

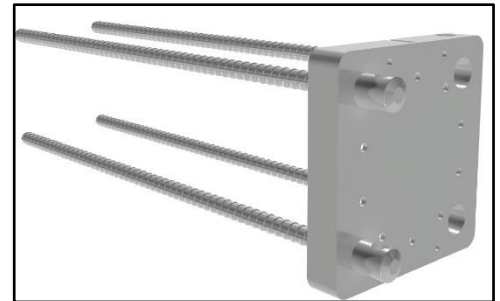


PRODUCT HIGHLIGHT – EMECA 24-inch Splice



Two concrete piles with an EMECA Splice on each end about to be joined in the field - image from EMECA/SPE USA Brochure

The EMECA 24-inch Splice is manufactured by EMECA/SPE USA out of Laurel, Delaware. It is approved for provisional use and listed on the Approved Products List (APL) as NP21-8865. The EMECA 24-inch Splice is a 24-inch square steel splice that is used to join two pre-stressed concrete piles together for use in deep foundation systems. The EMECA 24-inch Splice is cast in-place with the pre-stressed concrete pile. This allows for shorter, and subsequently lighter, more maneuverable concrete pile lengths to be transported and used on site. The two concrete piles are then joined in the field, once the first pile is driven. The two pile end splices are joined together by four steel pins in as little as 3 minutes. The EMECA pile splices come in standard square 12", 14", 16", 18", and 24" sizes. Custom square and circular shapes are also available as well. For more information, please visit <https://www.emeca-speusa.com/>



3-D image of EMECA Splice before it is cast in the concrete pile – image from EMECA/SPE USA Brochure

PRODUCT INNOVATION – Basalt Fiber Reinforced Polymer Rebar



Various diameter samples of white BFRP rebar (left); sample of black BFRP rebar after tested to its tensile strength failure limit (right) – images from Pultrall website (left); and from Pultrall testing report (right)

The Basalt Fiber Reinforced Polymer (BFRP) Reinforcement Bars (Rebar) are manufactured by Pultrall out of Thetford Mines in Québec, Canada. It is made from basalt fibers produced from natural basalt rock by Mafic USA, LLC (located in Shelby, NC). It is currently awaiting a field trial and listed on the APL as NP20-8819. BFRP rebars are a non-corrosive alternative material to steel for internal reinforcement of concrete structures. They are composed of longitudinally aligned basalt fibers embedded in a vinyl-ester resin matrix. They are corrosion resistant, have a 2-3 times higher tensile strength than steel, transparent to electro-magnetic fields, are non-conductive, and lightweight (approximately ¼ the weight of steel). For more information regarding technical specifications, testing, colors, and size options, please visit: www.pultrall.com



Grey/white BFRP rebar tied together prior to a concrete pour for a parking garage floor – image from Pultrall twitter account