

INSTALLATION GUIDE



SUPERTIE™

FIBERGLASS FORM-TIE SYSTEMS



THE COIL ROD SERIES: **15K, 24K & 34K**

NEVER PATCH . . . NEVER RUST





SUPERTIE™

FIBERGLASS FORM-TIE SYSTEMS

THE COIL ROD SERIES: **15K, 24 K & 34K**

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



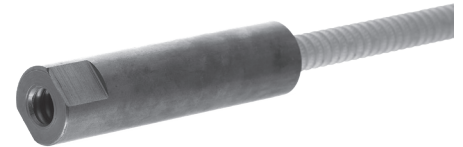
RJD Fiberglass Coil Rod systems are available in gray and offered in sizes: 13 mm (6800 kg), 19 mm (10,800 kg) & 25.4 mm (15,420 kg)

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. Our American made 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 Ultimate Tensile Strengths of 6,800 kg (13 mm), 13,600 kg. (19 mm), and 10,800 kg. (25.4 mm). The Form Fixtures range in length from, respectively, 127 mm, 153 mm, and 204 mm.

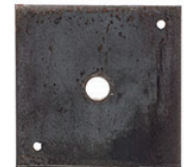


SuperTie™ Bearing Plate – BP615/BP300

The SuperTie™ BP615 is a 102 mm x 102 mm steel plate and fits the 13 mm coil rod system.

The SuperTie™ BP300 is a 127 mm x 127 mm steel plate and fits 19 mm & 25.4 mm coil rod systems.

The SuperTie™ bearing plates are required component of the SuperTie™ Gripper/Form Fixture System when using a wooden forming system.

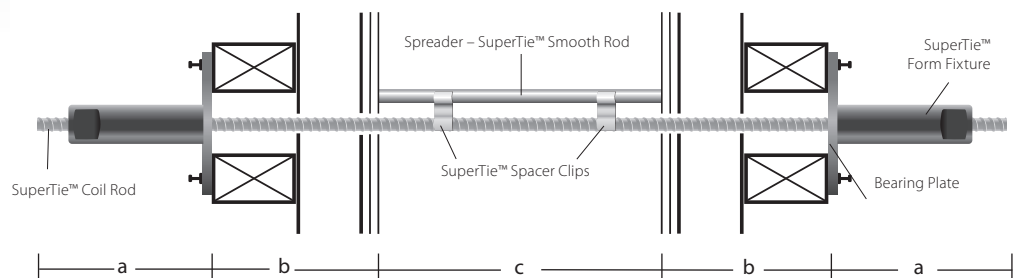


Example for 13 mm System

- a. (2) 152.5 mm Form Fixture + Rod Tail . 305 mm
 - b. (2) 197 mm forms width394 mm
 - c. Structure width305 mm
- Total rod length needed.....1004 mm

Ordering SuperTie™ Coil Rods

Formula for a 305 mm thick structure
[2 (a) + 2 (b) + c = required materials]

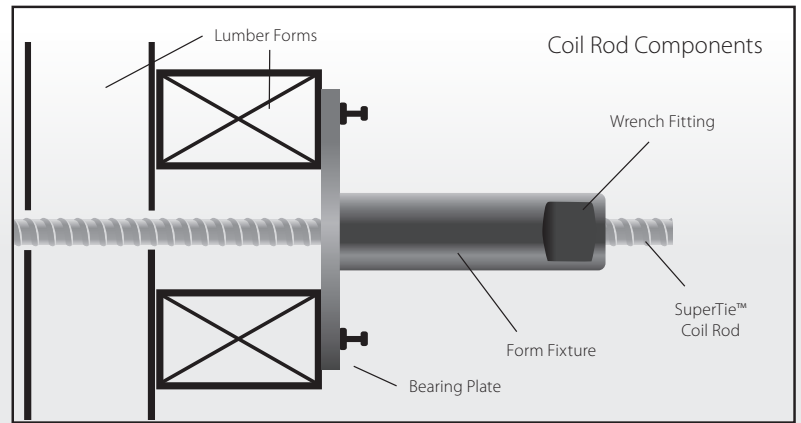


Note: Cut fiberglass rod using a diamond blade.



1508 W Stone Field Way, Ogden, UT 84404
(805) 456-5980
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

THE COIL ROD SERIES: **15K, 24K & 34K**

Typical Tie Spacing / Placement Rates per ACI 347 Recommendations

13 MM COIL ROD SYSTEM – 15K

Temperature					Tie Spacing Data				
4.4°C	10°C	15.6°C	21.1°C	26.7°C					
Maximum Rate of Concrete Placement Height (m) Per Hour					Horizontal	Vertical	Area	Form Pressure	Actual Load (kg.)
1.83 m	2.29 m	2.74 m	3.20 m	3.66 m	762 mm	609 mm	0.46 m ²	71.82 kN/m ²	3,400 kg
1.43 m	1.77 m	2.14 m	2.50 m	2.83 m	762 mm	762 mm	0.59 m ²	57.45 kN/m ²	3,400 kg
1.16 m	1.43 m	1.74 m	2.01 m	2.32 m	762 mm	914 mm	0.69 m ²	47.88 kN/m ²	3,400 kg
0.92 m	1.16 m	1.40 m	1.62 m	1.86 m	914 mm	914 mm	0.84 m ²	39.89 kN/m ²	3,400 kg

19 MM COIL ROD SYSTEM – 24K

Temperature					Tie Spacing Data				
4.4°C	10°C	15.6°C	21.1°C	26.7°C					
Maximum Rate of Concrete Placement Height (m) Per Hour					Horizontal	Vertical	Area	Form Pressure	Actual Load (kg.)
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*

25.4 MM COIL ROD SYSTEM – 34K

Temperature					Tie Spacing Data				
4.4°C	10°C	15.6°C	21.1°C	26.7°C					
Maximum Rate of Concrete Placement Height (m) Per Hour					Horizontal	Vertical	Area	Form Pressure	Actual Load (kg.)
4.38 m	8.81 m	6.61 m	7.71 m	8.80m	762 mm	609 mm	0.46 m ²	162.79 kN/m ²	7710 kg
3.47 m	4.35 m	5.21 m	6.09 m	6.94 m	762 mm	762 mm	0.59 m ²	130.28 kN/m ²	7710 kg
2.86 m	3.59 m	4.29 m	5.02 m	5.73 m	762 mm	914 mm	0.69 m ²	108.53 kN/m ²	7710 kg
2.34 m	2.95 m	3.53 m	4.10 m	4.72 m	914 mm	914 mm	0.84 m ²	90.44 kN/m ²	7710 kg

Note: Tables are relative to SuperTie™ CRFF form tie spacing only. The contractor must consider industry standards for other formwork components: sheathing, accessory lumber and commercially available formwork strengths.

IMPORTANT: When using admixtures, retardants, self-compacting concrete, or other products that create a full liquid head of pressure, a new safe working load must be used at a 2.5:1 ratio in lieu of the 2:1 safe working load which ultimately decreases your tie spacing.

scan for a distributor



RJD Industries, LLC
1508 W Stone Field Way, Ogden, UT 84404
(805) 456-5980 • 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.