



FORTRESS[®]

FASTENERS

Hex Head Screwbolts

The Fortress Screw Bolts have been appraised for use as wall bracing system hold downs and bottom plate fixings to concrete slab-on-ground in buildings designed and constructed in accordance with NZS 3604. They are for use in internal, dry, protected environments. Available in ZC & Galv



	Drill Bit Diameter	Minimum Embedment Depth
10mm x 120mm 12mm x 150mm	10mm 12mm	70mm 100mm <small>*Drilled holes must be 10mm deeper than embedment depth</small>

Bracing Hold-down Characteristic Tensile Strengths		
	Characteristic Strength	Max Bracing Units Per Metre
10mm x 120mm 12mm x 150mm	11 kN 15 kN	120 (6kN) 150 (7.5kN)

Bottom Plate Fastener Spacing		Max Fastener Spacing	Min Edge Distance (to Centre Of Fastener)
	Wall Type		
10mm x 120mm	Internal Wall	900mm	60mm
	External Wall (formed concrete foundation)	725mm	60mm
12mm x 150mm	Internal Wall	900mm	60mm
	External Wall (formed concrete foundation)	900mm	60mm
	External Wall (masonry header block foundation)	750mm	60mm

Serviceable Life 50 Years (minimum)

Further information available at <http://www.branz.co.nz/appraisal/687>