



Rapid Set® Cement Technology
faster. easier. **unique.**



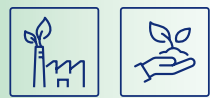
*Rapid Set
changes the game!*

The ONE-FOR-ALL

- fast
- load-bearing
- near zero shrinkage
- intelligent
- easy to use
- extremely high performance



maximum versatility
multiple applications
with one product



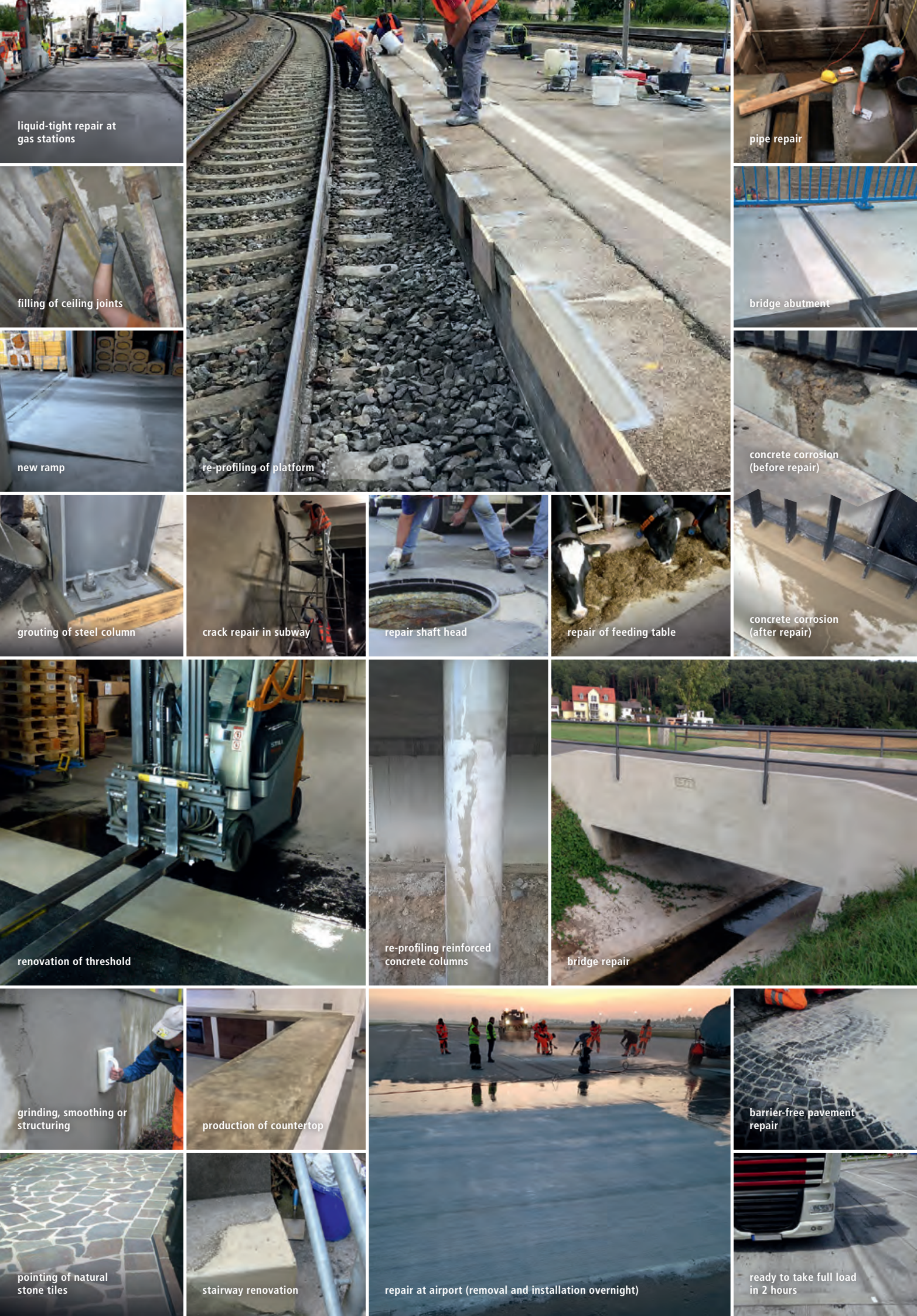
30 % less CO₂ emissions
compared to Portland cement
4 times longer lifetime than
Portland cement

ALL IN ONE!

Maximum profitability through maximum efficiency!



- ✓ efficient work performance
- ✓ cost reduction
- ✓ multipurpose
- ✓ fast usability
- ✓ long-term durability
- ✓ optimizing logistics
- ✓ minimizing downtimes
- ✓ superior quality
- ✓ 12 months shelf-life



liquid-tight repair at gas stations

pipe repair

filling of ceiling joints

bridge abutment

new ramp

re-profiling of platform

concrete corrosion (before repair)

grouting of steel column

crack repair in subway

repair shaft head

repair of feeding table

concrete corrosion (after repair)

renovation of threshold

re-profiling reinforced concrete columns

bridge repair

grinding, smoothing or structuring

production of countertop

barrier-free pavement repair







pointing of natural stone tiles


stairway renovation


repair at airport (removal and installation overnight)


ready to take full load in 2 hours

Unique Rapid Set® Products

	FIELDS OF APPLICATION	LAYER THICKNESS	INITIAL SET ¹⁾	READY FOR TRAFFIC ¹⁾	READY FOR COVERING ¹⁾ after approx. 2 hours ³⁾ after approx. 16 hours ³⁾	COMPRESSIVE STRENGTH ¹⁾ after 60 minutes after 180 minutes after 7 days after 28 days	MODULUS OF ELASTICITY	PHARMACY accelerators, plasticizers, retarders	SULFATE RESISTANCE	FROST/DEICER RESISTANCE	PENETRATION BEHAVIOR	SPECIAL FEATURES	
 CEMENT ALL® Multipurpose Repair Mortar	General concrete repair, re-profiling, casting, anchoring, injection, formed work, grouting, industrial and highway construction, civil engineering, precast industry, indoors and outdoors, in wet environments	 „0“ mm 100 mm	after 15 min.	after 60 min.	vapor-permeable coverings (e.g. tiles, vapor-permeable color coats) diffusion-proof coverings (e.g. parquet, water-proofing)	> 20,0 N/mm ²	> 31,0 N/mm ²	> 41,0 N/mm ²	> 62,0 N/mm ²	31.700 N/mm ²	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> near zero shrinkage <input checked="" type="checkbox"/> faster setting <input checked="" type="checkbox"/> higher strength <input checked="" type="checkbox"/> no primer <input checked="" type="checkbox"/> applies to featheredge
 MORTAR MIX Fast Setting Repair Mortar	General concrete repair, re-profiling, underlayment, formed work, road repair, industrial and highway construction, civil engineering, precast industry, indoors and outdoors, in wet environments	 10 mm 150 mm	after 15 min.	after 60 min.		> 17,0 N/mm ²	> 28,0 N/mm ²	> 35,0 N/mm ²	> 50,0 N/mm ²	26.827 N/mm ²	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> near zero shrinkage <input checked="" type="checkbox"/> faster setting <input checked="" type="checkbox"/> higher strength <input checked="" type="checkbox"/> no primer <input checked="" type="checkbox"/> applies overhead
 CONCRETE MIX Very Fast Setting Concrete	General concrete repair, construction of walkways and roads, concrete and machinery foundations, anchoring, formed work, industrial and highway construction, civil engineering, precast industry, indoors and outdoors, in wet environments	 50 mm 600 mm	after 15 min.	after 60 min.		> 19,0 N/mm ²	> 25,0 N/mm ²	> 35,0 N/mm ²	> 41,0 N/mm ²	30.690 N/mm ²	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> near zero shrinkage <input checked="" type="checkbox"/> faster setting <input checked="" type="checkbox"/> higher strength <input checked="" type="checkbox"/> no primer <input checked="" type="checkbox"/> applies up to 600 mm

 **SET Control** – Additive to slow down the setting time

 **FLOW Control** – Additive to improve the fluidity

 **FAST** – Additive to accelerate the setting time

¹⁾ Technical data at + 20°C and 65 % relative air humidity
²⁾ NPD = No Performance Determined
³⁾ It is recommended to check the residual moisture by suitable measuring method

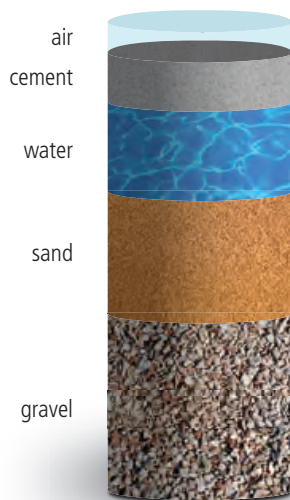


Maximize Performance with Advanced Rapid Set[®] Technology

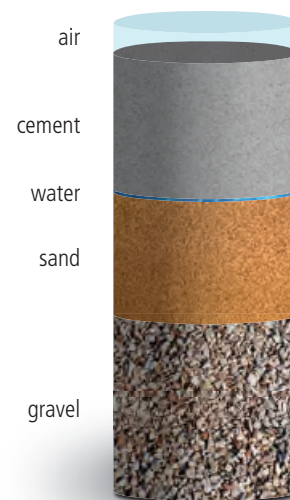
Reaction Process: Comparison between Portland cement and Rapid Set[®] Cement

The chemical reaction process of conventional Portland cement in comparison to Rapid Set[®] Cement, a belitic calcium sulfoaluminate (BCSA) cement, differs significantly. Rapid Set[®] Cement with a w/c ratio = 0,45 binds the added water close to 100 % chemically.

Portland Cement

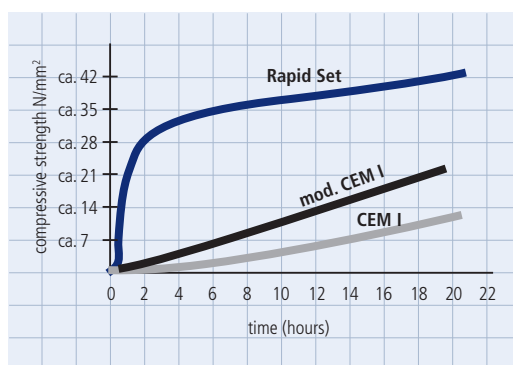


Rapid Set[®] Cement



Unique Performance of Rapid Set[®]

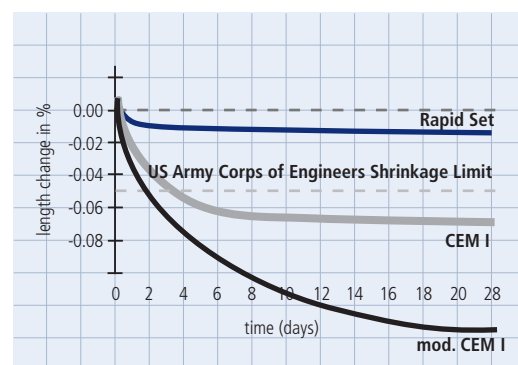
Strength



Rapid Set[®] – very high strength values after final set

The above graphic shows clearly improved high early strength development of a Rapid Set[®] based system, specially in comparison to conventional Portland cements (CEM I) and modified Portland cements (accelerated). After 1 hour and final set a compressive strength of > 20,0 N/mm² is definitely achieved.

Shrinkage



Rapid Set[®] – clearly less shrinkage than Portland cement

The above graphic shows typical shrinkage process of conventional binders (CEM I and mod. CEM I) in comparison to the Rapid Set[®] Technology. In the U.S. the limit value for non-shrinkage ranges at < 0,05 % (US Army Corps of Engineers Shrinkage Limit). This is definitely achieved with the Rapid Set[®] Technology.

KORODUR and CTS Cement Two Strong Partners

Exclusive License Partnership for Europe!

In the year 2012 KORODUR, world market leader in hard aggregate industrial flooring, started the exclusive license partnership with the American market leader in high performance cements CTS Cement | Rapid Set®.

Unique Rapid Set® Technology new in Europe, proved in the U.S.

The American manufacturer and market leader in special cements, CTS Cement, has developed the unique and high performance Rapid Set® Technology – entering a new level of cement technology and bringing about solutions for fundamental problems of the construction industry.

The Rapid Set® Technology is based on the high performance, innovative, fast and non-shrink hydraulic binder “Rapid Set® Cement”. The special cement receives its unique character by advanced and precise manufacturing techniques. Rapid Set® Cement is not a Portland cement. No chlorides or accelerators are added.

- ✓ HIGHER PERFORMANCE
- ✓ FASTER SETTING
- ✓ MORE DURABILITY
- ✓ MULTIPURPOSE
- ✓ LESS SHRINKAGE
- ✓ LESS CO₂ EMISSIONS

Rapid Set® Cement provides the Rapid Set® repair mortars with their superior and unique efficiency: Already in one hour extremely high strength! Immediate usability! Non-shrink! Multipurpose! Sulfate resistant! Excellent durability! Reduced CO₂ emissions!

Rapid Set® stands for Innovation, High Performance and Versatility!

Over the past 40 years Rapid Set® Cement has become the first choice of contractors in the U.S. in respect of fast and powerful problem solutions.

Rapid Set® Cement – green to the core! Environmentally friendly, durable and LEED compliant.



CTS Cement is a member of the U.S. Green Building Council. Rapid Set® Cement cuts CO₂ emissions by 30 % compared to standard Portland cement.



Rapid Set® Technology – proved over years in the U.S.
Pic. from left: Hoover Dam, Pentagon





Be a game changer!



CEMENT ALL®

also available in handy 5 kg small containers



LevelFlor®

innovative, self-leveling floor underlayment for interior and exterior use



easyFIX

crafting with concrete for creative design



RESURFACER

high grade mortar for eroded and worn concrete surfaces, indoors and outdoors, to renew the concrete look

KORODUR Westphal Hartbeton GmbH & Co. KG

KORODUR International GmbH

Werner-von-Braun-Str. 4

92224 Amberg, Germany

Phone: +49 (0) 96 21 / 47 59 - 0

E-Mail: info@korodur.de

Cert.: DIN EN ISO 9001:2015



www.korodur.de

www.korodur-rapidset.de

