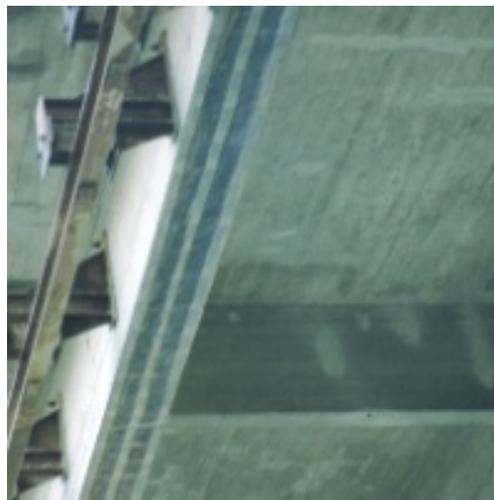
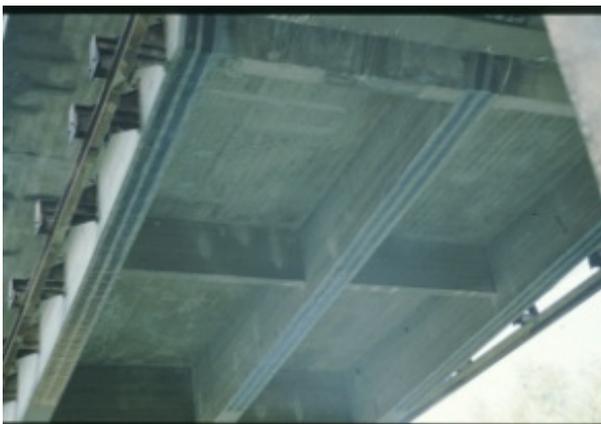


Method Statement no. 9

**REHABILITATION AND REINFORCEMENT OF BRIDGES WITH
CARBON FIBERS and CARBON LAMELLAS (CARBONFORCE®)**

Bridge on Canalbianco River – Trecenta (Italy)



Torre Setta Bridge – Sasso Marconi (Italy)





METHOD STATEMENT

1) Repair of concrete damages

- Remove any loose concrete to provide rough and sound surfaces. Depth of concrete removal depends on the extent of deterioration and on the reinforcement corrosion progress. If reinforcements are corroded, damaged concrete has to be removed beyond 2 cm. of reinforcements. Heavy corroded reinforcements have to be replaced if necessary.
- Cleaning the concrete surface and reinforcements by sandblasting.
- Application of a coat of liquid epoxy adhesive LA2S, as bonding coat with a consumption of 0,400 kg/m² for the subsequent application of #108 MORTAR thixotropic, non-shrink, sulphate resisting mortar.
- Application on the LA2S bonding coat, still tackey, of #108 MORTAR with a consumption of 19 kg/mm/mq.

Crack injections

- Remove all dust, debris or disintegrated material from cracks by using compressed air or vacuuming.
- Seal cracks with PA103 adhesive epoxy paste.
- Inject cracks with INJECTION 1, very low viscosity epoxy resin utilizing a low pressure injection Pot.

Application of Carbon Fibers Net (CARBONFORCE®)

1. Cleaning of the concrete surface by sandblasting.
2. Apply one coat of E/2 liquid epoxy adhesive as bonding coat with a consumption of about 0,4 kg/mq.
3. Apply the Carbon Fiber Net.
4. Saturate the Carbon Fibers Net with E/2 liquid epoxy adhesive with a consumption of 0.6-0.8 kg/m².

Application of Carbon Lamellas (CARBONFORCE®)

1. Clean the concrete surface by sandblasting.
2. Apply 1 coat of PA103 adhesive epoxy paste as bonding coats with a consumption of about 2 kg/mq.
3. Apply the Carbon Lamellas.

Sinit Intermar S.r.l. - Via V. Chiarugi, 76 – 45100 Rovigo (Italy)

Tel. +39 0425 361961 – Fax +39 0425 410115

E-mail: sinit@tin.it – info@sinitworks.com www.sinitworks.com