



A Simpson Strong-Tie® Company

## APPLICATION INSTRUCTIONS



### S&P C-Sheet 240



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## Application instructions



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### REQUIREMENTS

- Minimum pull-off tensile strength of bearing substrate > 1,0 N/mm<sup>2</sup>
- Minimum bearing substrate's temperature 3 °C above dew point temperature
- Maximum substrate moisture content < 12 % (with S&P Resicem HP) or < 4 % (with S&P Resin 55 HP)
- Glue handling temperature +10 to +35 °C
- Substrate temperature min. +8 °C max. +35 °C

### APPLICATION



Preparation of workspace.

Measure out and clearly mark the application area.



Sand blast, shut blast, or grind the substrate using a cup wheel. Not using a chisel!

Cement skin must be completely removed.

The optimum surface roughness is 0,5 to 1,0 mm.



Remove bad concrete (honeycomb), masonry, loose material, wood pieces, insulation material etc.



Round off corners and edges within a radius of 25 mm (chamfer or re-profile).



Re-profile using S&P Tecnogrout-K or S&P Resin 230 HP.

Pre-treat the derusted reinforcement with S&P Resicem HP.

Cracks > 2 mm must be repaired properly, ensuring a load-transferring connection.



### Quality assurance

Verify evenness:

- Maximum 5 mm across 2 m
- Maximum 1 mm across 30 cm

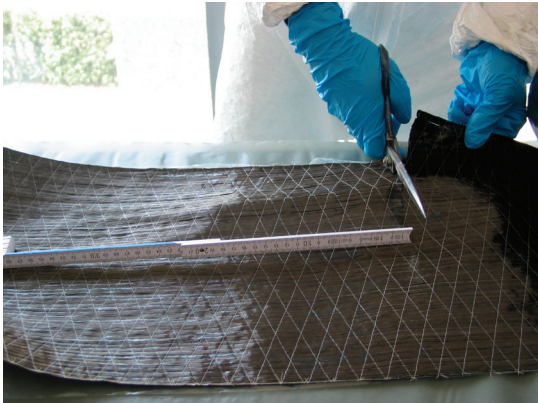
Measure the temperature and the humidity of the substrate. Determine the dew point temperature.



Clean substrate with a vacuum hose.

Substrate must be free of grease and oil.

APPLICATION



Tailor the S&P C-Sheet 240 to size using industrial scissors.

150 mm in fibre direction must be accounted for the anchoring of the S&P C-Sheet 240. Overlapping is not required perpendicularly to the fibre direction.

### Quality assurance

Check sheet type and dimension



Mix the adhesive at a low speed, max. 400 RPM.

Mix using a mixing paddle for approx. 3 minutes.

The glue's ideal temperature while mixing is 15 °C to 25 °C.

*When using S&P Resin 55 HP (vapour proof), a prior assessment of special statics requirements is necessary.*



Apply S&P Resicem HP (improves vapour exchanges) or S&P Resin 55 HP (vapour proof) onto the substrate.

Distribute evenly with S&P press roller.



Pre-impregnate the S&P C-Sheet 240 with S&P Resicem HP or S&P Resin 55 HP.

Spread the resin evenly with a rubber spatula and a press roller, rolling **only in one direction, longitudinal to the direction of the fibre.**

For material consumption rates, see table on pg 6.

APPLICATION



Fix the pre-impregnated S&P C-Sheet 240 onto the substrate, remove protective film and laminate with a rubber spatula (S&P Squeeze) or press roller.

Make sure that there is overlapping in the fibre direction of at least 150 mm.



Always roll in the direction of the fibre, and do so until all fibres are moistened and there are no air pockets left in the sheet.

Clean the tools within S&P Resicem HP / S&P Resin 55 HP's pot life using S&P Cleaner.



In this stage of work, also cover the sheets' area in quartz sand. This will act as a rough course to ensure the adhesion of plaster or mortar later on.

If covering the area in quartz sand later, in a different work stage, the area must first be primed with a new layer of S&P Resicem HP / S&P Resin 55 HP.



Image of a completed application on a column.

Full load-bearing capacity is reached after 72 hours, given conditions of 23 °C and 50 % humidity.

Protect the sheet against fire, UV- radiation and mechanical damage as required by the engineer.

SAFETY

Measures regarding health & safety (protective clothing/ accident prevention) are a prerequisite.

CONSUMPTION

Estimated glue consumption rates (depending on the substrate roughness) can be found in the following table:

Product	S&P Resin 55 HP (vapour proof)	S&P Resicem HP (improves vapour exchanges)
S&P C-Sheet 240 (200 g/m <sup>2</sup> )	~ 600–800 g/m <sup>2</sup>	~ 1 100–1 500 g/m <sup>2</sup>
S&P C-Sheet 240 (300 g/m <sup>2</sup> )	~ 700–1 100 g/m <sup>2</sup>	~ 1 300–1 600 g/m <sup>2</sup>
S&P C-Sheet 240 (400 g/m <sup>2</sup> )	~ 900–1 300 g/m <sup>2</sup>	~ 1 400–1 800 g/m <sup>2</sup>
S&P C-Sheet 240 (600 g/m <sup>2</sup> )	~ 1 000–1 400 g/m <sup>2</sup>	~ 1 500–1 900 g/m <sup>2</sup>
Bonding bridge	~ 150 g/m <sup>2</sup>	~ 150 g/m <sup>2</sup>

More information about the S&P FRP systems and all technical data sheets, as well as all safety data sheets, are available at [www.sp-reinforcement.eu](http://www.sp-reinforcement.eu)

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