



# REFURBISHMENT IMPROVED Sika MonoTop<sup>®</sup> SYSTEMS

AN OVERVIEW FOR DESIGNERS AND SPECIFIERS

BUILDING TRUST



# CONCRETE RESTORATION USING Sika MonoTop® SYSTEMS

Refurbishment - "The sustainable business"

## MAXIMISING THE PERFORMANCE AND COST EFFECTIVENESS OF CONCRETE REPAIRS USING EN 1504

Building owners need to minimize long term maintenance costs whilst taking into account a structure's required design life, the consequences of failure and the balance of immediate cost against the time and cost of future repairs.

EN1504 assists specifiers with the correct selection of repair strategies, together with their specification and use.



## WHAT IS EN1504?

The ten parts of European Standard EN1504 'Products and systems for the protection and repair of concrete structures – definitions, requirements, quality control and evaluation of conformity' define the principles and products for the protection and repair of concrete structures. The standard also specifies quality control of the production of repair materials and their on site application.

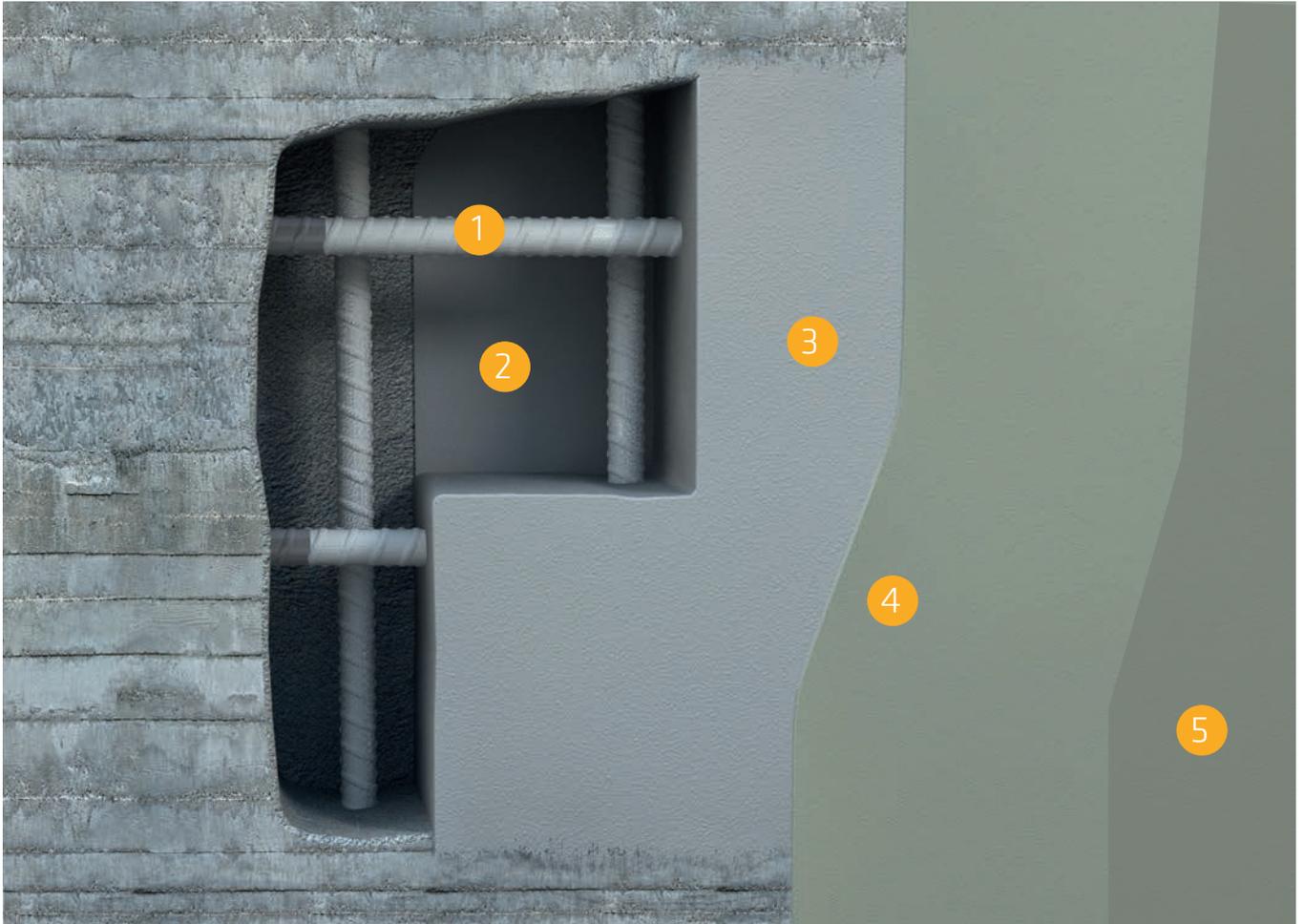
EN1504 is the most comprehensive standard for repair and protection of concrete structures available worldwide.

## **The Sika MonoTop range of concrete restoration products form part of Sika's EN 1504 compliant concrete repair and protection range.**

By choosing products that comply with EN1504, the specifier can be confident that the products are fit for purpose.



# Sika MonoTop® - THE CONCRETE REPAIR SYSTEM



	APPLICATION	PURPOSE	PRODUCT NAMES
1	Reinforcement corrosion protection	To prevent further corrosion of steel reinforcement, maximising the durability of repairs and minimising long term maintenance costs.	Sika MonoTop®-910 N
2	Bonding Primer	Promotes adhesion of mortars on demanding substrates, ensuring durable repairs.	Sika MonoTop®-910 N
3	Repair Mortar	Highly durable mortars and micro-concretes with good compatibility with the host concrete - ensures long term durability and cost effective repairs.	Sika MonoTop®-352 N Sika MonoTop®-412 N Sika MonoTop®-438 R Sikacrete® Gunite®-103
4	Pore sealer and levelling mortar	To restore minor defects and level surfaces.	Sika MonoTop®-723 N
5	Further chloride protection	Improved water repellency of the repairs and host concrete.	Sikagard®-706 Thixo Sikagard®-705 L Sikagard®-740 W

DESCRIPTION	PRODUCT NAMES	COMPLIES WITH
<b>Bonding Primer</b> and Reinforcement Corrosion Protection	Sika MonoTop®-910 N	EN 1504 Part 7
<b>Lightweight structural repair mortar</b> - enables thicker layers and faster application - saves time	Sika MonoTop®-352 N	EN 1504 Part 3
<b>Structural repair mortar</b> - higher strength for compatibility with most structural concrete	Sika MonoTop®-412 N	EN 1504 Part 3
<b>Pourable / castable repair micro-concrete</b> for saving time on large volume repairs	Sika MonoTop®-438 R	EN 1504 Part 3
<b>Spray applied repair</b> and mortar for saving time on large area repairs	Sikacrete® Gunit®-103	EN 1504 Part 3
<b>Cementitious pore sealer</b> and <b>levelling mortar</b>	Sika MonoTop®-723 N	EN 1504 Part 3
<b>Penetrating water repellants</b> prevent ingress of water and chlorides, improving the durability of the repairs and surrounding concrete.	Sikagard®-706 Thixo Sikagard®-705 L Sikagard®-740 W	EN 1504 Part 2



# Sika MonoTop® - FOR DIFFERENT TYPES OF PROJECTS

## BUILDING FACADES



- Low capillary absorption
- High carbonation resistance
- E-Modulus similar to concrete



## EXAMPLE SIKA REPAIR PRODUCTS

- Sika MonoTop®-910 N
- Sika MonoTop®-723 N

## CAR PARKS



- Low chloride permeability
- Freeze-thaw resistance
- High compressive strengths
- High carbonation resistance



## EXAMPLE SIKA REPAIR PRODUCTS

- Sika MonoTop®-910 N
- Sika MonoTop®-412 N

## BRIDGES



- Good bond even under dynamic loads
- High compressive strengths
- Low chloride permeability
- High carbonation resistance



## EXAMPLE SIKA REPAIR PRODUCTS

- Sika MonoTop®-412 N

## MARINE STRUCTURES



- Low chloride permeability
- High freeze-thaw resistance
- Abrasion and erosion resistance
- High carbonation resistance



## EXAMPLE SIKA REPAIR PRODUCTS

- Sika® MonoTop®-910 N
- Sika® MonoTop®-352 N

## CHIMNEY / COOLING TOWERS



- Similar thermal behaviour to concrete
- Strong adhesive bond
- Low capillary absorption

## WASTE WATER TREATMENT



- Abrasion Resistance

Compatible with **Sikagard® EpoCem®** for

- Higher chemical resistance
- Reduced curing



# FOR MORE Sika MonoTop<sup>®</sup> INFO.:



**WHO WE ARE**

Sika AG, Switzerland, is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, façades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature high quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.



**SIKA (NZ) LTD**  
 PO BOX 19192  
 Avondale, Auckland  
 1746, New Zealand

**Contact**  
 Phone 0800 745 269  
 Fax 0800 745 232  
 www.sika.co.nz



© Sika (NZ) Ltd | Version No.: 0720