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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-25/0730 of 2025/09/23

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:	m.look for use as cladding kit with rivets
Product family to which the above construction product belongs:	External wall cladding kit with visible punctual fixings
Manufacturer:	FunderMax GmbH Klagenfurter Straße 87-89 AT-9300 St. Veit an der Glan Telephone: 0043 59 4940 Internet: www.fundermax.com
Manufacturing plant:	FunderMax GmbH IZ-NÖ-Süd Straße 3 AT-2355 Wiener Neudorf
This European Technical Assessment contains:	13 pages including 2 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 Fundermax m.look is an architectural facade panel with a reinforced glass fibre, non-combustible mineral core. The panels are covered with UV-resistant decorative layers of melamine resin impregnated decorative papers and a polyurethane acrylic paint layer on both sides (weather protection film – surface type NT).

The maximum panel format is 3670 x 1630 mm. The facade panels should be used in portrait or landscape format. The panels are manufactured in accordance with EN 438-6 (manufacture of HPL panels):

Thickness:
7,0 mm
Tolerance: +0,8/-0,4 mm:

9,0 mm
Tolerance: +0,8/-0,5 mm:

Weight:
7 mm panels: 12,6 (+2/-1) kg/m²
9 mm panels: 16,2 (+2/-1) kg/m²

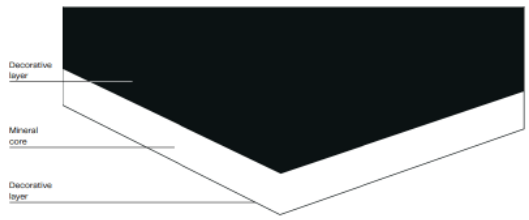


Figure 1: m.look façade panel

The transition between the fastener and the substructure represents the system limit between the object to be assessed and the object-specific components of the facade system to be implemented in accordance with the applicable technical building regulations.

On the facade the maximum center distance between the fastening points may not exceed 800 mm. The distance should not be wider than 600mm when used as rear-ventilated exterior ceiling soffits. The distance to the edge should be 30-80mm
In a soffit situation the engineer should specify the substructure and number of fixings required based on the weight of the system and any other requirements e.g., wind loads.

The m.look facade panels are mechanically attached to a metallic substructure (aluminum/steel) using blind rivets (aluminum/stainless steel) type MBE-FN 5x L K14 or SFS AP-5.0 x L K14. For more information about the panels and the rivet for mounting, please see Annexes A1 and A2.

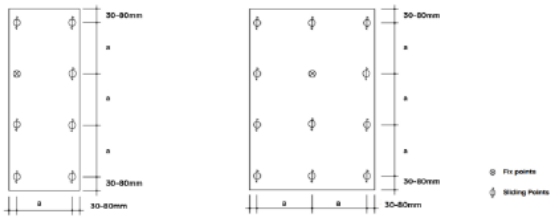


Figure 2: Distances for m.look rivets

Hole Diameter in the Facade Panels:
The panels are fastened using a sliding and fixed point system. The fixed points are implemented with a drill hole diameter of Ø5.1 mm each in the facade panel and substructure profile, whereby each facade panel always has a fixed point, and all other attachment points are designed as sliding points.

The sliding points are realized with a drill hole diameter of Ø8.5 mm in the facade panel, which ensures a constraint-free bearing on the substructure. All fastening points are to be made using a flexible mouthpiece during the setting process, which should ensure a distance of 0.3 mm between the rivet head and the panel surface. Use a centering drill tool at the sliding points to position the rivets in the center of the drill hole in the facade panel.

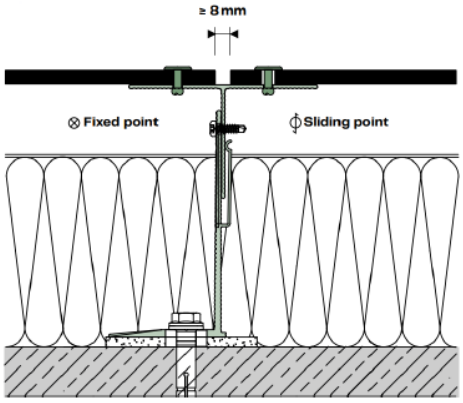


Figure 3: m.look façade panel fixed and sliding point mounting

Joints
The joints between the facade panels may be open (width of the open joints ≥ 8 mm) or closed with joint profiles in a non-restrained construction.

Rear Ventilation
The cladding kit has to be used in ventilated facades. Ventilation and drainage must be provided behind the system. The clear cavity between the back of the panel and substrate wall (or insulation if installed within the cavity) must be at least 20 mm wide, to ensure that a minimum ventilation area of 200 cm²/m of the façade cladding is achieved.

The distance may be reduced locally to 5 mm, e.g. due to the substructure or uneven walls.
All ventilation openings around the periphery of the system can be suitably protected with mesh to prevent the ingress of birds, vermin and insects. Inlet and outlet openings must have a free cross-section of at least 150 cm²/m.

Substructure
The supporting profiles of the aluminium substructure must be extruded profiles according to EN 755-25 with a tensile strength Rm ≥ 245 N/mm² and a yield point Rp 0.2 ≥ 200 N/mm² (e.g. made of the alloy EN AW 6063 T66). The nominal thickness of the substructure profiles must be at least 2.0 mm. Thicker support profiles can also be applied if a longer blind rivet is used.

Provided the corrosion protection requirements are observed, the m.look cladding kit considered here can be attached to support profiles made of aluminum and steel alloys that demonstrably meet the corrosion protection requirements using the appropriate rivet.

Static verification of the substructure is not the subject of this ETA and must be performed separately.

The substructure must be designed so that a tension-free fastening of m.look Exterior panels is ensured.

The aluminium substructure must meet the requirements of the national standards and must be assembled in accordance with the specifications of the manufacturer of the substructure.

Thermal insulation used with the system must consist of non-combustible mineral wool insulation panels in accordance with EN 13162, which must be attached to the structure independently of the substructure.

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

The FunderMax m.look cladding kit is intended for use as protective and decorative cladding on external walls of domestic and non-domestic buildings of masonry or concrete, above the damp-proof course (dpc) level.

The cladding kit transfers its self-weight and design wind loads through the supporting subframe to the substrate wall. The substrate wall and supporting subframe must be capable of resisting the associated loads.

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

The fire classification, **Euroclass A2-s1, d0** in accordance with EN 13501-1 and Delegated Regulation 2016/364 (table 3) is based on an application area where the panel can either be mounted directly on substructure, with a specific rear ventilation gap width to the substructure or free standing. Mineral wool insulation (density 30 kg/m³ - 70 kg/m³, melting point > 1000 °C) must be used as insulation.

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of at least 25 years, provided the cladding kit are subject to an appropriate use according to the provisions of this assessment.

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

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 m.look cladding system is classified as **Euroclass A2-s1, d0** 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 (open joints)**
Water absorption (for non-ventilated facades)	**Not relevant**
Water vapour permeability (for non-ventilated facades)	**Not relevant**
Drainability	**Drainable**
Content, emission and/or release of dangerous substances*	**No performance assessed**
3.4 Safety and accessibility in use (BWR 4)	
Wind load resistance	

Thickness	Wind load resistance, Q [kN/m²]
7 mm	**2,02**
9 mm	**3,51**

Resistance to horizontal point loads	**No damage**
Impact resistance	

Thickness	Use category
7 mm	**Category III**
9 mm	**Category I**

Impact resistance was tested with a hard body impact of 1-10 J, soft body with 10-400 J

Bending strength

Thickness	Mean value [N/mm²]	Characteristic value [N/mm²]
7 mm Standard climate	**54,32**	**48,91**
7 mm - 20°C	**55,72**	**49,06**
9 mm Standard climate	**61,64**	**54,88**
9 mm - 20°C	**64,02**	**58,16**

Characteristic	Assessment of characteristic
Creep Test**	**Not relevant**

Pull-through resistance

Pull-Through Resistance			
Panel Thickness	**Fixing Position**	**$F_{u,m}$ [N]**	**$F_{u,c}$ [N]**
7 mm	Corner 30/30	908	792
9 mm		1347	1227
7 mm	Edge 150/30	893	730
9 mm		1829	1624
7 mm	Centre 200/200	1810	1666
9 mm		2455	2214

Pull-through resistance under shear loads

Pull-Through Resistance under shear loads			
Panel Thickness	**Fixing Position**	**$F_{u,m}$ [N]**	**$F_{u,c}$ [N]**
7 mm	Corner 30/30	3312	2966
9 mm		3140	2852

Axial tension resistance	**Not relevant**
Shear load resistance	**Not relevant**
Combined tension and shear load resistance**	**Not relevant**
Resistance of slot	**Not relevant**
Resistance to vertical load	**Not relevant**
Pull-through resistance of fixings from profile	**Not relevant**
Resistance of punctual cladding fixings	**Not relevant**
Resistance of profiles	**See information in annex B**
Subframe fixings, tension/pull-out resistance	**No performance assessed**
Subframe fixings, shear load resistance	**No performance assessed**
Bracket resistance (horizontal and vertical load)	**No performance assessed**
Resistance to seismic loads Out-of-plane fundamental vibration period	**No performance assessed**
Resistance to seismic loads Out-of-plane acceleration	**No performance assessed**
Resistance to seismic loads In-plane displacement	**No performance assessed**
3.5 Protection against noise (BWR 5)	
Airborne sound insulation	**No performance assessed**

Characteristic	Assessment of characteristic

3.6 Energy economy and heat retention (BWR 6)

Thermal resistance — **No performance assessed**

3.7 Durability

Hygrothermal behavior — **No visual defects**

Behavior after pulsating load

	7 mm before	7 mm after	Ratio
Pull through resistance After 10.000 cycles Fixing position centre	**3020 N**	**2507 N**	**0,83**

Freeze-thaw resistance

Bending strength	Before	After	Ratio
7 mm	**51,11 MPa**	**39,08 MPa**	**0,76**
9 mm	**45,53 MPa**	**30,01 MPa**	**0,66**

Behavior after immersion in water — **Not relevant**

Dimensional stability – by humidity

	High humidity lengthwise	High humidity crosswise
Length change [%]		
7 mm	**0,1**	**0,1**
9 mm	**0,1**	**0,1**

Dimensional stability – by temperature

	Dry heat lengthwise	Dry heat crosswise
Length change [%]		
7 mm	**- 0,2**	**- 0,2**
9 mm	**- 0,1**	**- 0,2**

Chemical and biological resistance — **No performance assessed**

UV radiation resistance — **No changes**

Corrosion — **Not relevant**

Accelerated ageing behavior of kit when the cladding element is made of thin metallic composite panels (TMCP) — **Not relevant**

See additional information in section 3.8 and 3.9

** The characteristics are not relevant, since the cladding is not assessed used as horizontal or sloped surfaces in external ceilings or cornices (not roofs)

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 FunderMax m.look cladding kit is 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 III 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 2025-09-23 by

Thomas Bruun
Managing Director, ETA-Danmark

SSO-D15-ø5,0xL

Materials
- Rivet body:
Stainless steel A4, AISI 316
- Mandrel:
Stainless steel A4, AISI 316

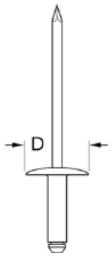
Metal sheet: steel or aluminum

Head type: dome head

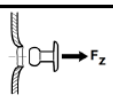
Rivet body: ø = 5,0 mm

Predrill: ø = 5,1 mm

Head diameter: D = 15mm



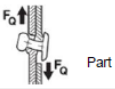
Pull-out load F_z (N)



Part II (blind side)			Part I (setting side)			Test results (N)		
Material grade	$R_{m,min}$	t_{II} (mm)	Material grade	t_I (mm)	KL in mm	$F_{z,avg}$	s	R_k
Steel Sheet								
S320 GD	390 N/mm²	1.00				1428	54	1189
S320 GD	390 N/mm²	1.25				2296	83	1973
S320 GD	390 N/mm²	1.50				3133	79	2538
S235	380 N/mm²	2.00				4774	197	3818
Aluminum Sheet								
AlMg3 1/4 hard	220 N/mm²	2.00				2184	82	1693

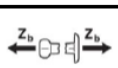
Shear load F_q (N)

$F_{q,avg}$ is measured between a displacement of max 3 mm



Part II (blind side)			Part I (setting side)			Test results (N)		
Material grade	$R_{m,min}$	t_{II} (mm)	Material grade	t_I (mm)	KL in mm	$F_{q,avg}$	s	R_k
Steel Sheet			**Steel**					
S320 GD	390 N/mm²	1.00	S355	8.00	9.00	5530	449	4161
S320 GD	390 N/mm²	1.50	S355	8.00	9.50	6816	114	5931
S320 GD	390 N/mm²	2.00	S355	8.00	10.00	7544	285	6226

Tensile breaking load Z_b (N)



$Z_b \geq 6.500$ N

Shear breaking load Q_b (N)

$Q_b \geq 5.300$ N

$R_{m,min}$ is the minimum standard tensile strength of Part 1 or 2

t is the nominal steel thickness of Part 1 or 2

F_{avg} or $\bar{X}$ are the arithmetic mean values of the test results.

s is the standard deviation.

R_k is the caracteristic resistance of fastenings according to the EN requirements

All calculations, measurements, fasteners and design methods have to be verified by a responsible designer or engineer, regarding the corresponding structure and load. Please consult your national norms and approvals.

Evaluation of the characteristic value R_k for the F_z, F_u and F_q: equations (1) and (2)

(1) $R_k = (F_{avg} - k * s) * \alpha$

, where F_{avg} is the mean of ultimate failure loads, and corresponds to tests: F_z, F_u and F_q
k is the statistical coefficient
s is the standard deviation
α is the material correction factor

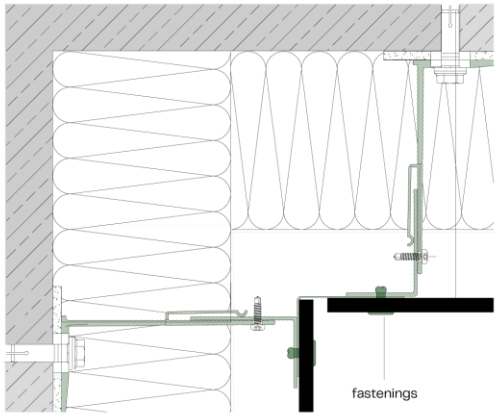
- the sample size n for all tests is 12 pieces
- k = 2,048 with a sample size n = 12
- the maximum value of F_{avg} for shear load, is obtained between a displacement of 0,5-3,0mm
- Part 1 is considered critical for failure in shear unless otherwise marked

(2) $\alpha = (R_{m,min}/R_{m,obs} * t_{min}/t_{obs})$

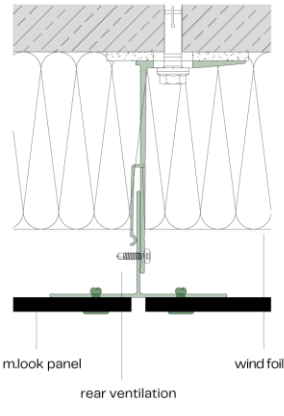
, where $R_{m,min}$ is the minimum standard tensile strength of Parts 1 or 2
$R_{m,obs}$ is the actual, tested tensile strength of Parts 1 or 2
t_{min} is the minimum standard steel thickness of Parts 1 or 2
t_{obs} is the actual, tested steel thickness of Parts 1 or 2

Sources:
- material properties according to the European product standards (EN)
- thickness tolerances according to the European product standards (EN)
- design thickness t_{min} for aluminium is set to 90% of the nominal
- test methods according to EN 1993-1-3, CUAP 06.02/07 and ECCS 124

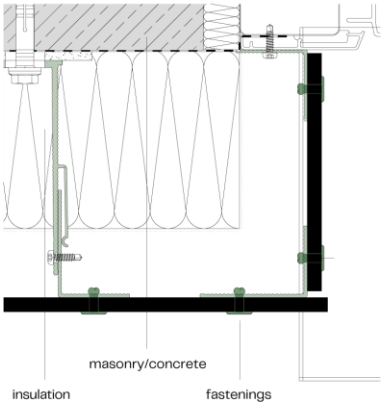
m.look	
Rivet for fastening of the façade panel: MBE-FN 5x L K14	Annex A1



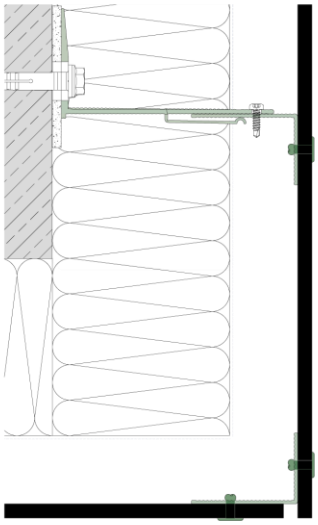
Inner corner A106



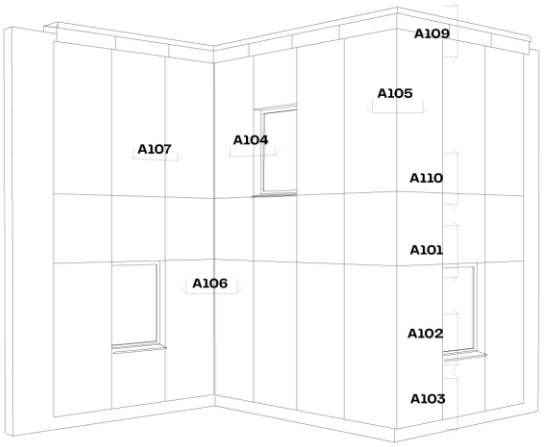
Vertical joint A107



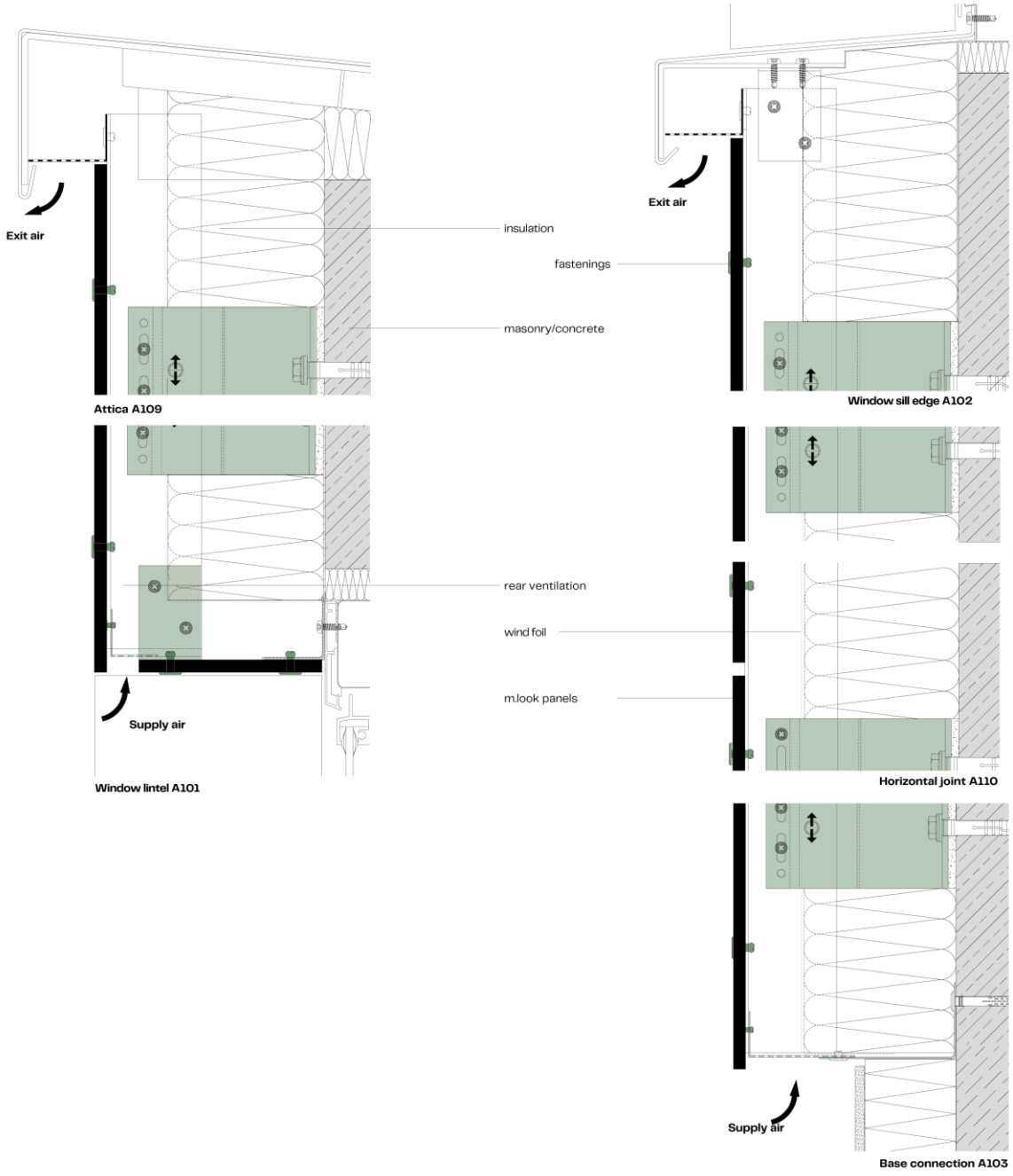
Window reveal A104



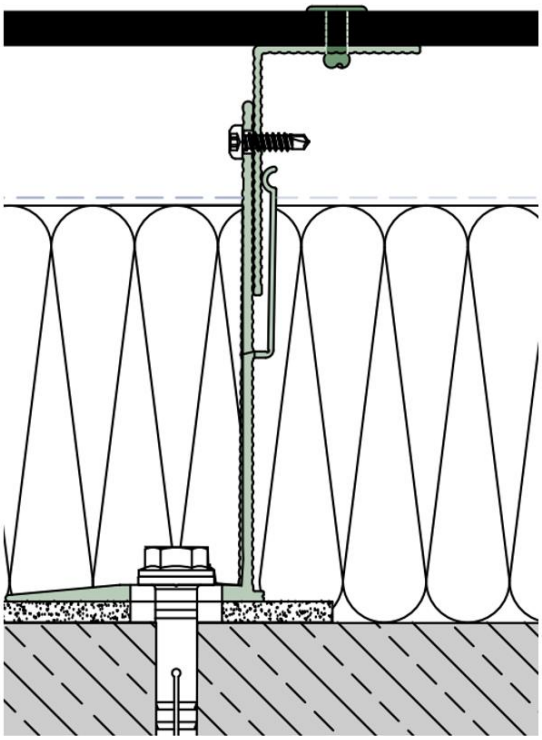
External corner A105



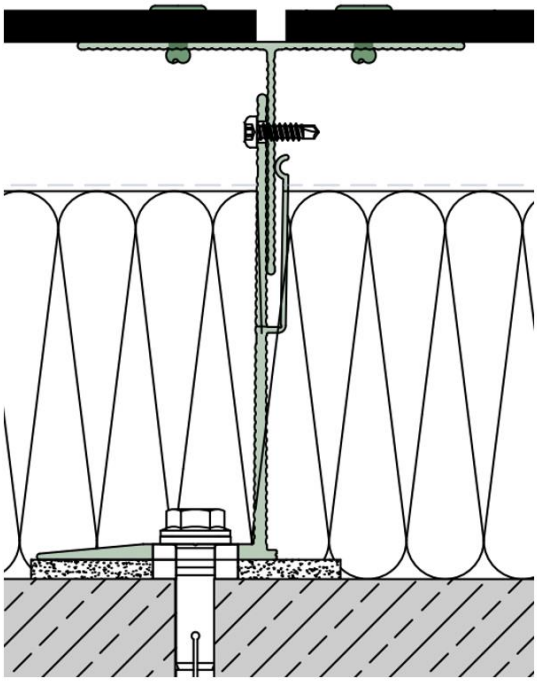
m.look	Annex A2
Construction details horizontal sections, Alu-substructure riveted.	



m.look	Annex A3
Construction details vertical sections, Alu-substructure riveted.	



L-Profile
Alloy Substructure (e.g. EN AW 6063 T66)
Thickness: ≥ 2mm



T-Profile
Alloy Substructure (e.g. EN AW 6063 T66)
Thickness: ≥ 2mm

m.look	Annex B
Resistance of profiles	