



A Simpson Strong-Tie® Company



APPLICATION INSTRUCTIONS

S&P C-Laminate
surface applied

SIMPSON
Strong-Tie

S&P C-Laminate (surface applied)

Application instructions

REQUIREMENTS

- Minimum pull-off tensile strength of bearing substrate > 1,5 N/mm²
- Minimum bearing substrate's temperature: 3 °C above dew point temperature
- Maximum substrate moisture content < 4 %
- Glue handling temperature: +10 to +35 °C
- Substrate temperature: +8 °C maximum +35 °C

APPLICATION



Preparation of workspace.

Measure out and clearly indicate the areas to be laminated.

There must be at least 10 mm space between laminates.

For information on S&P C-Laminate end anchors, see separate instructions.



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

Laitance must be removed completely.

The optimum surface roughness is between 0,5 and 1,0 mm.

Minimum pull-off tensile strength > 1.5 N/mm².



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



Reprofile using epoxy-based S&P Resin 230 HP levelling mortar.

Pretreat the already derusted steel using 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 temperature and humidity of bearing substrate, determine dew point temperature



Clean substrate with vacuum hose.

Substrate must be grease and oil free.



If needed, cut the laminate on the jobsite with a cutting wheel (thin metal sheet).

Clean and degrease the cut laminates with a clean towel and S&P Cleaner.

Quality assurance

Check laminate type and dimensions



Mix S&P Resin 220 HP at low speed, maximum 400 RPM.

Mix using a mixing paddle for approx. 3 minutes until the colour is uniformly grey and has no streaks.

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



Apply the glue onto the clean side of the laminate in a dome shape.

For consumption rates, see table on pg 6

Maximum thickness 5 mm.

For large projects, it is recommended that you use S&P gluing equipment to attain an optimal application.



Provisionally place the laminate by hand.



Press the laminate onto the substrate using a Teflon roller from the centre out to each extremity.

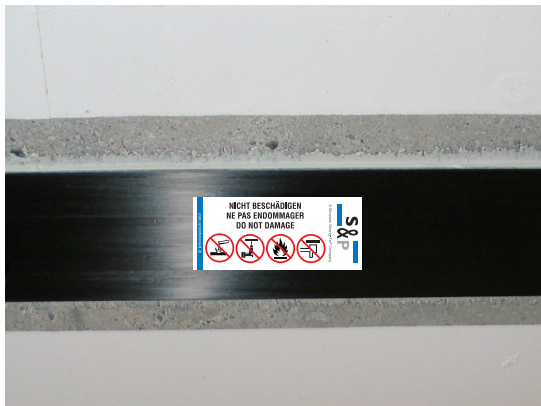
Glue thickness should be 2 to 3 mm.



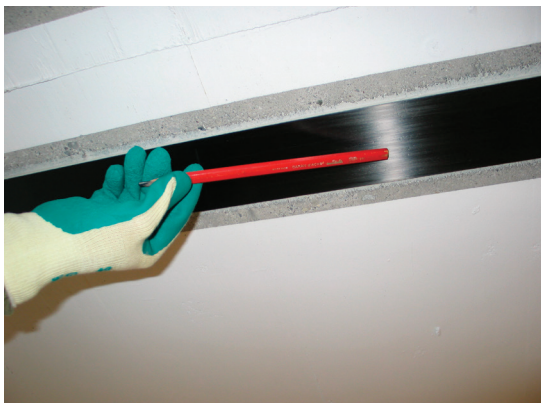
Remove excess glue along the laminate edges.



Clean the laminate with S&P Cleaner.



Stick a warning sticker onto the laminate to protect it against mechanical damage.



Quality assurance

Check for voids by knocking along the laminates carefully once the glue has cured.

If there are voids in the anchor zone, the laminate must be replaced.



Load-bearing capacity is reached after 48 hours, given conditions of 20 °C and 60% air humidity.

Protect the laminates against fire or UV- radiation, as required by the engineer.



For a subsequent application of plaster, the laminates must be covered in quartz sand.

Use S&P Resin 55 HP or S&P Resin 220 HP as bonding course.

SAFETY

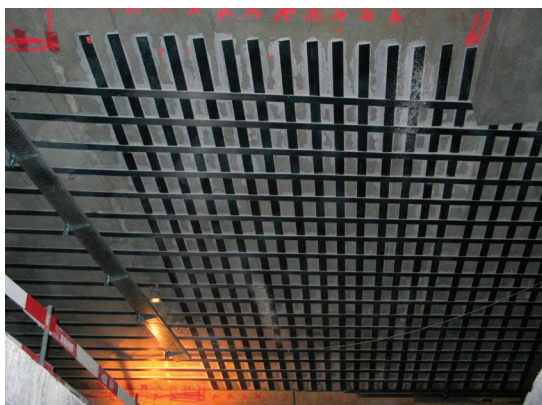
Measures regarding health & safety (protective clothing/accident prevention) are a prerequisite.

CONSUMPTION

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

| Laminate width | S&P Resin 220 HP |
|----------------|------------------|
| 50 mm | ~ 350 g/m |
| 60 mm | ~ 450 g/m |
| 80 mm | ~ 550 g/m |
| 90 mm | ~ 650 g/m |
| 100 mm | ~ 700 g/m |
| 120 mm | ~ 850 g/m |
| 150 mm | ~ 1 050 g/m |

APPLICATION EXAMPLES



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

Headquarters

S&P Clever Reinforcement Company AG
Seewernstrasse 127
CH-6423 Seewen
Tel.: +41 41 825 00 70
www.sp-reinforcement.ch
info@sp-reinforcement.ch