



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)

Colour:	White
Specific gravity:	1.0 kg/litre
Application temperature:	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	SikaTop 77 modified 1 : 1 solution	SikaTop 77 modified 1 : 3 solution
Compressive strengths:			
3 days	23 N/mm ²	30 N/mm ²	32 N/mm ²
7 days	30 N/mm ²	38 N/mm ²	40 N/mm ²
28 days	32 N/mm ²	50 N/mm ²	45 N/mm ²

Flexural strengths:

28 days	4.5 N/mm ²	9.0 N/mm ²	11.0 N/mm ²
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Bond strengths: (tensile)

28 days	1.0 N/mm ²	>2.0 N/mm ²	>1.5 N/mm ²
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.

