

TEST REPORT

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Date received: 08/06/16
Date of test: 22/07/16
Date of issue: 09/01/17

**BRENTOL OU
PETERBURI TEE 44
11415 TALLINN
EE - ESTONIA**

Sample name: Radiata pine (Pinus radiata) thermally modified at 220°C

**Natural durability of solid wood against wood-destroying fungi - Part 1:
Basidiomycetes UNI CEN/TS 15083-1:2005**

Timber species: softwood, heat treated
Sampling: done by the orderer
Density of timber: 425 kg/m³
Reference timber species: Pinus sylvestris, Fagus sylvatica
Ageing procedure applied: none
Method of sterilisation: gamma irradiation (25kGy)
Species and strain number of test fungi: Coniophora puteana DSM 3085;
Trametes versicolor DSM 3086

Duration of exposure to fungi: 16 weeks from 05/09/2016 to 27/12/2016
Mean mass loss of reference timber: Pinus sylvestris 34%; Fagus sylvatica 21%
Median mass loss of test timber: 6,51% with Coniophora puteana; 7.98% with Trametes versicolor
Provisional durability class: 2, Durable
Officer in charge of testing: Dr. Elena Conti

Notes:

- The provisional durability class was attributed in accordance with Annex D, Table D.1 of CEN TS 15083-1.

Durability class	Description	% loss in mass
1	Very durable	≤ 5
2	Durable	> 5 to ≤ 10
3	Moderately durable	> 10 to ≤ 15
4	Slightly durable	> 15 to ≤ 30
5	Not durable	> 30

Note:

- The interpretation and practical conclusions that can be drawn from this test report require a specific knowledge of timber.

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Managing Director
Dr. Andrea Giavon

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Table 1

Percentage mass loss of reference wood specimens

Pinus sylvestris with Coniophora puteana	mass loss (%)	Fagus sylvatica with Trametes versicolor	mass loss (%)
1	33,71	1	23,47
2	32,39	2	25,04
3	36,30	3	18,48
4	35,27	4	25,33
5	34,33	5	19,27
6	33,73	6	26,49
7	32,25	7	16,51
8	33,18	8	20,19
9	31,52	9	21,69
10	37,60	10	18,89
mean	34,03	mean	21,54

Note: test valid

Table 2

Moisture content of test wood specimens exposed to fungi

with Coniophora puteana	humidity (%) mean / lowest / highest	with Trametes versicolor	humidity (%) mean / lowest / highest
30 specimens	23/10/44	30 specimens	32/16/67

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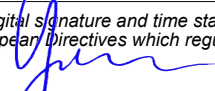
Sample name:

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Table 3
Percentage mass loss of test wood specimens exposed to fungi

with Coniophora puteana	mass loss (%)	with Trametes versicolor	mass loss (%)
1	1,70	1	9,23
2	2,61	2	8,86
3	8,77	3	6,80
4	2,92	4	7,99
5	6,60	5	10,07
6	11,24	6	3,75
7	4,99	7	4,24
8	2,69	8	5,83
9	4,62	9	7,03
10	12,84	10	11,56
11	13,67	11	7,21
12	8,94	12	3,98
13	12,25	13	4,01
14	5,65	14	9,54
15	3,45	15	8,98
16	7,93	16	7,98
17	5,45	17	8,19
18	3,45	18	11,08
19	10,56	19	7,62
20	5,56	20	4,10
21	4,62	21	8,32
22	11,63	22	9,58
23	9,10	23	8,17
24	7,11	24	5,25
25	6,42	25	3,63
26	15,42	26	8,48
27	8,15	27	7,12
28	5,87	28	9,71
29	3,25	29	lost
30	15,58	30	lost
median	6,51	median	7,98

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