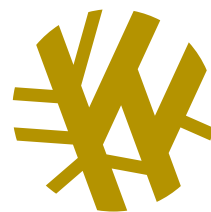


ONEWOOD®



ONEWOOD - CARELESS BEAUTY

FENCES

**OneWood** is a company that produces terrace, fence and façade boards of the wood plastic composite material in Estonia. The composition of the products are developed for the use in Nordic climate, by containing the best combination of wood (60%), plastic (30%) and additives (10%). This combination of materials provides a natural wooden look to the products, ensures long-lasting durability and insignificant maintenance costs. The products are weatherproof, do not need oiling or staining, do not separate surfaces and are not slippery even with wet weather. OneWood products change the way of thinking regarding the maintenance and safe use of terraces, fences, facades and garden furniture. You'll find information about our products on our homepage: [www.onewood.ee](http://www.onewood.ee)



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## FENCES

Fence boards are available with two different surface treatment: Natural and Basic. Standard selection has four different stain colours.



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## TERRACES

Terrace boards are available with five different surface treatments: Classic, Natural, Basic, Modern and Modern L. Standard selection has two different profiles and four different stain colours.



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## FACADES

Facade boards are available with Basic surface treatment and standard selection has four different stain colours.

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# ADVANTAGES



100% recyclable



does not need staining or oiling



splinter-free



Estonian product



weatherproof



wood product



Easy install

# TECHNICAL CHARACTERISTICS

**Wood plastic composite** is an ecological modern wood material and it is 100% recyclable. The material is produced from wood and plastic mixture, to protect against environment additional additives (UV protection, colorant, adhesive, stabilizers etc.) The composition of OneWood terrace boards is developed for the use in Nordic climate, which highlights the best qualities of wood and plastic as well: long-term durability, natural beauty of timber and easy maintenance (does not need oiling or staining). Additionally

the products are processed against slippery, which makes the use of a terrace safe also with wet weather.

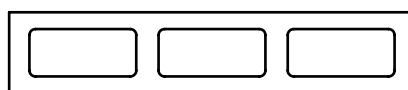
**Tests.** The long-term durability and high-quality of the OneWood products are verified by the tests carried out by Tallinn University of Technology, which meet the international standards of wood plastic composite materials.



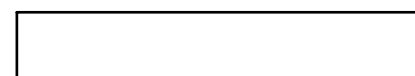
60% wood  
30% plastic  
10% additives

| Quality                  | Standard                    | Unit              | Value           |
|--------------------------|-----------------------------|-------------------|-----------------|
| Density/specific gravity |                             | kg/m <sup>3</sup> | 1380            |
| Bending strength         | ISO 16616:2015( E )         | Mpa               | 44,02           |
| Elastic modulus          | EVS-EN 15534-1:2014         | Mpa               | 5054,78         |
| Impact resistance        | EVS-EN ISO 179-1            | kJ/m <sup>2</sup> | 20,46           |
| Water absorbency 28p     | EVS-EN 317:2000             | %                 | 2,46            |
| Swelling 28p             | EVS-EN 15534-1:2014         | %                 | 0,54            |
| Thermal expansion        | EVS-EN 479:2003             | %                 | 0,04            |
| Color change             | EVS-EN 15534-1:2007         | 2000h UV-d        | 2,2             |
| Fire resistance          | EVS-EN 13501-1:2007+A1:2009 | Class             | C <sub>fi</sub> |

## FENCE BOARD PROFILES



**LIGHT** is a hollow profile, with measurements 100x20 mm, which has a good strength and weight ratio. These qualities make the LIGHT profile the most popular fence board.



**STRONG** is a solid profile, with measurements 80x15 mm. These qualities enable various application of uses.

# RANGE OF PRODUCTS

OneWood product range comprises terrace boards with three different surface treatments: classic (grooved), natural (wood patterned) and modern (brushed) surface. The standard range of stain colours includes four different most popular colours: white, brown, dark brown and grey. All colours and surface treatments are available as LIGHT and STRONG profiles.

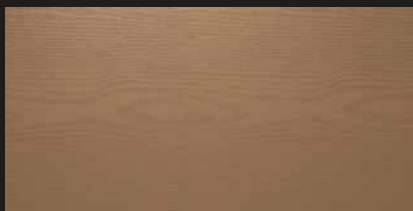
## NATURAL



WHITE



BROWN

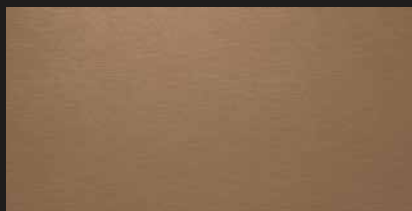
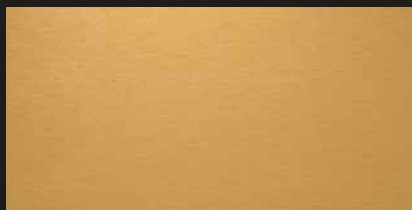
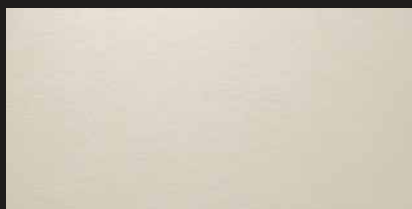


DARK BROWN

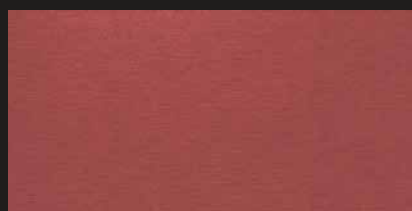


GRAY

## MODERN

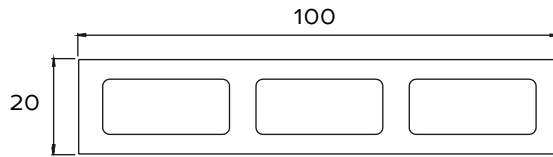


In addition to standard stained colours, it is possible to order the stained colours selected by the architect. More information about tailor-made stained colours is available at our sales department.



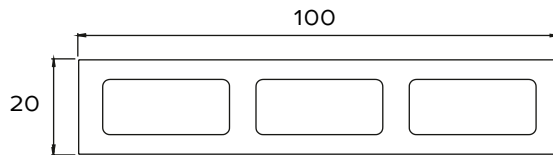
# SELECTION OF FENCES

## LIGHT, surface treatment Modern



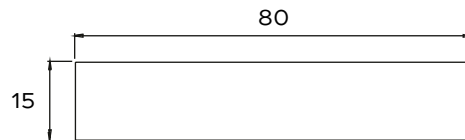
|           |                                |
|-----------|--------------------------------|
| Width     | 100 mm                         |
| Thickness | 20 mm                          |
| Length    | 4200 mm                        |
| Weight    | 1,4 kg/m                       |
| Colors    | White, brown, dark brown, gray |

## LIGHT, surface treatment Natural



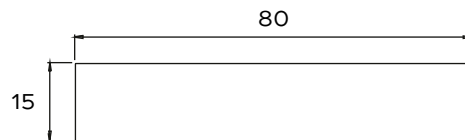
|           |                                |
|-----------|--------------------------------|
| Width     | 100 mm                         |
| Thickness | 20 mm                          |
| Length    | 4200 mm                        |
| Weight    | 1,4 kg/m                       |
| Colors    | White, brown, dark brown, gray |

## STRONG, surface treatment Modern



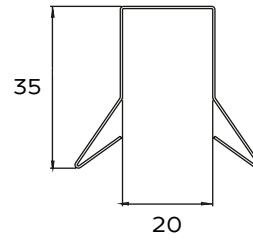
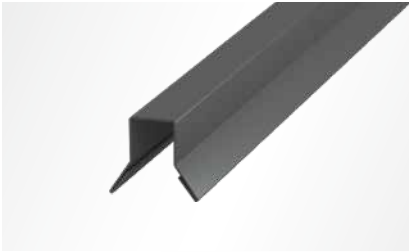
|           |                                |
|-----------|--------------------------------|
| Width     | 80 mm                          |
| Thickness | 15 mm                          |
| Length    | 4200 mm                        |
| Weight    | 1,6 kg/m                       |
| Colors    | White, brown, dark brown, gray |

## STRONG, surface treatment Natural



|           |                                |
|-----------|--------------------------------|
| Width     | 80 mm                          |
| Thickness | 15 mm                          |
| Length    | 4200 mm                        |
| Weight    | 1,6 kg/m                       |
| Colors    | White, brown, dark brown, gray |

Cover plate



|           |                              |
|-----------|------------------------------|
| Width     | For 20 mm wide boards        |
| Thickness | 35 mm                        |
| Length    | 2000 mm                      |
| Material  | Galvanized and stained steel |
| Colors    | Gray, brown, white           |



# INSTALLATION

## STORAGE

Avoid dragging and throwing the boards while loading and storing. Fence boards should be stored on the horizontally flat surface, preferably in an original package, on a wooden surface or on 50mm wide wood poles, which spacing should not exceed 500 mm. To be stored in a well-ventilated room.

## CUTTING

To cut the wood plastic composite material regular wood cutting devices are suitable, large tooth saw blades should be avoided.

## DRILLING AND FIXING WITH SCREWS

To fix with screws it is always necessary to previously drill the screw holes into the wood plastic composite material. For fence boards, the drill should be 0.5 to 1.0 mm larger than the screw diameter. For example for the 4mm screw you need to have a drill with 4.5-5.0 mm diameter. During the drilling process the drill should occasionally be drawn out of the drilling hole, so the dust would get out of the hole.

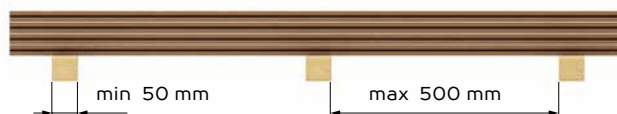
## MATERIALS AND WORK EQUIPMENT

Necessary materials:

- Fence boards
- Screws

Necessary work equipment:

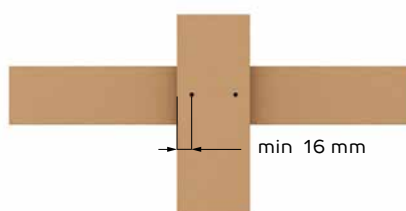
- Cordless drill (with drill and screw nozzles)
- Saw
- Tape measure and pencil
- Protective equipment (goggles, gloves etc.)



## INSTALLATION OF FENCE BOARDS

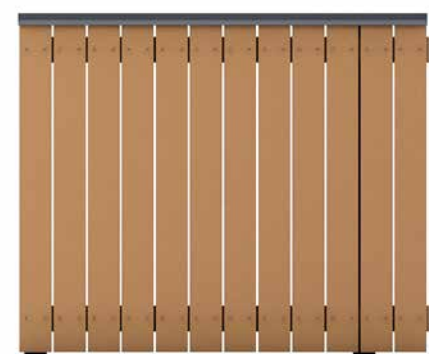
**NB! Fence boards made of wood plastic composite should not be installed with nails.**

To secure the fence boards use screws, rivets (for metal cleat) and bolts. Securing hole should be drilled at least 16 mm away from the board edge.



## COVERING THE UPPER EDGE OF THE FENCE

We recommend to cover the upper edges of the fence boards with sheet metal profile. To secure the sheet metal profiles with screws pre-drilling should be used. In that case the drill should be smaller than the screw diameter. For example the 4 mm screw use a drill with a diameter of 3 mm.





# FENCE CONSTRUCTION

Regular metal, wooden and stone pole solutions are suitable for the fence construction.

The fences are divided into two by the position of the fence boards:

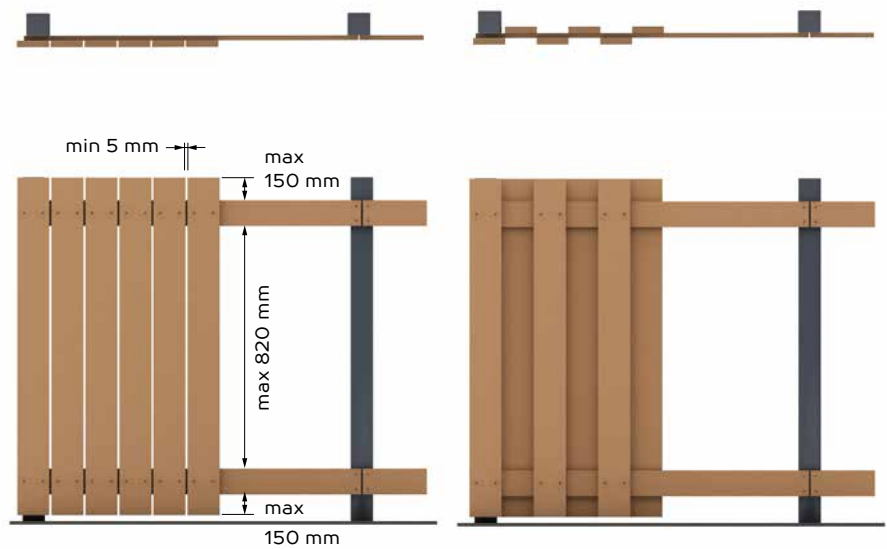
1. Vertical or slat fences
2. Horizontal or board fences.

## Vertical fences

Fence boards (slats) are secured on the metal or wooden cross rails. The recommended minimum measures for cross rails:

- Wooden cross rails 95x45 mm
- Metal cross rails 60x20x1,5 mm

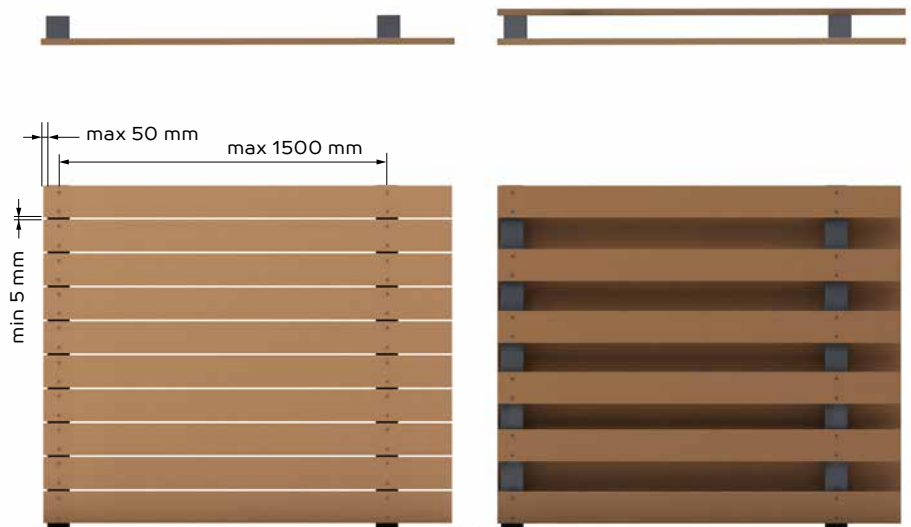
The cross rails must fall back on the poles so that the distance between them does not exceed 820 mm. We recommend 2.7 m for the maximum length of the cross rails.



## Horizontal fence

The fence boards are secured to the metal, wooden or stone poles. The maximum spaces between supporting poles:

- Fence boards 100x20 mm – space between supporting poles up to 1500 mm
- Fence boards 80x15 mm – space between supporting poles up to 800 mm



# MAINTENANCE

OneWood fences have very low maintenance costs; the fence does not need as similar maintenance as the regular wood fence. The fence does not involve a costly and time-consuming staining, oiling or any other covering. Periodic cleaning and washing is enough to ensure the beautiful look of the outdoor fence. Generally a pressure washer, soap water and sponge will do the cleaning.

## INSTRUCTION FOR MAINTENANCE

| No. | Problem               | Maintenance and solution   |
|-----|-----------------------|--|
| 1.  | Dust and dirt         | To remove dust and dirt, the surface should be regularly cleaned with water. To remove stronger dirt, use a pressure washer, if necessary use soap water.  |
| 2.  | Plants and leaves     | To remove stronger dirt, use a pressure washer, if necessary use soap water or weak aqueous solution of 2 % oxalic acid.   |
| 3.  | Rust                  | Remove loose dirt with a brush and soak with water, to remove stains use detergent and warm water. For stronger dirt use aqueous solution with low level of oxalic or phosphoric acid and soak with water.                       |
| 4.  | Cement                | Remove cement pieces with a brush and wash with a pressure washer. Use a detergent and warm water to remove the stains. For harder damage, let the surface dry properly and to remove cement use fine sand paper.                |
| 5.  | Colour and oil stains | Soap water, detergent containing acetone or methanol are suitable for cleaning. For the stronger dirt, let the surface dry properly, to remove stains use fine sandpaper and if necessary use once more the detergent.           |
| 6.  | Mould                 | To prevent mould the surface should be regularly cleaned and washed. To remove mould use a pressure washer and wipe with a brush. For stronger mould, use soap water or special anti-mould detergents that are on sale at shops. |
| 7.  | Scratches             | Lighter scratches vanish within time, to remove deeper ones, use fine sandpaper and rub it in parallel with the terrace board pattern.   |



1. To clean the surfaces use solvents and detergents which pH is neutral. Stronger detergents may bleach and have a permanent impact on the surfaces colour.
2. Never use industrial chemicals to clean surfaces, because they may permanently bleach or damage the surface.
3. To prevent scratching, use only a soft bristled brush to clean surfaces.
4. Detergents containing oxalic acid and methanol should be used at low concentrations. If necessary slightly increase the concentration, by adding it to the water.
5. It is recommended to use sandpaper with grits between 40 and 100. Do not use a grinding machine!
6. It is not recommended to sand surfaces with wood pattern. Sanding removes the relief surface permanently.
7. When using a pressure washer the nozzle should not be closer than 300 mm to the fence surface.

# WARRANTY

Warranty provisions are derived from the legislation of the Republic of Estonia and granting the guarantee is primarily based on the warranty given by the manufacturer provided that these are not in contradiction with the laws of the Republic of Estonia. The warranty covers the product's deficiencies related to production or materials during the warranty period.

## 1. General warranty conditions

1.1 The warranty is valid for the product's purposeful use for 2 years, i.e. 24 months.

1.2. The warranty period starts with the day the product was delivered.

2. The conditions for the validity of the warranty are current regulations and instructions for installation and maintenance, which should be taken as the basis for the installation, use and maintenance of the product. The warranty shall be valid, if the product has been regularly maintained and used purposefully.

## 3. Warranty does not include:

3.1. Training about the installation, maintenance and use of the product.

3.2. Repair of failures resulting from transportation damages and other mechanical damages (vandalism, lightning, fire etc.).

The warranty does not cover the failures that resulted from insufficient maintenance, incorrect installation or repair works or general wear.

OneWood product will have an additional warranty for materials for 10 years.



**Produced in EU for nordic climate.**

