



- The most comprehensive selection of screws for PVCu fenestration fabrication.
- Specially engineered drill points, thread profile, and head design improve efficiency and ease of use.
- Precision Thread Technology – Fast-starting for optimal engagement and reduced insertion torque.
- Effective for steel reinforced PVCu window and door manufacture for use in corrosive environments.

### Technical Specifications

DETAIL	DESCRIPTION
<b>Designed For</b>	Attaching hardware to steel and aluminium reinforced multi-chamber profiles
<b>Head Style/Drive Recess</b>	Countersunk – Phillips PH2
<b>Thread Form/Point</b>	Spaced self-tapping – Self drilling point
<b>Effective Thread Length</b>	Fully Threaded
<b>Material</b>	Stainless steel grade 410 to BS EN ISO 3506 (martensitic class)
<b>Surface Finish</b>	Factory-applied organic ceramic corrosion-protection coating system
<b>Corrosion Protection</b>	Combination of base alloy and applied coating
<b>Laboratory testing</b>	Neutral salt-spray (NSS) to BS EN ISO 9227:2022, exceeding 1,000hr under laboratory conditions

### Mechanical Data – Average Resistance Characteristics - Stainless Steel

NOMINAL SIZE	RECOMMENDED TENSILE CAPACITY ( $F_{t,swl}$ )	RECOMMENDED SHEAR LOAD ( $F_{v,swl}$ )	TENSILE STRENGTH ( $R_m$ )	RECOMMENDED TORSIONAL CAPACITY ( $F_{T,swl}$ )
<b>CSR 3.9mm</b>	2.99 kN	1.94 kN	406 MPa	1.89 Nm
<b>CSR 4.8mm</b>	3.52 kN	2.94 kN	406 MPa	3.53 Nm

**NOTE** Correct product selection remains dependent on installation environment, moisture exposure, substrate condition and maintenance regime. Data values are based on single-point tests and calculations and are indicative only. Specifiers, end-users, and third parties are responsible for determining and applying appropriate safety factors, not exceeding the stated average resistance characteristics or the limitations of the application.

### Installation Guidance

For optimal performance and compliance, thorough user-specific testing to validate the product's suitability for the intended design or application is strongly recommended. Such testing should consider variables such as material compatibility, load requirements, environmental conditions, and installation methods.

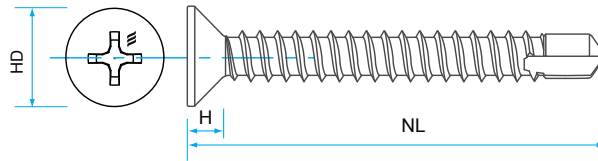
- **Impact-type electric drills/drivers** are not recommended for fixing screws into PVCu windows and doors due to the high-torque, percussive action they generate.
- Percussive action can cause material micro-cracks or stress fractures.
- Excessive torque can strip screw threads or damage the PVCu material, reducing joint integrity.
- Inconsistent torque application results in uneven or insecure screw installation, weakening the fixing.
- High-speed impacts can wear away protective coatings, increasing the risk of corrosion.
- Controlled torque screwdrivers or drills with torque-limiting settings are recommended for optimal performance and durability.

Rapierstar disclaims any liability for misuse, improper installation, or failure to adhere to recommended practices and local building regulations. Additionally, all installations must comply with relevant standards and codes specific to the application, including (but not limited to) those pertaining to safety, structural integrity, and environmental considerations.



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### CSR Stainless Steel Product Range

PRODUCT CODE	SIZE – SHANK X NL	HD	H	BOX QUANTITY
<b>CSR 3.9 X 19 S</b>	3.9mm x 19.0mm	7.25mm± 0.25mm	2.85mm	1000
<b>CSR 3.9 X 22 S</b>	3.9mm x 22.0mm	7.25mm± 0.25mm	2.85mm	1000
<b>CSR 3.9 X 25 S</b>	3.9mm x 25.0mm	7.25mm± 0.25mm	2.85mm	1000
<b>CSR 3.9 X 32 S</b>	3.9mm x 32.0mm	7.25mm± 0.25mm	2.85mm	1000
<b>CSR 3.9 X 38 S</b>	3.9mm x 38.0mm	7.25mm± 0.25mm	2.85mm	1000
<b>CSR 4.8 X 38 S</b>	4.8mm x 38.0mm	9.25mm± 0.25mm	3.50mm	500

### Supporting Documentation

- Declaration of Performance: 002CPR04-03-2013-StarPVCU-Stainless-DoP
- ISO9001-2015-218503 BAB Management Certificate
- ISO14001-2015-241585 BAB Management Certificate

### Referenced Standards

- BS EN ISO 3506 (series)
- BS EN ISO 9227:2022+A1:2024
- BS EN 14566:2008+A1:2009
- BS 7412:2024



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