

Tetra Seal

Elastic hybrid sealant for joints subject to strong expansion.

The perfect sealant for any type of long-lasting joint.

Tetra Seal is specifically designed to elastically seal any material on any substrate.



Rating 2

1. High elasticity
2. Adheres to all substrates, including damp ones
3. Overpaintable
4. For internal and external use
5. Low elastic modulus
6. High resistance to UV rays
7. High resistance to abrasion

- × Regional Mineral $\geq 30\%$
- ✓ VOC Low Emission
- × Solvent ≤ 5 g/kg
- × Low Ecological Impact
- ✓ Health Care

Areas of application

→ Use

Suitable for elastic sealing of any type.

In particular, we recommend the use of Tetra Seal for the following:

- sealing of construction and connection joints in general;
- expansion and fractionizing joints in industrial concrete floors, internal and external concrete floors, ceramic floor and coverings;
- joints in pre-fabricated or coated facades, and in internal and external vertical structures in general;
- sealing in structural steelwork and sheet metalworks;
- sealing of pipes subject to vibration;
- sealing of cracks.

Suitable for internal and external use, including in areas subject to freezing, in contact with the most common building materials such as:

- cement-based substrates (plaster/render, mortar, concrete)

- ceramic tiles, terracotta, bricks;
- excellent adhesion on metal substrates:
- steel - raw, stainless, galvanised, pre-painted,
- plasticised - aluminium, copper;
- glass, mirrors;
- timber, synthetic resins, PVC;
- polycarbonate pre-treated with sandpaper;
- marble and natural stone. It is advisable to always perform a preliminary test;
- Also for use on damp substrates.

Do not use on loose and dusty surfaces, on bituminous structures and products exuding oils, solvents or plasticizers; on polyethylene, polypropylene, polytetrafluorethylene, neoprene surfaces. It is recommended that a test be carried out before application on sensitive metal surfaces such as copper, silver and relevant alloys, marble and natural stone.

Do not use for swimming pool joints.

Instructions for use

→ Preparation of substrates

The sides of the joints to be sealed must be perfectly clean and free of grease, dust, rust or standing water. Remove all debonded or loose parts and carefully deoxidize all metals. When preparing visible joints, and in order to achieve a clean sealing line, the user should cover the edges with protective masking using normal adhesive tape.

The application technician is responsible for checking that the sealant is compatible with the substrate in terms of adhesion and stain formation. The use of Keragrip Eco Pulep on metal surfaces optimises the cleanliness of the surface and the adhesion of the product to it.

When used as a sealant, Tetra Seal must be able to move freely, adhering perfectly to the walls but not to the bottom of the joint: therefore, for an appropriate use, insert the closed-cell polyethylene foam sub-joint called Joint; select the appropriate diameter depending on the width of the joint.

→ Preparation

The product is ready-to-use. After cutting the conical nozzle of the cartridge, cut the spout at an angle of 45° to suit the width of the seal to be realized and screw it onto the cartridge. Insert the cartridge of sealant into the appropriate manual or pneumatic dispensing gun.

→ Application

Before extrusion of the product, check that any applied primer coat is dry. Areas close to joints must be protected with masking tape to prevent substrates from being contaminated and to ensure even sealing. Remove the masking tape immediately after finishing. Make sure the hybrid paste has been compacted deep into the joints to ensure optimum adhesion. To achieve a perfect finish, pass a metal or plastic spreader soaked in soapy water over the surface in one, continual movement if possible.

For long-lasting sealing, capable of withstanding expansion and contraction stress, the following conditions are necessary:

the joint is applied so that movement will not exceed 25% of joint width

- the ratio between width and sealant depth must be as follows:
 - 1/1 for sections from 8 to 12 mm
 - 2/1 for sections from 12 to 35 mm
- the sealant adheres only to the sides of the joint and not to the substrate.
- Use Joint polyethylene foam sub-joint layer to adapt depth and prevent adhesion to the surface.

→ Cleaning

Residual traces of sealant can be removed with common solvents. Once hardened, the product can only be removed by mechanical means.

Special notes

- Do not use in completely closed areas as the product will polymerise in atmospheric humidity.
- Brush the joint within 5 minutes after application to ensure the best contact between sealant and substrate.
- A base coat is normally not necessary. Specific substrates (porous or made of plastic materials) may require the use of an adhesion promoter to ensure maximum adhesion. This product is recommended for all situations at risk from dust.
- Tetra Seal can be painted over. In case of overpainting, the sealant must be fully

polymerised. We recommend the use of elastomeric paints, more specifically the following products:

- paints for internal use: Absolute, Decor, Keradecor White, Keradecor Paint.
- paints for external use: Kerakover Acrilex Flex, Kerakover Kompact.
- glazes: Microresina, Aqualite Eco Smalto Satinato, Aqualite Eco Smalto Lucido.

Always carry out a preliminary compatibility test between sealant and paint.

- After applying Tetra Seal, protect the sealant from rain for at least 2 hours at +20 °C.

Certificates and marks



* Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

Abstract

Elastic and waterproof sealing of joints, gaps, elastic couplings of building materials in general will be carried out with a moisture-curing, thixotropic, silane-terminated, hybrid, elastic sealant, such as Tetra Seal by Kerakoll Spa, GreenBuilding Rating 2, CE-marked and compliant with the performance requirements of Standard EN 15651, part 1, 2, 3 and 4.

Technical Data compliant with Kerakoll Quality Standard	
Appearance	Coloured thixotropic paste
Specific weight	≈ 1.5 g/cm ³
Chemical nature	moisture-curing silane-terminated hybrid polymer
Shelf life	≈ 12 months from production in the original sealed packaging
Warning	Protect from frost, avoid direct exposure to sunlight and sources of heat
Pack	290 ml cartridge
Colour	white, light grey, anthracite
Joint min. width	≥ 5 mm
Joint max. width	≤ 35 mm
Sealing section ratio W/D:	
- up to 12 mm	1/1
- from 12 to 35 mm	2/1
Temperature range for application	from +5 °C to +40 °C
Skinning time	≥ 60 min
Reticulation time	≈ 2 mm / 24 hrs
Coverage	see approximate coverage table

Values taken at +23 °C, 50% R.H. and no ventilation.

coverage table

Linear metres of joints sealable with one 290 ml Tetra Seal cartridge

Depth	Width	5 mm	8 mm	10 mm	15 mm	25 mm	30 mm	35 mm
5 mm		≈ 11.6 m	–	–	–	–	–	–
8 mm		–	≈ 4.5 m	–	≈ 2.4 m	–	–	–
10 mm		–	–	≈ 2.9 m	≈ 1.9 m	≈ 1.2 m	–	–
13 mm		–	–	–	–	≈ 0.9 m	≈ 0.7 m	–
15 mm		–	–	–	–	–	≈ 0.6 m	≈ 0.6 m
18 mm		–	–	–	–	–	–	≈ 0.5 m

If an estimated coverage value has not been given, it means the joint width/depth ratio is outside the specified limits and the joint cannot be sealed.

Performance**VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions**

Conformity	EC 1 plus GEV-Emicode	Cert. GEV 17095/11.01.02
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HIGH-TECH

Shore A Hardness	20 – 30	ISO 868
Elastic modulus	≈ 0.30 N/mm ²	ISO 8339
Elongation at break	≥ 500%	ISO 8339
Tensile strength	1.65 MPa	ASTM D412
Movement capability	25%	ISO 11600
Elastic recovery	80%	ISO 7389
Resistance to atmospheric agents	excellent	
Resistance to flow at +23 °C	≤ 3 mm	EN ISO 7390
Resistance to flow at +50 °C	≤ 3 mm	EN ISO 7390
Working temperature	from -40 °C to +80 °C	
Classification EN 15651-1	F-EXT-INT-CC	
Classification EN 15651-2	G-CC	
Classification EN 15651-3	S	
Classification EN 15651-4	PW-EXT-INT-CC	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

Warning

- Product for professional use
- abide by any standards and national regulations
- use at temperatures between +5 °C and +40 °C
- protect from rain during the first 2 hours following application
- store in a cold and dry environment
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com



The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in June 2023 (ref. GBR Data Report - 06.23); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com. KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.