

Table 3-8 Prequalification Data for BUEP Connections

General	
Applicable systems	OMF, SMF
Hinge location distance, s_h	$d_c/2 + t_{pl} + d_b/3$
Critical Beam Parameters	
Maximum depth	W30 and smaller for OMF W24 and smaller for SMF
Minimum span-to-depth ratio	OMF: 5 SMF: 7
Flange thickness	Up to $\frac{3}{4}$ "
Permissible material specifications	A572 Grade 50, A992, A913 Grade 50/S75
Critical Column Parameters	
Depth range	OMF: Not limited SMF: W8, W10, W12, W14
Flange thickness	Section 3.6.1.1, Step 7
Permissible material specifications	A572, Grade 50; A913 Grade 50, or 65, A992
Beam /Column Relations	
Panel zone strength	SMF: Sec. 3.3.3.2, Section 3.6.1.1, Step 9.
Column/beam bending strength ratio	SMF: Sec. 2.9.1
Connection Details	
<i>Bolts:</i>	
Bolt diameter	Section 3.6.1.1, Step 2
Bolt grades	A325 & A490.
Installation requirements	Pretensioned
Washers	Single F436 when required.
Hole type	Standard
<i>End Plate:</i>	
End plate thickness	Section 3.6.1.1, Steps 3 and 4
End plate material	A36
<i>Flange Welds:</i>	
Weld type	CJP groove weld similar to AWS TC-U4b, 3/8" fillet used as backing, root backgouged prior to start of groove weld. See Fig. 3-13.
Filler metal	Section 3.3.2.4
Weld access holes	Not permitted
Web connection:	Figure 3-13
Continuity plate thickness	Section 3.6.1.1, Steps 6 and 8