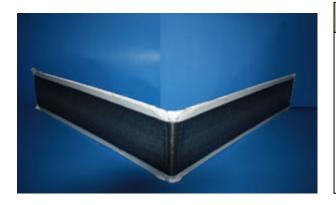
# CORNER STRAP FIBER REINFORCED POLYMER



**Product Description.** The pre-preg, pre-cured corner straps are designed based on steel plating systems. They follow ACI design guideline in being slightly less than 90 degrees. (The function of bend amount is to carry load around corner.) This has the advantage over wet layup systems in that the bend is certified in factory. The corner product represents a low profile bearing tendon to distribute load horizontally. Corners can be produced in various plates or solid carbon, glass aramid or grids. Tensile strength and modulus are a function of tow size and layers



### PRODUCT USE

reinforcement and/or repair of concrete or masonry foundation wall corners and restoring the structural integrity to damaged foundation corners. Individual straps are available for those not needing the Corner Stitching Kit.

In addition to the repair of concrete and masonry foundation wall corners and edges, the Corner Strap can be used for any concrete or masonry wall repair where a 90° structural repair or reinforcement is needed.

# **Advantages**

- Low profile and can be installed behind brick facade or other building facades.
- Legs or overlaps can be added to extend loads
- Parge coats and painting can be used for aesthetics
- Installs in same fashion as straight carbon plate or grids
- Reduces or illuminates contractor error in bending FRP to far to carry load
- Peel-ply technology on both sides for increased bonding capabilities.

# **SPECIFICATIONS**

**GENERAL INFORMATION** 

**CONSTITUENT MATERIALS** Continuous carbon fiber tows and epoxy.

PRIMARY FIBER DIRECTIONS 0° (unidirectional)

COLOR Black

**SPLITTING PROTECTION** A thin 90° carbon fiber ply can be included to prevent

splitting of the laminate (available on request)

**SURFACE TEXTURE** Peel-ply on one side forsecondary bonding.

AVAILABLE WIDTHS "4" (100mm) wide x 2ft x 2ft (Special widths available upon request)

**TYPICAL MATERIAL PROPERTIES** 

NOMINAL THICKNESS
Carbon Strap 900 gsm

0.041 in

1.0 mm

TENSILE STRENGTH 270 ksi 1,860 MPa ASTM D3039

TENSILE STRENGTH PER UNIT WIDTH
Corbon Street 900 gram 11.1 kips/in 1.950 kN/m

Carbon Strap 900 gsm

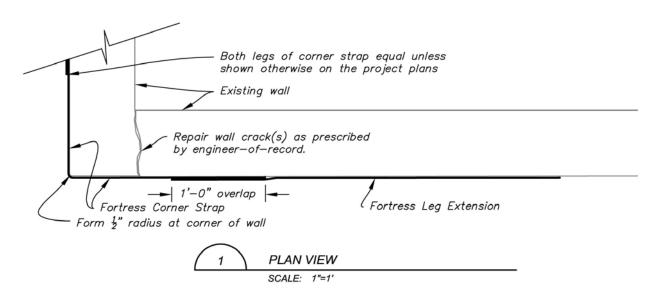
**TENSILE MODULUS** 19,000 ksi 131 GPa ASTM D3039 **FAILURE STRAIN** 1.4% 1.4% ASTM D3039

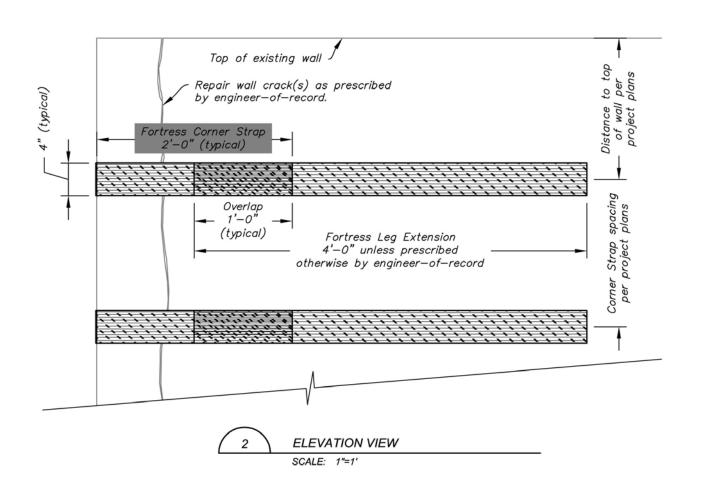
#### NOTES:

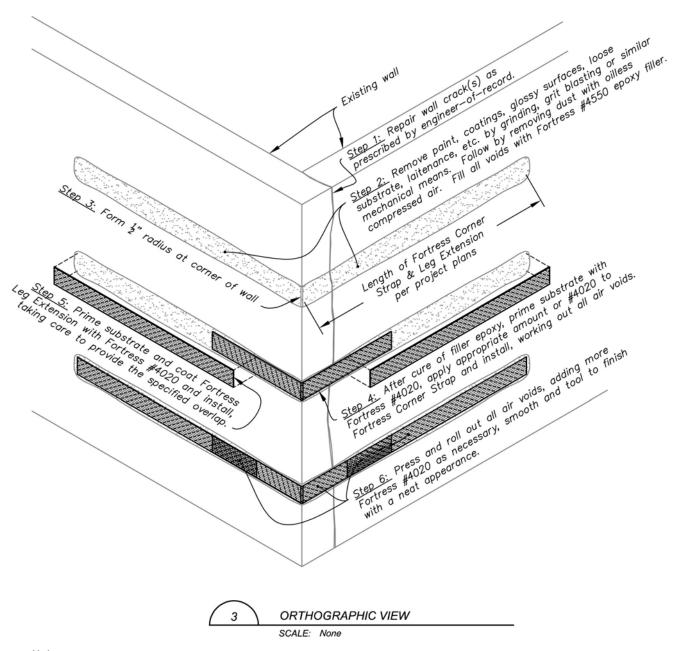
Tests conducted at Saginaw Valley State University.

<sup>1</sup>Nominal Thickness is the approximate measured thickness of the carbon/Kevlar grid embedded Fortress Toughened epoxy adhesive. Actual thickness is measured in the field may vary slightly due to variations in the thickness of the epoxy adhesive used to bond the grid to the substrate. Tensile strength per unit width is constant.

<sup>2</sup>Failure strain is based on reported rupture of strain of continuous carbon fiber strands.







## <u>Notes</u>

- Read and follow all safety precautions on Fortress product data sheets and product labels. Follow all OSHA safety practices.
- Read and follow all preparation and installation guidelines as described on Fortress product data sheets and product labels.
- Fortress Corner Strap number, spacing, Leg Extension lengths and overlaps shall conform to the project plans as prepared by the engineer—of—record.

#### Keep Out Of Reach of Children - Keep Container Tightly Closed - Not For Internal Consumption - For Industrial Use Only

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