

INSTALLATION GUIDE



SUPERTIE™

FIBERGLASS FORM-TIE SYSTEMS

ULTIMATE TENSILE STRENGTH **15K**

NEVER PATCH . . . NEVER RUST





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SuperTie™ Patented Fiberglass Form Tie Systems are used to secure concrete form work during concrete placement and initial hydration, without the inherent limitations of previously popular steel form tie systems. SuperTie™ 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 Smooth Rod 15K System - (13mm) is offered in black and gray.

Non-Corrosive Fiberglass Smooth Rod

RJD Fiberglass Smooth Rod, utilizes a specially blended and formulated custom engineered resin providing ultimate tensile strength and maximizing our GND15000 Gripper strength. Our American made RJD Fiberglass Smooth Rod will never rust thus eliminating the need for breakback, plugging and patching, providing a superior architectural finish.

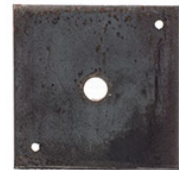
SuperTie™ 15K Patented Gripper – GND15000

SuperTie™ 15K Patented Gripper offers an ultimate tensile strength of 6,800 kg. (3,400 kg. safe working load at 2:1 safety factor) and is most commonly used with the jobsite built (plywood and 100x50) forms and hand-set modular forms.



SuperTie™ Bearing Plate – BP615

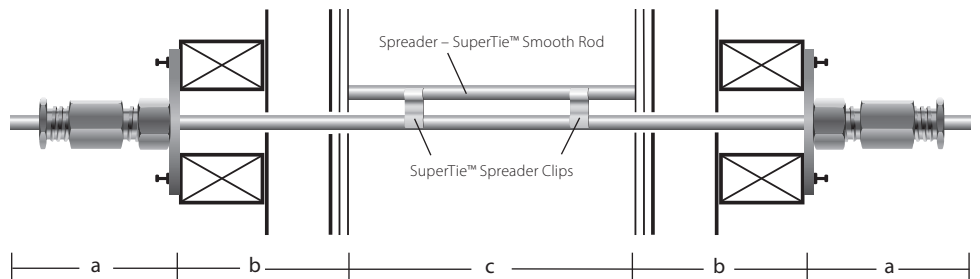
The SuperTie™ Bearing Plate is a 102 mm x 102 mm steel plate and fits the 6K and 15K systems. The SuperTie™ bearing plates are a required component of the "SuperTie™ Gripper System" when using a wooden forming system.



Ordering SuperTie™ Rods

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

- a. (2) 152.5 mm Grippers + Rod Tails . . .305 mm
 - b. (2) 197 mm form width394 mm
 - c. Structure width305 mm
-
- Total rod length needed.1004 mm



Note: Cut fiberglass rod using a diamond blade.



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INSTALLATION STEPS

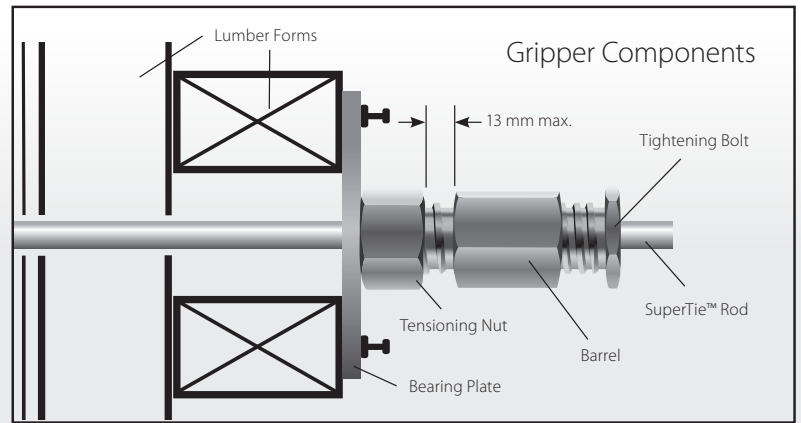


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15K = 7.5K

Safe Working Load allows a 2:1 safety factor



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.



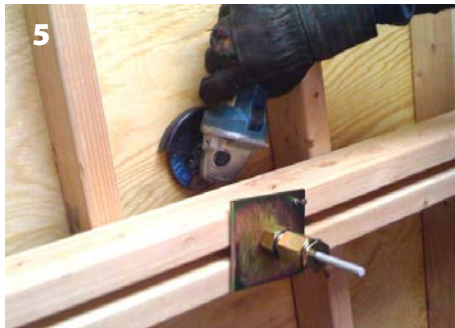
Slip Bearing Plate and Gripper onto the fiberglass rod. For a battered wall, add wedge shaped spacers so that the fiberglass rod is kept straight. The strength of a bent rod is significantly reduced.



Lock the Gripper onto the fiberglass rod by hand tightening the "tightening bolt," and then with a wrench, a 3/4 turn clockwise. On the opposite side of the form, lock another Gripper onto the fiberglass rod.



Use the "tensioning nut" to adjust width of form, or tighten form against internal spreaders (there is a maximum of 13 mm of adjustability for each Gripper). You are now ready to place concrete.



Cut the fiberglass rod between the Gripper 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 sheet metal 16 mm hole and 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.



Tie spacing is determined by standard industry practices. Some typical tie spacings at common placement rates are indicated in the table below. After determining tie spacing, drill holes in the plywood forms with a 16 mm dia. drill bit for SuperTie™ 15K System (3,400 kg ultimate tensile strength). When calculating tie spacing, always allow a 2:1 safety factor.

TIE SPACING CHART PER A.C.I. 347 RECOMMENDED VALUES

Ambient temp. @ time of pour (°C)			Form-Tie Spacing		Form-Tie Values		
4.4°C	15.6°C	26.7°C					
Rate of Concrete Placement: m/hr			Horz.	Vert.	Area m ²	Pressure	S.W.L.
2.06 m	3.05 m	3.05 m	762 mm	609 mm	0.46 m ²	71.82 kN/m ²	3,400 kg
1.83 m	2.14 m	3.05 m	762 mm	762 mm	0.58 m ²	57.45 kN/m ²	3,400 kg
1.32 m	3.05 m	2.74 m	762 mm	914 mm	0.69 m ²	47.88 kN/m ²	3,400 kg
0.81 m	3.05 m	1.83 m	914 mm	914 mm	0.84 m ²	34.89 kN/m ²	3,400 kg

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

For assistance Calculating SuperTie™ Material List and Quantities, please call RJD Industries LLC

COMPONENT LIST

Prod Number	Description	Packaging	Ship Wt.
R15/20G	13 mm dia. Rod 6,800 kg. – ultimate strength 6.10 m. lengths, gray color. 3400 kg. S.W.L.	18 per bundle – total 110m	31 kg
GND15000	Gripper - New Design	50 per bucket	28.5 kg
BP615	Bearing Plate	50 per box	25 kg
SC15000	Spreader Clip	50 per bag	312 g
WS15000	WaterStop	50 per bag	439 g

For custom rod lengths and/or custom colors, please call for quote and lead times.

*SWL = Safe Working Load

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.



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SuperTie™ 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.

scan for a distributor

