

# KOOLAIR



Linear nozzle



**DF-47-NARROW**

Mounting  
instructions

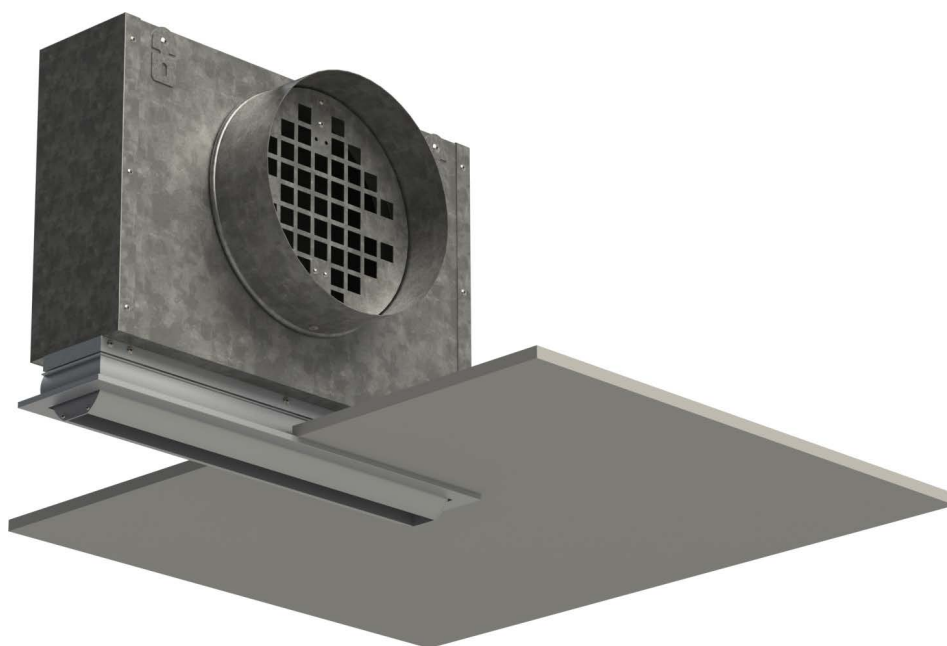
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# Linear Nozzle

## DF-47-NARROW

## DF-47-NARROW-LT

### Mounting instructions



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### DF-47-NARROW-LT

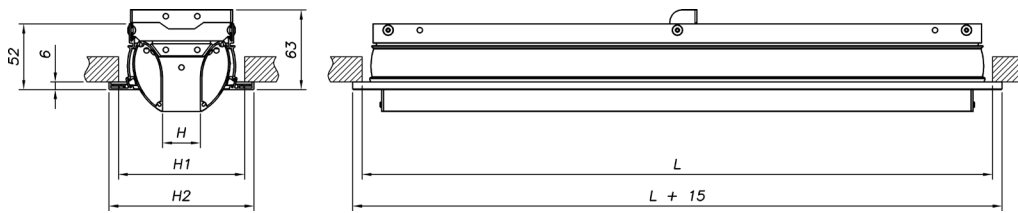
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## General information

### Model DF-47-NARROW

#### Description

The DF-47-NARROW model is a high induction slot diffuser whose entire core (linear nozzle) can be rotated  $\pm 30^\circ$ . The narrow slot allows medium and long range distribution, providing comfort when supplying either hot or cold air, while it has a very pleasing aesthetic appearance. Designed for installation in both ceilings and walls. Especially suitable for variable volume flows although the design also gives excellent performance with constant volumes.

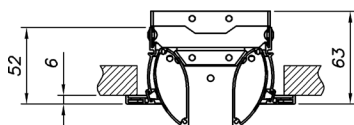


H	H1	H2
15	85	100
20	90	105
30	100	115
40	110	125
50	120	135

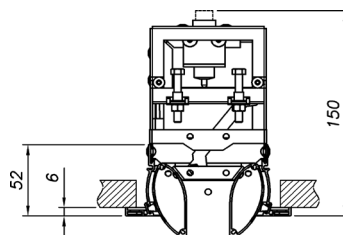
NOMINAL	L
500	500
600	600
700	700
800	800
900	900
1000	1000
1100	1100
1200	1200
1300	1300
1400	1400
1500	1500
1600	1600
1700	1700
1800	1800
1900	1900
2000	2000

#### TYPES

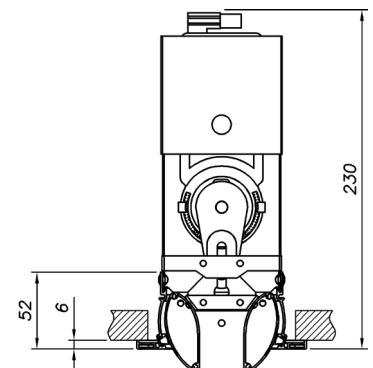
##### DF-47-NARROW



##### DF-47-NARROW-TR



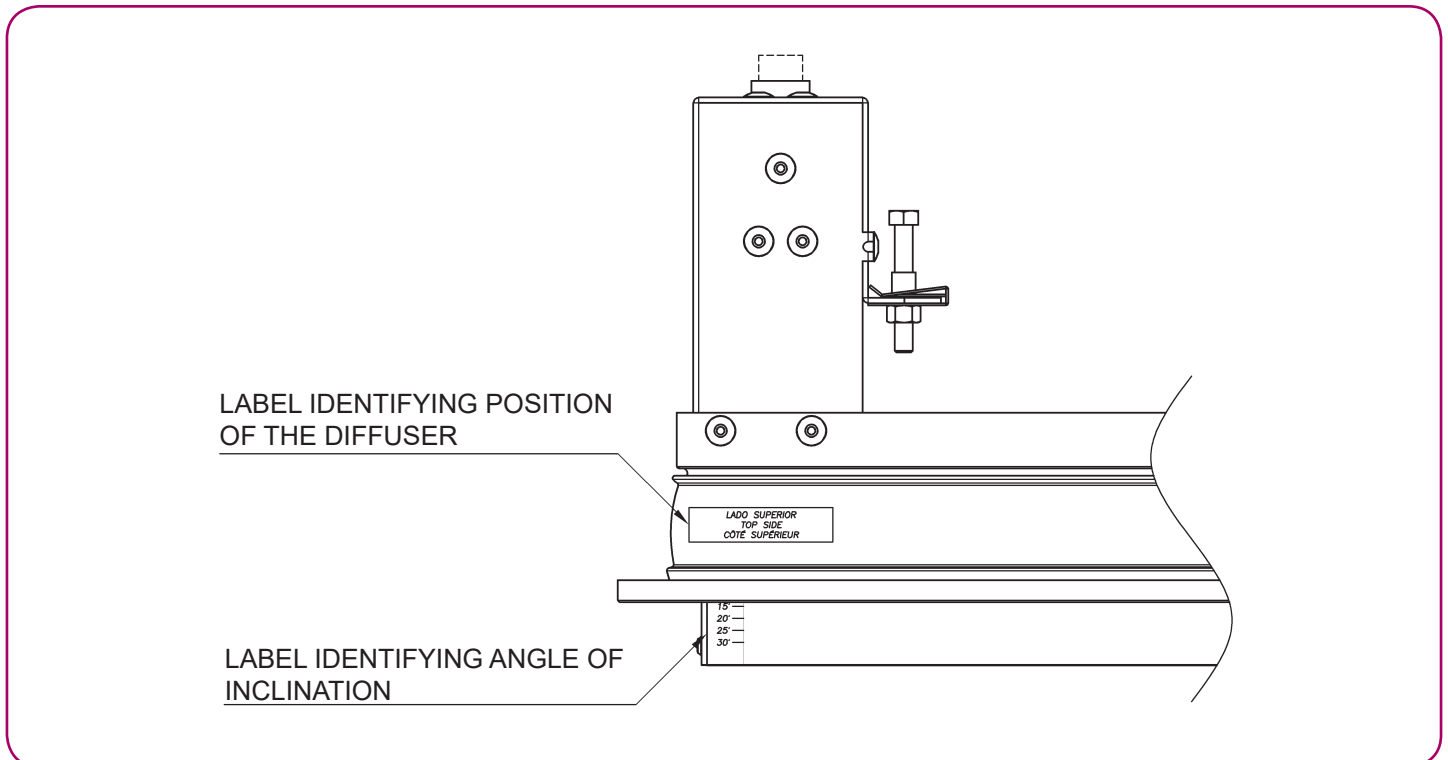
##### DF-47-NARROW-MT



# General information

## Model DF-47-NARROW

### TEMPERATURE-ADJUSTABLE



#### Label identifying position of the diffuser:

Located on the frame, on the same side as the temperature-adjustable mechanism.

“**Top side**”, should face up.

#### Label identifying angle of inclination:

Located in the core, on the left of the uppermost blade, on the same side as the temperature-adjustable mechanism.

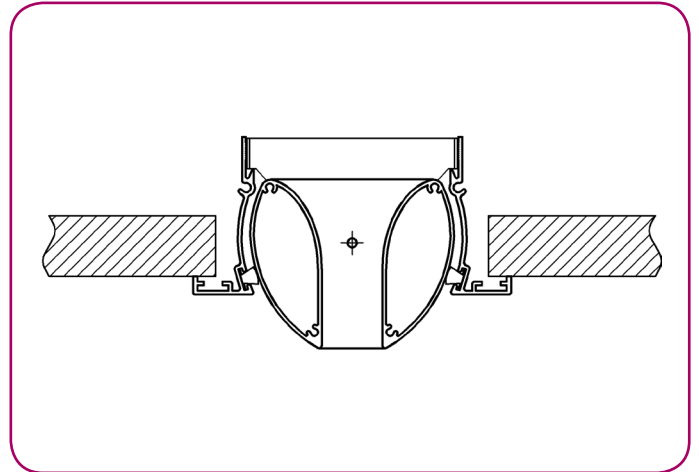
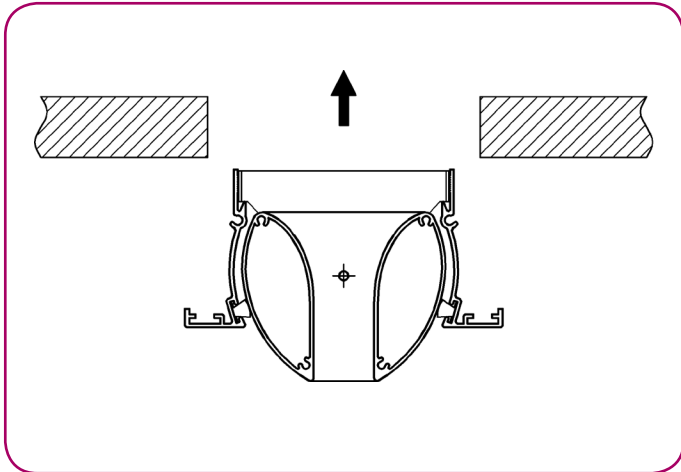
Negative angles, hot air: Core tilted down.

Positive angles, cold air: Core tilted up.

## Mounting instructions

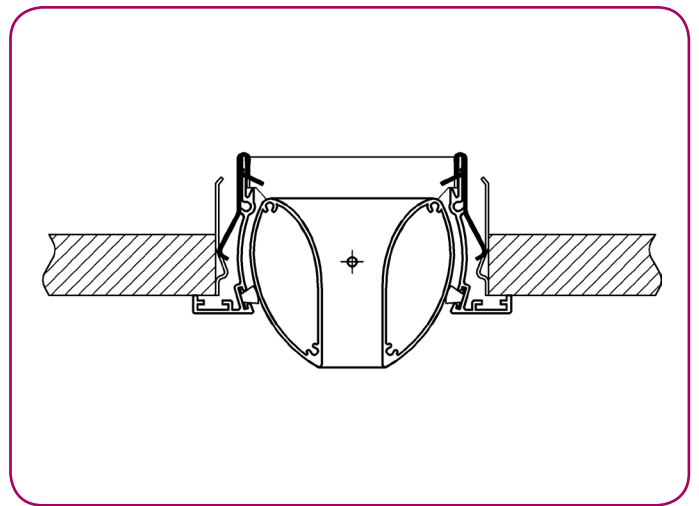
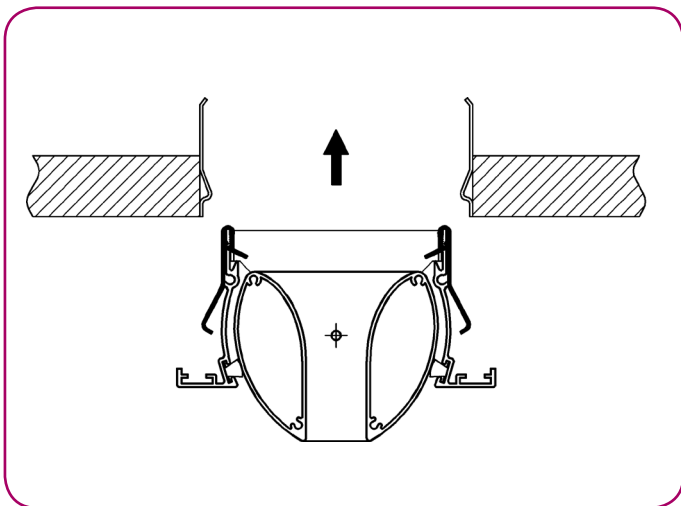
### Model DF-47-NARROW

#### DIFFUSER



Diffuser with no fastening system to allow the customer to select a mounting method.

#### DIFFUSER WITH MOUNTING FRAME



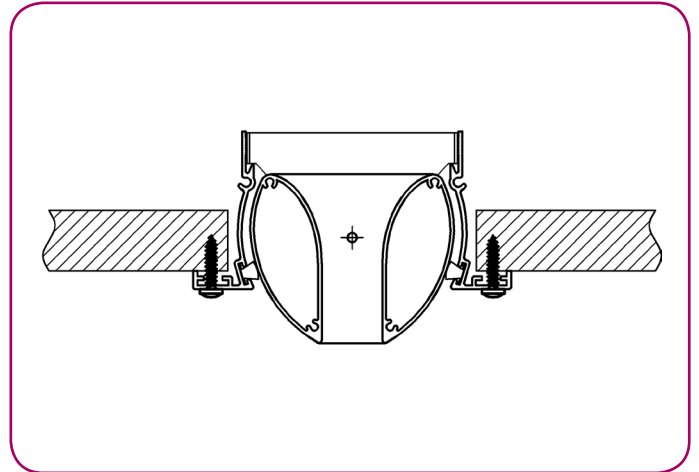
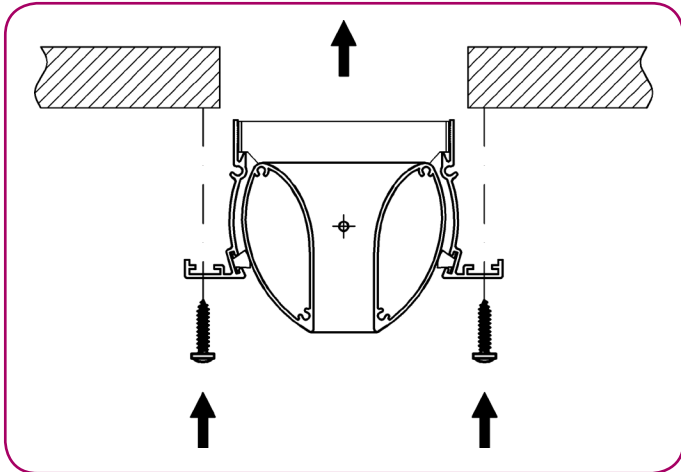
Diffuser held in place by means of clips.

- 1- Pre-install the mounting frame in the chosen surface.
- 2- Insert the diffuser into the mounting frame until it is fully held against the surface

# Mounting instructions

## Model DF-47-NARROW

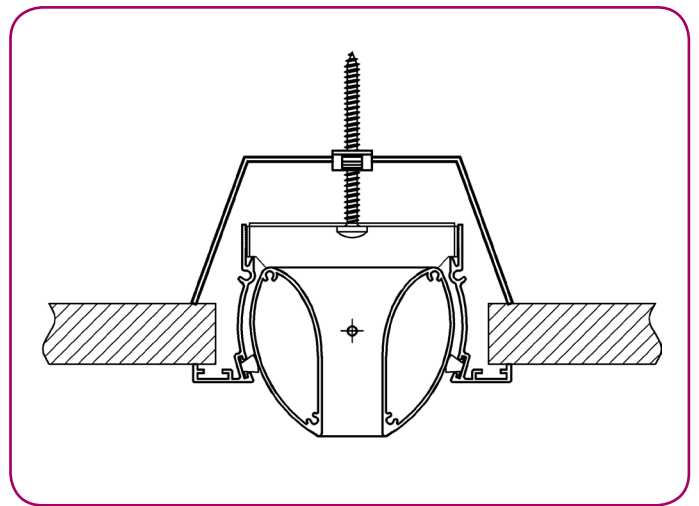
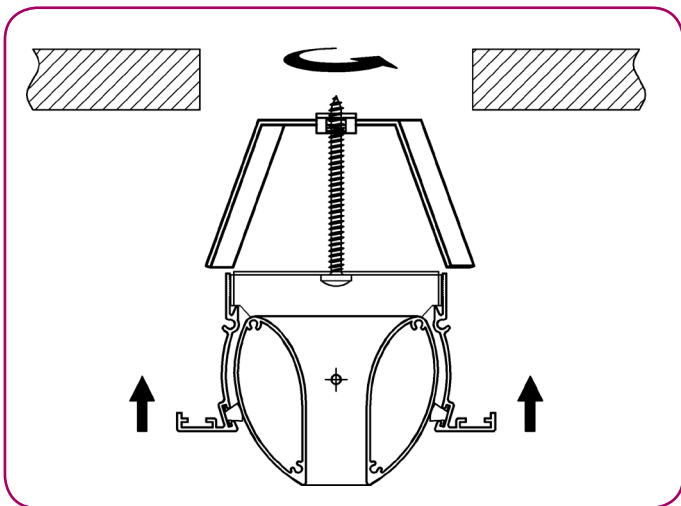
### DIFFUSER WITH SCREWS



Diffuser mounted with self-tapping screws.

- 1- Insert the diffuser in the opening.
- 2- Screw it to the surface.

### DIFFUSER WITH MOUNTING BRACKET

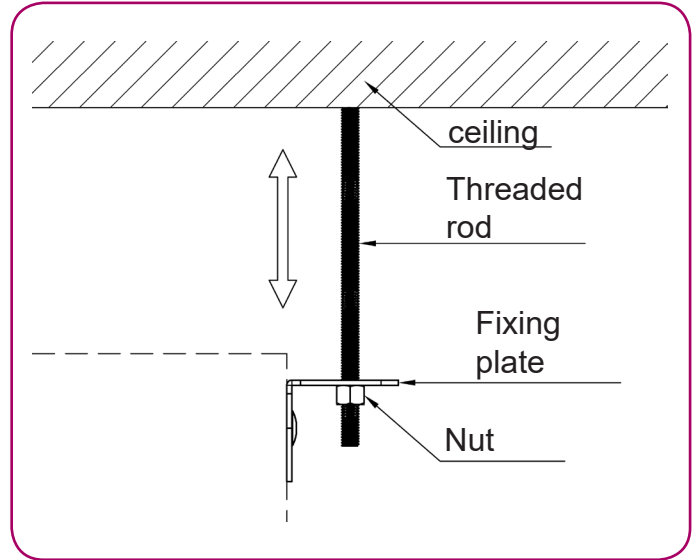
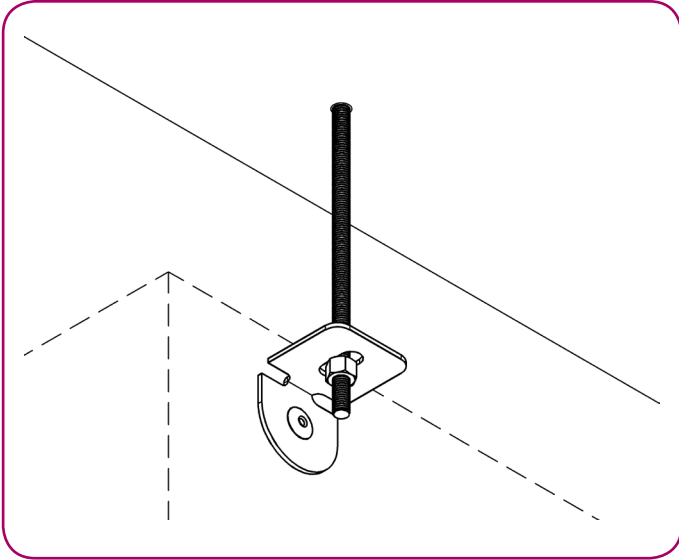


Diffuser fastened using mounting brackets.

- 1- Insert the diffuser into the opening with the brackets turned to run parallel to the length of the diffuser.
- 2- Turn the brackets.
- 3- Tighten the screws until the diffuser is fitted to the surface.

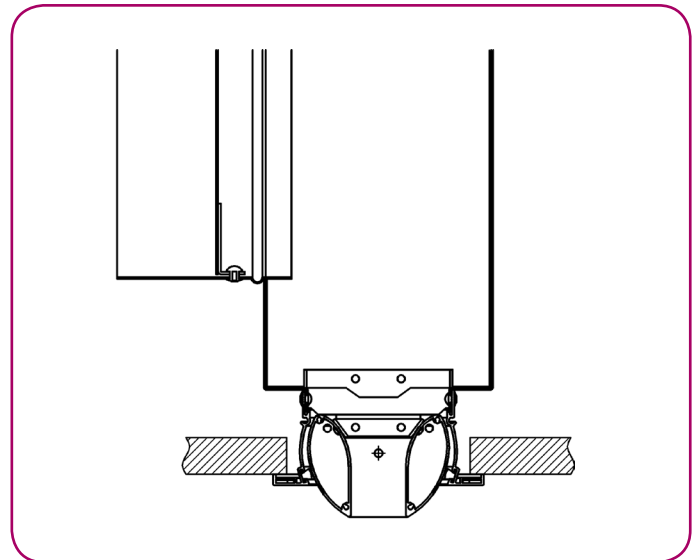
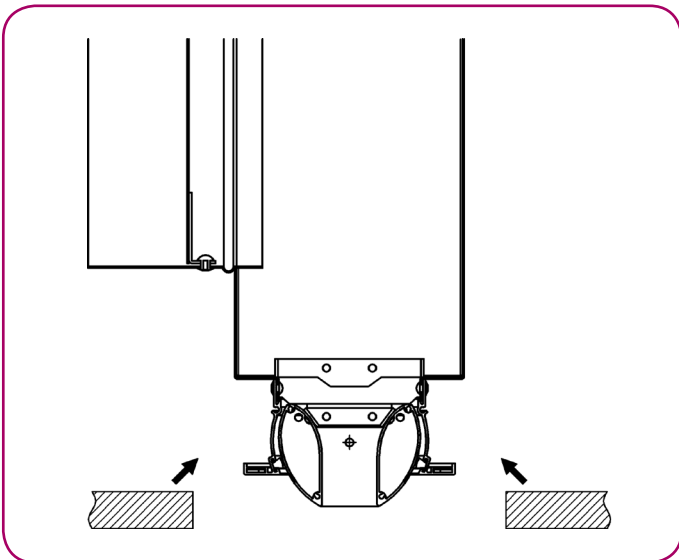
## Mounting instructions Model DF-47-NARROW

### FIXING TO THE CEILING



- 1- Place the threaded rods in the ceiling.
- 2- Fix the threaded rods to the hangers using nuts.

### DIFFUSER + FIXED PLENUM

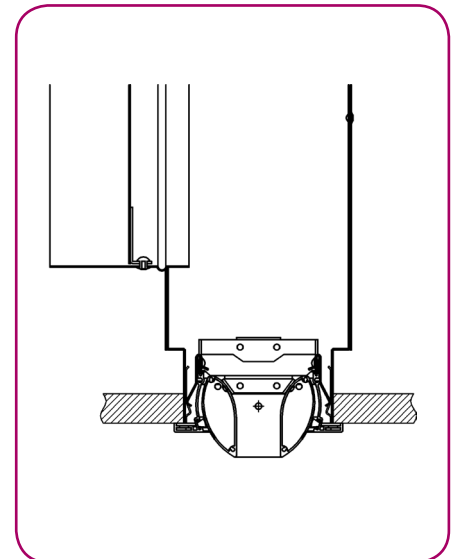
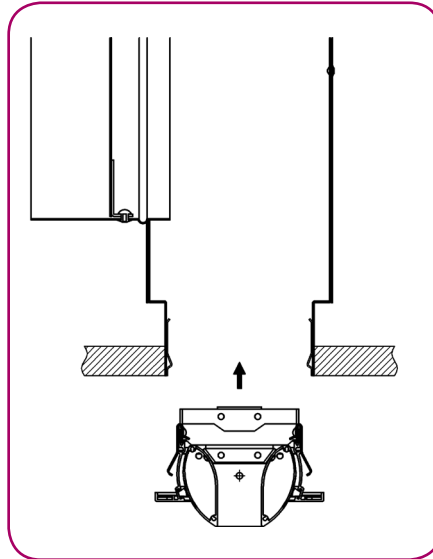
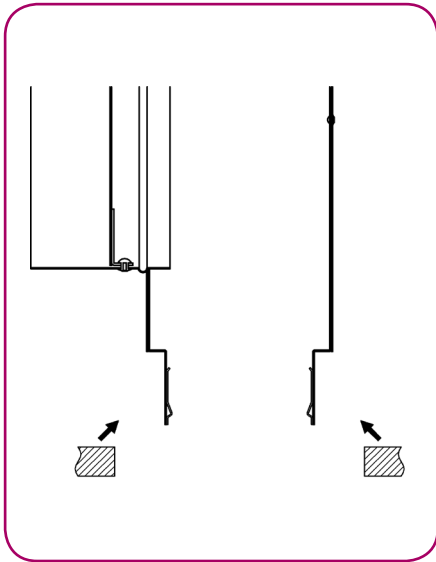


- 1- Fasten the plenum and diffuser assembly using the fastening plates.
- 2- Close the chosen surface around the body of the diffuser.

# Mounting instructions

## Model DF-47-NARROW

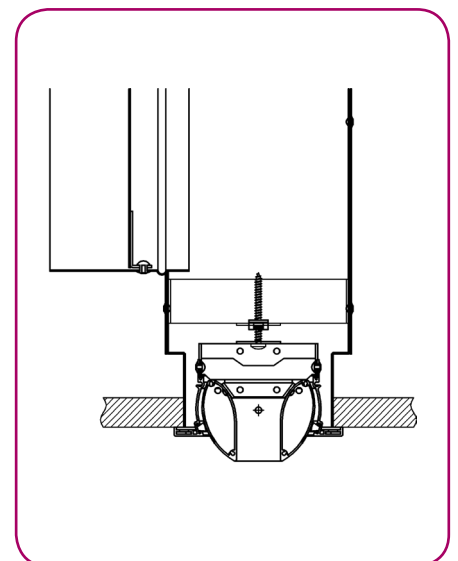
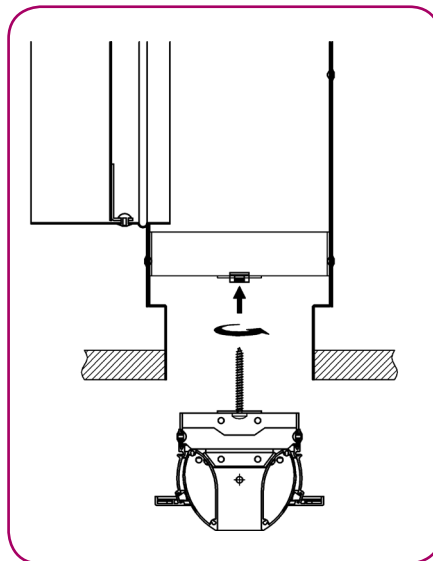
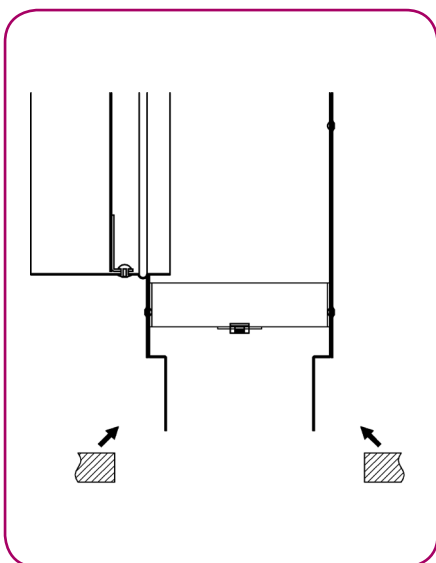
### DIFFUSER + PLENUM WITH MOUNTING FRAME



Diffuser held in place by means of clips.

- 1- Fasten the plenum using the fastening plates.
- 2- Close the selected surface flush around the bottom of the plenum.
- 3- Insert the diffuser in the plenum and fasten it using the clips so that it is held against the surface.

### DIFFUSER + PLENUM WITH MOUNTING BRACKETS



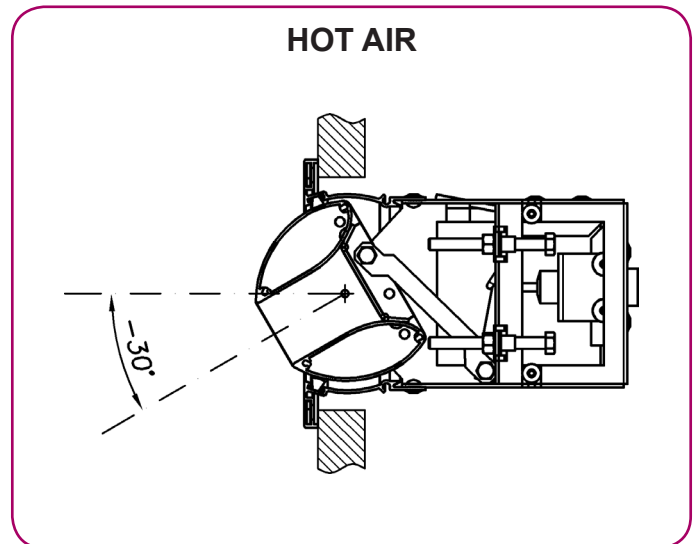
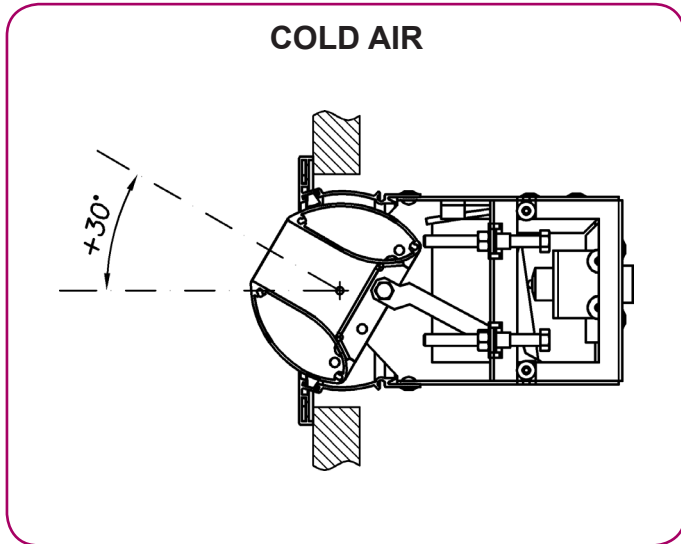
Diffuser fixed using mounting brackets.

- 1- Fasten the plenum using the fastening plates.
- 2- Close the selected surface flush around the bottom of the plenum.
- 3- Insert the diffuser into the plenum and tighten the mounting screws so that the diffuser is fully held against the surface.



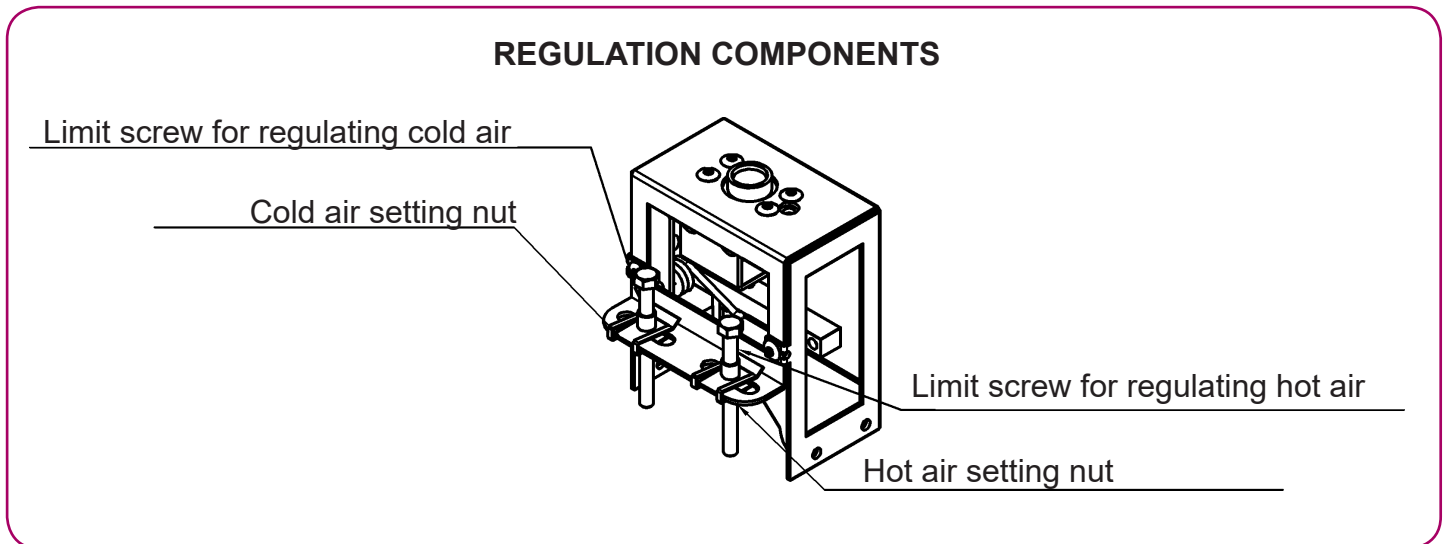
## Regulation instructions Model DF-47-NARROW-TR

### OPERATING POSITIONS



### GENERAL REGULATION INFORMATION

#### REGULATION COMPONENTS

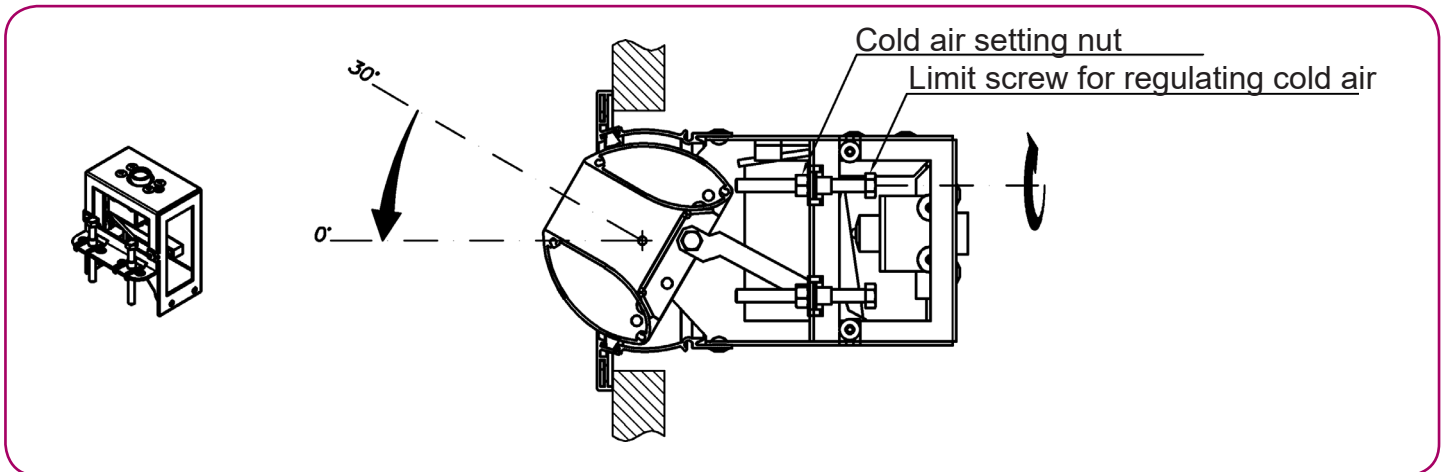


The diffuser will be supplied by default with the regulating limit screws set to their maximum positions (rotated  $\pm 30^\circ$  from the horizontal: total opening  $60^\circ$ ).

# Regulation instructions

## Model DF-47-NARROW-TR

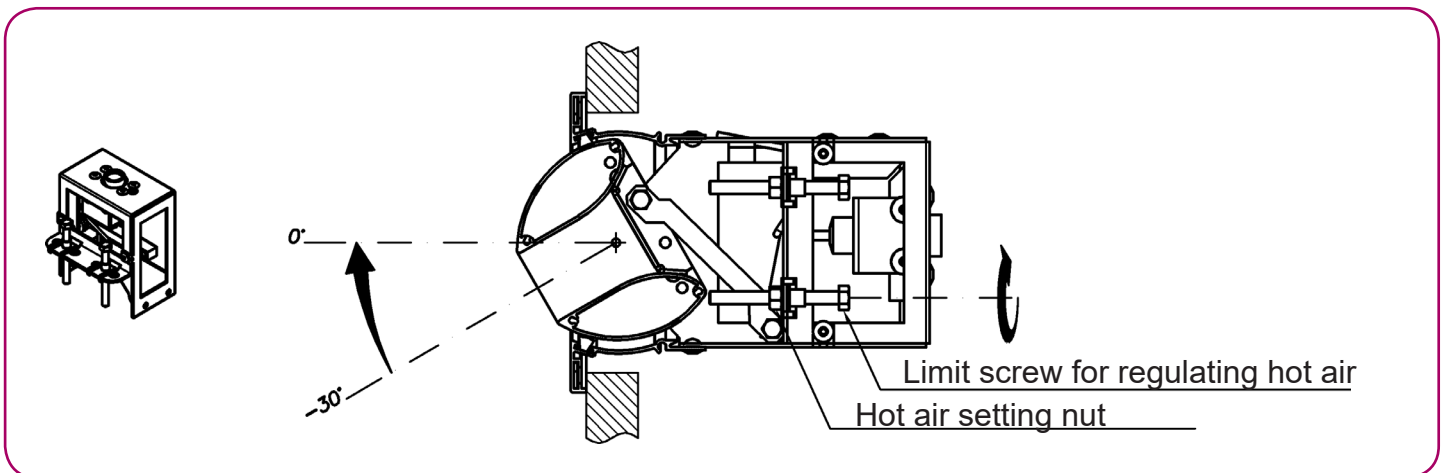
### COLD AIR REGULATION



To reduce the opening angle ( $30^\circ$ ) of the diffuser in the cold position:

- 1- Move the diffuser to the cold position (fuse completely withdrawn).
- 2- Loosen the setting nut.
- 3- Tighten the cold regulating screw by turning it clockwise until the desired position is achieved.
- 4- Retighten the locking nut to fix the setting.

### HOT AIR REGULATION



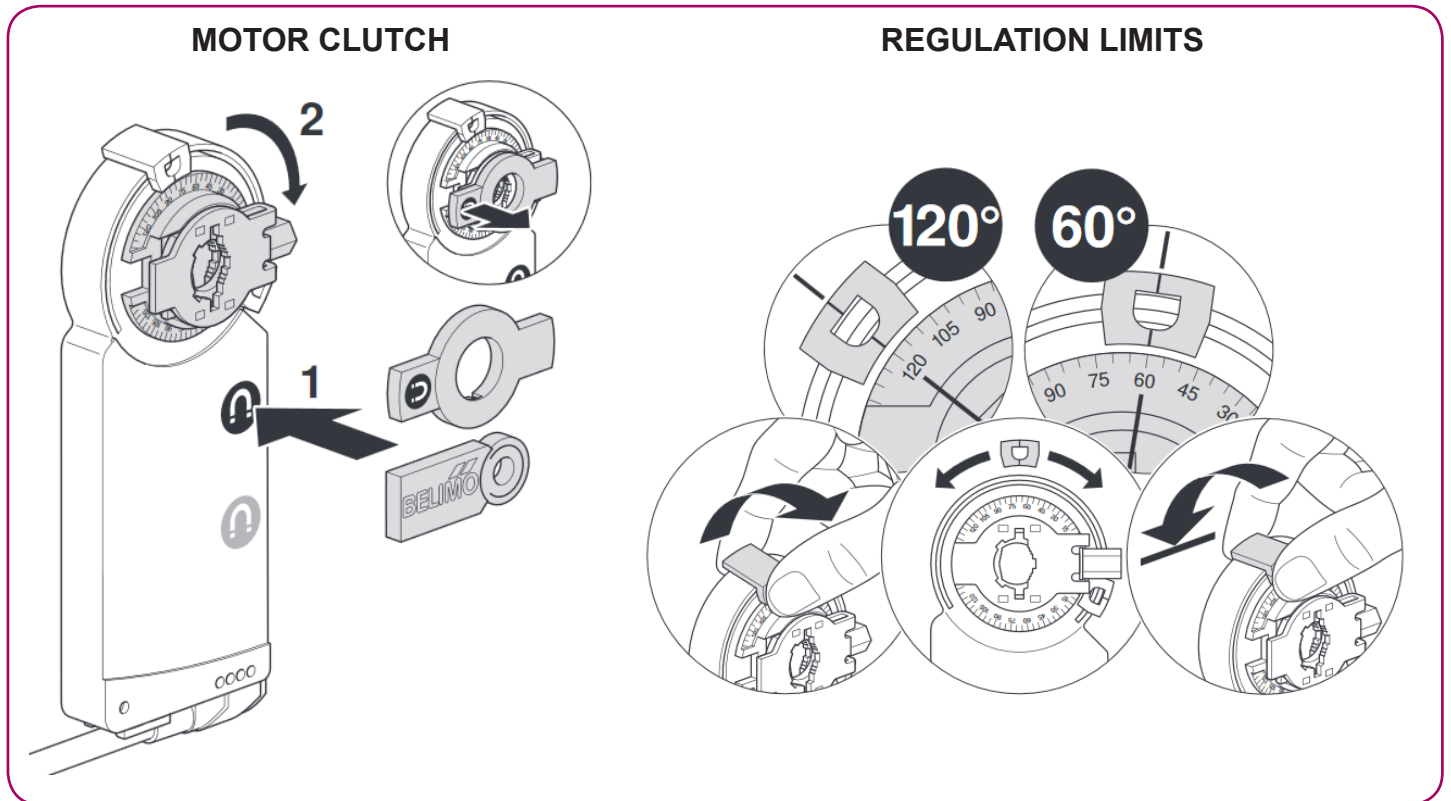
To reduce the opening angle ( $-30^\circ$ ) of the diffuser in the hot position:

- 1- Move the diffuser to the hot position (fuse completely distended).
- 2- Loosen the locking nut.
- 3- Tighten the hot regulating screw by turning it clockwise until the desired position is achieved.
- 4- Retighten the locking nut to fix the setting.

# Regulation instructions

## Model DF-47-NARROW-MT

### GENERAL INFORMATION



- 1- Clutch the motor using the orange plastic piece.
- 2- Remove the grey plastic stops.
- 3- Move the diffuser to the desired position and insert the corresponding stop.
- 4- Repeat step 3 on the opposite side.

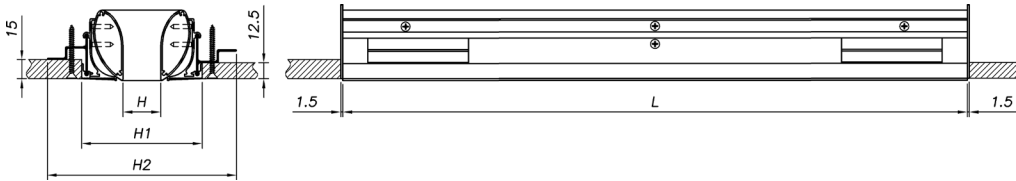
## General information

### Model DF-47-NARROW-LT

#### Description

KOOLAIR hidden high induction slot diffuser, model DF-47-NARROW-LT, for installation in suspended drywall ceilings or suspended ceiling grids.

Characterised by the absence of visible lines, it is practically imperceptible and suitable for continuous linear arrangement while having a very pleasing aesthetic appearance.



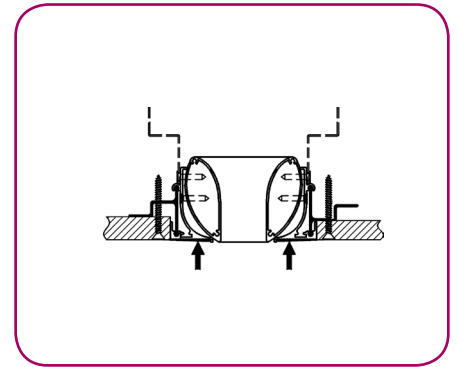
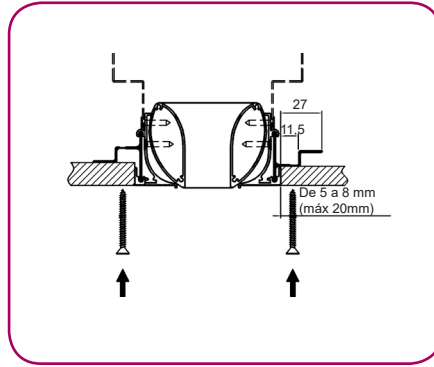
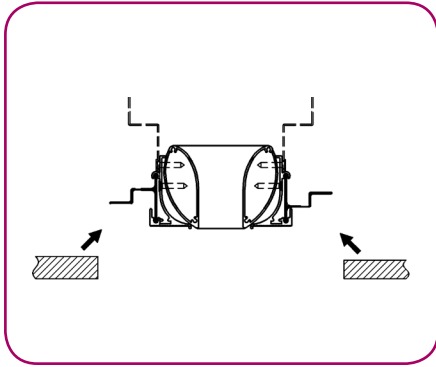
H	H1	H2
15	81	136
20	86	141
30	96	151
40	106	161
50	116	171

NOMINAL	L
500	500
600	600
700	700
800	800
900	900
1000	1000
1100	1100
1200	1200
1300	1300
1400	1400
1500	1500
1600	1600
1700	1700
1800	1800
1900	1900
2000	2000

## Mounting instructions

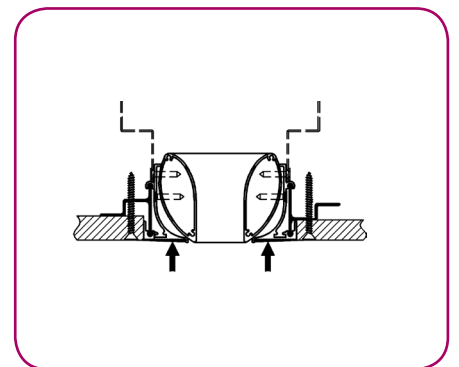
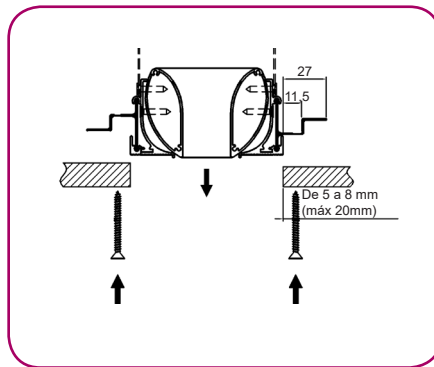
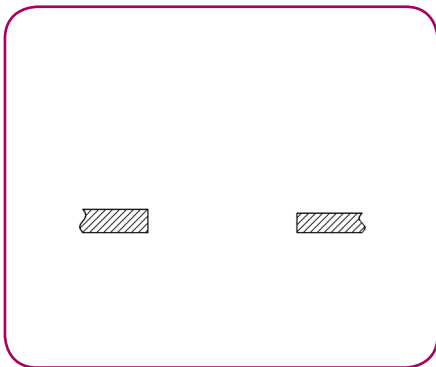
### Model DF-47-NARROW-LT

#### OPEN CEILING



- 1- Fasten the diffuser/plenum using the fastening plates.
- 2- Close the selected surface flush around the bottom of the plenum.
- 3- Screw.
- 4- Plaster the underside and finish with fine paste.

#### CLOSED CEILING

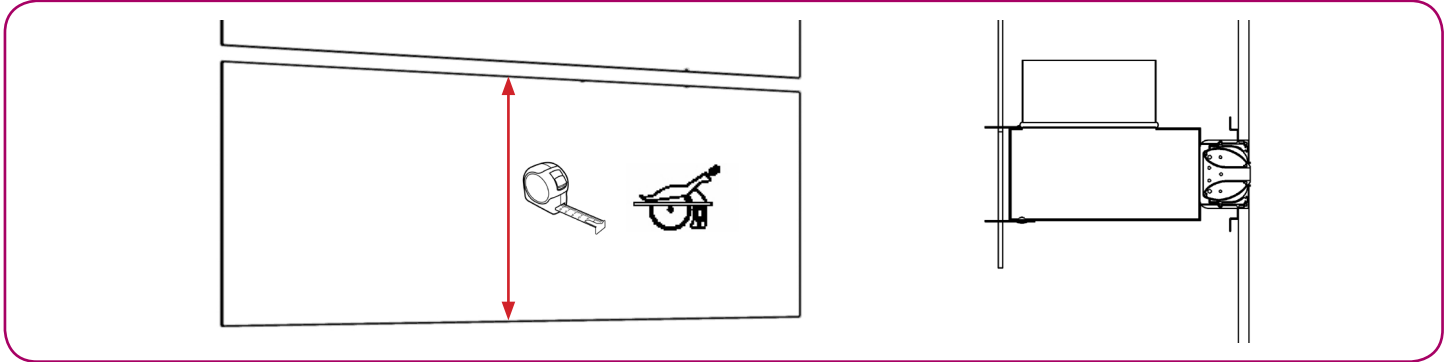


- 1- Create an opening (L x H) in the chosen surface.
- 2- Insert the diffuser (with or without plenum) and screw.
- 3- Plaster the underside and finish with fine paste.

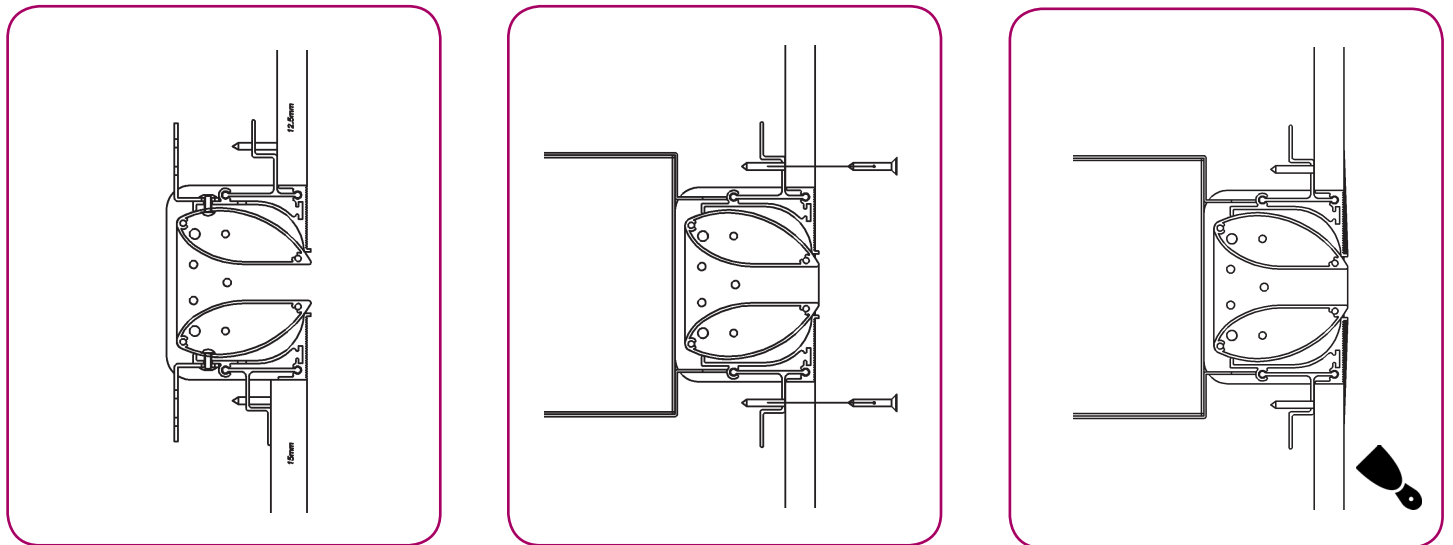
# Mounting instructions

## Model DF-47-NARROW-LT

### WALL MOUNTED



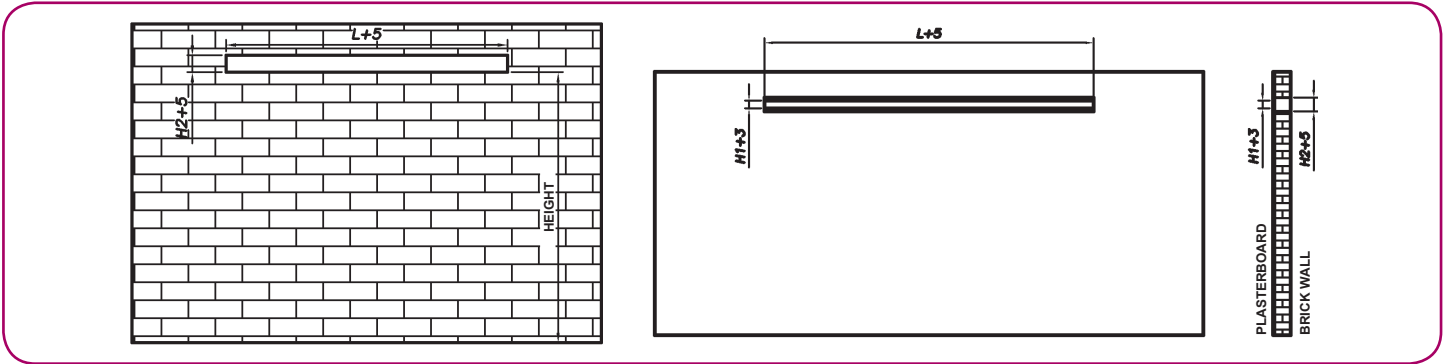
- 1 - Mark the position of the diffuser on the wall and cut plasterboard to the desired height.
- 2 - Support diffuser as shown in figure. If a plenum is used, fasten it using threaded drop rods and lugs at the rear of the plenum.



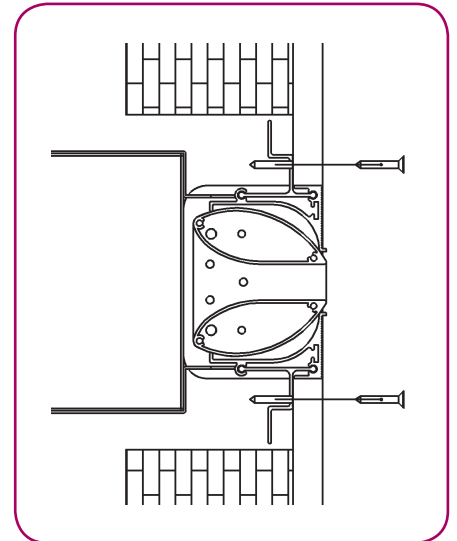
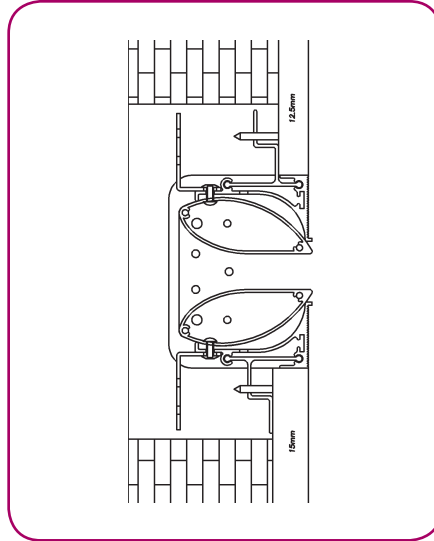
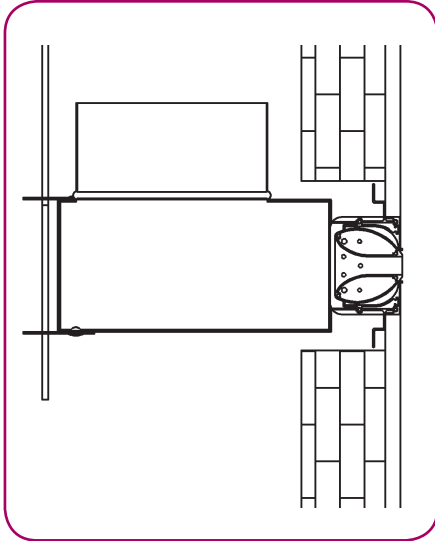
- 3 - The mounting/line formation frame allows the diffuser to be supported in 12.5 and 15 mm thickness plasterboard.
- 4 - Gently support the diffuser and screw the plasterboard to the mounting frame.
- 5 - Tape the lower surface of the diffuser for subsequent filling with a thick paste. Finish with a fine paste.

## Mounting instructions Model DF-47-NARROW-LT

### IN BRICK WALL



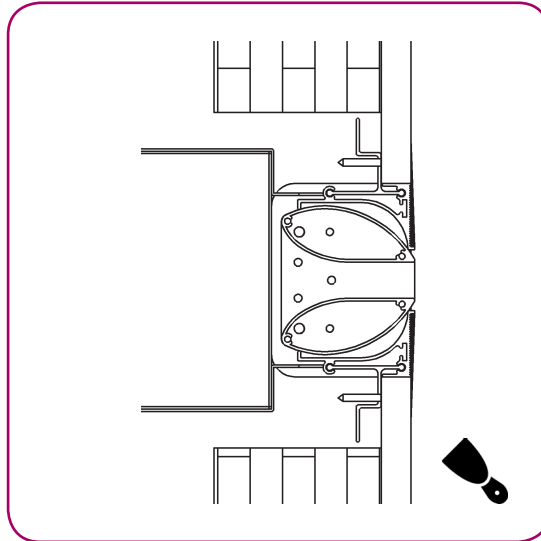
- 1 - Mark the diffuser wall installation height and create opening in the brick wall with dimensions  $(L+5) \times (H2+5)$ .
- 2 - Install plasterboard sheet with opening. Once installed, use the hole in the brick wall as reference to make a hole in the plasterboard with dimensions  $(L+5) \times (H1+3)$  centred on the hole in the brick wall.



- 3 - Support the diffuser on the plasterboard as shown in the figure. If a plenum is used, fasten it using threaded drop rods and lugs at the rear of the plenum.
- 4 - The mounting/line formation frame allows the diffuser to be supported in 12.5 and 15 mm thickness plasterboard.
- 5 - Gently support the diffuser and screw the plasterboard to the mounting frame.

## Mounting instructions

### Model DF-47-NARROW-LT



- 6 - Tape the lower surface of the diffuser for subsequent filling with a thick paste. Finish with a fine paste.



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