

IMPORTANT INFORMATION – PLEASE READ CAREFULLY – FOR DISTRIBUTION

General Notes:

V•ROD Composite Rebars must be handled carefully according to the following guidelines. **V•ROD** differs from steel rebars and must be handled with care.

Handling:

Shipping and Storage:

V•ROD shall be bundled and shipped according to the manufacturer's specifications. Please contact Pultrall Inc. if re-bundling and secondary shipping is required. **V•ROD** can be damaged by excessive force and forceful impacts. **V•ROD** must be handled with care and shall never be stored or placed on sharp edges or surfaces.

Additional precautions shall be enforced to avoid excessive deflection. Proper hoisting equipment and a minimum of three (3) lifting points shall be used to handle bundled bars. Bends and nonlinear components shall be placed on adequate pallets and shall be handled using proper equipment.

Handling:

Packaging shall be opened completely in order to access the product. Individual **V•ROD** rebars shall not be forced out of packaging. **V•ROD** rebars shall not be dragged on the ground or across sharp edges. **V•ROD** shall be stored flat and shall not be dropped on the ground.

When bars are kept in the open for more than two months, an opaque covering or tarp shall be placed over the bars to protect against UV exposure. Shall be prevented: excessive bending, spills of earth, oil or concrete. Damaging or abrading equipment or tooling shall not be used with **V•ROD** bars. **V•ROD** bars shall be stored above ground level on platforms, skids, or other supports as close as possible to the point of placement.

CAUTION: V•ROD shall not be bent permanently. All permanent bends shall be factory made. **V•ROD** can be bent elastically into place and firmly held into position. When released, those **V•ROD** will snap back into their original shape and may result in injuries.

On-site cutting of **V•ROD** bars is permitted by means of carbide or diamond-coated blades. Standard shears shall not be used. Eye and face protective garments shall be worn at all time when cutting **V•ROD** bars. Wear eye protection and a face mask if cutting the bars. Gloves shall be worn at all time when manipulating **V•ROD** bars.

Installation and pouring:

V•ROD bars shall be firmly held during the placing and setting of concrete. Bars, except those to be placed in vertical mats, shall be tied at every intersection where the spacing is more than twelve (12) inches (30 cm) in any direction. If spacing is less than twelve (12) inches (30 cm), bars shall be tied at every intersection or at alternate intersections provided. Such alternate ties accurately maintain the position of the reinforcement during the placing and setting of concrete. Care must be taken to ensure that bars do not float upward, or move in any direction during concrete placement. Concrete placement must be halted until corrective measures are taken.

When concrete is placed, **V•ROD** bars shall be free of materials deleterious to the bond, such as oils, dirt, or other chemicals. **V•ROD** bars may be used to tie in with steel bars. The same tying method as steel shall be used in order to achieve a tight bond.

Any damage to a **V•ROD** bar resulting in visible fibers (other than at cut ends) or any cut or defect greater than 0.04 in (1 mm) deep shall be cause for rejection of the bar. All visible damage to the **V•ROD** bars exceeding two (2) percent of the surface area per foot of bar and not resulting in rejection by the Engineer shall be repaired. A typical repair method is to lap splice a new **V•ROD** bar adjacent to the damaged portion with the appropriate lap length on either side of the damage.

Splicing and lapping:

V•ROD bars shall be lapped as shown on the plans. Unless otherwise shown on the plans, **V•ROD** bars shall be lap spliced using a GFRP bar of the same diameter. For tensioned lap splices, a lap length conforming to the recommendations of the design engineer. Bar cover shall be as indicated on the plans.

Additional information:

Please contact Pultrall Inc. for any clarification or question on the shipping, storage, handling and installation of **V•ROD**.