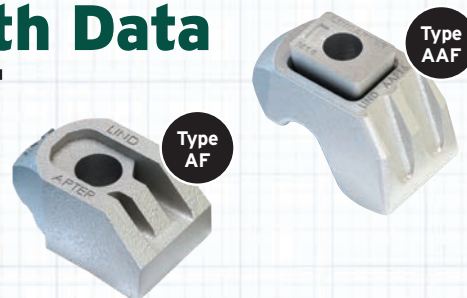


The Load and Resistance factor (LRFD) design strengths figures are taken from the ICC-ES Evaluation Report ESR-3330 for Hollo-Bolt (Table 2) and ESR-3976 for Girder Clamps (Table 3 and 4) and have been converted from **lbs** to **kN** (conversion 1 lb = 0.0044 kN). The LRFD Design Strengths have been calculated in accordance with the ICC-ES Acceptance Criteria AC437 and AC469.



LRFD Design Strength Data Type AF / Type AAF

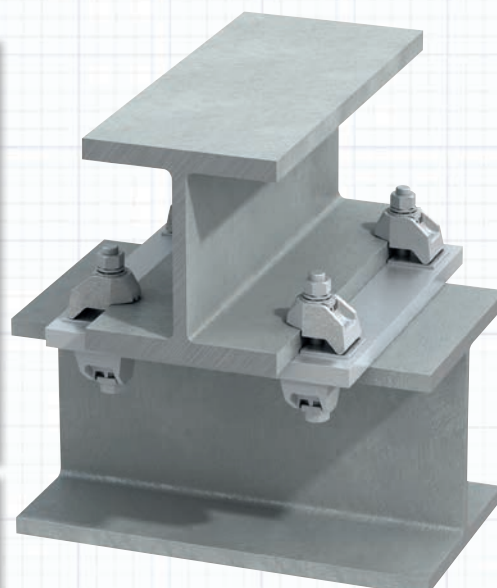
Meets the requirements of AISC 360, 341 and ASCE/SEI 7. Approved for use to resist axial tension loads and slip loads due to local combinations that include wind or seismic loads.



Type AF

Type AF

					Seismic Design Categories			
AF Product Code	Bolt		Static		A, B and C		D, E and F	
	Size	Property Class	LRFD Design Strength					
			Tension / 4 bolts kN	Slip / 4 bolts kN	Tension / 4 bolts kN	Slip / 4 bolts kN	Tension / 4 bolts kN	Slip / 4 bolts kN
AF12	M12	8.8	107.2	12.0	86.7	12.0	81.0	9.4
AF16	M16	8.8	161.9	24.0	134.3	24.0	121.0	18.9
AF20	M20	8.8	272.2	36.2	198.4	36.2	180.6	36.2
AF24	M24	8.8	458.2	56.5	385.7	56.5	357.2	52.0
AF12	M12	10.9	135.2	21.2	102.3	21.2	97.9	18.9
AF16	M16	10.9	176.6	28.0	165.5	28.0	158.4	25.2
AF20	M20	10.9	299.8	59.2	234.0	59.2	226.0	50.4
AF24	M24	10.9	609.4	80.5	529.3	80.5	516.0	80.5



Type AAF

Type AAF					Seismic Design Categories			
AAF Product Code	Bolt		Static		A, B and C		D, E and F	
	Size	Property Class	LRFD Design Strength					
			Tension / 4 bolts kN	Slip / 4 bolts kN	Tension / 4 bolts kN	Slip / 4 bolts kN	Tension / 4 bolts kN	Slip / 4 bolts kN
AAF12	M12	8.8	107.2	12.0	86.7	12.0	81.0	9.4
AAF16	M16	8.8	161.9	24.0	134.3	24.0	121.0	18.9
AAF20	M20	8.8	272.2	36.2	198.4	36.2	180.6	36.2
AAF12	M12	10.9	107.2	12.0	86.7	12.0	81.0	9.4
AAF16	M16	10.9	176.6	28.0	165.5	28.0	158.4	25.2
AAF20	M20	10.9	299.8	59.2	234.0	59.2	226.0	50.3

