IRG/WP/DDB 16-00011

THE INTERNATIONAL RESEARCH GROUP ON WOOD PROTECTION

Section 2 Testing Methodology and Assessment

Siberian larch

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

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TESTED TIMBER

Trade name	Siberian larch
Botanical name	*Larix sibirica* Ledeb.
Origin	Siberia, Russia
Number of replicates	10

REFERENCE TIMBER

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

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 This test was initiated with financial support from The Swedish Forest Industries Federation. The first progress report was published in 2003: Edlund, M.-L. (2003) Beständighet hos miljöanpassat träskydd. Delrapport 1. SP Rapport 2003:26
Specimen dimension and shape	25 x 50 x 500 mm^3
Rating scheme	0 (sound), 1 (slight decay), 2 (moderate decay), 3 (severe decay), 4 (failure) after EN 252 (1990)
Address of test site	SP field test site, SE-501 15 Borås, Sweden
Geographic coordinates (optional)	57°71'48,95"N, 12°88'73,54"E
Start of test	2001
Last evaluation	2014
Status of test	still running

RESULTS

Assessment

Material	***Larix sibirica* Ledeb.**					
Date	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	1	1	1	1	2	2
2	1	1	1	0	1	2
3	1	1	1	2	3	3
4	1	1	2	2	3	3
5	1	1	1	1	2	2
6	1	0	2	2	3	3
7	0	1	1	2	2	2
8	1	0	1	2	3	4
9	2	1	0	2	2	2
10	1	0	1	1	2	2

Material	***Larix sibirica* Ledeb.**					
Date	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Assessment	7	8	9	10	11	12
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	2	2	2	2	2	3
2	1	2	3	3	3	3
3	3	4	4	4	4	4
4	4	4	4	4	4	4
5	2	2	2	2	2	2
6	3	3	3	3	3	3
7	2	2	2	3	3	3
8	4	4	4	4	4	4
9	2	2	3	3	3	4
10	2	2	2	3	3	3

Material	***Larix sibirica* Ledeb.**					
Date	**2014**					
Assessment	13	14	15	16	17	18
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	3					
2	3					
3	4					
4	4					
5	2					
6	3					
7	3					
8	4					
9	4					
10	3					

Assessment Reference

Material	***Pinus sylvestris* L.**					
Date	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Assessment	1	2	3	4	5	6
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	4	4	4	4	4	4
2	1	2	4	4	4	4
3	1	2	4	4	4	4
4	1	2	4	4	4	4
5	2	4	4	4	4	4
6	2	4	4	4	4	4
7	1	1	4	4	4	4
8	1	2	3	4	4	4
9	4	4	4	4	4	4
10	1	2	4	4	4	4

Material	***Pinus sylvestris* L.**					
Date	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
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	4	4	4
2	4	4	4	4	4	4
3	4	4	4	4	4	4
4	4	4	4	4	4	4
5	4	4	4	4	4	4
6	4	4	4	4	4	4
7	4	4	4	4	4	4
8	4	4	4	4	4	4
9	4	4	4	4	4	4
10	4	4	4	4	4	4

Material	***Pinus sylvestris* L.**					
Date	**2014**					
Assessment	13	14	15	16	17	18
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]
1	4					
2	4					
3	4					
4	4					
5	4					
6	4					
7	4					
8	4					
9	4					
10	4					

REFERENCES

Edlund M.-L. (2004) Durability of some alternatives to preservative-treated wood. Stockholm: The International Research Group on Wood Protection, IRG/WP/04-30353

Edlund M.-L., Jermer J. (2007) Durability of some alternatives to preservative-treated wood. Stockholm: The International Research Group on Wood Protection, IRG/WP/07-30442

Larsson Brelid P., Edlund M.-L. (2013) Durability of some alternatives to CCA-treated wood. Results after 11 years exposure. Stockholm: The International Research Group on Wood Protection, IRG/WP/13-30633