

**0473P REGUPOL ACOUSTIC FLOOR UNDERLAYS****Branded worksection**

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**Worksection abstract**

This branded worksection *Template* is applicable to reducing impact sound transmission through floors using REGUPOL sonus acoustic underlays and systems for a range of floor finishes. NATSPEC does not have an *Acoustic floor underlay* generic worksection.

**Background**

For information on sound insulation and the NCC, refer to the non-mandatory *ABCB Sound transmission and insulation in buildings handbook (2024)*. This sets out the objectives of the NCC, acoustic issues covered, the compliance process and options to satisfy the NCC. Appropriate design and detailing are essential, particularly for flanking sound insulation and services penetrations. The handbook includes typical details, notes on construction and recommended design practices.

Refer to NATSPEC TECHnote DES 027 and NATSPEC TECHnote DES 032 for information on impact and airborne sound insulation, including specifying sound insulation properties using appropriate terms, symbols and units.

**How to use this worksection**

Customise this worksection *Template* for each project. See [A guide to NATSPEC worksections \(www.natspec.com.au\)](http://www.natspec.com.au) 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, including:

- *0471 Thermal insulation and pliable membranes* for thermal insulation to roofs and external walls.
- *0472 Acoustic insulation* for acoustic insulation to walls, partitions and ceilings.
- *0530 Suspended ceilings - combined* for acoustic ceiling tile suspended ceiling systems.
- *0621 Waterproofing - wet areas* for wet area membranes.
- *0631 Ceramic tiling*.
- *0632 Stone and terrazzo tiling*.
- *0651 Resilient finishes*.
- *0652 Carpets*.
- *0654 Multilayered board flooring* and *0655 Timber flooring* for acoustic floor underlays.

Related branded worksections include:

- *0651p REGUPOL in resilient finishes*.

**Documenting this and related work**

You may document this and related work as follows:

- Document underlays that are compatible with other components of the flooring system, particularly wet area membranes and adhesives.

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

- Guarantees and warranties.

**Specifying ESD**

REGUPOL sonus acoustic floor underlay consists of the following sustainable product attributes:

- Recycled material content: The underlays are manufactured from materials such as recycled rubber and post-consumer cork.
- Recyclable.
- Low VOC emission content.

Refer to NATSPEC TECHreport TR 01 on specifying ESD.

## 1 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 35 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 nationwide distribution of the REGUPOL sonus and REGUPOL everroll product lines.

### 1.1 RESPONSIBILITIES

#### General

Requirement: Provide REGUPOL sonus acoustic floor underlay systems, as documented.

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

*0171 General requirements* calls for sealing of penetrations around conduits and sleeves to maintain acoustic rating, if required.

It is the responsibility of the designer to design and document floor, wall and ceiling systems to the requirements of the NCC for sound insulation. If the design brief exceeds the performance requirements of the NCC, document in the relevant worksection or on the drawings.

### 1.2 COMPANY CONTACTS

#### REGUPOL Australia technical contacts

Website: [acoustics.regupol.com.au](http://acoustics.regupol.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 MANUFACTURER'S DOCUMENTS

#### Technical manuals

Technical information: [acoustics.regupol.com.au](http://acoustics.regupol.com.au)

### 1.5 INTERPRETATION

#### Definitions

General: For the purposes of this worksection, the following definitions apply:

- Acoustic underlay: A resilient material laid between the subfloor and the flooring material to provide sound isolation.
- Airborne sound: Sound radiated directly from a source, such as a loudspeaker or machine, into the surrounding air.
- Attenuation: The reduction of noise or vibration, by whatever method necessary, usually expressed in decibels.
- Impact sound: Sound caused by impacts on building structure. Typical sources include footsteps, dropped objects on horizontal surfaces and the slamming of doors.
- Sound: Pressure fluctuations in air within the audible range.
- Sound absorption: The sensation perceived by the sense of hearing and the process by which sound energy is converted into heat, leading to the reduction in sound pressure level.
- Sound insulation (isolation): Reduction of sound energy passing through building elements.
- Structure-borne sound: Sound waves transmitted within the building structure and re-radiated into other spaces as airborne sound. Typical sources include direct impact from dropped objects and vibrating machinery.

- 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.

## 1.6 SUBMISSIONS

### Fire performance

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

### Products and materials

Manufacturer's data: Submit the manufacturer's data for each type of underlay, and the manufacturer's recommendations for its application in the project including, if relevant, the following:

- Thickness and width of sheet or size of tile.
- Adhesive method specification approved by manufacturer.

Type tests: Submit test results of the following:

- Weighted normalised impact sound pressure level ( $L_{n,w}$ ): To **PRODUCTS, GENERAL, Tests**.

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 **PRODUCTS**.

### Samples

Requirement: Submit samples to **PRODUCTS, GENERAL, Samples**.

### Subcontractors

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

Evidence of experience: [complete/delete]

Delete if supplier/installer details are not required.

### Substrate acceptance

Requirement: Submit evidence of installer's acceptance of the flooring substrate before starting the installation.

### Tests

Detail the tests required in **EXECUTION** and list the submissions required here.

Site tests: Submit test results of the following:

- Moisture content to **TESTING, Moisture content tests**.
- Surface pH to **TESTING, Surface pH**.
- Weighted standardised impact sound pressure level ( $L'_{nT,w}$ ) to **TESTING, Impact sound tests**.

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

### Warranties

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

## 1.7 INSPECTION

### Notice

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

- Substrate immediately before fixing the underlay.
- Installed underlay before it is covered up or concealed.
- Completed installation.

Edit 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 **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.

#### 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.

#### Samples

Requirement: Provide labelled samples of underlays illustrating the product code or range 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.

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]

#### Tests

0171 *General requirements* defines different tests in **INTERPRETATION, Definitions**.

Weighted normalised impact sound pressure level (Ln,w): To the NCC cited AS ISO 717.2 (2004).

The NCC cites AS ISO 717.2 (2004). The current edition is AS ISO 717.2 (2024).

### 2.2 FIRE PERFORMANCE

#### Fire hazard properties

See NATSPEC TECHnote DES 003 for more information on fire hazard properties of insulation and pliable membranes.

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

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

REGUPOL sonus acoustic underlays have been tested to AS ISO 9239.1 (2003) as a component of a floor system only. Test specimens for AS ISO 9239.1 (2003) must include the proposed floor finish, substrate, underlays and adhesives (if used) and be representative of the flooring in its end use.

If smoke development rate is required, request testing of the proposed floor system to AS ISO 9239.1 (2003) here or in the relevant floor finishes worksection.

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

### 2.3 INSULATION MATERIALS

#### VOC limits

Total VOC limit:

- Generally: 0.5 mg/m<sup>2</sup>.

**Adhesives**

General: To REGUPOL recommendations and compatible with the substrate and the applied flooring material.

**Sealants**

Acoustic sealant: Elastic, water based, high performing, non-hardening sealant that maintains high acoustic performance in floors and walls.

Alternatives: Fire-resisting sealants are claimed to satisfy most acoustic properties.

Fire-resisting: Non-hardening sealant compatible with the host materials and having a fire-resistance level equal to that of the floor it seals.

Sealant strips: Closed cell resilient foam.

**2.4 REGUPOL ACOUSTIC FLOOR UNDERLAYS****REGUPOL sonus eco 5 mm**

Description: Styrene butadiene rubber (SBR) and cork particles, rebounded with polyurethane binder.

Application: A soundproofing acoustic underlay manufactured from recycled SBR rubber granulates and cork, bound with polyurethane. The product composition produces an effective acoustic barrier to install parquetry and timber floors directly to the surface finish. The cork and rubber combination provides excellent cohesion between the polyurethane adhesive, the acoustic underlay and the timber floor. The product is available in rolls and modular tiles for fast installation.

**Product Data**

Roll length: 20 lineal metres.

Roll width: 1000 mm.

Modular tiles: 1050 x 500 mm.

Thickness: 5 mm.

**REGUPOL sonus multi 4.5 mm and REGUPOL sonus multi 9 mm**

Description: Polyurethane bonded cork particles and polyurethane foam.

Application: A soundproofing acoustic underlay manufactured from high quality PUR foam granulates and cork, bound with polyurethane. The unique material composition offers excellent cohesion qualities making it a preferred material choice for approved direct fix installations of ceramic tiles, stone and marble floors. The product is lightweight and suitable for use with under floor heating systems. The product is available in rolls and modular tiles for fast installation.

**Product Data**

Roll length: 20 lineal metres.

Roll width: 1000 mm.

Modular tiles: 1050 x 500 mm.

Thickness: 4.5 mm and 9 mm.

Note: When installing tiles over 9 mm thickness the tile size should be 300 x 300 mm and above in size.

**REGUPOL sonus multi 3 mm**

Description: Polyurethane bonded cork particles and polyurethane foam.

Application: A soundproofing acoustic underlay manufactured from high quality PUR foam granulates and cork, bound with polyurethane. The unique material composition allows the acoustic underlay to be compatible with PVC flooring and will not cause plasticiser migration. The sanded finish and smooth texture of the underlay enables the approved resilient flooring to be installed directly to the underlay, without the need for separation layers. The product is available in rolls.

**Product Data**

Roll length: 20 lineal metres.

Roll width: 1000 mm.

Thickness: 3 mm.

**REGUPOL sonus core and REGUPOL sonus curve**

Description: Selected recycled rubber particles bounded together with a highly elastic polyurethane binder.

Application: The REGUPOL sonus core and REGUPOL sonus curve is a range of soundproofing acoustic underlays manufactured from recycled SBR rubber granulates, bound with polyurethane. The underlays are manufactured to a specific density and finished in either a flat sheet (known as REGUPOL sonus core) or a 3-D dimple profile (known as REGUPOL sonus curve). The finished product is technically superior when it comes to solid T&G, plywood and heavy duty screed beds. The 3-D sonus curve profile allows the impact sound generated to dissipate and reduce. All products are available in rolls.

**Product Data**

Roll length: Varies 10 and 20 lineal metres.

Roll width: Varies 1150 mm and 1250 mm.

Thickness: 5 mm, 10 mm and 15 mm in flat sheet profile. 6/3 mm dimple, 8/4 mm dimple and 17/8 mm dimple.

6/3 mm has a 6 mm nominal thickness and a 3 mm dimpled surface on one side.

8/4 mm has an 8 mm nominal thickness and a 4 mm dimpled surface on one side.

17/8 mm has a 17 mm nominal thickness and an 8 mm dimpled surface on one side.

**3 EXECUTION****3.1 PREPARATION**

Delete substrate preparation if documented in the relevant flooring worksection and add cross reference to worksection clause.

**Substrates**

General: To AS 1884 (2021) Section 3.

**Substrate tolerance table**

Property	Length of straightedge laid in any direction (mm)	Maximum deviation under the straightedge (mm)
Planeness	2000	4
Abrupt deviation tolerance	150	0.5

Planeness tolerance class: Nominate Class A in the **Flatness tolerance class table** in 0315 Concrete finishes and **TOLERANCES** in 0612 Cementitious toppings for locations if 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.

Requirement: Do not start installation until the concrete substrate conforms to AS 1884 (2021) clause 3.1.

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.
- Planeness, smoothness, projections: 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.

Cleaning: Remove loose materials or dust.

**Timber, plywood and particleboard substrates**

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

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.

**Storage**

General: Store horizontally and keep dry.

**Working environment**

General: Do not start work before the building is enclosed, wet work is complete and dry, 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 recommendation.

REGUPOL sonus acoustic floor underlay acclimatisation: Unroll the underlay and cut to length, allowing extra length for pull back. Allow all cut lengths to relax and acclimatise for up to 24 hours.

This process allows for dimensional relaxation and temperature equilibration to the room conditions.

**3.2 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**

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.

**Impact sound tests**

Weighted standardised impact sound pressure level ( $L'_{nT,w}$ ) of completed installation: To the NCC cited AS ISO 717.2 (2004).

The NCC cites AS ISO 717.2 (2004). The current edition is AS ISO 717.2 (2024).

A single-number rating, expressed in decibels, of the field measurement of frequency dependent impact sound insulation between rooms in buildings.

If on-site impact sound insulation rating 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 027 for information on the options available for NCC compliance.

**3.3 INSTALLATION****REGUPOL sonus acoustic underlay**

General: To REGUPOL's recommendations.

**3.4 FLANKING SOUND INSULATION**

To preserve the sound reduction properties of the floor system, seal the flanking sound transmission paths during installation, including junctions between partitions and other building surfaces, air gaps, recesses and cut-outs for services.

**Penetrations**

Ductwork and piping: [complete/delete]

0171 *General requirements* calls for the maintenance of the acoustic rating of the penetration. Delete if not appropriate.

**Abutments**

The insulation of flanking sound at abutments is project specific and relies on details, particularly at partition junctions to window mullions that may be subject to horizontal deflection movements

**Seal:**

- Strip: [complete/delete]
- Sealant: [complete/delete]

e.g. Closed cell foam strips and gunned acoustic sealant.

**Trims: [complete/delete]**

e.g. Project specific skirting section to protect the sealant and allow movement.

**3.5 COMPLETION**

**Warranties**

Refer to 0171 General requirements for appropriate warranty type and the terms covered in the warranty.

General: Register project warranty with manufacturer and submit for each product and application.

Type: Manufacturer’s warranty.

Refer to **Warranty types** in 0171 General requirements. Refer also to REGUPOL Australia’s limited product warranty.

Period: 7 years.

Refer to REGUPOL Australia’s limited product warranty.

**4 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.

**4.1 GENERAL**

**Acoustic floor underlays performance schedule**

The performance values apply to the complete flooring assembly. Document sound insulation properties by the appropriate quantities and using the correct terms, symbols and units.

	<b>A</b>	<b>B</b>	<b>C</b>
Fire hazard properties: Critical radiant flux			
Weighted normalised impact sound pressure level (Ln,w)			

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.

Critical radiant flux: Refer to BCA (2022) Spec 7.

Acoustic performance: Refer to NATSPEC TECHnote DES 027 for information on impact sound insulation and NATSPEC TECHnote DES 032 for information on airborne sound insulation.

Weighted normalised impact sound pressure level (Ln,w): A single-number rating, expressed in decibels, of laboratory measured frequency dependent impact sound insulation of a floor/ceiling assembly using a standardised tapping machine. It is determined by reference to AS ISO 717.2 (2004) from measurements of normalised impact sound pressure level over the third-octave band frequency range 100-3150 Hz. The NCC cites AS ISO 717.2 (2004). The current edition is AS ISO 717.2 (2024).

**4.2 REGUPOL SCHEDULES**

Each of the following subclauses covers the REGUPOL sonus acoustic treatment associated with a final floor finish. Delete those not required for the project.

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

**REGUPOL sonus multi acoustic floor insulation – Direct fix ceramic, stone, marble tiling system**

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

e.g. concrete slab, plywood flooring, floorboards with fibre cement underlay.

Product: REGUPOL sonus multi Impact Sound Acoustic Underlay.

Thickness: [complete/delete]

Select from 4.5 mm or 9 mm. Refer to REGUPOL for advice on the most appropriate thickness. Not less than 300 x 300 mm in size, for 9 mm thick REGUPOL sonus multi tiles.

Installation method: Direct fix using manufacturers specified systems and warranted adhesives, screed additives and flexible grouting systems.

Primer: REGUPOL primer 90-102.

For dry areas only.

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

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.

Underlay adhesive: [complete/delete]

Select from:

- REGUPOL adhesive 43-102 one part multi-use flooring adhesive for internal dry areas.
- REGUPOL adhesive 40-203 one part polyurethane adhesive for wet areas and external applications.

For wet area applications install an approved waterproof membrane on the substrate and over the acoustic underlay.

Tiles should be installed over the acoustic underlay with an approved compatible tile adhesive and grouting system.

Confirm with all manufacturers to make sure of compatibility of selected tiles with the underlay and adhesive/s.

### REGUPOL sonus multi acoustic floor insulation – Resilient finishes dual bond system

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

e.g. concrete slab, particleboard flooring, floorboards with fibre cement or hardboard underlay.

Product: REGUPOL sonus multi Impact Sound Acoustic Underlay.

Thickness: 3 mm.

Installation method: Direct stick dual bond using the manufacturer's specified systems and warranted adhesives.

Primer: REGUPOL primer 90-102.

For dry areas only.

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

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.

Underlay adhesive: [complete/delete]

Select from:

- REGUPOL adhesive 43-102 one part multi-use flooring adhesive for dry areas and for dual bonding of the approved resilient floor covering to the REGUPOL sonus multi for internal areas.
- REGUPOL adhesive 41-103 resilient two part polyurethane adhesive for wet areas and for dual bonding of the approved resilient floor covering to the REGUPOL sonus multi for wet areas, high thermal areas and heavy impact commercial areas.

Confirm with all manufacturers to make sure of compatibility of selected resilient finish flooring with the adhesive/s.

### REGUPOL sonus core and REGUPOL sonus curve acoustic floor insulation – Bonded screed system

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

e.g. concrete slab.

Product: REGUPOL sonus core and REGUPOL sonus curve Impact Sound Acoustic Underlay.

Thickness: [complete/delete]

Select from 5 mm, 6/3 mm dimple, 8/4 mm dimple, 10 mm or 17/8 mm dimple. Refer to REGUPOL for advice on the most appropriate thickness.

Installation method: To REGUPOL's recommendations, using the manufacturer's specified systems and warranted adhesives, screed additives and flexible grouting systems.

Primer: REGUPOL primer 90-102.

For dry areas only.

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

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.

Underlay adhesive: [complete/delete]

Select from:

- REGUPOL adhesive 43-102 one part multi-use flooring Adhesive for internal dry areas.
- REGUPOL adhesive 40-203 one part polyurethane adhesive for wet areas and external applications.

For wet area applications install an approved waterproof membrane on the substrate and over the screed.

For bonded screed applications use an approved polymer additive in the screed application. Make sure the minimum bonded screed height is as per REGUPOL's recommendations.

Tiles should be installed over the screed with an approved compatible tile adhesive and grouting system.

Confirm with the manufacturer, to make sure of compatibility of selected tiles with the underlay and adhesive/s.

### REGUPOL sonus core and REGUPOL sonus curve acoustic floor insulation – Engineered timber flooring

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

e.g. concrete slab, particleboard flooring, floorboards.

Product: REGUPOL sonus core and REGUPOL sonus curve Impact Sound Acoustic Underlay.

Thickness: [complete/delete]

Select from 5 mm, 6/3 mm, dimple, 8 mm, 8/4 mm dimple, 10 mm or 17/8 mm dimple.

Underlay adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

Plywood and engineered timber adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

Primer: To REGUPOL's recommendations.

Floating timber flooring installation method: [complete/delete]

Engineered timber can be loose-laid over the underlay or dual bonded to the underlay using an approved adhesive. Some dimpled products will require the installation of a plywood substrate to separate the engineered timber floor from the acoustic underlay. Refer to REGUPOL for advice on the most appropriate thickness and correct installation detail.

### REGUPOL sonus core and REGUPOL sonus curve acoustic floor insulation – T&G Timber strip flooring over plywood

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

Product: REGUPOL sonus core and REGUPOL sonus curve Impact Sound Acoustic Underlay.

Thickness: [complete/delete]

Select from 6/3 mm dimple, 8/4 mm dimple, 10 mm or 17/8 mm dimple. Refer to REGUPOL for advice on the most appropriate thickness.

Underlay adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

Plywood and T&G timber adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

Primer: To REGUPOL's recommendations.

Installation method: To REGUPOL's recommendations using manufacturers specified systems and warranted adhesives.

### REGUPOL sonus acoustic floor insulation – Parquet flooring

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

e.g. concrete slab, particleboard flooring, floorboards.

Product: REGUPOL sonus eco Impact Sound Acoustic Underlay.

Thickness: 5 mm.

Primer: To REGUPOL's recommendations.

Installation method: To REGUPOL's recommendations using manufacturers specified systems and warranted adhesives.

Underlay adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

Parquet flooring adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

### **REGUPOL sonus eco acoustic floor insulation – Engineered timber flooring**

Location: [complete/delete]

Describe, or refer to a Finishes Schedule.

Substrate: [complete/delete]

e.g. concrete slab, particleboard flooring, floorboards.

Product: REGUPOL sonus eco Impact Sound Acoustic Underlay.

Thickness: 5 mm.

Primer: To REGUPOL's recommendations.

Installation method: To REGUPOL's recommendations using manufacturers specified systems and warranted adhesives.

Engineered timber can be loose laid over the underlay or dual bonded to the underlay using an approved adhesive.

Underlay adhesive: REGUPOL adhesive 40-203 one part polyurethane adhesive.

#### **REFERENCED DOCUMENTS**

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

AS ISO 717		Acoustics - Rating of sound insulation in buildings and of building elements
AS ISO 717.2	2004	Impact sound insulation
AS 1884	2021	Floor coverings - Resilient sheet and tiles - Installation practices
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

##### **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 ISO 717.2	2024	Impact sound insulation
BCA Spec 7	2022	Fire resistance - Fire hazard properties
ABC Sound	2024	Sound transmission and insulation in buildings handbook
NATSPEC DES 003		Fire hazard properties of insulation and pliable membranes
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