

## **NVVT Company visit Tuesday 01 November 2024 to SKH/SHR**

SKH/SHR

Nieuwe kanaal 9e/f

6709 PA Wageningen

12:30 – 13:30 Reception with lunch

13:30 – 16:30 Laboratory visit - Presentations - Networking

16:30 – 17:30 Drinks and snacks

When you participate in this company visit, you give the organization permission to use images (photo and video) of you for communication purposes (LinkedIn). If you do not wish this, please let us know when you register.

Limited number of participants, for NVVT-members only. Latest subscription date: 25 October 2024.

### **Laboratory visit:**

- Workshop

Fully equipped workshop for making test panels and woodworking

- Burglary hall

Test stand where facade elements can be tested for burglar resistance

- Technology lab

Laboratory including the original set-up in which Accoya was developed

- Coating lab

Laboratory where formulation, application and testing of the paint systems under investigation can be performed

- Furniture lab

Test lab for testing office and nursery furniture in particular

- Wind and waterproofing setup and various climate chambers

Set-up for assessing the wind and water tightness of entire façades or façade-filling elements and various climate chambers in which, for example, an indoor climate can be simulated on one side and an outdoor climate on the other side at the same time

- Chemical lab

Research into wooden piles and mold infestation, among other things

- Various tensile test machines for research into the strength of wooden beams and roofs, among other things.

### **Presentations:**

**Robert Daamen: Quality and Bio-based content guaranteed by KOMO certification.**

Since over 20 years we have a unique certification standard (KOMO AD0814 and 0817) in the Netherlands for water based coatings for the use in the joinery industry. In this certification standard we make use of the in Europe accepted EN 927 series for determining the properties of a film forming coating on timber and added some tests to get a better understanding of the performance of the coating system when applied under factory conditions. Besides the unique tests in which properties are checked after minimal drying conditions, the certified systems are also audited and tested on an annual basis. In this way the production, quality control, handling of raw materials and the formulation of the certified products is controlled. This KOMO certification is unique for coating systems in the joinery industry and has pushed paint manufacturers and suppliers of resins for the coating industry to improve the performance of water based coatings.

Since the world is changing and we have to focus more and more on sustainable solutions, we have combined the unique KOMO certification standards for coatings (AD 0814, AD0817) with a new KOMO certification standard (AD7010), which focusses on the bio-based content of KOMO certified products. Combining these unique certification standards we can give an independent judgement about both the quality of the coating system as well as the biobased content of the coatings used

**Niels Lutke Schipholt: A decade of testing water permeability industrial paint systems for joinery, an overview of performances and requirements.**

For over 20 years SHR has been involved in the implementation of water based industrial paint systems for joinery applications. Therefor directly involved in the KOMO certification process of these paint systems especially for the performance requirements specified for the Dutch construction practice. KOMO certification implies annual product confirmation tests that resulted in an interesting dataset of useful information. In this paper an overview will be presented of a decade of testing of, and developments in paint systems and requirements for joinery applications in the Netherlands. Focus will be laid on water permeability after minimal drying conditions, typical for the Dutch situation as well as after full drying of the paint film. What has changed in the performance in the period 2005 – 2015 as a result of product developments and introduction of new paint systems?

**René Klaassen: Wooden pile foundations**

In this presentation, René Klaassen will take you into the world of wooden pile foundations as they carry modern houses, historical buildings, quay walls, bridges and locks in the Netherlands. Provided they are well made and using the right timber species in the right qualities, wooden pile foundations can last for hundreds of years. But they are not always well made and due to too low groundwater levels (drought, construction activities, sewers, trees), there are four major threats to this kind of construction. The threats and their consequences are explained, as are the techniques on how to map the quality of these types of foundations and the solutions that are available for them. In the issues surrounding wooden pile foundations, SHR is a key player that brings timber knowledge and provides and elaborates solutions. One of these solutions (a practice preservation) will be explained. In February 2024, an advice was given to the Dutch government on the problems surrounding foundations and in it, it was reported that the damage could amount to as much as 60 billion euros. The presentation will end with the contributions SHR in solving these problems.