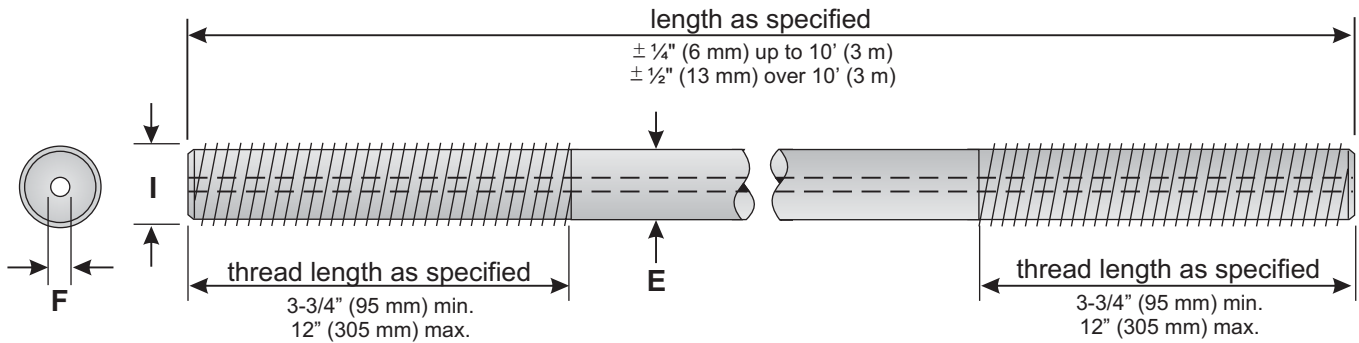


Stelpipe Bolts (Groutable Rockbolts)

Nominal 3/4" and 1" sizes



DIMENSIONS:

	3/4" (19 mm) Stelpipe	1" (25 mm) Stelpipe
E Body Diameter	0.68" (17.3 mm)	0.92" (23.4 mm)
F Grout Hole Diameter	0.34" (8.6 mm)	0.40" (10.2 mm)
I Thread Size (left and right)	3/4" - 10 UNC	1" - 8 UNC

ROLL THREADING:

Thread Size / Type	Pitch Diameter	Major Diameter
3/4" - 10 UNC	0.6773" to 0.6832" (17.20 mm to 17.35 mm)	0.7353" to 0.7482" (18.68 mm to 19.00 mm)
1" - 8 UNC	0.9100" to 0.9168" (23.11 mm to 23.29 mm)	0.9830" to 0.9980" (24.97 mm to 25.35 mm)

Standard UNC 2A Values

Left Hand (LH) & Right Hand (RH) threads available

TECHNICAL DATA:

	3/4" (19 mm) Stelpipe	1" (25 mm) Stelpipe
Steel Grade	1022M	
Minimum Tensile Strength	27,000 lbs (120 kN)	50,000 lbs (222 kN)
Recommended Hole Diameter	1-1/4" to 1-3/8" (31.8 to 35 mm)	1-3/4" (44.5 mm)
Recommended Expansion Shell	Frazer & Jones model: 3/4" x F1-1/4" with bail center hole	Frazer & Jones model: 1" x F9F with bail center hole
Ultimate Axial Strain	15% typical	

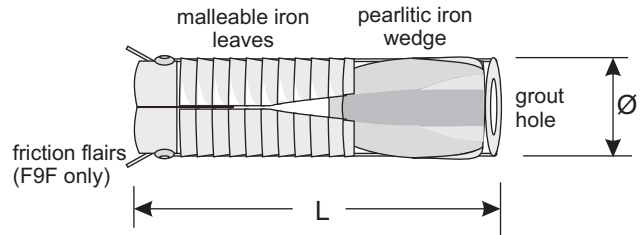
Specification for the tube bolt steel is selected by Stelpipe's metallurgical department

Installation Accessories

Stelpipe rock bolts

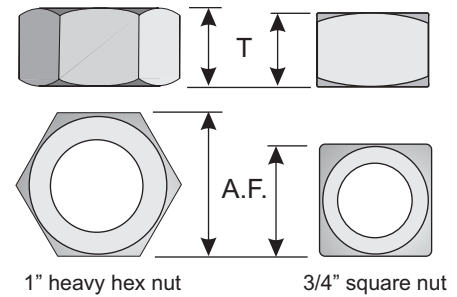
EXPANSION SHELLS

- for 3/4" thread (model F1-1/4B):
L = 3-1/4"
Ø = 1-1/4" (32 mm) hole size
- for 1" thread (model F9F):
L = 3-1/4"
Ø = 1-3/4"



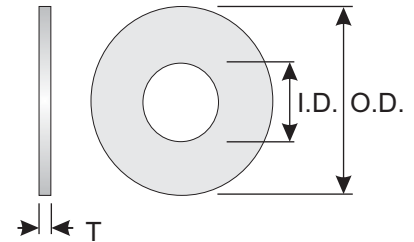
NUTS

- for 3/4" thread:
A.F. = 1-1/8" square
T = 0.8"
- for 1" thread:
A.F. = 1-5/8" hex
T = 63/64"



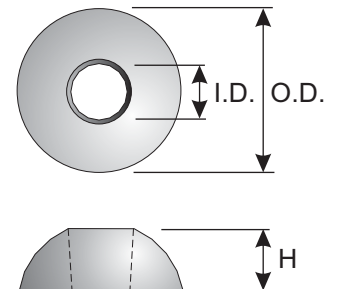
HARDENED ROUND WASHERS

- to ASTM F436 specifications
- for 3/4" thread:
I.D. = 13/16", O.D. = 1-15/32", T = 0.122" to 0.177"
- for 1" thread:
I.D. = 1-1/8", O.D. = 2", T = 0.136" to 0.177"



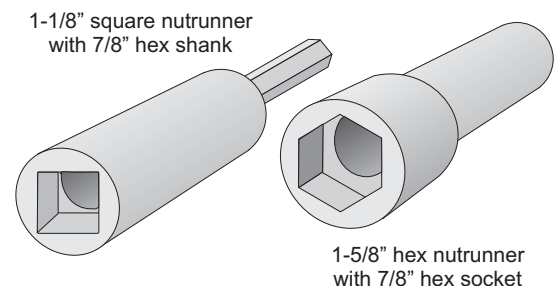
SPHERICAL SEAT (COMPENSATION) WASHERS

- ductile iron ASTM A536 Gr. 65-45-12
- for 3/4" thread:
I.D. = 13/16", O.D. = 2", H = 13/16" (model TSW-4)
I.D. = 15/16", O.D. = 2", H = 1/2" (model TSW)
- for 1" thread:
I.D. = 1-1/16", O.D. = 2", H = 1/2" (model TSW-1)



INSTALLATION TOOLS - for stopers/jacklegs

- 1-1/8" square nutrunner (for 3/4" bolts)
- 1-5/8" hex nutrunner (for 1" bolts)
- available with 7/8" hex socket
or 3-1/4" long 7/8" hex shank



Rope thread and T-thread drivers and nutrunners available on request