



T E C H N I C A L G U I D E

Rivets

Blind Rivet: A fastener that is installed from one side, that holds two or more pieces of material together typically in sheet metal applications.

The Blind Rivet consists of a mandrel with a head and a rivet body that sits over it.

The "Blind" side is where you have no access to the back of the sheet where it expands.

COMMON MATERIAL COMBINATIONS (RIVET/MANDREL)	STEEL / STEEL	ALUMINUM / STEEL	ALUMINUM / ALUMINUM	STAINLESS STEEL / STAINLESS STEEL	STAINLESS STEEL / STEEL	
COMMON RIVET HEAD STYLES	REGULAR DOMED HEAD	LARGE DOMED HEAD	COUNTERSUNK HEAD	CLOSED END	COLORED/PAINTED RIVETS AVAILABLE UPON REQUEST	
NOMINAL RIVET SERIES	#3	#4	#5	#6	#8	
NOMINAL RIVET SIZE	3/32" (.0938)	1/8" (.1250)	5/32" (.1563) 3/16" (.1875)		1/4" (.2500)	
METRIC CONVERSION	2.4MM	3.2MM	4.0MM	4.8MM	6.3MM	

DESCRIPTION	ILLUSTRATION	BODY DIAMETERS RANGE FROM	GRIP RANGE VERY FROM	MATERIALS OFFERED	IFI SPECIFICATION	MANUF. PROCESS
REGULAR DOMED HEAD OPEN ENDED 183, 184, 185, 186, VR1 Most commonly rivet used in the industry. Low cost and versatile applications where back side of job can not be accessed.	•	3/32" UP TO 1/4"	.031 UP TO 1.00	STEEL CR+3 5052 ALUMINUM 304 S.S.	IFI 114	EXTRUDED
LARGE DOMED HEAD OPEN ENDED 034, 035, 036, 037 Similar to the Open Ended rivet only difference being the increased flanged diameter perfect for soft or brittle material.		3/32" UP TO 1/4"	.031 UP TO 1.00	STEEL CR+3 5052 ALUMINUM 304 S.S.	IFI 114	EXTRUDED
COUNTER SUNK HEAD (120°) OPEN ENDED 100, 132, 134, 136, 137 Where a flat surface is needed after installation, Suitable for those applications where zero gap distance between the fastener and the surfaces being fastened.	8	3/32" UP TO 3/16"	.079 UP TO .625	STEEL CR+3 5052 ALUMINUM 5056 ALUMINUM 304 S.S.	IFI 114	EXTRUDED
CLOSED END DOMED HEAD W30, W31, W32, W33 Excellent choose where moisture resistance or positive containment is required.	-	1/8" UP TO 1/4"	.020 UP TO 1.00	STEEL CR+3 5052 ALUMINUM 304 S.S. 420 S.S.	IFI 126	EXTRUDED
MULTI-GRIP DOMED HEAD W34, W35, W36, W37 Ideal for clamping multiple layers of materials together. Reduce your inventory as fewer sizes need to be stocked compared to standard open end rivets. Tip of the mandrel locks itself in the rivet elimination risk of mandrel vibrating loose.		1/8" UP TO 1/4"	.039 UP TO 1.00	STEEL CR+3 5052 ALUMINUM 304 S.S.	IFI 116	EXTRUDED
BACK-UP RIVET WASHER 142, 152 Unlike regular washer these hold a tighter material thickness (056-062) on all five inner diameters. Used when installing in softer material and needed to start the rivet expansion, when a wider clamping surface is desired, or for irregular holes.		1/8" UP TO 1/4"	.056 UP TO .062	STEEL CR+3 1060 ALUMINUM		STAMPED
PAINTED TYPE 183, 184 These are available in a wide variety of head styles and materials. Typically are Domed Head in steel or aluminum. Consult with your BBI salesperson for a quote.		3/32" UP TO 1/4"	.031 UP TO 1.0	STEEL CR+3 5052 ALUMINUM 304 S.S.	IFI 114	EXTRUDED
SPECIAL ORDER ITEMS BBI's Special Mill Division offers Stock and release programs, Secondary Processing, PPAP requirements, Coating and plating alternatives, parts per print, kitting and special packaging.		3/32" UP TO 1/4"	.031 UP TO 1.0	STEEL CR+3 ALUMINUM S.S.		EXTRUDED
STRUCTURAL VT3, VR2 Where high shear and tensile strength is a requirement, Produces a strong and vibration resistant joint, Ideal where oversized or irregular holes exist. Offered in IL, UG, MB, and QL series.		3/32" UP TO 1/4"	.031 UP TO 1.0	STEEL CR+3 ALUMINUM S.S.	IFI 119	EXTRUDED