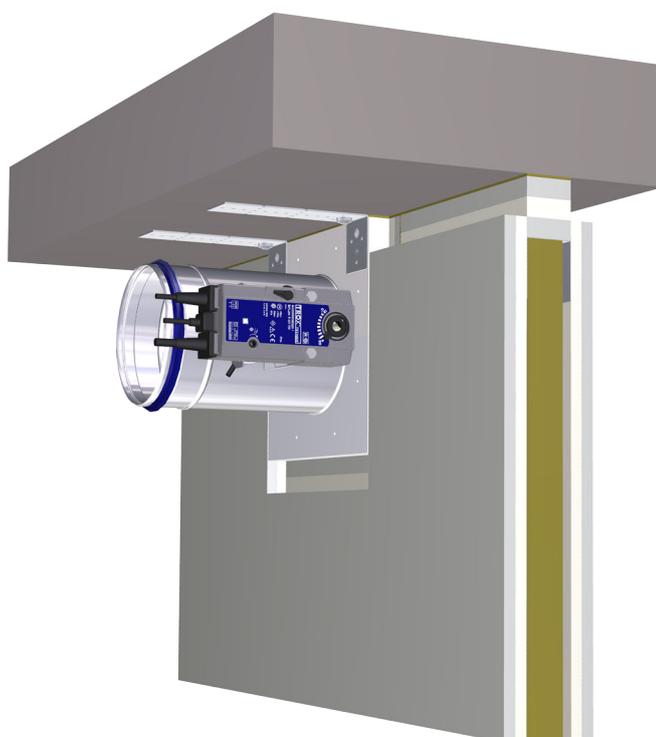




Fire damper

FKRS-EU

Installation kit GL2 for flexible ceiling joint



TROX[®] TECHNİK

The art of handling air

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1 Installation kit GL2

1.1 Scope of delivery

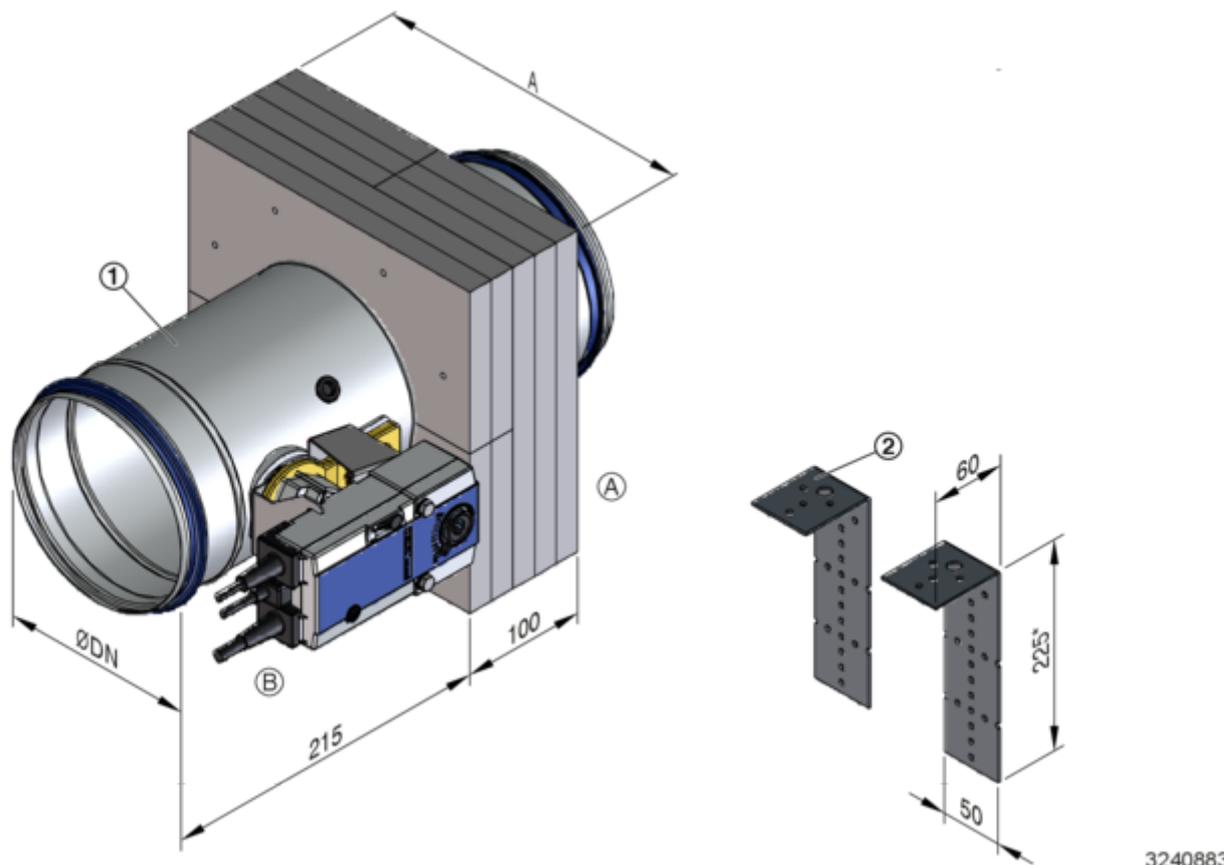


Fig. 1: Scope of delivery FKRS-EU with installation kit GL2

- 1 FKRS-EU with installation kit GL2
 - 2 Bracket
 - * The brackets may be shortened on site if necessary.
- A Installation side
B Operating side

Installation kit dimensions [mm]										
Nominal size	100	125	150	160	180	200	224	250	280	315
ØDN	99	124	149	159	179	199	223	249	279	314
□A	Nominal size + 100 mm									

Scope of delivery		
Position	Name	Quantity
1	FKRS-EU with installation kit GL2	1
2	Bracket	4

- The installation kit GL2 is supplied separately and must be installed on site.
- The installation kit GL2 can also be ordered subsequently.

1.2 Components to be provided on site

Note:

These instructions supplement the installation and operating manual of the FKRS-EU.

Components to be provided on site		
Position	Name	Property - Size
3	Fire rated plasterboard (GRP)	d = 12.5 mm
4	Fire rated plasterboard (GRP)	d = 20 mm ³
5	UW	50 × 40 × 0.6 mm / 50 × 60 × 0.6 mm ^{1,2}
6	CW section	50 × 50 × 0.6 mm ²
7	Chipboard screw	Ø5 × 100 mm ^{4,5}
8	Chipboard screw	Ø4 × 60 mm ⁵
9	Chipboard screw	Ø4 × 35 mm ⁵
10	Screw or steel rivet	
11	HUS anchor bolt	Ø6 × 60 mm ⁵ alternatively, equivalent anchor bolts or dowels with proof of suitability for fire protection
12	Mineral wool depending on wall structure	
13	Filler (to compensate for unevenness)	Type LaFillfresh or equivalent
14	Dry wall screw	TN Ø3.9 × 35 mm
15	Dry wall screw	TN Ø3.9 × 20 mm
16	Mineral wool	10 mm thick, melting point ≥ 1000 °C
17	Nail plug	
18	Filler (between the installation kits)	Type LaFillfresh or equivalent
19	Holding plate on both sides	Sheet steel, ≥ 1.5 mm thick, approx. 90 × 140 mm
20	Double profile (with distance 100 - 150 mm between the installation kits)	UW profile ² plugged over CW profile (closed side to damper), gap filled with mineral wool 1000°C, 80kg/m ³ .

¹ min. leg length ≥ a + 20 mm

- UW section 50 × 40 × 0.6 mm for subsidence of the ceiling slab a = 0 - 20 mm
- UW section 50 × 60 × 0.6 mm for subsidence of the ceiling slab a = 0 - 40 mm

² Profile width depending on wall construction

³ 3 strips for a ≤ 40 mm, 2 strips for a ≤ 20 mm

⁴ Ø5 × 80 mm when using 2 strips (item 4)

⁵ Pre-drill screw holes

1.3 Requirements

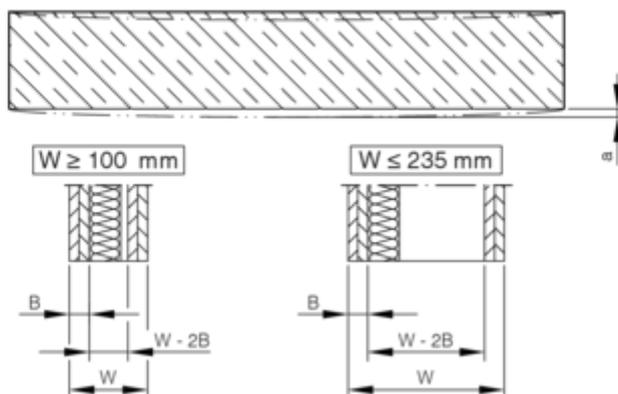


Fig. 2: Requirements

W Wall thickness, 100 - 235 mm
 B Cladding

W - 2B Width of the support structure
 a Subsidence of ceiling slab, 0 - 40 mm

2 Installation in metal stud walls

2.1 Overview - Installation variants

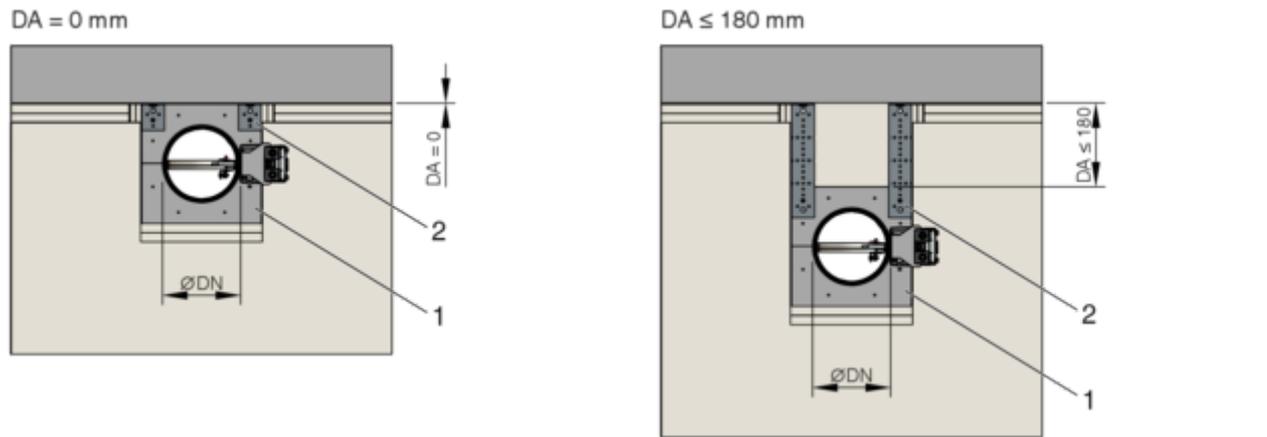


Fig. 3: Separate installation of the FKRS-EU with installation kit, see Fig. 14 or Fig. 26

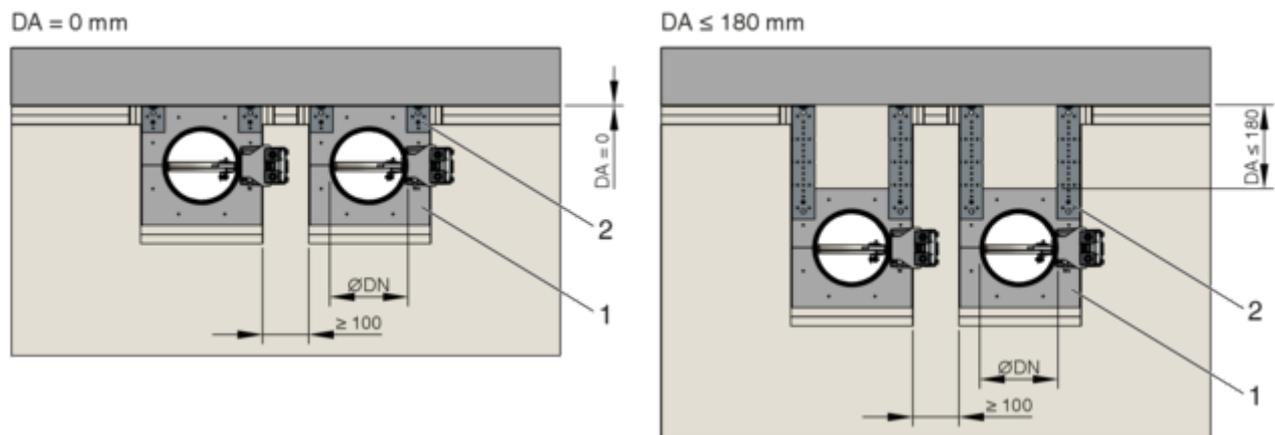


Fig. 4: Distance between two installation kits ≥ 100 mm, see Fig. 15 or Fig. 27

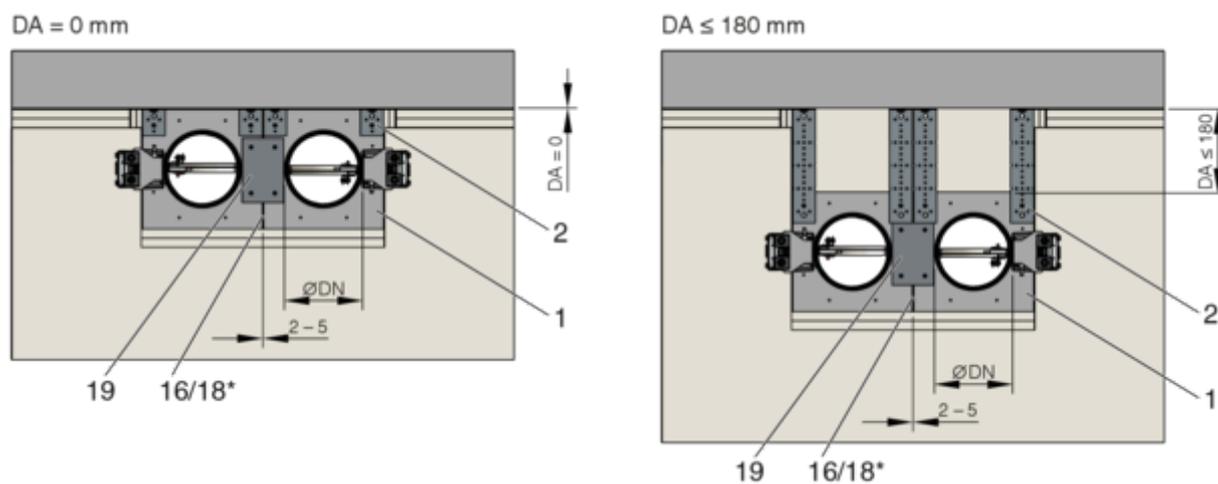


Fig. 5: Distance between two installation kits 2 - 5 mm, see Fig. 16 or Fig. 28

DA Distance between installation kit and ceiling, 0 - 180 mm

* optional

Distance of FKRS-EU to adjacent walls by design ≥ 125 mm.

2.2 Installation

2.2.1 Distance from ceiling DA = 0 mm

Installation - DA = 0 mm

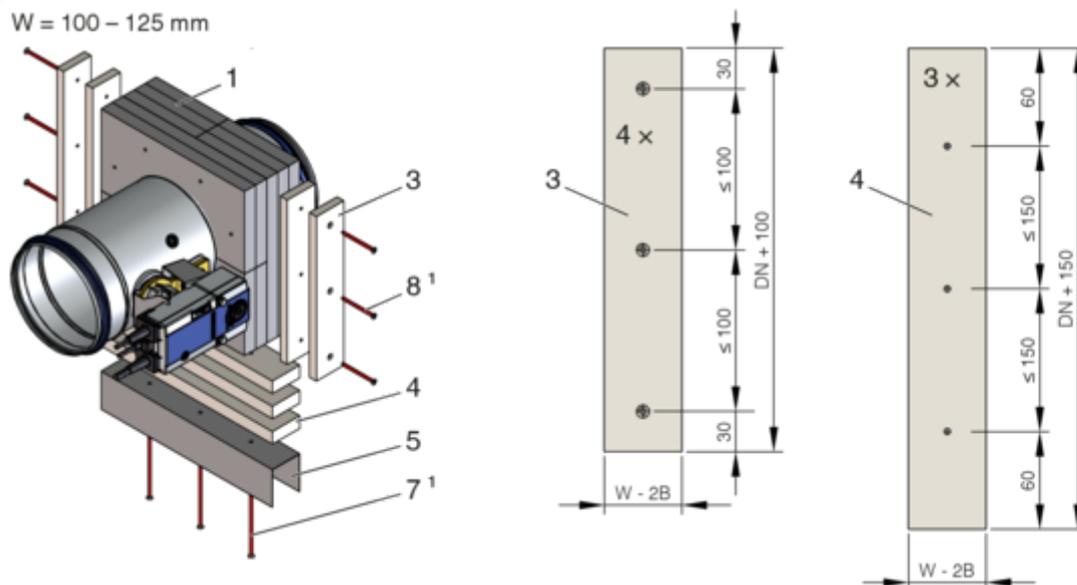


Fig. 6: Installation - DA = 0 mm

1 pre-drill with 4 mm (7), with 3 mm (8)

Installation - DA = 0 mm

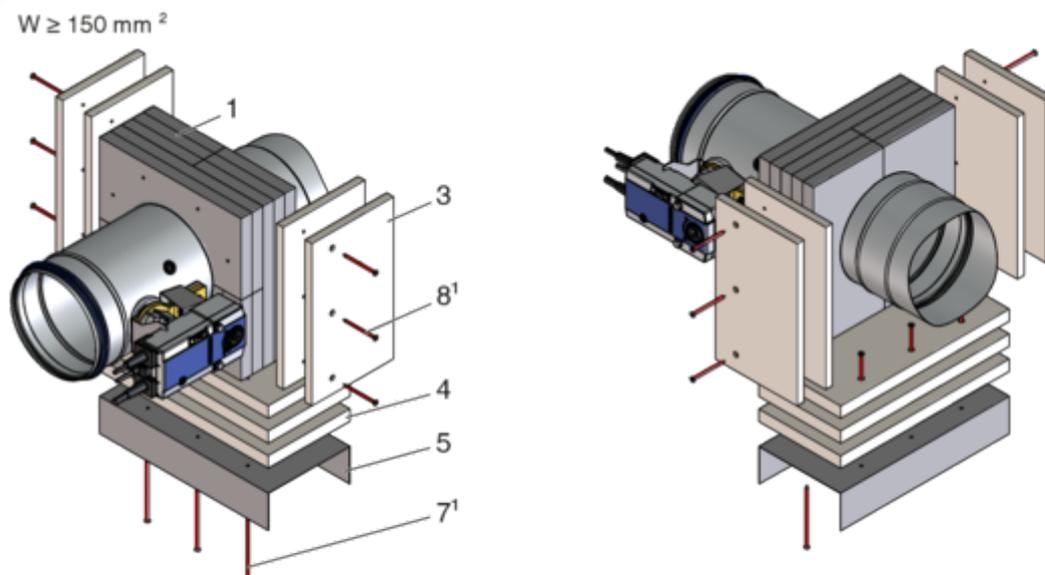


Fig. 7: Installation - DA = 0 mm

1 pre-drill with 4 mm (7), with 3 mm (8)
2 drawn W = 175 mm

Installation - DA = 0 mm

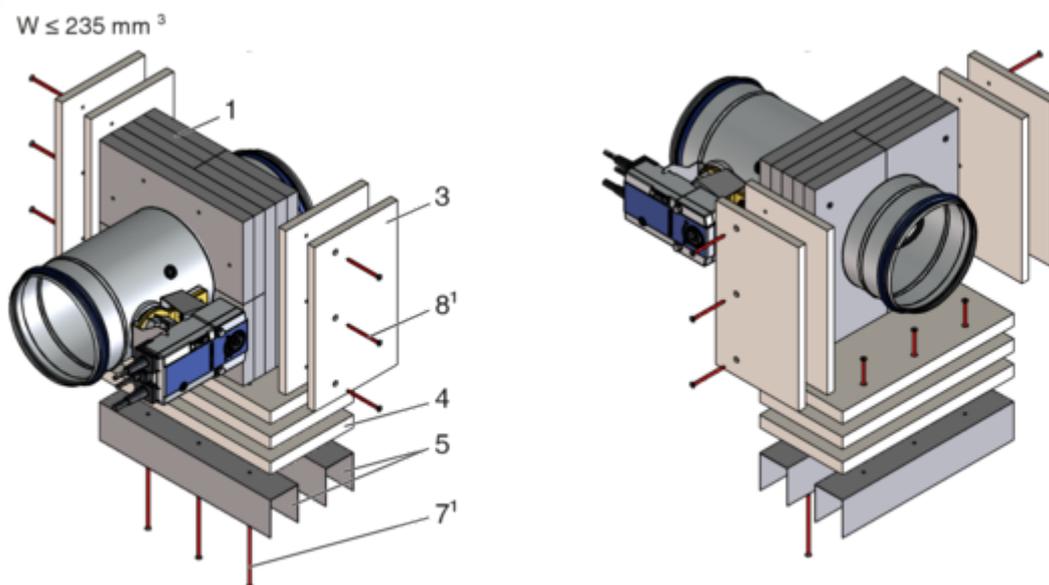


Fig. 8: Installation - DA = 0 mm

- 1 pre-drill with 4 mm (7), with 3 mm (8)
- 3 drawn W = 200 mm

Fixing the brackets to the installation kit GL2

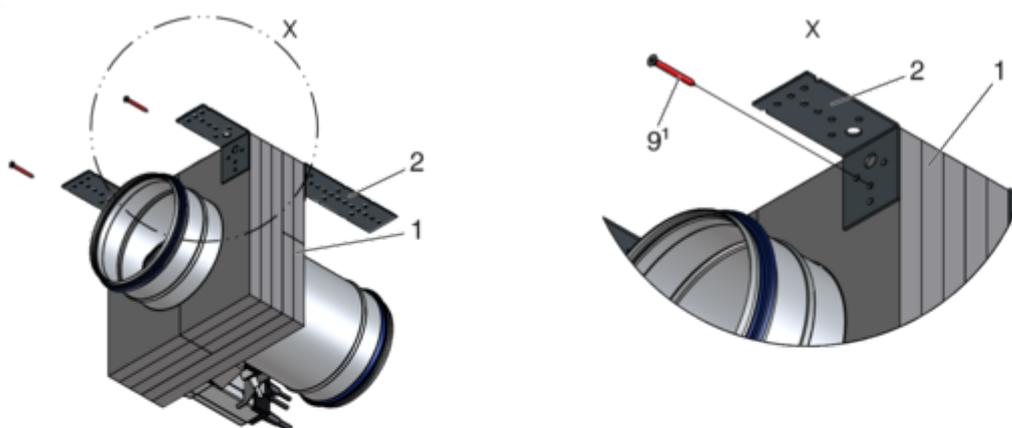


Fig. 9: Fixing the brackets to the installation kit GL2

- 1 pre-drill with 3 mm

Fixing the fire-rated plasterboard to the installation kit GL2

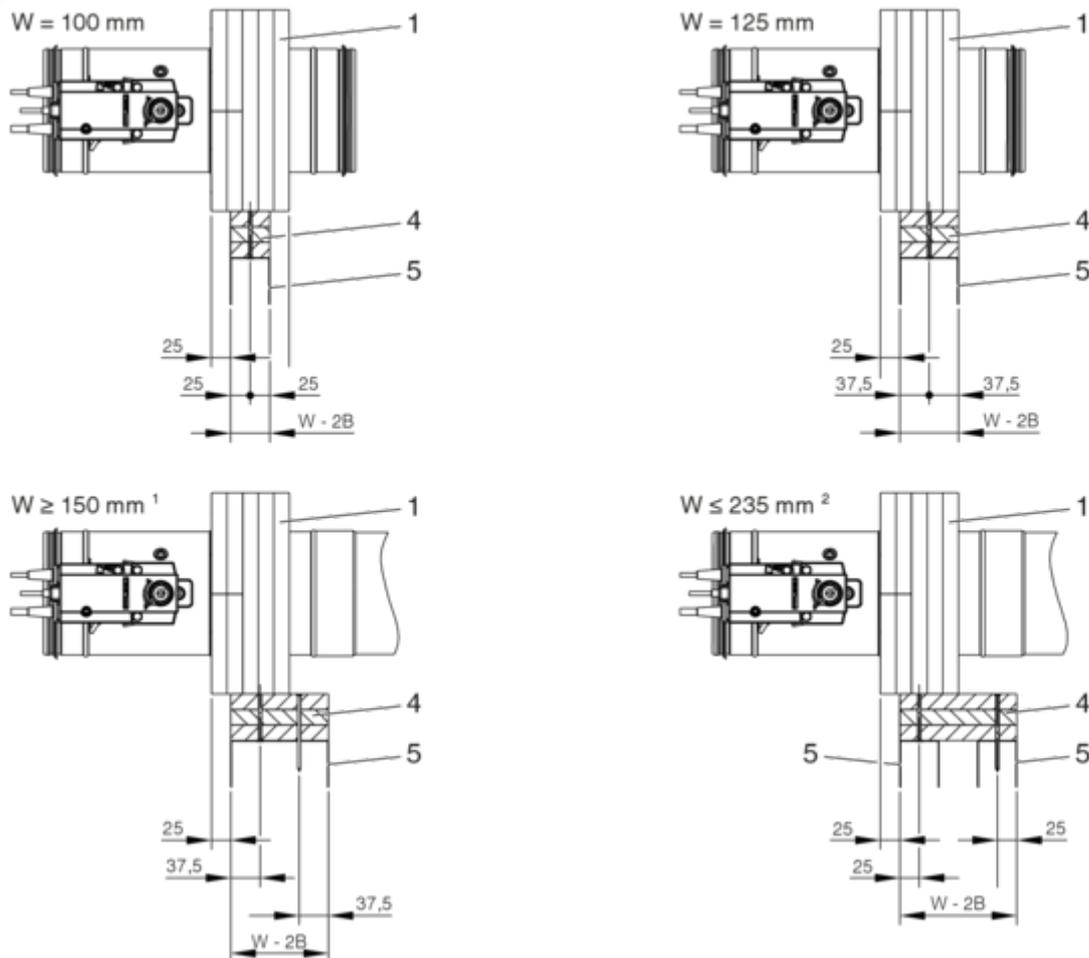


Fig. 10: Fixing the fire-rated plasterboard to the installation kit GL2

- 1 drawn W = 175 mm
- 2 drawn W = 200 mm

Create an appropriate opening with DA = 0 mm

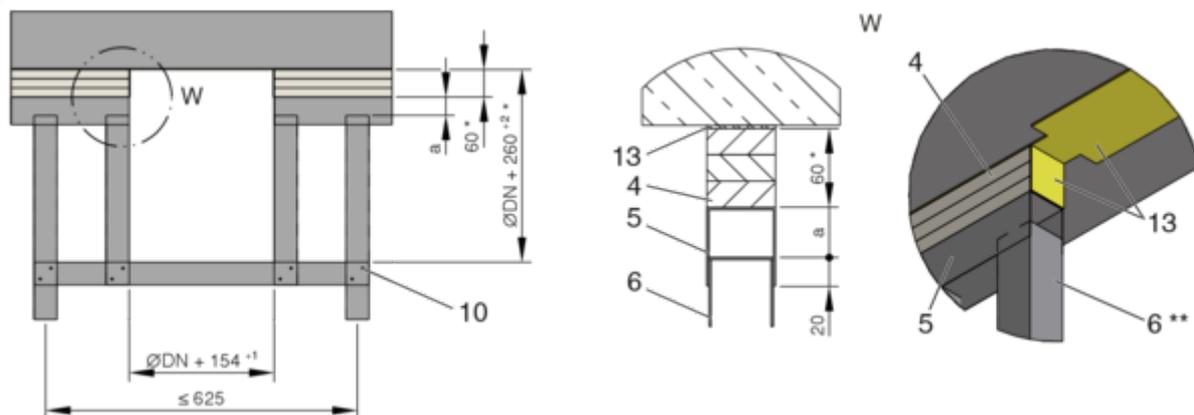
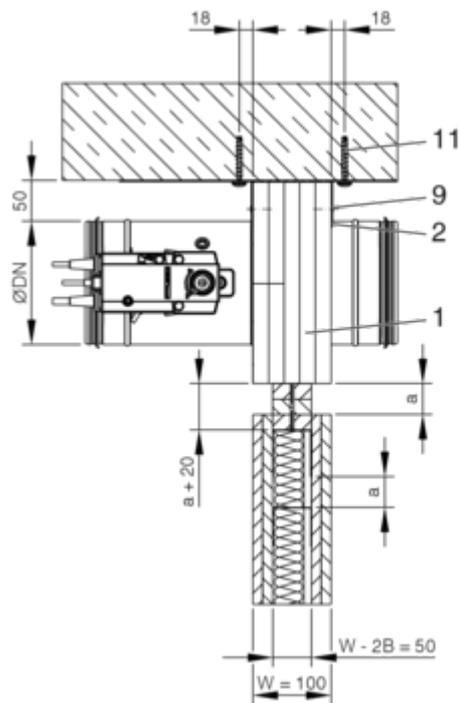


Fig. 11: Create an appropriate opening with DA = 0 mm

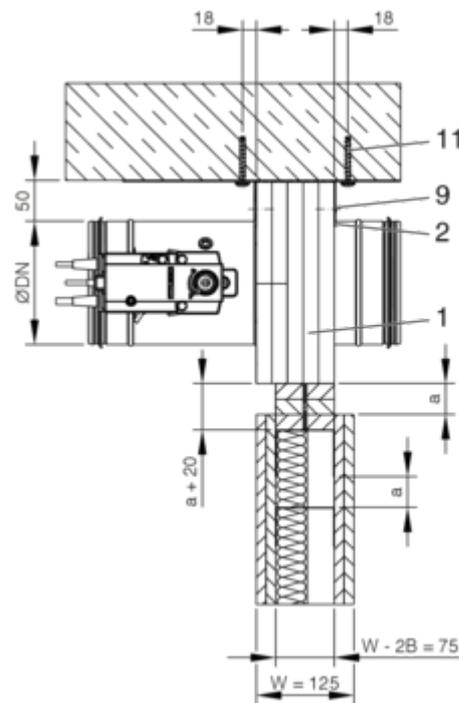
- * with a = 40 mm (drawn)
- ** closed side facing the installation opening

Installation with DA = 0 mm

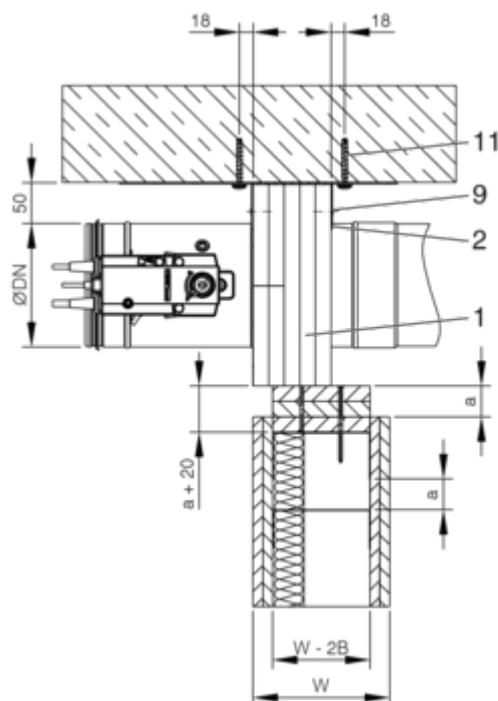
W = 100 mm



W = 125 mm



W ≥ 150 mm ¹



W ≤ 235 mm ²

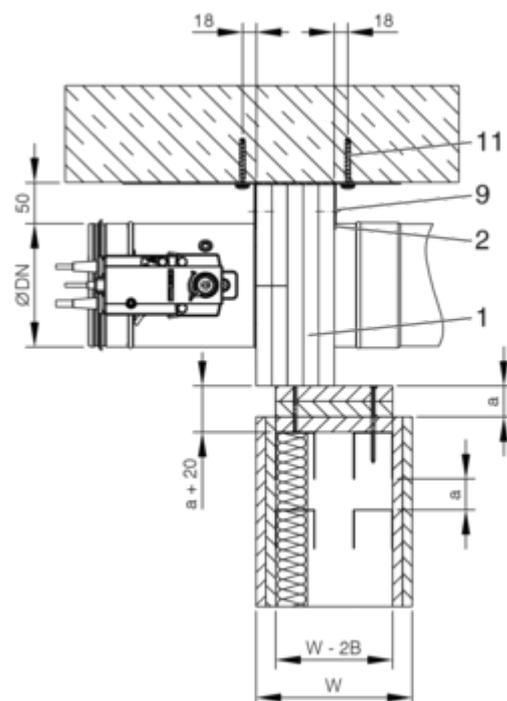


Fig. 12: Installation with DA = 0 mm

- 1 drawn W = 175 mm
- 2 drawn W = 200 mm

Wall cladding with DA = 0 mm

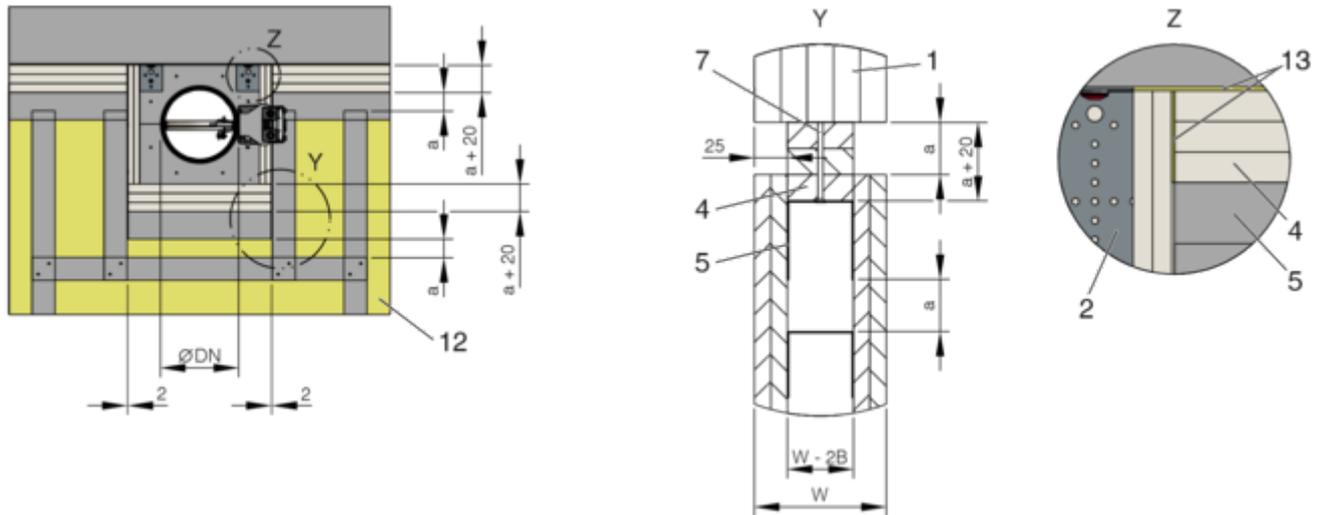


Fig. 13: Wall cladding with DA = 0 mm

Note: The planking of the wall can only be done after the installation of the fire damper.

Wall planking and screwing - Single installation kit

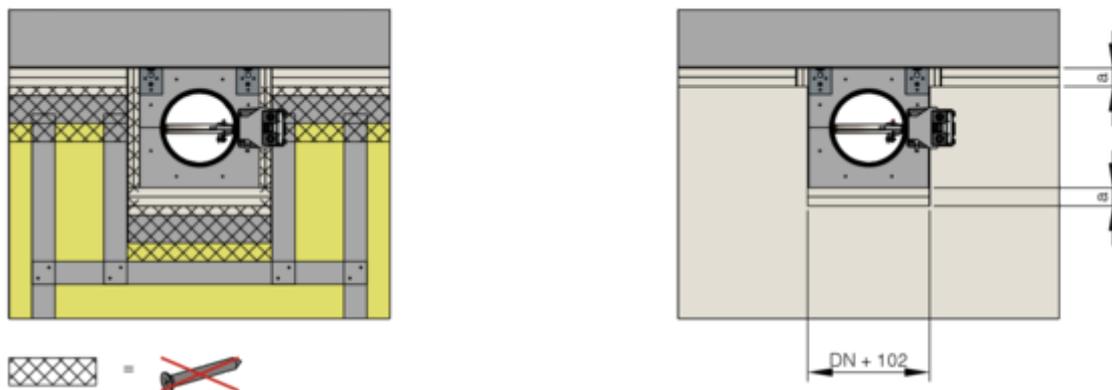


Fig. 14: Wall planking and screwing - Single installation kit

Wall planking and screwing - distance between two installation kits ≥ 100 mm

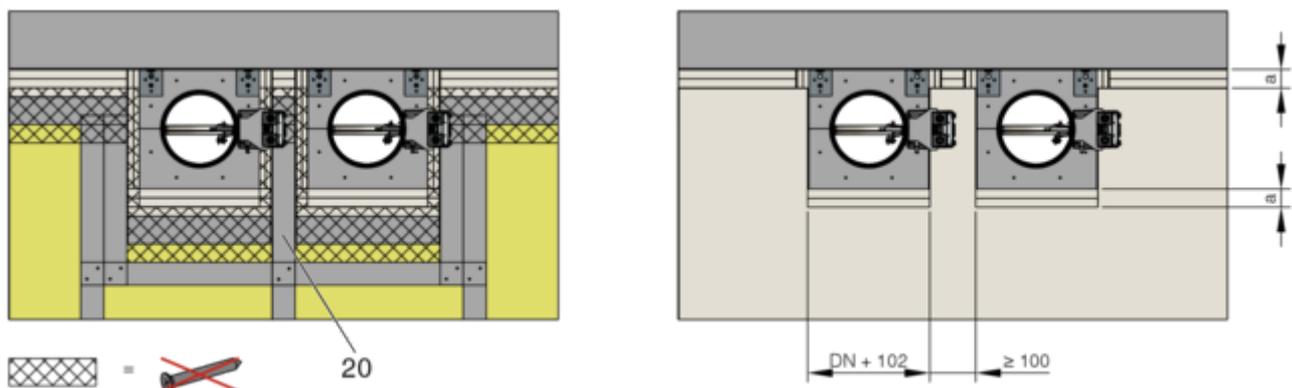


Fig. 15: Wall planking and screwing - distance between two installation kits ≥ 100 mm

Installation > Distance from ceiling DA = 0 mm

Wall planking and screwing - distance between two installation sets 2 - 5 mm to each other

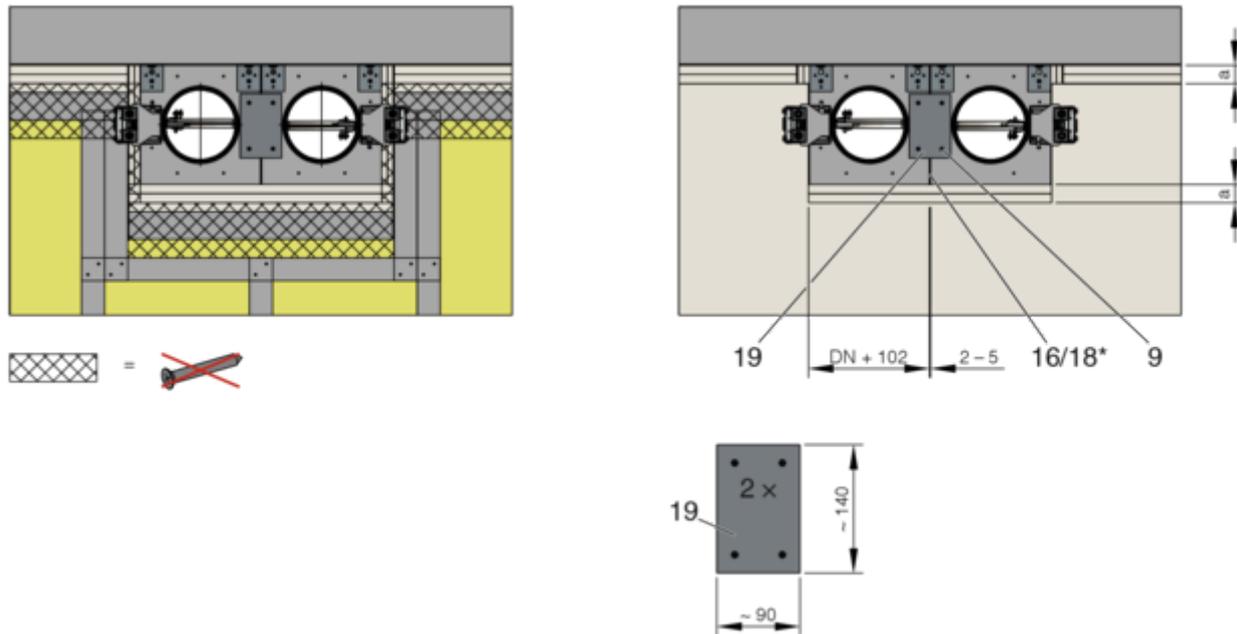


Fig. 16: Wall planking and screwing - distance between two installation sets 2 - 5 mm to each other

* optional

2.2.2 Distance from ceiling $DA \leq 180$ mm

Installation - $DA \leq 180$ mm

$W = 100 - 125$ mm

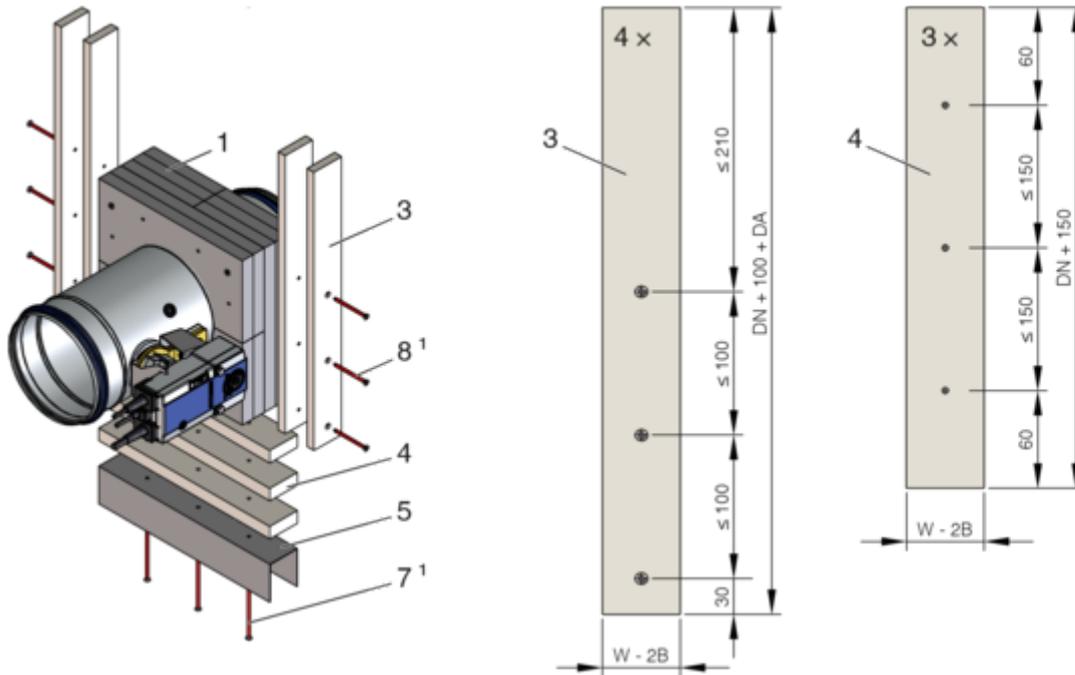


Fig. 17: Installation - $DA \leq 180$ mm

1 pre-drill with 4 mm (7), with 3 mm (8)

Installation - $DA \leq 180$ mm

$W \geq 150$ mm²

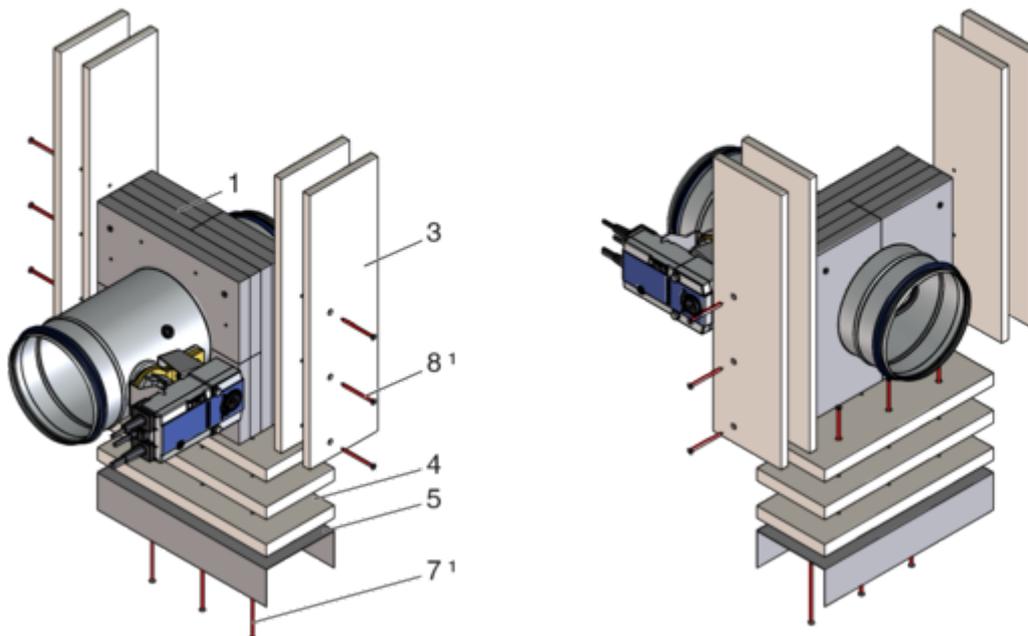


Fig. 18: Installation - $DA \leq 180$ mm

1 pre-drill with 4 mm (7), with 3 mm (8)

2 drawn $W = 175$ mm

Installation - DA ≤ 180 mm

W ≤ 235 mm³

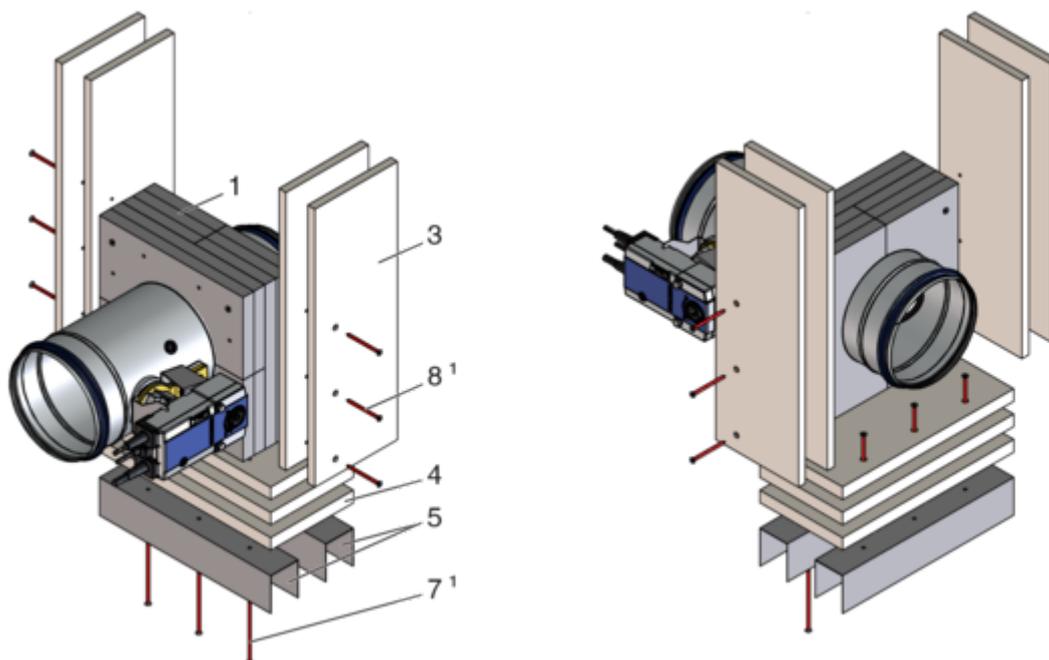


Fig. 19: Installation - DA ≤ 180 mm

- 1 pre-drill with 4 mm (7), with 3 mm (8)
- 3 drawn W = 200 mm

Fixing the brackets to the installation kit GL2

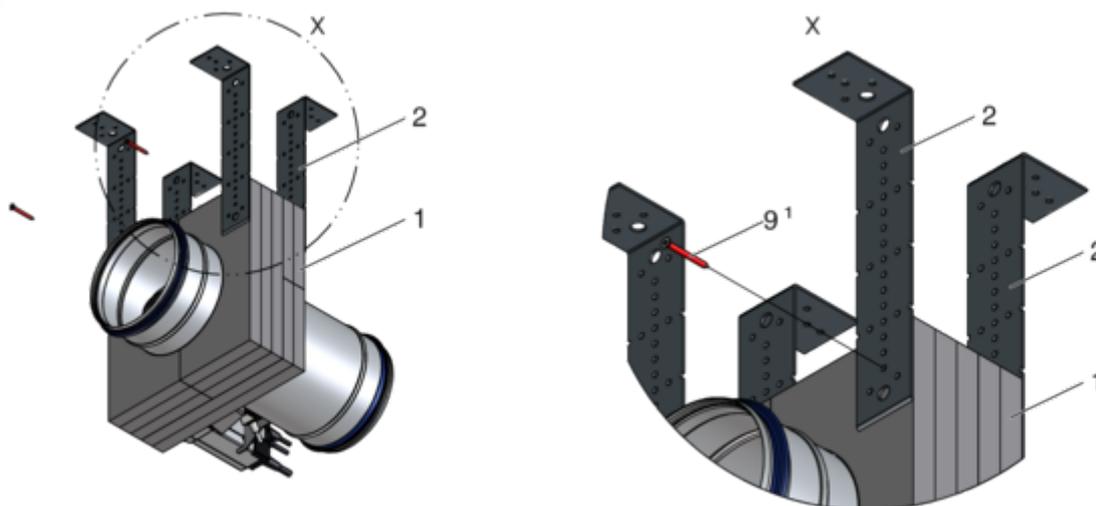


Fig. 20: Fixing the brackets to the installation kit GL2

- 1 pre-drill with 3 mm

Fixing the fire-rated plasterboard to the installation kit GL2

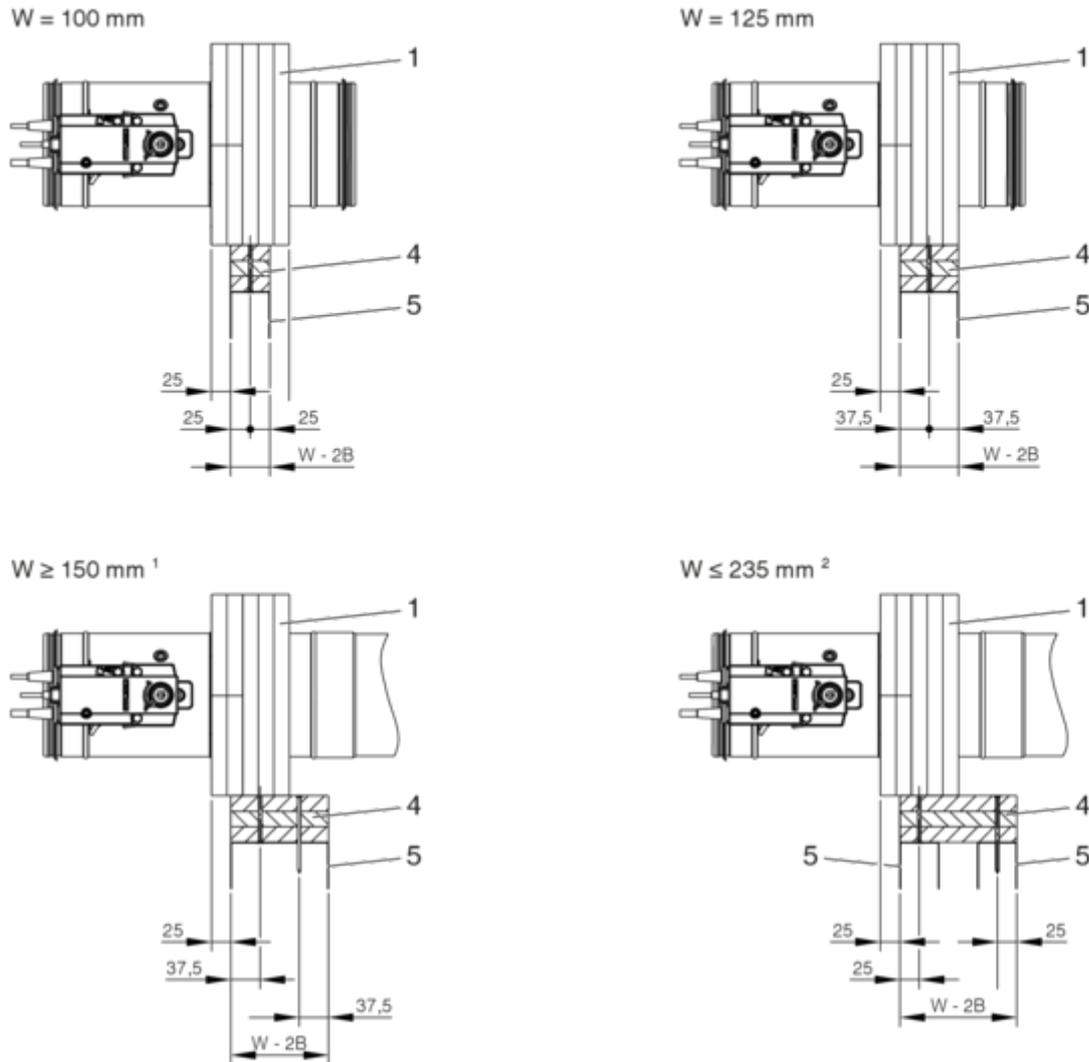


Fig. 21: Fixing the fire-rated plasterboard to the installation kit GL2

- 1 drawn $W = 175$ mm
- 2 drawn $W = 200$ mm

Installation > Distance from ceiling $DA \leq 180$ mm

Create an appropriate opening with $DA > 0 - 180$ mm

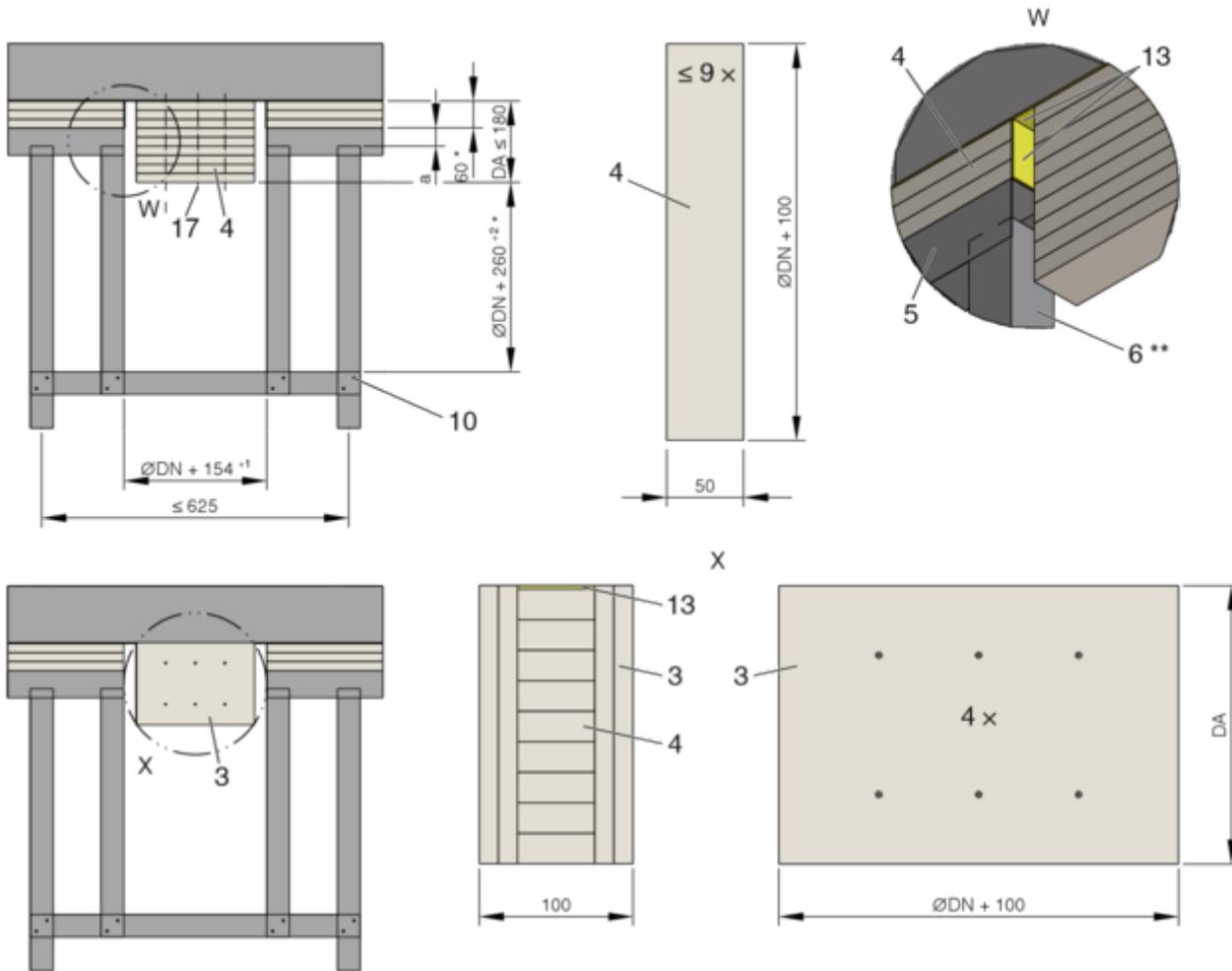


Fig. 22: Create an appropriate opening with $DA > 0 - 180$ mm

* with $a = 40$ mm (drawn)

** closed side facing the installation opening

Installation with $DA \leq 180$ mm

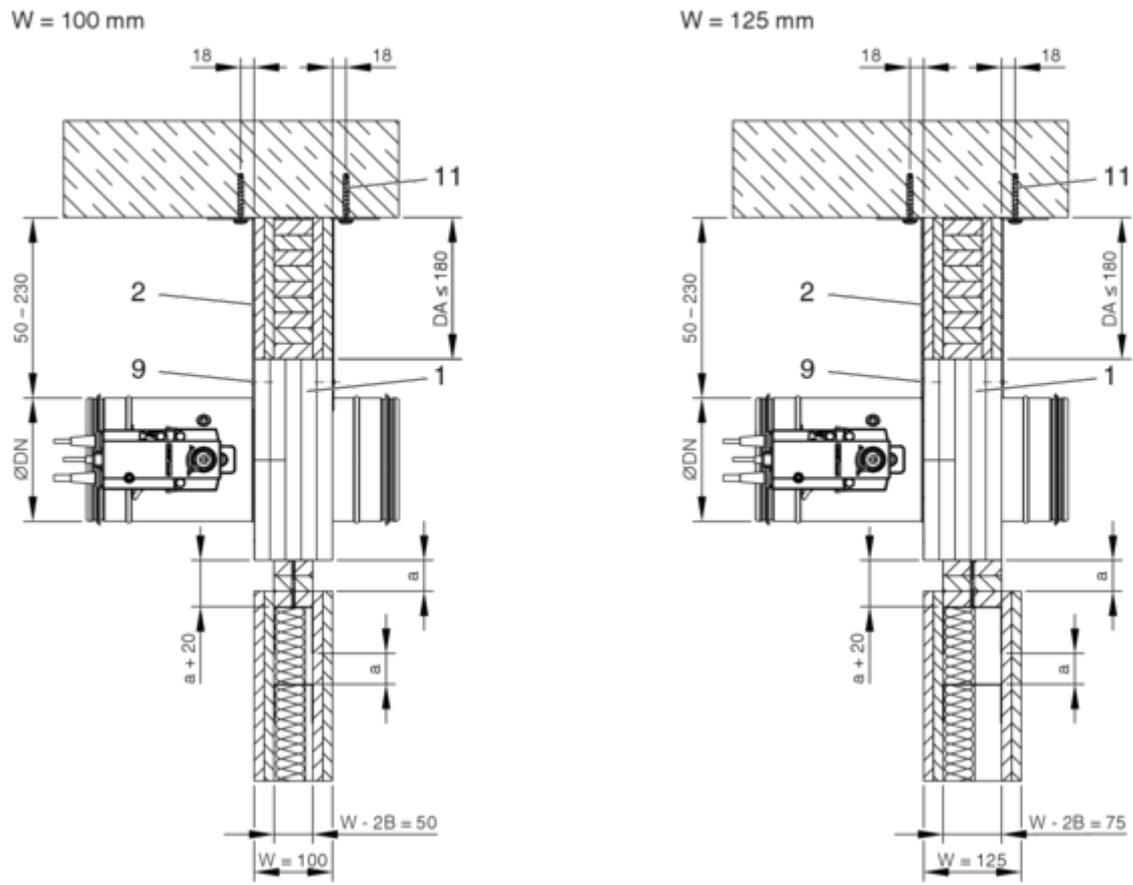


Fig. 23: Installation with $DA \leq 180$ mm

Installation with $DA \leq 180$ mm

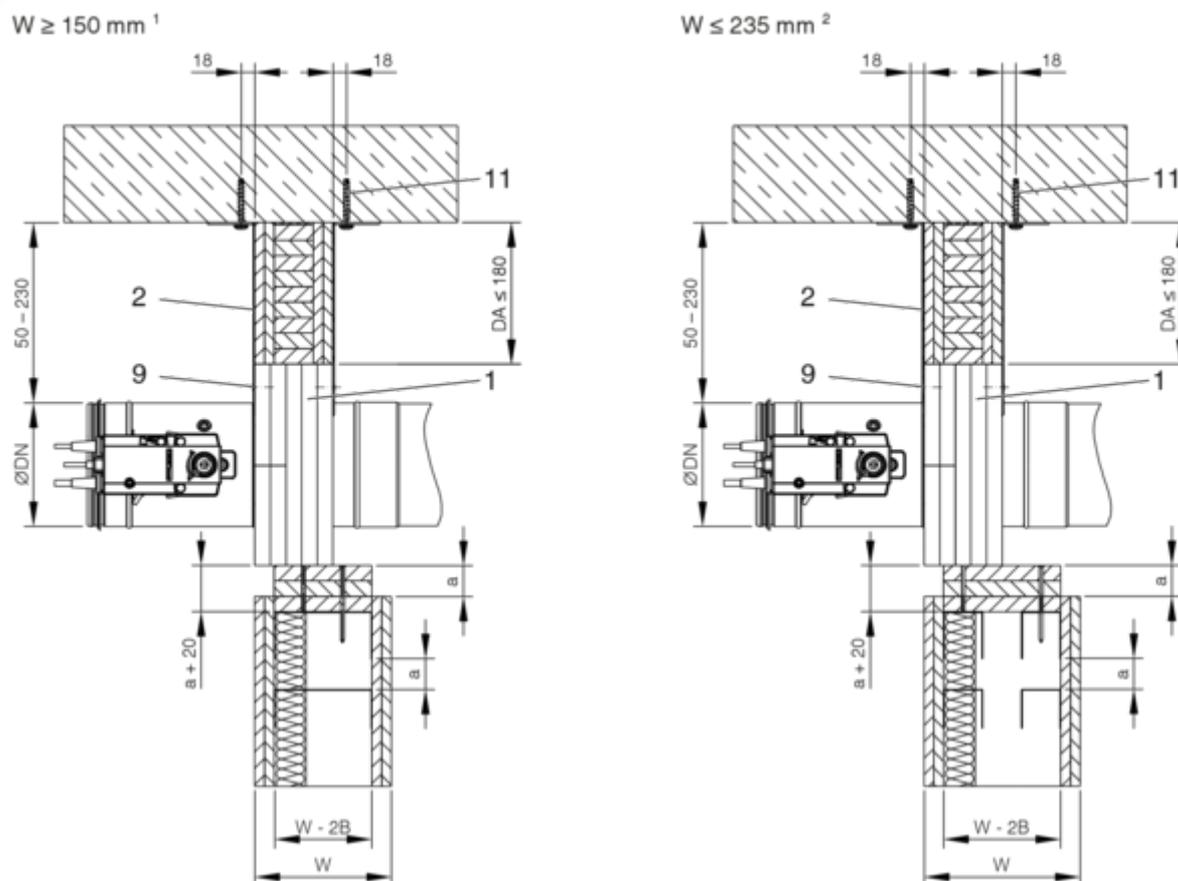


Fig. 24: Installation with $DA \leq 180$ mm

- 1 drawn $W = 175$ mm
- 2 drawn $W = 200$ mm

Note: The planking of the wall can only be done after the installation of the fire damper.

Wall planking for $DA \leq 180$ mm

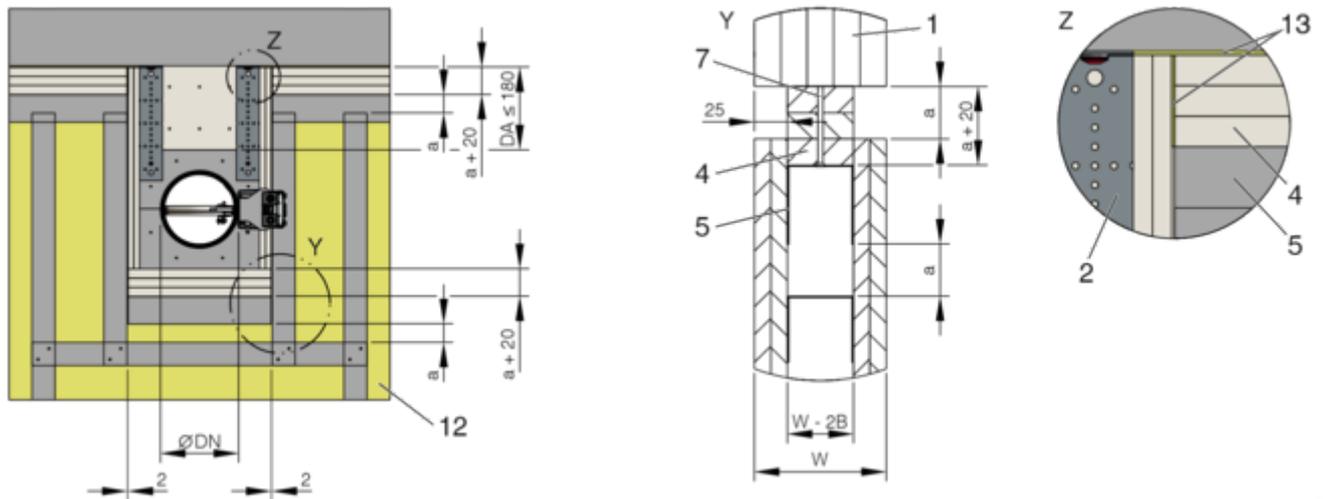


Fig. 25: Wall planking for $DA \leq 180$ mm

Note: The planking of the wall can only be done after the installation of the fire damper.

Wall planking and screwing - Single installation kit

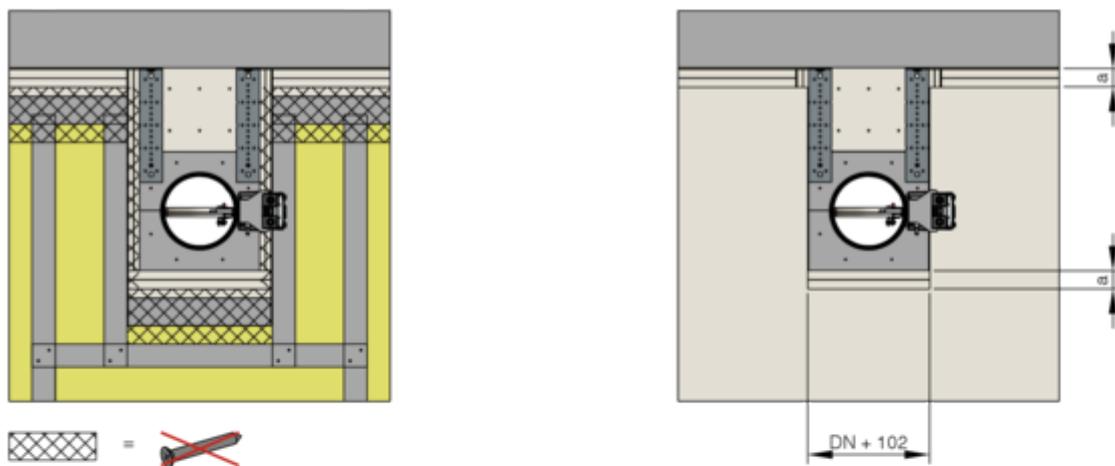


Fig. 26: Wall planking and screwing - Single installation kit

Installation > Distance from ceiling $DA \leq 180$ mm

Wall planking and screwing - Single installation kit

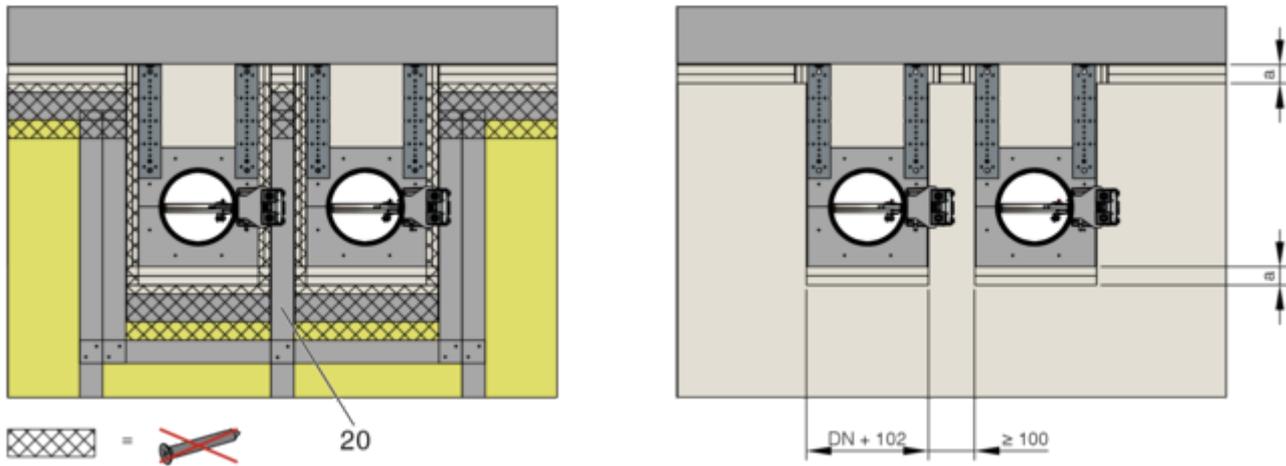


Fig. 27: Wall planking and screwing - distance between two installation kits ≥ 100 mm

Wall planking and screwing - distance between two installation sets 2 - 5 mm to each other

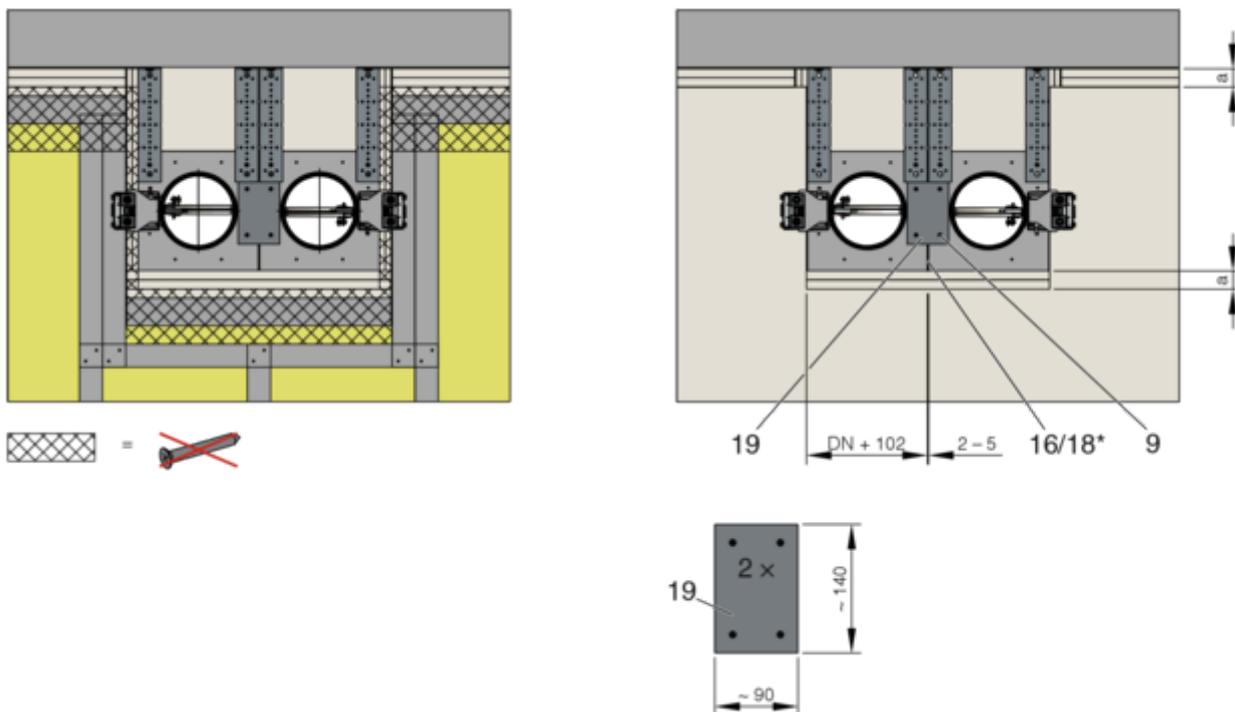


Fig. 28: Wall planking and screwing - distance between two installation sets 2 - 5 mm to each other

* optional

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