# Towards moisture safe buildings- an international research roadmap

## Background

After many years of research and development in moisture performance and durability, there are still a lack of design tools and knowledge in the building industry to build moisture safe buildings. To improve the application of research, solutions focusing on resilience in buildings, communications between the research community and the different stakeholders’ groups need to be improved. An ambitious target has been set that after 2020 every new change within a building will increases moisture safety and all new buildings will be moisture safe.

What is missing for contractors to avoid moisture damages from design, during the work, afterwards? What is missing to put innovative building products on the market which might avoid moisture damages? What is necessary to know before a material is placed on the market as a product?

To change the current situation, the knowledge that is collected and shared during this project will be organized in a ‘road map’ showing the entire process of testing and certification/verification that a material or framework needs to pass from a research laboratory to become a product on the market. Here, a road map can be a flow chart, matrix or similar organizing diagram

## Aim

The aim is to propose improved design solutions based on a case study building. The aim of this project is also to identify demonstration buildings, demonstration communities, and monitoring showing risk of moisture damage in buildings.

## Methods

Modelling of the energy, heat and moisture performance of specific building details, interviews and questionnaires. The project is done in collaboration with the industry.

## Required qualifications

Good knowledge of building technology, heat and moisture transfer in buildings.

## Relation to the research

The project is part of the framework of CIB W040 ‘Heat and Moisture transfer in Buildings’ lead by Prof. Thomas Bednar, TU Wien. The project is run in parallel at several international universities.

## Number of students in the project

This project is for two students

## Supervisors

XXXX

XXXXXXX

## Examiner

XXXXX