ASSEMBLY INSTRUCTIONS

FACADE PROFILES

174 Nova SE

TERAFEST by WOODPLASTIC

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174 Nova SE

BEFORE YOU BEGIN

Fire Applications and Classification

- The façade profiles **of 174 NOVA SE** can be safely used as cladding for family houses (single-storey and multi-storey).
- They are classified in **Fire Reaction Class E**. For taller buildings, consultation with a fire specialist.
- The TERAFEST® material is not intended to be load-bearing.
- Accessories (lighting, downpipes, etc.) must not be anchored only to the cladding profiles.

Tolerance and dilatation

- Manufacturing tolerance: width **± 2mm**, **thickness ± 1mm**, **length ± 10mm**.
- Maximum longitudinal deflection: **5 mm/m**.
- Profiles and rails expand and contract under the influence of temperature , → always observe the prescribed **expansion gaps**.

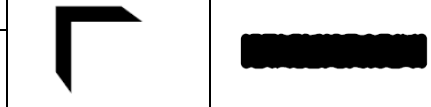
Storage and use

- TERAFEST® products are mainly designed for **outdoor use**.
- Store on a dry, level, stable surface before assembly.

Tools

- Use the same tools as for hardwood: circular **saw, drill, cordless screwdriver, tape measure, spirit level, pencil, rubber mallet and angle**.

APPROXIMATE MATERIAL CONSUMPTION

	Recommended product	Illustrative photo	Quantity per 1 m2
Facade profile	174 NOVA SE		6.67 m/m2
Anchoring of façade profiles	Stainless steel screw A2 TEX 3.9 x 25 mm		16.67 pcs/m2
	Start Clip + Stainless Steel Screw A2 TEX 3.9 x 16 mm		0.8 pcs/m2
Façade joists	AL joist 30 (AL-SMART joist 25)		2.5 m/m2
Anchoring of façade joists	According to the thickness of the thermal insulation – e.g. Frame dowel RMS 8x160mm + screw with hexagonal head		3.5 pcs/m2
Finishing and Edge boards	Corner board 50 SE		According to the complexity of the project
	Edge board 70 SE		
Anchoring of finishing and edge boards	Stainless steel screw A2 3.5 x 25 mm		

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1. INSTALLATION OF FAÇADE JOISTS

Basic rules

- First it is necessary to install the joists, only then the façade cladding is installed.
- The wall must safely support a load of at least **13–14 kg/m²**, which is usually met by conventional walls.
- For insulation **over 20 cm, it** is necessary to consult a designer or structural engineer regarding anchoring.

Used joists

- Aluminium profiles **AL joist 30** or **AL-SMART joist 25** are used as standard**.**
- An alternative is impregnated wooden slats with dimensions of **30 × 50 mm**.

Orientation and spacing of joist

- The façade profiles **174 NOVA SE** are mounted predominantly **horizontally**, so the joists are installed vertically. If required, the profiles can also be mounted vertically.
- The axial distance of the joists is **300–500 mm**, always depending on the specific conditions of the construction.
- Each profile must be supported by joists at least by **3 points**.

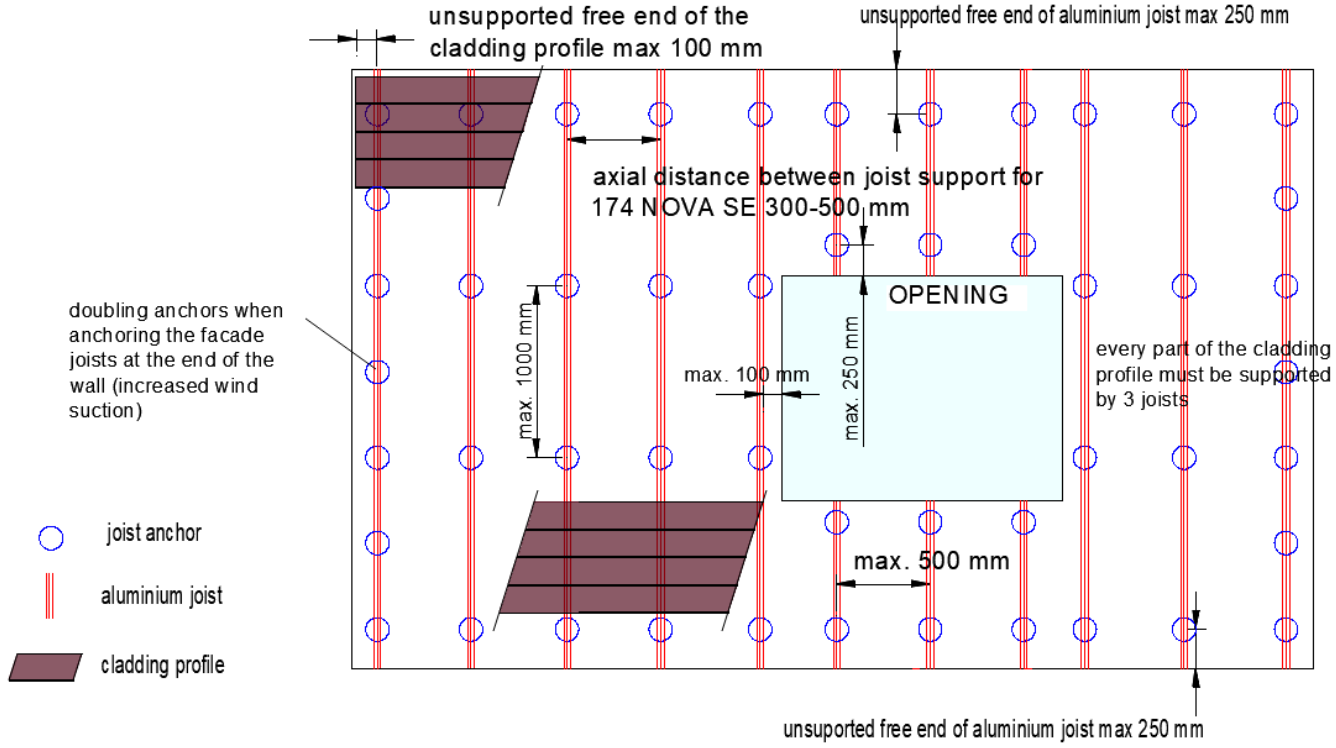
Anchoring of joists

- The joists are anchored through the thermal insulation directly into the supporting structure.
- The distance between the anchors is a maximum of **1 m**, the exact design is determined by the static design.
- In the outer strips of the façade and at the corners, the number of anchor elements must be doubled.
- The maximum free overhang of the aluminium carrier is **250 mm**.
- To minimize heat loss, it is recommended to use dowels with a thermal bridge break.

Other recommendations

- Do not anchor to the waterproofing membrane. The first row of anchors can be moved up to **30 cm above the ground**.

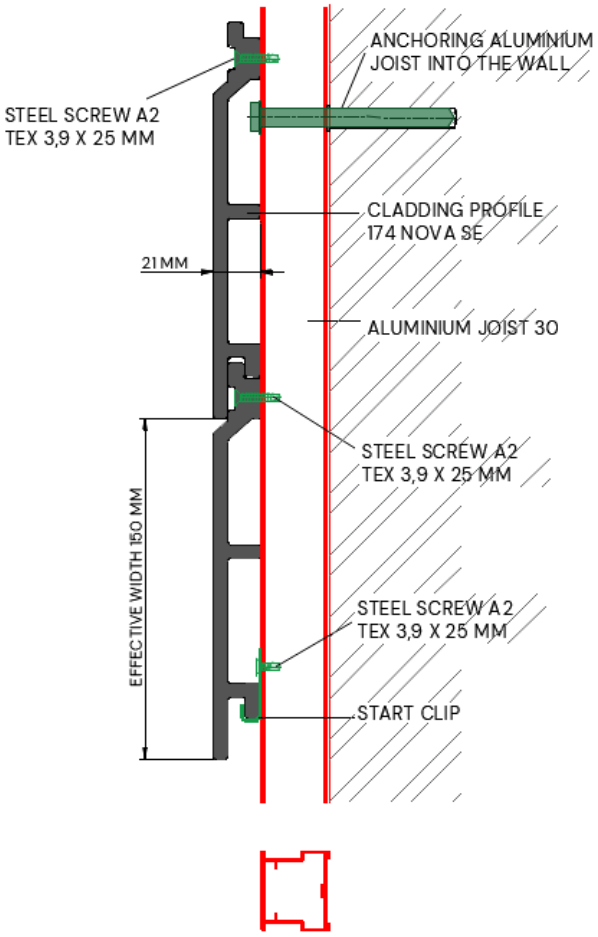
Mounting scheme of aluminium joists for **174 NOVA SE** - horizontal
wall view



2. INSTALLATION OF FAÇADE PROFILES 174 NOVA SE

Anchoring principles

- The façade profiles are anchored directly to the supports using screws. The first row anchors to the Starter Clip.
- The effective width of the 174 NOVA SE profile is **150 mm.**
- Due to expansion movements, the screws are **anchored only on one side** of the profile, the other side is freely inserted into the adjacent profile. A gap in the cavity of about 2 mm is omitted.
- Shortened profiles are anchored on both sides if the installation situation requires it.
- The maximum free length of the façade profile is **100 mm.**
- When connecting façade profiles in length, it is necessary to keep a gap of **3 mm.**
- Proceed from the bottom row of 174 NOVA SE façade profiles
- The first row is put on the **Start clip**
- The corners of the façade are covered with the **Corner board 50 SE.** The window jambs and lintels are complemented by the **Finishing board 70 SE,** depending on the depth of the opening.

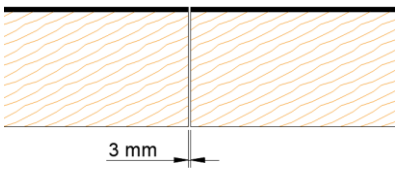


Fasteners used

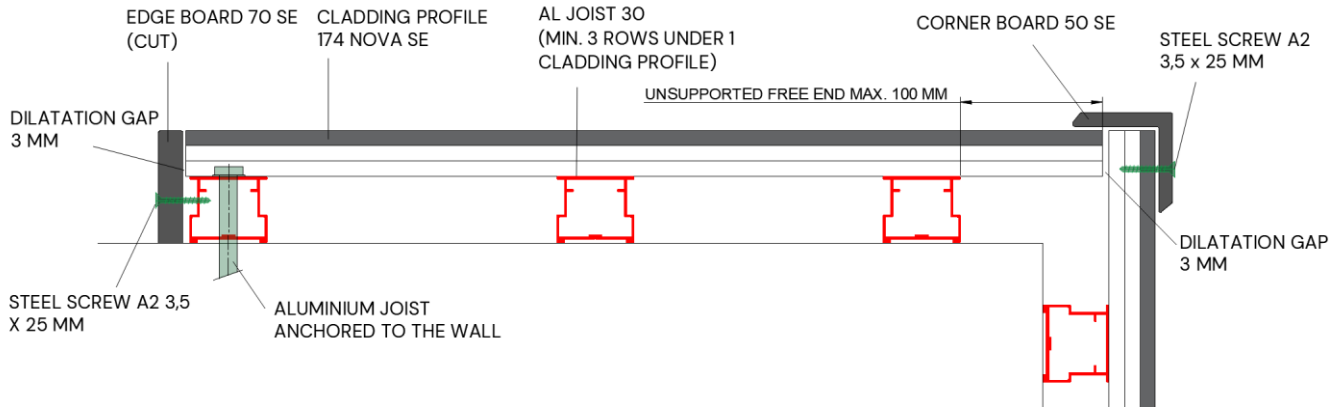
- Standard: **Stainless steel screw A2 TEX 3.9 × 25 mm**.
- Start Clip Anchors: **Stainless Steel Screw A2 TEX 3.9 × 16 mm**.
- For mounting corner and edge boards: **Stainless steel screw A2 3.5 x 25 mm**

Pre-drilling and tightening of screws

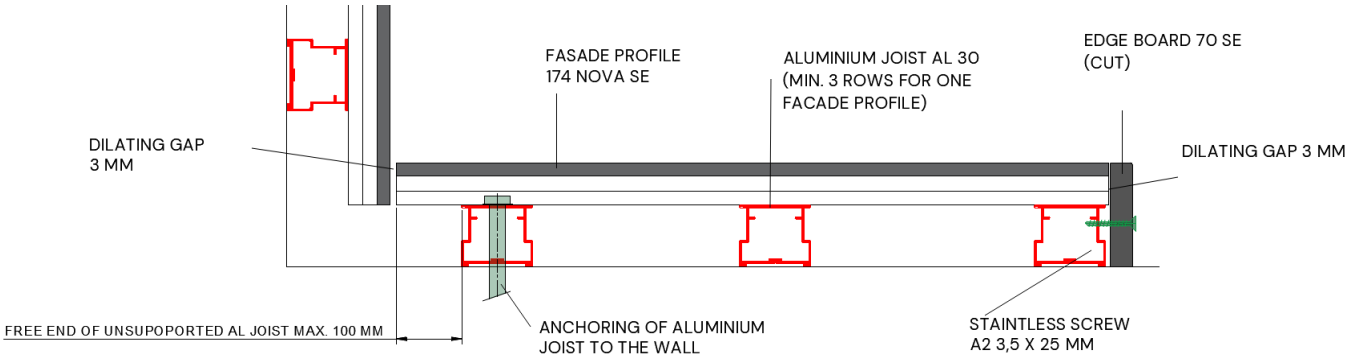
- Pre-drilling is necessary for easier installation **to allow expansion movements of façade profiles**.
- Façade profiles: drill with min. **2 mm larger than the screw** (for TEX screws **ø 6 mm**).
- Aluminium carriers: drill **bit ø 2.5-3 mm.**
- Tighten the screws with a torque **of max. 4 kN.**



Detail of the beginning of the cladding and the outer corner



Detail of the inner corner and the end of the cladding



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