

Sika Plug

Cementitious fast setting water plug

Construction

Description	Sika Plug is a chloride free, ready for use powder based on high alumina cement. When mixed with water, it becomes a powerful, fast setting waterplug.
Uses	Ready to use waterplug to stop pressure leaks and seepage through rock and concrete, as well as through joints between concrete and steel (bolt surroundings, ducts, sheetpiles etc.) in culverts, tunnels, dams, basements, pools for short term service life.
Advantages	<ul style="list-style-type: none"> • Easy to use, easy to mix, just add water. • No special equipment required. • Very fast setting with rapid strength development. • Good adhesion to mineral substrates. • Remarkable water-stopping power and hydraulic resistance. • No cracking, practically no shrinkage.
Storage and Shelf Life	Minimum 12 months shelf life in unopened original container.
Instructions for Use	
Surface Preparation	<p>Concrete, mortar, brickwork: Sound, clean, free of oil, grease, dust or laitance. If possible cut the concrete or rock into a "V" shape at the location of the leak.</p> <p>Steel, iron: Clean, free of oil, grease and rust.</p> <p>Absorbent substrates must be in a water saturated condition.</p>
Mixing	Thoroughly and quickly mix the powder and water in a suitable container. Mix only the quantity that can be immediately applied by gloved hand or trowel.
Application	<p>Quickly work the mixed mortar firmly into the leaking crevice, V-cut, joint etc. and hold in place with a gloved hand or trowel until the mortar is sufficiently hard to remain in place. Strike off flush with the surface if desired. Repeat this procedure, mixing small quantities at a time until the seepage or leak is stemmed.</p> <p>If the water pressure is very high and dislodges the applied mortar, use a timber plug or similar which can then be covered and secured with Sika Plug.</p>
Cleaning	Clean all tools and equipment immediately after use with water. Hardened Sika Plug can only be removed mechanically.

Technical Data (Typical)

Form	Grey powder	
Density	2.0 kg/litre (mixed) approx.	
pH	12 approx.	
Mix ratio	3 parts powder : 1 part water (approx. by mass)	
Setting time	Temp. of mixing water (°C)	Initial set (seconds)
	5	150
	10	110
	15	85
	20	70
	25	60
	30	50
	35	45
	The above setting times are indicative only. Where set time is critical an on-site mix is recommended.	
Compressive Strength	Approx. 30 MPa @ 6 hours Approx. 55 MPa @ 24 hours Approx. 70 MPa @ 7 days Approx. 75 MPa @ 28 days	
Colour	Grey	
Packaging	10 kg plastic pail	
Important Notes	<ul style="list-style-type: none"> • At later ages and under certain conditions of warm to hot ambient temperature in the presence of water for prolonged periods, hardened high alumina cement undergoes a chemical process known as 'conversion' resulting in a loss of mechanical strength. Sika Plug is therefore not suitable for medium to long term structural repairs. • Prepare Sika Plug in small quantities at a time. If mixed in large quantities hardening may occur prior to application. • Do not mix other cements or admixtures with Sika Plug. • Sika Plug is hygroscopic. Seal any unused material immediately in the original container. 	
Handling Precautions	<ul style="list-style-type: none"> • Avoid contact with the skin. • Protective gloves and clothing are recommended when mixing or using this product. • A full Material Safety Data Sheet is available from Sika on request. 	
Important Notification	<p>The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.</p> <p>PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.</p>	

