



weber EXM 701

- Underpinning/embeddings - thin layers <50mm
- Very good adhesion to steel

About this product

Expanding Concrete 701 is a certified dry concrete. It should be mixed only with water to obtain a ready-to-use, lightly flowing, expanding, frost-resistant, underpinning mortar. Expanding Concrete Coarse gives excellent adhesion to adjoining surfaces, and like other cement-rich mortars it provides very high corrosion protection for embedded components made from untreated steel. Embedded components of untreated aluminium must not be used. Galvanized embedded components should be given anti-corrosion protection of the part to be embedded. Weber Expanding Concrete provides excellent airtightness and thus offers good resistance against outside elements such as detergents, light acid attack, saline solutions and similar. Expanding Concrete is certified and approved in accordance with AMA Anläggning. P-marked according to CR059.

Area of use

For use in layer thicknesses up to 50mm. Especially suitable where all dimensions are given and total filling is required. Expanding Concrete is intended for use in underpinning, embedding and encasing of bridge bearings, steel and concrete piles, balustrade stands etc. and is also suitable for horizontal concrete laying and injection work.

Substrate type

- Concrete
- Block
- Cementitious floor levelling
- Tile
- Mineral
- Stone

Constraints

- Should not be used in temperatures below +5°C

Pretreatment

Clean casting site well. Raw, broken-up surfaces for casting against an existing structure provide best adhesion. Always moisten the casting site so that water is not sucked out of the casting compound. However when casting, no unconfined ground water should occur at the casting site.

Mixing

Expanding Concrete should be mixed by machine for minimum 5 minutes using approx. 3,6 litres water per 20 kg. This amount will yield approx. 10 litres fresh concrete of light flowing consistency. No further admixtures are recommended. Mixing should be performed using a paddle or contraflow mixer, high-speed mixer or drilling machine with beater.

Product specification

Recommended layer thickness	5-50mm
Recommended water content	3,6 L / 20 kg
Mixed volume	approx 10 L / 20 kg bag
Application temperature	>5° C
Pot life (Operating time)	approx 30min
Open time	4h/0,1 MPa according to EN13294
Curing start	approx 4 hours
Consistency	360-440mm according to SP-standard 1651
Binder	Portlandcement
Cement type and class	Cem I 42,5N MH/SR3/LA and CEM I 52,5R
Aggregate	Natural gravel/sand 0-1mm
Compressive strength 1 day	>30 MPa according to EN 12390-3
Compressive strength 7 days	>40 MPa according to EN 12390-3
Compressive strength 28 days	>50 MPa according to EN 12390-3. For accredited strength testing report at 28 days, contact Weber.
Shrinkage	28 days: 1,2 % according to SS 13 72 15. 56 days: 1,3 % according to SS 13 72 15.
Exposure class	X0, XC4, XS3, XD3, XF4, XA1 according to EN 206-1
Frost resistance	Yes, XF4 according to SS 13 72 44 (salt environment)
Waterproof	Yes, according to SS 137214
Air content	3-6% according to EN 1015-7
Chloride content	<0,1% according to EN 196-2:2013
Expansion	0,5-2% according to SS 137540:2008
Water cement ratio	0,32
CE-marking designation code	EN 1504-6, Dop-SE 0219 according to Cert 0402
P-label	CR059, Cert nr. 125702 according to cert 1002
Storage conditions	Storage time for bags on a plastic-covered pallet is approx. 12 months from date of packing. Store in a dry place.
Package	20 kg bag 1000 kg bigbag
Water separation	None, according to SS 137540:2008

Work instructions

Adjust the consistency to suit the casting to be undertaken. When underpinning, check that no air pockets occur by working away from a hole. Only light vibration or puddling may be permitted. For pouring in the concrete, use of formwork with a raised edge on one side is recommended. EXM 701 should be applied within 30 minutes.

After-treatment

The finished casting should be protected against dehydration. Exposed surfaces (stripped early) should be cured with water during the first 24 hours. When watering is finished or when the covering is removed (permanent formwork), Weber shrink barrier can be applied for best results.

Please observe

Winter handling: At temperatures below +5°C, strength development will cease. Care must also be taken when casting against cold concrete surfaces. Use warm concrete and protect finished castings against cooling. The concrete must not be exposed to frost until adhesion strength corresponding to 5 MPa is obtained, normally after 1-3 days. Alternatively Weber EXM 715 or EXM 711 can be used. Do not use water to aftercure when there is a risk of frost.

Safety regulation

Always read the applicable safety data sheets, use personal protective equipment and follow the workplace safety regulations.

Quality control

The product is P-labeled, according to SP / Certification, CR 059 expanding dry mortar. P-marking is a third-party certification, SP/Certification. The certification includes detailed requirements and controls of the product with respect to content, functional properties, durability and strength properties. The certification also includes annual follow-up of the manufacturer's own inspection, as well as testing in an independent laboratory, to verify that the stated requirements and properties are met. The current properties of the product and the requirements are stated in the certificate of approval and the product sheet.

Disclaimer

As there are different conditions at every opportunity, Weber can not be held responsible for anything other than the information provided under the heading "Product Specification". Examples of information and circumstances, which are outside Saint-Gobain (whether specifically stated or not) include storage, construction, processing, interoperability with other products, workmanship and local conditions.