# Self-tapping Screw
# BPIR Declaration

Version: v1

## Designated building product: Class 1

## Declaration

Wurth New Zealand Ltd has provided this declaration to satisfy the provisions of Schedule 1(d) of the Building (Building Product Information Requirements) Regulations 2022.

## Product/system

| | |
|---|---|
| **Name** | Self-tapping Screw |
| **Line** | |
| **Identifier** | Self-tapping Screw |

## Description

A self-tapping screw is a type of fastener that is designed to tap its own hole as it is driven into the material.

## Scope of use

The scope of use for self-tapping screws is quite extensive, as they are versatile fasteners suitable for a variety of applications. Here are some of the common uses:

DIY Projects: Ideal for smaller DIY tasks such as installing shelves, assembling furniture, or fastening plastic materials.

Automotive Industry: Commonly used in automotive applications due to their effectiveness on softer materials.

Metal Roofing and Gutters: An excellent choice for installing metal roofing and gutters, providing a secure and durable hold.

Construction: Used in construction for joining wood, plastic, metal, and even brick, especially where access is limited to one side of the material.

Medical Applications: In the medical field, self-tapping screws are used in surgeries, such as dental implants and orthopedic bone screws.

Self-tapping screws are designed to tap their own threads, which makes them convenient for repeated disassembly and reassembly, allowing them to relocate into the same threads from which they have been removed. This feature is particularly useful in applications that require regular maintenance or adjustments.

## Conditions of use

Guideline values for selecting the correct core hole diameter are contained in DIN 7975. Shape C = thread with tip Shape F = Thread without tip Shape R = Thread with rounded tip

Stainless steel tapping screws are weaker than case-hardening steel tapping screws. This means that these screws cannot form a counter thread in sheet steel. For this reason, they are used in soft materials such as aluminium only.

## Relevant building code clauses

**B1 Structure** – B1.3.1, B1.3.2, B1.3.3 (b, d, e, f, g, h, j, q), B1.3.4

**B2 Durability** – B2.3.1 (a)

**F2 Hazardous building materials** – F2.3.1

## Contributions to compliance

B1 - Structure Design Compliance: Compliance with B1 Structure is contingent upon the design crafted by a designated professional, such as a consulting structural engineer or architect. Design data is accessible to these professionals to ensure compliance with the provisions stipulated in NZS 3603 or AS/NZS 17201.

Scope of Use: Self-tapping screws are intended for use in residential and commercial timber construction to secure various building components.

B2 - Durability Material Selection: Compliance with B2 Durability is contingent upon the selection of the most appropriate coating or material, in accordance with the specific application. This decision should be based on the required durability for the intended use, taking into consideration the environmental conditions in which the product will be situated.

Coating Options: The product is offered in multiple coating options or in stainless steel to meet various environmental and durability requirements.

F2 - Hazardous Building Materials Safety: These products are safe when handled and do not contain or emit harmful materials.

Compliance with Acceptable Solution: There are no requirements for self-tapping screws in order to comply with Acceptable Solution F2/AS1, First Edition Amendment 3, 20171. It's important to note that the responsibility for choosing the correct size/diameter and finish of the product, as well as applying the appropriate torque during installation in accordance with the application's requirements, rests with the user. To facilitate decision-making, consulting technical guides provided by manufacturers is recommended.

Compliance with the Building Code ensures the safety, health, and durability of buildings, and self-tapping screws play a role in maintaining these standards when used correctly.

## Supporting documentation

The following additional documentation supports the above statements:

None added

For further information supporting Self-tapping Screw claims refer to our website.

## Contact details

| | |
|---|---|
| **Manufacture location** | Overseas |
| **Legal and trading name of manufacturer** | N/A |
| **Legal and trading name of importer** | Wurth New Zealand Ltd |

| | |
|---|---|
| **Importer address for service** | 99 McLaughlins Road, Wiri<br>Auckland 2104 |
| **Importer website** | wurth.co.nz |
| **Importer NZBN** | 9429039489333 |
| **Importer email** | sales@wurth.co.nz |
| **Importer phone number** | 0800683040 |

**WURTH NEW ZEALAND LTD**
99 McLaughlins Road, Wiri Auckland 2104 New Zealand
0800683040 | wurth.co.nz

# Appendix

Note: The below appendix includes information relating to BPIR Ready.

Publishing this information is not a requirement under BPIR. Its inclusion here is to provide a reference for how this BPIR summary was generated as well as to help summary creators understand the performance clauses suggested by BPIR Ready.

## BPIR Ready selections

**Category:** Fixings and fasteners

## Building code performance clauses

### B1 Structure

B1.3.1

*Buildings*, *building elements* and *sitework* shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during *construction* or *alteration* and throughout their lives.

B1.3.2

*Buildings*, *building elements* and *sitework* shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during *construction* or *alteration* when the *building* is in use.

B1.3.3

Account shall be taken of all physical conditions likely to affect the stability of *buildings*, *building elements* and *sitework*, including:

- (b) imposed gravity loads arising from use
- (d) earth pressure
- (e) water and other liquids
- (f) earthquake
- (g) snow
- (h) wind
- (j) impact
- (q) time dependent effects including creep and shrinkage

B1.3.4

Due allowances shall be made for:

a. the consequences of failure,
b. the intended use of the *building*,
c. effects of uncertainties resulting from *construction* activities, or the sequence in which *construction* activities occur,
d. variation in the properties of materials and the characteristics of the site, and
e. accuracy limitations inherent in the methods used to predict the stability of *buildings*

# B2 Durability

B2.3.1

*Building elements* must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:

- (a) the life of the building, being not less than 50 years, if: those building elements (including floors, walls, and fixings) provide structural stability to the building, or those building elements are difficult to access or replace, or failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building

# F2 Hazardous building materials

F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the *construction* of *buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.