

Fabricator _____ Shop No. _____
 Bridge No. _____ Station _____ Route _____
 Project _____ County _____
 Job No. _____ Contract ID _____
 Bolt Diameter _____ Bolt Length _____ Bolt Grade A325 A490

Job Site Rotational Capacity Test (RoCap Test) – Short Bolts						
Calibrated Wrench Method (Sec 712.7.5) and Turn-Of-Nut Method (Sec 712.7.6)						
TEST No.	Sec 1080.2.5.4.5 Turn Test Tension (P)	20% of Max. Turn Test Torque (T)	Maximum Calculated Turn Test Torque	Greater Than	Torque Gauge Reading at End of First Rotation	Visual Inspection of nut and bolt after Second Rotation (Acceptable/Not Acceptable)
1				>		
2				>		
3				>		
R1				>		
R2				>		
R3				>		
20% Torque Formula ($T = 0.20T$), T in ft-lbs.						
Torque Formula ($T=0.25P \times \text{Dia.}/12$), T in ft-lbs., P in lbs., Dia. in inches						
First Rotation [L<= 4D, 1/3 turn (120°)], [4D< L<8D, 1/2 turn (180°)], D = Bolt Dia., L = Bolt Length						
Second Rotation A325 [L<= 4D, 1/3 turn (120°)], [4D< L<8D, 1/2 turn (180°)]						
A490 [L<= 4D, 1/4 turn (90°)], [4D< L<8D, 1/3 turn (120°)]						

Load Indicating Bolt Method (712.7.7)				
Test No.	Sec 712.7.3 1.05xMinimum Bolt Tension (P)	Less Than	Bolt Tension Gauge Reading (P)	Inspection Torque Calculated Value
1		<		
2		<		
3		<		
R1		<		
R2		<		
R3		<		
(Inspection Torque formula = $0.95 \times 0.25 \times \text{Gauged Tension Reading} \times \text{Bolt Dia.} / 12$; Bolt Dia. in inches)				

Bolt Manufacturer _____
Bolt Length _____ **Quantity** _____
Bolt Heat No. _____
Bolt Lot No. _____
Nut Manufacturer _____
Nut Heat No. _____
Nut Lot No. _____
Washer _____
Washer Heat No. _____
Washer Lot No. _____
Location of Testing _____
Recommendation/Remarks: _____
Responsible Person _____
Date: _____

Distribution: eProjects

Note: Job site rotational-capacity testing = testing of 3 bolts, nuts and washers per R-C lot number. If all bolts fail, the lot is unacceptable. If one bolt fails, the contractor has the option to test 3 additional bolts. All 3 of these additional bolts must pass for lot to be acceptable.