

# SecuraTop® Standard Tubular Security Fencing

Product description	The fencing consists of 2400mm long (standard length) panels with uprights with a sharp crushed spear top profile welded into horizontal rails. The panel is then connected to a post with a shroud or proprietary security bracket that is fixed to both with a series of self-drilling tek screws.
Product application	Perimeter security for commercial and industrial property, technology parks, car and machinery yards.
Panel height	1800mm, 2100mm and 2400mm (standard).
Post spacing	2480mm post centres or 2415mm gap between posts (standard)*. <i>*This assumes a 65x65mm post.</i>
Gap under fence	50-100mm on level ground. Maximum of 150mm on sloped ground.
Panel configuration	The horizontal rails have a hole punched in one or both sides of the tube to suit the profile of the vertical picket. The picket is then inserted through/ into the rail and welded in place in the top and bottom rail. The pickets extend 150mm above and below the top and bottom rail.
Picket profile	25x25x1.2mm Square Hollow Section (SHS) steel.
Picket spacing	140mm centre-to-centre of each vertical picket. 125mm gap between pickets. <i>*A picket spacing of 87mm is recommended for applications where is desirable for the fence to be child-safe and/ or a more severe hazard being protected by the barrier.</i>
Picket top profile	Crimped (sharp or rounded) spear top.
Rails	40x40x1.6mm SHS steel.
Panel brackets	1mm gauge pressed zinc plated shrouds (four per panel: one at each corner). The shroud fits over the end of the rail of the panel and mounts on the face of the post in line with the panel. There are two fixing points through the shroud to the post and one through the shroud to the rail of the panel; or  <i>Recommended alternative for heavier duty application: Bluedog SmartaBracket®: 3mm gauge mild steel material, 1-piece heavy duty, hot dipped galvanised 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.</i>
Change of direction brackets	Bluedog SmartaBracket®: 3mm gauge mild steel material, 1-piece heavy duty, hot dipped galvanised 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.
Fasteners	Colour matched 12 gauge self-drilling tek screw (three screws per shroud); or  <i>Recommended alternative for heavier duty applications: 12g x 25mm long tamper proof self drilling Tek screw 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.</i>
Intermediate posts	65x65x1.6mm SHS (2400mm long for 1800mm high panel); 65x65x1.6mm SHS (26600mm long for 2100mm high panel).  <i>Recommended alternative for heavier duty applications: a 65x65x2.5mm post (3000mm long for a 2100mm high panel).</i>

Gate frame	<p>Stiles (i.e. vertical sections at each end of the gate leaf) and rails 40x40x1.6mm (three horizontal rails for increased rigidity).</p> <p>Recommended alternative for heavier duty application: Stiles and Rails 65x65x1.6mm SHS (three horizontal rails).</p>
Gate configuration	The horizontal rails have a hole punched in one or both sides of the tube to suit the profile of the vertical picket. The picket is then inserted through/ into the rail and welded in place in the top and bottom rail.
Gate locking hardware	<p>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.</p> <p>Optional extra: A strip of perforated metal (1mm) fits to the outside of the gate preventing the slide-bolt hardware being used as climbing points.</p>
Gate drop-bolt hardware	<p>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; or</p> <p>Ø16mm x 700mm long drop bolt (drop bolt guides and locking tabs welded to the gate stile during fabrication). The units is pad lockable in the down position only.</p>
Gate hinging	<p>Heavy duty self-closing hinge* that screws to the hinge stile and gate post on site with 8 x 14g tek screws. The hinge does not hold the gate open at 90 degrees. This hinge allows the gate leaf to swing back on itself but not through the opening; or</p> <p><i>Recommended alternative for heavier duty applications:</i> SureClose hydraulic self-closing hinge that screws to the hinge stile and gate post on site with 8 x 14g tek screws. The hinge does not hold the gate open at 90 degrees and has a final 'snap-close' function to ensure a heavier gate closes properly. This hinge allows the gate leaf to swing back on itself but not through the opening.*</p> <p><i>*A gate stop fitted to the latch stile or gate post is recommended for both hinge types to prevent the hinges being damaged from 'over-swing' through the gate opening.</i></p> <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 applications:</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 (3000mm long to suit 2100mm high fence) for small single gates.</p> <p>100x100x4mm (3000mm long to suit 2100mm high fence) for openings up to 4800mm.</p> <p>150x150x5mm (3000mm long to suit 2100mm high fence) for openings of 4800-6000mm.</p>
Post footings	<p>Fence posts Ø300mm x 900mm deep using 20mpa concrete for 2100mm high fencing*</p> <p>Gate posts Ø450mm x 900mm deep using 20mpa concrete for 2100mm high fencing*</p> <p><i>*subject to site specific soil conditions and loadings.</i></p>

Base flanges	<p>130x130x5mm with 4xØ13 holes to suit 65x65 post.</p> <p>150x150x8mm with 4xØ13 holes to suit 75x75 post.</p> <p>200x200x10mm with 4xØ13 holes to suit 100x100 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	<p>Bluedog pre-galvanised steel square cap (powder coated). The pressed steel cap is fitted on site (tap on with rubber mallet) and fits tightly over the top of the post and is not easily removed once installed. The cap can be fixed in place with a self drilling tek screw if required.</p>
Material	<p>Mild steel. Strength grade: C250 minimum. Zinc coating inside and out with 50 grams/ square metre minimum. Recommend 135 grams/ square metre minimum for increased corrosion resistance.</p>
Weld type	<p>All welds are Silicon bronze*.</p> <p><i>*This weld has superior corrosion resistance and powder coating film adhesion to a standard mild steel weld.</i></p>
Metal pretreatment process	<p>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.</p>
Powder coat process	<p>The product is powder coated using an automated conveyerised powder coating line. Powder is applied to the metal surface using air pressure and an electrostatic charge. The product then passes through a heated curing oven. This causes the powder to gel and then harden to a tough durable surface. The thickness and curing times are closely monitored as these variables influence the mechanical characteristics of the finished coating.</p>
Powder coat for standard outdoor applications	<p>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.</p>
Powder coat for applications at risk of graffiti	<p>For applications at risk of graffiti, EasyClean™ can be used as an alternative to the standard polyester coating. EasyClean is a Polyurethane coating that is designed to allow the simple and rapid removal of most forms of graffiti. This ease of graffiti removal reduces overall maintenance costs. Interpon Typical applications include fence installations at train, tram and bus stations, schools and playgrounds. Film thickness: ~80µm minimum.</p>
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	<p>Drawing set.</p> <p>Installation guide.</p> <p>Proforma product specification.</p>