



Leaders of the flat world



Contents

Page 2	Introducing RCR Flooring Products
Page 3	Product portfolio
Pages 4-5	Why choose RCR products?
Pages 6-7	Innovation, quality and the environment
Pages 8-9	International presence and partnerships
Pages 10-11	Our clients
Pages 12-13	Permaban armoured joints, formwork and dowels
Pages 14-15	Rocland surface hardeners and colourants
Pages 16-17	Rinol sealing and curing compounds
Page 18	Find out more

Introducing RCR Flooring Products

Industrial flooring products have always been at the heart of the RCR Group. Indeed, it was two product manufacturers, Rinol and Rocland, which originally came together to found RCR as a new force in global industrial flooring.

More recently armoured joint manufacturer Permaban joined the Group. With its complementary product range, and similar approach to product quality and innovation, the synergies between the three companies are strong.

Because we believe our strength is in integration, our Products companies have committed to work together. By regularly sharing their latest developments they can provide cost-effective, cohesive product specifications for our clients worldwide. Their ongoing drive for innovation keeps us at the leading-edge of industrial flooring development.

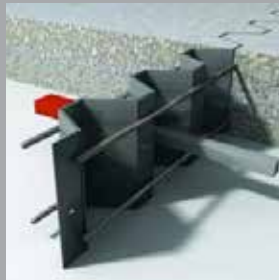
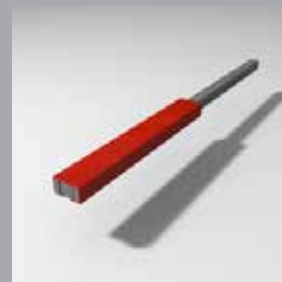
Our Products division operates on a truly international scale, with manufacturing facilities in eight countries across in Europe, South Africa, Chile and India.

With knowledge encompassing everything from steel fibres to cleaning solvents; formwork to decorative finishes; RCR's product expertise helps ensure we remain the leaders in a flat world.

Product portfolio

Our product portfolio encompasses everything an industrial floor could require at every stage of its construction:

- armoured joints – to protect construction joint arrises
- formwork – to provide a boundary for the concrete pour
- construction joint sealants – to fill saw-cut joints in concrete floors
- resin coatings – for a decorative, smooth and durable finish
- floor hardeners – to improve durability in hard-working applications
- dry-shake toppings – for colour and durability; and abrasion and slip resistance
- decorative finishes – to enhance appearance and style
- bonding agents – used when forming a floor in multiple strata
- steel fibres – adding strength to concrete
- accelerating additives – to speed up the curing time and increase early strength
- curing and sealing compounds – to speed curing and improve hardness and durability
- cleaning solvents and detergents – to maintain appearance and performance



Why choose RCR products?

For clients, RCR products provide:

- A durable floor, built to last
- A wide choice of floor colour finishes, to tone with brand colours
- Ease of cleaning
- Reduced maintenance costs for the life of the building
- Reduced operational downtime, due to fewer costly floor repairs
- Enhanced value of the building

For designers and engineers, specifying RCR products means:

- Proven performance in buildings of more than 10 million m² per year, worldwide
- Comprehensive specification resources
- Authoritative technical back-up whenever required
- A value-added specification for the client
- Bespoke product design when needed
- Assurance of ready availability throughout the world



Flooring installers benefit from:

- Expert technical advice when needed
- High quality, durable, cost-effective products which add value to every building
- Products which are designed to work well together
- Technically advanced products, among the most innovative in the world
- Products which are easy to handle and install

"Being a flooring specialist in Central America, the innovative range of RCR products helps me to maintain my technical edge in the market and deliver high value floors to my customers. I also appreciate the consistent service and quality support from RCR Products teams"

Eng. Eduardo Lavarreda
Owner ProPiso®
(specialist flooring contractor)

"This new warehouse is a long-term investment for the company, so it was important to consider all the lifetime benefits and costs during the construction process. We're confident Permaban Signature was the right choice, and are very pleased with the results."

Neil Westley
Operations Director, Aerotron
(aerospace industry client)

"Permaban Eclipse is stiff and easy to work with, which made the joint installation very straightforward. We'd happily use it again. Permaban's technical support on-site was also appreciated."

Kevin O'Reilly
Commercial Director, KonFloor
(specialist flooring contractor)

"RINOL products combine very high mechanical and chemical resistance with excellent aesthetic performance"

Michael Ponsel
CEO Ponsel Flooring
(specialist flooring contractor)

"We have worked with Rocland products for more than 10 years and highly recommend them to our clients due to their high standard of quality. In those 10 years, we have not only imported products, but more importantly we received information and 'know how' about the newest standards, details and methods of construction. We highly recommend your technology and standards of industrial flooring."

Oktay Cantez
Architect



The power of innovation

RCR Products division is diverse in its scope, offering everything from formwork to cleaning solvents. Yet, regardless of the product, our companies are united by a determination to innovate. Through a commitment to research and strenuous testing, all are pioneers in their own field of expertise.

In practice this means developing strong ties not only with end-user clients but also with flooring contractors, engineers, and machinery and equipment manufacturers. Lasting partnerships are grown only through listening – and our companies recognise that true innovation comes from a deep understanding of applications.

Every industrial floor is unique – so our sales and technical teams take the time to determine the precise requirements for each building, which helps to ensure an optimal product specification. Sometimes this will involve creating bespoke products, so the client has a unique solution for their application.

Quality at heart

A key element of controlling the innovation process is adhering to the internationally-recognised ISO9001 quality standard. Our product manufacturers operate under these strict disciplines as a matter of course, giving assurance of quality and consistency which can be relied upon worldwide.

An expert team

Individual excellence is expected – but team excellence is what sets RCR companies apart.

Adopting a matrix structure, we have regional and product champions who work together to ensure a rapid and consistent flow of knowledge around the world. By harnessing and sharing our technical and market knowledge, clients worldwide benefit from our up-to-the-minute experience.

Yet despite these strong ties, the client always has choice. With so many leading names, there are benefits of choosing an integrated RCR product specification; but no obligation for the client to do so. The client's needs and preferences always come first.





Our commitment to the environment

Companies today need to fulfil environmental regulations, and meet stakeholder expectations. Doing so starts with the building's design.

RCR has the tools to calculate the carbon footprint of our products, so we can propose the most carbon-efficient specification for the floor. Designers and engineers can be assured they are helping to minimise the embodied energy in the building; and building owners can be confident they are making a responsible choice.

As a large international Group, RCR takes its own responsibilities seriously too; and we encourage our companies to operate within a recognised environmental management framework.

Our dry-shakes and resins also hold LEED (Leadership in Energy and Environmental Design) product certification, and have a very low VOC content.



International presence

One of the most compelling features of RCR is its sheer size. Our Products division operates on a truly international scale, with manufacturing facilities in eight countries across Europe, South Africa, Chile and India. All our manufacturers are world-class, not only in their product portfolio and manufacturing capabilities, but also in terms of international connections.

As well as their RCR relationships, each company has its own network of specialist distributors and agents around the world. Some also hold stocks in strategic locations, to help ensure swift supply.

Supply chain partners

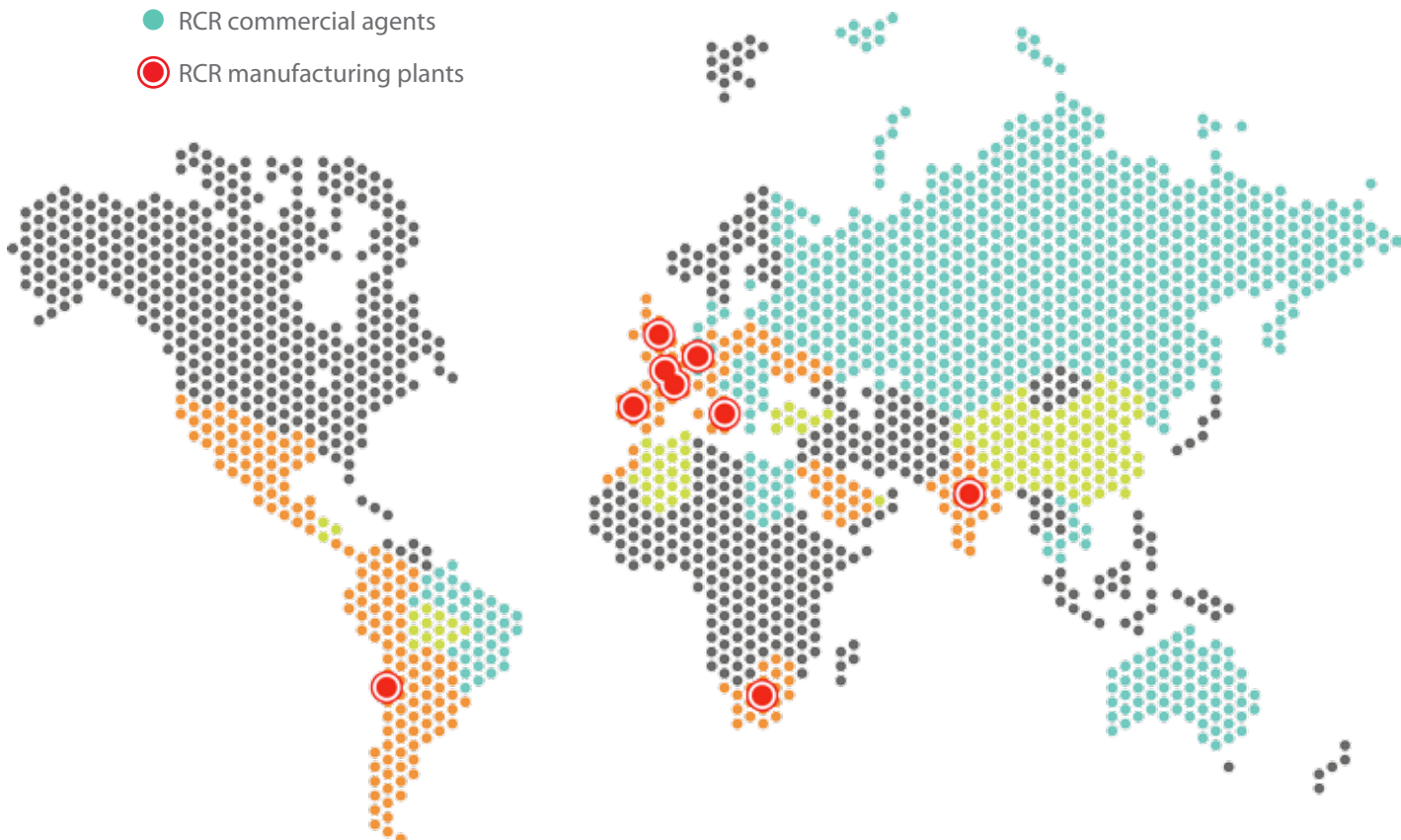
All our companies work hard to develop long-term relationships with their supply chains, with a depth of understanding that is mutually beneficial. By implementing high-end management systems, our Products companies offer complete assurance of efficient and consistent supply.

Because of their experience in the industry, our companies also have relationships with suppliers of specialist products and equipment, and can source these for clients' projects when required.

With international reach, we focus on selecting the highest quality materials and components, and insist that our suppliers' service standards are equally world-class.

Industrial Flooring Group locations

- RCR companies
- Collaboration agreements
- RCR commercial agents
- RCR manufacturing plants



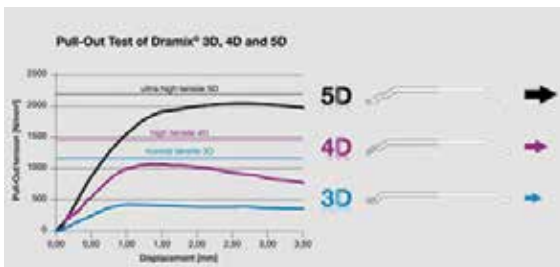
Strategic alliances



Steel fibres are an important part of RCR's value-added approach to industrial floor construction, enhancing strength, durability and performance and improving the production process in terms of speed and quality.

RCR has chosen to work with Bekaert as a strategic partner for steel fibre cooperation in industrial floors. Bekaert, undisputed leader in this field, shares the technical support, international reach and quality-driven approach that is common to all RCR companies. By committing to working closely with them across every aspect of business, we can develop superior quality, cost-effective flooring specifications.

Together, RCR and BEKAERT can offer the construction market innovative solutions meeting the highest quality requirements resulting in the best value for money. RCR is official distributor of Dramix® steel fibres in several countries.



Dramix® steel fibres, reinforcing the future

Over the last years, BEKAERT has been investing for the the future. An extended research program resulted in the development of two innovative fibre types, Dramix® 4D and Dramix® 5D, to complete the range of original Dramix® 3D fibres, which remain the reference in the market. These new fibres have been specifically designed to meet stringent SLS and ULS requirements, opening a complete new world of possibilities, from fluid tight to seamless floors and from "fibre only" piled floors to structural clad racks or raft foundations.

More information can be found at
www.bekaert.com/building



WorldTechFloor is a strategic alliance of leading companies which provides an entire design and construction package for industrial concrete floors.

RCR companies Rocland, Permaban and Rinol contribute with their product lines; as does RCR partner Bekaert. Laserscreed® manufacturer Somero ensures precision in the floor's finish.

Reputed consultants Monofloor provide technical advice and training to ensure a smooth execution. They undertake a thorough survey and valuation of the final result, and provide a project report for the owner.

The confidence in our products and know-how allows WorldTechFloor to provide a five-year warranty to the investors, together with licensed applicators.

More information can be found at:
www.worldtechfloor.com

and also:



FASTER. FLATTER. FEWER.®
www.somero.com



Industrial Flooring Consultants and Projects Managers
www.monofloor.com

Trusted by leading companies worldwide

Numerous leading global companies across a range of sectors have chosen RCR for their floors, including:

Automotive

- Audi
- Michelin
- BMW
- Jaguar Land Rover
- Sungwoo

Retail

- Walmart
- Decathlon
- Ikea
- Lidl

Logistics

- DHL
- DB Schenker
- Ixocon
- Kühne & Nagel

Property developers

- Gazeley
- FM Logistics
- ProLogis

Industrial & Electronics

- Sony
- Hawe

Aerospace

- Labinal
- Aerotron
- Airbus

Medical & Pharmaceutical

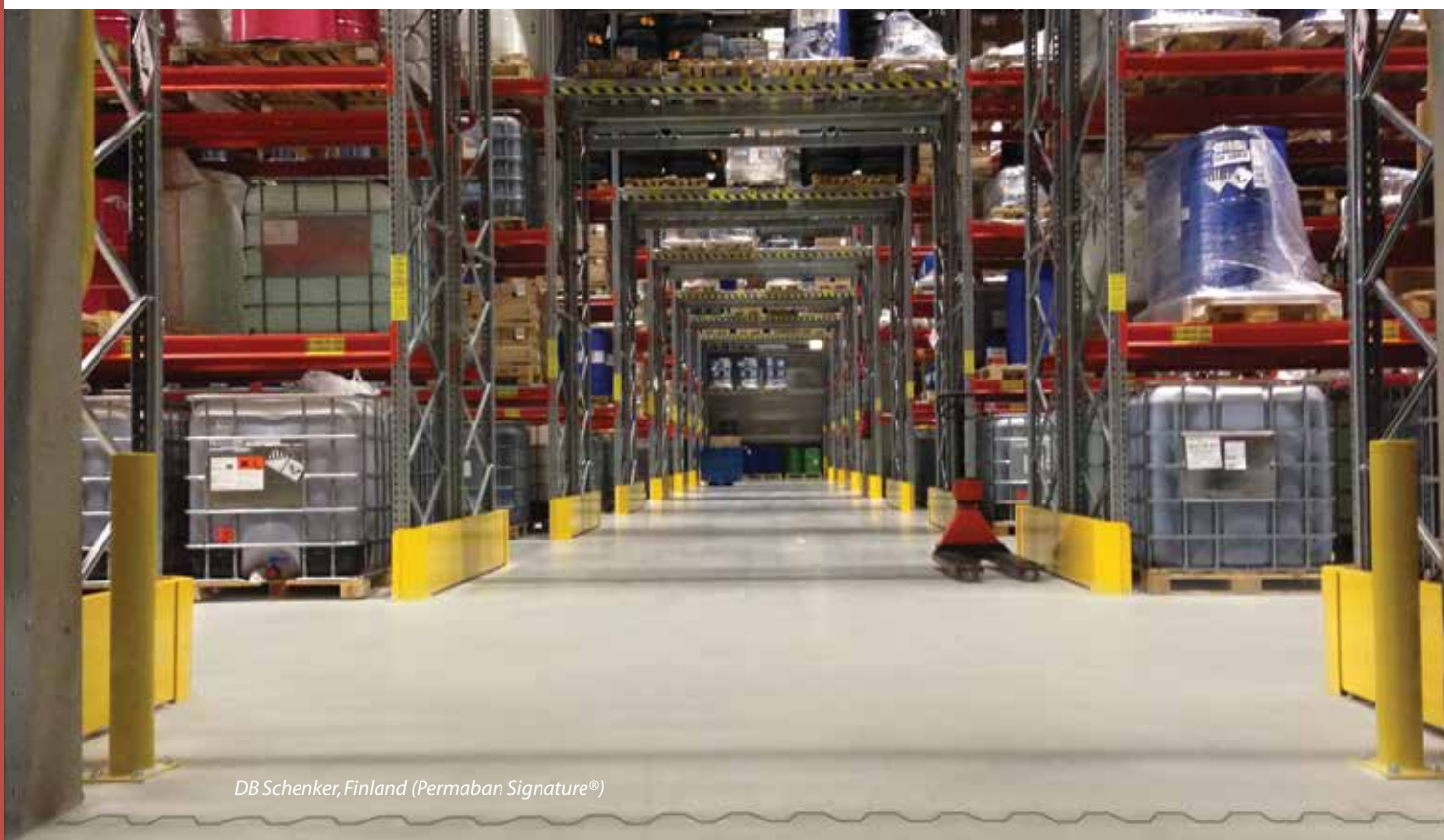
- Novartis
- Becton Dickinson
- Familia Sancela

Food manufacturing

- Nestlé
- Coca-Cola
- Bodegas Portia
- Heineken

Museums

- Guggenheim Museum
- Tate Modern
- Royal Palace Museum Madrid
- Maritime Museum Drassanes



DB Schenker, Finland (Permaban Signature®)



Client: Caterpillar
Location: Santiago, Chile
Area: 12,000 m²
Solution: Rocland Qualitop® Metal Green
 Steel fibres Dramix® 3D 80/60 BG
 Permaban AlphaJoint®



Client: Walmart
Location: Costa Rica
Area: 40,000 m²
Solution: Worldtechfloor label
 Rocland hardeners
 Qualitop Millenium
 Permaban AlphaJoint®
 Steel fibres Dramix®3D 80/60BG



Client: Decathlon
Location: Rivas Vaciamadrid, Spain
Area: 16,000 m²
Solution: Permaban AlphaJoint®
 Steel fibres RocFibre HT (made by Bekaert)
 Rocland Qualitop HP Colour " Decathlon
 grey" 7 kg/m² dryshake hardener
 Proroc Rinol NT sealer



Client: BMW Rolls Royce
Location: Germany
Area: 50,000 m²
Solution: Rinol Allrounder (smooth)



Permaban – armoured joints, formwork and dowels

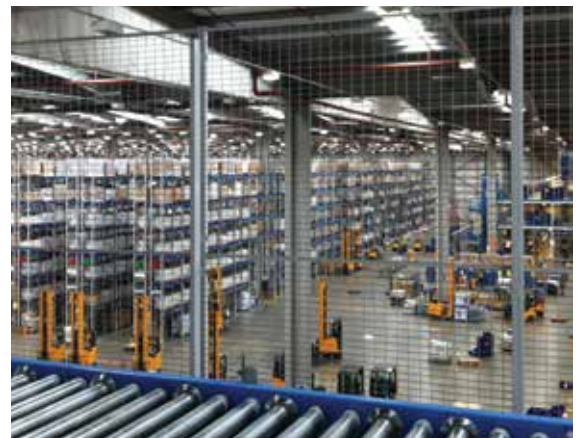
Permaban designs and manufactures leave-in-place formwork and armoured joints for large-scale concrete floors.

Armoured joints (properly called “leave-in-place joint systems”) offer four important benefits.

- They act as a permanent formwork, creating a secure boundary or day joint during the concrete pour.
- They allow the concrete slab to contract in a controlled way, to prevent random cracks occurring.
- They protect the construction joint from impact damage once the building is in use, saving the expense of repair.
- They allow efficient load transfer between concrete slabs, for a stable and durable floor.

By building-in protection during the construction of a floor, Permaban’s products have been proven to save time and money for building owners and users.

Permaban is best known for its AlphaJoint Classic 4010 armoured joint, which set the standard throughout the industry. More recently Permaban has refreshed its approach to joint armouring by launching innovative new products, Signature and Eclipse, to much acclaim; and these are already shaping the future of joint armouring.



B&Q Worksop, UK (AlphaJoint)



IBG Bremen, Germany (Permaban Signature®)



Pendennis Shipyard, UK (Permaban Eclipse®)

The company also offers a range of dowels to accommodate load transfer across joints - plate dowels (its Diamond Dowels, and 'TD' trapezoidal dowels); and square dowel bars with its Permasleeve dowel sleeve. All allow the concrete to move horizontally as it cures, but not vertically, ensuring the floor's surface remains even across the joint.

Permaban currently manufactures in the UK, working with a large network of international distributors and agents to support customers worldwide. Stocks are held in strategic locations around the world to ensure rapid supply.

As well as providing a wide range of products suitable for many applications, Permaban's in-house design engineers often create bespoke products for specific projects.

All products are made under the strict guidelines of ISO 9001, so quality in design and manufacture is assured.

Permaban's products include:

- **Permaban Signature.** Its clever half-hexagon shape prevents the wheels of materials handling vehicles from dropping into the gap between the two edges of the joint, preventing impact. This means there is no damage to either the joint or the truck, giving building owners and operators added value for the lifetime of the building.
- **Permaban Eclipse.** Eclipse is a tough, hard-working armoured joint for heavy-duty applications. A high-tensile steel triangular section reinforces the top edge of the joint, giving extra support where vehicle wheels impact, so the joint can withstand heavy and persistent traffic.
- **AlphaJoint Classic 4010.** This traditional-style armoured joint is one of Permaban's long-established products, still widely respected for its strength and versatility.
- **BetaEdge.** BetaEdge is an easy-to-install joint which simply screw-fixes to the top of timber or steel formwork. Contractors can provide all the benefits of an armoured joint without changing their preferred method of work.
- **Permafex.** This range of joint sealants fills and protects induced (saw-cut) joints, and parallel-faced armoured joints, helping to prevent joint arris damage and stopping debris entering the joint. With different hardnesses and temperature performance ranges, Permafex offers versatility for every project.

More information can be found at www.permaban.com.



Rocland – surface hardeners and colourants

When it comes to surface finishing for industrial floors, Rocland has an impressive product range and reputation for quality.

Its surface hardeners are applied to the top of fresh concrete as a dry-shake powder. Blending with the concrete, they create a durable, impact and abrasion-resistant surface to extend the life of hard-working industrial floors.

Rocland’s special formulation ensures the dry-shake is famously easy to apply and work, which aids trowelling and ensures exemplary flatness.



Jipocar workshop, Prague Czech Republic
(Qualitop Millenium red)

Think Rocland – think colour! An impressive 14 bright, long-lasting colours are available as standard across its entire range. This gives designers tremendous scope for creativity, as floors can easily be ‘zoned’ or created in brand colours. The light reflective finish also helps to reduce the lighting requirements for the building.

Rocland can create speciality formulations to perfectly suit the specific concrete or end-user requirement: all products are developed under the quality disciplines of ISO9001. Rocland products also hold LEED accreditation for their environmental performance.

Truly international, the company is based in France, Chile, South Africa, India and Spain. Its extensive distribution relationships ensure its scope and service is worldwide.



Devred 1902 retail, Nantes France (Qualitop Colour French grey)

Rocland products include:

- **Qualitop Metal.** This surface hardener compound contains specially treated metal particles, providing the ultimate in durability for challenging applications such as heavy industry, airport hangars and automotive manufacturing.
 - **Qualitop Millennium.** This is ideal for floors which will be subject to intense wheeled traffic and abrasion, such as warehousing and distribution centres.
 - **Qualidur.** One of Rocland's best-known products, Qualidur comprises hard synthetic mineral granules. Chemically inert, Qualidur is highly reliable and consistent in use, and is easy to maintain.
 - **Indurit.** This high performance cement-based screed has been developed specifically for the food industry. Completely non-toxic, it resists rot and the growth of bacteria, withstands frequent cleaning, and also provides anti-slip properties.
 - **'Fresh on fresh' formula.** This mortar, containing hardeners and colourants, is supplied ready to pour on top of fresh concrete. There it forms a hard 5mm top, monolithic with the slab; and trowels easily to achieve a superflat floor.
- More information can be found at www.rocland.eu.

Maritime Museum, Barcelona Spain (Fresh on Fresh Qualitop Master light grey)





Rinol – synthetic resin coating systems

For more than 50 years Rinol has been a respected international name in the flooring industry. It manufactures in Italy, and its synthetic resin coating systems are used for projects worldwide.

Rather than focusing on products Rinol has created over 30 systems, each carefully formulated to suit a different flooring application. For example, there are systems for heavy manufacturing; for the electronics industry; and for food production.

Each system typically comprises two or three layers, applied in turn to the concrete surface – a primer, then a levelling compound, and finally the coloured coating. This process ensures a high-quality, durable and attractive finish.



K48, Leverkusen Germany (Rinol Parking – OS8 + OS11a)

As well as suiting industrial floors, Rinol's systems are also popular for showrooms, exhibition centres, schools, public buildings and large apartments.

Furthermore, the company can create special systems to precisely suit a client's application - all controlled through its ISO9001 procedures.

Choosing a Rinol coating offers important benefits to the building's owner and user, such as chemical resistance, abrasion resistance, and an attractive seamless finish. Rinol also offers a wide range of RAL and NCS colours; and with no minimum order requirement, designers can enjoy the freedom to be creative even in smaller spaces.



Wine store, Winnenden Germany (Rinol GFR)

Rinol products include:

The company places a high emphasis on its products' environmental credentials. It holds LEED product accreditations across its range, due to the low VOC emissions. It is also a member of DGNB, the German Sustainable Building Council; and its systems conform to the AgBB normative for German public buildings.

- **Rinol Allrounder.** Ideal for medium to heavy duty industrial floors, warehouses, laboratories and manufacturing. This three-layer system also complies with EU food industry regulations.
- **Rinol Standard.** This has been designed specifically for medium to heavy duty industrial floors, including workshops, exhibition arenas, production facilities and storage areas. Its impermeable coating complies with EU regulations for the food industry.
- **Rinol Sealing.** This two-layer system protects and hardens the floor's surface, providing seamless durability and slip resistance. It is best suited to light-duty industrial floors, storage, and pedestrian areas.
- **Rinol Conductive.** A four-layer system, Conductive is designed specifically to be electrically dissipative, so is perfect for explosion-proof industrial spaces, operating rooms, clean rooms, power plants and the aerospace and electronics industries.
- **Rinol Exquisit.** Exquisite combines durability and style. Offering a virtually unlimited number of colour combinations and patterns, it creates a striking impression in moderately busy pedestrian areas, such as showrooms, lobbies and shops.

More information can be found at www.rinol.de.

Sungwoo Hitech, Czech republic (Rinol Automotive)



Designed with you in mind

Every product we manufacture has one purpose - to add value for specifiers, investors, clients and contractors alike.

We want to make life simpler; to make projects more cost-effective; and to help buildings perform efficiently for a lifetime.

And to do this we start by listening. The more we know about you and your project, the more we can help you create the optimal specification, and the ideal industrial floor. We can even create specially-designed products for you if necessary.

So get in touch with us, and our technical experts will be happy to help you with your project. Contact us via e-mail at info@rcrindustrialflooring.com

Find out more

We've mentioned our standard products in this brochure to give an overview of what we can do. But it certainly isn't everything!

You can find out more, and download technical information, at:

www.permaban.com
www.rocland.eu
www.rinol.de

or visit our RCR Group website:
www.rcrindustrialflooring.com





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Leaders of the flat world