

#### The exhibition

#### Touch, feel and try out the superpowers of wood

Can you recognize a tree species by smell? What is the sound of wood? How do wooden buildings withstand earthquakes and fires?

The Wild Wild Wood exhibition reveals the many excellent properties of the material.

Wood has many uses, but it is also a carbon sink – a material for building sustainable societies.

The natural properties of wood are excellent for a multitude of uses. Wood can be used to build almost anything from furniture to bridges and skyscrapers. Although fully natural, we refer to the versatile properties of wood as superpowers to draw attention to how invaluable they are.

In Wild Wild Wood exhibition, you can experience the superpowers and warm touch of wood!

The Wild Wild Wood exhibition has been created in extensive collaboration with our partners who research, refine, and utilise wood.

The key message of the exhibition is that wood is a renewable resource material to build sustainable societies.

### Wild Wild Wood

#### **Technical features**

 Exhibits
 20 + 2

 Size
 600 m²

Ceiling height General height 3-4 meters;

the maximum height 5 meters (Charmed by a tree, option).

(+ 1.0 m installation space).

Other requirements Power 240 V electricity supply

Rental period Negotiable

Other costs Shipping, insurance, installation, de-installation

text translation, graphics production, AV production, consumables

Languages Designed for three (3) languages

Shipping volume To be confirmed

Availability Please kindly confirm with hop@heureka.fi

#### About the exhibition

Wild Wild Wood is a 600 m<sup>2</sup> traveling exhibition that portrays the unmatched properties and versatile uses of wood. There are over 20 exhibits.

The exhibition offers a personal, multi-sensory and aesthetic experience of the subtlety of wood material. Not only forests, but also long-lived wood products have a role in mitigating climate change.

In addition to traditional sawing, wood is now worked with computers and automation. Architects are inspired to design taller and taller modern wooden buildings and skyscrapers.

Wild Wild Wood presents the wonders of wood, with many shared and engaging activities!

Wild Wild Wood is probably the most beautiful exhibition Heureka has ever produced: a surprising and memorable experience for audiences of all ages.







# OO1 A tree split open by lightning

A lightning strike has opened up this 80-yearold birch tree for you to study.

Find the knots made by the branches and the tissue transporting nutrients. How many knots can you find?

Wood's superpower:
Renewable natural material



### 002 More than just sawing

Step in, start production and see how logs get converted into timber.

The sawmill will utilise the logs fully.

The sawmill will measure, sort, debark and cut the logs.

The journey of the log involves a lot of automation and technology that speed it up and make it easier for people.

Wood's superpower:
Nothing wasted

#### 003 Turning wood

See how logs turn into sheets of veneer. The veneer plant makes thin sheets, veneer, from logs.

About a third of a log's mass can be turned into veneer.

Plywood is made by gluing veneer sheets together with their grains crosswise.

Plywood is made from birchwood, softwood or a combination of the two.

Wood's superpower: Strong and lightweight panels



#### 005 Engraving wood

Make your own key ring.

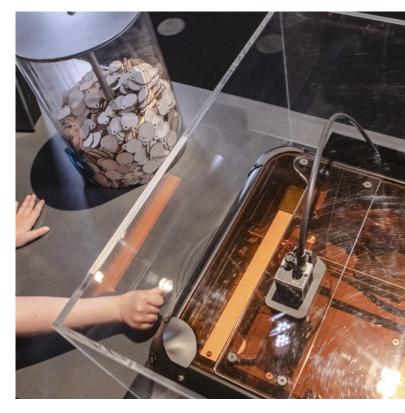
Draw an image with your finger on the touchscreen at the workstation.

Then pick up a piece of plywood from the tray. Place it in the laser engraver's feed opening and spin the disc.

Then watch the laser go to work. Finally, collect and keep your unique key ring as a souvenir.

This workstation uses a laser to imprint your image onto birch plywood in less than one minute.

Wood's superpower: Easy to shape







### oo6 From a log to a product

The sculptures represent different sawing and plywood manufacturing methods.

Logs are made into timber, such as beams, boards, planks, laths and veneer.

It is important to know what the wood will be used for: ornaments and instruments require different wood than rafters and concrete moulds.

Wood's superpower: Versatile



### 007 Build a wooden bridge

Combine pieces of board. Push a rod through the holes in the board pieces and use a nut to squeeze them together. Test the bridge by walking over it.

Wood is suitable for different kind of bridges. Other materials in addition to wood are often used, such as steel and concrete.

By weight, the wooden elements used in bridge construction can handle compression, tension and bending better than ordinary reinforced concrete.

Wood's superpower:
Tolerates compression and bending

## 009 A living wooden city

Be an architect and participate in designing a wooden metropolis.

Use the blocks to build the house of your dreams on the floor or at the workstation.

Building more sustainable and less environmentally burdensome cities is a critical challenge of the future.

Wood's superpower:

Material for cabins and skyscrapers



### O10 Carbon telescope

Climb into the observation tower. Use the telescope to spot wooden carbon reservoirs.

Use the carbon telescope to see how wood is used in large structures and the opportunities this can offer.

Some of these carbon reservoirs are extremely old, some new, and some are part of our future.

Wood's superpower:
Carbon reservoirs in forests and in human use







#### 011 Carbon circulates

Turn on the television and join Carbon di Oxide on his journey.

Trees absorb carbon dioxide and convert it into sugars and oxygen as they grow.

Forests store carbon in the trees and the soil.

The trees in a forest act as a carbon reservoir while they stand – and when they are turned into wood products.

Wood's superpower:
Carbon reservoirs in forests and in human use



### O13 What's that tree?

Try to guess the tree species used to make these items.

Which tree is good for which purpose?

Different tree species have surprisingly different properties. One bends extremely well, while another transmits sound beautifully. Knowing these properties is important for manufacturing high-quality products.

Wood's superpower: Versatile

### O14 Option Our friend the tree

Enter the cube and listen to the life story of a birch tree.

Pick a year from the stump and you can hear about the changes that have taken place in Finnish forestry, leisure activities and the local climate over the past century.

Wood's superpower: Cosy



### 015 Building a house

Build a wooden house. Pick suitable blocks from the bin and assemble them in the right order.

You can use the blocks to build a small detached house or a tall block of flats.

Wood's superpower:
Breathable and insulating







### 016 Living facades

Play around the walls of a skyscraper. Press yourself against the wall and look around the corner to see who your neighbours are. Take a group photo #wildwildwood!

Wood's superpower: Gentle and firm



### 017 Earthquake bench

Take a seat on the earthquake bench and see how it is built.

Try to quake the bench.

Wooden buildings use flexible joints that can tolerate shifts without suffering major damage.

The durability of wooden buildings is also due to their light weight. Light objects suffer less from the forces of an earthquake than heavy objects. This makes heavy buildings more likely to collapse in an earthquake. Over history, wooden buildings have proved the safest for people during earthquakes.

Wood's superpower: Earthquake-proof

### 018 Guess the tree

Challenge a friend to a game of guess the tree species.

Turn all the cards on the board face up. Have the display assign you a random species.

Using the questions, guess your opponent's tree species.

Wood's superpower:
More natural diversity



# O21 Balancing on joints

Go for a parkour run among Japanese and Nordic wood joints.

Can you identify the dovetail, saddle and butt-and-pass styles?

Woodworking joints are needed when the material runs short. Joints can extend short logs without nails and screws, for example.

Wood's superpower:
Traditional and modern







### O22 Scale of trees

Use the scale to play a game. Take turns rolling the die, choosing wooden blocks and placing them in the squares on the board according to the roll. If the resulting square is occupied, you can choose another square freely. The player who topples the blocks loses the game.

Different tree species have different properties that suit different uses. In terms of density, ie. specific gravity, wood is divided into light wood and heavy wood. Light wood is typically soft, while heavy wood is hard and durable.

Wood's superpower: Heavy or light, hard or soft.



## 023 Fire investigation

How long did the fire burn in the flat next to the stairwell?

Inspect the burned wall and step into the stairwell.

The telescope in the observation tower can show you the fire in the wooden block.

Here you will learn about the behaviour of wood in fire.

Wood's superpower: Safe burning

#### 024 Wooden orchestra

Become a conductor and make the wooden orchestra play dedicated compositions.

Choose the piece you would like to hear.

Use the controls to adjust the volume of different instruments and create your own hits.

The wooden orchestra highlights the ability of wood to transmit and emit sound.

Wood's superpower:
Good acoustic properties



#### 026 Memories and smells

How does the barrel smell?

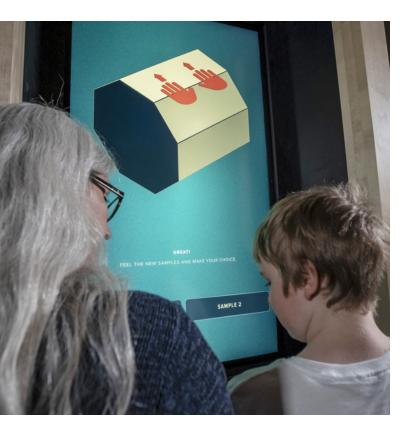
Pick up the lid and breathe in!

Smells have strong connections in our memories. What do crushed leaves or juniper berries remind you of? What kind of forest do you see when you smell mushroom alcohol?

Wood's superpower: A treat for your nose







# 027 Discover your favourite wood

Do you like the same wood as everyone else?

When used indoors, wood has been found to positively influence people's mood.

Wooden surfaces make a space appear calming and warm.

Touching wood will not increase blood pressure.

Wood's superpower:
Affects well-being



## O30 Option Charmed by a tree

Relax with wood. Simply spending time in a forest reduces stress and lifts your spirits.

Like the trees in a forest, wood materials have also been shown to be beneficial for health and well-being.

The act of touching wood calms people and invokes positive emotions linked to experiences from nature.

The design of wooden structures is increasingly computer-assisted. Even after high-tech processing, wood has that natural charm.

Wood's superpower: Stress reliever





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