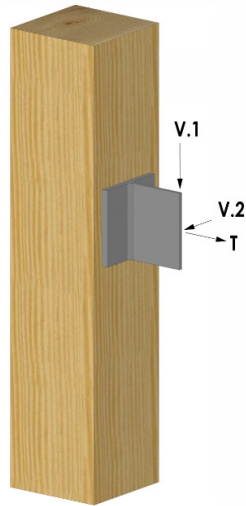
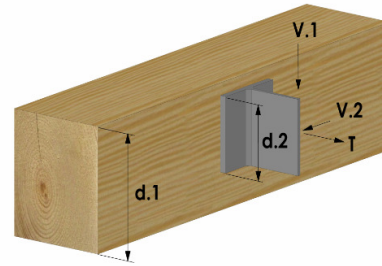




## Standard T-REX (6x6) connector

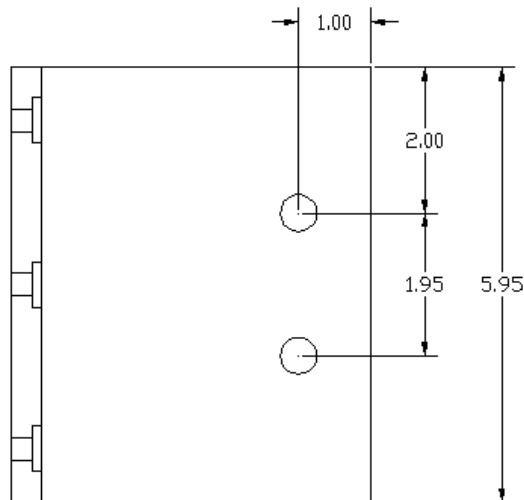


Connection A



Connection B

### Connection orientation and loading directions



### 6x6 Connector plate, pin connection layout, Units: in



**Connection capacity using 5/16” x 3 1/8” GRK RSS wood screws<sup>1,2</sup>, Units: lb**

Timber Species	Load Duration, C <sub>D</sub>	Connection A			Connection B <sup>3</sup>		
		T	V <sub>1</sub>	V <sub>2</sub>	T	V <sub>1</sub>	V <sub>2</sub>
Eastern White Pine (G = 0.36)	1.0	1318	997	331	1318	997	331
	1.15	1516	1146	381	1516	1146	381
	1.6	2109	1595	530	2109	1595	530
Douglas Fir (G = 0.5)	1.0	2543	1923	451	2543	1923	451
	1.15	2925	2212	518	2925	2212	518
	1.6	4069	3078	721	4069	3078	721
Red Oak (G = 0.67)	1.0	3900	2356	411	3900	2356	411
	1.15	4485	2710	473	4485	2710	473
	1.6	6240	3770	658	6240	3770	658

**Connection capacity using 5/16” x 5 1/8” GRK RSS wood screws<sup>1,2</sup>, Units: lb**

Timber Species	Load Duration, C <sub>D</sub>	Connection A			Connection B <sup>3</sup>		
		T	V <sub>1</sub>	V <sub>2</sub>	T	V <sub>1</sub>	V <sub>2</sub>
Eastern White Pine (G = 0.36)	1.0	2171	1642	331	2171	1642	331
	1.15	2497	1889	381	2497	1889	381
	1.6	3474	2628	530	3474	2628	530
Douglas Fir (G = 0.5)	1.0	3900	2356	451	3900	2356	451
	1.15	4485	2710	518	4485	2710	518
	1.6	6240	3770	721	6240	3770	721
Red Oak (G = 0.67)	1.0	3900	2356	411	3900	2356	411
	1.15	4485	2710	473	4485	2710	473
	1.6	6240	3770	658	6240	3770	658

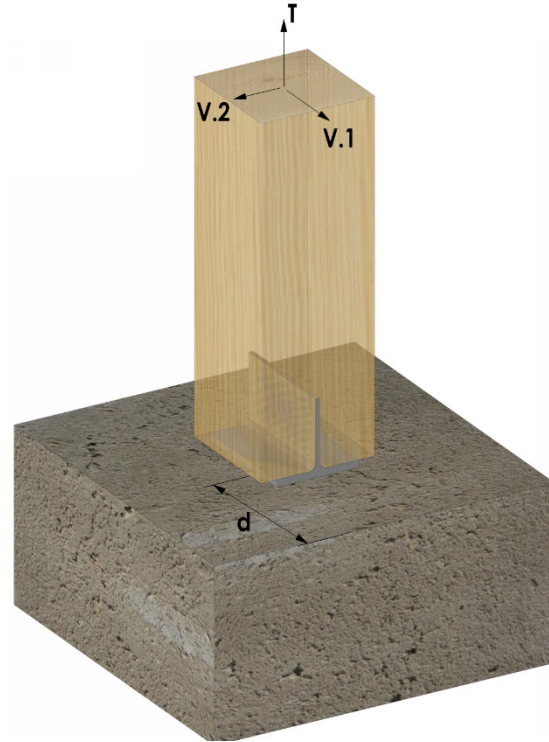
<sup>1</sup> Capacities for species not shown may be linearly interpolated based on specific gravity.

<sup>2</sup> Capacities for the 6x8 and larger connector plates are identical to those shown. Use of the connectors with 8x material also achieves the same capacity.

<sup>3</sup> Depth of supporting member, d<sub>2</sub> must be at least 2” deeper than the supported member, d<sub>1</sub>.



## T-REX connector to concrete



Connection orientation and loading directions



**Connection capacity (lb) for the following conditions**

- (2) 1/2" diameter 6061 Aluminum pins in post
- (4) 19/64" diameter, 5" long GRK Calburn screws into concrete
- Normal load duration ( $C_D = 1.0$ )
- 4,000 psi concrete strength

**Service-level capacity (lb) for various loadings**

<b>Loading</b>	<b>Eastern White Pine</b>	<b>Douglas Fir</b>	<b>Red Oak</b>
<b>Uplift (T)</b>	2,400	2,800	3,200
<b>Shear (V.1)</b>	1,400	1,700	2,100
<b>Shear (V.2)</b>	600	820	750

**Notes:**

The above capacities do not consider the resistance of the concrete foundation to breakout, side-face blowout, or pryout. Determination of the resistance for these limit states is the responsibility of a qualified design professional.

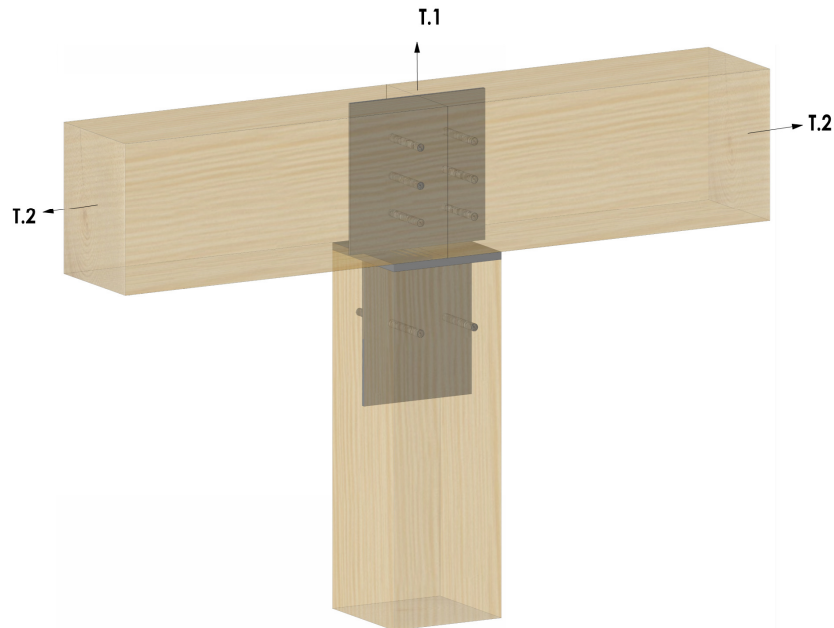
Post bases should not be used to resist permanent / long-term loading.

Post bases should be installed directly to the concrete. If the post base sits atop a 2x (1 1/2" net thickness) sill plate rather than directly on the concrete, use the V.2 shear capacity for each direction.

The capacities listed apply to 6x and 8x connections.



## T-REX 3-Way connector



**Connection Orientation and Loading Directions**

### Connection capacity (lb) for the following conditions

- Minimum 6x10 beams and 6x8 post
- 1/2" diameter, 8" long, 6061 Aluminum pins (3 in each beam & 2 in the post, 8 total)
- 5/16" diameter, 3 1/2" long GRK RSS screws into post end-grain (for assembly only)
- Normal load duration ( $C_D = 1.0$ )

### Service-level Connection Capacity (lb)

Loading	Eastern White Pine	Douglas Fir	Red Oak
<b>Uplift on post (T.1)</b>	2,400	2,800	3,200
<b>Tension beam to beam (T.2)</b>	3,600	4,200	4,800