

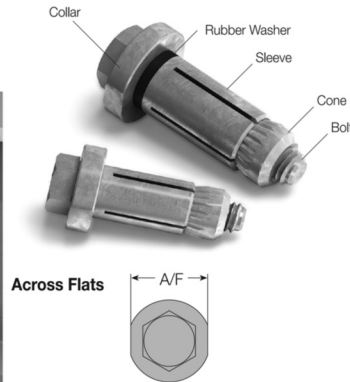
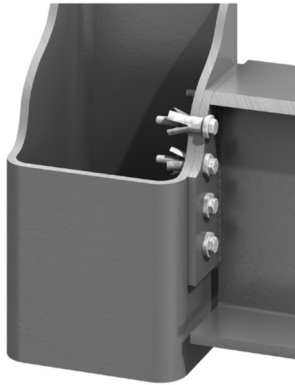
7 STEELWORK CONNECTIONS



Cavity Fixings



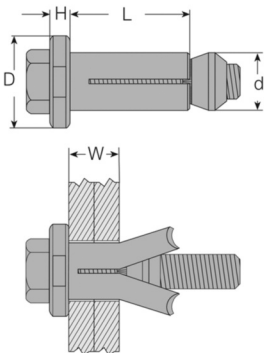
TYPE HB - *Hollo-Bolt*® HOT DIP GALVANISED



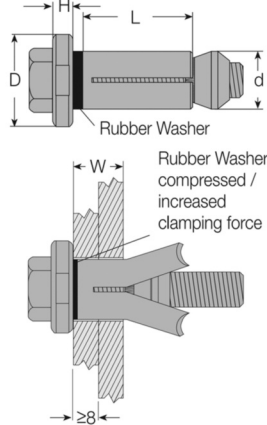
Suitable for hollow sections, tubes and where access is available from one side only. For high corrosion protection the *Hollo-Bolt*® comes with additional JS500 protection as standard or hot dip galvanised. Sizes M16 and M20 have a patented collapse mechanism for optimised clamping force.

Awarded the Design Council's Millennium Product status for innovation in the year 2000.

Hollo-Bolt®: M8, M10, M12

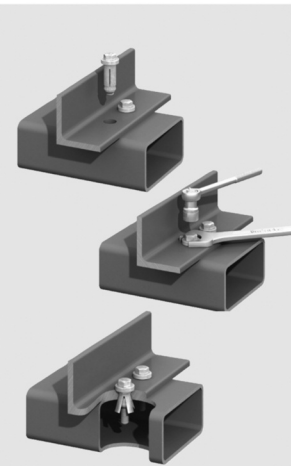


Hollo-Bolt®: M16, M20



Installation *Hollo-Bolt*®

1. Align pre-drilled fixture and steelwork. Insert *Hollo-Bolt*® through fixture and steelwork.
2. Grip the *Hollo-Bolt*® collar with an open ended spanner.
3. Using a torque wrench, tighten the central bolt to the recommended torque.



Product Code	Bolt	Clamping Thickness W mm	Outer Ply ¹⁾ min t mm	Sleeve		Collar			Tightening-Torque Nm	Safe Working Loads ²⁾ (5:1 Factor of Safety)	
				Length L	Outer Ø d	Height H d	Ø D mm	A/F mm		Tensile kN	Single Shear kN
HB08-1	M8x50	3 - 22	-	30							
HB08-2	M8x70	22 - 41	-	49	13.75	5	22	19	23	4.0	5.0
HB08-3	M8x90	41 - 60	-	68							
HB10-1	M10x55	3 - 22	-	30							
HB10-2	M10x70	22 - 41	-	48	17.75	6	29	24	45	8.5	10.0
HB10-3	M10x90	41 - 60	-	67							
HB12-1	M12x60	3 - 25	-	35							
HB12-2	M12x80	25 - 47	-	57	19.75	7	32	30	80	10.5	15.0
HB12-3	M12x100	47 - 69	-	79							
HB16-1	M16x75	12 - 29	8	41.5							
HB16-2	M16x100	29 - 50	8	63	25.75	8	38	36	190	21.0	30.0
HB16-3	M16x120	50 - 71	8	84							
HB20-1	M20x90	12 - 34	8	50							
HB20-2	M20x120	34 - 60	8	76	32.75	10	51	46	300	35.0	40.0
HB20-3	M20x150	60 - 86	8	102							

■ Order example: HB08-1 BZP plus JS 500

- 1) **Type HB (HB16 and HB20 only) require the thickness of the outer ply (min t) to be at least 8mm. If necessary, spacer washers should be used beneath the collar to increase the thickness to 8mm.**
- 2) **The *Hollo-Bolt*® can be used on a wide variety of steel hollow shape sections; safe working loads shown are based on use in S275 structural hollow section. The safe working loads, in both tension and shear, are applicable to the *Hollo-Bolt*® only. Failure of the section, particularly on those with thin walls and a wide chord face, could occur at a lower figure and its strength should be checked by a qualified structural engineer.**