Table 3-10 Prequalification Data for Bolted Flange Plate Connections

General	
Applicable systems	OMF, SMF
Hinge location distance s_h	$d_c/2 + L_p$
Critical Beam Parameters	
Maximum depth	OMF: up to W36 SMF: up to W30
Minimum span-to-depth ratio	OMF: 5 SMF: 8
Flange thickness	Up to 1-1/4" (OMF) Up to ¾" (SMF)
Permissible material specifications	A572 Grade 50, A992, A913 Gr50/S75
Critical Column Parameters	
Depth range	OMF: Not Limited SMF: W12, W14
Permissible material specifications	A572 Grade 50, A913 Grade 50 or 65, A992
Critical Beam Column Relations	
Panel zone strength	SMF: Section 3.6.3.1, Step 3.
Column/beam bending strength ratio	SMF: Section 2.9.1
Critical Connection Details	
Connection Plates:	
Permissible material specifications	A36, A572 Grade 42 or 50
Design method	Section 3.6.3.1, Step 4 and Step 5
Weld to flange	Fig. 3-17. Welding QC/QA Category AH.
Flange welding parameters	Section 3.3.2.4, 3.3.2.5, 3.3.2.6
Bolt Characteristics:	
Bolt diameter	Section 3.6.3.1, Steps 6 and 7; 1-1/8" maximum
Bolt grade	A325-X or A490-X
Bolt spacing	3x bolt diameter min.
Installation requirements	Pretensioned
Washers	F436 as required
Web Connection Parameters:	
Web Connection	Section 3.6.3.1, Step 12; Shear tab welded to column flange and bolted to beam. Bolt holes short-slotted horizontal. See Fig. 3-17.