BUILDING TRUST

PRODUCT DATA SHEET

SikaWrap®-10 Helical

High-performance stainless steel helical bars for masonry structural strengthening

DESCRIPTION

SikaWrap®-10 Helical are high-performance stainless steel helical bars with an 10 mm diameter, for the strengthening of masonry structures. The SikaWrap®-10 Helical bars can be used either: for masonry reinforcement as part of the Sika® NSM system, combined with a mortar or for anchoring as part of the Sika® FRCM system, combined with a mortar, resin or through dry application using the WALLtie Driver dia 10 mm drilling guide and SikaWrap®-10 Dowel plastic special anchoring piece.

USES

- Component for masonry structural strengthening
- Cross connections of masonry with unconnected facings
- Reinforced stitching of masonry structures
- Applicable to domes and arches
- Stitching and anchoring of horizontal and vertical masonry structures
- Repair of localized damage
- Anchor for reinforced plaster systems (FRCM etc.)

FEATURES

- High durability
- High mechanical strength
- Manufactured by AISI 304 stainless steel
- Easy and quick application
- Dry application option

CERTIFICATES AND TEST REPORTS

- CE marking and Declaration of Performance in accordance with EN 845-1:2013 + A1:2016

PRODUCT INFORMATION

Construction	Helical bars of AISI 304 stainless steel
Packaging	10 m roll
Appearance and colour	Helical bar, silver grey
Shelf life	Unlimited, if stored properly
Storage conditions	Store covered in the original packaging in dry conditions
Dimensions	20-22 turns per meter
Diameter	10 ± 0.5 mm

TECHNICAL INFORMATION

Tensile strength (EN 10270-3)

Properties	Char. Value
Maximum Tensile Strength	~ 1240 MPa
Yield Tensile Strength	~ 1035 MPa

Elongation at break (EN 10270-3)

Properties	Char. Value
Elongation at break	~ 5.7 %

SYSTEM INFORMATION

System structure

SikaWrap®-10 Helical forms part of a masonry strengthening system for anchoring and comprises the following products:

WALLtie dia 10 mm	Drilling guide
SikaWrap®-10 Helical	Helical steel bar
SikaWrap®-10 Dowel plastic	Special anchoring piece

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

APPLICATION INSTRUCTIONS

Reinforcement and Stitching:
Cut a groove along an existing joint in the masonry surface using an appropriate saw. In the case of stitching, cut the groove perpendicular to the crack. Make sure to clean the groove with compressed air until the groove is free of dust. The surface and groove area must be clean and sound. Apply a mortar of the SikaMur® or SikaRep® or other mortar of the Sika range inside the groove using a pointing gun with a special flattened nozzle and embed the SikaWrap®-10 Helical. Seal the groove by applying an additional mortar layer using a joint trowel. For more information on mortar options, please contact the technical department of Sika HELLAS S.A.

Anchoring:
Drill a hole using a rotary drill with depth and diameter specified on the project. Before application, clean the hole with compressed air and a metal brush until the hole is free of dust.
For dry application, the diameter of the hole must be assessed based on the substrate's hardness and mechanical properties. It is recommended to drill holes with a diameter of 8 mm in substrates such as tuff, solid brick, soft stone and limestone. In soft substrates, SikaWrap®-10 Helical can be applied without an initial hole. The SikaWrap®-10 Helical should be applied using the drill in hammer mode and the corresponding WALLtie dia 10 mm drilling guide.
For damp application, drill holes with a diameter of 14-16 mm and apply the mortar or resin inside of it. Screw the SikaWrap®-10 Helical in the mortar in rotational motion while it is still fluid to remove trapped air.
For both application methods, connect the anchor with the reinforcing grid by placing the SikaWrap®-10 Dowel plastic special anchoring piece.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The

user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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