BASALT ENGINEERING

## Handling, Safety and Installation Instructions

**BASTECH (BFRP) rebars are lightweight and highly durable, making them easy to handle and install. Incorrect handling could compromise safety and performance. Please observe the following guidelines for handling, safety, and storage.**

### Shipping and Storage

The manufacturer packages and ships rebar either in coil rolls (up to #3 inclusive) or as straight rods (any diameter) up to 40 feet long:

- The coil roll can hold up to 300 feet. The coil is tied up along its length by number of ties to hold it together. Coils are packed either in bulk on pallets for shipping or individually, wrapped in film and warning labels applied to alert of a spring-loaded product. Coils are clearly labelled with batch number and the length.
- Straight rebar up to the length of 40 feet. Wire tied packs of ten pieces of the same length. The wire ties are applied along the length at every 3 – 5 feet, the distance between the last tie and the end of the rebar shall be 4–8 inches. Packs are clearly labelled with batch number and the length.

Damage by excessive force and/or heavy impacts may occur so observe the following best practices:

- Never store or place on sharp edges or surfaces.
- Always use proper hoisting equipment and multiple lifting points when handling bundled bars.
- Place bends and non-linear components on durable pallets, use proper lifting and hoisting equipment.
- Store above ground level on platforms, skids, or other supports as close as possible to the point of placement.
- Caution when handling coil rolls as the product is spring loaded. Uncoiling rolls should be done from the inside, exercising great care to prevent instant uncoiling.

### Handling

Care is advised in the handling of these materials during storage and installation:

- Open packaging completely and do not force out of packaging.
- Do not drag on the ground or across sharp edges as this can score the BASTECH® rebar.
- Damaging or abrading equipment or tooling should not be used with BASTECH® rebar.
- On-site cutting is permitted by means of carbide, diamond-coated blades, Sawzall with metal blades or hacksaws. Do not use shears.
- Uncoiling rolls should be done from the inside, exercising great care to prevent instant uncoiling.
- Eye and face protective garments must always be worn when cutting BASTECH® rebar.
- Gloves must always be worn when handling BASTECH® rebar, as the surface is treated and designed to facilitate bonding to concrete.

***CAUTION:*** Bending of bars on site is neither practical nor necessary for very large radius bends. BASTECH rebar can be bent elastically into place and firmly held into position. If released without

controls, the elastic energy will cause BASTECH rebar to snap back quickly to its original shape, which may result in injury.

## Installation

The placement of BASTECH rebar is like that of other rebar. Following these guidelines will ensure the best results:

- BASTECH rebar must be held firmly during the pouring and setting of concrete. Ties to be placed per specifications. Ties maintain the position of the reinforcement during the pouring and setting of concrete. They do not need to provide permanent strength to the structure.

- Always ensure bars do not float upwards and out of position during concrete placement and consolidation. If movement is detected, the pour should be halted whilst additional support or fixtures are added.

- BASTECH rebar is supplied free of materials that could compromise the bond, such as oils, dirt, or chemicals. If the bars become contaminated, they should be cleaned prior to installation to ensure best performance.

- BASTECH rebar can be used and tied in with steel bars. The same tying method as steel should be used to achieve best performance.

- Due to the nature of BFRP rebar, shapes cannot be bent on-site. All shapes are factory made and delivered to exact specifications.

- Nicks, scrapes, and cuts that do not exceed 5% of the depth of the bar are acceptable. Beyond 5% we recommend replacement of the bar. Alternatively, a lap splice with the appropriate lap length either side of the damage may be applied.

### Jointing and Lapping

BASTECH rebar may be jointed with lap joints or couplings as shown on the plans and specifications. Unless otherwise shown on the plans, BASTECH rebar shall be lap spliced using a BFRP rebar of the same diameter. Lap lengths and bar cover should be as indicated on the plans and specifications. The same applies with regards to using couplings which should be applied according to drawing requirement

### Additional Information

Please contact Basalt Engineering, LLC. office for any queries on handling, safety, and installation. Email: **www.basalt-usa.com or 1-888-244-7865**