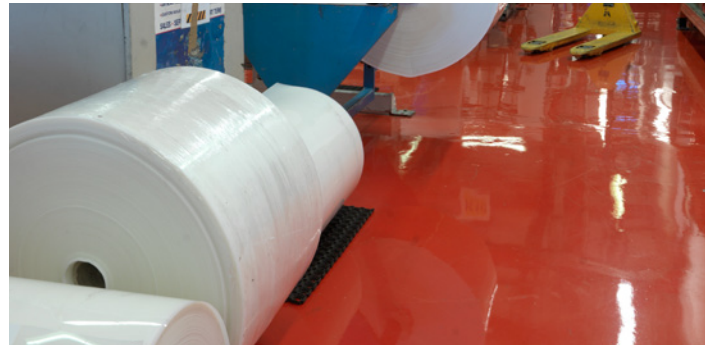


RESIFLOW

RESIFLOW CHEMICAL GRADE

AREAS OF USE

- Production areas
- Showrooms
- Reception areas
- Clean rooms
- Workshops
- Chemical storage areas (Resiflow Chemical Grade)
- Warehouses
- Switchgear and plant rooms
- Food & pharmaceutical – processing, storage and laboratory areas



FEATURES

- Our top of the range high gloss, high performance, high build epoxy resin self-levelling floor finish
- Superior wear and abrasion resistance with just one 1-2mm thick application
- Can be applied up to 5mm thick if required
- Extremely easy to keep clean
- Excellent resistance to oils and general chemical spillages
- Resiflow Chemical Grade has exceptional resistance to aggressive chemicals
- Perfect for floors where high levels of hygiene are important
- Low odour – safe to use in confined spaces
- Superior performance demonstrated by ISO testing to CE Mark EN1504-2
- Also available: Resiflow Anti Slip (50 PTV) and Resiflow Flex

DESCRIPTION

Watco has developed a highly advanced formulation that puts Resiflow into a class of its own. This one coat, high build, self-levelling epoxy resin finish, leaves a smooth, exceptionally high gloss surface, which is both attractive and easy to keep clean. This high performance formulation is usually applied at 1-2mm thick, but can be applied up to 5mm in one application. It is our ultimate floor covering for durability and appearance.

Resiflow has very good general chemical resistance, but this has been enhanced to 'Excellent' for Resiflow Chemical Grade. If slip resistance, as well as excellent chemical resistance is important, apply one coat of Watco Protecta-Coat Anti Slip (62 PTV), a clear, glossy, polyaspartic resin, over the top of Resiflow Chemical Grade.

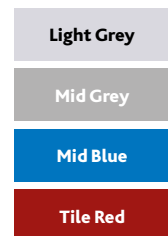
Both grades now carry CE Mark EN1504-2 and have impressive test results for hardness, abrasion, scratch and impact resistance, as well as for adhesion and flexibility, and they have an A+ VOC emissions rating with a low level of VOC.

SPECIFICATION

Composition	High build, high solids epoxy resin.
Number of Components	1 x curing agent, 1 x resin and 1 x fine powder blend.
Finish	Coloured, high gloss, smooth self-levelling finish.
Primer Required	Yes. See section headed 'Priming'.
Number of Coats	1
Dry Film Thickness	1-2mm.
Wet Film Thickness	1-2mm.
Usage Interior/ Exterior	Interior.
Application Tools	Watco Resiflow Applicator and Spiked Roller (Spiked Shoes also available).
Minimum Application Temperature	Air temperature 15°C Floor temperature 10°C
Suitable For	Concrete, well bonded paint and some metal. The moisture content of concrete should be less than 75% RH.
Pack Size	20kg
Coverage	Approximately 10m ² at 1mm thick and 5m ² at 2mm thick (thicker applications can be made up to 5mm but this will result in reduced coverage).
Pot Life	25 minutes at 20°C.
Mix Ratio (by weight)	23 parts curing agent : 100 parts resin : 105 parts aggregate.

Cleaning Tools	It is not practical to clean applicators and they should be discarded after use.
Shelf Life	24 months in unopened containers.
Cleaning	Normal industrial cleaners – Watco Protect is ideal. Do not steam clean or subject to temperatures in excess of 60°C.
Storage	Between 15°C-25°C for at least 8 hours prior to use. Do not allow to freeze.
Principle Limitations	Unsuitable for most self-levelling compounds, however certain self-levelling materials such as Watco Flowtop® are suitable – please ask for details. Unsuitable for asphalt. Do not apply to damp surfaces. Please contact us regarding applications not described here.

COLOURS



Tile samples are available on request.
While great care is taken with the colour samples shown, no guarantee can be given that they represent exactly the colours offered.

CURING TIME	Recoat Time (if required)	Touch Dry	Light Traffic	Heavy Traffic	Full Chemical Resistance
10°C	16 hours	12 hours	24 hours	48 hours	7 days
20°C	16 hours	8 hours	16 hours	48 hours	7 days
30°C	12 hours	6 hours	16 hours	24 hours	7 days

Light Traffic: Foot, trolley, pallet truck, occasional forklift
Heavy Traffic: Regular forklift, heavy footfall, parked vehicles

TEST RESULTS

<p>Abrasion Resistance ISO 5470-1 Taber test method expresses results in mg on a scale between 0mg (highest resistance) and 3000mg (lowest). A reading below 3000mg is a CE mark pass.</p>	<p>3000mg → 0mg Lowest → Highest</p>	<p>Flexibility ISO 1519 Flexibility is measured using a Mandral Flex Tester, 2mm is the most flexible, 36mm the least.</p>	<p>36mm → 2mm Lowest → Highest</p>
<p>Impact Resistance ISO 6272 Impact is expressed as Newton metres. Greater than 4 Nm is a CE mark pass.</p>	<p>Class 1 >4Nm Class 2 >10Nm Class 3 >20Nm</p>	<p>Gloss Value Rating is a 'Gloss Unit' measured on an Optical Glossmeter.</p>	<p>Matt 0-10%, Low Sheen 10-25%, Eggshell 26-40%, Semi-Gloss 41-69%, Gloss 70-85%, High Gloss +85%</p>
<p>Scratch Resistance ISO 4586-2 Scratch resistance is measured using a Sclerometer and the resistance is measured in Newtons. 1N is the lowest resistance, 20N the highest.</p>	<p>1N → 20N Lowest → Highest</p>	<p>Chemical Resistance Results shown are for tests with commonly used chemicals. Please contact us for information on other chemicals and concentrations not listed here.</p>	<p>Petrol, Diesel, White Spirit, Bleach, Methylated Spirit, Oil, 20% Ammonia, Anti-Freeze, 5% Citric Acid, Detergents, 20% Caustic Soda, Sugar Solutions, Mineral Hydraulic Oil.</p>
<p>Adhesion Test ISO 2409 Cross-Cut Test method. Class 0 is highest adhesion, Class 5 is lowest.</p>	<p>Class: 5 → 4 → 3 → 2 → 1 → 0 Lowest → Highest</p>	<p>Water Permeability EN 1062-3 To achieve a CE mark, the measurement must be less than 0.1 kg/m²(24 h)^{0.5}</p>	<p>CE Marking Critical Value: < 0.1kg/m²/(24 h)^{0.5} W₁ → W₂ → W₃ Lowest → Highest</p>
<p>Adhesion Test EN 1542 Adhesion is expressed in MegaPascals (MPa) or Newton millimetres squared (Nmm²). Greater than 2 MPa is a CE mark pass.</p>	<p>>2MPa (Nmm²) = test pass</p>	<p>Slip Resistance BS7976-2 The Pendulum Test Value (PTV) is measured in wet conditions. A number above 36 indicates a 'low slip potential'.</p>	<p>High: 0-24 PTV Moderate: 25-35 PTV Low: 36+ PTV</p>
<p>Wolff-Wilborn Hardness Test Also known as the 'pencil test', a 9H reading is the measure of a hardest coating, HB is the softest.</p>	<p>HB → 9H Least Hard → Hardest</p>		

STANDARD COMPLIANCE

<p>EN 1504-2 This mark indicates that a coating has passed all the tests required to carry a CE mark.</p>	<p>BREEAM COMPLIANT</p>	<p>VOC LEVEL 5g/Litre VERY LOW</p>	<p>ISO 16000 The 'Loi Grenelle' measurement of the effect of a product's VOC level within a building. A+ is the top safety rating.</p>	<p>REACH COMPLIANT</p>
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PREPARATION & APPLICATION

SURFACE PREPARATION

Bare concrete – remove surface laitance, dust and any light dirt or grease deposits using Watco Etch & Clean. Watco Etch & Clean also etches smooth, bare concrete surfaces to provide a key. Flush with clean water and allow the surface to dry. For the removal of heavier deposits of oil and grease we recommend Watco Concroff®, again, flush with clean water and allow the surface to dry.

New concrete – as a guide, new concrete should be left for eight weeks to dry; (if the application has to go ahead before this, use Watco New Concrete Primer). The surface should then be prepared using Watco Etch & Clean and thoroughly rinsed away and left to dry prior to applying this coating.

Painted surfaces – abrade to remove any weak or loose paint. Check remaining paint is well bonded. Very smooth, glossy paint should be lightly abraded to provide a key. Watco Bio D can be used to remove grease and oil from painted surfaces. Watco Concroff® is a very powerful degreaser for contaminated bare concrete, (do not use on a previously painted surface since it can soften paint).

Repairs – Chips and small holes in concrete which may reflect through Resiflow can be quickly repaired using Watco Concrex® Fine Filler. Watco Concrex® can be used for isolated bigger holes and damage. If the concrete has a generally rough surface, it would be more economical to first resurface it with Watco Flowtop® rather than trying to achieve a smooth surface with layers of Resiflow.

Priming – use Watco 4 Hour Epoxy Primer on open textured, or very porous high suction surfaces, such as sand and cement screed. This provides a uniform finish and prevents air entrapment bubbles. Very smooth or power floated concrete should be primed with Watco Powerfloat Primer.

Metal – remove any rust and flaking material by disc grinding or wire brushing. Apply Resiflow immediately after preparation to the clean metal surface. Grease or oil can be removed using Watco Bio-D. Allow the metal to dry before coating.

Galvanised Metal – Watco Galvaprim must be used to prepare galvanised metal.

Non-ferrous Metals – for advice, please contact our Technical Department.

MIXING

Remove all three components from the outer bucket. Stir the contents of the coloured

resin tin thoroughly, and then do the same for the clear curing agent, (scrape around the inside of the tins to remove any residue). Pour the resin into the outer bucket, and using a mixing blade (available from Watco) fitted to a slow speed electric drill, (do not use a high speed drill as this will pull too much air into the mix and encourage air bubbles to form), start to mix while slowly adding the curing agent. When thoroughly mixed add the fine powder blend, mixing for 2-3 minutes until uniform in colour and consistency, ensuring that all material at the sides and base are thoroughly blended together. It is possible to hand mix small quantities but great care must be taken. The mixed components must be used immediately. To assist with mixing and application, we recommend 1 person to mix continuously, whilst the other gradually adds the powder blend.

Important - once the contents of the pack have been mixed, a chemical reaction takes place which creates heat. The product should therefore be used straight away.

APPLICATION

To watch our online video, please go to watco.co.uk. Best results are obtained in warm (minimum of 15°C), dry conditions with good ventilation. Application on cold surfaces can reduce the product's ability to flow.

Working in sections of approximately 5m², pour the mixed components onto the prepared surface in ribbons and spread evenly to the desired depth of 1-2mm using a Watco Resiflow Applicator, or similar notched trowel. The applicator has a built in depth guide which makes it easier to achieve the required thickness. The product will naturally self-level. Use a spiked roller to remove air bubbles and repeat a few minutes later and thereafter if air bubbles continue to form. Application within the 5m section needs to be completed within 15-20 minutes maximum. Do not spike roller for longer than 20 minutes or track marks will be left on the surface. Spike rolling should extend into the previously applied section, but ensure that this has not hardened to such a degree that spiked rolling is not possible. If a knife cut in the wet surface heals quickly, the surface is still safe to roller. Spiked shoes (available from Watco), should be worn if you need to walk across the wet floor. Do not wash or allow water to lie on the surface for at least 7 days.

SAFETY

Material Safety Data Sheets are available.



WATCO.CO.UK

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