ASSEMBLY INSTRUCTIONS

FAÇADE PROFILE
150 PANEL

- Please read these installation instructions in detail before starting the installation. If you are unsure, contact the manufacturer or your dealer. For more information, visit www.terafest.eu

Important product information

- The TERAFEST® façade profile is made of composite wood, which consists of wood flour and HDPE. It is designed for example for the facade of walls of sheds or garages, or for ventilated facade constructions fixed to a wooden or metal underlying grille.
- Composite wood is not a structural material and therefore cannot be used for a supporting structure. If you install other accessories (e.g. lighting, guttering, etc.) on the facade, they must not be anchored to the facade profiles only.
- Before installation, store composite wood facade boards on a dry and level surface so that the face (brushed) side of the board is protected from sunlight and uneven colour maturing.
- Do not treat the surface of composite wood facade boards with stains, paints, varnishes, waxes, oils or other similar products unless recommended by the manufacturer for composite wood materials. Avoid the use of solvents and thinners!
- Composite wood products are designed primarily for outdoor use. Exposure to the sun's UV rays and rain makes them easier to maintain, so consult your dealer when using them indoors.
- Composite wood facade boards, joist and finishing boards undergo volumetric changes (expending and contracting) as the temperature changes. Therefore, follow the prescribed expansion and ventilation gaps.
- It is a natural product, which may have slight colour variations and shading that suggest the natural appearance of the wood, but do not reduce the quality of the product or its durability. We recommend checking the colour of the planks when laying and mixing the decking on the decking if necessary to emphasise the natural character of the decking. We recommend ordering the boards for the whole facade at once.
- When working with composite wood, you can use the same tools as when working with hardwood. To assemble the composite wood façade, you will need a hand circular (mitre) saw (we recommend a blade with teeth made of carbide), a drill with drill bits and a countersink, an electric screwdriver with bits, a tape measure, a spirit level, a pencil, a rubber mallet, a square, safety glasses.
- The facade profile is made of flammable material (class E) - always use this material in accordance with fire safety regulations and other building standards, preferably after approval by an authorized building engineer or designer.

Accessories for facade profiles

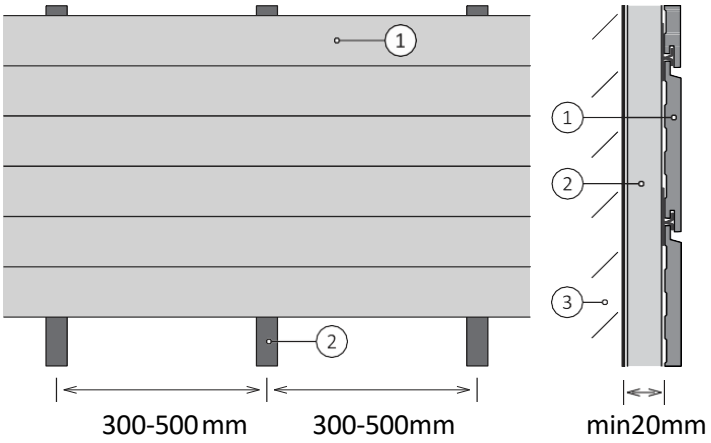
- Stainless steel CLICK START CLIP
- Stainless steel STANDARD CLIP
- Stainless steel START CLIP
- Anchoring stainless steel wood screws
- TERAFEST® 70x16 mm and 90x16 mm finishing boards

Installation of the facade profile

- The TERAFEST® façade profile (1) is mounted horizontally on a sufficiently load-bearing vertical grille of underlying beams (2) with a central spacing of 300 to 500 mm. The maximum spacing of 500 mm must not be exceeded. See Fig. 1.
- The minimum dimension of the wooden beam (2) is 25 x 40 mm, for other materials (aluminium, steel, etc.), the profile must allow the stainless-steel clip to be securely fixed for the installation of the facade.
- The minimum ventilated gap between the facade profile (1) and the wall (3) is 20 mm over the entire facade area. Where insects or small rodents could enter the gap between the substructure and the facade, a barrier in the form of a net or grille must be installed.
- Each piece of TERAFEST® façade profile should be anchored to at least three underlying beams.

  Attention! At the edges of the building, the structure is more wind-loaded, so we recommend reducing the spacing of the substructure at these points. For buildings that stand in particularly exposed areas, we recommend calculating the wind load and designing the optimal grille spacing. Consult the calculations with a structural engineer.

Fig. 1 Facade composition



- Laying (See Fig. 2) is carried out from the bottom facade profile (1) using START CLADDING CLIP (4), which must be in one horizontal line. The minimum distance of the TERAFEST® façade bottom profile from the ground should be such that there is no long-term contact of the profile with water.
  - The STANDARD CLADDING CLIP (5) is slipped onto the bottom facade profile (1), anchored with a screw (6) and then another facade profile (1) is slid onto the clip (5) so that the clip fits into the groove in the profile.
- Check the parallelism of the profiles with a spirit level and by measuring the longitudinal gaps continuously during the installation of the profiles.
- The last facade profile (1), which is adjusted to the required width, is fixed with visible stainless-steel screws through the facade into the structure (6), or alternatively, the facade profile that is not adjusted to the width can be anchored with the START CLICK CLADDING CLIP.
- All holes for screws must be pre-drilled in the facade profile and for visible screws also countersunk.
- The standard expansion gap between the profiles is 5 mm and between the profile and the solid part of the house is 5 mm. When installing the facade at lower or higher temperatures, we recommend adjusting the size of the expansion gaps according to the table below Table 1.

WPC – WOODPLASTIC a.s., V Celnici 1034/6, 110 00 Praha 1, IČO: 08920354, DIČ: CZ08920354,
tel.: +420 800 720 288, e-mail: wpc@woodplastic.eu, www.terafest.cz,
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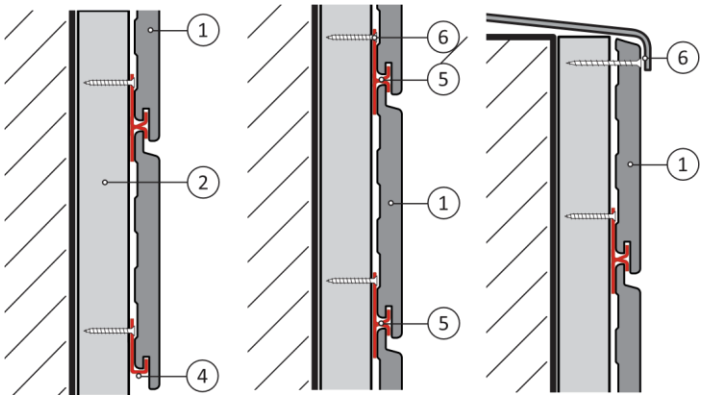
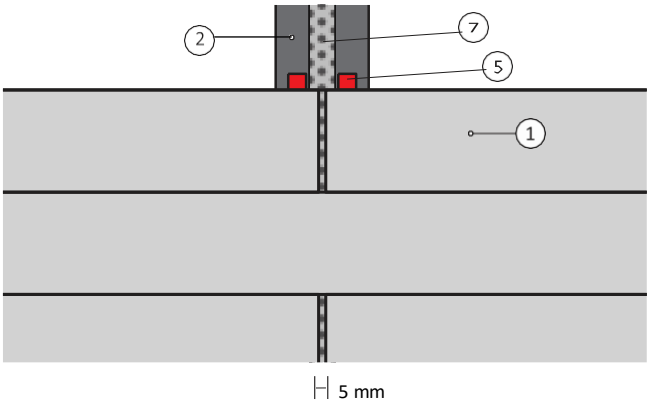
Fig. 2 Anchoring procedure for façade profile tiles



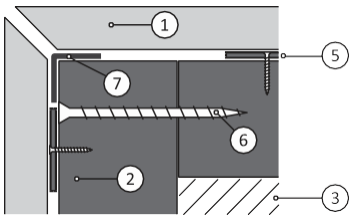
- The connection of the profiles is made by two side-by-side underlying beams or one wider beam and two rows of STANDARD CLIPS. The maximum allowed overhang of the profile over the beam is 50 mm. See Fig. 3
- To achieve a nice appearance, we recommend that the profile connections are placed alternately so that a long vertical gap is not created.

Fig. 3 Connecting the façade profiles



- To secure the profile against horizontal displacement, we recommend securing the profile as close as possible to the centre of the length of the profile by screwing it into the underlying beam so that it is covered by the following profile. We recommend protecting the wooden subframes with bitumen or EPDM tape (7) at the connection point of the profiles.
- The outer corner can be mitred at an angle of 45°, the ends of the facade profiles (1) should be supported by a beam (2). The gap between the profiles is again 5 mm, for the inner corners and butt joint the gap is 5 mm.

Fig. 4 Outer corner made of facade profile



- When solving corner details and connecting the facade to the door or window lining, it is possible to use TERAFEST® finishing boards with dimensions 70x16 mm and 90x16 mm, which have the same colour as the TERAFEST® facade. Also in these cases, make sure that the expansion gaps are maintained.

Tab. 1 – Prescribed expansion gap widths (for facade profiles of 3.1 m or 3.3 m) depending on temperature and weather changes.

Air temperature	Below +10°C	+10°C to +25°C	Above +25°C in the shade
Gap between façades profiles (lengthwise)	**6 mm**	**5 mm**	**4 mm**
The gap between the façade profile (width- and lengthwise) and the wall or other fixed part of the house	6 mm	5 mm	4 mm

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Facade profiles TERAFEST®

MAINTENANCE, WARRANTY

SAFETY INSTRUCTIONS

- If this manual does not comply with valid legislation or other regulations in any detail, we consider the current legislation and regulations to take precedence over this manual.
- The installation of TERAFEST® façade cladding with reaction to fire class E must be carried out in accordance with the Fire Safety Solution.
- As with any other building material, follow all safety precautions and all relevant legislation. When handling TERAFEST® façade profiles, be extra careful due to their higher weight and length.
- When handling the 90 Rhomba profile with an inserted aluminium reinforcement, there is a risk of it loosening.
- Personal protective equipment must be used when cutting and drilling TERAFEST® façade profiles. Especially when cutting aluminium profiles, pay attention to eye protection.
- When using cleaning products, especially those containing sodium hypochlorite, follow the safety instructions on the packaging.
- For more detailed information on health and safety, please refer to the Material Safety Data Sheet available on our website.

MAINTENANCE

Unbrushed surfaces of façade profiles

- If you choose TERAFEST® façade profiles in a variant with an unbrushed visible surface, which offers a richer colour expression, it is necessary to be extra careful during handling, installation and subsequent maintenance. The surface is covered with a thin layer of polymer with pigment, which can be easily damaged. That is why most TERAFEST® products are supplied in a unbrushed version.

Treatment of the TERAFEST® façade after installation

- After completing the installation, remove sawdust, especially metal shavings, from the surface of the profiles, preferably by vacuuming.
- Wash the façade profiles with a stream of water, with caution you can also use a high-pressure cleaner with a pressure of max. 80 bar from a constant distance of the nozzle from the surface of approx. 400 mm. It is important to wash all dust from the profiles to reduce the occurrence of so-called water dust spots, see below.

Regular maintenance

- Wash the façade cladding with clean water at least 1 x a year (preferably in spring). A high-pressure cleaner can be used with caution, see the previous point. If possible, clean the cladding profiles in the longitudinal direction and from top to bottom.

Removing dirt and stains

- When cleaning standard brushed surfaces of profiles, proceed according to table No. 1, Maintenance of brushed surfaces TERAFEST®
- When maintaining unbrushed surfaces, it is necessary to proceed more carefully, see the options listed in table No. 2. Maintenance of unbrushed surfaces TERAFEST®
- Avoid the use of aggressive solvents and thinners. Also, never treat the surface of TERAFEST® profiles with stains, paints, varnishes, waxes, oils or other similar products, unless they are approved by the manufacturer.

Fig. 1 Common pollution

Fig. 2 Water dust spots

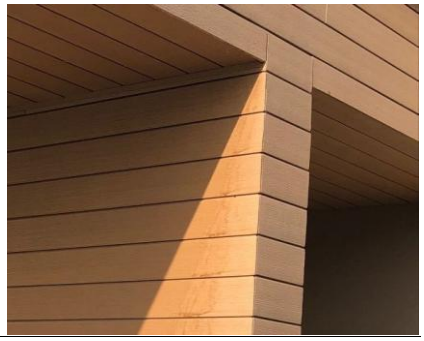

Fig. 3 Maturation of the wood component

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Tab. 1 – Maintenance of TERAFEST® brushed surfaces®.

Dirt type	Cause and origin	Removal method
Common dirt Fig.1	Dust and ash in the air, etc. More significant pollution is mainly on leeward surfaces.	Use regular household cleaners or wood composite cleaners (WPC). Use a spray bottle to apply the cleaning solution. A brush can also be used on the brushed surfaces (do not use a wire brush or dish sponge) Rinse the subsequent surface with water. A high-pressure cleaner can be used with caution.
Stubborn stains	Stains from mould, fungi, moss, leaves and other organic material, they occur mainly on shaded areas with higher humidity.	The most effective are products containing sodium hypochlorite, such as SAVO, Cilit Bang, etc. Before use, soak the cladding, apply the cleaner and leave it on for a few minutes, then rinse the treated area with water. Always follow the instructions and safety instructions on the cleaner packaging.
Water dust spots Fig. 2	These stains occur in places with insufficient intensity of rainwater, when insufficiently washed dirt dries on the surface of the cladding.	In case of stains, wash the cladding with clean water and, if necessary, use cleaning agents designed for WPC, you can brush the profiles in the longitudinal direction. Under the action of rainwater, the stains gradually disappear spontaneously. For covered areas, the use of a cleaner containing sodium hypochlorite is effective. See above.
Yellowing of the surface Fig. 3	Caused by the maturation of the wood component.	This is a natural process of maturation the surface of the boards after their exposure to UV radiation. The associated yellowing of the surface will disappear over time due to rainwater. In case of lack of rainfall, the process can be accelerated by rinsing with water. For covered areas, this must be repeated several times to obtain an even colour without stains.
Surface scratches	Accidental damage, vandalism.	If the scratches are deep with burrs, the damage can be partially smoothed out with an abrasive fleece (not sandpaper) by sanding in the longitudinal direction, then rinsing the surface with water. Minor scratches do not need to be treated, after maturing the exposed layer of material will not be visible.

Tab. 2 – Maintenance of unbrushed surfaces TERAFEST®.

Dirt type	Cause and origin	Removal method
Common dirt Fig.1	Dust and ash in the air, etc. More significant pollution is mainly on leeward surfaces.	Use common household cleaners (without abrasive particles) or wood composite cleaners (WPC). A brush cannot be used on unbrushed surfaces. To apply the cleaning solution, use a spray bottle, let it work and then rinse with water. A high-pressure cleaner can be used with caution.
Stubborn stains	Stains from mold, fungi, moss, leaves and other organic material, they occur mainly on shaded areas with higher humidity.	The most effective are products containing sodium hypochlorite, such as SAVO, Cilit Bang, etc. Before use, soak the cladding, apply the cleaner and leave it on for a few minutes, then rinse the treated area with water. Always follow the instructions and safety instructions on the cleaner packaging.
Water dust spots Fig. 2	These stains occur in places with insufficient intensity of rainwater, when insufficiently washed dirt dries on the surface of the cladding.	In case of stains, wash the tile with clean water and possibly use cleaning agents designed for WPC, unbrushed profiles cannot be brushed. Under the action of rainwater, the stains gradually disappear spontaneously. For covered areas, the use of a cleaner containing sodium hypochlorite is effective. See above.
Yellowing of the surface Fig. 3	Caused by the maturation of the wood component.	This is a natural process of maturation the surface of the boards after their exposure to UV radiation. The associated yellowing of the surface will disappear over time due to rainwater. In case of lack of rainfall, the process can be accelerated by rinsing with water. For covered areas, this must be repeated several times to obtain an even colour without stains.
Surface scratches	Accidental damage, vandalism.	These scratches are very visible on unbrushed surfaces. As of the date of publication of this document, there is no appeal available yet. We assume that minor scratches will not be so noticeable after the exposed layer has matured.

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WARRANTY

The extended warranty for TERAFEST® products in the period of 25 years is valid for all composite wood products in the range against wood-decaying fungi, rot and insects in standard conditions. For all other cases, the warranty is 60 months. We will replace damaged products under warranty. If the product in question is no longer manufactured, it will be replaced with a similar one. No further financial or other compensation can be claimed under this warranty. Installation and all other work and costs associated with the replacement of cladding profiles are excluded from the warranty.

The warranty does not cover the following:

- **Colour fastness** – TERAFEST® products have UV protection. However, these are products made of wood, and therefore colour variations may occur over time due to uneven exposure to UV light and moisture.
- **Scratching of unbrushed surfaces –** unbrushed surfaces of profiles are covered with a thin layer of coloured polymer, the thickness is determined by the production technology. With standard products, due to easy scratching, is this layer removed by brushing. In the case of a requirement for an unbrushed visible surface, the warranty cannot be applied for any damage occurring after receipt from the manufacturer for the above reason.
- **Maturing of the wood component** – see Fig. 3. In the first weeks or months after installation, depending on the intensity of sunlight and rainfall, the colour matures. It is the release of lignin from the wood component in the TERAFEST® material, which consists of wood (60%) and HDPE (40%). Lignin is a natural part of all tree species. Due to its release, which is caused by UV radiation and subsequent leaching by water, a colour change occurs in the first weeks or months, usually with a yellow tint. Over time, and especially depending on the intensity of rainwater, this colour change disappears.
- **Water dust spots** – see Fig. 2. These stains occur in places with a lower intensity of rainwater, when insufficiently washed dirt dries on the surface of the cladding. However, UV radiation and rain gradually remove the stains spontaneously. This phenomenon cannot be completely avoided on partially covered surfaces. In open areas fully exposed to the sun and rain, this phenomenon is least noticeable.
- **Occurrence of static electricity** – under certain conditions, people moving near façade cladding made of TERAFEST® material may encounter discharges of static electricity. This is a common physical phenomenon occurring in most materials with a proportion of plastics. The polarity and strength of electrostatic charge vary depending on the types of materials touching (shoes, clothing), surface roughness, temperature and other circumstances. This phenomenon is not predictable. Static electricity usually manifests itself in windy weather and at low relative humidity. The intensity varies depending on the climate and age of the cladding. There is no health risks associated with the occurrence of static electricity on TERAFEST® cladding, and its occurrence is not a recognizable reason for a complaint.
- **For common surface dirt and wear**, see - Fig. 1 and Table 1 and Table 2
- **Problems arising due to poor preparation of the load-bearing structure of the façade cladding**, or its low load-bearing capacity, rigidity, or deformation, or due to insufficient ventilation of the space under the façade cladding.
- **Failure to comply with the assembly instructions** – TERAFEST® products that have not been installed in accordance with the assembly instructions supplied together with the material. The warranty also does not apply to products that have been used for a purpose other than that specified in the assembly instructions.

Warranty period TERAFEST®	FOR HOME USE	FOR COMMERCIAL USE
BASIC	5 years	5 years
EXTENDED	25 years	10 years

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