

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 preservation-finishing 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 Wood	Brushed Sanded Wood	Laboratory references	
			Sanded Wood	Brushed Sanded Wood
Suppressed references	Sample no 1	Sample no 5	611-1	611-5
	Sample no 2	Sample no 6	611-2	611-6
	Sample no 3	Sample no 7	611-3	611-7
	Sample no 4	Sample no 8	611-4	611-8
	Sample no 9	Sample no 10	611-9	611-10
	Sample no 1 F	Sample no 5 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 Reference	Defect rating					Comments
	Change of appearance	Blistering	Cracking	Flaking	Chalking	
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	Very major erosion Non-quantifiable defect			Very visible erosion – few products remain at the surface + greying of wood
611-8	5	0	Very major erosion Non-quantifiable defect			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



référence N°611-1



référence N°611-5



référence N°611-2



référence N°611-6



référence N°611-3



référence N°611-7



référence N°611-4



référence N°611-8

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référence N°611-9



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.