DIN EN 927-6:2018-12 (E)

Paints and varnishes - Coating materials and coating systems for exterior wood - Part 6: Exposure of wood coatings to artificial weathering using fluorescent UV lamps and water

Contents

Page

European foreword 4

Introduction 6

1 Scope 7

2 Normative references 7

3 Terms and definitions 7

4 Principle 8

5 Apparatus 8
5.1 Test chamber 8
5.2 Lamps 8
5.3 Device for wetting the test panels 8
5.4 Black panel thermometer 8
5.5 Irradiance control 8

6 Test panels 9
6.1 Wood 9
6.2 Preparation and selection of wood panels 10
6.3 Preparation of coated panels 10
6.3.1 Wood conditioning 10
6.3.2 Preparation of panels for the test coating 10
6.3.3 Conditioning 10

7 Procedure 10
7.1 Examination before exposure 10
7.2 Mounting the test panels 11
7.3 Exposure 11
7.3.1 Exposure cycle 11
7.3.2 Sample rotation and maintenance 11
7.3.3 Duration of test 11
7.4 Examination of test panels 11

8 Precision 12

9 Expression of results and test report 14

Annex A (normative) Details of the test methods 15

A.1 Gloss and change of gloss 15
A.2 Colour and colour change 15
A.3 Blistering 15
A.4 Flaking 15
A.5 Cracking 15
A.6 Chalking 15
A.7 General appearance 16

A.8 Adhesion 16

Annex B (informative) Explanatory notes 17

B.1 Explanation of exposure cycle 17
B.2 Reproducibility 17
B.3 Correlation to natural weathering 17
B.4 Dependency on wood species and substrate 17
B.5 Recommendation of periodical performance assessments 17

Annex C (informative) Test for heartwood in pine 18

Annex D (informative) Water treatment, devices for water purification 19

Annex E (normative) Test for abnormally porous wood 20

Annex F (informative) Alternative procedure for preparation and coating of panels 21

Annex G (informative) Determination of adhesive strength of tape on test surface 22

Bibliography 23