Table 3-6 Prequalification Data for RBS Connections

General	
Applicable systems	OMF, SMF
Hinge location distance s_h	$d_c/2 + a + b/2$
Critical Beam Parameters	
Depth range	W36 and shallower (maximum weight 300 lbs/ft)
Minimum span-to-depth ratio	OMF: 5. SMF: 7
$b_f/2t_f$	Up to $52/\sqrt{F_y}$, with b_f determined as described in Section 3.3.1.1
Flange thickness range	1-3/4" maximum
Permissible material specifications	A572 Grade 50, A992, A913 Grade 50/S75
Flange reduction parameters	Sec 3.5.5.1
Critical Column Parameters	
Depth range	OMF: Not Limited SMF: W12, W14
Permissible material specifications	A572 Grade 50; A913 Grade 50 and 65, A992
Beam / Column Relations	
Panel Zone strength	SMF: Section 3.3.3.2
Column/beam bending strength ratio	SMF: Section 2.9.1
Connection Details	
Web connection	Section 3.5.5.1 and Figure 3-12
Continuity plate thickness	Sec. 3.3.3.1
Flange welds	Fig. 3-12
Welding parameters	Sections 3.3.2.4, 3.3.2.5, 3.3.2.6
Weld access holes	See Fig. C-J1.2 AISC LRFD Vol. 1, or Section 3.3.2.7

As an alternative to a CJP groove weld, the beam web connection can also be made using a welded shear tab. The shear tab may be welded to the column using either fillet welds or groove welds. The shear tab, in turn, is then welded to the beam web with fillet welds. It is important to extend the tab as described in Figure 3-12, so as not to cause stress concentration near the end of the weld access hole. The web connection can also be made with a shear tab that is welded to the column flange and bolted to the beam web.

The effect of flange reduction on the elastic drift of frames can be readily calculated using prismatic beams with reduced moments of inertia or multi-segment beams that accurately represent the reduced section properties. Studies have been performed at the University of Texas (Grubbs, 1997) that have shown