



SPECIFICATIONS: ASTM A449-14 TYPE 1

ROUND BAR: YIELD STRENGTH-1" AND LESS 92 KSI MIN
 YIELD STRENGTH->1" AND 1 1/2" INCL. 81 KSI MIN
 YIELD STRENGTH->1 1/2" AND 3" INCL. 58 KSI MIN
 TENSILE STRENGTH-1" AND LESS 120 KSI MIN
 TENSILE STRENGTH->1" AND 1 1/2" INCL. 105 KSI MIN
 TENSILE STRENGTH->1 1/2" AND 3" INCL. 90 KSI MIN
 ELONGATION-2"-14% MIN.
 REDUCTION AREA- 35% MIN.

GALVANIZE: ASTM-A153, CLASS C

NUTS: ASTM A563-GR DH, ANSI B18.2.2

THREADS: UNIFIED NATIONAL COARSE
 ANSI B1.1 CLASS 2A
 THREADS ARE ROLLED OR CUT.

WASHERS: ASTM F-436

				FULLY THREADED STUD CHISEL TIP GR A449		
				REVISION: A	P.O. COMPANY:	DRAWN BY: JEP
				DATE:	P.O. NUMBER:	CHECKED BY: AJS
				CONTRACTOR:		
				J. H. Botts LLC		
				DWG. NO.		
A	FOR RELEASE					
REV #	DESCRIPTION	DATE	BY			
	REVISIONS					
				253 E. BRUCE JOLIET, IL 60432		
				1 of 1		