



# SikaTop® 77

## Styrene Acrylate Polymer Admixture

### Technical Data Sheet

#### DESCRIPTION

**SikaTop 77** is a one component water based styrene acrylate polymer admixture. When diluted with water it produces a gauging solution for improving cementitious mixes.

#### USES

**SikaTop 77** is added to water then mixed with cement and sand/aggregate to produce:

- \* Bond coat/slurry.
- \* Pourable micro concrete.
- \* Renders.
- \* Screeds with enhanced mechanical properties.

#### ADVANTAGES

- \* Reduced shrinkage and cracking.
- \* Reduced permeability.
- \* Improved workability.
- \* Improved mechanical properties.
- \* Improved resistance to freeze/thaw.
- \* Just add water.
- \* Suitable for contact with potable water.
- \* More durable than SBR and latex mixes.
- \* Water based.
- \* Solvent free.
- \* Non toxic.
- \* Chloride free.
- \* Non flammable.
- \* Compatible with all cement types.

#### Technical Data (typical)

<b>Colour:</b>	White
<b>Specific gravity:</b>	1.0 kg/litre
<b>Application temperature:</b>	In accordance with render/screed/concrete standards. 5°C (guide only) (Substrate and ambient)

#### MECHANICAL PROPERTIES

**28 days @ 20°C** RH 65%  
1 : 3 cement : sand mortar mix

	Unmodified control	<b>SikaTop 77</b> modified 1 : 1 solution	<b>SikaTop 77</b> modified 1 : 3 solution
<b>Compressive strengths:</b>			
3 days	23 N/mm <sup>2</sup>	30 N/mm <sup>2</sup>	32 N/mm <sup>2</sup>
7 days	30 N/mm <sup>2</sup>	38 N/mm <sup>2</sup>	40 N/mm <sup>2</sup>
28 days	32 N/mm <sup>2</sup>	50 N/mm <sup>2</sup>	45 N/mm <sup>2</sup>

#### Flexural strengths:

28 days	4.5 N/mm <sup>2</sup>	9.0 N/mm <sup>2</sup>	11.0 N/mm <sup>2</sup>
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#### Bond strengths: (tensile)

28 days	1.0 N/mm <sup>2</sup>	>2.0 N/mm <sup>2</sup>	>1.5 N/mm <sup>2</sup>
With bond coat: (failure mode)	bondline	bondline/substrate	bondline/substrate

Bond strength can be improved by using **SikaDur® 32** or **SikaTop® Armatec 110 EpoCem®** as a bond coat resulting in a failure mode within the substrate (depending on preparation).

#### Notes:

- \* Final mechanical properties and strength gain will be dependent on temperature, aggregate/sand type, moisture content and curing regime.
- \* More accurate information regarding workability, mechanical strengths and strength gains should be obtained from site trials and appropriate strength/bond tests.
- \* Bond strength will be dependent on condition of substrate, preparation techniques and application.
- \* Where increased open times and bond strength are required for bond coat/slurry use **SikaTop Armatec 110 EpoCem** or **SikaDur 32**.

Approved for potable water contact.  
Details available on request.

All above values are approximate.

