

RTUD Ratcheting Take-Up Device



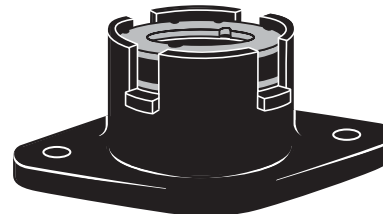
The new RTUD ratcheting take-up device is a cost effective shrinkage-compensation solution for continuous rod systems. The unique design of the RTUD provides reliable performance in a device that allows for unlimited shrinkage. Once the RTUD is installed, a series of internal wedges allow the device to ratchet down the rod as the wood structure shrinks, but engage the rod in the reverse direction when under tensile loading. A firm grip is maintained on the rod at all times by the take-up device, allowing the rod system to perform as designed from the time of installation.

FEATURES:

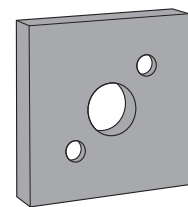
- Maintains rod-system tightness, allowing it to perform as designed
- Pass-through design provides unlimited shrinkage compensation
- Available for 1/2" diameter threaded rod
- Fastens easily to the wood plate with the BPRTUD3-4 bearing plate and (2) 8dx1 1/2" nails (*minimum*) or (2) #9x1 1/2" Strong-Drive® SD structural-connector screws

INSTALLATIONS:

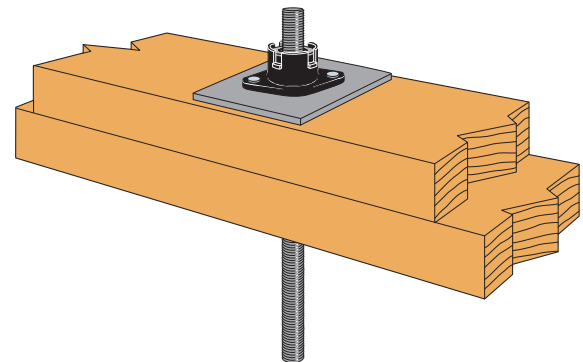
- See the General Notes in our 2011 *Wood Construction Connectors* catalog (C-2011).
- The RTUD4 must be installed with the BPRTUD3-4 bearing plate (*sold separately*) to function properly.



RTUD4
(Patent Pending)



BPRTUD3-4
(Sold Separately)



Typical RTUD Installation

Model No.	Threaded Rod Dia. (in.)	Dimensions (in.)			Allowable Load (lbs.)	Seating Increment, ΔR (in.)	Deflection at Allowable Load, ΔA (in.)
		Length	Width	Height			
RTUD4	1/2	2 3/8	1 1/4	1 5/16	6665	0.048	0.011

Model No.	Length (in.)	Width (in.)	Thickness (ga.)	Allowable Load (lbs.) (160)			1/2" Dia. ATR ¹ (lbs.)
				DF	SP	SPF	
BPRTUD3-4	3	3	3	6100	5515	4150	4,270

1. ATR: all-thread rod tensile capacity shown is for ASTM F1554 Grade 36, A36 or A307 standard steel, $F_u = 58\text{ksi}$.
2. Allowable loads are for RTUD only. The attached components must be designed to resist design loads in accordance with the applicable code.
3. Thread specification for threaded rod must be UNC Class 2A, in accordance with ANSI/ASME B1.1.
4. No further increase in allowable load permitted.



Why use a take-up device?

In order for rod systems to perform properly, it is important that they effectively compensate for shrinkage within the wood structure. Without take-up devices, gaps can occur between wood members and key elements of the rod system such as nuts and bearing plates (see photo). This can result in excessive movement during a seismic or wind event.

Want to estimate the shrinkage in a structure?

Visit www.strongtie.com/shrinkcalc for our free shrinkage calculator web app.

This flier is effective until December 31, 2013, and reflects information available as of December 1, 2011. This information is updated periodically and should not be relied upon after December 31, 2013; contact Simpson Strong-Tie for current information and limited warranty or see www.strongtie.com.