KIRI TEC®

KiriBloX®

THE SIMPLE WAY TO BUILD WITH WOOD

KIRI TEC®

THE COMPANY KIRITEC – PART OF A THOUGHT-OUT CIRCULAR SYSTEM

KIRITEC GmbH is a part of the WeGrow Group, based in Tönisvorst, Germany. The company develops, processes, and markets innovative wood construction products made from fast-growing, sustainably cultivated Kiri wood. KIRITEC combines material innovation with practical expertise, focusing on solutions for resource-efficient and climate-friendly construction.

The **WeGrow Group**, founded in 2009 as a spin-off of the University of Bonn, specializes in the breeding, cultivation, and industrial use of fast-growing, non-invasive Kiri tree hybrids. The WeGrow Group controls the entire value chain – from plant innovation and plantation management to sustainable wood production and value-added processing for modern construction.

WeGrow is a world leading supplier of Kiri tree young plants with costumers in almost 50 countries worldwide. Besides this WeGrow is a leading grower of sustainable Kiriwood on more than 500 hectares of managed short-rotation plantations in Germany and Spain. The trees are cultivated outside of natural forests, thereby reducing the pressure on forests biodiversity.

KIRI TEC®

OUR BUSINESS MODEL – FROM YOUNG PLANTS TO TIMBER CONSTRUCTION

PLANTS
DIVISION

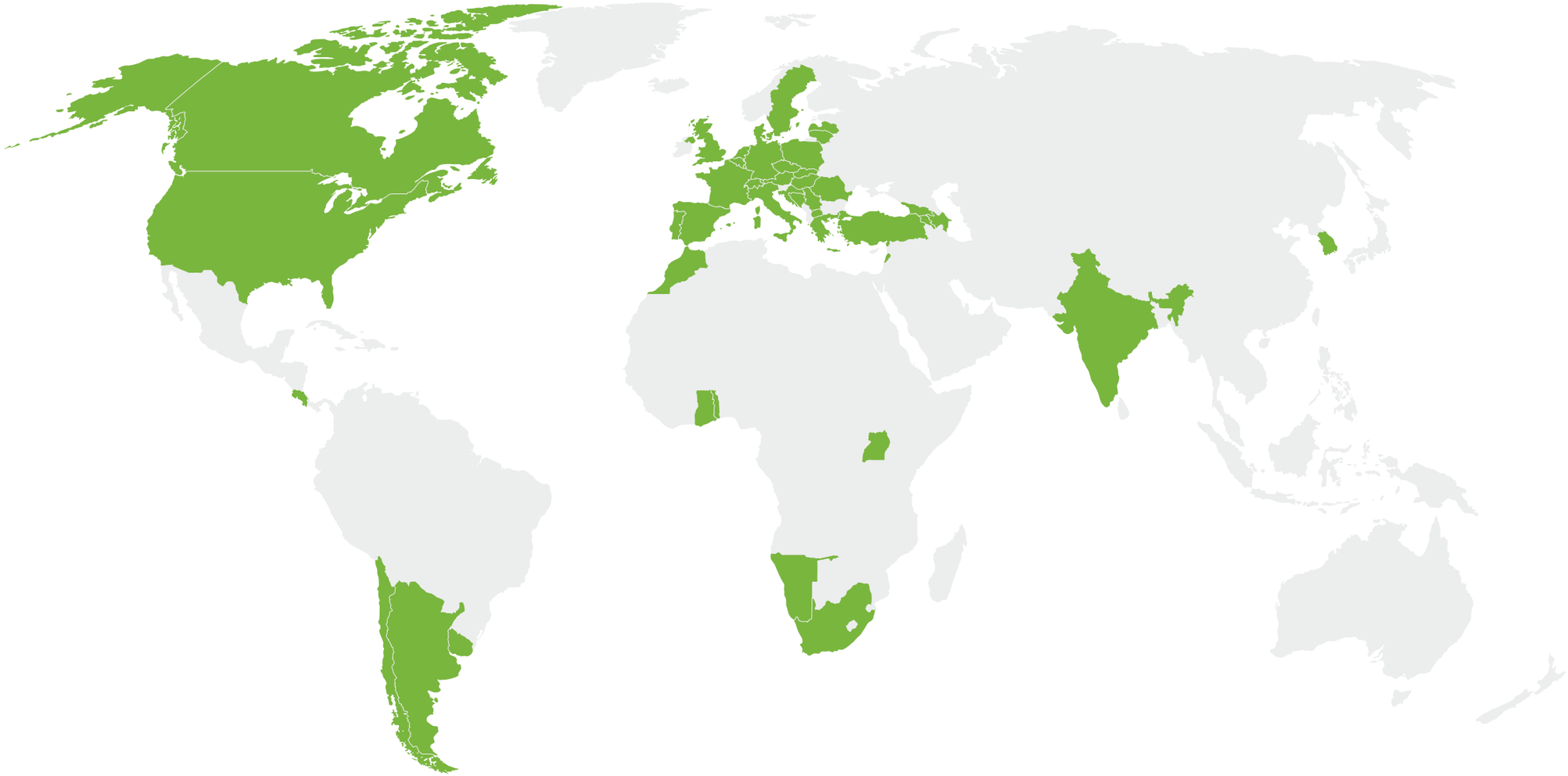
TIMBER FARMING
DIVISION

TIMBER PRODUCTS
DIVISION

KIRI TEC®

PLANTS
DIVISION

OUR CUSTOMERS IN 49 COUNTRIES



KIRI TEC®

TIMBER FARMING

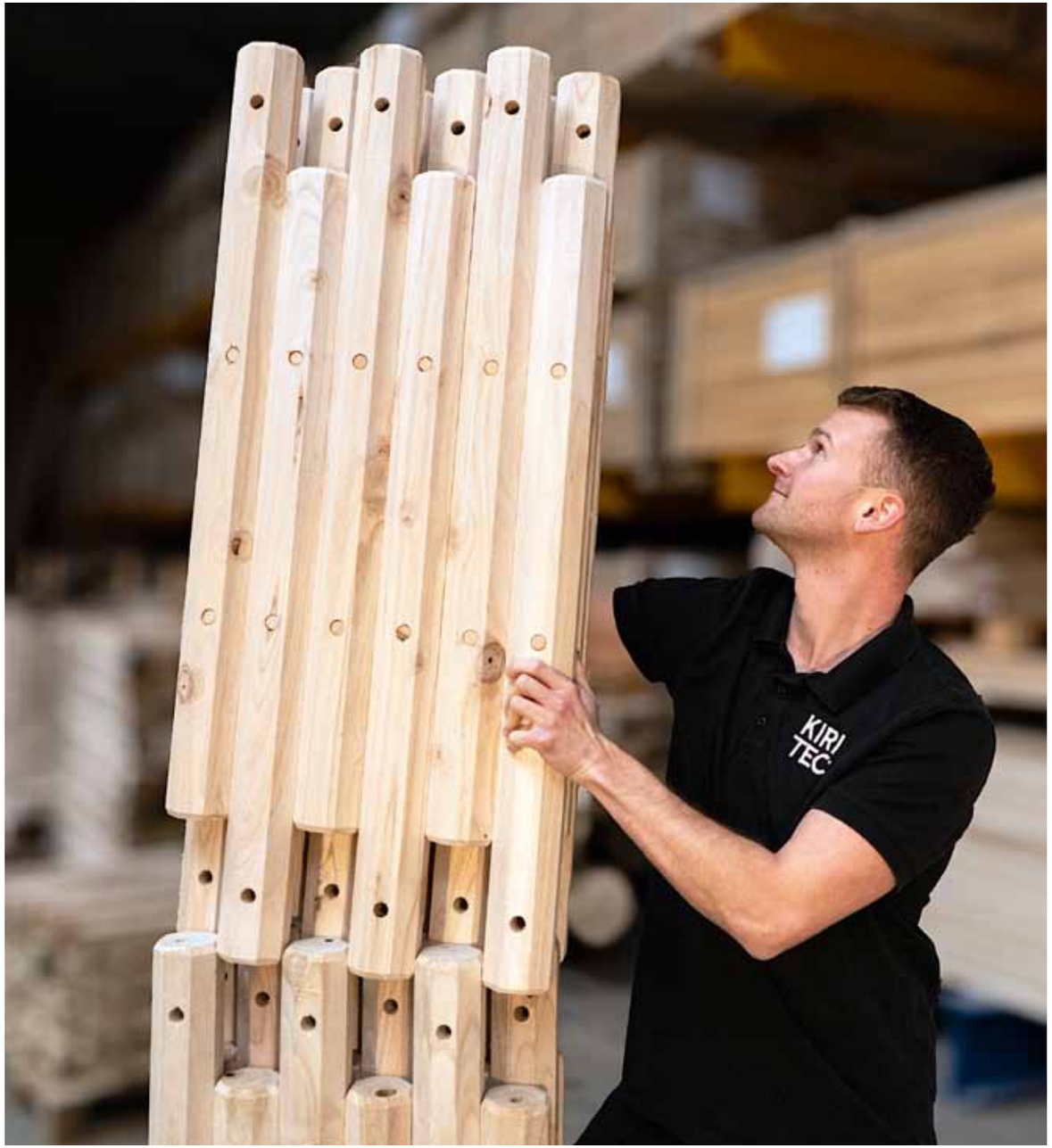
DIVISION

- IN-HOUSE TIMBER SUPPLY
- HARVEST-READY STANDS
- EXPANDING RAW MATERIAL STOCK

TIMBER PRODUCTS

DIVISION

OUR CURRENT PRODUCT: MODULAR SOLID WOOD BUILDING SYSTEM KiriBlox®



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KiriBlox® WALL CONSTRUCTION SYSTEM – TWO MODULES

KiriBloX® are standardized wall construction modules made from 100 % wood. They consist of vertical octagonal profiles made from sustainably cultivated european kiriwood.

The modules are connected without the usage of glue or metal, using only precisely milled pine wood system dowels, which creates a stable and sustainable construction.

The standardized wall modules are available in a thickness ranging from 15 to 25 cm and are suitable for both load-bearing external walls as well as partition and internal walls.

KiriBloX® A150

KiriBloX® B150

KiriBloX® A250

KiriBloX® B250

Connecting dowels

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KiriBlox® WALL CONSTRUCTION SYSTEM – FIRE RESISTANCE

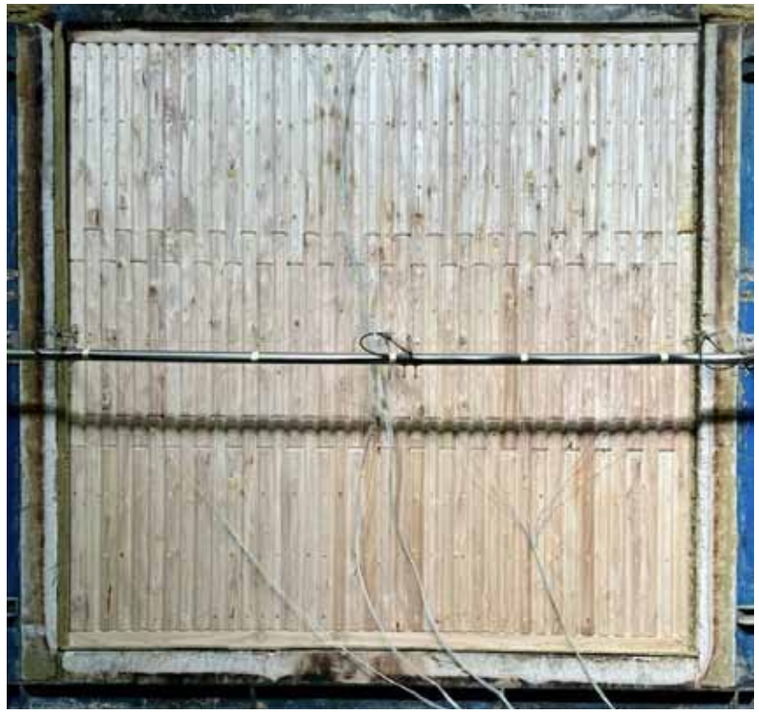
Fire resistance test of a load-bearing solid wood wall construction according to **DIN EN 1365-1:2013-08** in conjunction with **DIN EN 1363-1:2020-05** conducted by the materials testing institute MFPA Leipzig in September 2024.

Load on the test objects: 30 tons

RESULT:

- Fire resistance REI 90
- No smoke penetration

Non-fire-exposed side prior to testing: **22°C**



Non-fire-exposed side after 99 minutes: **24°C**

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KiriBlox® WALL CONSTRUCTION SYSTEM – THERMAL RESISTANCE

Thermal conductivity test according to **DIN EN 12667** conducted by the material testing institute MFPA Leipzig in September 2024.

Tabelle 3: Wärmeleitfähigkeit Variante 2 (gefüllt)

Prüfdatum: 08.09.2024		**Probekörper**	
Eigenschaft	**Maßeinheit**	**1**	**2**
Länge	mm	500,1	500,8
Breite	mm	499,2	499,5
Dicke	mm	149,4	149,6
Brutto-Rohdichte	kg/m³	270,4	270,0

Mitteltemperatur der Probenoberfläche auf der Heizplattenseite $\theta_{w,m}$ [°C]	Mitteltemperatur der Probenoberfläche auf der Kühlplattenseite $\theta_{c,m}$ [°C]	Mittlere Temperatur-differenz $\theta_{w,m} - \theta_{c,m}$ [K]	Mitteltemperatur der Probe $\theta_m = (\theta_{c,m} + \theta_{w,m})/2$ [°C]	Wärmeleit-fähigkeit bei 10 °C Mitteltemperatur λ_{10} [W/(m·K)]
15,2	4,8	10,4	10,0	0,0791

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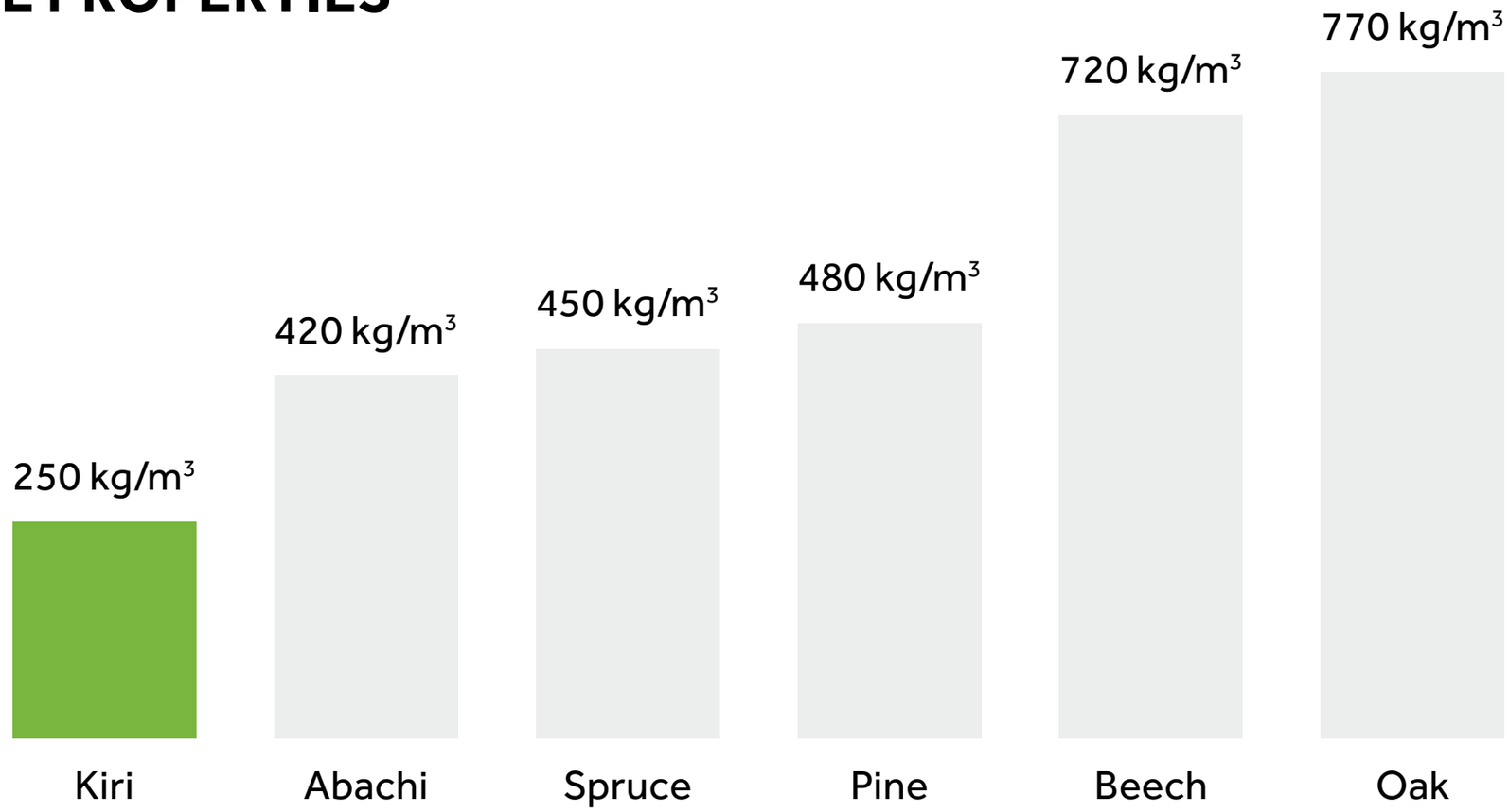
KiriBlox® WALL CONSTRUCTION SYSTEM – SERIAL PRODUCTION

- The production line has started at the KIRITEC site.
- KiriBloX® are transported via truck or rather container (66 packages per truck).
- One pallet contains 14 KiriBloX® 150 or 8 KiriBloX® 250.

KIRI TEC®

THE KIRIWOOD – TECHNICAL PROPERTIES

- Light:
  250 kg/m³
- Dimensionally stable:
  Radial 0,12%
  Tangential 0,22%
- Durable:
  Durability class 1v
- Thermally insulating:
  0,09W/(mK)



KIRI TEC®

THE KIRITREE – GROTH WONDER EVEN IN REGROWTH

- Thinning of the regrowth to four main shoots.
- Average DBH of the new main shoots: 6.38 cm at 7.5 m length.
- A calculated stem growth of 30 m (4 × 7.5 m) was achieved in less than six months.
- KiriBloX® only require a raw timber diameter of 10 cm. It is expected that 30 meters of usable round timber per tree can be harvested within 3 to 4 years.

INSPIRATIONS KiriBlox®

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MARKTEINFÜHRUNG

OFFIZIELLER VERTRIEBSSTART AUF DER INTERNATIONALEN MESSE BAU 2025 IN MÜNCHEN

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ZUM KIRIBLOX® VIDEO

WEITERE INFORMATIONEN STEHEN IHNEN HIER ALS DOWNLOAD ZUR VERFÜGUNG.