

**Product Data Sheet**  
Edition 25/4/2012.  
Identification no. 3.2.003  
Version No. 09  
Sika MonoTop® 615 HB

# *Sika® MonoTop® 615 HB*

## High Build Polymer Modified Repair mortar

Construction

<b>Description</b>	Sika Monotop 615 HB is a one component, thixotropic, high build, polymer modified, cementitious mortar containing silica fume.
<b>Uses</b>	<ul style="list-style-type: none"><li>■ Fast repair to overhead, horizontal or vertical concrete or mortar surfaces above and below ground level</li><li>■ Filling/ repair mortar for voids, honeycombed areas, etc.</li><li>■ Repair of spalled concrete caused by reinforcement corrosion</li><li>■ Repairs with improved resistance to oils, sewage, chemicals, etc.</li></ul>
<b>Advantages</b>	<ul style="list-style-type: none"><li>■ Fast and easy to apply to clean, sound substrate in layers up to 60 mm thick</li><li>■ Excellent thixotropic behaviour, especially suitable for overhead and vertical application</li><li>■ One component system requiring only the addition of clean water</li><li>■ Compatible with the thermal expansion properties of concrete</li><li>■ Chloride free</li><li>■ Non-corrosive to reinforcing steel</li><li>■ Non-toxic, suitable for potable water</li><li>■ Minimized shrinkage tendency</li><li>■ Good sulfate resistance</li></ul>

### Product Data

<b>Form/Colour</b>	Powder / Grey
<b>Packaging</b>	25 kg bag
<b>Storage</b>	Dry, cool, shaded place
<b>Shelf life</b>	Min. 6 months if stored properly in unopened, original packaging



---

## Technical Data

---

<b>Density</b>	~ 1.15 kg/ltr (bulk density of powder) ~ 1.75 kg/ltr (density of fresh mortar)
<b>Mixing ratio</b>	Water : Sika Monotop 615HB powder = 1 : 6.40 – 6.60 (parts by weight) Water : Sika Monotop 615HB powder = 1 : 5.60 – 5.70 (parts by volume) 3.80 - 3.90 litres of clean water per 25 kg bag
<b>Consumption</b>	1 bag yields approx. 16.5 litres of mortar Approx. 60 bags required for 1m <sup>3</sup> of mortar
<b>Pot life</b>	~ 30 minutes (at 27°C / 65 % r.h)
<b>Compressive strength</b>	~ 6 N/mm <sup>2</sup> (1 day), ASTM C-349/ C109 ~ 30 to 35 N/mm <sup>2</sup> (28 days)
<b>Flexural strength</b>	~ 6 N/mm <sup>2</sup> (28 days), ASTM C-348
<b>Bond strength</b>	~ 1.5 N/mm <sup>2</sup> (on prepared concrete surface with bonding bridge)
<b>Layer thickness per application</b>	Minimum 5 mm Maximum 60 mm (20-mm for overhead application)
<b>Application temperature</b>	Minimum 6°C Maximum 40°C

---

## Application

---

<b>Surface preparation</b>	<p>All concrete and mortar substrate must be sound, clean and free from oil, grease and surface contaminants. All loose materials and surface laitance must be removed. For large areas, grit or grit-water blasting or scabbling is recommended. For small areas and for "spot" repairs, needle gunning or jack-hammering is effective. The concrete or mortar substrate must have a minimum compressive strength of 20 MPa. If in doubt test with a Concrete Test Hammer.</p> <p>The prepared substrate should be thoroughly soaked with clean water until uniformly saturated but with no surface water. This condition is referred to as saturated surface dry and care should be taken to remove any cement slurry or dust produced during surface preparation. Steel reinforcements should have all traces of rust removed and be primed with two coats of Sika Monotop 610.</p>
<b>Priming</b>	<p><i>Concrete:</i></p> <p>Prior to the application of Sika Monotop 615 HB, Sika Monotop 610 should be applied as bonding bridge. Always work "wet on wet" on priming coats (refer to Sika Monotop 610 Data Sheet)</p> <p><i>Reinforcement:</i></p> <p>Two coats of Sika Monotop 610 should be brush applied to the prepared steel (refer to Sika Monotop 610 Data Sheet).</p>
<b>Mixing</b>	<p>Sika Monotop 615HB should be mechanically mixed in a clean container using a low-speed electric mixer (max. 500 rpm). Place required quantity of clean water (3.80 - 3.90 ltr for 25-kg of Sika Monotop 615HB) into a clean container and then add Sika Monotop 615HB slowly while mixing. A minimum mixing time of 3 minutes is recommended to thoroughly blends the components.</p>

---

<b>Application</b>	Brush apply a bonding coat onto the saturated surface dry substrate. Then, working wet-on-wet, work the mixed mortar well into the substrate using a placing rather than a rendering technique to fill all pores and voids. Compact well. Force material against the edge of the repair, working towards the centre. For repairs in excess of 60 mm deep, apply in layers with a heavy brush stipple to form a key for subsequent layers. If previous layers are over 48 hours old, needle gun the surface and dampen. Steel trowel the final coat if required.
<b>Curing</b>	To achieve the full potential of any cement based material, curing is essential. In warm or windy weather, the use of standard curing methods are necessary (use of polyethylene sheets or damp hessian) to prevent premature drying out of mortar.
<b>Cleaning</b>	Remove non-hardened Sika Monotop products from tools and equipment with water. Hardened material can only be removed mechanically.
<b>Notes on application / limits</b>	<ul style="list-style-type: none"> <li>■ Mix to a uniform consistency (no lumps). A small reduction in the water gives a stiffer mix.</li> <li>■ Repairs with Sika Monotop system cannot bridge live cracks or moving joints, etc.</li> <li>■ Repairs in excess of 60 mm deep must be layered as indicated above.</li> <li>■ Sika Monotop mortars that are wetted during the initial cure period may produce a white “bloom” on the surface which does not affect the long term properties of the mortar.</li> </ul>
<b>Health and Safety information</b>	
<b>Ecology</b>	Product is water poluting do not dispose into water canals ,sewer lines etc.
<b>Transportation class</b>	Non hazardous
<b>Waste disposal</b>	According to local law
<b>Important notes</b>	Sika Monotop 615 HB is cement base and is therefore alkaline. Suitable precautions should be taken to minimize direct contact with the skin. If the material gets into the eyes, rinse immediately with clean water and seek medical attention.
<b>Disclaimer</b>	<i>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.</i>



Sika Limited (Vietnam)  
 Nhon Trach 1 Industrial Zone,  
 Nhon Trach Dist., Dong Nai Province  
 Tel: (84-61) 3560 700 Fax: (84-61) 3560 699  
 vnm.sika.com sikavietnam@vn.sika.com