

**Product Data Sheet**  
Edition 09/05/2016  
Identification no:  
010302040010000033  
Sika® MonoTop®-615 HB

# Sika® MonoTop® -615 HB

High build repair and re-profiling mortar

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## Product Description

Sika® MonoTop® -615HB is a high build cementitious, polymer modified, one component repair and reprofiling mortar containing silica fume and Ferrogard corrosion inhibitor.

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## Uses

Sika® MonoTop® -615HB is designed for thick layer concrete repairs, especially for overhead and vertical applications.

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## Characteristics / Advantages

- Only requires mixing with water
- Excellent workability characteristics
- Adjustable consistency
- Excellent thixotropic behaviour, especially suitable for overhead and vertical applications
- Good mechanical strength
- Good freeze/thaw resistance
- Good resistance to water and chloride penetration
- Corrosion inhibitor
- Sprayable by the wet spray method

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## Tests

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## Approval / Standards

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Construction



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## Product Data

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### Form

**Appearance / Colour** Powder Grey when mixed

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**Packaging** 25kg bags.

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### Storage

**Storage Conditions / Shelf-Life** 12 Months in original, unopened packaging. Store in a dry area between +5°C and +30°C. Protect from direct sunlight and moisture.

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## Technical Data

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**Chemical Base** Cement and crystalline free silica aggregate

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**Density** ~1, 65kg/litre fresh mortar

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**Layer Thickness** Min. 5mm - max. 70mm

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## Mechanical Properties

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**Compressive Strength (23°C/50% RH)** 35-40 N/mm<sup>2</sup> at 28 days

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## System Information

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**System Structure** **Primer:** Sika® MonoTop® -610 or SikaTop Armatec® -110 EpoCem®  
**Repair Mortar:** Sika® MonoTop®-615HB (5 –70mm layer thickness)

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## Application Details

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**Consumption / Dosage** Volume Yield 15.0 litres per 25kg bag

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**Substrate Quality** The concrete substrate must be sound and of sufficient compressive strength (min.20 N/mm<sup>2</sup> (Mpa) with a minimum pull off strength of 1.5 N/mm<sup>2</sup> (Mpa).  
The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc.  
The substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface.  
Weak concrete should be removed and surface defects such as honeycombed areas, blowholes and voids must be fully exposed.  
Repairs to substrate, filling of blowholes/voids and surface levelling should be carried out using the appropriate product from the Sikafloor®, SikaDur® and SikaGard® range of materials.

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**Substrate Preparation / Priming** **Precise and efficient surface preparation is essential to achieve the high adhesive qualities of Sika® MonoTop® .**  
The concrete substrate must be sound, clean and free from oils, grease or surface contaminants. All loose materials and surface laitance must be removed by high pressure water jet blasting or similar mechanical means. Small areas and 'spot' repairs should be mechanically prepared by needle gunning, bush-hammering or similar means.  
**The prepared substrate should be thoroughly soaked with clean water until uniformly saturated, leaving no standing water.**  
Take care to remove any cement slurry or dust produced during surface preparation; the use of a 'fan' shaped water jet is ideal. Apply Sika® MonoTop® -610 as the bonding bridge. Steel reinforcement should be gritblasted to a bright steel condition to remove all traces of rust and contamination prior to applying Sika® MonoTop® -610 corrosion protection.

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**Application  
Conditions /  
Limitations**

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**Substrate Temperature** Min.5°C - Max.30°C

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**Ambient Temperature** Min.5°C - Max.35°C

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**Substrate Humidity** < 10%

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**Application  
Instructions**

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**Mixing (Ratio/Dosage)** Mixing can only be achieved using either a slow speed drill (set at 400 - 600 rpm) fitted with a clean, rust free, mixing paddle, or standard mortar mixing equipment.  
**DO NOT ATTEMPT TO MIX BY HAND.**

3,4 - 4,0 litres water per 25kg powder depending on application.

Pour clean water in the correct proportion into a clean mixing vessel. Add the Sika® MonoTop®-615HB slowly while mixing continuously. To avoid entraining too much air use a slow speed mixer (max. 600 rpm) for minimum of 3 minutes. By gradually adding the powder in portions, the desired application consistency can be obtained.

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**Application Method  
/Tools**

Thoroughly wet the concrete substrate to a saturated surface dry condition, then prime with a Sika® MonoTop®-610 bonding slurry.

Sika® MonoTop®-615HB is normally applied by trowel or spatula. The repair mortar must be applied wet on wet without any voids to the Sika® MonoTop®-610 bonding layer. For repairs of more than 70mm thickness, Sika® MonoTop®-615HB must be applied in layers.

As soon as the mortar has started to set it can be rubbed down with a wooden or plastic float prior to applying the next layer. Use Sika® MonoTop®-610 as a bonding bridge for day joints and between layers if they are left to cure for more than 24 hours.

If a finer surface finish is required or a protective coating is to be applied, Sika® MonoTop®-615HB can be overcoated with Sika® MonoTop®-620 surface levelling compound as required.

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**Cleaning of Tools**

Application and mixing tools should be cleaned with water immediately after use. Hardened material must be removed mechanically.

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**Notes on Application /  
Limits**

Freshly applied Sika® MonoTop®-615 HB should be protected from damp, condensation and water for at least 12 hours.

When spray applying Sika® MonoTop® products, water jet blasting is the preferred method of surface preparation and the surface profile should be greater than 2mm.

Sika® MonoTop®-610 should be used as bonding slurry for hand and spray applied applications.

When curing with polythene sheets, ensure all edges are fastened down and that air movement/circulation over the surface of the fresh mortar cannot occur.

Once Sika® MonoTop®-615HB has started to set, it should be discarded. Do not add more water to improve workability.

Concrete should be a minimum of 28 days old.

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**Value Base**

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.

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**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.

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**Health and Safety Information**

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**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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