DES 020	2011	Fire behaviour of building materials and assemblies
NATSPEC DES 027	2016	Impact sound insulation
NATSPEC GEN 006	2007	Product specifying and substitution
NATSPEC GEN 024	2015	Using NATSPEC selections schedules
NATSPEC TR 01	2018	Specifying ESD
EN 12235	2013	Surfaces for sports areas. Determination of vertical ball behaviour.
EN 13036		Road and airfield surface characteristics. Test methods.
EN 13036-4	2011	Method for measurement of slip/skid resistance of a surface. The pendulum test.
EN 14808	2005	Surfaces for sports areas - Determination of shock absorption
EN 14809	2005	Surfaces for sports areas - Determination of vertical deformation