SWENN Products Service Life Guide

The table 1.1 below provides a clear overview of the service life and environmental classifications for various SWENN Fasteners. This information is important for selecting the right fastener to suit your requirements, considering factors like humidity levels and corrosivity categories. For the best results and long-lasting fastener performance, please refer to the important notes and terms and conditions provided after the table.

Table 1.1: SWENN Products Expected Service life

Type of SWENN Fasteners	**Environmental Classifications**		**Service Life in Years**
	Humidity Level	Corrosivity Category **ISO 9223**	
[CARBON STEEL] UltraDuro GRI	Dry or Low Humidity	C1 - C3	**10 - 15**
		C4	**0 - 5**
		C5	**NOT RECOMENDED**
	High Humidity	C1 - C3	**5 - 10**
		C4	**NOT RECOMENDED**
		C5	**NOT RECOMENDED**
[STAINLESS STEEL] 410 Grade	All Humidity Levels	C1 - C3	**15 - 20**
		C4	**5 - 10**
		C5	**0 - 5**
[STAINLESS STEEL] 304 Grade	All Humidity Levels	C1 - C3	**More than 25**
		C4	**10 - 20**
		C5	**0 - 15**
[STAINLESS STEEL] 316 Grade	All Humidity Levels	C1 - C3	**More than 25**
		C4	**More than 25**
		C5	**0 - 20**

Important Notes:

1. Life expectancy values are approximate and for guidance only, based on material properties, industry experience, and environmental factors.
2. Adhere to the manufacturer's guidelines for installation and maintenance to ensure optimal fastener performance and longevity.
3. Corrosivity categories follow the ISO 9223 standard, which classifies corrosivity based on humidity, temperature, and atmospheric pollution.
4. Regular inspections help ensure fasteners' continued performance and early detection of corrosion or degradation.
5. Select fasteners based on application requirements, including environment, load-bearing capacity, and other relevant factors.
6. Refer to warranty terms and conditions information for specific coverage details and limitations.

Terms and Conditions

Bright Star/SWENN herewith warrants its UltraDuro/Zinc coated carbon steel screws, SS316, and SS304 screws with EPDM sealing washers ("the fasteners") against any loss of structural integrity resulting from corrosion or metallurgical defects, Subject to the following provisions:

1. Exclusions: This warranty shall not apply to:
    - The threaded or shank portions of the screw (coverage pertains to the head exclusively).
    - The aesthetic attributes of the coatings (including instances of paint blistering).
    - The infiltration of chemicals or moisture within the building or the accumulation of corrosive salts or moisture beneath the cladding materials.
    - Exposure to heightened chloride pollution is typical of marine splash and spray zones.
    - Contact with soil, ash, fertilizer, moisture-retaining substances, lead, copper, other metals, or chemical agents.
    - Saltwater transport and deposition resulting from cyclonic winds.
    - Intentional or accidental damage inflicted upon the coating.
2. Non-Transferability: This warranty remains non-transferable and exclusively applies to the initial owner of the structure where the fasteners are utilized.
3. Environmental Conditions: The determination of environmental conditions and categorization shall adhere to ISO 9223 standards, taking into account the complexity and influence of various environmental factors. Consulting with ISO 9223 and the SWENN Technical Department is necessary for establishing the appropriate ISO 9223 category and corresponding SWENN Corrosion Warranty duration. SWENN's decision, rendered reasonably, shall be final.
4. Warranty Claims: Upon validation of a warranty claim, SWENN shall provide equivalent or identical fasteners sufficient to replace the defective fasteners.
5. Liability Limitations: SWENN's liability shall exclude direct, indirect, consequential, or incidental damages, such as:
    - Labor and costs associated with the removal or repair of defective fasteners and the installation of replacement fasteners.
    - Property damage, personal injury, loss of income, or other indirect losses resulting from or in connection with defective fasteners.
6. Warranty Conditions: The warranty is contingent upon:
    - The installation of fasteners in accordance with SWENN Product Recommendations, relevant standards, and building codes
    - The cladding manufacturer's endorsement of fasteners as suitable for use with their cladding material, along with adherence to recommended maintenance practices.
    - Ensuring that the supplied fasteners do not come into contact with, or are coated by, any incompatible materials, including post-paint treatments or systems.
7. Force Majeure: This warranty shall not cover any loss or damage, in whole or in part, resulting from events beyond SWENN's reasonable control, including acts of God.
8. Warranty Exclusivity: This SWENN Corrosion Warranty constitutes the sole warranty or guarantee applicable to the fasteners. All terms, conditions, warranties, or guarantees that may otherwise be implied by law in any jurisdiction are expressly excluded to the maximum extent permitted by law, subject to conditions 10 and 11.
9. Micro-Environmental Impact: Warranty periods are based on macro-environmental characteristics associated with the installation of products. Nevertheless, the presence of micro-environments and microclimatic conditions may significantly impact coating performance and the structural integrity of the products.

10. Environmental Exposure: The warranty period shall encompass product exposure to environments with increased corrosivity due to localized or micro-environmental conditions, provided that man-made crevices are not present, fasteners are not inserted into oversized holes causing embedded neck corrosion, and the localized environment within a 15-meter radius of the fastener is free of contaminants.

11. Maintenance Requirements: Regular washing of areas not exposed to direct rainfall is essential to prevent the accumulation of salt spray and other contaminants on or around the fastener heads and shanks. This is particularly crucial in coastal regions and areas affected by industrial fallout. The frequency of washing must be increased in areas with higher corrosivity ratings.

12. Limited Warranty: The warranty provided by SWENN is limited to the replacement of the defective product, as determined by SWENN. The total cost of replacement will not exceed the original purchase price of the product.

13. Inspection: SWENN reserves the right to inspect the fasteners and the installation site before deciding on a warranty claim.

14. Amendments: SWENN reserves the right to modify, amend or supplement these terms and conditions at any time without prior notice. Any such changes will be effective immediately upon posting to SWENN's website or other communication means.

15. Language: These terms and conditions are written in English, and any translation of these terms and conditions into any other language is for convenience only and shall not affect the interpretation of these terms and conditions.