



AutoTight® CATALOG 2020-21

AUTOTIGHT® SYSTEM HARDWARE

BY COMMINS MANUFACTURING INC.

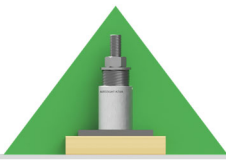


SELF-ADJUSTING MULTI-STORY TIE-DOWN SYSTEMS
FOR HIGH WIND AND SEISMIC PERFORMANCE



COMMINSMFG.COM
(360) 378-9484





SYSTEM HARDWARE

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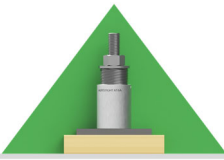


Hardware for AutoTight®

Multi - Story Tie-Downs

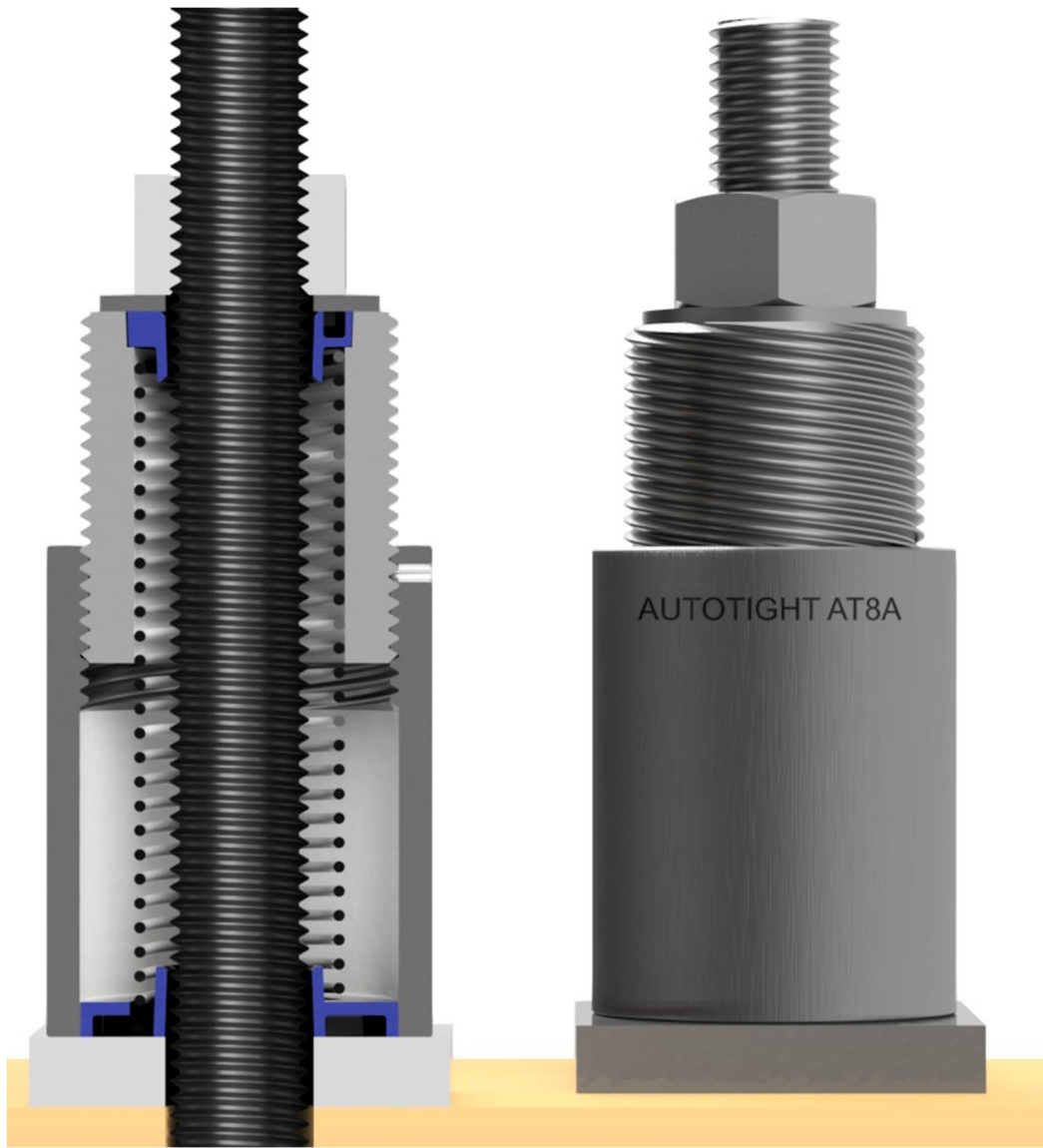


- Accommodating up to 5" of Building shrinkage
- Threaded hardware from 1/2" – 2" Ø



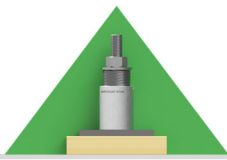
AUTOMATIC TAKE-UP DEVICE

The AutoTight® Take-Up Device (TUD) is the most robust shrinkage compensator available. The new aluminum series TUDs provide the tightest connection and highest reliability.



With a patented thread design and concealed torsion spring gives the AT maximum jobsite reliability.

All Aluminum TUDs have a minimum expansion capacity of 1-1/2"



THREADED ROD-ALLOWABLE STRENGTH DESIGN

THE MUSCLE

Rod Tie-down systems provided by Commins Manufacturing Inc. use continuous threaded rod. Rod is specified by diameter, grade and length. Threaded rod is the main tension component in a standard ATS System.

ROD DIAMETER

Rods are specified in 1/8-inch increments.

Example 1: R8-A307=1" Diameter Rod

Example 2: R4-A307= 1/2" Diameter Rod

ROD STRENGTH

ASD rod strength is calculated Per AISC 360 14th Edition as follows:

$$P \text{ (ASD)} = 0.75 \times F_u \times A_g/2$$

This applies to both *all-thread* & *full diameter rod*

ROD GRADE

Most threaded rod is classified into 3 grades:

Grade A307- Also known as: A36 & F1554G36

Grade 55- Also known as F1554G55

Grade B7- Also known as F1554G105

Grades B7, C1045 and Gr. 55 have a stamp at one end of the rod for identification.

A36/A307 rod is not stamped.

ELONGATION FORMULA

Rod elongation is calculated per AC391 3.2.1.1 as follows:

- All-Thread $\Delta \text{ Rod} = PL/A_nE$
- Full Diameter $\Delta \text{ Rod} = PL/A_gE$

P=Load

L=length,

$$A_n = 0.7854 (D - 0.9743/n)^2$$

$$A_g = \pi r^2$$

D = nominal rod dia

n = threads per inch

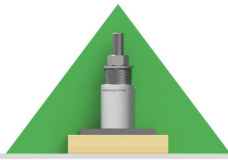
E = modulus = 29,000,000



1/2" 3/4" 5/8" 7/8" 1" 1-1/8" 1-1/4" 1-1/2" 1-3/4" 2"

CODE REFERENCES

THREAD DESIGN	ROD STRENGTH	ROD ELONGATION
Unified National Coarse (UNC). Rod is available from 3/8" to 2" diameter.	Tensile Values per IBC 2018 as specified in AISC 360 14th edition.	Rod elongation is calculated per AC391, 3.2.1.1 Using Net Area (A _n)



THREADED ROD-ALLOWABLE STRENGTH DESIGN

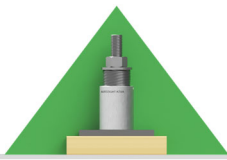
ELONGATION FORMULA

To calculate rod elongation, the tensile area of the rod must be determined. The tensile area for all-thread and smooth shanked rod is A_n (Net Area). The tensile area for full diameter rod is A_g (Gross Area). Full Diameter is not readily available & is available as a special order only.

Standard Strength	Diameter & Thread	Rod ID	F1554G36 A307		Rod Area	
		Model	ASD Allowable Tension (lb)	Elongation (in. per 10' @ full load. A_n)	Net Area A_n (for Elongation)	Gross Area A_g (for Strength)
		1/2"-13 UNC	R4-A307	4,418	0.129	0.142
5/8"-11 UNC	R5-A307	6,903	0.126	0.226	0.307	
3/4"-10 UNC	R6-A307	9,940	0.123	0.334	0.442	
7/8"-9 UNC	R7-A307	13,530	0.121	0.462	0.601	
1"-8 UNC	R8-A307	17,671	0.121	0.606	0.785	
1-1/8"-7 UNC	R9-A307	22,365	0.121	0.763	0.994	
1-1/4"-7 UNC	R10-A307	27,612	0.118	0.969	1.23	
1-3/8"-6 UNC	R11-A307	33,410	0.120	1.155	1.48	
1-1/2"-6 UNC	R12-A307	39,761	0.117	1.405	1.77	
1-3/4"-5 UNC	R14-A307	54,119	0.118	1.900	2.41	
2"-4.5 UNC	R16-A307	70,686	0.117	2.500	3.14	

Standard Strength	Diameter & Thread	Rod ID	F1554B55		Rod Area	
		Model	ASD Allowable Tension (lb)	Elongation (in. per 10' @ full load. A_n)	Net Area A_n (for Elongation)	Gross Area A_g (for Strength)
		1/2"-13 UNC	R4-G55	5,522	0.161	0.142
5/8"-11 UNC	R5-G55	8,629	0.158	0.226	0.307	
3/4"-10 UNC	R6-G55	12,425	0.154	0.334	0.442	
7/8"-9 UNC	R7-G55	16,912	0.152	0.462	0.601	
1"-8 UNC	R8-G55	22,089	0.151	0.606	0.785	
1-1/8"-7 UNC	R9-G55	27,957	0.152	0.763	0.994	
1-1/4"-7 UNC	R10-G55	34,515	0.147	0.969	1.23	
1-3/8"-6 UNC	R11-G55	41,763	0.150	1.155	1.48	
1-1/2"-6 UNC	R12-G55	49,701	0.146	1.405	1.77	
1-3/4"-5 UNC	R14-G55	67,649	0.147	1.900	2.41	
2"-4.5 UNC	R16-G55	88,357	0.146	2.500	3.14	

High Strength	Diameter & Thread	Rod ID	F1554G105 or A193-B7		Rod Area	
		Model	ASD Allowable Tension (lb)	Elongation (in. per 10' @ full load. A_n)	Net Area A_n (for Elongation)	Gross Area A_g (for Strength)
		1/2"-13 UNC	R4-B7	9,204	0.268	0.142
5/8"-11 UNC	R5-B7	14,381	0.263	0.226	0.307	
3/4"-10 UNC	R6-B7	20,709	0.256	0.334	0.442	
7/8"-9 UNC	R7-B7	28,187	0.253	0.462	0.601	
1"-8 UNC	R8-B7	36,816	0.251	0.606	0.785	
1-1/8"-7 UNC	R9-B7	46,595	0.253	0.763	0.994	
1-1/4"-7 UNC	R10-B7	57,524	0.246	0.969	1.23	
1-3/8"-6 UNC	R11-B7	69,604	0.249	1.155	1.48	
1-1/2"-6 UNC	R12-B7	82,835	0.244	1.405	1.77	
1-3/4"-5 UNC	R14-B7	112,748	0.246	1.900	2.41	
2"-4.5 UNC	R16-B7	147,262	0.244	2.500	3.14	



BEARING PLATES-ALLOWABLE STRENGTH DESIGN

LOAD DISTRIBUTION

Bearing plates distribute uplift loads into the structure at reaction points. AutoTight plates exceed the flexural requirements of AISC 360 (14th ed.) and wood bearing requirements of the 2015 NDS. (ICC ES AC391 Section 1.4.6, March 1, 2015)

MAXIMUM DEFORMATION

AutoTight bearing plates provide a maximum deformation of 0.040" at their rated capacity.

DESIGN EXAMPLE

Plate Crushing:

Reaction Load: 11,000 pounds
Bottom Plate Wood Species: Douglas Fir
Rod Diameter: 1-1/8" Ø.

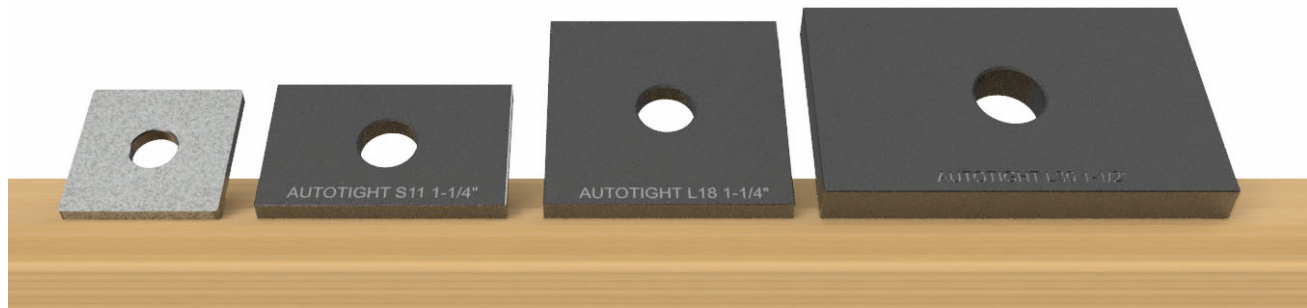
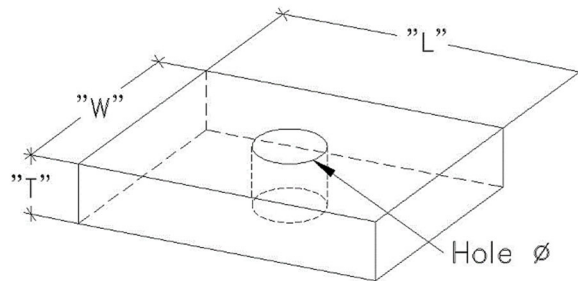
Selected Plate: S11-1-1/4"
Rated Capacity: 11,948 pounds.

$$\Delta = 0.040 * 11,000 / 11,948 = 0.037"$$

For system deformation add the 0.037" to the rod and shrinkage compensator deformation plus Δr . (per AC 391, section 3.2.1.2)

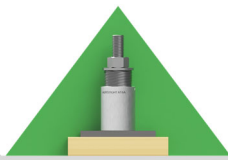
TUNING THE SYSTEM

Along with changing rod size, changing the bearing plate is another method that lets you adjust total system deflection (elongation) to achieve tighter specifications.



CODE REFERENCES

FLEXURAL REQUIREMENTS	PLATE DEFLECTION	PLATE CAPACITY
AISC 360 14th Edition	Per the 2015 NDS, plate design deflection is 0.040 inch at the compressive design value. ICC ES AC 391 section 3.2.1.2	Capacity = (Fc perp) * Bearing Area at a deflection of 0.040". per AC 391 3.2.1.2



BEARING PLATES-ALLOWABLE STRENGTH DESIGN

Bearing Plates						Allowable ASD Loads			
Wall Width	Model No.	Thickness	Width	Length	Max. Rod Ø	ASD Allowable Load (@ 0.040" Cross Grain Crushing)			
						DFL @ 625	HF @ 405	SYP @ 565	SPF @ 425
For Walls 4X and Up	For 1/2" through 3/4" Rod								
	S5-3/4"	1/4"	3"	3"	3/4"	5,964	3,864	5,391	4,055
	For 1/2" through 1" Rod								
	S7-1"	3/8"	3-1/2"	3-1/2"	1"	7,863	5,095	7,108	5,347
	For 3/4" through 1-1/4" Rod								
	S7-1-1/4"	3/8"	3-1/2"	3-1/2"	1-1/4"	7,540	4,886	6,816	5,127
	S11-1-1/4"	1/2"	3-1/2"	5-1/2"		11,948	7,742	10,801	8,125
	For 1-1/4" through 1-1/2" Rod								
	S11-1-1/2"	1/2"	3-1/2"	5-1/2"	1-1/2"	11,571	7,498	10,461	7,869
	S14-1-1/2"	3/4"	3-1/4"	7"		13,020	8,437	11,770	8,854
S16-1-1/2"	1"	3-1/4"	8"	15,052		9,753	13,607	10,235	
S19-1-1/2"	1"	3-1/2"	9"	18,489		11,981	16,714	12,573	
S25-1-1/2"	1-1/4"	3-1/2"	12"	25,052		16,233	22,647	17,035	
For Walls 6X and Up	For 1-1/4" through 1-1/2" Rod								
	L18-1-1/2"	1/2"	5-1/2"	5-1/2"	1-1/2"	18,915	12,257	17,099	12,862
	L20-1-1/2"	5/8"	5-1/2"	6"		19,427	12,588	17,562	13,210
	L25-1-1/2"	3/4"	5-1/2"	7-1/2"		24,583	15,930	22,223	16,716
	L30-1-1/2"	1"	5-1/2"	9"		29,739	19,271	26,884	20,223
	L33-1-1/2"	1"	5-1/2"	10"		33,177	21,498	29,992	22,560
	L37-1-1/2"	1-1/4"	5-1/2"	11"		36,614	23,726	33,099	24,898
	L40-1-1/2"	1-1/2"	5-1/2"	12"	40,052	25,953	36,207	27,235	
	For 1-1/2" through 2" Rod								
	L18-2"	1/2"	5-1/2"	5-1/2"	2"	17,965	11,641	16,240	12,216
L20-2"	5/8"	5-1/2"	6"	18,537		12,012	16,757	12,605	
L25-2"	3/4"	5-1/2"	7-1/2"	23,693		15,353	21,419	16,111	
L30-2"	1"	5-1/2"	9"	28,849		18,694	26,080	19,618	
L33-2"	1"	5-1/2"	10"	32,287		20,922	29,187	21,955	
L37-2"	1-1/4"	5-1/2"	11"	35,724		23,149	32,295	24,293	
L40-2"	1-1/2"	5-1/2"	12"	39,162	25,377	35,402	26,630		
Hot Dipped Galv.	Plate Washers								
	S5-3/4"	1/4"	3"	3"	3/4"	5,964	3,864	5,391	4,055
	S7-1"	3/8"	3-1/2"	3-1/2"	1"	7,863	5,095	7,108	5,347
	S7-1-1/4"	3/8"	3-1/2"	3-1/2"	1-1/4"	7,540	4,886	6,816	5,127
	PW-12	1/2"	4"	4"	1-1/2"	9,627	6,238	8,703	6,546
	PW-14	1/2"	4"	4"	1-3/4"	9,174	5,945	8,293	6,238
PW-16	1/2"	4"	4"	2"	8,654	5,608	7,823	5,884	

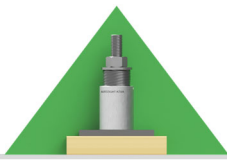
PRODUCT IDENTIFICATION

S__ = Standard plate fits 2x4 walls
L__ = Large plate fits 2x6 walls

Plate ID includes maximum rod diameter. All holes are oversize to ensure they fit around the threaded rod.

The number in the plate name classifies approximate allowable load on DFL.

Example: L40-2"
Allowable Load: 39 Kips
Hole Size: 2"
Wall Size: 2x6



TAKE-UP DEVICES-ALLOWABLE STRENGTH DESIGN

Take-Up Devices require a thorough evaluation of functionality, strength, expansion and deflection. **Two code defined deflections** (Δ_A) and (Δ_R) are required and will contribute to the system deflection.

FUNCTIONALITY

AutoTight TUDs are designed to eliminate slack between the threaded rod and the bearing plate at reaction points. As a building shrinks the AT torsion spring rotates the stud of the device, automatically tightening the connection. ATs are designed to fit a minimum of two rod sizes. Select ATs based on rod size, estimated shrinkage & load capacity.

STRENGTH

ATs are tested and rated per ICC ES-AC316. In most cases, TUD strength exceeds reaction load requirements. ATs are rated up to 83.2 Kips.

EXPANSION

TUDs are expansion rated from 1.10" – 2.50". TUDs may be stacked to double the expansion to 5.0".

DESIGN EXAMPLE

TUD Load-Deflection Calculation

Reaction Load: 11,000 pounds
Rod Diameter: 1"
Location: 3rd Floor
Shrinkage Per floor: 1/2"
Cumulative Shrinkage: 1-1/2"

TUD Specifications:

AT8A-1.5 Selected based on the rod size
Rated Capacity: 20,750 pounds
Deflections: $\Delta_A = 0.004"$, $\Delta_R = 0.000"$

Load/Deflection
 $\Delta_T = \Delta_R + \Delta_A(P_D/P_A)$

$(\Delta_A) = 0.004 * 11,000/20,750 = 0.002"$
 (Δ_R) (From Table = 0.000"

Total movement at given load = 0.002"

Add total to the system elongation per AC 316 & AC 391 section 3.1.1

Δ TAKE-UP DEVICE DEFLECTION Δ

Per AC 316 TUDs are rated for two separate types of elongation. These two values are combined into a single number to form total deflection.

$$\Delta_T = \Delta_R + \Delta_A(P_D/P_A)$$

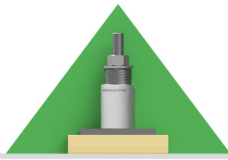
Deflection at allowable load Δ_A is factored based on full capacity.

$$\Delta_A \text{ (demand)} = \Delta_A(P_D/P_A)$$

Δ_R is an average seating increment (backlash) of the threaded Take-Up Device.

AutoTight Take-Up Devices average less than 0.0005" with extreme movements of 0.001".

The AT Shrinkage compensator is reliable and less vulnerable to failure from jobsite debris.



TAKE-UP DEVICES-ALLOWABLE STRENGTH DESIGN

Model Number	Rod Diameter (Max.)	Matl.	Dimensions (Inches)		Rated Take-Up (Inches)	Allowable Load Pounds	Δ_R (inches) Seating Increment	Δ_A (inches) Deflection at Allowable Load
			O.D.	H				
AT4A-1.5	1/2"	Aluminum	1-1/2	3.00	1.50	6,450	0.000*	0.011
AT4A-2.5				4.06	2.50			
AT6A-1.5	3/4"		2-1/8	3.19	1.50	10,550	0.000*	0.011
AT6A-2.5				4.19	2.50			
AT8A-1.5	1"		2-3/4	3.50	1.75	20,750	0.000*	0.004
AT10A-1.5	1-1/4"		3-1/4	3.50	1.62	28,050	0.000*	0.021
AT12A-1.5	1-1/2"		3-1/4	3.50	1.62	28,050	0.000*	0.021
AT16A-2.0	2"		4	3.50	2.07	39,450	0.001*	0.011
AT 75	3/4"	Steel	2	2.80	1.10	16,450	0.002	0.024
AT 75-2.5				4.00	2.50	15,200		0.021
AT 100	1"		2-1/4	2.90	1.10	25,300	0.032	
AT 125	1-1/4"		2-3/4	2.86	1.10	34,500	0.016	
AT 200-2.0	2"		4	3.88	2.18	83,200	0.000*	0.009

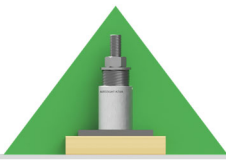
New
New
New
New

* Δ_R is Less than 0.0005"
-See ICC-ESR 1344 for latest capacities



AT A GLANCE		
CAPACITY	Δ_A	Δ_R
Take-Up Devices are designed to accommodate high differential loads.	Multi-Lead thread design provides unmatched reliability in harsh jobsite conditions	AutoTight® Provides TUDs with the lowest operating looseness

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TAKE-UP DEVICES

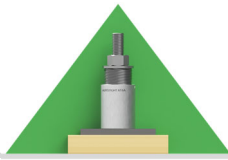
TAKE-UP DEVICE INSTALLATION

Take-Up Device installation is simple. The following illustrations show the proper sequence for correctly installing the Automatic Take-Up Device



 STEP 1 THREADED ROD	 STEP 2 BEARING PLATE	 STEP 3 TAKE-UP DEVICE	 STEP 4 NUT & WASHER
<p>Threaded rods must be installed plumb.</p> <p>Rods may not exceed an out-of-plumb condition of 2" per 10'-0".</p>	<p>Bearing plates are sized to fit 2x4 or 2x6 walls</p> <p>All bearing plates have oversized holes to ensure alignment.</p>	<p>Slide the TUD over the rod and onto the bearing plate</p> <p>Rotate the TUD so the activation pin is accessible</p>	<p>Slide the washer down the threaded rod until it sits flat on top the TUD</p> <p>Thread the Hex nut to the washer and finger tighten</p>
 STEP 5	<p><u>ACTIVATION INSTRUCTIONS</u></p>		

PULL ACTIVATION PINS RIGHT BEFORE ENCLOSING WALL



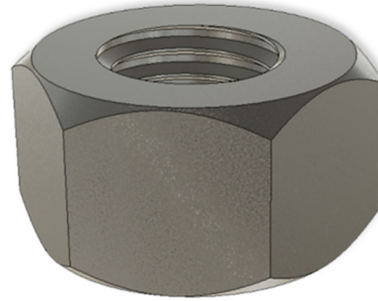
HEX NUTS-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

Nuts are Unified National Coarse thread (UNC or NC).

Standard Nuts are SAE Grade 2 or ASTM 563-Grade A.

High Strength Nuts are SAE grade 5, ASTM 563-Grade C or A194-2H to match rod requirements.

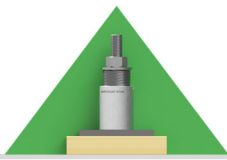


Standard Hex Nuts		High Strength Hex Nuts	
Model Number	Diameter-Thread	Model Number	Diameter-Thread
N-4	1/2"-13 NC	NHS-4	1/2"-13 NC
N-5	5/8"-11 NC	NHS-5	5/8"-11 NC
N-6	3/4"-10 NC	NHS-6	3/4"-10 NC
N-7	7/8"-9 NC	NHS-7	7/8"-9 NC
N-8	1"-8 NC	NHS-8	1"-8 NC
N-9	1-1/8"-7 NC	NHS-9	1-1/8"-7 NC
N-10	1-1/4"-7 NC	NHS-10	1-1/4"-7 NC
N-12	1-1/2"-6 NC	NHS-12	1-1/2"-6 NC
N-14	1-3/4"-5 NC	NHS-14	1-3/4"-5 NC
N-16	2"-4.5 NC	NHS-16	2"-4.5 NC

CODE REFERENCES

S.A.E. HEX NUTS	APPLICATION
The Society of Automotive Engineers governs acceptance criteria for standard hex nut hardware.	Hex nuts secure the TUDs and help distribute axial loading into the wood framing of the building.

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SAE WASHER-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

SAE washers are used for steel TUDs up to AT125. USS (Common) Washers are used for all other TUDs.

These washers distribute load into the Tud and help keep jobsite debris out of the Tud mechanism.

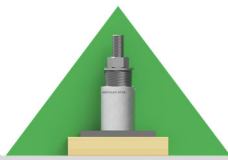


Washers for Steel Tuds

Steel Tud	Rod Ø	Model Number	Nominal Diameter	Outside Diameter
	1/2	W-4	1/2"	1-1/16"
AT 75	5/8	W-5	5/8"	1-5/16"
	3/4	W-6	3/4"	1-1/2"
AT 100	7/8	W-7	7/8"	1-3/4"
	1	W-8	1"	2"
AT 125	1 1/8	W-9	1-1/8"	2-1/4"
	1 1/4	W-10	1-1/4"	2-1/2"
	1 1/2	W-12	1-1/2"	3-1/2"
AT 200	1 3/4	W-14	1-3/4"	3-3/8"
	2	W-16	2"	3-3/4"

CODE REFERENCES

S.A.E. WASHER	APPLICATION
SAE washers have a larger outside diameter and thinner gauge or thickness than USS Flat Washers	Washers are placed between the TUD and the Hex Nut to distribute axial loading through the TUD into the Building

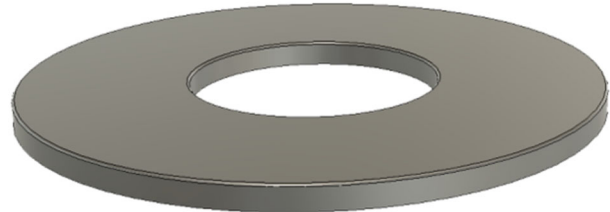


USS WASHERS-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

USS washers provide a larger bearing surface to distribute load into the TUD and help keep jobsite debris out of the TUD mechanism.

Washer sizes are not always the nominal size of the Rod or the TUD.

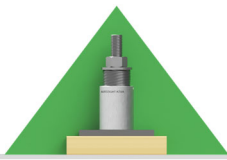


Washers for Aluminum Tuds				
Aluminum Tud	Rod Ø	Model Number	ID Inside Ø	OD Outside Ø
AT4A	1/2	W-4-USS	0.562	1.375
AT6A	5/8	W-5-USS	0.688	1.750
	3/4	W-6-USS	0.812	2.000
AT8A	7/8	W-8-USS	1.062	2.500
	1	W-8-USS	1.062	2.500
AT10A	1 1/8	W-10-USS	1.375	3.000
	1 1/4	W-10-USS	1.375	3.000
AT12A	1 1/2	W-11-USS	1.500	3.250
AT16	1 3/4	W-13-USS	1.750	3.750
	2	W-15-USS	2.000	4.250

CODE REFERENCES

U.S.S. WASHER	APPLICATION
USS washers have a larger outside diameter, inside diameters & thickness to accommodate a broader range of applications	Washers are placed between the TUD and the Hex Nut to distribute axial loading through the TUD into the Building.

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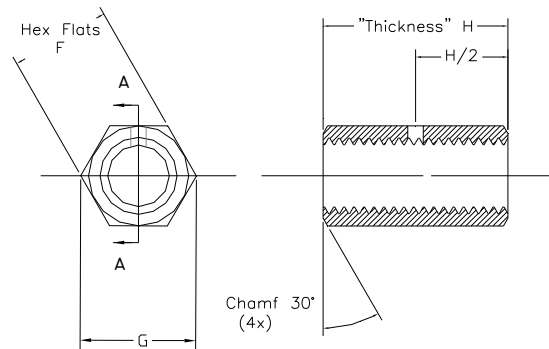
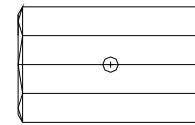
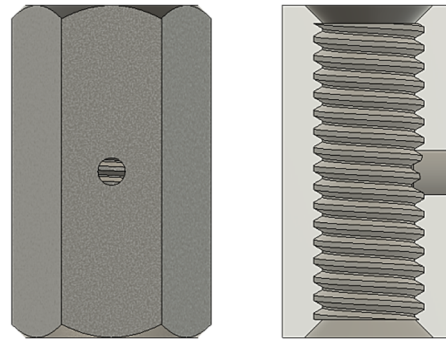
COUPLER NUTS-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

Standard Strength Couplers are ASTM A563 Grade A (SAE Grade 2) and are used with A36, A307, F1554 Gr36 & F1554 Gr55 rod.

Standard Strength couplers do not have notches

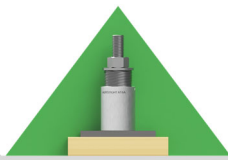
Standard Strength	
Straight Couplers	
Model Number	Rod Ø Both Ends
CN-4	1/2"
CN-5	5/8"
CN-6	3/4"
CN-7	7/8"
CN-8	1"
CN-9	1-1/8"
CN-10	1-1/4"
CN-12	1-1/2"
CN-14	1-3/4"
CN-16	2"



Thread pitch is Unified National Coarse (NC or UNC). Coupler nuts are available to fit rod from 1/2"-13 through 2"-4.5 NC. Sighted couplers have holes drilled to aid installation.

CODE REFERENCES

HEX COUPLER NUTS	APPLICATION
All coupler nuts provided by Commins Manufacturing Inc are in accordance with International Fasteners Institute IFI-128	Straight Coupler nuts connect two of the same size threaded rod. Sight holes provided for proper thread engagement



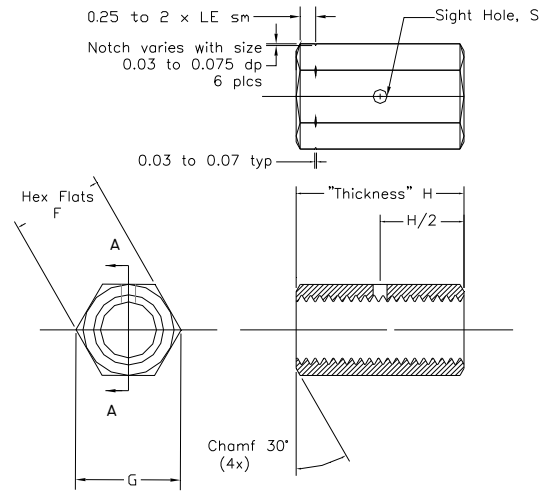
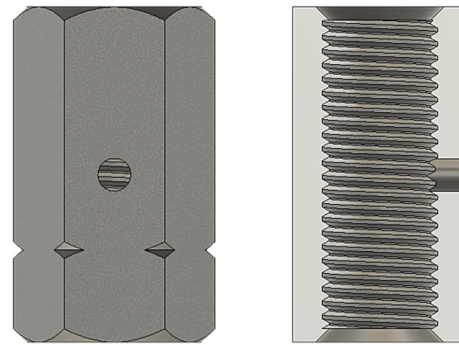
COUPLER NUTS-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

Grade: High Strength Couplers are Grade 5 and are used with B7, F1554 & Gr105 rod.

High Strength Couplers have notches for identification

High Strength	
Straight Couplers	
Model Number	Rod Ø Both Ends
CNHS-5	5/8"
CNHS-6	3/4"
CNHS-7	7/8"
CNHS-8	1"
CNHS-9	1-1/8"
CNHS-10	1-1/4"
CNHS-12	1-1/2"
CNHS-14	1-3/4"
CNHS-16	2"

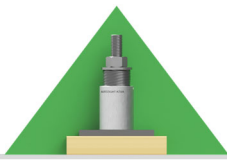


Thread pitch is Unified National Coarse (NC or UNC). Coupler nuts are available to fit rod from 1/2"-13 through 2"-4.5 NC. Sighted couplers have holes drilled to aid installation.

CODE REFERENCES

HEX COUPLER NUTS	APPLICATION
All coupler nuts provided by Commins Manufacturing, Inc are in accordance with International Fasteners Institute IFI-128	Washers are place between the TUD and the Hex Nut to distribute axial loading through the TUD into the Building.

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COUPLER NUT REDUCERS-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

Coupler Nut Reducer Identification:

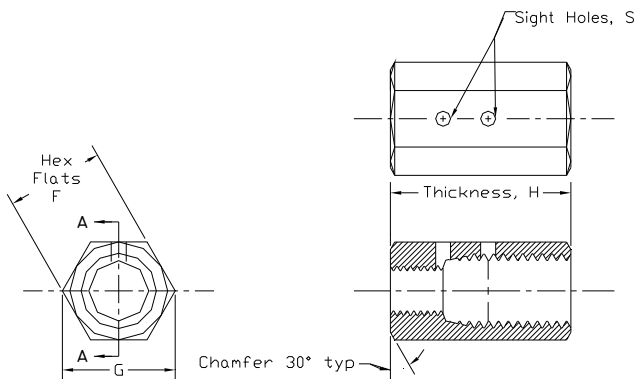
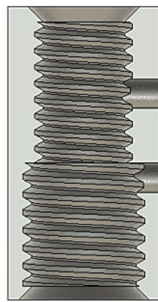
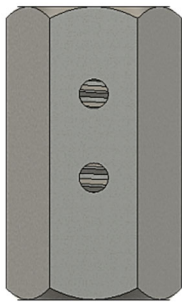
Example: CNR-610:

CNR = Coupler Nut Reducer

610 = 3/4" NC to 1-1/4" - 7 NC Thread.

Grade: Standard Coupler Nuts are ASTM A563 Grade A (SAE Grade 2) and are used with A36, A307, F1554 Gr36 & F1554 Gr55 rod.

Standard Strength Couplers do not have notches



Thread pitch is Unified National Coarse (NC or UNC). Sighted couplers have holes drilled to aid installation.

Coupler Nut Reducers		
Standard Strength Gr 2		
Model Number	Rod Ø	
	Small	Large
CNR-45	1/2"	1/2"
CNR-46		3/4"
CNR-47		7/8"
CNR-48		1"
CNR-56	5/8"	3/4"
CNR-57		7/8"
CNR-58		1"
CNR-59		1-1/8"
CNR-67	3/4"	7/8"
CNR-68		1"
CNR-69		1-1/8"
CNR-610		1-1/4"
CNR-78	7/8"	1"
CNR-79		1-1/8"
CNR-710		1-1/4"
CNR-89	1"	1-1/8"
CNR-810		1-1/4"
CNR-812		1-1/2"
CNR-910	1-1/8"	1-1/4"
CNR-912		1-1/2"
CNR-1012	1-1/4"	1-1/2"
CNR-1014		1-3/4"
CNR-1016		2"
CNR-1214	1-1/2"	1-3/4"
CNR-1216		2"
CNR-1416	1-3/4"	2"

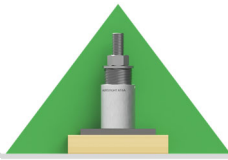
CODE REFERENCES

HEX COUPLER NUTS

All coupler nuts provided by Commins Manufacturing, Inc are in accordance with International Fasteners Institute IFI-128

APPLICATION

Coupler nut reducers allow the installer to connect different diameter threaded rods



COUPLER NUT REDUCERS-STANDARD HARDWARE

PRODUCT SPECIFICATIONS

Coupler Nut Reducer Identification:

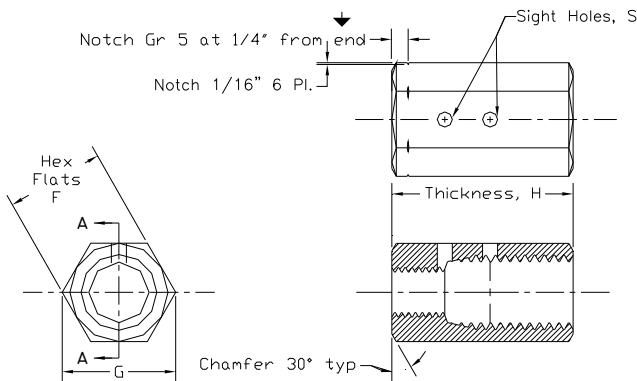
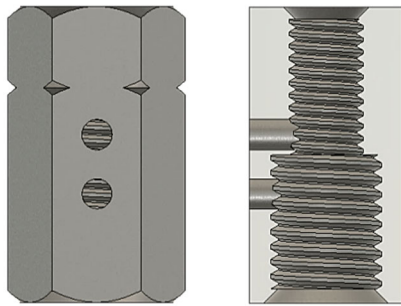
Example: CNR-610:

CNR = Coupler Nut Reducer

610 = 3/4" NC to 1-1/4" - 7 NC Thread.

Grade: High Strength Couplers are Grade 5 and are used with B7, F1554 & Gr105 rod.

High Strength Couplers have notches on the small ends.



Thread pitch is Unified National Coarse (NC or UNC). Sighted couplers have holes drilled to aid installation.

Coupler Nut Reducers		
High Strength Gr 5		
Model Number	Rod Ø	
	Small	Large
CNRHS-56	5/8"	3/4"
CNRHS-57		7/8"
CNRHS-58		1"
CNRHS-59		1-1/8"
CNRHS-67	3/4"	7/8"
CNRHS-68		1"
CNRHS-69		1-1/8"
CNRHS-610		1-1/4"
CNRHS-78	7/8"	1"
CNRHS-79		1-1/8"
CNRHS-710		1-1/4"
CNRHS-89	1"	1-1/8"
CNRHS-810		1-1/4"
CNRHS-812	1-1/8"	1-1/2"
CNRHS-910		1-1/4"
CNRHS-912	1-1/4"	1-1/2"
CNRHS-1012		1-1/2"
CNRHS-1014		1-3/4"
CNRHS-1016	1-1/2"	2"
CNRHS-1214		1-3/4"
CNRHS-1216	1-3/4"	2"
CNRHS-1416		2"

CODE REFERENCES

HEX COUPLER NUTS

All coupler nuts provided by Commins Manufacturing; Inc are in accordance with International Fasteners Institute IFI-128

APPLICATION

Coupler nut reducers allow the installer to connect different diameter threaded rods