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

Alfredsen, G.; Flæte, P.-O.

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.

IRG SECRETARIAT
Box 5609
SE-114 86 Stockholm
Sweden
www.irg-wp.org

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 18.01.2016

AUTHORS

Corresponding author Gry Alfredsen

Email gry.alfredsen@nibio.no

Institution Norwegian Institute of Bioeconomy Research

Street/PO Box Box 115

City Ås

Zip Code NO-1431

Country Norway

Author 2 Per-Otto Flæte

Email Per.otto.flate@treteknisk.no

Institution Norwegian Institute of Wood Technology

Street/PO Box Box 113, Blindern

City Oslo

Zip Code NO-0314

Country Norway

TESTED TIMBER

Trade name Norway spruce

Botanical name *Picea abies* Karst.

Origin Norway

Number of replicates 10

Timber quality 3 mm annual rings

REFERENCE TIMBER

Trade name Scots pine sapwood

Botanical name Pinus sylvestris L.

Origin Norway

Number of replicates 10

TEST METHODS

Standard method Graveyard test - EN252 (1990)

Reference EN 252 (1990) Field test method for

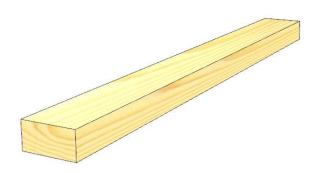
determining the relative protective effectiveness of a wood preservative in ground

contact. European Committee for

Standardization

Specimen dimension and shape $25 \times 50 \times 500 \text{ mm}^3$

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 Sørkedalen, Oslo, Norway

Geographic coordinates (optional) 60°01'29,4"N, 10°35'34,3"E

Start of test September 15 2004

Last evaluation September 15 2008

Status of test terminated

RESULTS

Assessment

Material	Picea abies Karst.								
Date	15.09.2004	15.09.2005	15.09.2006	15.09.2007	15.09.2008				
Assessment	1	2	3	4	5	6			
Replicate ID	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]	[0-4]			
1	2	4	4	4	4				
2	2	2	4	4	4				
3	1	2	3	4	4				
4	2	4	4	4	4				
5	2	4	4	4	4				
6	2	4	4	4	4				
7	1	4	4	4	4				
8	2	4	4	4	4				
9	1	2	2	4	4				
10	2	4	4	4	4				

Assessment Reference

Material	Pinus sylvestris L.								
Date	15.09.2004	15.09.2005	15.09.2006	15.09.2007	15.09.2008				
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	3	4				
2	0	1	2	4	4				
3	1	3	4	4	4				
4	0	1	2	2	4				
5	1	2	4	4	4				
6	1	2	2	4	4				
7	1	1	2	4	4				
8	1	2	3	4	4				
9	0	2	2	4	4				
10	1	2	4	4	4				

REFERENCES

Flæte P.O., Alfredsen A., Evans F.G. (2011): Natural durability of wood tested in different environments in Northern Europe. Stockholm: The International Research Group on Wood Protection, IRG/WP/11-10747.