

AQUAPANEL®

05/2019

Knauf Exterior Wall Profile 150

The high-performance profile for the substructure of the exterior stud frame





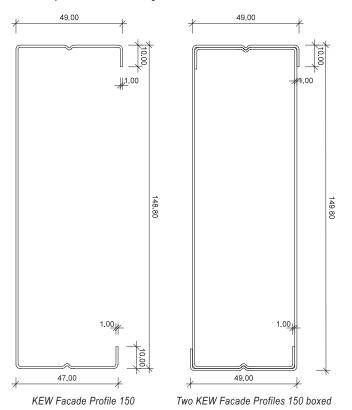
Description

Knauf AQUAPANEL® has developed the high-performance Knauf Exterior Wall (KEW) Facade Profiles 150, which represent the substructure of the exterior stud frame. These profiles, combined with the associated Knauf Exterior Wall Steel Angle 70x135/100, the Knauf Exterior Wall Screw 4.8x20 and an appropriate concrete screw (e.g. Hilti HUS-HR 6), enable a preliminary static design according to EUROCODE 3, which accelerates the planning process for architects and structural engineers, because it takes all elements of Knauf Exterior Wall into account including the anchoring means, which transfer the loads into the primary construction. Additionally these profiles offer the necessary space for 150 mm thick insulation panels.

Knauf Exterior Wall Facade Profile 150

Steel type: S250GD Sheet thickness: 1.0 mm

Corrosion protection: Coil coating C3 acc. to EN ISO 12944, black

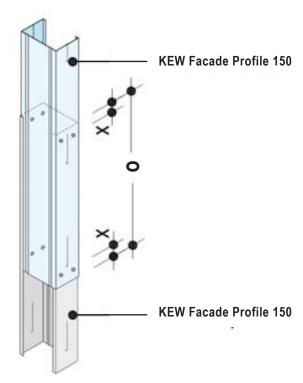


Cross-section values of the effective facade profile

Surface: A = 2.03 cm^2	
Centre of gravity: Y _s = 36.5 mm	$Z_s = 75.6 \text{ mm}$ (in relation to zero point = start)
Moment of inertia: I _y = 67.2 cm ⁴	$I_z = 5.7 \text{ cm}^4$ $I_{yz} = -1.2 \text{ cm}^4$
Main axes:: L = 67.2 cm ⁴	$l_0 = 5.7 \text{ cm}^4$ $\alpha = 1.1^\circ$

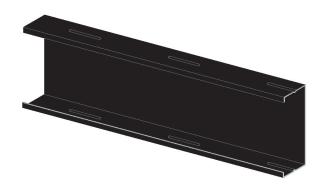
Extension of profiles by boxing

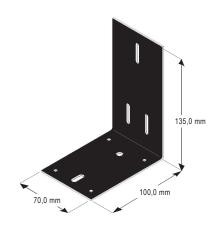
The Knauf Exterior Wall Facade Profile 150 can be extended by boxing and riveting of two profiles. Field tests examined heights of up to 5.0 metres. Boxing has to be conducted with a minimum overlap of 500 mm. Boxing is recommended in higher wall areas, as bar cut-outs are not allowed in boxed areas. Connect profiles by rivets in the boxed areas. Use 4 rivets on every flange side, with parallel rivets at the beginning and end of the boxed area. For the minimum edge distance of the rivets (to the flange edge of the profile) please follow the manufacturer's instructions.



- o (overlap) ≥ 500mm
- x (minimum edge distance of the rivets)









Product characteristics

Knauf Exterior Wall Profile 150

- Point of use: exterior stud frame
- Designed to absorb and transmit wind and dead loads
- Boxable
- Enables a preliminary static design according to EUROCODE 3 (in combination with Knauf Exterior Wall Steel Angle and Knauf Exterior Wall Screw)
- Black coated
- Minimum corrosion protection C3 acc. to EN ISO 12944

Web	Flange	Nominal	Weight	Length
height (mm)	width (mm)	thickness (mm)	(approx kg/m)	(mm)
150	50	1.0	2.0	3600*

*(special lengths on request)

Packaging: 4 pcs. / small bundle | Item code: 00582034

48 pcs. / large bundle

Knauf Exterior Wall Steel Angle 70x135/100

■ Steel type: S250GD

■ Sheet thickness: t=1.5 mm

■ Black coated

- Enables a preliminary static design according to EUROCODE 3 (in combination with Knauf Exterior Wall Profile and Knauf Exterior Wall Screw)
- Minimum corrosion protection C3 acc. to EN ISO 12944

Width	Length	Nominal thickness
(mm)	(mm)	(mm)
70	135/100	1.5

Packaging: 30 pcs. / package Item code: 00582026

160 packages / pallet

Knauf Exterior Wall Screw

- Rustproofed screw
- Hardened nail tip
- \blacksquare Suitable for metal thickness up to 1.2 mm
- Enables a preliminary static design according to EUROCODE 3 (in combination with Knauf Exterior Wall Profile and Knauf Exterior Wall Steel Angle)

Width	Length
(mm)	(mm)
4.8	20

Packaging: 250 pcs. / package | Item code: 00582527

864 packages / pallet

AQUAPANEL® is a technologically advanced building system. Because it's a system, it involves clear step-by-step process from

design idea to project completion. AQUAPANEL® cement board panels, accessories and services work in unison - you can be

AQUAPANEL®

certain that your project will all come together as planned.

AQUAPANEL® is a registered trademark.

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