

# Headingly® Steel Picket Fence System

Product description	The fencing consists of 2400mm long (standard length) panels with uprights (pickets) welded to two horizontal rails and secured to the posts with a proprietary security bracket and fastenings.
System function	To act as a physical barrier and control pedestrian access points to a sports field or other open space area. In the context of a sports oval, the fence also defines the boundary of the oval and helps contain cricket balls.
Product application	Sports ovals, open space area, estates, retirement homes, and residential properties.
Panel height	900mm (standard).
Post spacing	2480mm post centres standard (assumes a 65x65mm post). 2415mm gap between posts (standard).
Gap under fence	50-100mm on level ground. Maximum of 150mm on sloped ground.
Picket profile	75x16x1.0mm Oval Hollow Section (SHS) steel.
Picket spacing	138mm centre-to-centre of each vertical picket (63mm gap between pickets).
Picket top profile	'Moon' picket (standard).
Rails	40x40x1.6mm SHS steel
Panel brackets	Bluedog SmartaBracket®: 3mm gauge mild steel material, 1-piece heavy duty, security bracket (four brackets per panel). The bracket fits over the end of the 40x40mm rail of the panel and mounts on the non-attack side (normally the inside) of a 65x65mm fence post. There are two fixing points to the post and one to the rail of the panel. This bracket centres the panel on the post along the fence alignment. The bracket is hot dip galvanised after fabrication and then powder coated.
Change of direction brackets	Bluedog SmartaBracket®: 3mm gauge mild steel material, 1-piece heavy duty, security bracket. The bracket fits over the end of the 40x40mm rail of the panel and mounts on in-line with the panel on the post. There are two fixing points through the bracket to the post and two through the bracket to the rail of the panel. The bracket is hot dip galvanised after fabrication and then powder coated.
Fasteners	12g x 25mm long tamper proof self drilling Tek screw (Pentaforce or similar) in a Class 3 (minimum) corrosion finish (three screws per bracket). Requires a special setting tool that fits to a drill to install and remove the screw.
Intermediate posts	65x65x1.6mm post (1500mm long).
Gate frame	40x40x1.6mm stiles (i.e. the vertical sections at each end of the gate leaf) and 40x40x1.6mm rails).  <i>Recommended alternative for heavier duty application: 65x65x1.6mm stiles and 40x40x1.6mm rails SHS (three horizontal rails for large leaves).</i>
Gate configuration	The vertical pickets are welded to the face of the horizontal rails with each picket welded at the top and bottom of the rails.
Gate locking hardware	D-latch (fixes to gate stile with 2x12g teks) and strike (fixes to gate latch post with 2x12g teks); or  Bluedog Boltn'Lock® heavy duty Ø20mm slide-bolt unit. This unit fixes to the gate latch stile on site with a combination of 14 gauge tek screws and/or M8 bolts. The slide-bolt is lockable with a standard padlock in both the open and closed positions. A 5mm slide bolt receiver fixes to the gate post or adjacent double gate latch stile on site with a combination of 14g tek screws and M8 bolts.
Gate drop-bolt hardware	Ø16mm x 550mm long drop bolt (screw on site with 3 x 14g self-drilling tek screws). The units is pad lockable in the down position only. Metal drop bolt keeper to be placed in concrete footing in the open and closed position.

Gate hinging	<p>Goliath (single) ball bearing hinge (top and bottom). Fitted on site to the gate post and gate stile with a combination of 2 x 14g teks and 1 x M8 bolt; or</p> <p><i>Recommended alternative for heavier duty application:</i> Bluedog Eternity® greasable tapered roller bearing (bottom) and sealed deep groove ball bearing hinging (top) to suit the 65mm gate stile. The top assembly allows the level of the gate leaf to be lifted or lowered. A 10mm gate post bracket is secured to the gate post with 4 x M10x25mm long stainless steel screws (that requires a specialist setting tool to install for tamper resistance). The gate post is drilled and tapped to suit the M10 fasteners. The gate stile bracket inserts into the top and bottom gate stiles and is fixed with a 14g tek.</p>
Gate posts	<p>75x75x3mm (1500mm long to suit 900mm high fence) for Gate Leaf up to 1400mm Wide</p> <p>100x100x4mm (1500mm long to suit 900mm high fence) for Gate Leaf 1401 – 2400mm Wide</p>
Post footings	<p>Fence posts Ø225mm x 650mm deep using 20mpa concrete for 900mm high fencing*</p> <p>Gate posts Ø300mm x 600mm deep using 20mpa concrete for 900mm high fencing*</p> <p>*subject to site specific soil conditions and loadings</p>
Base flanges	<p>130x130x5mm with 4xØ13 holes to suit 65x65 post.</p> <p>The post inserts into the centre of the base flange (standard). The base flanges are hot dip galvanised after fabrication.</p>
Post cap	Bluedog pregalvanised steel cap (powder coated).
Tubular pre-galvanised material	<a href="#">Orrcon Mild Steel Galvabond®</a> Electric Resistance Welded (ERW) precision tubing with 135 grams/ square metre zinc coating mass (minimum) for increased corrosion resistance.
Weld type	<p>All welds are Silicon bronze*.</p> <p><i>*This weld has superior corrosion resistance and powder coating film adhesion compared to a standard (lower cost) mild steel weld.</i></p>
Metal pretreatment	The product undergoes a 7 stage chemical pretreatment process to clean, etch and prepare the metal surface for powder application. This process includes first submerging the product in two consecutive heated alkali degreasing baths, then a series of rinse baths and then a nanoceramic conversion coating bath that places a fine crystalline structure on the surface of the steel for the powder to 'key' into and prevent oxidation on the surface before powder coating. This facilitates improved powder film adhesion.
Powder coat for standard outdoor applications	For standard outdoor application D1000 Excel™ polyester powder is used as standard. All powders used are supplied by Interpon and formulated by Akzo Nobel. Interpon D1000 exhibits a tougher cured film which provides superior damage resistance to packaging materials. It is designed to give excellent long term exterior durability and colour retention and is available in a limited range of colours and in gloss, satin and matt finishes. Film thickness: ~80µm minimum.
Powder coat for higher corrosion environments	For applications that will be subject to higher corrosion, a zinc-rich epoxy primer can be applied under the top coat of polyester to give much greater corrosion resistance. The epoxy primer provides a non-porous barrier between the corrosive elements (salt, pollutants etc.) and the metal surface.
Applicable Australian Standards	<p>AS 1450 – Steel tubes for mechanical purposes - Product Designation AS 1450/C250/ERW.</p> <p>AS 1397 – Steel sheet and strip – Hot-dip zinc-coated or alu/zinc coated - Product Designation AS 1397/G2.</p> <p>AS 1163 – Structural steel hollow sections – Product Designation AS 1163 C350LO.</p> <p>AS/NZS 4680:2006 – Hot dip galvanized (zinc) coatings on fabricated ferrous articles.</p> <p>AS 4506.2005 Metal finishing - Thermoset powder coatings.</p>

Bluedog reference material	Drawing set. Installation guide. Proforma product specification.
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