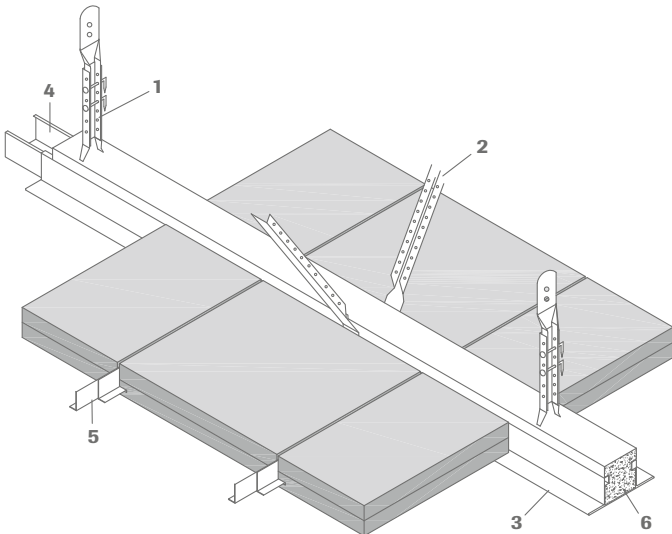


Self contained fire protection units EI 30 (a ↔ b)

OWAlifetime collection

OWA

Element lengths up to 1500 mm EI 30 (a ↔ b) fire protection from above and below – smoke impervious



- 1 Nonius hanger no. 79/75, centres ≤ 800 mm
- 2 Nonius angle brace no. 17/80; from a bandraster section length of > 2500 mm, diagonal reinforcements are required on both sides, max. spacing 1250 mm.
- 3 Bandraster profile no. 8025/100
- 4 Connector no. 82/8025G
- 5 L profile no. 37/15, thickness 1.5 mm
- 6 Infill material, H = 50 mm (bandraster profile approx. 35 mm + gypsum strips ≥ 15 mm), the bandraster profile must be filled completely onsite

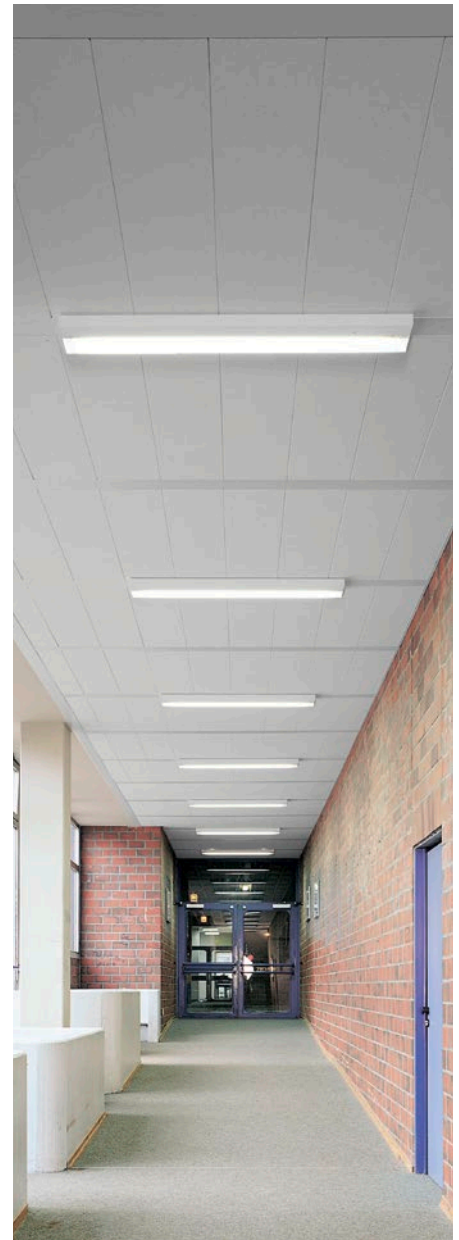
Work Steps

Option 1:

Installer to fabricate timber formers around the bandraster (between the hangers), extending 15 mm above the bandraster; height = 50 mm. Fill the opening with wet infill material. Allow to dry for 24 hours. When set, remove formers leaving solid infill material protruding 15 mm above the bandraster; height = 50 mm

Option 2:

Completely fill the bandraster with wet infill material, height = 35 mm. Allow to dry for 24 hours. After 24 hours shrinkage will occur. Apply more wet infill material to top of bandraster. Bond gypsum strips (50 mm wide $\times \leq 15$ mm thick) to the wet infill material on top of the bandraster (between the hangers), height = 35 + 15 = 50 mm



Technical data | Mineral tiles

Dimensions

Design Constellation: 1250 x 312.5 mm, 1500 x 312.5 mm
 Design Cosmos/N: 1250 x 300 mm, 1250 x 312.5 mm, 1500 x 300 mm, 1500 x 312.5 mm
 Design Cosmos/O: 1250 x 312.5 mm, 1500 x 312.5 mm
 See OWAlifetime collection price list no. 9001 e for delivery categories and minimum order quantities.

Designs

Constellation, Cosmos/O, Cosmos/N

Edges

Long edge



Short edge



Thickness

Approx. 40 mm (OWAcoustic premium)

Weight

Approx. 16.8 kg/m²

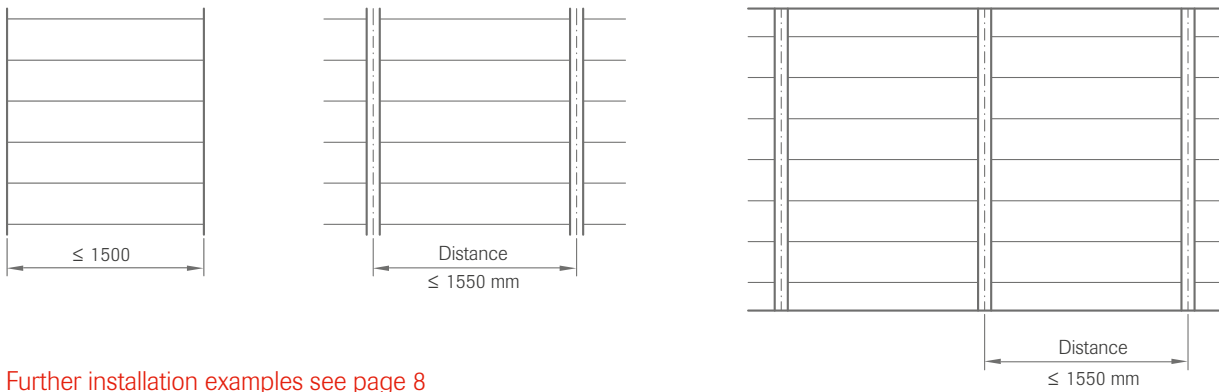
Reaction to fire

A2-s1,d0 in accordance with EN 13501-1

Metal system

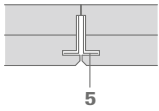
All metal components listed are galvanized steel or white coated galvanized steel respectively

Installation examples:

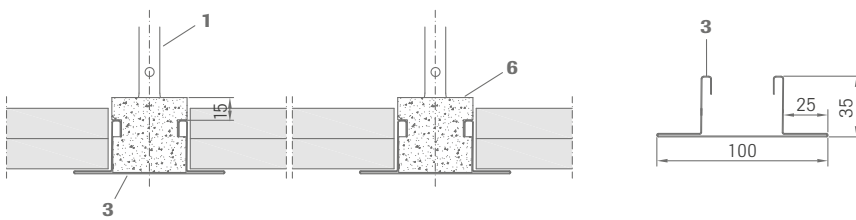


Further installation examples see page 8

Cross section:



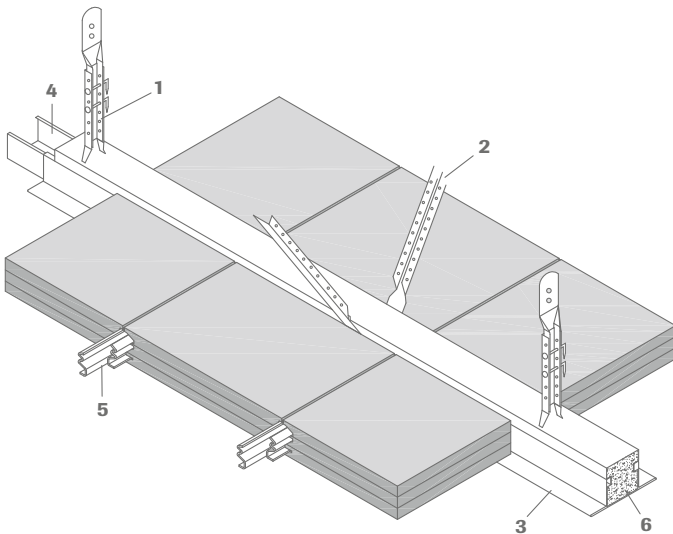
Section:



Double-sided affixing of elements: 25 mm

Wall perimeter see page 9-11

Element lengths up to 2250 mm EI 30 (a ↔ b) fire protection from above and below – smoke impervious



- 1 Nonius hanger no. 79/75, centres \leq 625 mm
- 2 Nonius angle brace no. 17/80; from a bandraster section length of $>$ 2500 mm, diagonal reinforcements are required on both sides, max. spacing 1250 mm.
- 3 Bandraster profile no. 8025/100
- 4 Connector no. 82/8025 G
- 5 Barriere profile no. 37/25, thickness 2.0 mm, if the profile needs to be shortened on site, due to profile prestressing equal amounts must be trimmed from each end
- 6 Infill material, H = 50 mm (bandraster profile approx. 35 mm + gypsum strips \geq 15 mm), the bandraster profile must be filled completely onsite

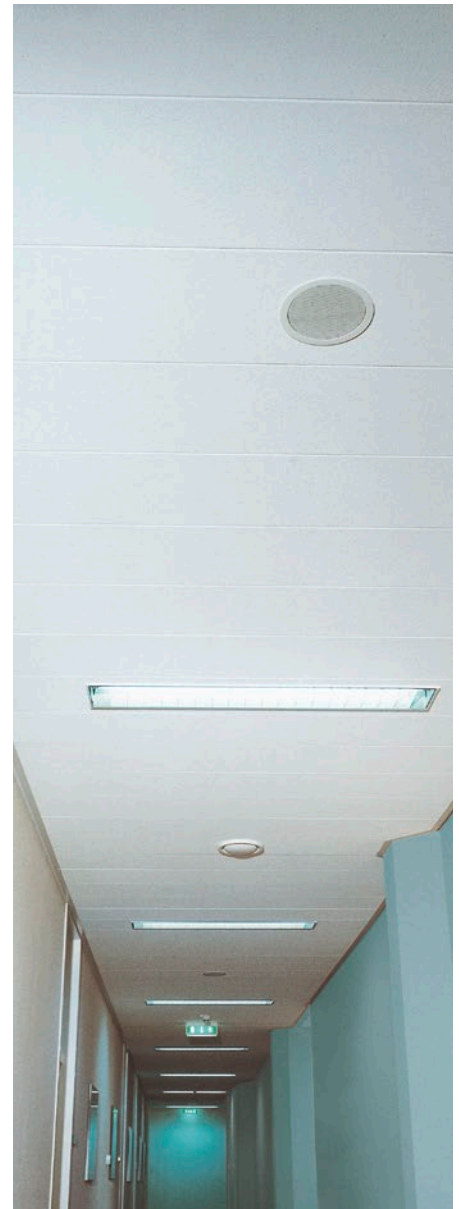
Work Steps

Option 1:

Installer to fabricate timber formers around the bandraster (between the hangers), extending 15 mm above the bandraster, height = 50 mm. Fill the opening with wet infill material. Allow to dry for 24 hours. When set, remove formers leaving solid infill material protruding 15 mm above the bandraster, height = 50 mm

Option 2:

Completely fill the bandraster with wet infill material, height = 35 mm. Allow to dry for 24 hours. After 24 hours shrinkage will occur. Apply more wet infill material to top of bandraster. Bond gypsum strips (50 mm wide \times \leq 15 mm thick) to the wet infill material on top of the bandraster (between the hangers), height = 35 + 15 = 50 mm



Technical data | Mineral tiles

Dimensions

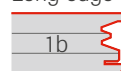
Design Constellation: 1800 x 312.5 mm, 2000 x 312.5 mm, 2250 x 312.5 mm
 Design Cosmos/N: 1800 x 300 mm, 1800 x 312.5 mm, 2000 x 300 mm, 2000 x 312.5 mm,
 2250 x 300 mm, 2250 x 312.5 mm
 Design Cosmos/O: 1800 x 312.5 mm, 2000 x 312.5 mm, 2250 x 312.5 mm
 See OWAlifetime collection price list no. 9001 e for delivery categories and minimum order quantities.

Designs

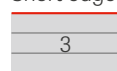
Constellation, Cosmos/O, Cosmos/N

Edges

Long edge



Short edge



Thickness

Approx. 44 mm (OWAcoustic premium)

Weight

Approx. 18.5 kg/m²

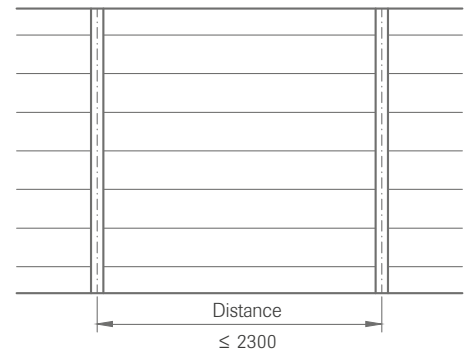
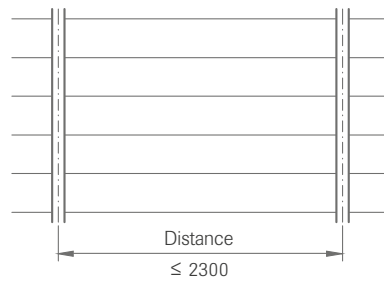
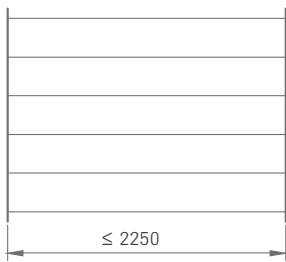
Reaction to fire

A2-s1,d0 in accordance with EN 13501-1

Metal system

All metal components listed are galvanized steel or white coated galvanized steel respectively

Installation examples:

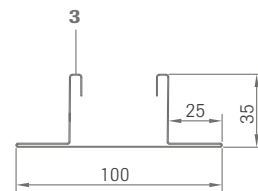
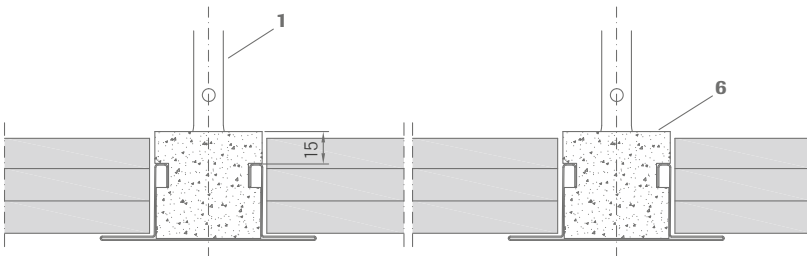


Further installation examples see page 8

Cross section:



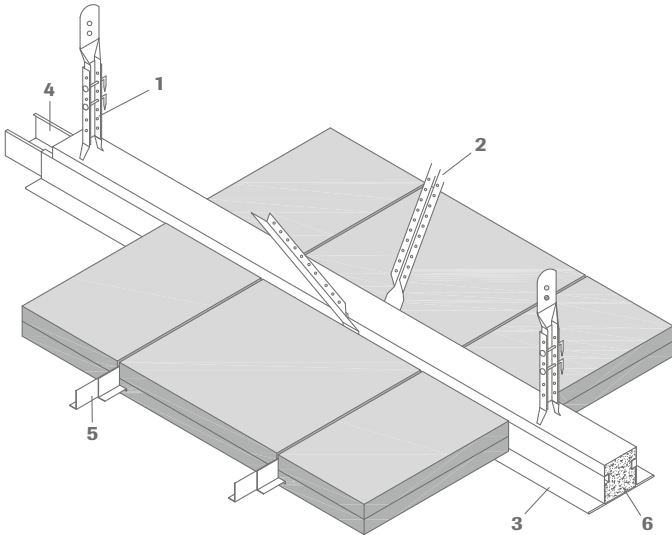
Section:



Double-sided affixing of elements: 25 mm.

Wall perimeter see page 9-11

Element lengths up to 1250 mm EI 30 (a ↔ b) fire protection from above and below – smoke impervious



- 1 Nonius hanger no. 79/75, centres ≤ 800 mm
- 2 Nonius angle brace no. 17/80; from a bandraster section length of > 2500 mm, diagonal reinforcements are required on both sides, max. spacing 1250 mm.
- 3 Bandraster profile no. 8025/100
- 4 Connector no. 82/8025G
- 5 L profile no. 37/15, thickness 1.5 mm
- 6 Infill material, H = 50 mm (bandraster profile approx. 35 mm + gypsum strips ≥ 15 mm), the bandraster profile must be filled completely onsite

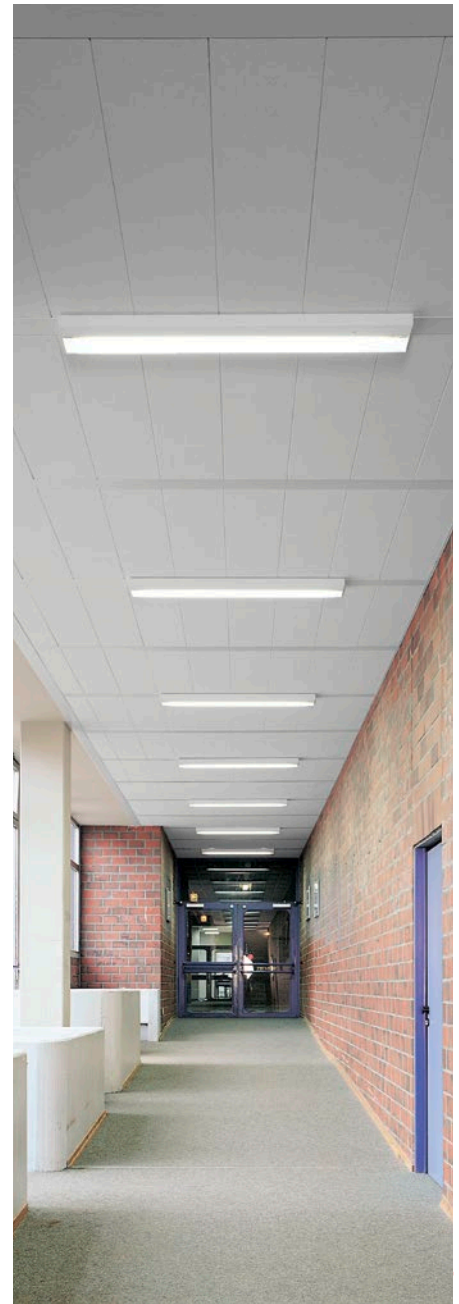
Work Steps

Option 1:

Installer to fabricate timber formers around the bandraster (between the hangers), extending 15 mm above the bandraster, height = 50 mm. Fill the opening with wet infill material. Allow to dry for 24 hours. When set, remove formers leaving solid infill material protruding 15 mm above the bandraster, height = 50 mm

Option 2:

Completely fill the bandraster with wet infill material, height = 35 mm. Allow to dry for 24 hours. After 24 hours shrinkage will occur. Apply more wet infill material to top of bandraster. Bond gypsum strips (50 mm wide $\times \leq 15$ mm thick) to the wet infill material on top of the bandraster (between the hangers), height = 35 + 15 = 50 mm



Technical data | Mineral tiles

Dimensions

1250 x 625 mm

See OWAlifetime collection price list no. 9001 e for delivery categories and minimum order quantities.

Designs

Constellation, Cosmos/O, Cosmos/N

Edges

Long edge



Short edge



Thickness

Approx. 40 mm (OWAcoustic premium)

Weight

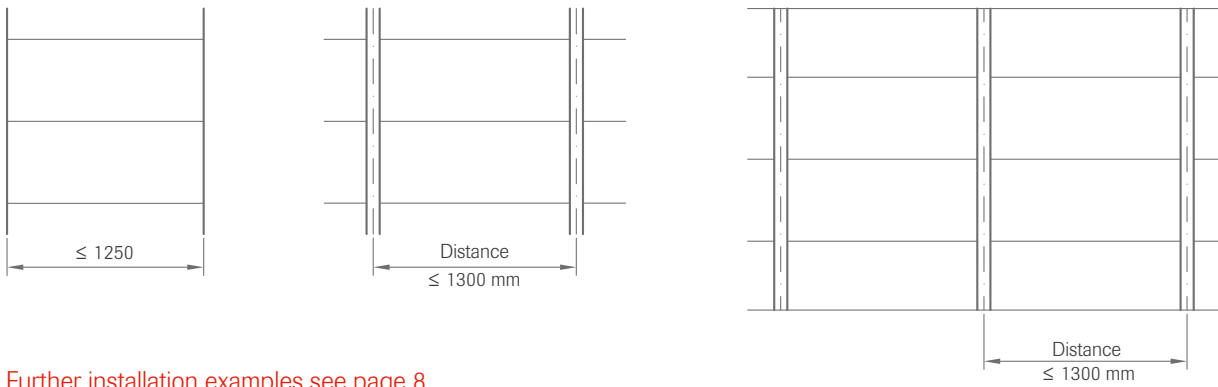
Approx. 16.8 kg/m²

Reaction to fire

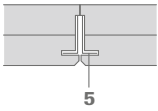
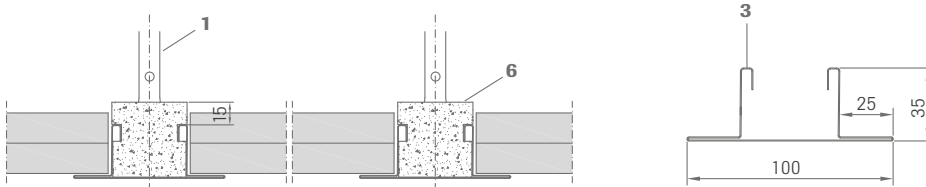
A2-s1,d0 in accordance with EN 13501-1

Metal system

All metal components listed are galvanized steel or white coated galvanized steel respectively

Installation examples:

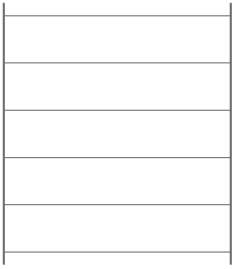
Further installation examples see page 8

Cross section:**Section:**

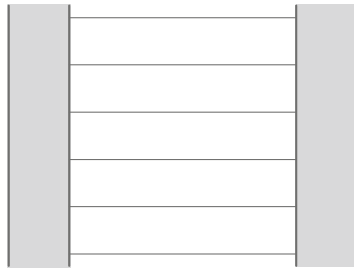
Double-sided affixing of elements: 25 mm

Wall perimeter see page 9-11

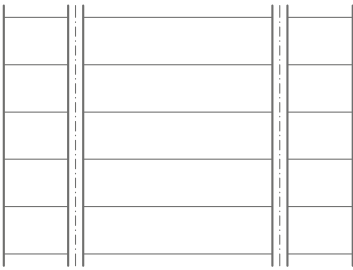
Further installation examples in corridors:



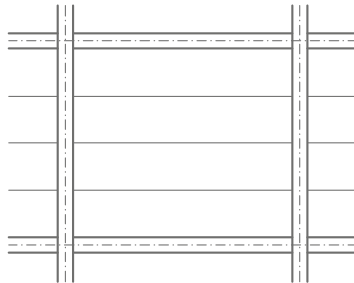
Clear spanning from wall to wall



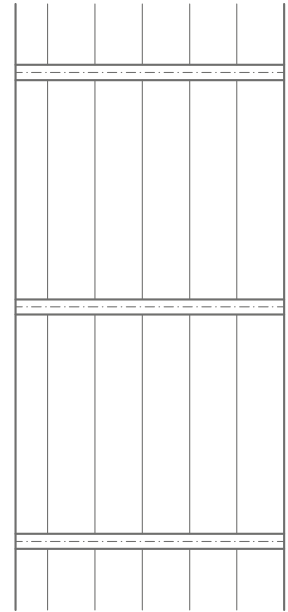
Clear spanning with gypsum board frieze on two sides



Bandraster in long direction

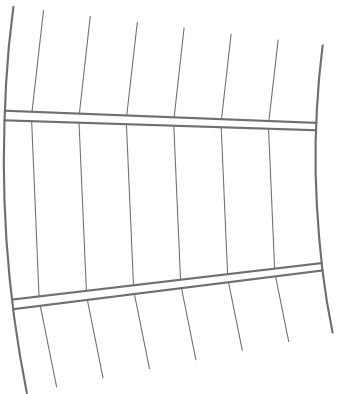


Bandraster in both directions



Bandraster in transverse direction

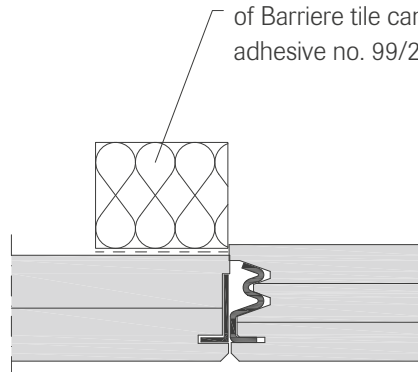
Further installation examples in circular corridors:



Bandraster in transverse direction

Attention: when combining the different Barriere products, the detail shown below must be considered.

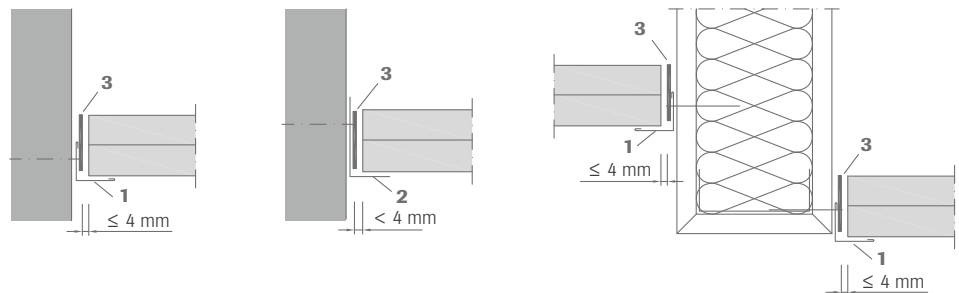
Mineral wool strip $\geq 40 \text{ kg/m}^3$, melting point $\geq 1000 \text{ }^\circ\text{C}$, A1 (non-flammable), 50 x 45 mm. Alternatively a 50 mm strip of Barriere tile can be used. Either must be bonded with adhesive no. 99/24 over the entire length of each element.



Wall perimeter:

- at solid walls
- at lightweight EI 30-gypsum board walls
- at EI 30-gypsum board perimeters
- at EI 30-Ceiling level changes

- 1 Wall angle no. 51/25, 25/25 – 1 mm
- 2 Wall angle no. 50/25, 50/25 – 1 mm
- 3 Intumescent strip no. 4439, thickness 2.0 mm, width 36 mm

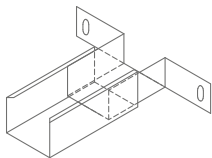


The illustrated wall perimeter can alternatively be used in the above listed construction situations.

With gypsum board perimeters ≤ 500 mm no angle bracing is necessary, from 500 mm up to 2000 mm angle bracing is necessary to comply with test certification.

Important:

The bandrafter sections may be laid on top of each other. A wall anchor is essential.



Wall anchor no. 75/76 for binder infill or securing cross bandrafter

Fixing centres for perimeter wall sections at solid walls:

Fasteners approved for fire protection and construction (European Technical Assessment or general building inspectorate approval); according to existing background. Fixing centres ≤ 200 mm.

Fixing wall sections to gypsum board walls and borders as well as ceiling level changes:

When positioning on lightweight partition wall and skirt constructions approved for fire protection, drywall screws of at least 3.5 x 35 mm (depending on the thickness of the cladding) must be used. Fixing centres ≤ 210 mm. In each case, every third screw must fasten to a respective upright stud profile within the lightweight partition wall.

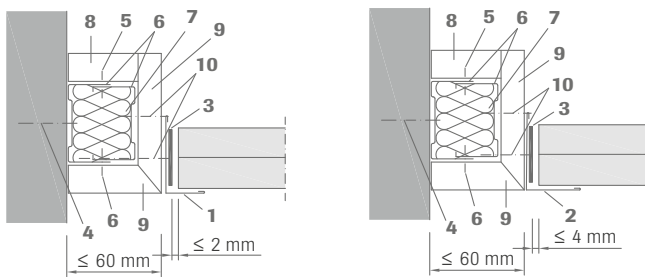
During installation care must be taken that the elements are fixed in the direction of the arrows (on rear of panel) and are only pushed lightly together. The demountability of the elements should be checked during the installation.

The Barriere OWAcoustic ceiling system cannot be installed to every wall construction tested for fire protection. Please check suitability in advance. This should be checked in advance.

Attention:

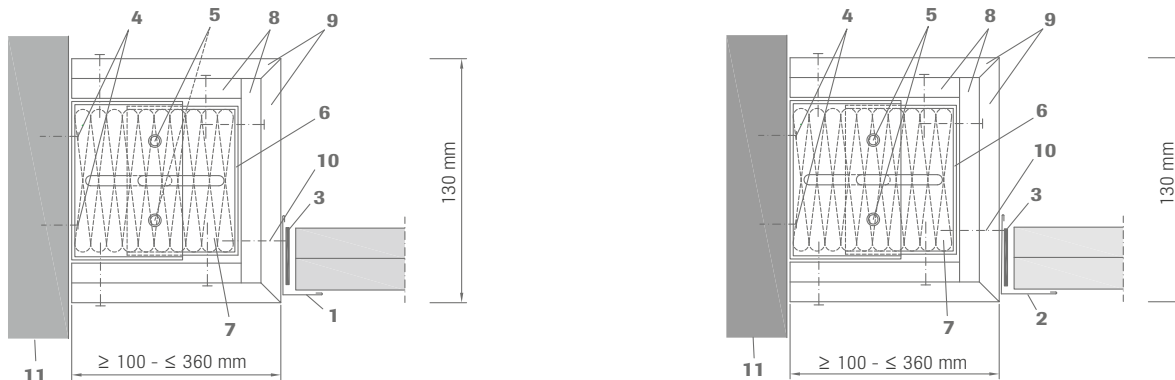
The wall perimeter can be installed in the same height as the plaster boards to have an even surface.

Wall perimeter with gypsum board-frieze (without hangers)



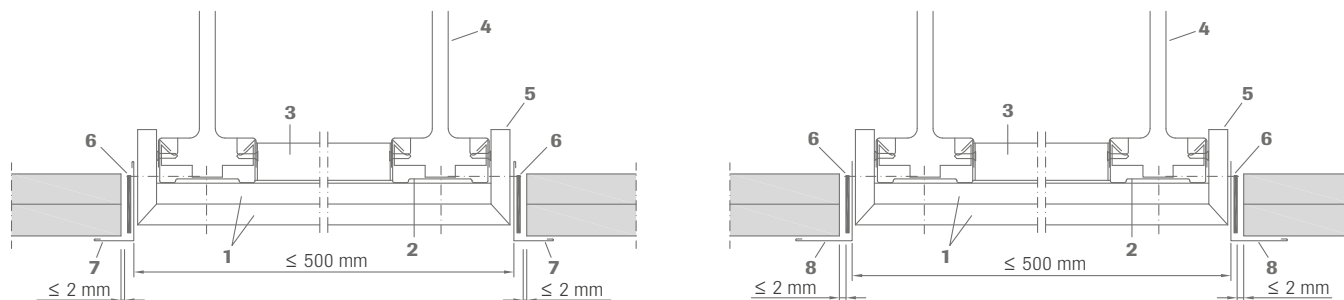
- 1 Wall angle no. 50/25, 50/25 - 1 mm
- 2 Wall angle no. 51/1, 50/35 - 1 mm
- 3 Insulation expansion strip no. 4439, thickness 2,0 mm, width 36 mm
- 4 For solid walls: use appropriate wall plug and screw or wall anchor, \varnothing 6 mm (on-site), fixing centres every 400 mm
For gypsum board walls: use appropriate gypsum board fixing and screw, 3,5 x 55 mm (on-site), fixing centres every 210 mm, fasten every third screw into the upright stud profile.
- 5 Steel rivets (on site), \varnothing 3,2 mm, centres \leq 400 mm
- 6 Console \leq 60 mm, consisting of: C profile 35/50/35 mm no. 00062619 and C profile 35/48/25 mm no. 00062621
- 7 Mineral wool (on site), \geq 40 kg/m³, 1000 °C, 50 x 45 mm
- 8 Gypsum fire board or plasterboard folding tiles (on site), thickness 18 mm
- 9 Gypsum fire board or plasterboard folding tiles (on site), thickness 18 mm, height 86 mm
- 10 Self-drilling screw (on site) 3,5 x 55 mm

Wall perimeter with gypsum board-frieze (without hangers) - adjustable brackets



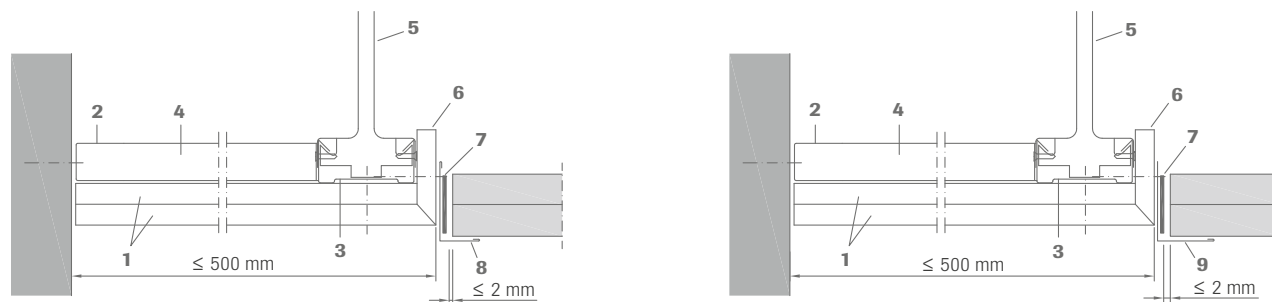
- 1 Wall angle no. 50/25, 50/25 - 1 mm
- 2 Wall angle no. 51/1, 50/35 - 1 mm
- 3 Insulation expansion strip no. 4439, thickness 2,0 mm, width 36 mm
- 4 For solid walls:
use appropriate metal solid wall anchor, \varnothing 6 mm (on-site), fixing centres every 400 mm
For gypsum board walls:
use appropriate metal hollow wall anchor (cavity dowel), e.g. Fischer HM 5 x 65 S or equivalent (on-site), fixing centres every 312,5 mm.
Every second fixing must secure into a vertical metal stud profile. Anchor specification must relate to the board thickness installed.
- 5 Steel rivets (on site), \varnothing 4,0 mm
- 6 Mounting bracket
Clamping range 75 - 115 mm, no. 00082491
Clamping range 115 - 200 mm, no. 00082490
Clamping range 200 - 340 mm, no. 00082489
Each set consists of 2 parts with a screw, 2 washers and a lock nut.
- 7 Mineral wool (on site), \geq 40 kg/m³, 1000 °C, fill completely
- 8 12,5 mm gypsum fire board or plasterboard (on site)
- 9 12,5 mm gypsum fire board or plasterboard, height 130 mm (on site)
(8 and 9 can also be replaced by one layer of 18 mm gypsum fire board or plasterboard)
- 10 Self-drilling screw (on site) 3,5 x 55 mm, fixing distance \leq 200 mm or \leq 156,25 mm; every second screw must fasten to a respective upright stud profile within the lightweight partition wall
- 11 Masonry

Wall perimeter gypsum board central:



- 1 Gypsum fire board, thickness 2 x 12.5 mm
- 2 Basic profile CD 60/27 - 0.6 mm
- 3 Cross section CD 60/27 - 0.6 mm, centres 500 mm
- 4 Nonius hanger (0.4 kN) with CD profile screwed together, centres ≤ 500 mm
- 5 Gypsum fire board, thickness 12.5 mm, height 60 mm
- 6 Insulation layer holders no. 4439, thickness 2.0 mm, width 36 mm
- 7 Wall angle no. 50/25, 50/25 - 1 mm
- 8 Wall angle no. 51/1, 50/35 - 1 mm

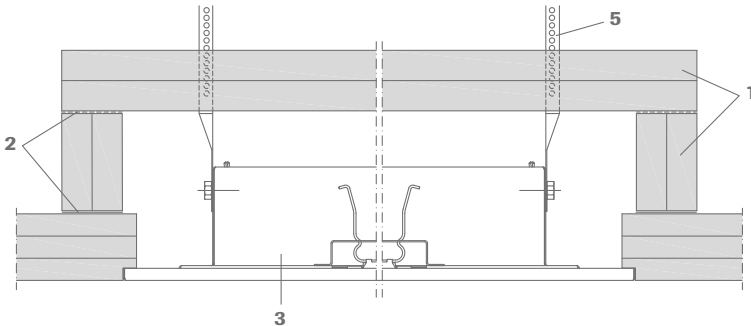
Wall perimeter with gypsum board border:



- 1 Gypsum fire board, thickness 2 x 12.5 mm
- 2 U profile 27/28/27
- 3 Basic profile CD 60/27 - 0.6 mm
- 4 Cross section CD 60/27 - 0.6 mm, centres 500 mm
- 5 Nonius hanger (0.4 kN) with CD profile screwed together, centres ≤ 500 mm
- 6 Gypsum fire board, thickness 12.5 mm, height 60 mm
- 7 Insulation layer holders no. 4439, thickness 2.0 mm, width 36 mm
- 8 Wall angle no. 50/25, 50/25 - 1 mm
- 9 Wall angle no. 51/1, 50/35 - 1 mm

Recessed lighting panel with fire box

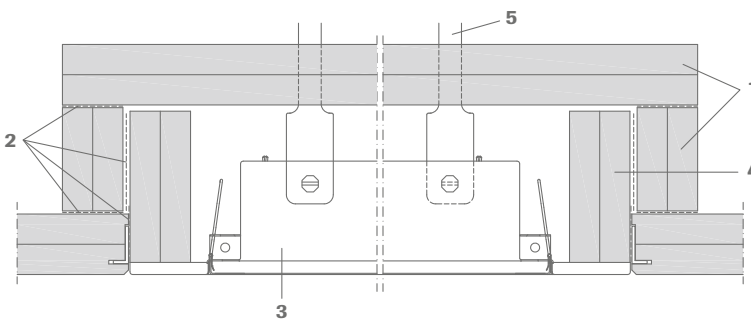
Section – variation A , B and C:



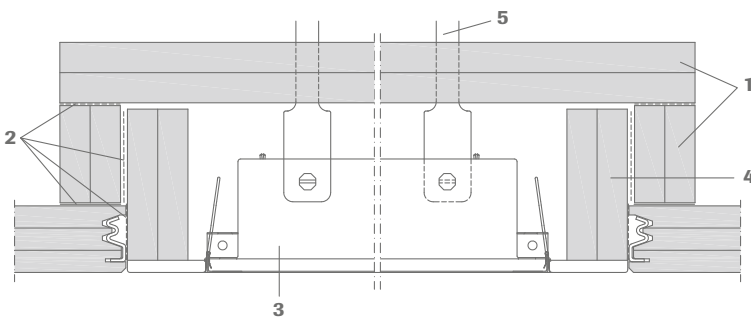
- 1 MINOWA BSK fire resistant tile no. 00082674, thickness 40 mm or MINOWA fire box no. 00082619 for grid 1250 x 312.5 mm (1200 x 300 mm) or fire box no. 00026998 for grid 625 x 625 mm (600 x 600 mm)
- 2 Kit pieces glued together with adhesive no. 99/24 onsite
- 3 OWA integrated lighting OWAlifetime LED, see leaflet no. 9630 e
- 4 Pre-cut Barriere tile, H = 100 mm
- 5 Nonius hanger no. 17/81, extension no. 16/... + safety pin, where hanger penetrates board, fill any gaps with glue no. 99/24

When using luminaires from a third party, it is important to ensure that the perimeter can accommodate the pre-cut Barriere tile (see sections below). We recommend that you only install our OWAlifetime LED.

Cross section – variation A and C:



Cross section – variation B:



See leaflet no. 9801 e for installation of the approved fire box.

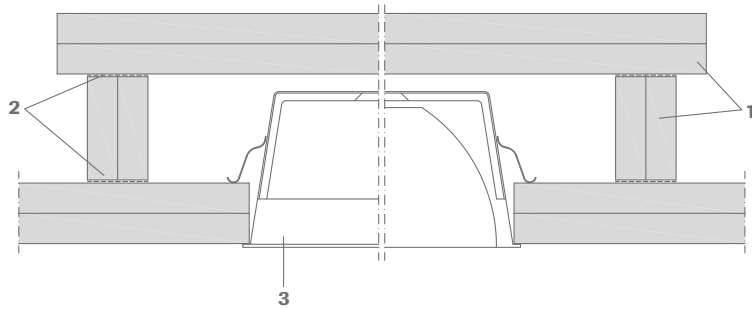
Air outlets:

The respective approval from the manufacturer should be observed when installing air grilles. You can seek advice from OWAconsult beforehand in the event of uncertainties.

Recessed downlight with fire box

For variations A, B and C:

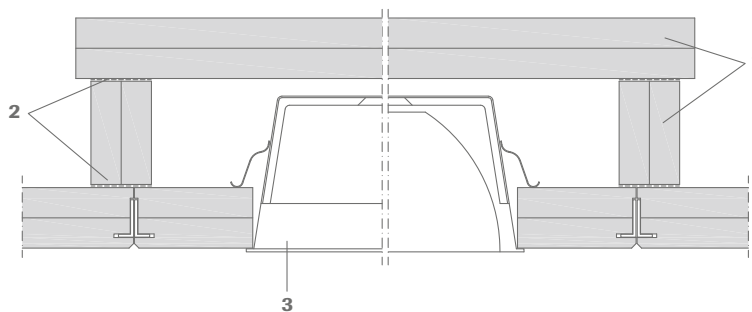
Section:



- 1 MINOWA BSK fire resistant board no. 00082674, thickness 40 mm, or MINOWA fire box kit no. 00083556
- 2 Kit pieces glued together with adhesive no. 99/24 onsite
- 3 Downlight

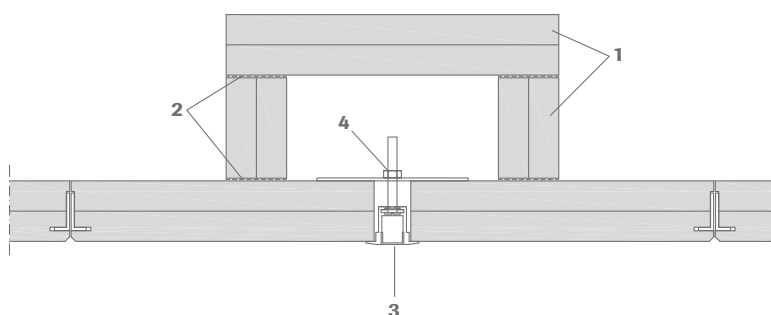
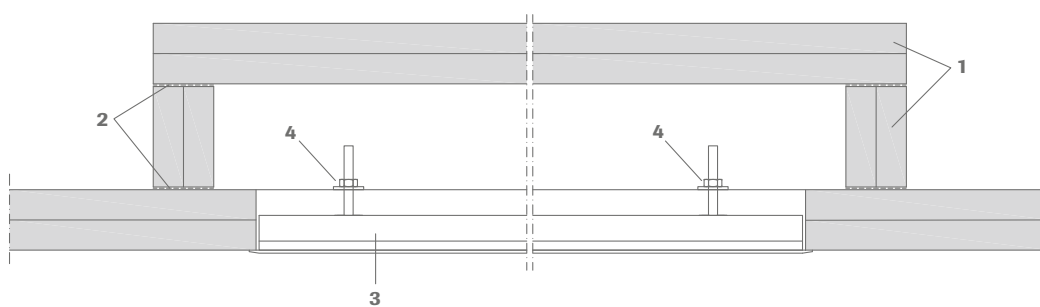
Installation of downlights with a ceiling cut-out $\varnothing \leq 175$ mm and weight of up to 3.0 kg is possible. Additional suspension is not necessary.

Cross section:



Integrated lighting OWAlumino LED light rail with fire box

For variation C:

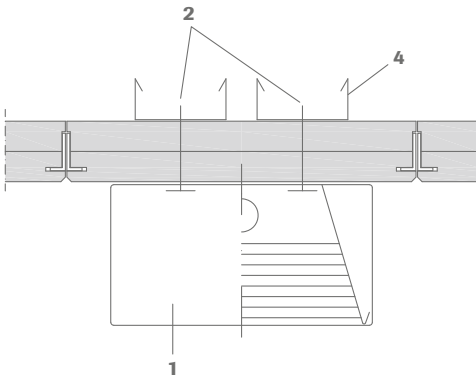


- 1 MINOWA BSK fire resistant board no. 00082674, thickness 40 mm
- 2 Kit pieces glued together with adhesive no. 99/24 onsite
- 3 OWAlumino 2 LED light rail no. 00081539, 940 x 35 mm, see leaflet no. 9630 e
- 4 Mounting kit part no. 00082405

Surface mounted fixtures up to 6 kg

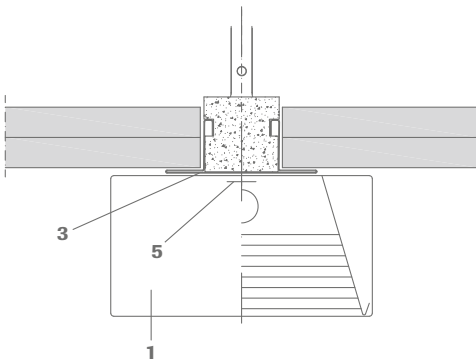
For variations A, B and C:

Installation through the barrier element with CD profiles on the reverse:

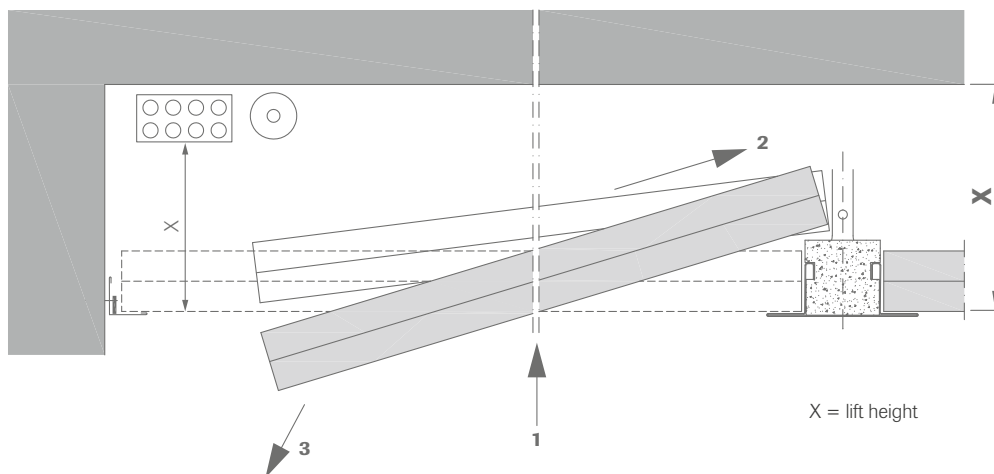
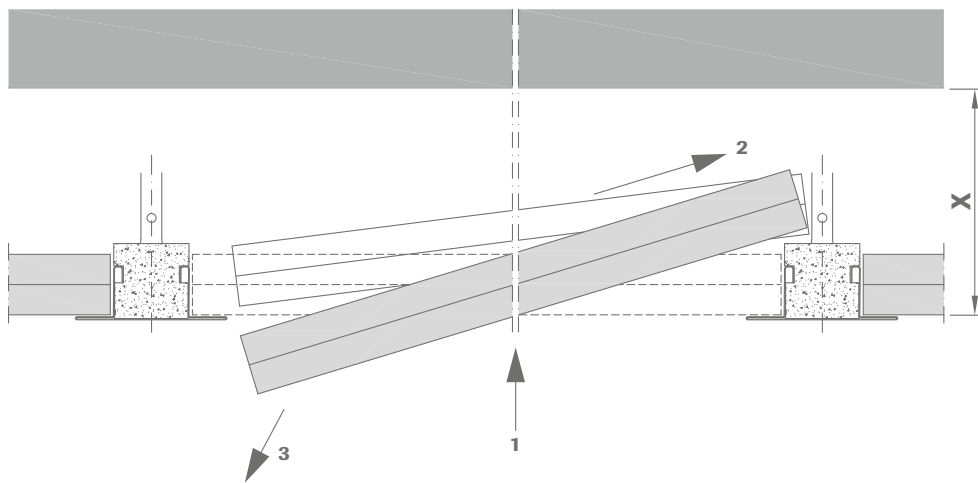


- 1 Fixture
- 2 Fasten with 3no. \varnothing 6.0 x 80 mm drywall screws per CD profile
- 3 Bandraaster profile no. 8025/100 with infill material
- 4 The length of the CD profile should be 5 mm less than the length of the boards. Depending on the surface-mounted fixture, one or two CD profiles may be required.
- 5 Fasten with 3 no. \varnothing 3.5 x 55 mm drywall screws

Installation on bandraaster profile:



Demounting the elements



- 1 Movement of the panel element in arrow direction (lift height according to installation)
- 2 Element moved up and sideways (until removal is possible)
- 3 Element removed in arrow direction

Necessary clear lift height **X** for removal:

- with bandraaster profile incl. infill material: ≥ 130 mm
- from wall to wall: ≥ 280 mm
- with suspended gypsum board frieze: ≥ 140 mm

Note:

When installing in the ceiling cavity, the lift height X must be calculated from the lowest point of the installation, i.e. underside of services.

Material requirements per m²:

example for calculating standard dimensions

	Barriere A	Barriere A	Barriere B	Barriere C	
Module size of Bandraster section	1300 x 312.5 mm	1550 x 312.5 mm	2300 x 312.5 mm	1300 x 625 mm	
Exact size	1250 x 312.5 mm	1500 x 312.5 mm	2250 x 312.5 mm	1250 x 625 mm	
No.	Description				
79/75	Nonius hanger	0.96 pce	0.81 pce	0.70 pce	1.23 pce
8025/100	Bandraster profile	0.77 m	0.65 m	0.43 m	0.77 m
82/8025G	Connector	0.21 pce	0.17 pce	0.12 pce	0.21 pce
75/76	Wall anchor	Depending on room size and shape			
51/25	Wall angle	Depending on room size and shape			
4439	Insulation layer holders	Depending on room size and shape, wall angle			
37/15	L profile	4.92 pce	4.13 pce	-	2.46 pce
37/25	Barriere profile	-	-	2.78 pce	-
17/80	Nonius angle brace	Depending on bandraster length			

The material quantities are for individual components required per m² of the planned ceiling.

Weight per m²:

	Barriere A	Barriere A	Barriere B	Barriere C
Construction approx.	3,16 kg/m ²	2,99 kg/m ²	5,58 kg/m ²	2,13 kg/m ²
Tiles 40 mm approx.	16,8 kg/m ²	16,8 kg/m ²	-	16,8 kg/m ²
Tiles 44 mm approx.	-	-	18,5 kg/m ²	-

Component list:

OWAconstruct nonius hanger no. 79/75
 OWAconstruct bandraster profile no. 8025/100
 OWAconstruct connector no. 82/8025G
 OWAconstruct wall anchor no. 75/76
 OWAconstruct wall angle no. 50/25

OWAconstruct wall angle no. 51/1
 OWAconstruct wall angle no. 51/25
 OWAconstruct insulation layer holders no. 4439
 OWAconstruct L profile no. 37/15
 OWAconstruct Barriere profile no. 37/25

Product Warranties

The information provided in this leaflet is based on the standards and data available at the time of publication. Any performance, warranties or guarantees provided, expressed or implied, are subject to the exclusive use of OWA components and the installation of those components in accordance with our recommendations. Failure to adhere to these conditions will result in the invalidation of any performance claims, warranties or guarantees and rejection of any liability. OWA reserves the right to make any technical improvements to the products, systems or services without prior notice. **All goods and services are supplied in accordance with our current Terms and Conditions of Sale.** Errors excepted!



The information in this brochure is up-to-date at the time of publication. Errors and mistakes excepted. Please contact our competence team OWAconsult for specific advice. Our experts will be happy to answer your questions under the following contact details: tel: +49 9373 201-444 or e-mail: info@owaconsult.de



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