

# Product Showcase

## Technologies for Enhancing Durability

### MasterEmaco T 5000

The Construction Chemicals division of BASF Corporation launched MasterEmaco® T 5000, a chemical-resistant repair mortar and grout based on a low-odor, solvent-free, 100% solids epoxy resin system. The MasterEmaco T 5000 system can be mixed to create a thick repair mortar suitable for patch thicknesses of up to 4 in. (100 mm). The system also can be mixed to produce a flowable grout for use under baseplates of smaller equipment. The 7-day strengths of the mortar and grout are 11,000 and 10,000 psi (76 and 69 MPa), respectively. An extensive chemical resistance guide is provided on the manufacturer's website.

—BASF Corporation, [www.master-builders-solutions.basf.us](http://www.master-builders-solutions.basf.us)



### Rapid RH and DataMaster

The Rapid RH® sensor system provides rapid relative humidity measurements within concrete slabs. Rapid RH 4.0 EX or Rapid RH 5.0 EX sensors can be paired with the Rapid RH Bluetooth® Smart Reader to provide instant readings, and the readings can be processed on a smartphone using the DataMaster™ app. The app adheres to the ASTM F2170 standard and ensures ASTM critical data integrity by making the data “read-only.” The app links recorded data to a display of each jobsite's sensor locations with a mapping function, sends reports directly to wireless-enabled printers, and exports data to [www.F2170reports.com](http://www.F2170reports.com) for graphing and trending.

—Wagner Meters, [www.wagnermeters.com](http://www.wagnermeters.com)

### SSR 2304 Duplex and Stainless Steel Welded Wire Mesh Mats

Salit Specialty Rebar (SSR) 2304 Duplex is a lean duplex stainless steel (SS); lean duplex SS has a low nickel content and no molybdenum, and it has a microstructure consisting of roughly equal percentages of austenite and ferrite phases. 2304 Duplex SS provides resistance to general corrosion in acid environments, chloride stress corrosion cracking, pitting, and crevice corrosion. Due to its low carbon content, it also provides intergranular corrosion resistance in the as-annealed and as-welded conditions. 2304 Duplex SS has a minimum yield strength of 75 ksi (500 MPa) and can be used to produce reinforcing bars, anchoring systems, and dowels.

SSR stainless steel welded wire reinforcement (WWR) is produced in 6 x 12 ft (2 x 4 m) mats. Two styles are available: 6 x 6 – D2.9 x D2.9 or 4 x 4 – D4 x D4. Mats can be fabricated using either 2205 Duplex SS or 316LN Austenitic SS, a nonmagnetic alloy that provides excellent cryogenic ductility.

SSR's WWR mats meet ASTM A1022/A1022M-13, “Standard Specification for Deformed and Plain Stainless Steel Wire and Welded Wire for Concrete Reinforcement.” Salit Specialty Rebar partners with StelCrete on projects that require mats or pre-assembled cages.

—Salit Specialty Rebar, [www.stainlessrebar.com](http://www.stainlessrebar.com)

—StelCrete, [www.stelcrete.com](http://www.stelcrete.com)

## V2 T-Biscuits

V2 T-Biscuits are carbon/glass fiber-reinforced plastic laminates designed to supplement damaged flange-to-flange shear connectors of precast concrete (single- and double-) T beams. A triaxial carbon fabric provides high strength, while a proprietary textured glass fabric is bonded on the exterior face to provide additional toughness and a rough bonding surface. The constituent resin matrix is a proprietary epoxy that provides strength and chemical resistance, especially to salt and gasoline. Using a proprietary aerospace composite manufacturing technique, the fabric and resin are combined to form a finished composite laminate.

—V2 Composites, Inc., [www.v2composites.com](http://www.v2composites.com)

## Concrete Protector SB

PROSOCO's Concrete Protector SB is a solvent-based product that is applied to finished concrete floors. A treated surface repels water, oil, and stains, yet retains its natural appearance, texture, and breathability. The product is especially recommended for use in high-traffic areas, where surface film-forming sealers would prematurely wear off. The low-odor, VOC-compliant product is easily applied with pump-up sprayers and can also be applied to surfaces previously treated with Consolideck guards.

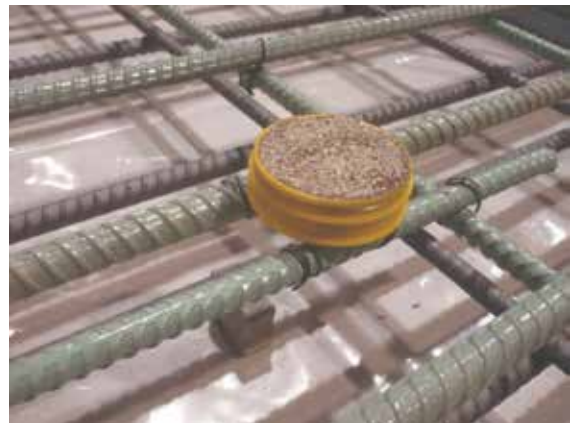
—PROSOCO, [www.prosoco.com](http://www.prosoco.com)

## CorroDec 2G

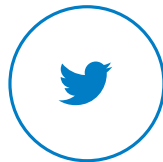
BS2 CorroDec® 2G is a system comprising wireless sensors for detecting corrosion, humidity, and prevailing potential in concrete. Sensors are attached directly to reinforcing bars, and data from the sensors can be viewed on handheld radio-frequency identification (RFID) readers. The sensors are passive—they are powered by the electromagnetic field of the RFID reader.

Data transfer starts within 3 to 5 seconds after the sensor receives the reader's interrogating radio waves. The CorroDec 2G Type A sensor indicates corrosion activity. The body of the sensor is ringed by two levels of a special wire that will be destroyed by corrosion before corrosion initiates in the reinforcing bars. Measurements indicate the condition of the sensor wires as well as the temperature within the concrete structure. Type B sensors measure the potential prevailing above the reinforcing bars (between 100 mV and -1000 mV)—they comprise a combination of precious and nonprecious metals. Type C sensors measure electric conductivity and temperature—they consist of two stainless steel rings. Special sensor solutions are available for concrete structures up to 25 m (82 ft) in thickness.

—BS2 Sicherheitssysteme GmbH, [www.bs2-sicherheitssysteme.de](http://www.bs2-sicherheitssysteme.de)



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