

THE INTERNATIONAL RESEARCH GROUP ON WOOD PROTECTION

Section 2

Testing Methodology and Assessment

Scots pine sapwood

**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 Scots pine sapwood
Botanical name *Pinus sylvestris* L.
Origin Sweden
Number of replicates 10

REFERENCE TIMBER

Trade name None

TEST METHODS

Standard method Horizontal lap-joint test
Alteration of standard (optional) The samples constitute controls in a lap-joint test of copper-based wood preservatives produced by different manufacturers. No public report of the test of preservatives is expected for the time being.

Reference	ENV 12037 (1996) Wood preservatives - Field test method for determining the relative protective effectiveness of a wood preservative exposed out of ground contact - Horizontal lap-joint method. European Committee for Standardization
Specimen dimension and shape	38 x 85 x 180 mm ³
Rating scheme	<p>0 (sound), 1 (slight decay), 2 (moderate decay), 3 (severe decay), 4 (failure) after ENV 12037 (1996); upper surface, lower surface and lap area were assessed separately.</p> <p>The last relevant inspection was carried out in 2009 when all controls had reached rating 4. There was no inspection between 2004 and 2009. Rating 4 was probably reached sooner in most cases.</p>
Address of test site	SP field test site, Borås, SE-501 15 Sweden
Geographic coordinates (optional)	57°71'48,95"N, 12°88'73,54"E
Start of test	1999
Last evaluation	2009
Status of test	still running

RESULTS

Assessment – Upper specimen side

Material	<i>Pinus sylvestris</i> L. sapwood					
Date	2000	2001	2002	2004	2009	
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	1	1	2	1	4	
2	1	1	1	2	4	
3	1	1	2	2	4	
4	1	1	2	2	3	
5	1	1	2	2	4	
6	1	1	2	2	4	
7	1	1	1	2	4	
8	1	1	2	2	4	
9	1	1	2	2	4	
10	1	1	2	2	4	

Assessment – Lower specimen side

Material	<i>Pinus sylvestris</i> L. sapwood					
Date	2000	2001	2002	2004	2009	
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	1	1	3	2	4	
2	1	1	2	2	4	
3	1	1	2	2	4	
4	1	1	2	2	3	
5	1	1	2	3	4	
6	1	1	2	2	4	
7	1	1	2	3	4	
8	1	1	2	3	4	
9	1	1	2	2	4	
10	1	1	2	3	4	

Assessment – Joint area of specimens

Material	<i>Pinus sylvestris</i> L. sapwood					
Date	2000	2001	2002	2004	2009	
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	1	1	3	3	4	
2	1	1	1	4	4	
3	1	1	2	3	4	
4	1	1	2	3	4	
5	1	1	2	3	4	
6	1	1	2	3	4	
7	1	1	2	3	4	
8	1	1	2	4	4	
9	1	1	2	3	4	
10	1	1	3	3	4	