

MORE THAN WOOD

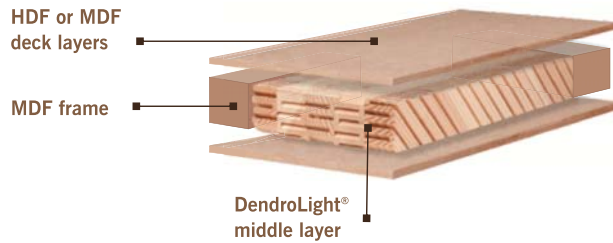


DendroLight®  
**DOOR BLANK**



 **dendro**®  
LATVIJA | LIGHT

# PRODUCT



**DendroLight® door blank** represents fresh concept in the door industry. It is a lightweight solid wood door blank with unique DendroLight® middle layer (ML) in thick MDF frame sandwiched between two HDF or MDF deck layers.

The manufacturing process of the DendroLight® middle layer secures reduced blank weight and superior stability - two key elements for manufacturing high quality door.

## General technical data

| Standard formats (mm)  |             |     |           |      | MAX formats |
|------------------------|-------------|-----|-----------|------|-------------|
| <b>Height</b>          | 2080        |     |           |      | <b>4080</b> |
| <b>Thickness</b>       | 40          | 50  | 60        |      | <b>80</b>   |
| <b>Deck layer (DL)</b> | MDF         | HDF | magnesium |      |             |
| <b>DL thickness</b>    | 3           | 4   | 6         | 8    |             |
| <b>Edge material</b>   | MDF (30 mm) |     |           |      |             |
| <b>Width</b>           | 855         | 905 | 955       | 1005 |             |

**MDF** middle density fiber board

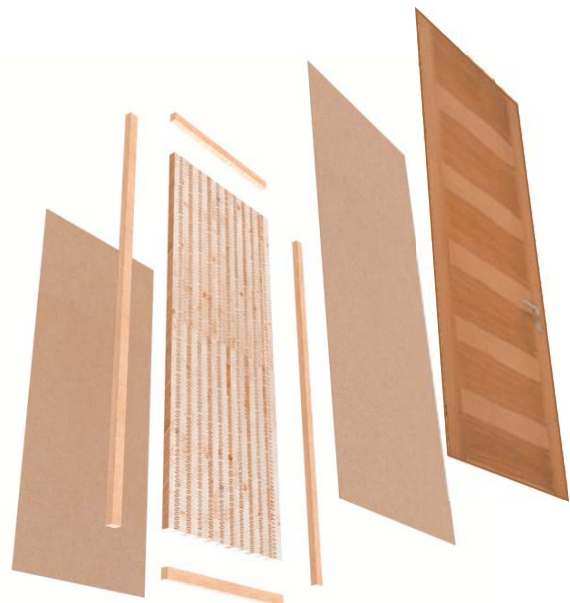
**HDF** hard density fiber board

For additional information contact your local DendroLight® area manager or distributor listed on our official web site

[www.dendrolight-latvia.com](http://www.dendrolight-latvia.com)

## Main product advantages

- **DendroLight® door blank is light**, allowing easy handling and exploitation also with extra-large sized blanks.
- **DendroLight® door blank provides stability**, it will not swell, warp or bend, because of its homogenous internal structure.
- **Homogeneity of DendroLight® door blank** secures extra rigid dimensions which allows for fine finishing materials to remain in their original quality.
- **DendroLight® door blank is environment friendly** product, providing one of the greenest solutions for composite doors in the market.



# TECHNOLOGY



## DendroLight® middle layer technology

DendroLight® middle layer material is made of unique spruce, pine or aspen tree profiles, which are glued together in perpendicular angles forming DendroLight® middle layer block, which is then band sawed into middle layer sheets.

The unique DendroLight® profiling technology reduces weight of a solid wood by 40% reaching as low as 250 kg/m<sup>3</sup> and minimizes internal tensions of a wood.

In the gluing process PVAc (D3/D4) or EPI is used, with total amount of glue in the material not exceeding 5%. Therefore DendroLight® middle layer material is highly natural product at the same time providing good sustainability to external environment.

The unique DendroLight® glueing, pressing and sawing processes grant extra stability, homogeneity and rigid dimensions to the material. These qualities are then complemented with extra strength in the process of material decking.

DendroLight® middle layer is coated from both sides with deck layers of plywood, MDF, HDF or any other type of plate material required, providing wide range of quality DendroLight® products.



## PATENT & AWARDS

**Dendrolight Latvija Ltd. is the first and the only licensed DendroLight® material manufacturer in the world.**

The material has won the following awards:



DR WOLFGANG  
HOUSKA  
PREIS 2007

Let innovative technologies enrich your life with the best qualities of wood.

\* The award was granted to TEAM7 Natürlich Wohnen GmbH product 3-Layer laminate with DendroLight middle layer

# PROCESSING

## Processing



There is no need for special equipment to process DendroLight® door blanks. They can be processed as easy as plywood, MDF or HDF.

Cutting, routing, drilling and sanding can be performed using traditional tools on DendroLight® door blanks. Surface routing of the panel edges must be done with suitable routing tools.

## Veneering & mounting

Veneering or laminating of DendroLight® door blanks is possible with all conventional bonding systems. Pressing guidelines differ, according to the glue that is used to fix deck layers:

| GLUE TYPE<br>used in blank processing | PVAc                   | EPI                    |
|---------------------------------------|------------------------|------------------------|
| <b>MAX pressure t°</b>                | 80°                    | 120°                   |
| <b>MAX pressure</b>                   | 4 kg / cm <sup>2</sup> | 4 kg / cm <sup>2</sup> |

DendroLight® door blanks can be mounted with average screws and they show very good screw hold characteristics:

| Drafting values for screws<br>(4 mm Ø, 40 mm deep) |               |
|--|---------------|
| <b>On a surface &amp; side</b>                     | 800 N average |

## Transportation and storage

Transportation and storage of DendroLight® door blanks always must be done with respective care. Always carefully inspect incoming deliveries and use appropriate unloading equipment (fork lifts or other).

DendroLight® door blanks must be carefully covered to avoid soiling and soaking during transportation, storage and processing. Recommended storage temperature of the blanks is **18-22°C**, with **60-65%** of relative humidity.



DendroLight® door blanks must be stored on leveled ground on wooden supports or pallets with frequency that does not allow blank bending. Always use cover sheets while storing the blanks in a warehouse. If several blanks are placed on top of each other, wooden supports must form a vertical line.

**If material is not stored in recommended conditions sufficient acclimatization period is required.**

For additional information contact your local DendroLight® area manager or distributor listed on our official web site.

[www.dendrolight-latvia.com](http://www.dendrolight-latvia.com)



# APPLICATION

## Quality lightweight solid wood doors

DendroLight® door blank is well suited for traditional and modern design doors or interior elements. The main advantage of the blank is its **lightness** that tolerates large sized designs and makes the blank easy to process and mount.

**Stability** - homogenous internal structure of the DendroLight® door blank secures the door leaf from swelling, warping or bending. Homogeneity of the blank also ensures that the fine finishing materials always remain in their original quality.

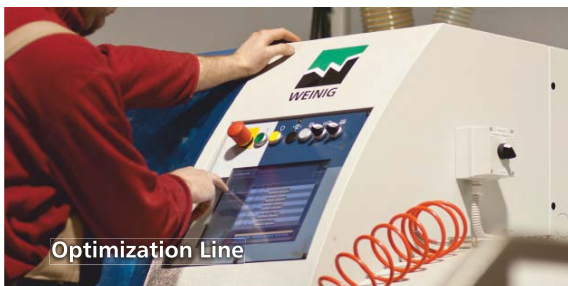


# THE FACTORY

## Hi tech of wood processing

Innovative approach to wood engineering and continuous product research secures the most advanced manufacturing process of the DendroLight® material and top quality production standards.

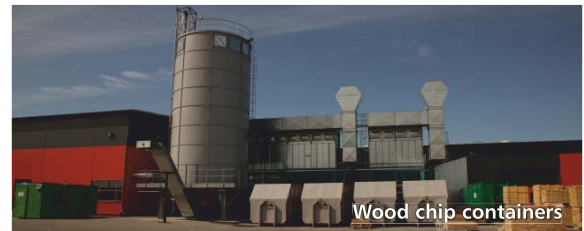
DendroLight® is manufactured on the leading wood processing equipment from **WEING** combined with Austrian built machinery developed by pioneers and experts of the material **DendroSolutions GmbH**.



LIVING INNOVATIONS

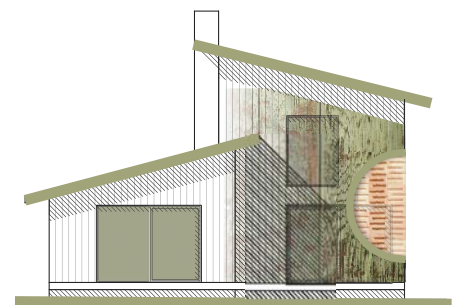
**DENDRO**  
Solutions GmbH

## Autonomic energy



## Development

Current annual production capacity of the DendroLight Latvia plant is 90 000 m<sup>2</sup>. The next phase of expansion is being carried out by constructing and equipping additional 8000 m<sup>2</sup> of manufacturing area for further DendroLight® product developments, advancing in greater variation of 3-layer and door panel sizes, wider spectrum of deck materials and DendroLight® building constructions concept.



# DENDROLIGHT LATVIJA



## Trustworthy partnership

Dendrolight Latvija Ltd. is part of privately owned Group of Latvian enterprises that occupies more than 12 000 m<sup>2</sup> of production area and has been successfully operating in European markets for more than 20 years.



[www.dendrolight.lv](http://www.dendrolight.lv)

- DendroLight® Middle Layer
- DendroLight® 3-Layer Panel
- DendroLight® Door Blank
- DendroLight® Building Block
- DendroLight® Acoustic Panel



[www.arbo.lv](http://www.arbo.lv)

- Wooden Windows
- Doors and Facades
- Sliding Systems
- Carpentry and Furniture
- Modular Houses
- Construction



[www.ekomajas.lv](http://www.ekomajas.lv)

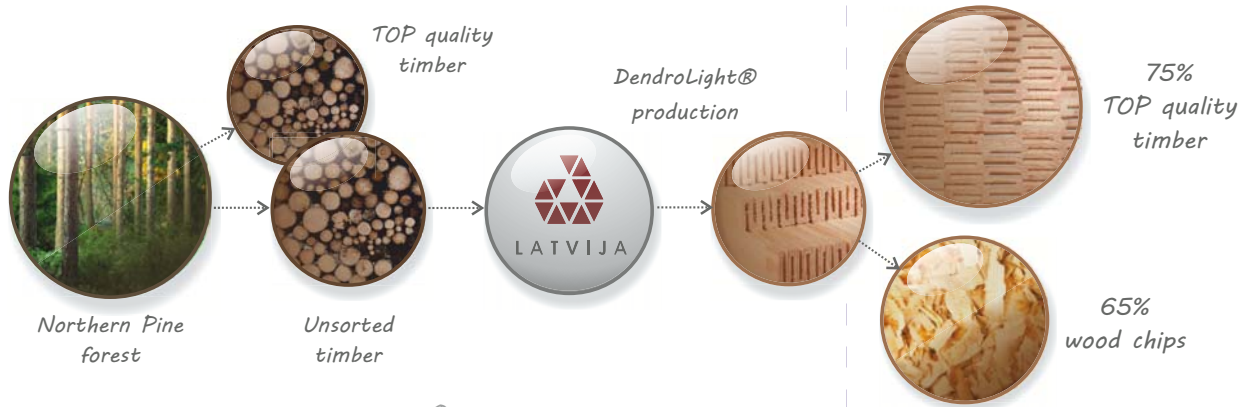
- Insulating Glass Production



## Convenient logistics

Dendrolight Latvija plant is situated in Ventspils, Latvia, which is one of the main transit centers in the Eastern Europe, providing convenient sea, rail and road logistics.

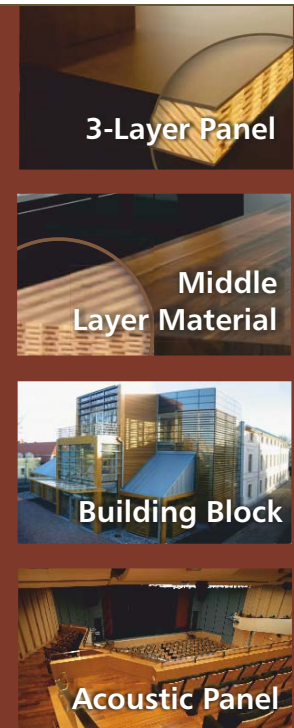




1 = 1,4 with DendroLight<sup>®</sup>

### Taking ECO responsibility to another level:

- FSC Certificate
- CO<sub>2</sub> neutral (++)
- Autonomic heating system powered by wood chips
- Ultra energy-saving aspiration system
- Environment friendly products
- We process northern pine right where it grows
- We conserve natural resources by making more out of less



### Contacts:

**Dendrolight Latvia Ltd.**  
Kustes dambis 32  
Ventspils, LV – 3601  
Latvia

Ph.: +371 63620855  
Fax: +371 63620858  
info@dendrolight.lv

[www.dendrolight.lv](http://www.dendrolight.lv)  
[www.dendrolight-latvia.com](http://www.dendrolight-latvia.com)

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