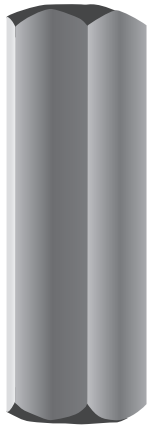


## INSTALLATION GUIDE



# SUPERTIE™

FIBERGLASS FORM-TIE SYSTEMS



1/2"-7,500 Lbs SWL

3/4"-12,000 Lbs SWL

1" - 17,000 Lbs SWL

Safe Working Loads

## NEVER PATCH . . . NEVER RUST





# SUPERTIE™

## FIBERGLASS FORM-TIE SYSTEMS

1/2"-7,500 Lbs SWL  
3/4"-12,000 Lbs SWL  
1" - 17,000 Lbs SWL  
Safe Working Loads

SuperTie™ Fiberglass Coil Rod Form Tie Systems are used to secure concrete formwork during concrete placement and initial hydration, without the inherent limitations of previously popular steel form tie systems.

SuperTie™ Form Tie Systems eliminate the possibility of rust stains as well as the structural deterioration often caused by failure of patching for steel form tie holes. SuperTie™ Systems are appropriate for use in all forming applications but are especially beneficial in situations such as architectural finishes.

**1. Superior Finishes:** Improved architectural finishes, without patches or rust.

**2. No Corrosion:** The fiberglass form tie material cannot rust, eliminating the need to have a break-back and the need for subsequent plugging and patching to forestall rust.

**3. Saves Money:** Saves dramatically on labor costs. Reduces form-tie related costs as much as 70%. Reduced Inventory: One size fits any wall. Bulk lengths are cut to the working measurements at the jobsite.

**4. Extends Form Life:** All forms and form liners strip easily from the structure without damage from the ties.

**5. Natural Insulator:** Fiberglass tie, which is left in the structure, is electromagnetically transparent, making it ideal for special situations where magnetic or electrical interference is undesirable. Fiberglass will not promulgate radio frequency and shields nuclear energy.

**6. Compatible:** SuperTie™ systems are compatible with all job-built and commercially available forming systems.



US Patent #7,819,388



**RJD Fiberglass Coil Rod systems are available in gray and offered in diameters:**

1/2", 3/4" and 1"

### Non-Corrosive Fiberglass Coil Rod

RJD Fiberglass Coil Rod, utilizes a specially blended and formulated custom engineered resin providing ultimate tensile strength and maximizing our CRFF Gripper strength. The RJD Fiberglass Coil Rod will never rust eliminating the need for breakback, plugging and patching, providing a superior architectural finish.

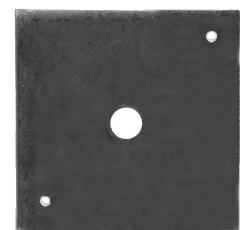
### SuperTie™ Coil Rod Form Fixture

SuperTie™ Coil Rod form fixtures offer a safe working load of 7,500 lb (1/2"), 12,000 lb (3/4"), and 17,000 lb (1"). The Form Fixtures range in length from, respectively, 5", 6", and 8".



### SuperTie™ Bearing Plate – BP615/BP300

The SuperTie™ BP615 is a 4"x 4" steel plate and fits the 1/2" coil rod system. The SuperTie™ BP300 is a 5"x 5" steel plate and fits 3/4" & 1" coil rod systems. The SuperTie™ bearing plates are required component of the SuperTie™ Gripper/Form Fixture System when using a wooden forming system.

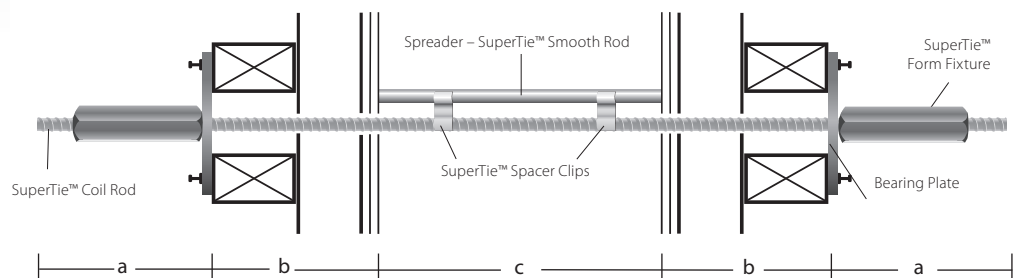


### Example for 1/2" System

a. (2) 6" Form Fixture + Rod Tails. .... 12"  
b. (2) 7.75" forms width ..... 15.5"  
c. Structure width ..... 12"  
Total rod length needed. .... 39.5"

### Ordering SuperTie™ Coil Rods

Formula for a 12" thick structure  
[ 2 (a) + 2 (b) + c = required materials ]



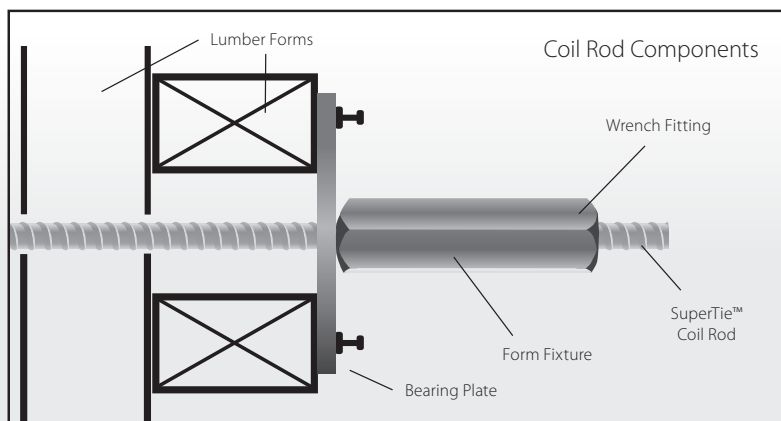
Note: Cut fiberglass rod using a diamond blade.



(800) 344-4753  
info@rjdindustries.com



# INSTALLATION STEPS



Slide the fiberglass rod through the form. Short lengths of fiberglass rod can be used as internal spreaders; these spreaders can be either tied to the rebar cage, or attached to the tie rod by using two Spreader Clips.



Slip Bearing Plate and Form Fixture onto the fiberglass rod. For a battered wall, add wedge shaped spacers so that the fiberglass rod is kept straight. The strength of a bent rod is significantly reduced.



Lock the Form Fixture onto the fiberglass rod by turning the "Form Fixture" clockwise.



On the opposite side of the form, lock another Form Fixture onto the fiberglass rod.



Cut the fiberglass rod between the Form Fixture and the form.



After removing the forms, you will see short lengths of fiberglass rod sticking out of your structure.



To ensure protection of exposed concrete surface, drill a hole slightly larger than rod diameter in a piece of sheet metal, slide over rod, then cut.



Grind the stubs of fiberglass rod off flush to the concrete structure using a grinder with a diamond blade.



The tie will nearly disappear. No breakback. No plugging. No patching.

**Warning:** Once SuperTie™ installation is complete, the tie must be completely straight through the formwork. Any bending, bowing, sagging, or deflection will drastically lower tie strengths and could result in failure.



# SUPERTIE™

FIBERGLASS FORM-TIE SYSTEMS

Tie spacing is determined by standard industry practices based on ACI 347R-14. Always review formwork design, concrete mix and special on-site conditions with a qualified Engineer to determine proper Form Tie spacing.

Examples of approximate tie spacings at common placement rates are shown below.

1/2" (7,500 Lbs SWL), 3/4" (12,000 Lbs SWL) and 1" (17,000 Lbs SWL)

SWL = Safe Working Load

| Always refer to ACI347R-14 Guide to Formwork for exact calculations                                                                                                                                                     |                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| $R < 7 \text{ ft/hr}$<br>$P=150 + (9000 \times R)/T$<br>(without any admixture)                                                                                                                                         | $R > 7 \text{ ft/hr but } < 14 \text{ ft/hr}$<br>$P=150 + (43,400/T) + (2800 \times R)/T$<br>(without any admixture) |
| <b>KEY:</b> P = Concrete Lateral Pressure, lb/ft <sup>2</sup> • W = Unit Weight of Concrete, lb/ft <sup>3</sup> • H = Height of Concrete Placement, ft<br>R = Rate of Placement, ft/h • T = Temperature of Concrete, °F |                                                                                                                      |

## 1/2" COIL ROD SYSTEM - 7,500 lbs (safe working load)

| Temperature (°F)                                        |    |    |     |     | Tie Spacing Data |                |                         |                     |                  |
|---------------------------------------------------------|----|----|-----|-----|------------------|----------------|-------------------------|---------------------|------------------|
| 40                                                      | 50 | 60 | 70  | 80  |                  |                |                         |                     |                  |
| Maximum Rate of Concrete Placement Height (ft) Per Hour |    |    |     |     | Horizontal (in.) | Vertical (in.) | Area (ft <sup>2</sup> ) | Form Pressure (psf) | Actual Load (lb) |
| 6'                                                      | 7' | 9' | 10' | 12' | 30               | 24             | 5.0                     | 1,500               | 7,500            |
| 4'                                                      | 5' | 7' | 8'  | 9'  | 30               | 30             | 6.25                    | 1,200               | 7,500            |
| 3'                                                      | 4' | 5' | 6'  | 7'  | 30               | 36             | 7.5                     | 1,000               | 7,500            |
| 3'                                                      | 3' | 4' | 5'  | 6'  | 36               | 36             | 9.0                     | 833.3               | 7,500            |

## 3/4" COIL ROD SYSTEM - 12,000 lbs (safe working load)

| Temperature (°F)                                        |     |     |     |     | Tie Spacing Data |                |                         |                     |                  |
|---------------------------------------------------------|-----|-----|-----|-----|------------------|----------------|-------------------------|---------------------|------------------|
| 40                                                      | 50  | 60  | 70  | 80  |                  |                |                         |                     |                  |
| Maximum Rate of Concrete Placement Height (ft) Per Hour |     |     |     |     | Horizontal (in.) | Vertical (in.) | Area (ft <sup>2</sup> ) | Form Pressure (psf) | Actual Load (lb) |
| 10'                                                     | 14' | 14' | 14' | 14' | 30               | 24             | 5.0                     | 2,400               | 12,000           |
| 9'                                                      | 12' | 14' | 14' | 14' | 30               | 30             | 6.25                    | 1,920               | 12,000           |
| 6'                                                      | 10' | 12' | 14' | 14' | 30               | 36             | 7.5                     | 1,600               | 12,000           |
| 5'                                                      | 6'  | 9'  | 14' | 14' | 36               | 36             | 9.0                     | 1,333.3             | 12,000           |

## 1" COIL ROD SYSTEM - 17,000 lbs (safe working load)

| Temperature (°F)                                        |     |     |     |     | Tie Spacing Data |                |                         |                     |                  |
|---------------------------------------------------------|-----|-----|-----|-----|------------------|----------------|-------------------------|---------------------|------------------|
| 40                                                      | 50  | 60  | 70  | 80  |                  |                |                         |                     |                  |
| Maximum Rate of Concrete Placement Height (ft) Per Hour |     |     |     |     | Horizontal (in.) | Vertical (in.) | Area (ft <sup>2</sup> ) | Form Pressure (psf) | Actual Load (lb) |
| 14'                                                     | 14' | 14' | 14' | 14' | 30               | 24             | 5.0                     | 3,400               | 17,000           |
| 11'                                                     | 14' | 14' | 14' | 14' | 30               | 30             | 6.25                    | 2,720               | 17,000           |
| 9'                                                      | 11' | 14' | 14' | 14' | 30               | 36             | 7.5                     | 2,266.7             | 17,000           |
| 7'                                                      | 9'  | 11' | 13' | 14' | 36               | 36             | 9.0                     | 1,888.9             | 17,000           |

NOTE: Tables are relative to SuperTie™ Form Tie approximate spacing only. The contractor must consider industry standards for other formwork components, sheeting, accessory lumber and commercially available formwork strengths. Always review formwork design, concrete mix and special on-site conditions with a qualified Engineer to determine proper Form Tie spacing.

**IMPORTANT:** When determining tie spacings, refer to guidelines in ACI 347R-14. All formwork load calculations shall be performed by a qualified engineer. Failure to do so may result in form failure or injury.

scan for a distributor



RJD Industries, LLC  
(800) 344-4753 • rjdindustries.com

SuperTie™ CRFF Systems are sold exclusively through quality construction materials dealers. Scan the QR code to see our distributor locations or just call us for the name of the dealer nearest you.