TECHNICAL SPECIFICATIONS
NOMAD CLADDING

Brief description

NOMAD cladding is a ventilated cladding system with a slatted appearance made from **VESTA®, with CSTB technical appraisals** and an **FDES (= Environment Product Declaration)** verified by an independent third party.

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– NOMAD boards dimensions:
  - Standard lengths: 3000 and 4000 mm (other dimensions available under certain conditions),
  - Width of interlocked boards: 300 mm.
– The boards are available in 3 wave formats, which can be combined with each other:
  - NOMAD 4: 6 waves; 40 mm wide and 13 mm deep waves
  - NOMAD 6: 4 waves; 60 mm wide and 13 mm deep waves
  - NOMAD MIX: 4 waves; 50/30/80/100 mm wide and 13 deep waves
– Can be installed on: masonry, concrete, Timber Frame Constructions, Timber Frame Façades, CLT, double metal skin.
– Can be installed horizontally or vertically.
– The boards are installed with visible A2 stainless steel screws supplied by Neolife, screwed onto a wooden or metal frame.
– Mechanical resistance: Q3 impact resistance, V4 wind resistance, seismic zone 4 (depending on the zone and size of the building, see ATec technical appraisals).
– Fire rating: Euroclass D.
– Rot-proof (equivalent durability class 4) and no treatment of cut edges.
– UV resistance compliant with standard NF EN 15534.
– Vibrated finish available in all colours from our colour chart.
– NOMAD boards have an Environmental Statement (FDES) verified by an independent third party.

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Full description

The service will include the supply and installation of the product in accordance with the **CSTB** Technical Appraisals (ATec) and the technical specifications in force on the date of installation.

1. Description of NOMAD cladding

NOMAD cladding is an add-on cladding system that complies with standard **EN 15534,** with a slatted look.

It is made from VESTA®, a bio-based material composed of wood fibres, a binder, an antioxidant and mineral pigments. It has a vibrated, regular surface appearance.

The slats are available in three combinable profiles:

- NOMAD 4: 6 waves; 40 mm wide and 13 mm deep waves
- NOMAD 6: 4 waves; 60 mm wide and 13 mm deep waves
- NOMAD MIX: 4 waves; 50/30/80/100 mm wide and 13 deep waves

The profile is available in all colours from the Neolife colour chart, as the material is dyed throughout.

NOMAD cladding boards can be installed horizontally or vertically on flat walls.

They are fixed to the supporting structure, in the hollow of the wave (NOMAD 4: one wave out of three, NOMAD 6: one wave out of two, NOMAD MIX: one wave out of two), with stainless steel screws supplied by NEOLIFE. Screws with lacquered heads in the nearest RAL colour.

A ventilated air gap of at least 20 mm is provided between the inner face of the slats and the bare exterior of the load-bearing wall or any thermal insulation. When the cladding is vertical, the air gap is created in the wave of the cladding.

2. Dimensional characteristics

Manufacturing dimensions

- Standard lengths: 3000 and 4000 mm (other dimensions available on request)
- Thickness: 16.8 mm
- Width of interlocked blades: 300 mm

Dimensional tolerances of standard manufacturing components

- Length: - 0 / + 20 mm
- Width: ± 2.55 mm
- Thickness: ± 1.15 mm

Nominal surface mass

- NOMAD 4: 7.7 kg/m²
- NOMAD 6: 7.5 kg/m²
- NOMAD MIX: 7.0 kg/m²

3. Physical and mechanical characteristics

Fire

- NOMAD 4: Euroclass D-s3, d2
- NOMAD 6: Euroclass D-s3, d2
- NOMAD MIX: Euroclass D-s3, d0

Impact:

Maximum resistance Q3

Seismic:

Suitable for seismic zones 1, 2, 3 and 4 for buildings of importance I, II, III (see ATec technical appraisals)

Wind:

Maximum resistance V4, exact pull-out pressure to be determined.

4. Characteristics of the load-bearing frame

Wood frame

The frame components comply with the requirements of CSTB 3316-V2.
The battens shall be calibrated, class 2, and have the following minimum dimensions:

- Minimum visible width of 40 mm (at board joints: 2x40 mm or 60 mm)
- Minimum thickness 27 mm
- Maximum centre-to-centre distance between rafters: 645 mm on wooden frames and 600 mm on masonry or concrete

The coplanarity of the uprights must be checked between adjacent uprights with a maximum permissible deviation of 2 mm. The fixing brackets must have been tested taking into account a deformation under vertical load of no more than 3 mm.

Fixings to the supporting structure must be chosen taking into account wind exposure conditions and their permissible pull-out resistance in the substrate in question, according to the seismic zone and the importance category of the building.

In the case of substrates with unknown characteristics, the ultimate strength of the anchors shall be verified by prior testing in accordance with the document "Determination on site of the ultimate strength of a mechanical fastening for cladding" (CSTB book 1661-V2).

When being installed, wooden rafters and battens must have a maximum target moisture content of 18%, with a maximum deviation of 4% between two elements. The moisture content of the elements must be determined using the method described in standard NF EN 13183-2 (using a pin moisture meter).

Wooden rafters must have a mechanical strength corresponding to at least class C18 according to standard NF EN 338, and natural or conferred durability of use class 2 with protective strip or 3b according to FD P 20-651.

Steel frame

The steel frame shall be of a flanged design with dimensions 87 x 30 mm in omega profile or 30 x 30 mm in C profile. It shall comply with the requirements of CSTB Book 3194 and its amendment 3586–V2 and shall be considered in a direct outdoor atmosphere. The frame shall be made of steel with a minimum grade of S220 GD.

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Aluminium frames

The aluminium frame shall be freely expandable in design, in accordance with the requirements of CSTB Specification 3194 and its amendment 3586-V2, and shall be considered for direct outdoor use. The visible width shall be at least 30 mm at intermediate supports and at least 60 mm at blade joints. The aluminium used for the frame shall be series 3000 minimum and shall have an elasticity limit $R_{p0.2}$ greater than 180 MPa.

Installation principles

Fixings

NOMAD cladding boards are fixed to the supporting frame, in the hollow of the wave (NOMAD 4: one wave out of three, NOMAD 6: one wave out of two, NOMAD MIX: one wave out of two, NOMAD), with A2 stainless steel self-drilling screws, minimum 4.5 x 35 mm, in a wooden support, and A2 stainless steel self-drilling screws, minimum 4.8 x 21 mm, in a steel or aluminium support. Screws with lacquered heads in the nearest RAL colour.

Ventilation

This is important regardless of the substrate and the direction in which the boards are installed. It must be provided in the lower and upper parts, allowing a minimum space of 15 mm (or in accordance with DTU 41.2) and starting the installation of the slats at least:

- Wooden frame: 150 mm from the ground
- Metal frame: 150 mm on soft ground, 50 mm on hard ground.

When installed vertically, ventilation can be provided within the cladding.

Expansion gap

In general, the boards should be laid so as to leave an 8 mm gap between them (at the joints) and opposite any adjacent elements in order to avoid any accumulation of dimensional variations.

Cutting the boards

NOMAD cladding boards should be cut using a fine tooth saw. Small cuts can be made using a jigsaw. As the material is homogeneous and dyed throughout, cut edges do not require any special treatment.

General principles and specific points

The diagrams in the technical data sheet constitute a catalogue of examples of how to deal with special points. The company installing the product undertakes to read and comply with the catalogue.

Accessories

The metal cladding profiles commonly used to treat special points of traditional cladding must meet the following specifications:

– Anodised aluminium sheet, class 15 or 20 according to standard NF EN 1396. Thickness 10/10th, 15/10th mm or 20/10th mm.
– Galvanised steel sheet, minimum Z 350 according to standard NF EN 10326. Thickness: minimum 6/10th.
– Galvanised steel sheet, minimum Z 275, pre-coated in accordance with standard XP P34-301.

Refer to standard NF P 24-351 for protection against sheet metal corrosion depending on local environment.