IRG/WP/DDB 16-00009

THE INTERNATIONAL RESEARCH GROUP ON WOOD PROTECTION

Section 2 Testing Methodology and Assessment

Scots pine

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	17.01.2016

AUTHORS

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TESTED TIMBER

Trade name	Scots pine
Botanical name	*Pinus sylvestris* L.
Origin	Sweden
Number of replicates	10
Sampling	The test material was supplied by a local timber yard (Borås, Sweden). No data about specific origin of the wood, but most likely Southern Sweden.
Timber quality	Heartwood

REFERENCE TIMBER

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

Sampling	The test material was supplied by a local timber yard (Borås, Sweden). No data about specific origin of the wood, but most likely Southern Sweden.
Timber quality	Sapwood

TEST METHODS

Standard method	Graveyard test - EN252 (1990)
Reference	EN 252 (1990) Field test method for determining the relative protective effectiveness of a wood preservative in ground contact. European Committee for Standardization AWPA E7 (2015) Standard Field Test for Evaluation of Wood Preservatives to be Used in Ground Contact (UC4A, UC4B, UC4C); Stake Test. American Wood Protection Association. as per AWPA E7-09: 10 (sound), 9.5 (trace of suspicion of attack), 9 (slight decay up to 3% of cross section), 8 (moderate decay from 3 to 10% of cross section), 7 (moderate/severe decay from 10 to 30% of cross section), 6 (severe decay from 30 to 50% of cross section), 4 (very severe decay from 50 to 75% of cross section), 0 (failure). The ongoing test is part of a test program started within the Swedish national research project WoodBuild 2008-2013. A report containing a full description of all tests and results after five years' exposure is expected in 2017.
Specimen dimension and shape	25 x 50 x 500 mm^3
Rating scheme	Presently according to AWPA E7 (2015)
Address of test site	Hilo, Hawaii, USA
Geographic coordinates (optional)	19°40'05,45"N, -154°92'70,34"E
Start of test	December 13 2011
Last evaluation	December 15 2015

Status of test still running

RESULTS

Assessment

Material	***Pinus sylvestris* L.**					
Date	**07. 12.2012**	**03.05.2013**	**10.12.2013**	**09.12.2014**	**09.12.2015**	
Assessment	1	2	3	4	5	6
Replicate ID	[10-0]	[10-0]	[10-0]	[10-0]	[10-0]	[10-0]
1	9	9	9	8	8	
2	10	9	9	4	4	
3	9	8	8	4	0	
4	9	8	8	0	0	
5	9,5	9	9	8	8	
6	10	9	9	8	7	
7	9,5	8	8	4	0	
8	9	9	8	4	0	
9	9	8	8	4	7	
10	9,5	9	9	4	0	

Assessment Reference

Material	***Pinus sylvestris* L.**					
Date	**07. 12.2012**	**03.05.2013**	**10.12.2013**	**09.12.2014**	**09.12.2015**	
Assessment	1	2	3	4	5	6
Replicate ID	[10-0]	[10-0]	[10-0]	[10-0]	[10-0]	[10-0]
1	9	7	0	0	0	
2	0	0	0	0	0	
3	9.5	8	0	0	0	
4	0	0	0	0	0	
5	9	0	0	0	0	
6	9	7	0	0	0	
7	9.5	7	missing	missing	missing	
8	10	4	0	0	0	
9	7	0	0	0	0	
10	9	0	0	0	0	

REFERENCES

Meyer L., Brischke C., Pilgård A. (2012) *Moisture performance based wood durability testing.* Stockholm: The International Research Group on Wood Protection, IRG/WP/12-20495.