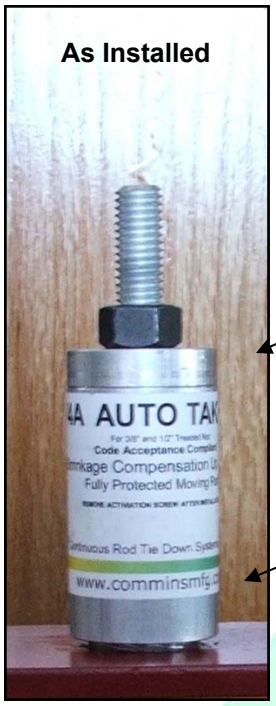
AutoTight Tie-Down Systems
Commins Manufacturing 360-378-9484

AutoTight® Aluminum AT

Automatic Shrinkage Compensator

for continuous threaded rod tie down systems.

- **Up to 50% lower system cost .**
- **Tested at 3º out-of-plumb (6” in 10’) for maximum reliability.**

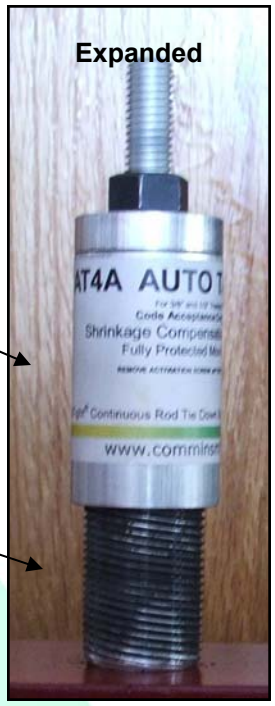


Shown is the AT 4A-1.5
Automatic Shrinkage Compensator

- Fully protected moving parts.
  (no snags from debris)

- Expansion to 2-1/2”
  Expands as the wood shrinks
  Starts Small–Grows Tall

- The tightest take-up available.
  (no Δ_r deflection)



Aluminum AT Sizes

AT4A	1.5" Expansion	3/8" to 1/2" Rod
AT4A-2.5	2.5" Expansion	
AT6A	1.5" Expansion	1/2" to 3/4" Rod
AT6A-2.5	2.5" Expansion	

See reverse for complete systems

Systems Rated for: Strength, Elongation and Shrinkage

The code requires you to design tie-down systems for strength, limit stretch and accommodate shrinkage. AutoTight systems do all three. All deflection components are evaluated and listed as a single number. These items include rod, bearing plates, and shrinkage compensators.

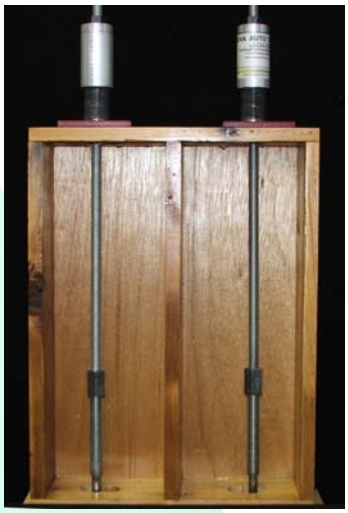
A new item called Δ_r (Delta r) is now code. This is lost motion introduced as a shrinkage compensator changes direction from advancing (shrinkage) to loading. I call this "backlash" but the official name is "average travel and seating increment". (See section 3.4.6 of AC 316). Introduced in November of 2009, ICC ES AC316 requires that this number on all code reports. If this isn't listed the report is obsolete. AutoTight AT shrinkage compensators have the lowest Δ_r in the industry. (Aluminum AT Δ_r is 0.000" [not a misprint]. Steel AT Δ_r is 0.002".)

Competitive shrinkage compensators show a Δ_r ranging from 0.070" to 0.180".

To get the whole story ask for test reports based on AC316 from November 2009 or later.

AutoTight AT
Starts Small

Grows Tall
Up to 2-1/2"



Consult factory for additional systems
Shown are model walls only, not actual shear walls

Complete Tie-Down Systems

System Rated for: Strength, Elongation and Shrinkage

System	Rod[1]	Bearing Plate	Shrinkage Compensator	Capacity Limit[2]	System Elongation[4]	Expansion Capacity[3]
1	R3 3/8" Dia	S5 1/4"X3"X3"	AT 4A -1.5	2,790	0.139	1-1/2"
			AT 4A -2.5			2-1/2"
2	R4 1/2" Dia		AT 4A -1.5	4,420	0.153	1-1/2"
			AT 4A -2.5			2-1/2"
3	R5 5/8" Dia	S8 3/8" X 3-1/4" X 4"	AT 6A -1.5	6,379	0.152	1-1/2"
			AT 6A -2.5			2-1/2"
4	R6 3/4" Dia		AT 6A -1.5	8,281	0.144	1-1/2"
			AT 6A -2.5			2-1/2"

Notes Code Values pending at time of publication.

1. Load Rated A307 Rod
2. Capacity limited by Rod strength.
3. Recommended Shrinkage Compensation 1/2" per floor.
4. System Elongation at Capacity Limit. Elongation includes 10' rod, bearing plate on dfl. and specified Shrinkage Compensator. All systems include 1-1/2" or 2-1/2" of shrinkage compensation.