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Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011

European Technical Assessment ETA-25/0241 of 2025/04/22

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:	Steffen Sten cladding kit type Nordic
Product family to which the above construction product belongs:	Kits for external wall claddings mechanically fixed
Manufacturer:	Steffen Sten APS Havnegade 70B DK-5000 Odense C Tel. + 45 65 91 64 30 Internet www.steffensten.dk
Manufacturing plant:	Steffen Sten APS Havnegade 70B DK-5000 Odense C
This European Technical Assessment contains:	13 pages including 5 annexes which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:	EAD 090062-01-0404 – Kits for external wall claddings mechanically fixed
This version replaces:	-

II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

The Cladding kit type Nordic, consist of cladding elements that are suspended on the subframe by means of a drilling point fastener with a bonded sealing washer.

The kit consists of the following elements:

Subframe: Horizontal aluminium subframe, alloy EN AW-6060 T6 in accordance with EN 573-3.

Screws for fixing the cladding element on aluminium subframe:
4.5 x 40 mm, TX20 drilling-point woodscrews, bonded sealing washer 15 mm, Stainless – A2.

The kit is installed on vertical wooden battens dimension: e.g. 25x50 mm or vertical aluminium profiles with a cc distance of 600 mm.

Screws for fixing the horizontal aluminium subframe to the vertical subframe: 4,5 x 25 mm stainless steel A2 self-tapping screws

Cladding element: Nordic: 100 % ceramic tiles. Assessed in accordance with EN 1304.

Tile size [mm]	Horizontal subframe distance [mm]	Vertical subframe distance [mm]
400x175x30	135	Max c/c 600
400x250x30	210	Max c/c 600

Dimensions are specified in annex 1.

Always check the base layer before mounting battens and laths. Straightness requirements of the underlying construction, vertical and horizontal, tolerance: +/- 3 mm, measured with a straight edge over 2 m.

The metal fasteners for fixing the horizontal subframe into the substrate is not a part of the kit

The face to which the system is fixed should be flat, vertical and capable of supporting appropriate loads. In a soffit situation the engineer should specify the sub-structure and number of fixings required based on the weight of the system and any other requirements e.g., wind loads, etc.

2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The cladding kit Nordic is intended for use as fastening of external wall claddings, in ventilated facades.

The cladding kits are fixed to external vertical walls made of masonry (clay, concrete, or stone), concrete (cast on site or as prefabricated panels), timber or metal frame in new or existing buildings (retrofit).

The façade kit is assessed as a kit family E in accordance with EAD 090062-01-0404.

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of 25 years, when installed in the works.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by the Technical Assessment Body issuing an ETA based on the EAD 090062-01-0404 but are regarded only as a means for expressing the expected economically reasonable working life of the product.

3 Performance of the product and references to the methods used for its assessment.

Characteristic	Assessment of characteristic
3.2 Safety in case of fire (BWR 2)	
Reaction to fire	The metal parts and the clay/natural slate tiles of the Cladding kit type Nordic are classified as **Euroclass A1** in accordance with EN 13501-1 and Delegated Regulation 2016/364
Façade fire performance	**No performance assessed**
Propensity to undergo continuous smoldering	**Not relevant**
3.3 Hygiene, health and the environment (BWR 3)	
Watertightness of joints (protection against driving rain)	**Not watertight**
Water absorption	**≤ 3,0%**
Water vapour permeability (for non-ventilated facades)	**Not relevant**
Drainability	**Drainable,** See figures in annex 2
Content, emission and/or release of dangerous substances*	**No performance assessed**
3.4 Safety and accessibility in use (BWR 4)	
Wind load resistance	**Q: 500 Pa** **Max. deformation** **< 1 mm at 6500 m^3/h** No failure occurred. The joints in the tiles did not allow for obtaining higher pressure. The characteristic wind resistance of the kit is governed by the resistance of pull-through resistance – see below
Resistance to horizontal point loads	**No visible deformation on any component could be observed**
Impact resistance	The kit fulfils the requirements for **impact category IV** when subjected to a hard body impact of 1 J and a soft body impact of 10 J.
Mechanical resistance	
Bending strength	**No performance assessed**
Resistance to long term or permanent dead load	**Not relevant**

Characteristic	Assessment of characteristic
Pull-through resistance	Arithmetic average value $\mathbf{F_{u,m}}$ **= 2.124 N** Characteristic value $\mathbf{F_{u,C}}$ **= 851 N**
Pull-through resistance under shear loads	The pull through resistance to shear loads is governed by the breaking load in the material and the mean value is 0,6 kN.
Combined tension and shear load resistance	**Not relevant**
Resistance of profiles	**No performance assessed**
Tension/pull out resistance of subframe fixings	The resistance of the screw fixing is the determining factor and therefore the tension/pull out resistance equals the resistance of the screw fixings.
Shear load resistance of subframe fixings	The resistance of the pull through under shear loads is the determining factor
Bracket resistance	**No performance assessed**
Resistance to seismic loads	**No performance assessed**
3.5 Protection against noise (BWR 5)	
Airborne sound insulation	**No performance assessed**
3.6 Energy economy and heat retention (BWR 6)	
Thermal insulation	**No performance assessed**
3.7 Durability	
Hygrothermal behavior	**Not relevant**. The cladding element is not known to be or suspected of being sensitive to hygrothermal variation
Behavior after pulsating load	**No performance assessed**
Freeze-thaw resistance	**The cladding element showed no change after 150 freeze/thaw cycles**
Behavior after immersion in water	**Not relevant.** The cladding element is not known to be or suspected of being sensitive to water
Dimensional stability – by humidity	**Not relevant.** The cladding element is not known to be or suspected of being sensitive to humidity
Dimensional stability – by temperature	**Not relevant.** The cladding element is not known to be or suspected of being sensitive to temperature
Chemical and biological resistance	**Not relevant.** The cladding kit is made from inorganic materials
UV radiation resistance	**Not relevant.** The cladding kit does not contain polyester or other plastics
Corrosion	The **durability rating** of alloy AW 6060 & AW 5754 in accordance with EN 1999-1-1 is **B** Normally additional corrosion protection is not needed for atmospheric exposure in rural, industrial/urban and marine conditions according to table D.1 of EN 1999-1-1

3.8 Methods of verification

The product is fully covered by EAD 090062-01-0404.
According to the Regulation (EU) No 305/2011.

3.9 General aspects related to the fitness for use of the product

The European Technical Assessment is issued for the product based on agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

The cladding kits are manufactured in accordance with the provisions of this European Technical Assessment using the manufacturing processes as identified in the inspection of the plant by the notified inspection body and laid down in the technical documentation.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base.

4.1 AVCP system

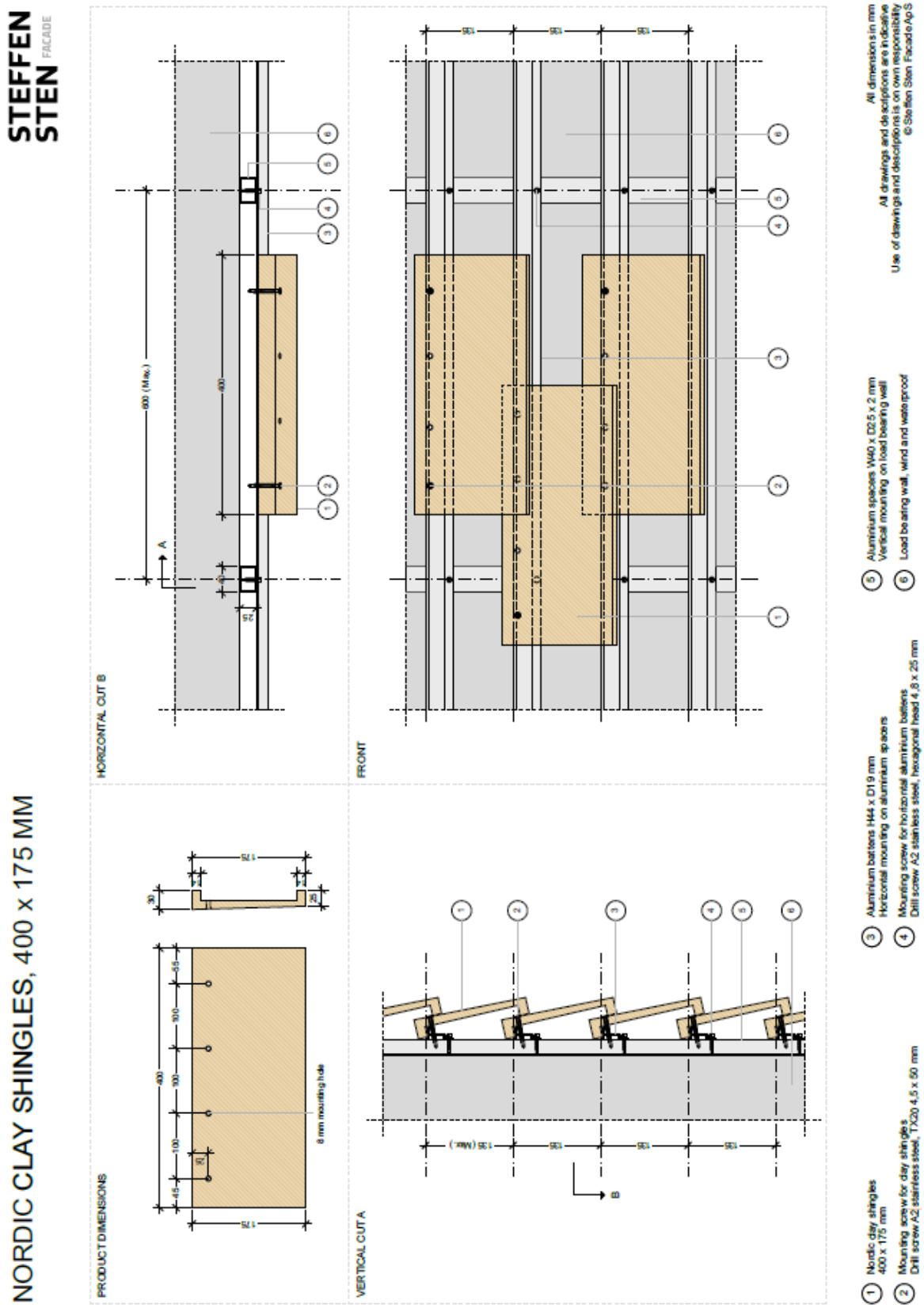
According to the decision 2003/640/EC of the European Commission, as amended by 2001/596/EC, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 2+.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD.

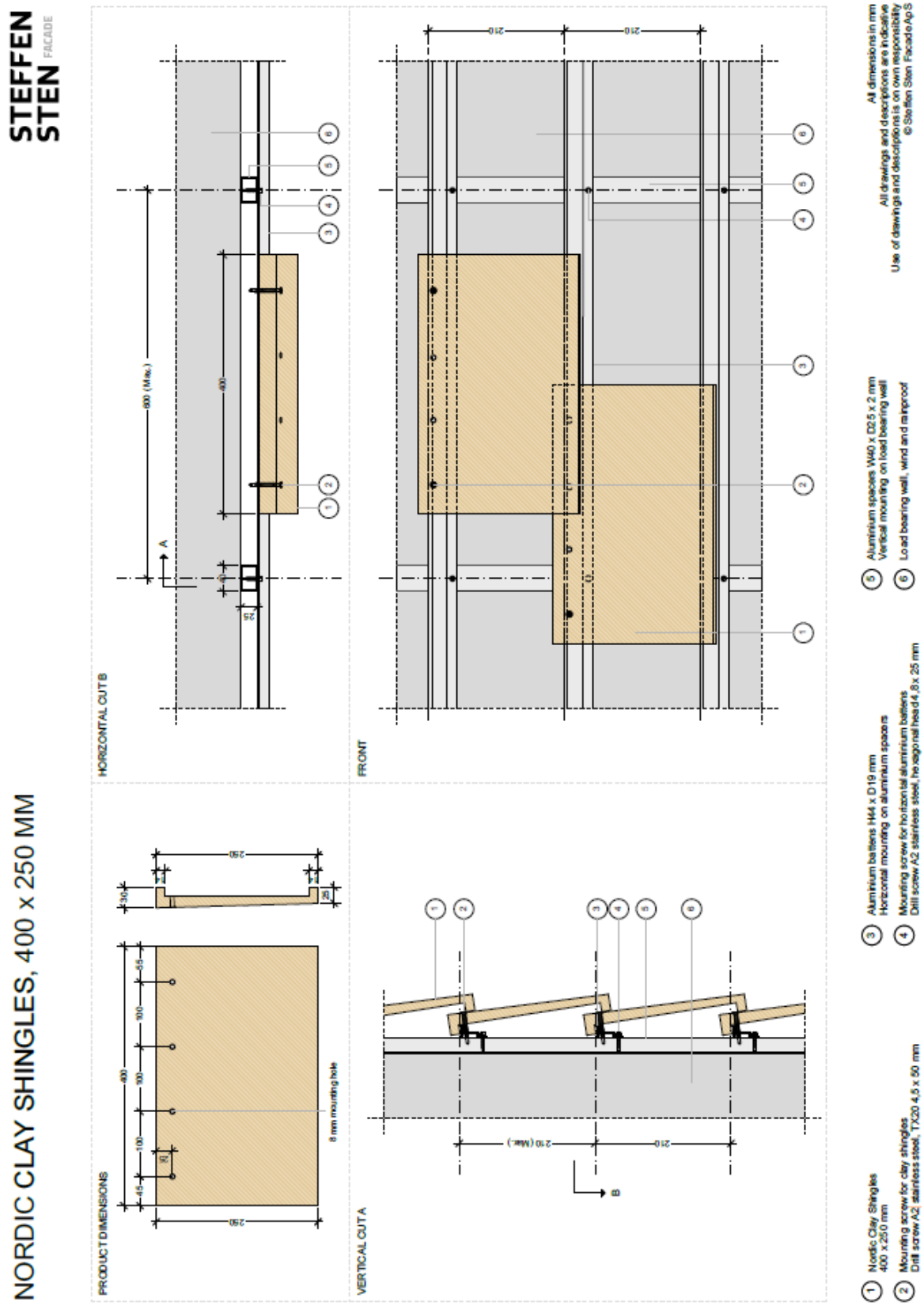
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2025-04-22 by

Thomas Bruun
Managing Director, ETA-Danmark



Cladding kit type Nordic	Annex 1
Cladding elements, 400 x 175 mm **Drainability, horizontal and vertical view**	



Cladding kit type Nordic	Annex 2
Cladding elements, 400 x 250 mm **Drainability, horizontal and vertical view**	

Design

The design of the external wall claddings for ventilated facades using the Cladding kit type Nordic should consider:

- It is assumed that the substrate wall meets the necessary requirements regarding the mechanical strength (resistance to static and dynamic loads) and the airtightness, as well as the relevant resistance regarding watertightness and water vapour.
- The verification of the designed system by means of calculation, taking into account the mechanical characteristic value of the kit components in order to resist the actions (dead loads, wind loads etc.) applying on the specific works. National safety factors and other national provisions must be followed.
- The selectionand verification of the brackets which support the subframe vertical profiles considering compatible materials (e.g. aluminium alloy) and the mechanical resistance (vertical and horizontal resistance) according to the envisaged actions obtained from the mechanical calculation of the designed system.
- The selection and verification of the anchors between the brackets and the external walls (substrate), taking into account the substrate material and the minimum resistance required (pull-out and shear resistance) accordint to the envisaged actions obtained from the mechanical calculation of the designed system.
- The accommondation of the designed system movements to the substrate or structural movements.
- The execution of singular parts of the façade, some examples of construction details are indicated in annex 3.
- The corrosion protection of the designed system metallic components taking into account the category of corrosivity of the atmosphere of the works (e.g. according to ISO 9223).
- The drainability of the ventilated air space between the cladding elements and the insulation layer or the external wall accordingly.
- An insulation layer is usually fixed on the external wall and should be defined in accordance with an harmonized standard or an ETA and taking into account the section 3 of this ETA.
- Because the joints are not watertight, the first layer behing the ventilated air space (e.g. insulation layer) should be composed by materials with low water absorption.

Installation

Installation of the external wall claddings for ventilated facades using the Cladding kit Nordic should be carried out:

- According to the specifications of the manufacturer and using the components specified in this ETA.
- In accordance with the design and drawings prepared for the specific works. The manufacturer shoud ensure that the information on these provision is given to those concerned.
- By appropriately qualified staff and under the supervision of the technical responsible of the specific works.

Maintenance and repair

Maintenance of the external wall claddings for ventilated facades using the cladding kit type Nordic includes inspections on site, taking into account the following aspects:

- Regarding the cladding elements, the apperance of any damage souch as cracking, detachment, delamination and mould presence due to permanent moisture or permanent irreversible deformation.
- Regarding metallic componnets: The presence of corrosion or presence of water accumulation.

When necessary, any repair to localized damaged areas must be carried out with the same components and following the repair instructions given by the manufacturer.

Cladding kit type Nordic	Annex 3
Design, installation, maintenance, and repair criteria	