

Acrylicon Industry System



Det Norske Veritas certification for use in offshore applications

Description and Uses

The Acrylicon Industry System is a trowel applied mortar system with an excellent compressive strength and tensile strength in bending. It is characterised by very low linear shrinkage, high wear resistance and unparalleled longevity. Due to Acrylicon's unique ability to chemically bond it can be combined with other Acrylicon Systems to provide a decorative finish. The cure time is under 2 hours, even at temperatures down to -25°C, meaning any downtime is reduced to a minimum.

Designed to withstand heavy duty mechanical stress, both indoor and outdoor. Suitable for use in offshore applications, heavy engineering, freezers and as a heavy duty screed (up to 550mm thickness) for other Acrylicon Systems.

Specification

Product	Acrylicon Industry System - Preparatory work and application in accordance with suppliers instructions.
Finish	Matt
Thickness	4mm as standard for offshore use. As screed up to 550mm with addition of aggregates.
Slip Resistance	For added slip resistance our Industry Plus option is available in different grades.
Colour	Standard grey colour, but can be delivered pigmented in various RAL colours.
Supplier	AcryliCon Polymers GmbH (Germany)

Please visit our website www.acryliconpolymers.com to find your nearest AcryliCon office.

Key Features and Benefits



High compressive strength - excellent durability and cleanability.



1-2 hours cure time - rapid installation and minimum downtime.



Slip resistant - our floors exceed minimum safety requirements and can be tailored to each area.



Hard wearing with exceptional resistance to chemicals, abrasion, impact and fire.



Chemical bond/cure means a truly seamless floor with no cold joints or risk of delamination.



Low emissions - our products are solvent-free and contain very low VOC's.



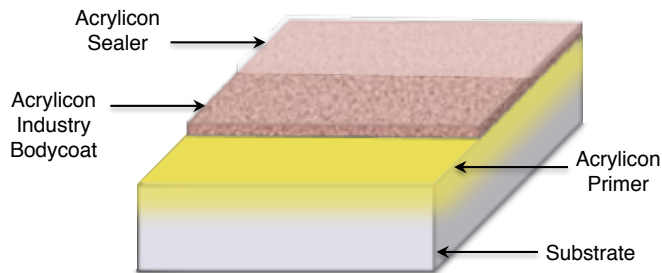
Long lasting - our floors do not degrade, become brittle or porous with use.



-because the world is a tough place

Acrylicon Industry System

System



Cleaning and Maintenance

Clean regularly using a mechanical Scrubber/Dryer. Cylindrical machines with a built in vacuum are best suited in combination with a neutral degreaser. Contact your nearest AcryliCon office for advice.

Cure Time

The Industry System is fully cured within 2 hours after installation and may be put into full use by the customer.

Properties and Application

Acrylicon Industry System consists of a powder component which contains quartz sand up to 1.8mm along with a low viscosity, solvent free, 2-component modified methyl-methacrylate resin. Acrylicon Sealer is used as a colourless, wear resistant seal coat if required. The curing time is about 1 hour at 20°C/68°F (ambient). The lowest application temperature (substrate and material) is -25°C /-13°F.

Substrate

The concrete strength must not be less than 22.5N/mm² (3250psi). Cores may be required for laboratory testing if any doubt exists. The substrate must be solid, free of dirt, oil, dust and other contaminants that would prevent bonding. It is necessary to protect the substrate from rising moisture and ground water pressure. Acrylicon systems can be applied onto 28 day old concrete at a Relative Humidity of up to 95%. Should there be any doubt about the moisture in the concrete, an insulated hygrometer is recommended for testing the vapour leaving the substrate. In situations requiring rapid installation, AcryliCon can provide fast cure systems as alternatives to traditional concrete. AcryliCon systems can also bond to other substates. For further advice please contact your nearest AcryliCon office.

Technical Information

Compressive Strength EN196-1 (DIN1164), ASTM C349	83 - 105 N/mm ² 12,038 - 15,230 psi
Flexural Strength EN 196-1 (DIN1164) / ASTM C348	27.5 - 37 N/mm ² 3,990 - 5,437 psi
Water Permeability DIN / EN 1062-3:2008	<0.001 kg/(m ² .h ^{0.5})
Tensile Adhesion Strength DIN / EN 1542:1999	Concrete: >2.0 MPa Steel: >2.0 Mpa
Slip Resistance ASTM C1028 (SCOF)	Dry: 0.84 / 1.14 (+ AluOxide) Wet: 0.85 / 1.10 (+AluOxide)
Temperature Resistance	Tolerant of sustained temperatures up to 65°C/149°F
Abrasion Resistance EN ISO 5470-1 (Taber)	<1000 mg (average mass loss)
Chemical Resistance EN13529	Excellent
Fire Class EN 13501-1	Bfl - s1 (standard) Bfl - s1 (slip resistant)

The technical properties of the Acrylicon system are evaluated to EN, ASTM or ISO standards and the results are average values, delivered under proper installation procedures and recommended conditions.

Life Expectancy

In excess of 20 years, subject to correct installation conditions and substrate preparation. Life expectancy is generally influenced by the use of the system and maintenance regime.

Disclaimer

This information and all further technical advice is based on intensive research and many years experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. We reserve the right to make technical alterations during the course of further development. The customer is not released from the obligation of checking our data and recommendations for the suitability of their own particular application. Performance of the product described herein should be verified by testing, which we recommend be carried out only by qualified experts and is the sole responsibility of the customer.



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