

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

Submission Date 15.12.2015

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TESTED TIMBER

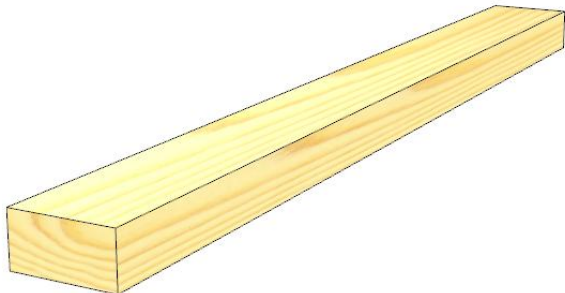
Trade name Norway spruce
Botanical name *Picea abies* Karst.
Origin Slovenia
Number of replicates 10

REFERENCE TIMBER

Trade name None
Botanical name
Origin
Number of replicates

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 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	University Ljubljana Jamnikarjeva 101 SI-1000 Ljubljana Slovenia
Geographic coordinates (optional)	46°2'55,57"N, 14°28'44,66"E
Start of test	June 2006
Last evaluation	June 2015
Status of test	terminated

RESULTS

Assessment

Material	<i>Picea abies</i> Karst.					
Date	28.05.2007	19.06.2008	03.06.2009	07.06.2010	31.05.2011	02.06.2012
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	0	1	2	3	3	4
2	0	1	1	3	3	3
3	0	1	2	3	3	4
4	1	1	2	4	4	4
5	0	2	2	3	3	4
6	0	0	1	1	3	3
7	0	0	1	3	3	3
8	1	0	2	2	4	4
9	0	2	3	3	3	3
10	0	0	2	3	3	4

Material	<i>Picea abies</i> Karst.					
Date	02.07.2013	10.06.2014	03.06.2015			
Assessment	7	8	9	10	11	12
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	4	4	4			
2	4	4	4			
3	4	4	4			
4	4	4	4			
5	4	4	4			
6	3	3	4			
7	4	4	4			
8	4	4	4			
9	3	4	4			
10	4	4	4			

Decay types

Material	<i>Picea abies</i> Karst.					
Date	28.05.2007	19.06.2008	03.06.2009	07.06.2010	31.05.2011	02.06.2012
Assessment	1	2	3	4	5	6
Replicate ID						
1		B	B	B	B	B
2		B	B	B	B	B
3		B	B	B	B	B
4	B	B	B	B	B	B
5		B	B	B	B	B
6			B	B	B	B
7			B	B	B	B
8	B		B	B	B	B
9		B	B	B	B	B
10			B	B	B	B

Material	<i>Picea abies</i> Karst.					
Date	02.07.2013	10.06.2014	03.06.2015			
Assessment	7	8	9	10	11	12
Replicate ID						
1	B	B	B			
2	B	B	B			
3	B	B	B			
4	B	B	B			
5	B	B	B			
6	B	B	B			
7	B	B	B			
8	B	B	B			
9	B	B	B			
10	B	B	B			

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