# 0651p REGUPOL in resilient finishes

Branded worksection

This branded worksection *Template* has been developed by NATSPEC in conjunction with **REGUPOL Australia Pty. Ltd.** (the Product Partner) and may be used whilst the Product Partner is licensed to distribute it. The copyright remains with NATSPEC. As with all NATSPEC worksections, it is the responsibility of the user to make sure it is completed appropriately for the project. The user should also review its applicability for local conditions and regulations. Check [www.natspec.com.au](https://www.natspec.com.au/) for the latest updated version.

Worksection abstract

This branded worksection *Template* is applicable to resilient sheet, and tile finishes with associated underlay including synthetic sporting surfaces and rubber products supplied by REGUPOL Australia Pty. Ltd.

How to use this worksection

Customise this worksection *Template* for each project. See [A guide to NATSPEC worksections](https://www.natspec.com.au/a-guide-to-natspec-worksections) ([www.natspec.com.au](https://www.natspec.com.au/a-guide-to-natspec-worksections)) for information on *Template* structure, word styles, and completing a worksection.

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 Decking, sheet and panel flooring* for substrates.
* *0541 Access floors*.
* *0652 Carpets*.
* *0654 Multilayered board flooring* for hybrid modular flooring.
* *0656 Floor sanding and finishing* for substrates.
* *0657 Resin based seamless flooring*.
* *0802 Hydraulic design and install* for fitting to floor wastes.

Related branded worksections include:

* *0473p REGUPOL acoustic floor underlays*.

Material not provided by Product Partner

This worksection includes generic material which may not be provided by REGUPOL Australia, including:

* Corklinoleum.
* Cork tiles.
* Linoleum.
* PVC.
* Vinyl.

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.
* Hybrid modular flooring to AS 1884 (2021) is documented in *0654 Multilayered board flooring*.

The *Normal* style text of this worksection may refer to items as being documented elsewhere in the contract documentation. Make sure they are documented.

Search [acumen.architecture.com.au](https://acumen.architecture.com.au/), the Australian Institute of Architects' practice advisory subscription service, for notes on the following:

* Guarantees and warranties.
* Polyvinyl chloride (PVC).

Specifying ESD

REGUPOL consists of the following sustainable product attributes:

* REGUPOL Australia rubber flooring, with post-consumer rubber content, and adhesives have low VOC content.

The following may be specified by retaining default text:

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

The following may be specified by 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 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 NATSPEC TECHreport TR 01​ on specifying ESD.

## General

REGUPOL Australia Pty. Ltd. is the Australasian office and distribution network for the REGUPOL sonus acoustic underlays and REGUPOL everroll sustainable flooring product brands. The company has been operating in the region for over 30 years offering solution-based products and technical services for all kinds of sustainable flooring and soundproofing solution based projects. The company is conveniently located at Smeaton Grange, NSW and offers the nationwide distribution of REGUPOL sonus and REGUPOL everroll product lines.

### Responsibilities

#### General

Requirement: Provide rubber surface coverings supplied by REGUPOL Australia and other resilient floor finishes to substrates, as documented.

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

### Company contacts

#### REGUPOL Australia technical contacts

Website: [www.regupol.com.au](https://www.regupol.com.au/)

### 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.

### Standards

#### General

Installation: To AS 1884 (2021).

#### Slip resistance

Classification: To AS 4586 (2013).

See NATSPEC TECHnote DES 001 on slip resistance performance.

### Manufacturer's documents

#### Technical manuals

Manuals: [www.regupol.com.au](https://www.regupol.com.au/)

### Interpretation

#### Definitions

General: For the purposes of this worksection, the definitions given in AS 1884 (2021) and the following apply:

* Acoustic underlay: A resilient material laid between the subfloor and the flooring material to provide sound isolation.
* Resilient floor coverings classification: To EN ISO 10874 (2012).
* EN ISO 10874 (2012) 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 rubber, cork, plywood or in situ levelling compound to provide a smooth and flat surface for flooring installation. Rubber and cork underlays have acoustic sound absorbing properties.

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

### SUBMISSIONS

#### Certification

General: Submit a certificate of conformity for static dissipative and static conductive floor installations.

#### Fire performance

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

#### Operation and maintenance manuals

Requirement: Submit manual to **COMPLETION**, **Operation and maintenance manuals**.

#### 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 (2013).

Evidence of delivery: Submit delivery docket as evidence of delivery of

If evidence of delivery to site is required for particular products, consider including this *Optional* style text by changing to *Normal* style.

#### 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:

* Sheets: 450 x 450 mm.
* Tiles: A whole tile or 0.09 m2, whichever is the greater.
* Linear accessories, including coving, skirting, stair nosing and protection strips: 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:
* Size (mm):

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

#### Subcontractors

General: Submit names and contact details of proposed suppliers and installers.

Delete if supplier/installer details are not required.

Substrate acceptance: Submit evidence of installer’s acceptance of the flooring substrate before starting the installation.

#### Tests

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

Site tests: Submit results, as follows:

* Moisture content test.
* Surface pH test.
* Slip resistance test of completed installation.

If on-site slip resistance tests are documented, include this *Optional* style text by changing to *Normal* style text.

#### Warranties

Requirement: Submit warranties to **COMPLETION**, **Warranties**.

### Inspection

#### Notice

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

* Substrate immediately before fixing resilient finishes or underlay.
* Trial set-outs before execution.
* 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.

## Products

### General

#### Product substitution

Other products: Conform to **SUBSTITUTIONS** in *0171 General requirements*.

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

#### Storage and handling

Requirement: Store and handle to the manufacturer’s recommendations.

#### Product identification

General: Marked to show the following:

* Manufacturer’s identification.
* Product brand name.
* Product type.
* Quantity.
* Product reference code and batch number.
* Date of manufacture.

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

### FIRE PERFORMANCE

#### Fire hazard properties

Critical radiant flux: Tested to AS ISO 9239.1 (2003).

Non-sprinklered buildings: The flooring finish must have maximum *smoke development rate* of 750 percent-minutes tested to AS ISO 9239.1 (2003).

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

### 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 (2000), Type B, category 2 minimum.

Thickness: 5 mm minimum.

#### Wet process fibreboard (hardboard) underlay

Standard: To AS/NZS 1859.4 (2018).

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

Thickness: 5.5 mm.

#### REGUPOL acoustic underlay

Product: REGUPOL sonus core.

Thickness:

Select from 10 mm or 15 mm.

**MOISTURE BARRIER**

If testing to AS 1884 (2021) shows the moisture content of the concrete slab exceeds the requirements of AS 1884 (2021) or the manufacturer’s recommendations, a moisture barrier may be required. If a moisture suppression system is acceptable, consider including this *Optional* style text by changing to *Normal* style text. See NATSPEC TECHnote DES 008 on the preparation of concrete substrates.

General

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

Product: REGUPOL barrier 99-101 two part water based epoxy sealer.

### Adhesives

#### General

Requirement: To the resilient finishes manufacturer’s recommendations.

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

### Sheets, tiles and planks

#### REGUPOL Australia rubber

Product:

Application: REGUPOL everroll is a sustainable rubber flooring collection offering five (5) distinctive product ranges with a total of 45 colours to choose from. With featured benefits of safety, comfort, resilience and strength, REGUPOL everroll makes an excellent flooring choice within commercial, retail, education and community facilities. All of the REGUPOL everroll flooring products are homogeneous, have no wear layer and are PVC free. The product is available in rolls, modular tiles, planks and hexagons.

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

* REGUPOL everroll classic range: Fifteen (15) colours make up the REGUPOL everroll classic range. Manufactured from quality recycled rubber and EPDM granulates bound with polyurethane. Available in 4 mm and 8 mm thickness with selected colours available in 12 mm thickness.
* REGUPOL everroll vitality range: Three (3) colours make up the REGUPOL everroll vitality range. Manufactured from high quality recycled rubber and EPDM granulates bound with polyurethane. Available in 4 mm thickness.
* REGUPOL everroll ultimate range: Twenty Two (22) colours make up the REGUPOL everroll ultimate range. Manufactured from high quality EPDM granulates bound with polyurethane. Available in 4 mm thickness with selected colours available in 8 mm thickness.
* REGUPOL everroll diamond range: Two (2) colours make up the REGUPOL everroll diamond range. Manufactured from high quality EPDM granulates bound with polyurethane. Available in 4 mm thickness.
* REGUPOL everroll savanna range: Three (3) colours make up the REGUPOL everroll savanna range. Manufactured from high quality EPDM granulates bound with polyurethane. Available in 3 mm thickness.

Thickness:

Adhesive:

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

* REGUPOL adhesive 43-102 one part multi-use for dry areas.
* REGUPOL adhesive 40-203 one part polyurethane for wet areas.
* REGUPOL adhesive 41-103 resilient two part polyurethane – fast setting for wet areas.

Primer: REGUPOL primer 90-102.

For dry areas only.

Sealer: REGUPOL PU 21-306 Reguseal.

Sealing can provide ease of cleaning and maintenance of the floor.  Delete if sealing is not required.

Reguseal is a penetrating sealer made with water-based polyurethane and is suitable for green building projects. It is a flexible clear coating, which provides a matt finish to REGUPOL everroll products. Reapplication is expected every 3 to 4 years. It is not suitable for use in outdoor areas and wet areas.

REGUPOL everroll can also be supplied pre-sealed. Application of Reguseal to REGUPOL everroll may affect the slip resistance classification, colour and texture of the specified product. Consult the flooring manufacturer.

Lead time:

#### Cork tiles

Standard: To EN 12104 (2023).

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/m3 may be available for heavy contract use.

#### Linoleum

Standard: To EN ISO 24011 (2012).

#### Corklinoleum

Standard: To EN 688 (2011).

#### Polyvinyl chloride (PVC)

Resilient floor covering, homogeneous: To EN ISO 10581 (2020).

Resilient floor covering, heterogeneous: To EN ISO 10582 (2018).

Resilient floor covering, jute or polyester felt backing: To EN 650 (2012).

Resilient floor covering, with foam layer: To EN 651 (2011).

Resilient floor covering, with particle based enhanced slip resistance: To EN 13845 (2017).

Resilient floor covering, semi-flexible polyvinyl chloride tiles: To EN ISO 10595 (2012).

Proprietary PVC products will generally be imported and conform to overseas standards. 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.

#### Static control flooring

See NATSPEC TECHnote DES 007 on static control floors.

General: Unbacked flexible sheet with electrical resistance.

Sheet products with antistatic properties generally refer to static dissipative or static conductive grades that provide static control. However, some standard products will provide some degree of static control and may prove adequate.

#### Acoustic sheet vinyl

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

Acoustic underlay thickness: 2 mm.

For built-up applications using a separate acoustic underlay, a tested system from a single manufacturer is preferable to a combination of products from different manufacturers. Single layer resilient backed sheet vinyl may provide an alternative but with a lower insulation rating.

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

#### Inlaid vinyl sheet

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

### Synthetic sporting surfaces

#### REGUPOL Australia rubber sporting surfaces

General: Resilient rubber coverings with sound and impact absorbing qualities suitable for sporting activities.

Surface finish product: [compltete/delete]

Application: REGUPOL everroll is a sustainable rubber flooring collection offering three (3) distinctive product ranges with a total of 43 colours to choose from. With featured benefits of safety, comfort, resilience and strength REGUPOL everroll makes an excellent flooring choice within the sports, leisure and aquatic industries. All of the REGUPOL everroll flooring products are homogeneous, have no wear layer and are PVC free. The product is available in rolls, modular tiles, planks and hexagons.

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

* REGUPOL everroll classic range: Fifteen (15) colours make up the REGUPOL everroll classic range. Manufactured from quality recycled rubber and EPDM granulates bound with polyurethane. Available in 4 mm and 8 mm thickness with selected colours available in 12 mm thickness.
* REGUPOL everroll vitality range: Three (3) colours make up the REGUPOL everroll vitality range. Manufactured from high quality recycled rubber and EPDM granulates bound with polyurethane. Available in 4 mm thickness.
* REGUPOL everroll ultimate range: Twenty Two (22) colours make up the REGUPOL everroll ultimate range. Manufactured from high quality EPDM granulates bound with polyurethane. Available in 4 mm thickness with selected colours available in 8 mm thickness.

Underlay: REGUPOL Shockpad.

Contact REGUPOL Australia for information on the range of shock and sound absorbing underlays for use under the REGUPOL everroll collection of rubber flooring in sports and impact safety applications.

Lead time: [compltete/delete]

### Other materials

#### Tactile ground surface indicators

Standard: To AS/NZS 1428.4.1 (2009).

The NCC cites AS 1428.4 (1992) and AS/NZS 1428.4.1 (2009). The current edition is AS/NZS 1428.4.1 (2009).

Delete if none required.

## Execution

### Subcontractors

#### General

Requirement: Use specialist installers recommended by the material manufacturers.

REGUPOL Australia can assist in recommending suitable installers throughout Australia.

### Preparation

#### Substrates

General: To AS 1884 (2021) Section 3.

#### Substrate tolerance table

| Property | Length of straightedge laid in any direction | Max. deviation under the straightedge |
| --- | --- | --- |
| Planeness | 2000 mm | 4 mm |
| Abrupt deviation tolerance | 150 mm | 0.5 mm |

Planeness tolerance class: Nominate Class A in the **Flatness tolerance class table** in *0315 Concrete finishes* and **TOLERANCES** in *0612 Cementitious toppings* for locations where resilient finishes locations 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 on Moisture in concrete and moisture-sensitive finishes and coatings (2007)*.

Requirement: Do not start installation of the resilient finishes until the concrete substrate conforms to AS 1884 (2021) clause 3.1 and the adhesive and resilient finish manufacturers’ recommendations.

AS 1884 (2021) sets out minimum requirements for moisture content surface pH, and surface quality 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.

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.

* Surface quality: Remove projections and fill voids and hollows with a smoothing and 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* style 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, particleboard and fibre cement sheet substrates

Requirement: Do not start installation of the resilient finishes until the timber, plywood, particleboard and fibre cement substrate conforms to AS 1884 (2021) clause 3.6.

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

Conditioning of floor covering and subfloor: To AS 1884 (2021) clause 4.1 and manufacturer’s recommendations.

#### Trial set-out

General: Prepare a trial tile and plank set-out to each area.

Delete if not required.

### Testing

*0171 General requirements* defines different tests in **INTERPRETATION**, **Definitions** and calls for an inspection and testing plan in **TESTING - GENERALLY**, **Inspection and testing plan**.

#### Moisture content tests

General: Test substrate for suitability for the installation of resilient floor coverings to AS 1884 (2021) Appendix A.

* Maximum relative humidity of concrete: To AS 1884 (2021) Appendix A3.2.
* Moisture content of timber, plywood and particleboard subfloors: To AS 1884 (2021) Appendix A3.3.

Some manufacturers may provide products that can be used on concrete slabs with a moisture content greater than the maximum allowed by AS 1884 (2021), or that require a moisture content less than the maximum allowed by AS 1884 (2021).

#### Surface pH tests

General: Test concrete subfloor for suitability for the installation of resilient floor coverings to AS 1884 (2021) Appendix C.

* 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.

Slip resistance tests

Slip resistance of completed installation: To AS 4663 (2013).

If on-site slip resistance tests are required in addition to type tests, consider including this *Optional* style text by changing to *Normal* style text. Site testing is expensive. See NATSPEC TECHnote DES 001 on slip resistance.

### Installation

#### REGUPOL Australia rubber sheet flooring

General: To AS 1884 (2021) Section 5 and REGUPOL Australia's recommendations.

#### 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.

#### Plank set-out

General: Set out planks from centre of room. Align patterns, texture and grain in one direction.

#### Edges

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

#### Expansion joints

General: To the manufacturer's recommendations for joint widths, and area and length limitations.

#### Joints

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

Delete if joints are welded.

Doorways: Where changes of floor finish occur at doorways, locate the joint on the centreline of the door leaf in the closed position.

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

#### 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:

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.

#### Scrap recycling

Participating supplier:

Some manufacturers will recycle site scrap vinyl of their own brand.

### Tiling

#### Vinyl tiles and planks

Laying: Lay as follows:

* Loose lay: Interlock tongue and groove edges of rigid planks. Tap down with rubber mallet.
* Adhesive fix: Apply acrylic adhesive over whole subfloor surface.

#### 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*.

#### REGUPOL Australia rubber tile flooring

General: To REGUPOL Australia's recommendations.

Laying: Dry lay tiles before installation. Lay tiles in stretcher bond. Match edges and align joints.

Stretcher bonding, where each alternate tile is laid so that the end of the adjacent tile is in the centre of the ones on either side of it, reduces the possibility of the tiles lifting at the point where the four corners join.

### Sheeting

#### Laying vinyl

Requirement: To AS 1884 (2021) Section 5 and to REGUPOL Australia's recommendations.

#### Welded joints

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

Thermal 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 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. Document welding type in SELECTIONS **Schedules**.

Epoxy jointing: Join seams with epoxy adhesive.

For slip-resistant vinyl sheet.

#### Conductive flooring

General: Install conductive sheet on a copper grid comprising copper tape 80 µm thick x 10 mm wide adhered to the floor with conductive adhesive. Lay copper tape along each length of sheet and connect it at right angles to a 1 MΩ resistor. Connect to earth with copper tape at 20 to 30 m2 intervals.

The static dissipative requirement will determine the installation method, adjust text above as necessary. 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.

### 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.

Preformed and formed in situ are alternatives. Delete as required.

### 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.

#### 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.

#### 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.

#### 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.

#### Vinyl skirting

Select from the following.

Feather edge: 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: 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.

#### REGUPOL Australia rubber skirtings

General: Cut from continuous strips of REGUPOL everroll sheet. Seal floor junction with polyurethane sealer.

Sealer:

e.g. Sikaflex 11FC.

#### Coved skirtings

Install 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**.

### COMPLETION

#### Protection

Finished floor surface: Keep traffic off floors for a minimum of 24 hours after laying or until bonding has set or, 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. Buff and polish. Before the date for practical completion, mop and leave the finished surface clean and undamaged on completion.

REGUPOL Australia rubber: Conform to the REGUPOL Australia cleaning guidelines.

#### 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.

#### Operation and maintenance manuals

General: Prepare a manual that includes manufacturer’s recommendations for care and maintenance for each type of finish.

Compliance with this clause targets the Operations and Maintenance requirement within the Minimum Expectation level of the Verification and Handover credit in Green Star Buildings (2021).

#### Warranties

Requirement: For each type of resilient finish specified, submit the manufacturer and installer’s warranty of the material, workmanship and application.

Warranty items:

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

Warranty terms:

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

REGUPOL Australia provides a 5 year product warranty. Check REGUPOL Australia for warranty conditions.

## Selections

**Schedules** are a tool to specify properties required for products or systems. If the principal permits documentation of the product or system by proprietary name, some of the properties may be unnecessary and can be deleted. Document the product or system's location or application here and/or on the drawings with a matching project code. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

### Products

#### Sheet and tile schedule

|  | A | B | C |
| --- | --- | --- | --- |
| Type |  |  |  |
| Product |  |  |  |
| Form |  |  |  |
| Colour |  |  |  |
| Pattern |  |  |  |
| Tile laying pattern |  |  |  |
| Sheet width (mm) |  |  |  |
| Thickness (mm) |  |  |  |
| Vinyl chip size (mm) |  |  |  |
| Surface |  |  |  |
| Slip resistance classification |  |  |  |
| Critical radiant flux |  |  |  |
| Airborne sound insulation |  |  |  |
| Impact sound insulation |  |  |  |
| Tile dimensions (mm) |  |  |  |
| Underlay |  |  |  |
| Skirting |  |  |  |
| Welded joints |  |  |  |
| Finish |  |  |  |
| Roll after laying |  |  |  |

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Much of the scheduled information will be unnecessary if resilient finishes are specified by proprietary items.

Include any particular requirements not otherwise specified, such as resistance to wear, indentation, chemicals, light or fire. Consult the manufacturer.

Type: e.g. REGUPOL Rubber, Linoleum, Cork, Vinyl (PVC), Antistatic vinyl, Conductive vinyl, Cushion backed vinyl, Vinyl counter topping.

Product: e.g. REGUPOL everroll classic, REGUPOL everroll vitality, REGUPOL everroll ultimate, REGUPOL everroll diamond, REGUPOL everroll savanna.

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

Pattern: e.g. Marbled or Plain (Linoleum, PVC).

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

Thickness: e.g.:

* For REGUPOL Australia rubber: 4 or 8 mm. Other sizes available (3, 6, 10, 12 mm) subject to lead times. Check with REGUPOL Australia.
* For cork: 4.75 or 6.3 mm (6.3 mm is recommended for concrete floors).
* For flexible terrazzo tiles: 4.76 mm.
* For flexible PVC sheet or tiles: 1.5, 2, 2.5 or 3 mm.
* For semi-rigid PVC tiles: 1.5, 2, 2.5, or 3 mm.
* For linoleum sheet or tiles: 2 or 2.5 mm.

Surface:

* For cork: Smooth surface only.
* For PVC: Normally smooth surface, but various textured or inlaid slip-resistant surfaces are available. Semi-rigid tiles may have a factory-applied protective coating. Consult the manufacturer for details of the available surfaces.

Slip resistance classification: Refer to NATSPEC TECHnote DES 001, SA HB 197 (1999) and SA HB 198 (2014). Select the slip resistance tests and classification to suit the location and application.

Critical radiant flux: Include the appropriate value from BCA (2022) Table S7C3 for the building class.

Airborne sound insulation: State the required rating to AS/NZS ISO 717.1 (2004) for either the weighted sound reduction index (Rw) or weighted sound reduction index with spectrum adaptation (Rw + Ctr). This rating is for a building system e.g. partition wall, of which the building element is only one component. It may be better to provide the rating in the appropriate system schedule. It is advisable to obtain the advice of an acoustic consultant on the selection of an Rw or Rw + Ctr rating for airborne sound transmission reduction. Refer to NATSPEC TECHnote DES 032 for information.

Impact sound insulation: State the required rating to AS ISO 717.2 (2004) for the weighted normalised impact sound pressure level (Ln,w). This rating is for a building system of which the building element is only one component. It may be better to provide the rating in the appropriate system schedule. It is advisable to obtain the advice of an acoustic consultant on the selection of an Ln,w rating for impact sound transmission reduction. Refer to NATSPEC TECHnote DES 027 for information.

Tile dimensions:

Consult the manufacturer for available sizes and thicknesses:

* PVC tiles: 300 x 300 mm is standard size
* Portuguese cork tiles: 305 x 305 mm.
* Rubber tiles: Various sizes and formats available, check with REGUPOL Australia.

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

Welded joints. Thermal, Chemical or Epoxy.

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).

Roll after laying: Refer to manufacturer’s recommendations.

#### Synthetic sporting surfaces schedule

|  | A | B | C |
| --- | --- | --- | --- |
| Type |  |  |  |
| Sport/activity |  |  |  |
| Surface finish product |  |  |  |
| Underlay |  |  |  |
| Surface product |  |  |  |
| Colour |  |  |  |
| Colour density |  |  |  |
| Skirting |  |  |  |
| Critical radiant flux |  |  |  |
| Slip resistance classification |  |  |  |
| Surface marking method |  |  |  |

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Type: e.g. Indoor or Outdoor.

Surface finish product: e.g. REGUPOL everroll classic, REGUPOL everroll vitality, REGUPOL everroll ultimate.

Underlay: REGUPOL Australia REGUPOL sonus core acoustic underlay, REGUPOL Shockpad.

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

Critical radiant flux: Include the appropriate value from BCA (2022) Table S7C3 for the building class.

Slip resistance classification: For selections refer to NATSPEC TECHnote DES 001, SA HB 197 (1999) and SA HB 198 (2014).

#### Tactile ground surface indicators schedule

|  | A | B | C |
| --- | --- | --- | --- |
| Product |  |  |  |
| Type |  |  |  |
| Edge protector |  |  |  |
| Material |  |  |  |
| Colour |  |  |  |

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Product: Refer to manufacturer’s range. Many of the following items in the schedule may not be required if the product identification is sufficient. Delete any items below if sufficiently covered by the product details nominated here.

Type: Directional, Warning or Integrated. Both warning and directional indicators may be required.

Edge protector: Button bevelled, Button round, Bar thin or Bar thick.

Material: Porcelain, Stainless steel, Thermoplastic urethane injection moulded (TPU), Rubber. Refer to manufacturer.

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 (2009) Appendix E. Refer to manufacturer’s range. The NCC cites AS 1428.4 (1992) and AS/NZS 1428.4.1 (2009). The current edition is AS/NZS 1428.4.1 (2009).

#### Accessories schedule

|  | A | B | C |
| --- | --- | --- | --- |
| Skirting |  |  |  |
| Edge strip material |  |  |  |
| PVC cover strip: Width (mm) |  |  |  |
| PVC cover strip: Colour |  |  |  |

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Skirting: e.g. Feather edge, Flat or coved vinyl, Coved rubber, or Site formed coving. If preformed, nominate whether skirting is sit-in or sit-on. Sit-on is surface mounted after the floor material is laid.

Edge strip material: e.g. Brass, Stainless steel, Aluminium.

PVC cover strip:

Width: e.g. 25 mm, 50 m.

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 *0802 Hydraulic design and install*.

#### Control joints schedule – proprietary slide plate

|  | A | B | C |
| --- | --- | --- | --- |
| Location |  |  |  |
| Product |  |  |  |
| Material |  |  |  |
| Insert colour |  |  |  |

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Location: State here or show on drawings.

Product: 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.

REFERENCED DOCUMENTS

**The following documents are incorporated into this worksection by reference:**

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 Reconstituted wood-based panels - Specifications

AS/NZS 1859.4 2018 Wet process fibreboard

AS 1884 2021 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 ISO 10581 2020 Resilient floor coverings - Homogeneous poly(vinyl chloride) floor covering - Specifications

EN ISO 10582 2018 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 2023 Resilient floor coverings - Cork floor tiles - Specification

EN 13845 2017 Resilient floor coverings - Polyvinyl chloride floor coverings with particle based enhanced slip resistance - Specification

EN ISO 24011 2012 Resilient floor coverings - Specification for plain and decorative linoleum

**The following documents are mentioned only in the *Guidance* text:**

AS ISO 717 Acoustics - Rating of sound insulation in buildings and of building elements

AS/NZS ISO 717.1 2004 Airborne sound insulation

AS ISO 717.2 2004 Impact sound insulation

AS 1428 Design for access and mobility

AS 1428.4 1992 Tactile ground surface indicators for the orientation of people with vision impairment

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 Table S7C3 2022 Fire resistance - Fire hazard properties - Floor linings and floor coverings - Critical radiant flux (CHF in kW/m²) of floor linings and floor coverings

CCAA Data Sheet MC 2007 Moisture in concrete and moisture-sensitive finishes and coatings

GBCA Buildings 2021 Green Star Buildings

NATSPEC DES 001 Slip resistance performance

NATSPEC DES 007 Static control floors

NATSPEC DES 008 Preparation of concrete substrates

NATSPEC DES 020 Fire behaviour of building materials and assemblies

NATSPEC DES 027 Impact sound insulation

NATSPEC DES 032 Airborne sound insulation

NATSPEC GEN 006 Product specifying and substitution

NATSPEC GEN 024 Using NATSPEC selections schedules

NATSPEC TR 01 Specifying ESD