0657P PARCHEM RESIN BASED SEAMLESS FLOORING

Branded worksection

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Worksection abstract

This worksection *Template* is applicable to resin based flooring including epoxy, polyurethane and methacrylate resins. It also includes in situ resinous terrazzo flooring.

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.

***Guidance* text**

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

***Optional* style text**

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

Related material located elsewhere in NATSPEC

If a listed worksection is not part of your subscription package and you wish to purchase it, contact NATSPEC.
Related material may be found in other worksections. See for example:

- *0315 Concrete finishes* for substrates.
- *0411p PARCHEM waterproofing – external and tanking*.
- *0621p PARCHEM 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 the NATSPEC TECHreport TR 01 on specifying ESD.

1 GENERAL

Parchem Construction Supplies is a leading manufacturer and supplier of products and equipment to the Australian and New Zealand concrete and construction markets. Through all of its divisions and heritage, Parchem has built over 50 years' experience in servicing the construction, civil, and concrete industries. Parchem brings experience and technical expertise in the supply and manufacture of construction and decorative concrete products, equipment and tools.

1.1 RESPONSIBILITIES

General

Requirement: Provide PARCHEM 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: Provide resin flooring finish which:

- Forms a strong permanent bond to the floor base.
- Is impermeable to liquids.
- Is hygienic and easily cleaned.
- Slip resistant or 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

Parchem technical contacts

Website: www.parchem.com.au/parchem-specification-team

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.

1.5 MANUFACTURER'S DOCUMENTS

Technical manuals

Website: www.parchem.com.au/construction/

- Industrial flooring.
- Decorative concrete.
- 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 (MMA's).

- 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 conformance to PRODUCTS, **FIRE PERFORMANCE**, **Fire hazard properties**.

Operations and maintenance manuals

Requirement: At completion, submit the manufacturer's published use, care and maintenance instructions.

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**, if 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, consider including this Optional style text by changing to Normal style text.

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 this is 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.

Tests

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

Site tests: Submit results, as follows:

- Slip resistance test of completed installations.
- Moisture content test.

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

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

Warranties

Requirement: On completion, submit interlocking warranties from the supplier and applicator covering materials and workmanship.

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

1.8 INSPECTION

Notice

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

- Completion of substrate preparation.

This is 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 PRODUCTS, **GENERAL**, **Substitutions** in *0171 General requirements*.

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

VOC emission limits

Requirement: Provide materials conforming to the following limits for VOC content

- [complete/delete] g/L.

For example:

- Primers: 0 g/L, 10 to 350 g/L, Maximum 250g/L.
- Floor coatings: 0 g/L, 250 to 400 g/L, Maximum 250g/L.

Storage and handling

Delivery: All deliveries to site are to be checked by the applicator for quantities, damage and material conformance.

Storage: Store materials to the manufacturer’s recommendations, with seals and labels intact and legible. Maintain temperatures at 15 to 20ºC 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.

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

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

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. Generally solvent free.	LD/MD	150 to 300 µm
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	Often referred to as self-smoothing or self-levelling flooring and 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

*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 ascending 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

Materials

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

Resin flooring system properties: Provide a floor coating system with the following properties:

Add values/requirements for each of the following properties, as appropriate.

- Minimum compressive strength: [complete/delete] N/mm2.

e.g. 40 N/mm2, 36 N/mm2.

- Minimum tensile strength: [complete/delete] N/mm2.

e.g. 16 N/mm2, 30 N/mm2.

- Minimum flexural modulus of elasticity: [complete/delete] kN/mm2.

e.g. 3.9 kN/mm2, 3 kN/mm2.

- Maximum water absorption: [complete/delete] %.

e.g. 0.03%, 0.05%.

- Maximum shrinkage: [complete/delete] %.

e.g. 0.060% tested to ASTM C531.

- Maximum indentation: [complete/delete] %.
- Impact resistance: No chipping, cracking or delamination and not more than [complete/delete] mm permanent indentation.

e.g. 1.5 mm tested to ISO 6272.

- Resistance to elevated temperatures: No slip or flow of more than [complete/delete] mm.

e.g. 1.5 mm.

- Abrasion resistance (maximum weight loss): [complete/delete] mg loss

e.g. 1200 mg loss, Taber abrasion.

- Hardness: [complete/delete], Shore D.

e.g. 30, 60.

- Chemical resistance: [complete/delete] tested to ASTM C267, ASTM D543 or ASTM D1308.

Chemical resistance: e.g. Acetic acid (10%), Spillage resistance to most dilute and concentrated organic and inorganic acids, dilute and concentrates alkalis, fats, oils and organic solvents. Select the appropriate testing standard required.

2.3 PARCHEM 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 FC120HB

Description: Fuel resistant, UV stable, chlorinated rubber coating applied to protect trafficable concrete floors.

Typical applications: Light industrial floors, driveways, car parks, parking stations, stairs, petrol stations.

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.

2.4 PARCHEM 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.

3 EXECUTION

3.1 GENERAL

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 period extending minimum 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 trafficking, wetting and exposure to 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. Refix in position undamaged on completion of the installation.

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

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

Subcontractors

Requirement: Use specialist applicators recommended by the material manufacturer.

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 Section 3.1 and the adhesive and manufacturers' recommendations.

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

Substrate alkalinity and adhesion: Verify the concrete pH is within the range recommended by the manufacturer. 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	Maximum deviation under the straightedge
Flatness Class A	2 m	4 mm
Smoothness	150 mm	1 mm
Projections	50 mm	0.5 mm

Flatness tolerance class: Nominate Class A in the *0315 Concrete finishes* and *0612 Cementitious toppings* worksection to resin based flooring locations as appropriate for the project.

Substrate correction

Concrete surface cleaning and preparation: Remove contaminants by high pressure water jetting and roughen mechanically.

Concrete surface treatments: Mechanically remove the following:

- Sealers and hardeners.
- Curing compounds.

Mechanical removal and concrete roughening methods: Shot blasting, planing or grinding.

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.

Thinner resin flooring: For all types other than resin screed flooring, heavy duty flowable flooring, and heavy duty resin flooring, 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.

Old concrete bases: 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 a reinforced mortar or a polymer modified cementitious self-smoothing and levelling compound, compatible with the seamless flooring system, to the manufacturer's recommendations.

Control joints

Joint treatment: Treat control joints and non-moving substrate cracks to prevent cracks from reflecting through the resin flooring, to the manufacturer's recommendations.

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.

3.3 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, then gradually add fillers and/or aggregates whilst continuing the mixing action. Mix until fillers and/or aggregates have been wetted out by the resin.

3.4 APPLICATION

Parchem floor systems

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

General

Coating application: 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 spreading rate with a stiff brush, roller or trowelling. Fully saturate the substrate surface.

Porous or open textured surfaces: If required to minimise pin hole, 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 whilst the primer is wet.

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

Resin coatings

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

Curing: Allow first coat to cure for 16 to 24 hours until it is tack-free before applying second coat.

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 cloth: 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 cloth. 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 trafficking and 3 to 7 days before wet cleaning, heavy trafficking or exposure to chemicals.

Generally 1 to 3 days at 15 to 20ºC.

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

3.5 JOINTS AND ACCESSORIES

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

Junctions

General: Finish junctions flush with adjoining surfaces. Where 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 **WASTEWATER, Wet area floors** in the *0802 Hydraulic design and install* worksection and **SANITARY PLUMBING, Wet area floors** in the *0822 Wastewater* worksection.

Control joints

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

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

Flooring finish: Where 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: Two-pack, self-levelling, non-hardening, mould-resistant polyurethane sealant applied over a backing rod. Finish flush with the seamless flooring surface.
- Trafficable floors: Shore hardness greater than 35.
- Backing rod: Compressible closed cell polyethylene foam with a bond-breaking surface.

3.6 TESTING

Substrate tests

Moisture content: Test subfloors for suitability for the installation of resin based seamless flooring to AS 1884 Appendix A.

- Maximum relative humidity of concrete: To AS 1884 appendix A3.1.2 and A3.1.3.

Completion tests

Slip resistance of completed installation: To AS 4663.

Although, site testing is expensive, slip resistance may be critical to industrial flooring. Delete if not required. See NATSPEC TECHnote DES 001 on slip resistance.

The wet-barefoot inclining platform test and the oil-wet inclining platform test cannot be performed in situ.

3.7 COMPLETION

Protection

General: Keep traffic off finished work for 60 hours or as recommended by the applicator, whichever is the greater.

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 hardware and fittings on completion.

4 SELECTIONS

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

4.1 SEAMLESS FLOORING SYSTEMS

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

Factors which influence flooring system selection include the flooring:

- 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.

PARCHEM resin flooring finish schedule

Property	RF1	RF2	RF3
Finish type			
Product			
Location			
Colour			
Gloss			
Pattern			
Aggregate			
Surface			
UV resistance			
Chemical resistance			
Anti-static			
Temperature resistance			
Slip resistance			
Surface regularity			
Tactile indicators colour and material			
Critical radiant flux			

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

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

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.
- Nitflor N: Floor coating/topping system.
- Nitflor SL.
- Nitflor SLX (cold weather version of Nitflor SL).
- Nitoflor FC100: Penetrating sealer.
- Nitoflor FC120HB: Floor coating.
- Nitoflor FC130: Floor and wall coating.
- Nitomortar 903.

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

Colour: e.g. select from the following:

- Nitflor FC150 HP: Available in a range of colours. Contact Parchem for more information.
- Nitflor FC150 HP FC: Available in a range of colours. Contact Parchem for more information.
- Nitflor (Novalac): Clear.

- Nitflor SL: Available in a range of colours. Contact Parchem for more information.
- Nitflor SLX: Available in a range of colours. Contact Parchem for more information.
- Nitoflor FC100: Clear, grey.
- Nitoflor FC120HB: Black.
- Nitoflor FC130: Silver grey, Mild grey, Clear.
- Nitomortar 903: Straw clear.

Gloss: e.g. select from the following:

- Nitflor FC150 HP: Semi-gloss.
- Nitflor FC150 HP FC: Satin finish.
- Nitflor (Novalac): Semi-gloss.
- Nitflor SL: Semi-gloss.
- Nitflor SLX: Semi-gloss.
- Nitoflor FC100: Semi-gloss.
- Nitoflor FC120HB: Low gloss.
- Nitoflor FC130: Semi-matt.
- Nitomortar 903: Satin.

Pattern: Describe pattern or refer to drawings.

Aggregate: e.g. select from the following:

- Nitflor FC150 HP: Slip-resistant grains at 20g/m². Select from Fine grit, Medium grit.
- Nitflor FC150 HP FC: Slip-resistant grains at 20g/m². Select from Fine grit, Medium grit.
- Nitflor N (Novalac): Slip-resistant aggregates.
- Nitflor SL: Over-coat with Durafloor HP to provide slip-resistant finish. Delete over-coat if not required.
- Nitomortar 903: Screed. Over-coat with Nitomortar 903 and aggregate for slip-resistant finish.

Surface: e.g. select from the following:

- Nitflor SL: Smooth floor topping.
- Nitflor SLX: Smooth floor topping.
- Nitomortar 903: Slightly textured slip-resistant finish.

UV resistance: e.g. UV or light stable, Resistant to fading or yellowing when exposed to UV light.

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, SAA HB 197 and SAA HB 198. 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: Refer to BCA Spec C1.10.

REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS 1884	2012	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
ASTM C267	2012	Standard test methods for chemical resistance of mortars, grouts, and monolithic surfacings and polymer concretes
ASTM D543	2014	Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
ASTM D1308	2013	Standard test method for effect of household chemicals on clear and pigmented organic finishes

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

SAA HB 197	1999	An introductory guide to the slip resistance of pedestrian surface materials
SAA HB 198	2014	Guide to the specification and testing of slip resistance of pedestrian surfaces
BCA Spec C1.10	2016	Fire resistance - Fire hazard properties
CCAA Data Sheet MC	2007	Moisture in concrete and moisture-sensitive finishes and coatings
NATSPEC DES 001	2016	Slip resistance performance
NATSPEC DES 008	2015	Preparation of concrete substrates
NATSPEC DES 020	2011	Fire behaviour of building materials and assemblies

NATSPEC GEN 006	2007	Product specifying and substitution
NATSPEC GEN 024	2015	Using NATSPEC selections schedules
NATSPEC TR 01	2017	Specifying ESD
ASTM C531	2012	Standard test method for linear shrinkage and coefficient of thermal expansion of chemical-resistant mortars, grouts, monolithic surfacings, and polymer concretes
ISO 6272	2011	Paints and varnishes - Rapid deformation (impact resistance) tests