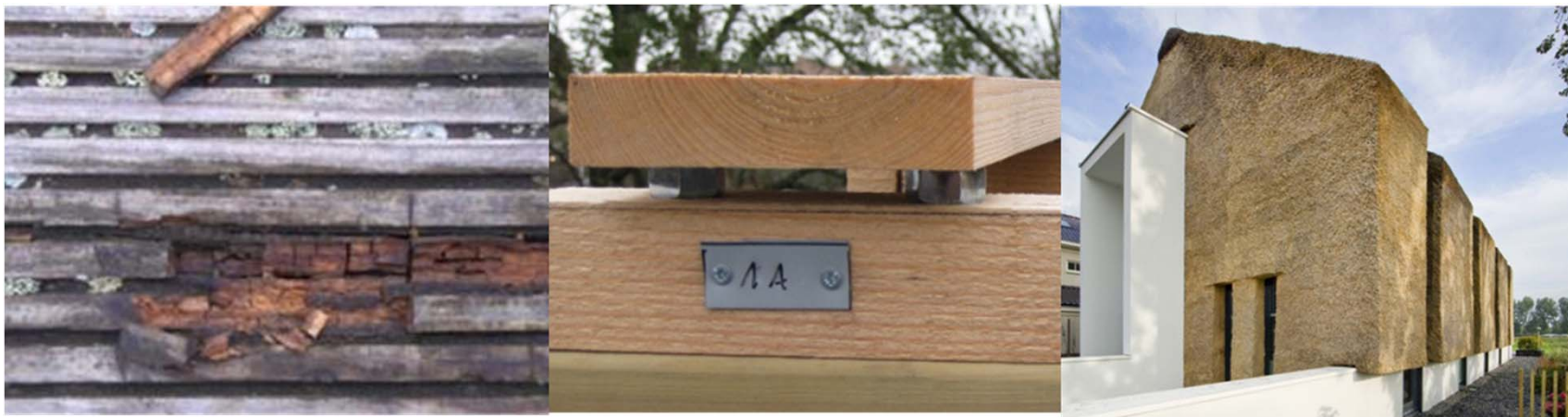


Ongoing R&D projects in COST member countries



COST FP1303: Performance of bio-based building materials

Belgium



UGent – Woodlab

www.woodlab.be



CTIB-TCHN, Brussels

www.ctib-tchn.be



CRNFB - DTB, Gembloux

environnement.wallonie.be/crnfb/site/DTB/DTB01.cfm



COST FP1303: Performance of bio-based building materials

Ghent University (UGent) – **Laboratory of Wood Technology (Woodlab)**

The Laboratory of Wood Technology (Woodlab) is part of the department of Forest and Water Management, situated at the Faculty of Bioscience Engineering at Ghent University. The research group Woodlab is headed by **Prof. Joris VAN ACKER**

Coupure Links 653
B-9000 Gent
Tel. + 32 9 264 61 20
www.woodlab.be

Researchers: Jan Van den Bulcke, Nele Defoirdt, Imke De Windt,
Wanzhao Li, Guillermo Vidal,...

Networking: InnovaWood, IRGWP, CEN TC 38, COST Actions, FAO-IPC,...

KEY RESEARCH PROJECTS:

PerformWood

The objective of this EU-project is to kick-start the development of new standards to enable the service life specification of wood and wood based materials for construction.

<http://www.performwood.eu/>

Coordination: Ed Suttie, BRE – UK



DO-IT Houtbouw

This national project has a focus on timber frame constructions and innovations toward the EU 2020 goals related to energy.

Coordination: Lieven De Boever, CTIB-TCHN - BE



KEY RESEARCH PROJECTS:

SILEX

The overall objective of this EU Life+ project is to extend the lifetime and usability of constructions made of wood and/or cement, by applying environmental friendly silicon-based water repellents.

<http://www.dowcorning.com/lifeplus>

Coordination: Jean-Paul Lecomte, Dow Corning - BE



KEY RESEARCH PROJECTS:

Validwoodcoat

This national project aims at implementation of test methodology developed in earlier project Assesswoodcoat and Optiwoodcoat to enhance potential of service life prediction as developed during the WoodWisdom Woodexter project.

Coordination: Inge Wuijters, CTIB-TCHN - BE

TimberFrameRot

The main focus of this national project main is on the development of an overall methodology to assess moisture related durability of building components through interdisciplinary research on mould growth and wood rot for timber frame constructions in dwellings.

Coordination: Prof. Staf Roels, KULeuven - BE

KEY RESEARCH INTERACTIONS:

Natural Fibre Composites

Both at UGent (Prof. Wim Van Paepegem) and interacting with KULeuven (Prof. Ignaas Verpoest) at national and on the international level (CELC) several initiatives on networking and research have been established dealing with service life prediction of both short and long natural fibre.

Wood Based Panels

Mainly through the PhD work of Wanzaho Li specific wood based panels (plywood, MDF, OSB,...) are assessed in relation to moisture dynamics (Time of Wetness) and risk assessment for wood rot.

WarringtonFireGent

Closely linked to UGent (initiated as a spin-off) a key testing facility for fire testing is present. <http://www.wfrgent.com/>



CTIB-TCHN - **Belgian Institute for Wood Technology**

CTIB-TCHN is the Belgian technical Centre of wood transformation and furniture: research, certification, technical support.

Director: **Alain GROSFILS**

Allée Hof ter Vleest, 3
B 1070 Bruxelles
Tel. +32 2 558 15 50
www.ctib-tchn.be

Contact: Sébastien Coudeville, Ward Van Peteghem, Lieven De Boever,
Hugo Coppens, Inge Wuijters,...



CTIB-TCHN is steering the Belgian procedure to be followed in order to put a **commercial wood preservative formulation** on the Belgian market which consists in three steps, each one dealing with a specific aspect:

- the authorization granted for selling the product (legal mandatory step);
- the homologation of the product performances (voluntary step);
- the technical approval of the commodities for the product (voluntary step).

CTIB -TCHN guides technical approval ATG delivered by the UBAtc-BUtg. An ATG provides the user with specifications regarding the application and commodities for which the efficacy of the product has been demonstrated. Approved industrial treatment processes according to



ISPM 15 Certificates delivered by CTIB-TCHN in Belgium

KEY RESEARCH PROJECTS:

DO-IT Houtbouw: Sustainable innovation in wooden buildings



Assesswoodcoat
Optiwoodcoat
Validwoodcoat



CRNFB - DTB
Centre de Recherche de la Nature, des Forêts et du Bois
Direction de Technologie du Bois

Avenue Maréchal Juin, 23
B-5030 GEMBLOUX
+ 32 81 62 64 61
b.jourez@mrw.wallonie.be

Scientific responsible: Benoit **JOUREZ**

KEY RESEARCH TOPICS:

Natural durability of larch, robinia (black locust), coconut lumber,...

Phytosanitary treatment by means of **microwave**

Insect testing



Specialist equipment - Belgium



UGENT: SERVICE LIFE PREDICTION ...

Fungal testing



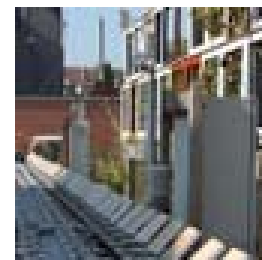
Coating weathering testing



Accelerated ageing



Moisture dynamics (CMM)

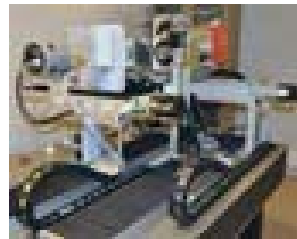


Specialist equipment - Belgium



UGENT: STRUCTURAL ANALYSIS ...

X-ray tomography

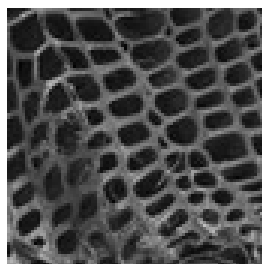


*Transnational access through EU project
Trees4Future*



<http://www.trees4future.eu/transnational-accesses.html>

Cryo-SEM



Specialist equipment



INSTITUTE	Properties						Environmental				
	Natural Durability	Moisture / sorption studies	Resistance to mould	Fire resistance / reaction to fire	Insect /termites / pests	Dimensional stability	Life Cycle Assessments	Whole Life evaluations	Product accreditation	Emission testing	Environmental Product Declaration (EPD)
UGent	X	X	X	X		X	X	X		X	X
CTIB-TCHN							X	X	X	X	X
CRNFB	X				X						

Specialist equipment



	Laboratory tests						Field tests				
INSTITUTE	Natural Durability	Mould resistance	Insect /termite testing	Leaching / weathering	Sorption studies	Dimensional stability	In ground contact tests	Out of ground contact tests	Natural weathering	Surface performance / coatings	Moisture data logging
UGent	X	X		X	X	X	X	X	X	X	X
CTIB-TCHN									X		
CRNFB	X		X								