TECHNICAL

BDX® - X9 ProteXion™

The **BDX®** screw with **X9 ProteXion™** coating is engineered to provide high-performance fastening solutions for steel and timber applications, offering enhanced durability and corrosion resistance suitable for severe Australian environmental conditions.

These screws have been developed and sourced within Hobson's quality management system which is certified to **ISO 9001**.

The **X9** coated screw is manufactured to comply to the requirements of **AS 3566.1-2002*** (Self-drilling screws for the building and construction industries. **Part 1** General requirements and mechanical properties). Pull out performance data is available in the individual screw data sheet.

X9 ProteXion™ coating is suitable for **ISO 9223 category 4** environments.

Corrosion performance and environmental suitability are assessed with reference to:

- **ISO 9223** — Corrosion of metals and alloys — Corrosivity of atmospheres — Classification.
- **AS 4312** — Atmospheric corrosivity zones in Australia, enabling appropriate product selection based on atmospheric corrosivity categories (C1–CX) and Australian environmental severity zones.

CORROSIVITY CATEGORIES ACCORDING TO ISO 9223 AND AS 4312

Category	Corrosivity	Typical Environment
C1	Very Low	Dry Indoors
C2	Low	Arid / urban inland
C3	Medium	Coastal or light industrial
C4	High	Sea-shore (calm)
C5	Very High	Sea-shore (surf)
CX	Extreme	Shoreline (severe surf)

For guidance on distance recommendations, including distance to the shoreline and other corrosive environmental sources, please refer to AS 4312 Section 3 and ensure alignment with the corrosion-category parameters defined in ISO 9223.

*AS 3566.2:2002 (Part 2. Corrosion resistance requirements) was withdrawn as a valid standard reference for the corrosion resistance of screws in April 2016 and was re-released in 2025. The most appropriate standard reference for understanding the use and performance of screws in corrosive environments between 2016 and 2025 has been ISO 9223 and AS 4312. These standards outline the atmospheric corrosivity category.

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The **BDX®** screw with **X9 ProteXion™** coating is designed to accommodate a broad spectrum of structural and non-structural applications. Correct fastener selection must consider substrate type, material thickness, environmental exposure classification, and load requirements.

Prior to installation of **X9** coated screws, technical data and application parameters should be reviewed and approved by a suitably qualified design professional responsible for the project design to ensure compliance with applicable codes, standards, and site conditions.

RECOMMENDED RPM SETTINGS

Fastener Type	Target Substrate	Recommended RPM
Self-Drilling (SDS)	Steel up to 4.5mm	2,500
s500 Point	Hot Rolled / Thick Steel	1,800
Type 17 Point	Hardwood / Softwood	1,500

Screw Gauge Conversion

gauge	0	1	2	3	4	5	6	7	8	10	12	14	16	18
mm	1.5	1.9	2.2	2.6	2.9	3.3	3.5	3.9	4.2	4.8	5.5	6.3	7.1	7.7
inch	0.060"	0.073"	0.086"	0.099"	0.112"	0.125"	0.138"	0.151"	0.164"	0.190"	0.216"	0.242"	0.280"	0.303"

Pro-Tip: For consistent, professional results, always use a screw gun equipped with torque control and depth-gauge adjustment.