

# Wecryl 885

# Concrete replacement for manual application (PRC)



## **Brief description**

Wecryl 885 is a fast-curing concrete repair mortar used to make good flaws and damage on concrete elements on engineering structures in accordance with ZTV-ING (Supplementary Technical Regulations and Guidelines for the Protection and Maintenance of Concrete Components) part 3, section 4. On account of its special properties, such as high compressive strength and tensile strength in bending, Wecryl 885 is the perfect product for areas with or without structural relevance.

#### Material

2-component, fast-curing, highly filled PMMA-based (polymethyl methacrylate) repair and levelling mortar with a preformulated, activated filler mix

# **Properties and advantages**

- Easy to apply
- Fast-curing, rapidly achieves final strength
- High compressive strength > 85 N/mm<sup>2</sup> after 1 day
- High tensile strength in bending > 23 N/mm<sup>2</sup>
- low shrinkage < 0,3 mm/m
- Resistant to frost and de-icing salts
- Largely resistant to acids, alkali solutions and diesel
- UV-, hydrolysis- and alkali-resistant
- Solvent-free

Wecryl 885 is a 2-component catalysed-resin mortar that is used to protect and repair concrete structures. If the concrete has been damaged, Wecryl 885 can be used as a concrete substitute or to strengthen the concrete structure.

- Application in splash zones
- Application in atomised-spray zones
- Application in areas with or without structural relevance
- Replacement of damaged or carbonated concrete
- Increased coverage of reinforcement steel
- Improved structural strength (cross-sectional enhancement)
- Horizontal and slightly inclined surfaces

Verifiable certification

(TAB certificate no. 19/14815/01-G01) in accordance with ZTV-ING part 3, section 4 "Protection and repair of concrete components", appendix F

Concrete repair in accordance with DAfStb guideline "Protection and repair of concrete components", published October 2001

Products and systems for the protection and repair of concrete structures, part 3 - "Structural and non-structural repair", DIN EN 1504-3

## **Applications**

**Tests and approvals** 



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## Pack size





2.00 kg Wecryl 885 (resin) 24.00 kg Wecryl 885 Sand (activated filler mix) 26.00 kg

**Colours** 

## Storage

Store products sealed in their original packaging and in a cool, dry and frostfree place. Avoid warm storage areas (> 30 °C) even for brief periods, for example on site. Consequently, the products must not be exposed to direct sunlight nor kept in a vehicle. The unopened product has a shelf life of at least 3 months after delivery. After removing some of the contents, reseal the containers so they are airtight.

# **Application conditions**





# **Temperatures**

Grey

The product can be applied within the following temperature ranges:

| Product    | Temperature range, in °C |            |           |
|------------|--------------------------|------------|-----------|
|            | Air                      | Substrate* | Material  |
| Wecryl 885 | -5 to +35                | +3 to +35* | +3 to +30 |

<sup>\*</sup> The substrate temperature must be at least 3 °C above the dew point during application and curing.

#### Moisture

The relative humidity must be  $\leq$  90%.

The surface to be coated must be dry and ice-free.

The surface must be protected from moisture until the coating has hardened.

# Frost

At temperatures around freezing the cured surface of the concrete repair mortar must be abraded. This is essential to provide a good key, otherwise there might be adhesion problems when the next layer is applied.

## **Reaction times**

|                   | Reaction times for Wecryl 885 (at 20 °C) |  |
|-------------------|--|--|
| Pot life          | approx. 12 min                           |  |
| Rainproof         | approx. 30 min                           |  |
| Can be walked on/ |  |  |
| overcoated        | approx. 1 hour                           |  |
| Curing time       | approx. 3 hours                          |  |

Higher temperatures will reduce reaction times, while lower temperatures will increase reaction times.

# **Consumption rates**

approx. 2.40 kg/m<sup>2</sup> per mm layer thickness

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**Technical data** 

Dry density:

approx. 2.4 g/cm3

Application thickness (per layer):

10 - 40 mm

# **Product application**





## Application equipment / tools

For mixing the product:

- Compulsory mixer with spiral mixer head

For applying the product:

Smoothing trowel

# **Substrate preparation**

The mortar is applied on top of hardened WestWood Wecryl 176 Primer.





## Mixing

To ensure that a smooth consistency is achieved we recommend first transferring the resin component to a second mixing tub and then adding the sand component while stirring.

Shake the resin component thoroughly before use. Then stir the entire contents for 3 minutes using a compulsory mixer (spiral mixer head). There must be no lumps or nodules and all the material on the base and walls of the container must be incorporated. To ensure that this is done, we recommend repotting the material once during the mixing process. Attention:

Catalyst does not need to be added. The catalyst is already included in the sand component.

# **Application**

To avoid cracking in the mortar, it is vital that the maximum layer thickness per applied coating does not exceed 40 mm.

Pour the mortar onto the primed surface, then immediately compact with a smoothing trowel and smooth over.

Important: Please make sure that the mortar is worked well into the corners (compacted).

# Requirements for subsequent layers:

Subsequent layers must only be applied once the base layer no longer gives off any sensible heat and is therefore overlayable. If vehicles will be driven over the hardened mortar before it is overlaid, it must be treated by abrasion or blasting, as this is vital for ensuring a good bond between the built-up layers.

# Cleaning

If work is interrupted or when it is completed, clean the tools thoroughly with WestWood Cleaning Agent within the pot life of the material (approx. 12 minutes). This can be done with a brush. Do not use the tools again until the Cleaning Agent has evaporated fully.

Simply immersing the tools in the Cleaning Agent will not prevent the material from hardening.

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Information on safety and risks

Please refer to the safety data sheets for the products used.

#### **General information**

The above information, especially information about application of the products, is based on extensive development work as well as many years of experience and is provided to the best of our knowledge. However, the wide variety of requirements and conditions on site mean that

However, the wide variety of requirements and conditions on site mean that it is necessary for the product to be tested to ensure that it is suitable for the intended purpose. Only the most recent version of the document is valid. We reserve the right to make changes to reflect advances in technology or improvements to our products.

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