

Installation Instructions for Precured Embedded Anchors

Installation of Kulstoff anchors should only be performed by contractors trained and certified by Kulstoff Composite Products, LLC. The following steps are to be followed to ensure appropriate installation.

1. Kulstoff anchors shall be installed in holes drilled into the existing substrate. Holes may be either hammer or core drilled.
2. The hole to receive the anchor shall have a diameter at least 1/8" greater than the anchor diameter. The depth of the hole shall be 1/4" greater than the specified embedment depth of the anchors.
3. The drilled holes shall be cleaned as follows:
 - a. Remove debris using either compressed air (minimum 2 times) or vacuum. For vacuum cleaning, the hose shall be fitted with a nozzle with diameter 2/3 the diameter of the hole to be cleaned.
 - b. Wire-brush twice.
 - c. Removed debris again using either compressed air (minimum 2 times) or vacuum.
4. Kulstoff anchors shall be installed over the already installed FRP fabric unless otherwise indicated in the project documents. Kulstoff anchors shall be installed while the resin for the already installed FRP is still uncured. It is acceptable to install the anchors within the recoat window of the resin (24 hours maximum). Locate the holes drilled into the substrate prior to the FRP installation and gently separate the fibers of the already installed FRP to expose the hole.
5. Fill the prepared hole completely with the mixed resin. The resin overflow when the Kulstoff anchors is inserted will be used to hold the splay in place over the already installed FRP.
6. Prepare the Kulstoff anchors for installation by dipping them entirely into mixed resin and gently working resin into the free rovings for full saturation.
7. Insert the precured end of the Kulstoff anchors into the hole and push down to the bottom of the hole. The length of precured end of the anchor is specially designed to be shorter than the total desired embedment depth. Ensure that there is no entrapped air beneath or around the anchor.
8. Carefully position the splay of the free fibers over the already installed FRP.
9. Install remaining FRP over the installed Kulstoff anchors splays, if required by the project documents.
10. Allow FRP and Kulstoff anchors to cure.

Notes:

1. Anchor installation shall comply with all environmental and other conditions that apply to the FRP installation. Please refer to the FRP installation instructions by the FRP manufacturer.
2. Please see www.kulstoff.com/frp-anchors.html for more information.
3. Please follow all safety instructions listed in the FRP datasheets.