

THE INTERNATIONAL RESEARCH GROUP ON WOOD PROTECTION

Section 2

Testing Methodology and Assessment

Norway spruce

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

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Disclaimer

The responsibility for the data presented in this paper falls to the authors exclusively. The data presented are raw test data and intended to get used for scientific purposes only.

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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

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TESTED TIMBER

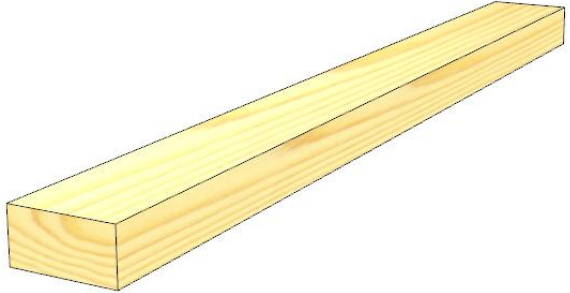
Trade name Norway spruce
Botanical name *Picea abies* Karst.
Origin Slovenia
Number of replicates 19

REFERENCE TIMBER

Trade name Scots pine sapwood
Botanical name *Pinus sylvestris* L.
Origin Slovenia
Number of replicates 9

TEST METHODS

Standard method Graveyard test - EN252 (1989)

Reference	EN 252 (1989) Field test method for determining the relative protective effectiveness of a wood preservative in ground contact. European Committee for Standardization
Specimen dimension and shape	25 x 50 x 500 mm ³
Sketch of specimen (optional)	
Rating scheme	0 (sound), 1 (slight decay), 2 (moderate decay), 3 (severe decay), 4 (failure) after EN 252 (1989)
Address of test site	Silvaprodukt SI-1292 Ig Slovenia
Geographic coordinates (optional)	45°95'36,73"N, 14°53'66,06"E
Start of test	September 23 2009
Last evaluation	October 05 2015
Status of test	still running

RESULTS

Assessment

Material	<i>Picea abies</i> Karst.					
Date	23.09.2011	20.09.2012	04.10.2013	01.10.2014	05.10.2015	
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	2	2	2	3	3	
2	2	3	4	4	4	
4	2	2	3	3	3	
5	1	2	3	3	3	
6	2	3	3	3	3	
7	2	3	3	3	3	
8	2	3	3	3	4	
9	2	3	3	3	3	
10	2	3	3	3	4	
11	2	4	4	4	4	
12	2	2	4	4	4	
13	0	2	4	4	4	
14	2	2	3	3	4	
15	1	2	4	4	4	
16	2	2	3	3	4	
17	2	2	3	3	3	
18	2	2	3	3	4	
19	2	3	3	4	4	
20	1	2	3	3	3	

Decay types

Material	<i>Picea abies</i> Karst.					
Date	23.09.2011	20.09.2012	04.10.2013	01.10.2014	05.10.2015	
Assessment	1	2	3	4	5	6
Replicate ID						
1	S	S	S	S	S	
2	S	S	S	S	S	
4	S	S	S	S	S, B	
5	S	S	S	S	S	
6	S	S	S	S	S	
7	S	S	S	S	S	
8	S	S	S, B	S	S	
9	S	S	S	S	S	
10	S	S	S	S	S	
11	S	S	S	S	S	
12	S, B	S, B	S	S	S	
13	S	S	S	S	S	
14	S	S	S	S	S	
15	S	S	S	S	S	
16	S	S	S, B	S	S	
17	S	S	S	S	S	
18	S	S	S	S	S, W	
19	S	S	S	S	S	
20	S	S	S, B	S	S	

W = White rot, B = Brown rot, S = Soft rot

Assessment Reference

Material	<i>Pinus sylvestris</i> L.					
Date	23.09.2011	20.09.2012	04.10.2013	01.10.2014	05.10.2015	
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	1	2	3			
2	1	1	2	2	3	
3	1	2	2	2	2	
4	1	1	1	1	2	
5	2	2	3	3	3	
6	2	2	2	3	4	
7	1	2	2	2	3	
8	1	2	2	3	4	
9	1	2	3	3	4	
10	1	1	2	3	4	

Decay types reference

Material	<i>Pinus sylvestris</i> L.					
Date	23.09.2011	20.09.2012	04.10.2013	01.10.2014	05.10.2015	
Assessment	1	2	3	4	5	6
Replicate ID						
1	S	S	S			
2	S	S	S	S	S	
3	S	S	S	S	S	
4	S	S	S	S	S	
5	S	S	S	S	S	
6	S	S	S	S	S	
7	S	S	S	S	S	
8	S	S	S	S	S	
9	S	S	S	S	S	
10	S	S	S	S	S	

W = White rot, B = Brown rot, S = Soft rot