

Single-component, cementitious waterproofing mortar

weber.cem dryrend 521

motex® dry-rend 521



About this product

weber.cem dryrend 521 is a preblended, single-component cementitious mortar which, when mixed with water, produces a durable, high performance waterproof render, suitable for use on concrete, dense concrete blockwork and dense brickwork. **weber.cem dryrend 521** is suitable for use on horizontal and vertical, internal and external surfaces, subject to positive or negative water pressures.

Technical data

The following test results were obtained in laboratory conditions at 20°C

Hardened density:	2170 kg/m ³
Bond to dense brick, dense block or concrete:	> 1 N/mm ²
Bond to concrete after thermal cycling:	> 0.75 N/mm ²
Interlayer bond strength:	> 2 N/mm ²
At 10 mm thickness, no leaks at negative pressure of:	1 bar at 7 days 2 bars at 14 days 3 bars at 28 days
Pot life	30 minutes

Strength gain	Compressive strength	Tensile strength	Flexural strength
24 hours	12 N/mm ²	n/a	n/a
3 days	25 N/mm ²	2.0 N/mm ²	4.8 N/mm ²
7 days	30 N/mm ²	2.5 N/mm ²	5.0 N/mm ²
28 days	40 N/mm ²	3.0 N/mm ²	5.5 N/mm ²

Uses

weber.cem dryrend 521 may be applied to walls, floors or soffits, including underground work in buildings (e.g. foundations, basements, car parks etc.) and civil engineering. Typical applications include:

- Waterproof tanking: structures subject to positive and negative water pressure
- Tanking of water-containing and water-excluding structures
- Reducing permeability of porous surfaces
- Levelling rough surfaces
- Forming covings and fillets on walls and floors

weber.cem dryrend 521 can be applied in single coats of 5 mm or 10 mm up to a maximum thickness of 20 mm in 2 coats depending on the water resistance required.

Suitable substrates:

- New, old or repaired concrete
- Dense concrete blockwork at least 28 days old
- Dense brickwork at least 14 days old

Constraints

Do not apply more than 10 mm thick in one coat. Do not use on weak, friable substrates such as soft bricks or lightweight blocks, where there is a large variation in thickness, or where the substrate is cracked, subject to movement or heavily trafficked.

Features and benefits

- ▲ Uses sulphate-resistant cement: tolerates aggressive water with pH > 5
- ▲ Supplied ready to mix, no need for batching
- ▲ Easy to mix, apply and finish
- ▲ Can be applied by spray pump to cover large areas
- ▲ Time saving – faster finish than conventional render
- ▲ Excellent bond to damp or wet concrete
- ▲ Impermeable to negative pressure up to 3 bars
- ▲ Resistant to thermal cycling
- ▲ May be overcoated with tiles, microporous paints or coatings

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Preparation

All substrates must be sound and free of all contamination including laitance, paints, coatings, oil, grease and dust. Concrete and engineering brick surfaces must be roughened by suitable mechanical means such as grit blasting, high pressure water jetting or needle gunning. Dense facing brick and concrete block surfaces should also be roughened. New concrete must be fully cured for at least 14 days. Do not use a permanent curing membrane.

Mortar joints in dense brickwork, concrete block joints and small cavities in concrete blocks should be raked out, saturated with water and filled flush with **weber.cem dryrend 521**. The perimeter of each area where **weber.cem dryrend 521** is to be applied must be cut back square. Feather edging is not permitted. Use temporary battens to ensure that the correct thickness of render is applied. Form rounded skirtings at junction of walls and floor and form vertical covings in corners between walls with fillets of **weber.cem dryrend 521**. Thoroughly dampen the whole area with clean water before applying **weber.cem dryrend 521**.

All ancillary works such as leak sealing, treatment of cracks and joints, sealing of pipes and fixtures should be carried out in accordance with the Specification. Contact Technical Services for details.

Mixing

Use only clean, potable water.
Water addition per 25 kg bag:
For a hand placed mortar for covings etc. 2.75 – 3.25 litres
For manual application of render 3.0 – 3.5 litres
For machine application 3.25 – 3.5 litres

Hand application

Mix **weber.cem dryrend 521** in a forced-action mixer such as a Mixal or Cretriangle or in a clean bucket using a paddle and a slow-speed drill at a speed not exceeding 500 rpm. Mix for at least 2 minutes to a smooth and homogeneous consistency. Remix after 10 minutes if required.

Machine application

Use a Putzmeister P11, DuoMix or similar machine. Machine mix the mortar for at least 5 minutes.

Application

Hand application

Apply an initial bondcoat with a plaster float to a thickness of approx. 2 mm, pressing well into the damp substrate. Immediately apply the first layer of render to the required thickness not exceeding 10 mm in total. Leave a rough surface suitable for subsequent bonding of the second coat if required.

Machine application

Apply the mixed **weber.cem dryrend 521** by spray pump to the required thickness (max. 10 mm in one pass) and level off with a screeding bar. When applying a total thickness of 20 mm in 2 layers, leave the first layer "as screeded" before applying the second coat.

The second coat should be applied as soon as the first layer is firm enough to support it (approx. 6 hours at 20°C). For total tanking operations, use a crawling board to spread weight when applying second layer of **weber.cem dryrend 521** onto floors.

Application temperature: 5°C to 35°C
Do not apply to frozen surfaces or when frost is forecast within 24 hours. Do not apply in direct sunlight or on a hot substrate.

Note: Times quoted need to be extended at lower temperatures and reduced at higher temperatures.

Finishing

When the render has firmed up sufficiently, rub up with a wooden float or sponge to produce a level textured surface suitable for tiling or painting. Do not re-wet the surface before trowelling.

Curing

Normal concrete curing methods are recommended. Do not traffic until 4 days after application (at 20°C).

When applying in confined spaces, cure for 4 days then ensure sufficient ventilation to prevent condensation..

Packaging

weber.cem dryrend 521 is supplied in 25 kg bags.

Coverage and yield

Approx. 20 kg per m² when applied at 10 mm thickness.

Yield 12.5 litres per bag.

Storage and shelf life

When stored unopened in a dry place at temperatures above 5°C, shelf life is 6 months from date of manufacture.

Health and safety

Contains cement (Contains chromium (VI). May produce an allergic reaction). Harmful by inhalation. Irritating to eyes and skin. Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical help. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing, gloves and eye/face protection.

For further information, please request the Material Safety Data Sheet for this product.

Technical services

Weber's Customer Services Department has a team of experienced advisors available to provide on-site advice both at the specification stage and during application. Detailed specifications can be provided for specific projects or more general works. Site visits and on-site demonstrations can be arranged on request.

Technical helpline

Tel: (01525) 722110
Fax: (01525) 718988

Sales enquiries

Weber products are distributed throughout the UK through selected stockists and distributors. For UK sales enquiries and overseas projects, contact **Weber's** Sales office.

Sales office

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