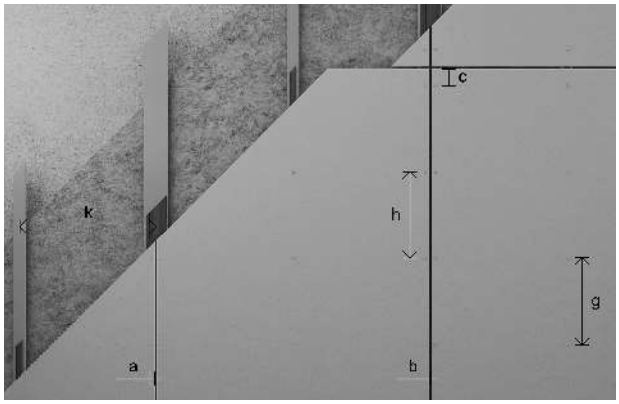
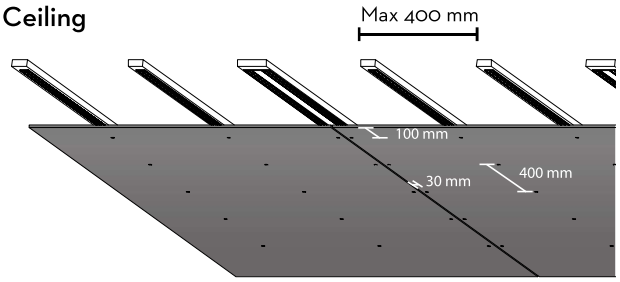
Rivets on aluminium

Front view



Ceiling



In order to achieve a correct and safe aluminium sub-construction, the supplier of the system should be consulted. However, there are a few rules to consider when it comes to the functionality of the facade boards:

- Length of the aluminium profiles is maximum 3000 mm (one storey)
- The aluminium profiles must be fixed with one fix-point at the middle or the upper end and all other fixations as sliding points
- All joints of the aluminium profiles must be aligned so they can be followed by joints of the facade boards. A board must never cross an aluminium profile joint and be fixed to two separate aluminium profiles across a joint
- The facade boards must be fixed with a fix-point in the middle of the board. All other fixations are sliding points. In case of two intermediate supporting profiles, two fix-points at the same horizontal level are allowed
- Every 12 m of the facade a double framing must be installed in order to create a dilatation joint.
- **Important!** With installation with rivets, begin with the fix-points, followed by the sliding points above and finally the sliding points below.

  On metal sub-construction, the length of the Cembrit Raw boards must not exceed 1500 mm.

Fixing details

Vertical board orientation

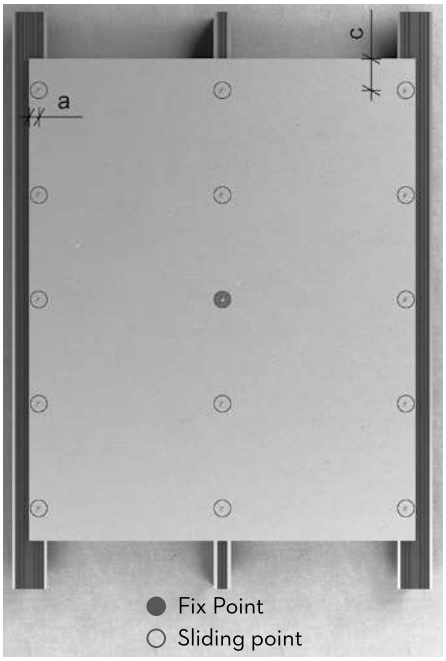
Installation with rivets on aluminium, vertical sub-construction

Max dimensions 8 x 1250 x 1500 mm

Drill hole in the boards: Ø9

Wind load	Max support distance	Max fixing distance	Edge distance	Corner distance
kN/m²	k mm	h, g mm	a mm	c mm
0.60	630	600	30-150	100-150*
0.70	630	600		
0.80	630	600		
0.90	630	600		
1.00	630	500		
1.10	630	500		
1.20	630	400		
1.30	420	500		
1.40	420	500		
1.50	420	500		
1.60	420	500		
1.70	420	450		
1.80	420	400		
1.90	420	400		
2.00	420	400		

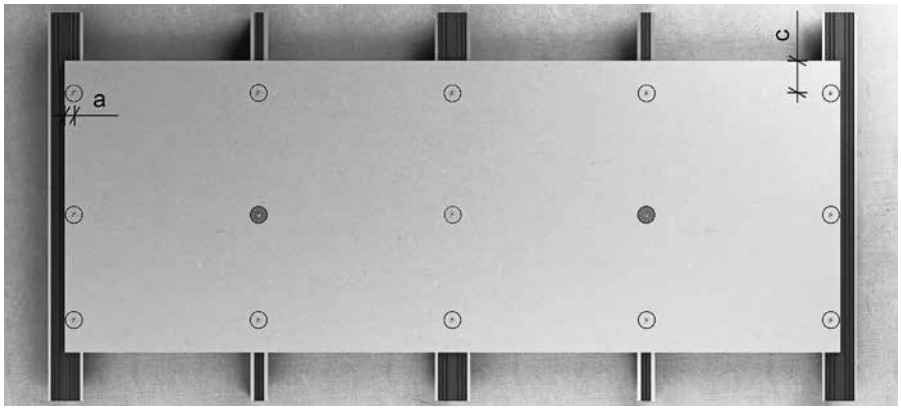
*Overhang e.g. windows max 200 mm



Rivets on aluminium

Horizontal orientation

Facade boards may be installed in a horizontal position on a vertical sub-structure.
On aluminium framing, the edge distance a ≥ 30 mm and corner distance c ≥ 100 mm.



● Fix Point
○ Sliding point

Horizontal board orientation
Installation with rivets on aluminium, vertical sub-construction
Max dimensions 8 x 1250 x 1500 mm
Drill hole in the boards: Ø9

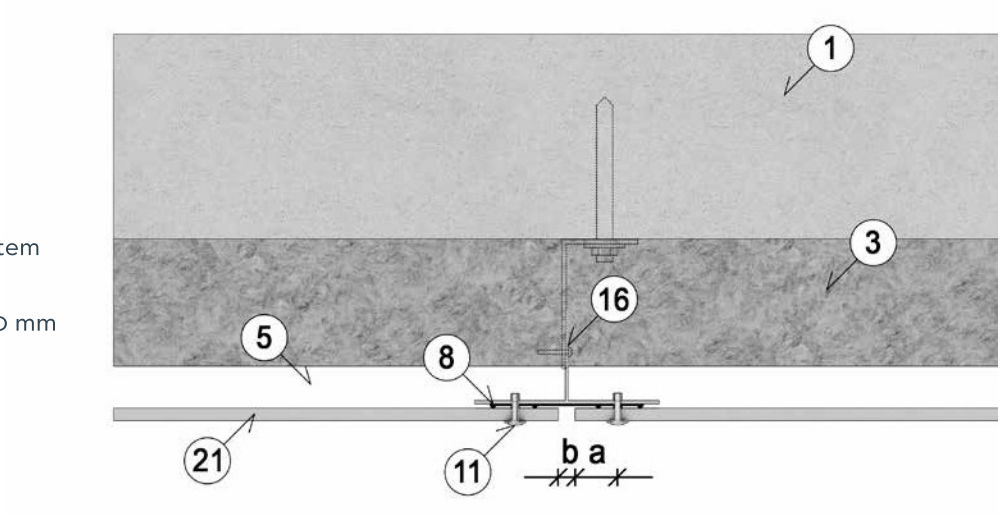
Wind load	Max support distance	Max fixing distance	Edge distance	Corner distance
kN/m²	k mm	h, g mm	a mm	c mm
0.60	630	600	30-150	100-150*
0.70	630	600		
0.80	630	600		
0.90	630	600		
1.00	500	500		
1.10	500	500		
1.20	500	500		
1.30	500	500		
1.40	500	400		
1.50	440	400		
1.60	440	400		
1.70	440	400		
1.80	420	400		
1.90	420	400		
2.00	420	400		

*Overhang e.g. windows max 200 mm

Rivets on aluminium

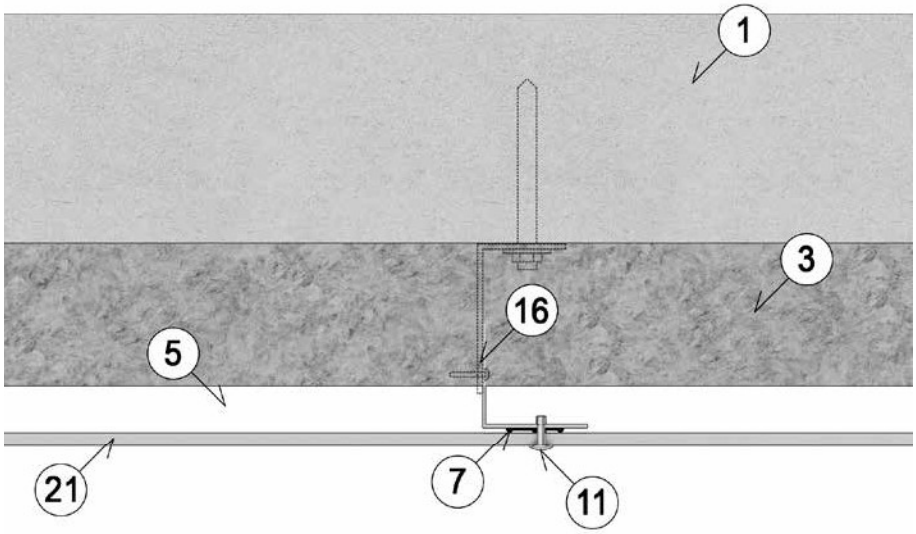
Horizontal cross section vertical joint

1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
8 EPDM underlay
11 Rivet 4.0x20
16 Aluminium frame system
21 Facade board
a Edge distance min 30 mm
b Joint width 8 mm



Horizontal cross section intermediate support

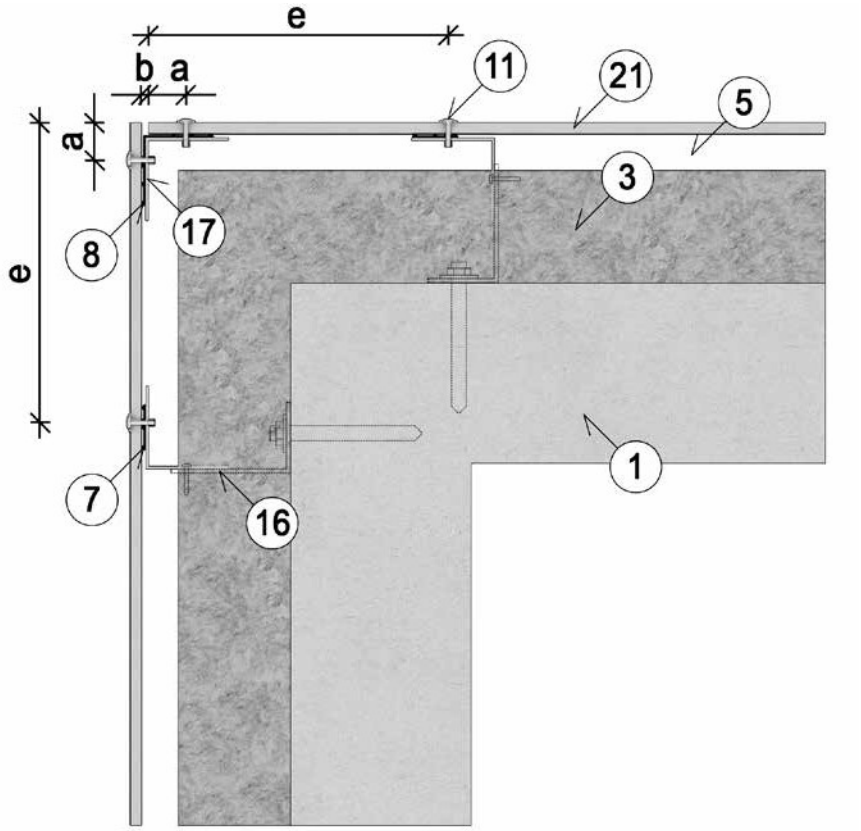
1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
7 EPDM underlay
11 Rivet 4.0x20
16 Aluminium frame system
21 Facade board



Rivets on aluminium

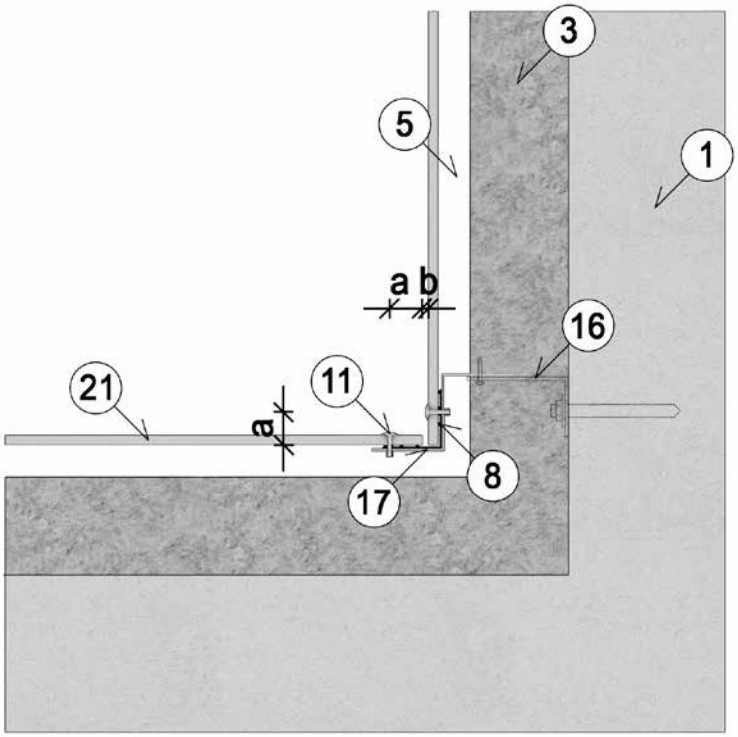
Horizontal cross section external corner

1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
7 EPDM underlay
8 EPDM underlay
11 Rivet 4.0x20
16 Aluminium frame system
17 Aluminium angle
21 Facade board
a Edge distance min 30 mm
b Joint width 8 mm
e Dist. to wall fixing max 200 mm



Horizontal cross section internal corner

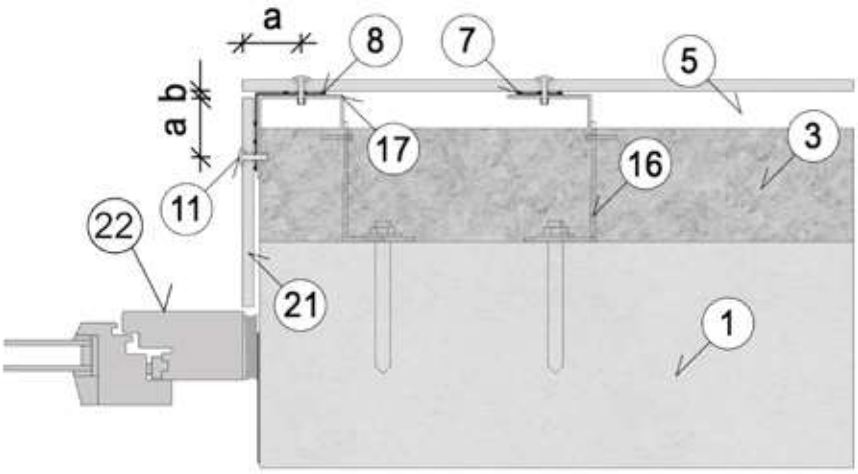
1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
7 EPDM underlay
8 EPDM underlay
11 Rivet 4.0x20
16 Aluminium frame system
17 Aluminium angle
21 Facade board
a Edge distance min 30 mm
b Joint width 8 mm

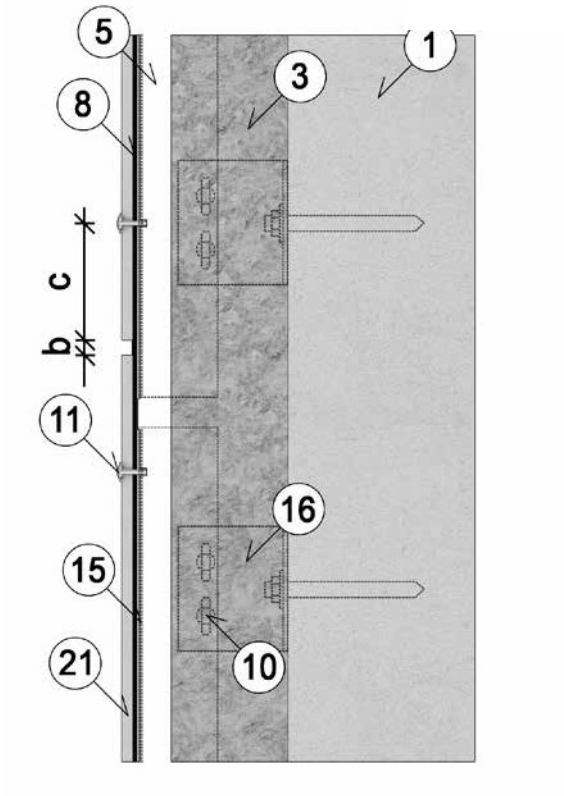


Rivets on aluminium

Horizontal cross section window
(Window recess max 200 mm without ventilation)

1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
7 EPDM underlay
8 EPDM underlay
11 Rivet 4.0x20
16 Aluminium frame system
17 Aluminium angle
21 Facade board
22 Window
a Edge distance min 30 mm
b Joint width 8 mm





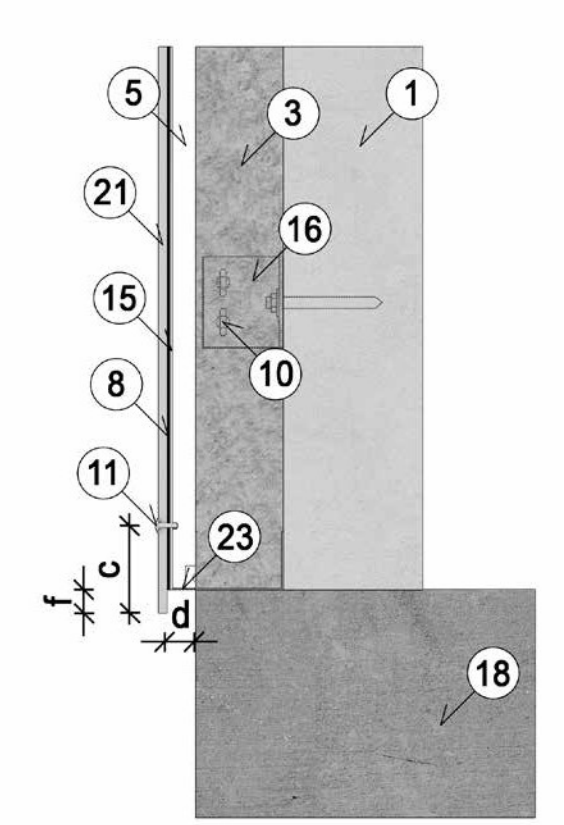
Vertical cross section horizontal joint

1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
8 EPDM underlay
10 Fixing point profile/bracket
11 Rivet 4.0x20
15 Aluminium profile
16 Aluminium frame system
21 Facade board
b Joint width 8 mm
c Distance min 100 mm

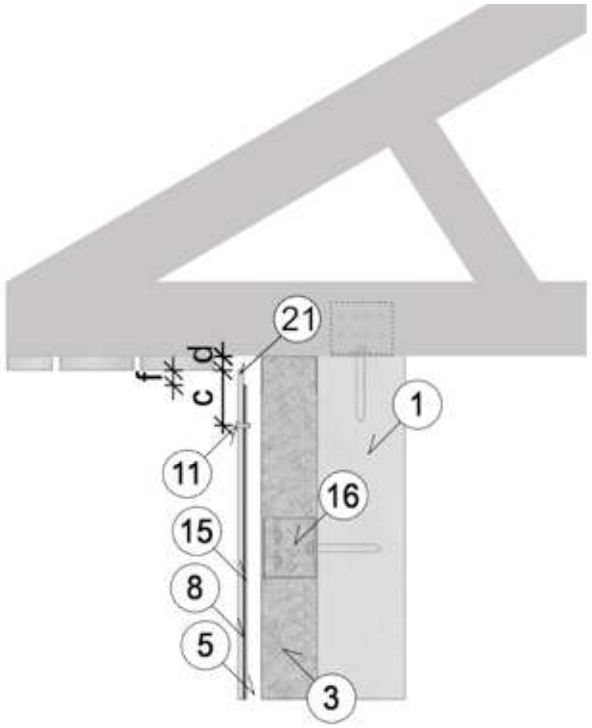
Note! Boards must never be fixed to two separate profiles!

Rivets on aluminium

Vertical cross section foundation



1 Load bearing wall
3 Insulation
5 Air gap min 2 mm
8 EPDM underlay
10 Fixing point profile/bracket
11 Rivet 4.0x20
15 Aluminium profile
16 Aluminium frame system
18 Foundation
21 Facade board
23 Insect grating
c Corner distance 100-150 mm
d Ventilation inlet min 100cm²/m
f Overhang approx. 30 mm



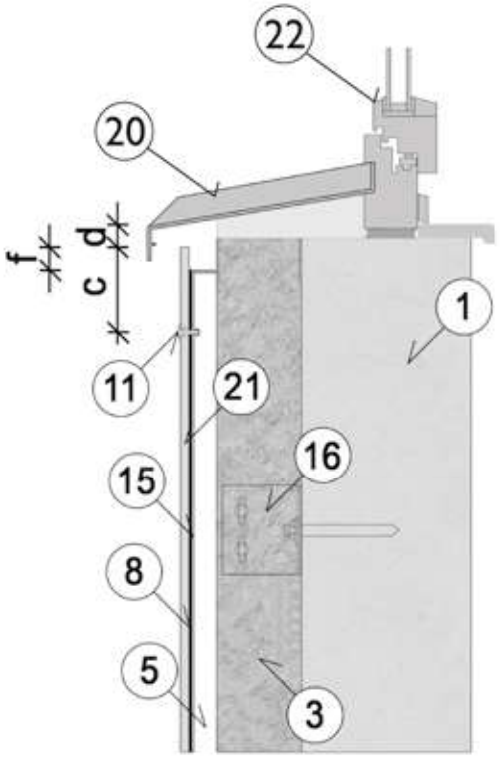
Vertical cross section roof edge

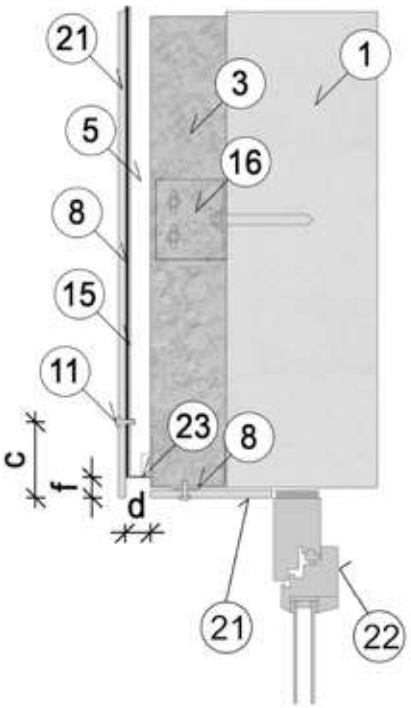
1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
8 EPDM underlay
11 Rivet 4.0x20
15 Aluminium profile
16 Aluminium frame system
21 Facade board
c Corner distance 100-150 mm
d Ventilation outlet min 100cm²/m
f Overhang approx. 30 mm

Rivets on aluminium

Vertical cross section window sill

1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
8 EPDM underlay
11 Rivet 4.0x20
15 Aluminium profile
16 Aluminium frame system
20 Window sill
21 Facade board
22 Window
c Corner distance 100-150 mm
d Ventilation outlet min 100cm²/m
f Overhang approx. 30 mm





Vertical cross section window upper edge
(Window recess max 200 mm without ventilation)

1 Load bearing wall
3 Insulation
5 Air gap min 20 mm
8 EPDM underlay
11 Rivet 4.0x20
15 Aluminium profile
16 Aluminium frame system
21 Facade board
22 Window
23 Insect grating
c Corner distance 100-150 mm
d Ventilation inlet min 100cm²/m
f Overhang approx. 30 mm