L 1045.1

TEST REPORT
39-16759/1/JP

Product:	Wood screws ø (5,0x90) mm
Customer:	ESSVE Produkter AB Esbogatan 14 16474 Kista, SWEDEN
Manufacturer:	ESSVE Produkter AB Esbogatan 14 16474 Kista, SWEDEN
Employee responsible:	Michal Štěpán
Report issue date:	2023-05-03
Distribution list:	1 copy to the Customer 1 copy to the Engineering Test Institute

I. Description of product tested

Wood screws ø (5,0x90) mm – ESSVE Corrseal coating

Photo documentation:

II. Sample tested

SZU reg. no.	Product name	Date of submission
2250.23.37737.001-100	Wood screws ø (5,0x90) mm	2023-01-04

The visual inspection, tests and verification were carried out by Aneta Monika Kout and Michal Štěpán at the test station of SZU.
The tests were performed using measuring and testing equipment with valid calibration.

III. Measuring and test equipment:

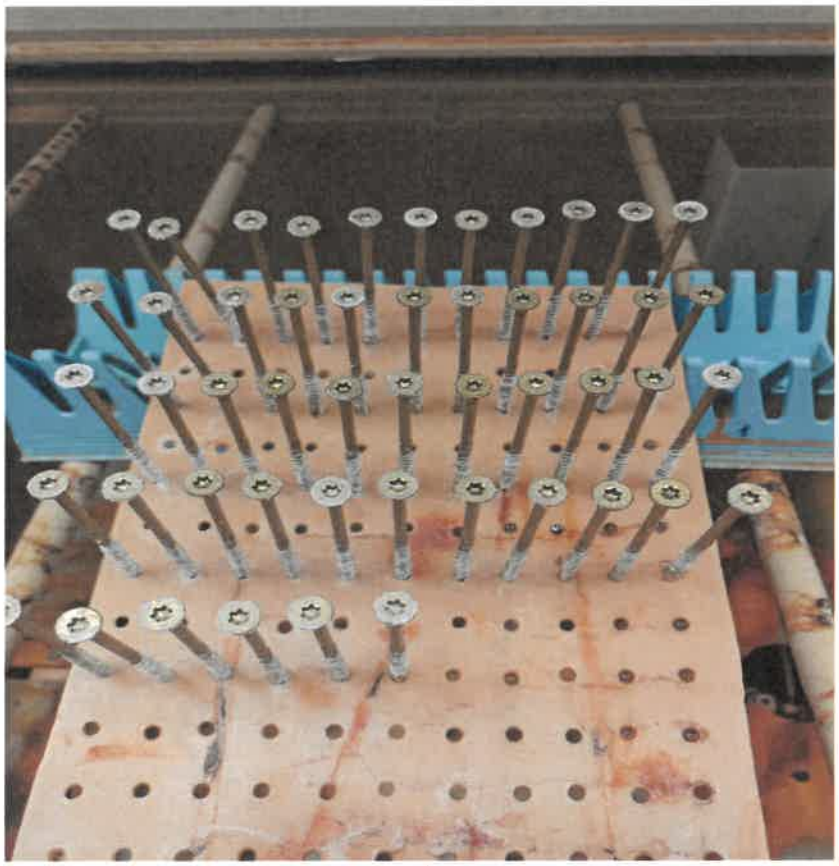
No.	Description	Inventory number
1.	Corrosion chamber Q lab	000-000-000-854

IV. Methods, results of tests and verifications

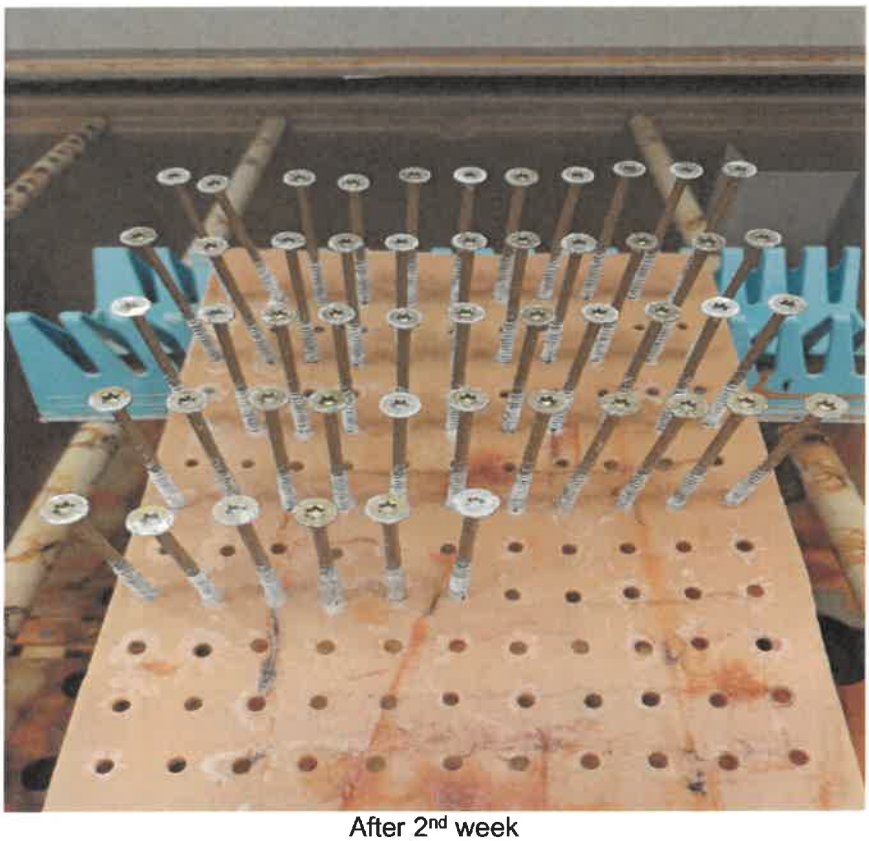
No.	Test objective	Requirement	Method of test	Documentation	Test evaluation/ verification *
1.	Corrosion resistance	EN 14592:2022 and Nordtest Method NT MAT 003, minimal degree according to EN ISO 10289 is R_p = 9 (only head is evaluated)	ČSN EN ISO 9227:2017 ČSN EN ISO 6270-2:2018	Page No. 3 to 8	+

***) Evaluation / statement of conformity:**
+..... Requirement fulfilled
-..... Requirement not fulfilled
0 .....Not applicable
x .....Not evaluated

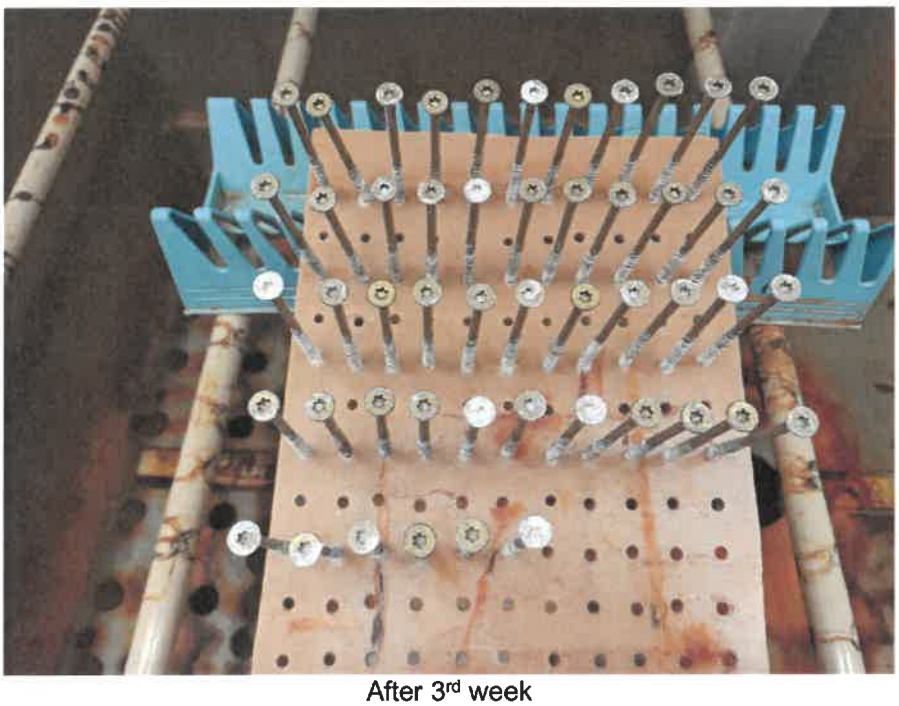
Test objective:	corrosion resistance
Exact name of the test procedure:	S 108 - Corrosion test in neutral salt spray, S 107 – Corrosion test in condensation chamber
Test method:	ČSN EN ISO 9227:2017, ČSN EN ISO 6270-2:2018
Sample tested:	Wood screws ø (5,0x90) mm
Measuring equipment used:	see Chapter III
Date of test:	2023-01-04 to 2023-03-08



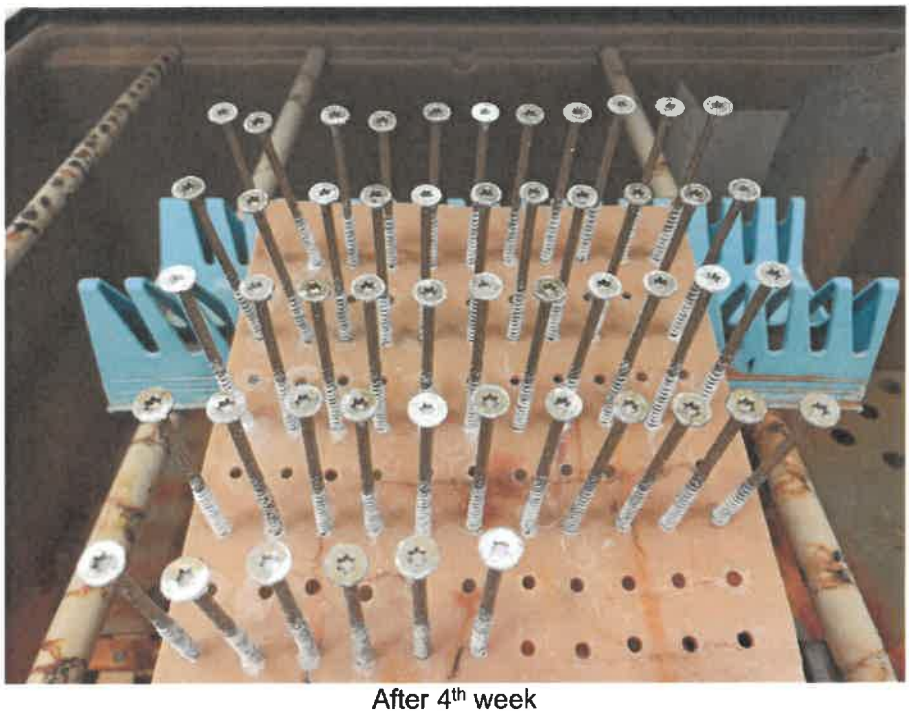
After 1st week



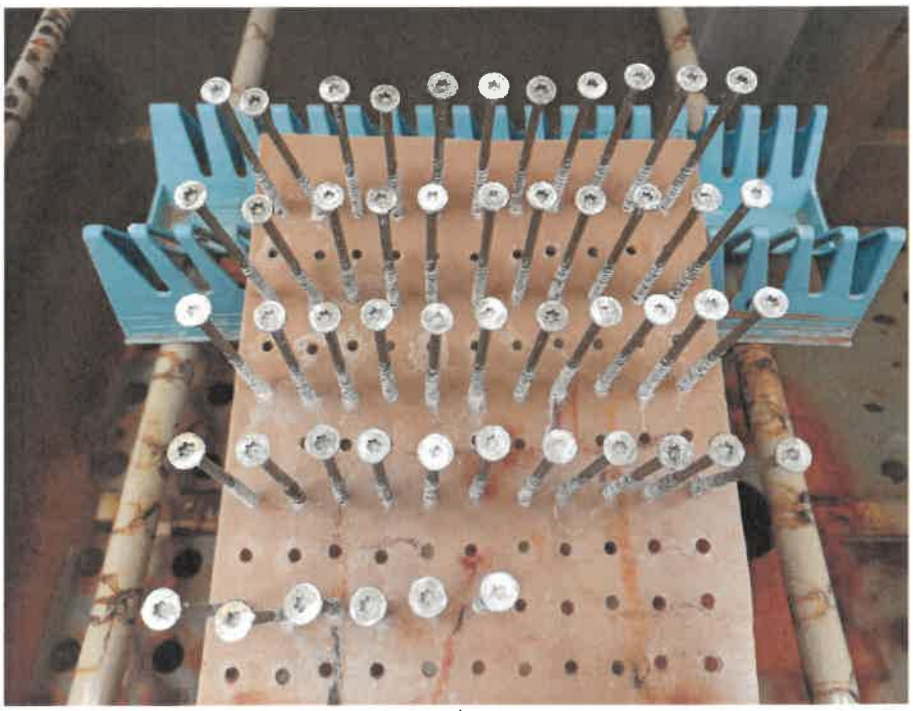
After 2nd week



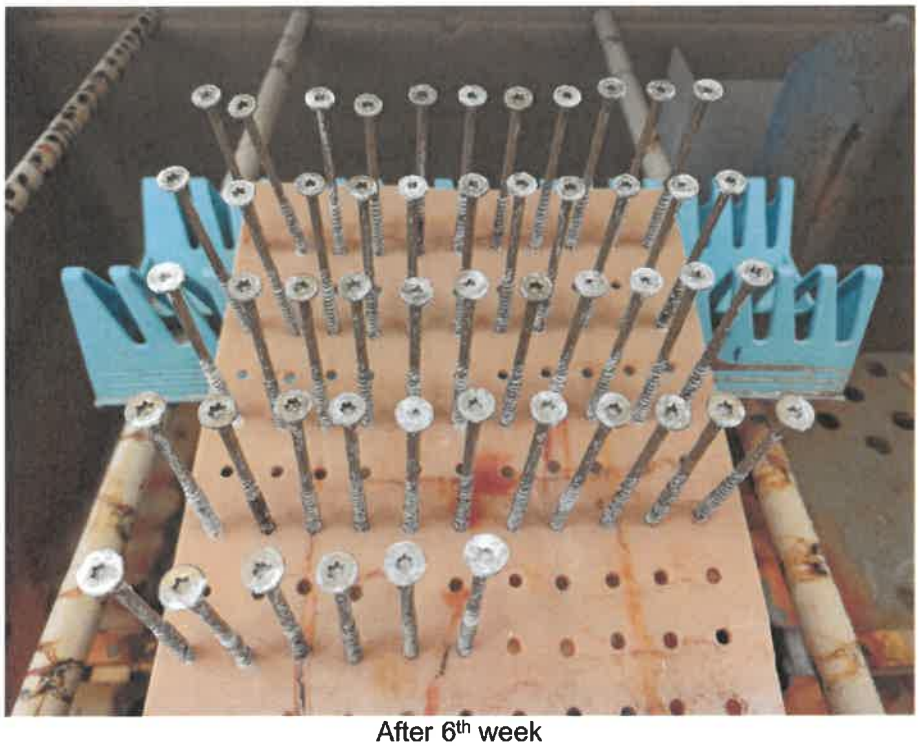
After 3rd week



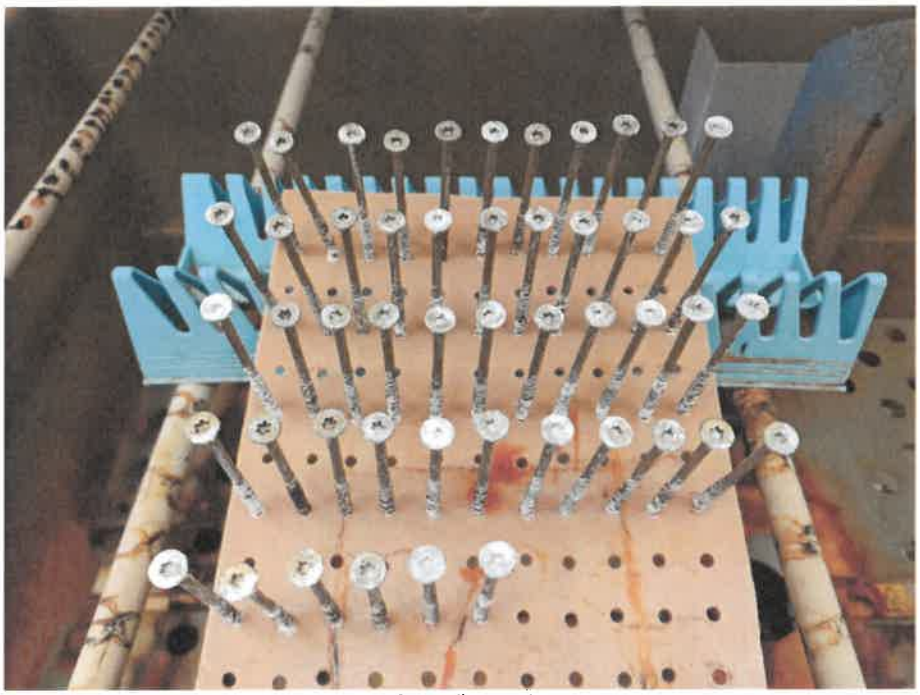
After 4th week



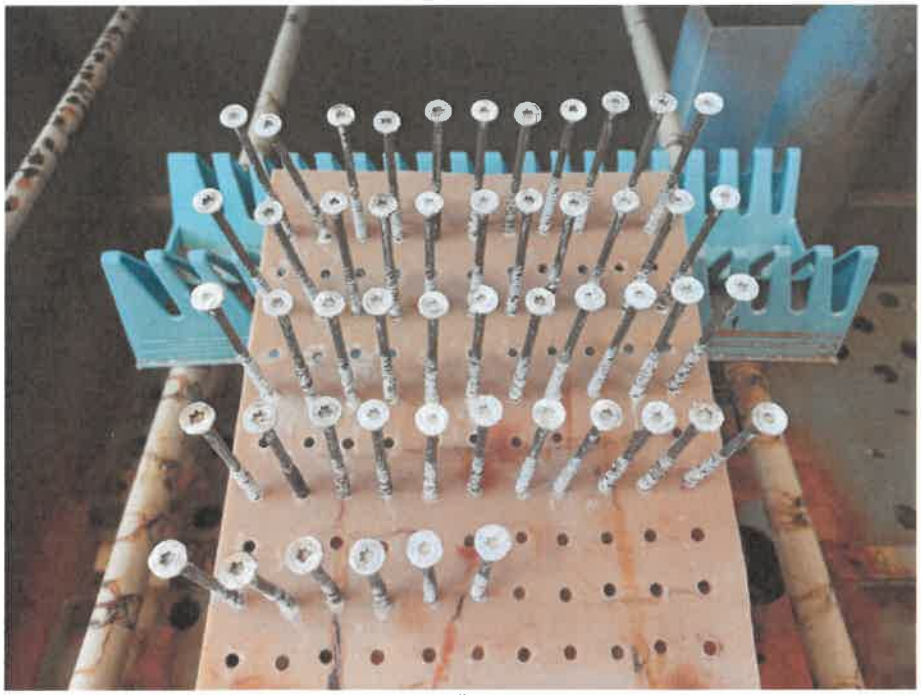
After 5th week



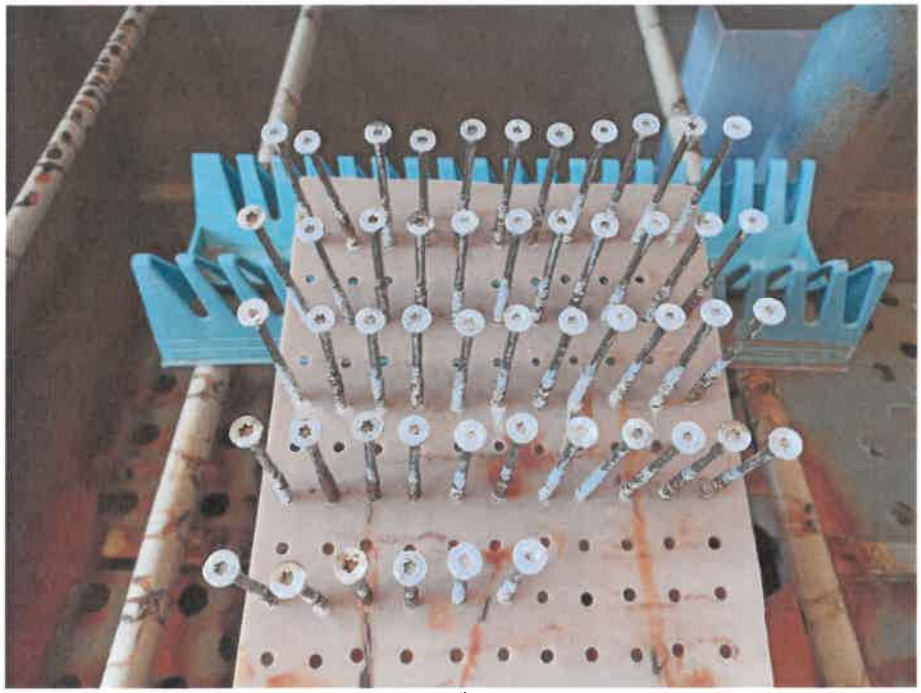
After 6th week



After 7th week



After 8th week



After 9th week

Exposition (weeks)	Sample	Appearance
1	50	- incipient white corrosion on heads (16 pcs)
2		- incipient white corrosion on heads (26 pcs) - white corrosion on heads (24 pcs)
3		- incipient white corrosion on heads (15 pcs) - white corrosion on heads (35 pcs)
4		- incipient white corrosion on heads (5 pcs) - white corrosion on heads (45 pcs)
5		- incipient white corrosion on heads (5 pcs) - white corrosion on heads (45 pcs)
6		- incipient white corrosion on heads (5 pcs) - white corrosion on heads (45 pcs)
7		- white corrosion on all heads
8		- white corrosion on all heads, red corrosion on 1 head (R_p 6)
9		- white corrosion on all heads, red corrosion on 3 heads (R_p 4 and 2)

Remark: 6% of all samples shows base material corrosion.

Evaluation: The test fulfills the requirements of the class **C4(15)** defined in EN 14592:2022

Tested by:	Aneta Monika Kout Michal Štěpán	Date:	2023-05-02	Signed:	
Reviewed and approved by:	Blanka Firstová	Date:	2023-05-02	Signed:	

V. A list of referenced documents

- Order of 2022-11-25 (Order reg. no. J-77985, received on 2022-11-28)
- ČSN EN ISO 9227:2017 Corrosion tests in artificial atmospheres - Salt spray tests
- ČSN EN ISO 6270-2:2018 Paints and varnishes - Determination of resistance to humidity - Part 2: Condensation (in-cabinet exposure with heated water reservoir)
- ČSN EN ISO 10289:2001 Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates - Rating of test specimens and manufactured articles subjected to corrosion tests

Test Report compiled by: Aneta Monika Kout

Test Report approved by: Michal Štěpán
Head of Fasteners and Measurements Department

– End of Test Report –

AKREDITOVANÁ ZKUŠEBNÍ LABORATOŘ č. 1045.1 * STROJÍRENSKÝ ZKUŠEBNÍ ÚSTAV s.p. * 2