Industrial grouting and concrete repair

Solutions for prefabricated concrete elements

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Ceresit







Concrete elements repair at production facility

APPLICATION AREAS	PRODUCTS
Fast repair of minor damages	CX 5, CX 20





APPLICATION AREAS	PRODUCTS
Repair of bigger damages	CD 24, CD 25, CD 26, CD 30









Key features

rapid curing:
- CX 5: 5 min
- CX 20: 20 min

- easy to apply
- shrinkage free
- water and frost resistant

Key features

- full PCC system meets requirements of European Standard EN 1504-3
- certified system solution with corrosion inhibitors
- compatible also with old concrete (class above C12/15)
- easy to apply on horizontal, vertical and overhead surfaces

- **1 CD 30** "2-in-1" mineral one-component anticorrosion mortar suitable also as bonding layer
- 2 CD 26 coarse-grained mortar for producing layers of 30 to 100 mm thickness
- **3 CD 25** fine concrete mortar for producing layers of 5 to 30 mm thickness
- 4 CD 24 fine filling compound for repairing concrete up to 5 mm layer thickness

Time-saving application:

The system components have to be applied fresh-in-fresh on the new CD 30 contact layer. The application of every layer of CD 26/CD 25 can take place after 3-4 hours, but not before previous layer is hardened. After completion of repair, the surfaces can be exposed to pedestrian traffic after 24 hours and to street/machine traffic after 72 hours. Additional protection layers can be applied 3 days after concrete repair.

Assembly of precast element buildings

Fast and reliable jointing of prefabricated elements, additional casting, filling and sealing cavities, gaps or voids. Filling bedding joints in precast pocket foundation.

APPLICATION AREAS	PRODUCTS
Horizontal joints	CX 15, CX 20, CS 29
Connection of elements	CX 15, CX 20
Additional casting	CX 15, CX 20
Pillows under columns (concrete & steel)	CX 15

Key features

- fast setting
- high mechanical strength
- excellent bonding to steel, concrete and most building materials
- very good workability and gap filling
- shrinkage free
- water and frost resistant



Fixing of embedded items into concrete elements

Solutions allowing excellent bonding to steel, concrete and other building materials.

APPLICATION AREAS	PRODUCTS
Light anchoring	CX 5, CX 20, CF 850, CF 920
Heavy anchoring	CX 15







Key features CX products

- rapid or fast setting (depending on product)
- high mechanical strength
- suitable for fixing metal and plastic elements
- chloride free does not cause corrosion of metal elements
- application temperature from 0° +25 C°

Key features CF products

- fast chemical curing
- high strength
- curing in low and high temperatures: -10° +40 °C

Industrial applications

APPLICATION AREAS	PRODUCTS
Assembly industrial equipment / general grouting	CX 5, CX 20, CX 15, CF 850, CF 920
Under grouting of steel columns and machine bases	CX 15
Anchoring, seating of metal pins, embedding items in concrete	CX 5, CX 20, CX 15, CF 850, CF 920
Assembly of smaller wind turbines	CX 15
Pillows under heavy cranes rails	CX 15

Key features

- excellent bonding to steel, concrete and most of building materials
- high mechanical strength
- fast setting
- water and frost resistant



CX products technical parameters

COMPRESSIVE STRENGTH	CX 5	CX 15	CX 20
(MPa)	EN 12190		
after 1 hour	≥ 11 *	_	_
after 2 hour	≥ 12*	_	≥4*
after 6 hour	≥ 15	_	≥ 15
after 24 hour	≥ 25	≥ 35	≥ 17
after 7 days	> 30	≥60	> 25
after 28 days	≥ 40	≥70	≥ 33

* according to independent laboratory analyses

FLEXURAL STRENGTH	CX 5	CX 15	CX 20
(MPa)	EN 13892-2	EN 196-1	EN 1015-11
after 6 hour	≥ 3,0	_	≥ 2,5
after 24 hour	≥ 3,0	≥ 4,5	≥ 3,5
after 28 days	≥ 6,0	≥ 7,0	≥ 4,2



Waterproofing of concrete elements

Solutions allowing waterproofing of prefabricated concrete elements from positive and negative side of water pressure.

APPLICATION AREAS	PRODUCTS
Sewage elements, rubbish underground containers, etc.	CR 65, CR 90, CR 166, CS 29

Key features

- waterproof
- frost resistant
- can be applied by brush, trowel or sprayed
- CR 166 certified acc. EN 1504-2
- CR 166 covers surface cracks
- CR 166 anti-radon diffusion certified



Painting & protection of precast concrete wall panels

Highly durable surface protection, applicable at production facility or upon assembly.

APPLICATION AREAS	PRODUCTS	Key features	
ATTEICATION AREAS		 protects against CO₂ chlorides and 	
	CT 110 – protective and decorative paint, available in 534 colors CT 9 – impegranate, additional protection of surface	sulphides penetration	
Complementary top-coat for concrete repair		 excellent colour stability with resistance to UV and weather conditions 	

- highly elastic with crack bridging properties (class A2)
- self-cleaning properties and resistance to dirt
- excellent adhesion to concrete







ASSEMBLY AND REPAIR MORTARS



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Ceresit CX 5 EXPRESS rapid assembly mortar

Rapid assembly mortar for rapid anchoring, fixing and temporary sealing spot water leaks. Can be used in dry or wet climatic conditions specified for classes XC1 and XC2 according to PN-EN 206+A1: 2016.

Ceresit CX 20 COMFORT assembly and repair mortar

Mortar for precise assembly of elements and filling up cavities, characterized by a comfortable setting time. Mortar has a perfect consistency for horizontal and vertical surfaces and is water and frost resistant. Suitable for indoor and outdoor applications.

Ceresit CX 15 STRONG grouting mortar

Mortar for high-strength grouting, anchoring and assembly. Flexural strength: 70 MPa (after 28 days). Intented for grouting steel inserts and anchors in concrete, grouting machine basis, grouting posts, beams support and grouting joints between prefabricated members and in-situ concrete, lintels and wells outlets, for filling openings and recesses in concrete and cavities in floor.

Ceresit CD 30 1-component, anti-corrosion protection and contact mortar "2 in 1"

Mortar for anticorrosion protection of reinforced bars and as well as a contact layer on the concrete and reinforced concrete before the application of other system components.

Ceresit CD 26 repair mortar (30-100 mm)

1-component coarse-grained repair mortar for repairing concrete and reinforced concrete from 30 to 100 mm layer thickness. Applied mortar layer thickness in single application can be up to 35 mm.

Ceresit CD 25 repair mortar (5-30 mm)

1-component, fine-grained repair mortar for producing layers of 5 to 30 mm thickness. CD 25 can be applied on vertical and horizontal surfaces, on the concrete of the class above C12/15.

Ceresit CD 24 fine filling compound

1 - component fine filling compound for repairing concrete up to 5 mm layer thickness. CD 24 can be applied on vertical and horizontal surfaces, on the concrete of the class above C12/15.

PRIMERS & PAINTS

Ceresit

Ceresit CT 17 PROFI TIEFGRUNT deep penetrating primer



Priming substrates (walls, floors, ceilings) inside and outside buildings prior to fixing ceramic tiles, pouring floors, fixing floor lining, papering, puttying, painting, or fixing thermal insulation boards. Solvent-free. Consumption: 0, 1–0,5 l/m² Product details: 2L IDH 1322439 5L IDH 884613, 10L IDH 884614



Ceresit CT 17	⁷ Transparent PROFI TIEFGRUNT deep penetratin	g primer

Tranparent formulation for surface strengthening of all absorbent substrates. Same applications as Ceresit CT 17 PROFI TIEFGRUNT.

Ceresit CT 9 water-repellent

Hydrophobic, solvent-free agent for impregnating mineral and dispersive substrates.

Product details: 2 kg IDH 1973072 5 kg IDH 1973073, 20 kg IDH 1923645 Certificate: EN 1504-6, EN 1504-3 Consumption: 1,8 kg/dm³ Product details: 25 kg IDH 219145

Certificate: EN 1504-6

Consumption: 1,6 kg/dm³

Product details: 2 kg IDH 1497259 5 kg IDH 1497258, 25 kg IDH 219148

Certificate: AT-15-9328/2014

Consumption: 1,6 kg/dm³

Certificate: EN 1504-3, EN 1504-7 Consumption: 1,5–2 kg/m² / 1 mm Product details: 25 kg IDH 1054293

Certificate: EN 1504-3 Consumption: ~2 kg/m² / 1 mm Product details: 25 kg IDH 1054296

Certificate: EN 1504-3 Consumption: ~2 kg/m² / 1 mm Product details: 25 kg IDH 1054295

Certificate: EEN 1504-3 Consumption: ~1,5 kg/m² / 1 mm Product details: 25 kg IDH 1054294

Consumption: 0,3–0,9 l/m² Product details: 10L IDH 1326712

Consumption: 0, 1-0, 5 l/m²

10L IDH 2364411

Product details: 5L IDH 2364410,



PRIMERS & PAINTS



Ceresit CT 49 SILIX XD NANOSILICONE RENO paint

Highly hydrophobic, vapour permeable nano-silicone paint for buildings' facades and interiors.



Ceresit CT 110 SOLAR PROTECT paint

Silico-elastomeric facade paint with increased UV protection, for intense and brilliant color tones. Highly elastic and durable facade paint, resistant to mechanical impacts, scratches and abrasion. Protects against CO_2 , chlorides and suphides penetration. Protects against weathering & biological corrosion. Excellent color stability, can be used in dark and intensive colours. Certificate: EN 1062-3

Consumption: ~0,3 l/m² per 2 layers

Product details: 15L IDH 2049074 white base 15L IDH 2559754 transparent base

Certificate: EN 1062-3

Consumption: ~0,3 l/m² per 2 layers

Product details: 14L IDH 2875948 white 14L IDH 2875949 transparent

CHEMICAL ANCHORS



Ceresit CF 850	
2-component reaction resin mortar based on polyester technology.	Certificate: ETAG001/175, ETAG 029
	Consumption: 1,79 kg/dm ³
Ceresit CF 920	Product details: 300 ml
2-component injection mortar based on vinylester technology.	Certificate: ETAG 001/1+5
	Consumption: 1,77 kg/dm ³
	Product details: 300 ml

WATERPROOFING



Ceresit CR 65 rigid 1-component cementitious waterproofing slurry

1-component rigid waterproofing slurry for the horizontal and vertical surfaces of buildings, structural components, tanks and swimming pools with a water depth of \leq 10 m. Suitable for the subsequent waterproofing of old buildings or components on the negative side.

Ceresit CR 90 CRYSTALLIZER slurry

Waterproofing and damp-proofing of non-deformable mineral substrates. Works in 2 ways – forms a waterproofing layer on the surface of the substrates and additionally, during the structure exploitation, it builds crystals in the substrate pores.

Ceresit CR 166 FLEXIBLE waterproofing slurry

2-component flexible slurry, strengthened with fibres and designed for waterproofing and damp-proofing on deformable and nondeformable mineral substrates. Suitable for internal and external use on walls, floors and ceilings and swimming pools with water depth of \leq 50 m. Ceresit CR 166 flexibility allows it to bridge \geq 0,75 mm wide cracks – even in cold conditions. Radon resistant. Certificate: EN 1504-2 Consumption: 1,5 kg/m² per 1mm layer Product details: 25 kg IDH 1146177

Consumption: $1,5 \text{ kg/m}^2 \text{ per } 1 \text{ mm} \text{ layer}$

Product details: 25 kg IDH 257966

Certificate: EN 1504-2

Certificate: EN 1504-2 Consumption: 1,8 kg/m² per 1mm layer Product details: 32 kg IDH 2588766

SEALANTS

166

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Ceresit CS 29 PU sealant

PU-sealant for sealing joints in concrete or between PVC, metal, wood and concrete air and watertightly.

Certificate: Polish National Technical Assesment

Consumption 5×5 joint: 300 ml 10 m & 600 ml ~20 m

Product details: 300 ml IDH 771100 600 ml IDH 2700461

Ceresit Construction Adhesives

Henkel offers professional Adhesive solutions for different construction applications under the brand **Ceresit.** Ceresit focuses on a wide range of specialized products and system solutions that meet the needs of prefabrication industry and construction professionals. Ceresit stands for reliability and professional quality, combining years of expertise with innovative solutions.

Ceresit modified cementitious mortars for anchoring, grouting, repair and waterproofing are strong, fast setting and EN certified. They are suitable for covering minor deficiencies as well as fixing different elements in concrete elements manufacturing, general industry and construction sites.











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