TEST INTERPRETATION

FINISHING

ARTIFICIAL AGING TESTS Of preservation systems for Wood Verandas VIE ET VERANDA Test reports 404/09/374

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1 - PURPOSE

To perform QUV artificial aging tests on fir-tree elements coated with preservationfinishing systems for wood verandas, and to evaluate the durability of tested systems by observing the modifications of the decorative and protective properties of the coatings after being exposed to UV and water.

2 - PRODUCT IDENTIFICATION

> Client: **CETIM**

> Type of product: Northern White Fir-Tree elements coated with finishing systems

> Reception no.: 611 - 1 to 10 and 611 - 1F; 3F; 5F and 7F

> Reception date: 23/11/09

> Product description:

Northern White Fir-Tree elements coated with the following finishing systems:

| | Sanded | Brushed Sanded | Laboratory references | | | |
|------------|---------------|--|-----------------------|-------------|------------------------|--|
| | Wood | Wood | | Sanded Wood | Brushed Sanded Wood | |
| Suppressed | Sample no 1 | Sample no 5 | | 611-1 | 611-5 | |
| references | Sample no 2 | Sample no 6 Sample no 7 Sample no 8 Sample no 10 Sample no 5 F | | 611-2 | 611-6 | |
| | Sample no 3 | | | 611-3 | 611-7 | |
| | Sample no 4 | | | 611-4 | 611-8 | |
| | Sample no 9 | | | 611-9 | 611-10 | |
| | Sample no 1 F | | | 611-1F | 611-5F | |
| | Sample no 3 F | Sample no 7 F | | 611-3F | 611-7F | |

The laboratory referencing follows the chronology of the sample referencing outlined in the table below:

3 - TEXT REFERENCE

See test report 404/09/374

4 - TEST DESCRIPTION

See test report 404/09/374

5 - TEST RESULTS

See test report 404/09/374

Table no. 2 below shows the test results on each sample for each of the tested systems.

| Sample | Defect rating | | | | | | | | |
|-----------------------------|----------------------|------------|----------|---------------------------------|---|--|--|--|--|
| Reference | Change of appearance | Blistering | Cracking | Flaking | Chalking | Comments | | | |
| Specifications of this test | - | 0.3 | 0.7 | 0.3 | - | | | | |
| 611-1 | 4 | 0 | 4 (S3)c | 0 | 0* | Darkening of the colour Erosion with beginning of wood greying + Wood cracking | | | |
| 611-5 | 4 | 0 | 5(S4)c | 0 | 0* | Darkening and lightening of the colour – heterogeneous appearance Erosion with beginning of wood greying + Wood cracking | | | |
| 611-2 | 3 | 0 | 0 | 0 | 0 | Homogenous darkening of the colour | | | |
| 611-6 | 3 | 0 | 0 | 0 | 0 | Homogeneous darkening | | | |
| 611-3 | 4 | 0 | 2(S3)c | 0 | 0* | Darkening of the colour Wood cracking + some zones with erosion | | | |
| 611-7 | 4 | 0 | 4(S4)c | 0 | 0* | Darkening of the homogenous colour + Erosion with greying of wood + Wood crackling | | | |
| 611-4 | 5 | 0 | | ry major eros quantifiable d | Very visible erosion – few products remain at the surface + greying of wood | | | | |
| 611-8 | 5 | 0 | | ry major eros quantifiable d | Very visible erosion – few products remain at the surface | | | | |
| 611-9 | 5 | 0 | 4(S4)c | 0 | 0* | Darkening of the colour + Erosion with greying of the wood +Wood cracking | | | |
| 611-10 | 5 | 0 | 4(S4)c | 0 | 0* | Darkening of the colour Erosion with beginning of greying + Resin exudation + Wood cracking | | | |
| 611-1F | 4 | 0 | 4(S2)c | 0 | 0* | Darkening and lightening of the colour Heterogeneous appearance Erosion with beginning of greying of the wood | | | |
| 611-5F | 5 | 0 | 3(S1)c | 0 | 0* | Darkening and lightening of the colour Heterogeneous appearance Erosion with beginning of greying of the wood | | | |
| 611-3F | 2 | 0 | 2(S2)c | 0 | 3 | Whitening of the colour + Dullness | | | |
| 611-7F | 2 | 0 | 3(S2)c | 0 | 3 | Whitening of the colour + Dullness | | | |

* wrenching of wood fibre after evaluation of the chalking with adhesive tape

Table no. 2: Test results after 12 weeks of aging.

Photos of the samples after aging / References 611-1 to 10



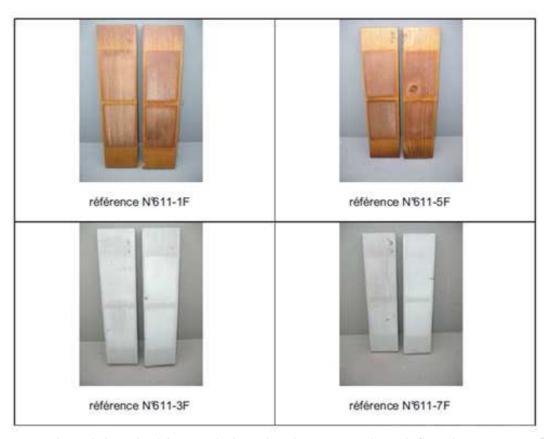
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référence N°611-10

Photos of the samples after aging / References 611-1F; 3F; 5F and 7F



(The non-aged sample is on the right on each photo; there is no non-aged sample for series 611-1, 611-3F, 611-5F and 611-7F)

6 - CONCLUSIONS

Only systems 611-2 and 611-6 are compliant with the specification standards.