IRG/WP/DDB 16-00035

THE INTERNATIONAL RESEARCH GROUP ON WOOD PROTECTION

Section 2 Testing Methodology and Assessment

Douglas fir

Natural durable timber – Field test results
IRG/WP Durability Database

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AIMS AND SCOPE OF THE IRG-WP DURABILITY DATABASE

The overall aim of the IRG-WP durability data base is the allocation of wood durability test results for comparative studies and re-analyses. The data base shall serve as pool for service life prediction and modelling and shall contribute to an enhanced understanding of wood durability. It is an open web-based platform for scientific exchange in the field of wood durability and wood protection.

It is NOT the aim of the data base to promote or denigrate any product or material. The data base will contain raw data only; no statistical evaluation will be included. Thus it will be the exclusive responsibility of the user to interpret the test results published in the data base.

For each data set, the full range of information about the test method, the test material, and other relevant parameters, is required to guarantee reliability of the data. For this reason every data set submitted is reviewed and checked for completeness of all relevant data.

The database allows submission of assessment data from all kinds of standardized and non-standardized wood durability tests.

Records of the IRG/WP Durability data base shall be cited as in the following example:

Brischke C., Meyer L. (2013) Douglas fir. Natural durable timber - Field test results. IRG/WP Durability Database. Stockholm: The International Research Group on Wood Protection, IRG/WP/DDB 13-00001.

INFORMATION

Submission Date	28.01.2016

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TESTED TIMBER

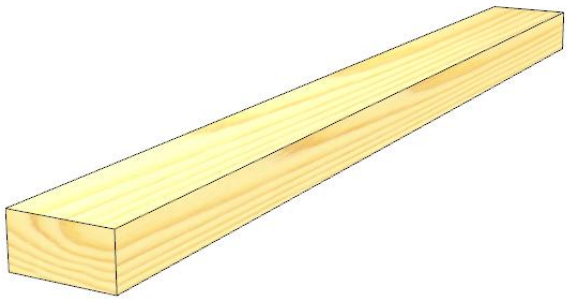
Trade name	Douglas fir
Botanical name	*Pseudotsuga menziesii* Franco.
Origin	Germany
Number of replicates	9

Timber quality	Pure heartwood

REFERENCE TIMBER

Trade name	Scots pine sapwood
Botanical name	*Pinus sylvestris* L.
Origin	Germany
Number of replicates	11

TEST METHODS

Non-standard method	Horizontal double layer (Rapp and Augusta 2004)
Reference	Rapp A.O., Augusta U. (2004) The full guideline for the "double layer test method" – A field test method for determining the durability of wood out of ground. Stockholm: The International Research Group on Wood Protection, IRG/WP/04-20190.
Specimen dimension and shape	25 x 50 x 500 mm³
Sketch of specimen (optional)	
Rating scheme	0 (sound), 1 (slight decay), 2 (moderate decay), 3 (severe decay), 4 (failure) after EN 252 (1989). Half ratings were permitted.
Address of test site	Technological Institute FCBA, Allée de Boutaut, BP 227, F-33028 Bordeaux Cedex
Geographic coordinates (optional)	44°86'88,37''N, - 0°57'56,41''E
Start of test	April 13 2001
Last evaluation	September 30 2008

Status of test terminated

RESULTS

Assessment

Material	***Pseudotsuga menziesii* Franco.**					
Date	**30.08.2002**	**10.04.2003**	**15.04.2004**	**29.04.2005**	**11.10.2006**	**26.09.2007**
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	0	0	0

Material	***Pseudotsuga menziesii* Franco.**					
Date	**30.09.2008**					
Assessment	7	8	9	10	11	12
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	0					
2	0					
3	0					
4	0					
5	1					
6	1					
7	0					
8	0					
9	0					

Assessment Reference

Material	***Pinus sylvestris* L. sapwood**					
Date	**30.08.2002**	**10.04.2003**	**15.04.2004**	**29.04.2005**	**11.10.2006**	**26.09.2007**
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	0	0	0	0	3	4
2	0	0	0	0	3	4
3	0	0	0	0	3	4
4	0	0	0	0	2	3
5	0	0	0	0	2	3
6	0	0	0	0	2	3
7	0	0	0	0	3	3
8	0	0	1	1	3	4
9	0	1	1	1	3	4
10	0	0	1	1	2	3
11	0	0	0	1	2	3

Material	***Pinus sylvestris* L. sapwood**					
Date	**30.09.2008**					
Assessment	7	8	9	10	11	12
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	4					
2	4					
3	4					
4	3					
5	3					
6	3					
7	4					
8	4					
9	4					
10	4					
11	3					

REFERENCES

Brischke C, Rapp AO (2008) *Dose–response relationships between wood moisture content, wood temperature and fungal decay determined for 23 European field test sites*. Wood Science and Technology 42: 507-518