

**Rapid strength-gain repair
concrete for thin bonded pavement
repairs**

weber.cem pyratop

pyratop



Uses

- Thin-bonded repairs 25 mm to 75 mm depth
- Repairs to steps and joints
- Industrial floors or failed floor slabs
- Bridge deck repairs
- High strength repairs to pavement concrete both thin-bed and full-depth
- Parking decks and ramps
- Loading bays
- Jetty decks and slipways to coastal areas
- Airport hardstandings

Features and benefits

- ▲ Fully complies with Highways Agency Specification for Highway Works
- ▲ 25–30 minute working time at 20°C
- ▲ 45 minute set time at 20°C.
- ▲ Shrinkage compensated
- ▲ Sulphate resistant
- ▲ Resistant to freeze/thaw conditions
- ▲ Can be used for winter work down to 5°C
- ▲ Excellent abrasion resistance
- ▲ May be extended with non-reactive 10 mm granite aggregate for full depth repairs over 75 mm depth
- ▲ Excellent strength gain after 3 hours at low temperatures
- ▲ Self priming
- ▲ Good compatibility with parent concrete
- ▲ Requires only the addition of water
- ▲ Independently tested by NAMAS approved laboratory

About this product

weber.cem pyratop is a prepacked hydraulic cement-based product with specially graded aggregates. It exhibits high early strength, is dimensionally stable and has excellent abrasion resistance. When mixed with clean water **weber.cem pyratop** produces an early strength concrete suitable for thin-bonded toppings or full-depth repairs up to 15 m². Complies with Highways Agency deck repairs specification.

Technical data

The following test results were obtained in laboratory conditions

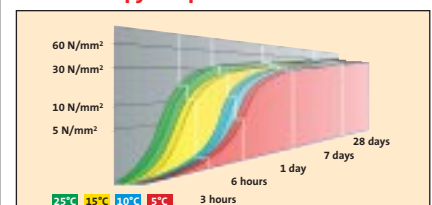
Thermal cycling resistance at 20°C to –15°C	+45 microstrain	
Bond strength	at 10°C	> 1.0 N/mm ²
	at 20°C	> 1.2 N/mm ²
Modulus of elasticity	20.0 kN/mm ²	
Coefficient of thermal expansion	11.9 x 10 ⁻⁶ per °C	
Hardened density	2350 kg/m ³	
Skid resistance value (polished)	SRV 51	
Abrasion resistance, mean depth of wear after 15 minutes (test TR34)	0.2 mm	
Working time	at 20°C	30 minutes
Setting time	at 20°C	45 minutes

Strength development

	Compressive strength	Tensile strength	Flexural strength
6 hours	20 N/mm ²	N/A	N/A
1 day	35 N/mm ²	1.35 N/mm ²	6.4 N/mm ²
7 days	45 N/mm ²	1.53 N/mm ²	7.7 N/mm ²
28 days	60 N/mm ²	1.90 N/mm ²	8.7 N/mm ²

Data based on water addition of 1.85 litres per 25 kg bag at 20°C
Further technical data is available. Please contact **Weber's** Customer Services Department.

Compressive strength development of weber.cem pyratop



weber.cem pyratop

Preparation

All concrete to be repaired should have a minimum characteristic strength of 25 N/mm² and a bond strength of 1 N/mm². Surface preparation method should be carefully chosen so as to minimise the risk of micro-cracking in the parent concrete thus affecting the bond with the repair. For full depth repairs all exposed reinforcement steel should be cleaned to Swedish Standard SA 2^{1/2}.

Scabble or break out spalled area to a depth sufficient to remove all deteriorated concrete providing an even, open texture. Avoid micro cracking to the parent concrete.

It is essential that edges be cut square to a minimum depth of 10 mm and are lightly scabbled. Feather edging is not recommended. Further breaking out is required at the saw-cut edges to achieve a minimum 25 mm depth of repair.

Clean and remove all oil, grease, dirt and loose debris from the area to be repaired. Thoroughly wet the prepared surface with clean water for at least 30 minutes prior to the start of mixing. Remove surplus water to achieve saturated, surface-dry concrete substrate.

Mixing

Use only freshly opened **weber.cem pyratop** bags and a clean, forced-action mixer such as a Creteangle. The mixer capacity should be at least 30% greater than the quantity to be mixed.

Locate the mixer close to the area to be repaired. Working time at 20°C is approximately 30 minutes. At lower temperatures, working time is increased, so it is advisable to keep material warm and use warm water in cold weather conditions.

Charge the mixer with 1.85 litres of water followed by a gradual addition of **weber.cem pyratop**. Mix for 3 minutes.

An additional 0.1 litres of water may be added if necessary and mix for 5 minutes..

NB: do not exceed maximum water addition of 1.95 litres water per 25 kg bag.

For repairs over 75 mm thick, bulk out the repair concrete with 10 mm single sized crushed granite aggregate (25 kg of aggregate per 3 bag mix) and mix for 5 minutes to a uniform consistency.

Application

weber.cem pyratop may be trowelled or poured into the prepared area. The use of a stiff brush is recommended to work the material onto the pre-dampened substrate to enhance the bond.

Screed and level up to existing concrete. Finish by steel trowel to seal the surface edges, and saw cuts.

Setting time

Setting time at 20°C is approximately 45 minutes.

Winter working

weber.cem pyratop can be used down to 5°C provided cold weather working precautions are carried out.

For applications below 5°C please contact **Weber's** Technical Services Department

Curing

Cure within 30 minutes of laying using an appropriate method such as wet hessian, polythene or a sprayed-on curing membrane.

Protect from frost.

Packaging

weber.cem pyratop is supplied in 25 kg bags.

Yield

Unbulked: yield per 25 kg **weber.cem pyratop** is approximately 12 litres.
 Bulked: yield per 75 kg **weber.cem pyratop** and 25 kg of aggregate is approximately 45 litres.

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

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.

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