0657P FOSROC RESIN BASED SEAMLESS FLOORING

Branded worksection

This branded worksection *Template* has been developed by NATSPEC in conjunction with **FOSROC** (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 for the latest updated version.

Worksection abstract

This worksection *Template* is applicable to FOSROC resin based flooring including epoxy, polyurethane and methacrylate resins.

Background

Resin floor coating systems may be used to provide the following:

- Decorative finish.
- Cleanable, hygienic finish.
- Protection from abrasion and chemicals.
- Prevent water leaking through hairline cracks.

How to use this worksection

Customise this worksection *Template* for each project. See A guide to NATSPEC worksections (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. See for example:

- *0315 Concrete finishes* for substrates.

Related branded worksections include:

- *0411p FOSROC waterproofing – external and tanking*.
- *0621p FOSROC waterproofing – wet areas.*

Documenting this and related work

You may document this and related work as follows:

- Nominate the locations of finishes, finish abutments, control joints, finished floor levels and falls on drawings to your office documentation policy.

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

Specifying ESD

The following may be specified by including additional text:

- Systems with low/zero VOC emission.
- Recycled materials, e.g. recycled glass aggregate.
- Water-based, solvent free systems.
- Patching end of life floors to improve floor life cycle, instead of removal and replacement.
- Nonylphenol free systems.

Refer to NATSPEC TECHreport TR 01 on specifying ESD.

1 GENERAL

Fosroc is a world leader in construction solutions. We deliver tailored functional construction solutions for virtually any building or infrastructure project. New or old construction, above or below ground, we combine high quality products, expert technical support, customer service and innovation to give you the best solution for your project. Parchem Construction Supplies is the licensed manufacturer and distributor of Fosroc products in Australia.

1.1 RESPONSIBILITIES

General

Requirement: Provide FOSROC resin based floor finishes to substrates, as documented.

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

The design aim is to select a flooring system with performance characteristics that satisfy the anticipated usage.

Performance

Requirement:

- Forming a strong permanent bond to the substrate.
- Impermeable to liquids.
- Hygienic and easily cleaned.
- Slip-resistant.
- Chemical resistant.

Amend to suit the project. Delete slip-resistant or chemical resistant if not required.

The design aim is to select a flooring system with performance characteristics that satisfy the anticipated usage.

1.2 COMPANY CONTACTS

FOSROC technical contacts

Website: www.fosroc.com.au/specification-services.

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

Slip resistance

Classification: To AS 4586 (2013).

See NATSPEC TECHnote DES 001 on slip resistance performance.

1.5 MANUFACTURER'S DOCUMENTS

Technical manuals

Website: www.fosroc.com.au.

- Industrial flooring.
- Surface treatments.

1.6 INTERPRETATION

Definitions

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

- Resin based seamless floor finish: Any combination of a resin based flooring system that combines two part resins, with or without an aggregate, to provide a continuous floor coating without joints except those that may already exist in the substrate.

Resin systems may include epoxies, polyesters, polyurethanes, vinyl esters and methyl methacrylates.

- Substrate: The surface to which a material or product is applied.

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

1.7 SUBMISSIONS

Fire performance

Fire hazard properties: Submit evidence of conformity 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 technical product data for each type of finish, and recommendations for its application in the project, including the following:

- Composition, thickness, finish and time between coats for multi-coat work.
- Safety data sheets.

Type tests: Submit results as follows:

- Slip resistance.

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.

Evidence of delivery: Submit delivery docket as evidence of delivery of [complete/delete]

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

Samples

Define the sample required, either by description or by reference to the manufacturer's code.

Resin based flooring generally: For each required finish, submit a sample of the coating on a suitable base, showing the thickness of each coat.

- Slip resistance: If documented, demonstrate conformance in the sample.

Resinous terrazzo: For each required finish, submit 3 samples on a fibre cement base, showing the range of variation in aggregate arrangement.

Labelling: Label each sample identifying the following:

- Brand.
- Product name.
- Manufacturer's reference code (including the code for each layer of a multi-layer system).

Size: 300 x 300 mm minimum.

Sample panels: If required, construct a panel to verify the floor finish, its aesthetic and material properties, as documented and as follows:

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

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 applicators.

Evidence of experience: [complete/delete]

Delete if supplier/installer details are not required.

Substrate acceptance: Submit evidence of applicator's acceptance of the coating substrate before starting installation.

Tests

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

Site tests: Submit results, as follows:

- Substrate moisture content test.
- Surface pH test.
- Slip resistance test of completed installation.

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

1.8 INSPECTION

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

- Completion of substrate preparation.

To verify substrate levels, falls and surface regularity.

- Substrate joints, thresholds and perimeter walls.

If required, include other leading and finishing edges.

- Completed priming of base.
- Completion of each coat in the flooring system.
- Completed application.

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 **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

Delivery: Check all deliveries to site for quantities, damage and material conformance.

Storage: Store materials to the manufacturer's recommendations, with seals and labels intact and legible. Maintain temperatures at 10°C to 30°C or within the recommended range. Do not use materials that have been stored longer than the manufacturer's maximum recommended shelf life.

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.

2.2 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.

2.3 SEAMLESS FINISHES

Once products have been selected in SELECTIONS, delete those not selected from list below.

Materials

Product supply: Supply all resin flooring mix components in pre-measured units in the correct proportion ready for mixing.

Resin flooring type table

Finish type	Description	Durability*	Typical thickness
Floor seal	Applied in 2 or more coats. Generally solvent or waterborne.	LD	≤ 150 µm
Floor coating	Applied in 2 or more coats.	LD/MD	150 to 300 µm

Finish type	Description	Durability*	Typical thickness
	Generally solvent free.		
High build floor coating	Applied in 2 or more coats. Generally solvent free.	MD	300 to 1000 µm
Multi-layer flooring	Aggregate dressed systems based on multiple layers of floor coatings or flow applied floorings.	MD/HD	> 2 mm
Flow applied flooring	Self-smoothing or self-levelling flooring, having a smooth surface.	MD/HD	2 to 3 mm
Resin screed flooring	Trowel finished, heavily filled systems, generally incorporating a surface seal coat to minimise porosity.	MD/HD	> 4 mm
Heavy duty flowable flooring	Having a smooth surface or slip-resistant finish	HD/VHD	4 to 9 mm
Heavy duty resin flooring	Trowel finished, aggregate filled systems effectively impervious throughout their thickness	VHD	> 6 mm

*Note:
- LD (Light duty): Light foot traffic, occasional rubber tyred vehicles.
- MD (Medium duty): Regular foot traffic, frequent fork lift truck traffic, occasional hard plastic wheeled trolleys.
- HD (Heavy duty): Constant fork lift truck traffic, hard plastic wheeled trolleys, some impact.
- VHD (Very heavy duty): Severe heavily loaded traffic and impact

Flooring types are listed in order of durability.

Surface regularity for wearing surface table

Class	Maximum permissible departure from a 2 m straightedge laid in contact with the floor (mm)	Application
SR1	3	High standard: Special floors.
SR2	5	Normal standard: Normal use in commercial and industrial buildings
SR3	10	Utility standard: Where surface regularity is less critical

2.4 FOSROC FLOOR COATINGS

Once products have been selected in SELECTIONS, delete those not selected from list below.

Nitoflor FC100
Description: General purpose, solvent based, UV stable acrylic sealer applied to concrete floors to dustproof, make surface more easily cleaned and provide resistance to oils and other liquids.

Typical applications: Warehouse floors, residential driveways, commercial car parks, light industrial floors, repair workshop floors, machine shop floors.

Nitoflor FC130
Description: Chemically resistant, water based epoxy coating applied to concrete floors and walls to dustproof, make surface more easily cleaned and provide resistance to oils and other liquids.

Typical applications: Warehouse floors, garage floors, light industrial floors, food production floors, kitchens.

Nitoflor FC150 HP
Description: Chemically resistant, solvent free, non-tainting epoxy coating applied to concrete floors and walls to protect against chemical attack and vehicular traffic. Achieves defined slip resistance levels.

Typical applications: Food production floors, chemical processing floors, hospital floors, school floors, laboratory floors.

Nitoflor FC150 HP FC
Description: Fast cure, chemically resistant, solvent free, epoxy coating applied to concrete floors and walls to protect against chemical attack and vehicular traffic.

Typical applications: Chemical processing floors, hospital floors, kitchen floors, school floors, laboratory floors.

Nitomortar 903
Description: General purpose, solvent free, epoxy binder/primer system.

Typical applications: General purpose epoxy, used as an epoxy primer; epoxy mortar in floor repair of cracked or damaged substrates.

Nitoflor PA
Description: High performance, solvent free polyaspartic floor coating; UV and abrasion resistant top coat for resin floor systems or as a stand-alone coating over correctly prepared concrete surfaces.

Typical applications: Used in the food and chemical industries, hospitals, schools, kitchens and other high traffic applications.

Nitoflor PU200
Description: High build, cementitious polyurethane top coating for industrial polyurethane cement flooring system.

Typical applications: Chemical storage plants, food processing industries, plant rooms, laboratories, warehouses, and industrial manufacturing zones.

2.5 FOSROC FLOOR TOPPINGS

Once products have been selected in SELECTIONS, delete those not selected from list below.

Nitoflor N
Description: Highly chemically resistant, novolac epoxy clear binder, producing various coating and topping systems.

Typical applications: Chemical plant floors, mining processing areas, chemical plant bunding areas, industrial plant floors.

Nitoflor SL
Description: Self-smoothing, epoxy resin floor topping (2 to 4 mm thickness).

Typical applications: Hospital clean rooms, laboratory floors, food processing floors, film studio floors, prison floors, light industrial floors, supermarket floors.

Nitoflor SLX
Description: Self-smoothing, epoxy resin floor topping for cold weather applications (2 to 4 mm thickness).

Typical applications: Hospital clean rooms, laboratory floors, food processing floors, film studio floors, prison floors, light industrial floors, supermarket floors.

Nitoflor PU600
Description: High performance, self-levelling, cementitious polyurethane industrial floor topping (3 to 6 mm thickness).

Typical applications: Chemical storage plants, food processing industries, plant rooms, laboratories, warehouses, and industrial manufacturing zones.

2.6 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.

3 EXECUTION

3.1 GENERAL

Subcontractors
Requirement: Use specialist applicators recommended by the material manufacturer.

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

Room and floor temperature: Maintain at temperatures recommended by the manufacturer for a minimum of 72 hours before and after the floor installation.

Lighting: Provide permanent lighting or if not in place, simulate permanent lighting conditions during flooring application.

Protection
Adjacent surfaces: Protect adjacent surfaces by masking or other methods and maintain free of the flooring finish.

Ventilation: Provide adequate ventilation and fire protection at mixing and application locations to the manufacturer’s recommendations including smoke, spark and flame prohibition.

Finished installation: Prevent exposure to traffic, water and chemicals until flooring is fully cured.

Removal of fixtures and fittings
Fixtures: Remove door stops and other fixtures within or adjacent to the work area.

Labelling and storage: Attach labels or mark fixtures using a non-permanent method, identifying the location and refixing instructions, if required. Store and protect against damage.

Difficult to remove fixtures: If removal is impractical, apply surface protection before substrate preparation.

3.2 PREPARATION

Substrate condition
Requirement: Sound, clean and free of any deposit or finish, including laitance, efflorescence, curing compounds, dirt and grease, which may impair bonding or is incompatible with the floor coating.

Concrete surface: Cured for at least 28 days and free of water for at least 7 days.

If a levelling screed is applied, amend text to allow for curing of the concrete and the screed.

Concrete moisture content: Do not start installation of the resin based seamless flooring until the concrete substrate conforms to AS 1884 (2021) clause 3.1 and the flooring manufacturer's recommendations.

Refer to NATSPEC TECHnote DES 008 on the preparation of concrete substrates. Refer also to the *CCAA Data Sheet on Moisture in concrete and moisture-sensitive finishes and coatings (2007)*.

Substrate alkalinity: Verify the concrete pH is within the range recommended by the manufacturer.

Substrate adhesion: Perform adhesion tests as recommended by the manufacturer, do not proceed with application unless the substrate passes the test.

Grouts, patching materials and metal embedments: Make sure these are compatible with the resin flooring.

Substrate tolerances 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 resin based seamless flooring is to be installed, as appropriate for the project. It is assumed smoothness and projection tolerance corrections form part of substrate preparation.

Substrate correction

Concrete surface cleaning and preparation: Remove contaminants by high pressure water jetting and roughen mechanically by shot blasting, planing or grinding.

Concrete surface treatments: Mechanically remove by shot blasting, planing or grinding the following:

- Sealers and hardeners.
- Curing compounds.

Acid etching of the concrete is not recommended as a preparation technique partly because of safety problems but also because the concrete surface is left saturated with water and calcareous salts, which may lead to debonding or osmotic blistering.

Resin flooring ≤ 3 mm: Remove laitance or surface sealers by grinding or light contained shot blasting. Do not remove by percussive scabbling.

Precast unit surfaces: Leave as cast and wash and clean by wire brushing to remove any dirt. Do not mechanically scabble.

Existing concrete substrates: Abrade and remove the uppermost cement matrix mechanically by grinding, planing or shot blasting. Repair damaged and deteriorated concrete to the resin flooring manufacturer's recommendations.

Patching and filling: Remove projections and fill voids and hollows with an epoxy resin based repair mortar compatible with the seamless flooring system, to the manufacturer's recommendations.

3.3 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 subfloors for suitability for the installation of resin based seamless flooring to AS 1884 (2021) Appendix A.

- Maximum relative humidity of concrete: To AS 1884 (2021) Appendix A3.2.

Surface pH tests

General: Test concrete subfloor for suitability for the installation of resin based flooring 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).

Site testing is expensive. Delete if not required. See NATSPEC TECHnote DES 001 on slip resistance.

3.4 MIXING

Unfilled systems

Two component systems: Blend together with a mechanical mixer to form a homogenous mix.

Filled systems

Requirement: Mix mechanically to the resin flooring manufacturer's recommendations.

Order of mixing: Mix liquid components first, gradually add fillers and/or aggregates while continuing to mix until fillers and/or aggregates have been wetted out by the resin.

3.5 APPLICATION

FOSROC floor systems

Requirement: Conform to the FOSROC product technical data sheet applicable to the selected product.

General
Requirement: Apply components of the resin flooring system to the manufacturer's recommendations to produce a uniform, monolithic wearing surface.

Priming
Coating application: Apply primer over prepared substrate at the manufacturer's recommended spreading rate with a stiff brush, roller or trowel. Fully saturate the substrate surface.

Porous or open textured surfaces: If required to minimise pin holes, apply a second coat to achieve full saturation.

Multi-layer, flow applied and heavy duty flowable flooring: Allow primer to reach a tack-free state before applying the resin flooring. If required to assist flooring application, incorporate a light scatter of dry graded aggregate while the primer is wet.

Resin screed flooring: Allow primer to reach a semi-set (tacky) state before applying the resin flooring.

Curing: Maximum 48 hours at 15°C to 20°C before applying the resin flooring. If curing exceeds 48 hours, mechanically prepare the surface and reapply primer.

Perimeter edges
Integral cove edges or skirting: Apply cove skirting mix to wall surfaces and perimeter edges before applying flooring. Mask adjacent surfaces, mix, prime, trowel, sand and apply top coat of the skirting to the manufacturer's recommendations. Round all internal and external corners.

Resin coatings
Floor seal, floor coating and high build floor coating: Apply by brush or roller to the manufacturer's recommendations.

Curing: Curing and overcoat times vary between products, refer to manufacturer's recommendations.

Flow applied systems
Flow applied and heavy duty flowable flooring: Apply by spreading evenly over the surface, using a serrated trowel, pin rake or squeegee. Immediately follow by rolling with a spiked roller to release entrapped air and assist in smoothing out.

Partially set or thickened areas: Do not use spiked roller on these areas.

Multi-layer flooring
Requirement: Apply to **Resin coatings** and/or **Flow applied systems** to the manufacturer's recommendations.

Reinforcement
Fibreglass fabric: If reinforcing is required to minimise problems arising from cracks or bay joints in the substrate, after applying the primer and a thin layer of resin, roll in the fibreglass fabric. Overlap the fabric by 50 mm minimum at joins and apply the final resin layer before the first layer fully hardens.

Curing
Finished flooring: Allow to cure to the manufacturer's recommendations before exposure to light traffic and 3 to 7 days before exposure to heavy traffic, wet cleaning or chemicals.

Generally 1 to 3 days at 15°C to 20°C.

Uncured resin flooring: Maintain minimum 3°C above dew point or below 75% relative humidity to reduce the risk of blooming on the floor finish.

3.6 JOINTS AND ACCESSORIES

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

Junctions
General: Finish junctions flush with adjoining surfaces. If changes of floor finish occur at doorways locate the joint on the centreline of the closed door leaf.

Seamless flooring junctions
Junction type: [complete/delete]

Select from the following, or refer to details:

- V-joint: Form the V-joint in the concrete base and carry the finish into the joint.
- Overlap: Carry the finish 100 mm past the junction line to be overlapped by the adjoining finish.
- Set-down: Provide a set-down for the applied finish (nominate depth).

- Coved skirting: Extend the seamless finish over coving formed in the substrate.

Accessories

Accessory type: [complete/delete]

Select from the following, or refer to details:

- Proprietary neoprene pattern divider strips for synthetic terrazzo.
- Nosings.
- Edge trim.

For floor wastes to wet areas, consult the manufacturer for special requirements, e.g. fittings to finish flush, and coordinate with **Wet area floors** in *0802 Hydraulic design and install*.

Control joints

Location: Provide control joints in resin based seamless flooring as follows:

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

Flooring finish: If possible, carry the seamless finish material over the edges of the control joint in the substrate. Provide a sealant joint as follows:

- Sealant width: 6 to 25 mm.
- Sealant depth: One half the joint width, or 6 mm, whichever is the greater.

Refer to the manufacturer's literature and edit as appropriate.

- Sealant: One part, flexible, abrasion resistant sealant applied over a backing rod. Finish flush with the seamless flooring surface.
- Floors: Trafficable, shore hardness greater than 35A.
- Backing rod: Compressible closed cell polyethylene foam with a bond breaking surface.

3.7 COMPLETION

Reinstatement

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

Removed fixtures and fittings

Requirement: Reinstall undamaged hardware and fittings on completion of the installation.

Operation and maintenance manuals

Requirement: Prepare a manual that includes the manufacturer's published use, care and maintenance instructions.

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: Cover materials and workmanship in the terms of the warranty in the form of interlocking warranties from the supplier and the applicator.

- Form: Against failure of materials and execution under normal environment and use conditions.
- Period: As offered by the supplier and the applicator.

Use only if warranties extending beyond the defects liability period are available for the particular system. Insert the required warranty period and terms, which should be negotiated beforehand. If the warranty is in the form of separate material and installation warranties, the signatures of both supplier and applicator are required.

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 PRODUCTS

Factors that influence flooring system selection include the following:

- Type and degree of traffic.

- Temperatures to which flooring will be exposed.
- Nature and duration of any chemical contact with the floor.
- Wet or dry service conditions.
- Slip resistance requirements.
- Ease of cleaning (including hygiene requirements).
- Moisture content of the substrate.
- Time available for application and cure of the flooring.
- Prevailing site conditions at time of installation.
- Cost.

FOSROC resin flooring finish schedule

	A	B	C
Finish type			
Product			
Location			
Colour			
Gloss			
Pattern			
Aggregate			
Surface			
UV resistance			
Chemical resistance			
Antistatic			
Temperature resistance			
Slip resistance			
Surface regularity			
Critical radiant flux			
Airborne sound insulation			
Impact sound insulation			

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.

Finish type: Designate flooring type from the **Resin flooring type table** or describe the system.

Product: Select from the following, as appropriate:

- Nitoflor FC150 HP: Floor and wall coating.
- Nitoflor FC150 HP FC: Floor and wall coating.
- Nitoflor PA: Floor coating.
- Nitoflor N: Floor coating/topping system.
- Nitoflor SL.
- Nitoflor SLX (cold weather version of Nitoflor SL).
- Nitoflor PU200.
- Nitoflor PU600.
- Nitoflor FC100: Penetrating sealer.
- Nitoflor FC130: Floor and wall coating.
- Nitomortar 903.

Location: e.g. room number and wall identification.

Colour: e.g. select from the following:

- Nitoflor FC150 HP: Available in a range of colours. Contact Parchem for more information.
- Nitoflor FC150 HP FC: Available in a range of colours. Contact Parchem for more information.
- Nitoflor PA: Available in a range of colours. Contact Parchem for more information.

- Nitoflor (Novalac): Clear.
- Nitoflor SL: Available in a range of colours. Contact Parchem for more information.
- Nitoflor SLX: Available in a range of colours. Contact Parchem for more information.
- Nitoflor PU200: Available in a range of colours. Contact Parchem for more information.
- Nitoflor PU600: Available in a range of colours. Contact Parchem for more information.
- Nitoflor FC100: Clear, grey.
- Nitoflor FC130: Silver grey, Mild grey, Clear.
- Nitomortar 903: Straw clear.

Gloss: e.g. select from the following:

- Nitoflor FC150 HP: Semi-gloss.
- Nitoflor FC150 HP FC: Satin finish.
- Nitoflor PA: Semi-gloss
- Nitoflor (Novalac): Semi-gloss.
- Nitoflor SL: Semi-gloss.
- Nitoflor SLX: Semi-gloss.
- Nitoflor PU200: Semi-matt finish.
- Nitoflor PU600: Semi-matt finish.
- Nitoflor FC100: Semi-gloss.
- Nitoflor FC130: Semi-matt.
- Nitomortar 903: Satin.

Pattern: Describe pattern or refer to drawings.

Aggregate: e.g. select from the following:

- Nitoflor FC150 HP: Slip-resistant grains at 20 g/m². Select from various grit. Contact Parchem for more information.
- Nitoflor FC150 HP FC: Slip-resistant grains at 20 g/m². Select from various grit. Contact Parchem for more information.
- Nitoflor N (Novalac): Slip-resistant aggregates. Contact Parchem for more information.
- Nitoflor SL: Over-coat with Nitoflor FC150 HP to provide slip-resistant finish. Delete over-coat if not required.
- Nitoflor PU200: Slip-resistant aggregate. Contact Parchem for more information.
- Nitoflor PU600: Slip-resistant aggregate. Contact Parchem for more information.
- Nitomortar 903: Screed. Over-coat with Nitomortar 903 and aggregate for slip-resistant finish. Contact Parchem for more information.

Surface: e.g. select from the following:

- Nitoflor SL: Smooth floor topping.
- Nitoflor SLX: Smooth floor topping.
- Nitoflor FC150 HP: Smooth floor coating.

UV resistance: e.g. UV or light stable, Resistant to fading or yellowing when exposed to UV light – epoxy materials are typically not UV resistant.

Chemical resistance: Thinner coating types, floors seals, floor coatings and high build floor coatings are not recommended for this. State the chemical the floor is likely to be exposed to and the level of resistance required, e.g. Acetic acid (10%), good resistance to occasional spillage.

Temperature resistance: State temperature range required, e.g. From -5°C to 70°C (at 3 mm), From -12°C to 90°C (at 4 mm).

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

Surface regularity: Select the surface regularity class from the **Surface regularity for wearing surface table**.

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.

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).

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 1884	2021	Floor coverings - Resilient sheet and tiles - Installation practices
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

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 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