

AQUA-H

Slot Diffuser

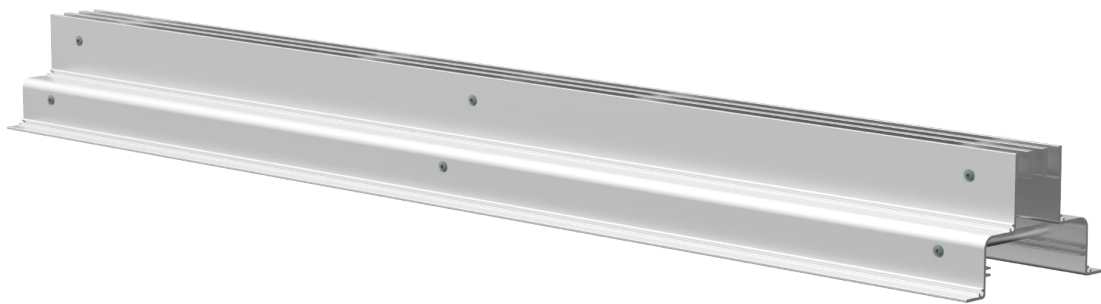


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Description

AQUA-H is a linear slot diffuser. The product is intended for air supply in ventilation systems for swimming pools and wet spaces with large windows or glass walls. The product is installed into the floor. AQUA-H helps protect the glass surfaces from the condensation of water.

Highlights

- Modern slim and compact design
- Low noise at sufficiently high air discharge velocity
- Homogenous discharge pattern on the whole diffuser length
- Single diffuser segments of various lengths
- Segments with detachable slot dividing profiles and 90° angle segments available
- Installation in multiple diffuser segment arrays is possible
- Robust design enables walking on the installed diffuser
- Accessory plenum boxes with bottom or side duct connection

Types of Product

- **AQUA-H:** Linear slot diffuser
- **AQUA-H-CE:** Corner element, with 90° angle as standard. Can be used as a functional element for air supply. Cannot be combined with a plenum box.

List of Accessories:

- **PB-AQUA:** Plenum Box
- **EC-AQUA-H:** End Cap ⁽¹⁾
- **CP-HELLA:** Connecting Pins ⁽²⁾
- **DN-AQUA:** Drainage Nipple ⁽³⁾
- **LB-AQUA:** Leveling Bridge ⁽⁴⁾
- **DC-AQUA-H:** Duct Connector

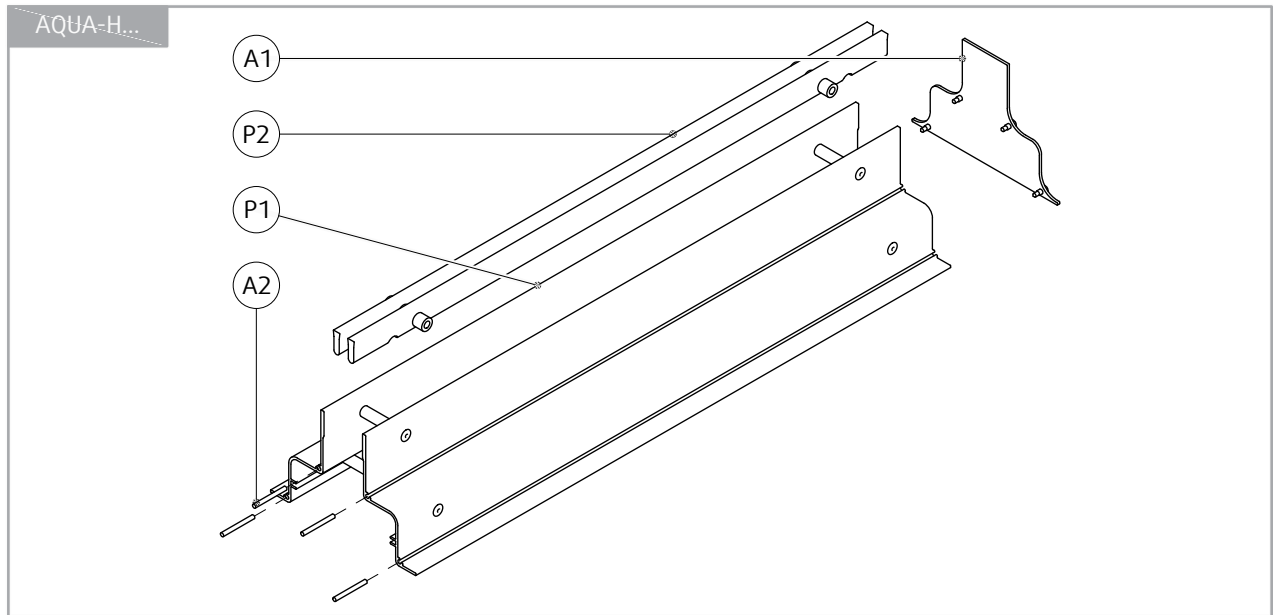
Notes:

1. EC-AQUA-H is only installed at the ends of a diffuser array. For one array, only two EC-AQUA-H are needed.
2. CP-HELLA come in a package of 50 pieces.
3. DN-AQUA can only be used with PB-AQUA-S.
4. Two pieces of LB-AQUA need to be used for levelling one PB-AQUA.

Design

AQUA-H is manufactured from aluminium profiles and stainless steel thread bolts. The product consists of a pressure-equalizing console and vertical air discharge slots. The console is open on the bottom. The consoles can be connected into a multiple-segment array by connecting pins (accessory CP-HELLA). The product is provided in a natural anodized surface finish.

Product Parts



Legend

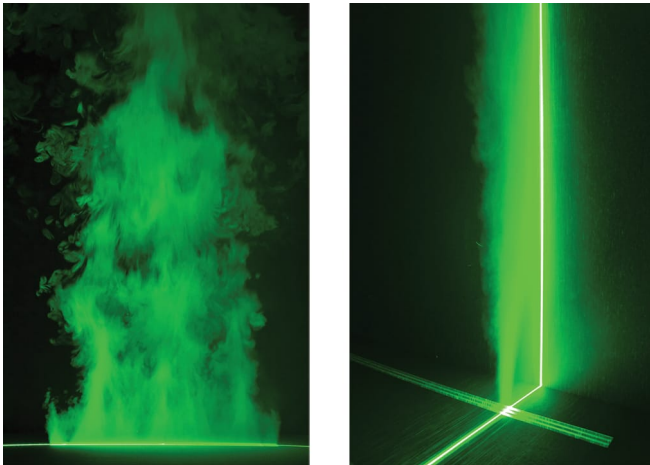
P1 - Console

P2 - Slot dividing profile

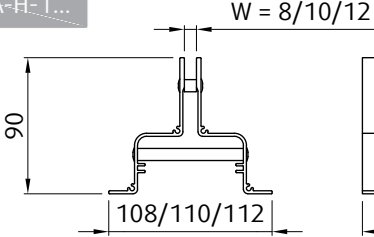
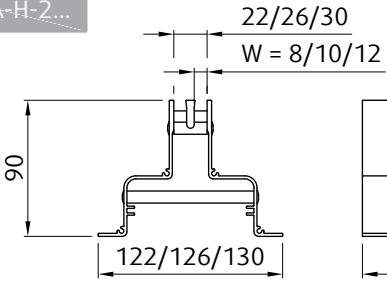
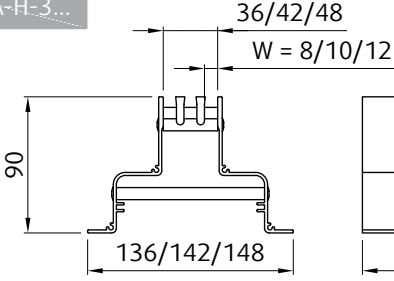
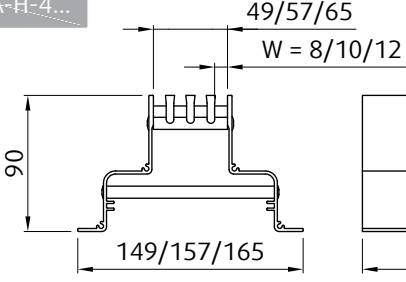
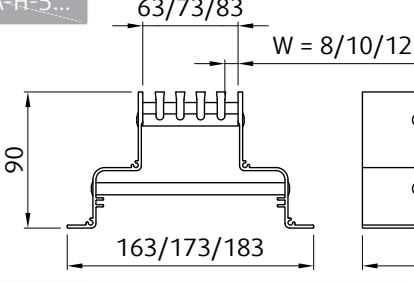
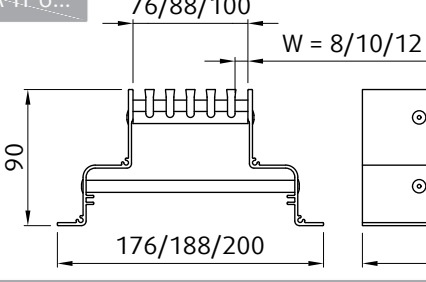
A1 - EC-AQUA, End Cap (accessory)

A2 - CP-HELLA, Connecting Pin (accessory)

Air flow visualisation



Dimensions & Weights

AQUA-H-1...		(mm)
AQUA-H-2...		(mm)
AQUA-H-3...		(mm)
AQUA-H-4...		(mm)
AQUA-H-5...		(mm)
AQUA-H-6...		(mm)

m (kg)	W (mm)		
	8	10	12
AQUA-H-1...500	1,3	1,3	1,3
AQUA-H-1...1000	2,1	2,1	2,1
AQUA-H-1...1500	3,0	3,0	3,0
AQUA-H-1...2000	3,9	3,9	3,9
AQUA-H-1...2500	5,1	5,1	5,2
AQUA-H-1...3000	6,0	6,0	6,0
AQUA-H-2...500	1,4	1,4	1,4
AQUA-H-2...1000	2,4	2,4	2,4
AQUA-H-2...1500	3,4	3,4	3,5
AQUA-H-2...2000	4,4	4,4	4,5
AQUA-H-2...2500	5,9	5,9	5,9
AQUA-H-2...3000	6,8	6,9	6,9
AQUA-H-3...500	1,6	1,6	1,6
AQUA-H-3...1000	2,7	2,7	2,7
AQUA-H-3...1500	3,8	3,9	3,9
AQUA-H-3...2000	5,0	5,0	5,0
AQUA-H-3...2500	6,5	6,6	6,6
AQUA-H-3...3000	7,7	7,7	7,7

m (kg)	W (mm)		
	8	10	12
AQUA-H-4...500	1,7	1,7	1,8
AQUA-H-4...1000	3,0	3,0	3,0
AQUA-H-4...1500	4,2	4,3	4,3
AQUA-H-4...2000	5,5	5,5	5,6
AQUA-H-4...2500	7,2	7,3	7,3
AQUA-H-4...3000	8,5	8,5	8,6
AQUA-H-5...500	1,9	1,9	1,9
AQUA-H-5...1000	3,3	3,3	3,3
AQUA-H-5...1500	4,6	4,7	4,7
AQUA-H-5...2000	6,0	6,1	6,1
AQUA-H-5...2500	7,9	8,0	8,0
AQUA-H-5...3000	9,3	9,4	9,4
AQUA-H-6...500	2,0	2,0	2,1
AQUA-H-6...1000	3,5	3,6	3,6
AQUA-H-6...1500	5,1	5,1	5,1
AQUA-H-6...2000	6,6	6,6	6,7
AQUA-H-6...2500	8,6	8,7	8,7
AQUA-H-6...3000	10,1	10,2	10,3

AQUA-H-CE-1...	W = 8/10/12 90 108/110/112 392/390/388 L = 500	(mm)
AQUA-H-CE-2...	22/26/30 W = 8/10/12 90 122/126/130 378/374/370 L = 500	(mm)
AQUA-H-CE-3...	36/42/48 W = 8/10/12 90 136/142/148 364/358/352 L = 500	(mm)
AQUA-H-CE-4...	49/57/65 W = 8/10/12 90 149/157/165 351/343/335 L = 500	(mm)
AQUA-H-CE-5...	63/73/83 W = 8/10/12 90 163/173/183 337/327/317 L = 500	(mm)
AQUA-H-CE-6...	76/88/100 W = 8/10/12 90 176/188/200 324/312/300 L = 500	(mm)

m (kg)	W (mm)		
	8	10	12
AQUA-H-CE-1...DC	3,8	3,8	3,8
AQUA-H-CE-2...DC	4,0	4,0	4,0
AQUA-H-CE-3...DC	4,1	4,1	4,1
AQUA-H-CE-4...DC	4,2	4,2	4,2
AQUA-H-CE-5...DC	4,4	4,4	4,4
AQUA-H-CE-6...DC	4,5	4,5	4,5
AQUA-H-CE-1...BP	3,5	3,5	3,5
AQUA-H-CE-2...BP	3,7	3,7	3,7
AQUA-H-CE-3...BP	3,8	3,8	3,8
AQUA-H-CE-4...BP	3,9	3,9	3,9
AQUA-H-CE-5...BP	4,1	4,1	4,1
AQUA-H-CE-6...BP	4,2	4,2	4,2

Ordering Codes

AQUA-H

Linear Slot Diffuser

Number of slots (N)

- 1
- 2
- 3
- 4
- 5
- 6

Slot width (mm)

- 8
- 10
- 12

Length (mm)

- 500
- 1000
- 1500
- 2000
- 2500
- 3000

NOTE:

4 pieces of connecting pin CP-HELLA are attached to each AQUA-H and AQUA-H-CE. The connecting pins are intended for connecting multiple diffusers installed in an array.

Example of the Ordering Code

AQUA-H-4-10-1500

Linear slot diffuser AQUA-H with 4 slots, 10 mm slot width, 1500 mm length.

AQUA-H-CE

Corner Element

Number of slots (N)

- 1
- 2
- 3
- 4
- 5
- 6

Slot width (mm)

- 8
- 10
- 12

Diffuser console cover

DC Duct connector (2x DC-AQUA-H)

BP Blanking plate (2x BP-AQUA-H)

Example of the Ordering Code

AQUA-H-CE-3-10-DC

A linear diffuser corner element with three 10 mm wide slots and two duct connector plates (DC-AQUA-H)

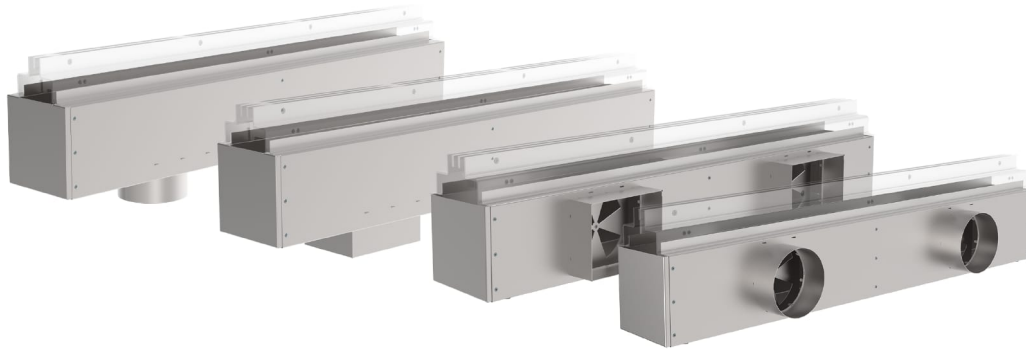
NOTE:

AQUA-H-CE is manufactured with a 90° corner angle. Other angles are available upon request.

Accessories

PB-AQUA

Plenum Boxes



Description

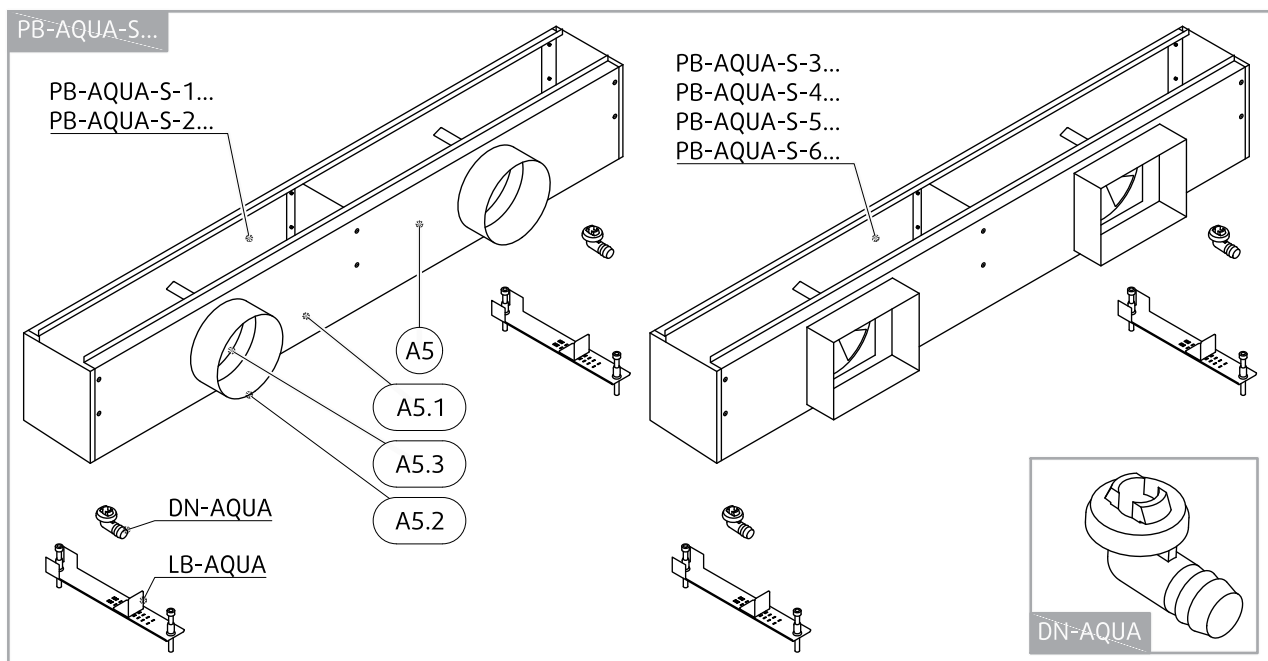
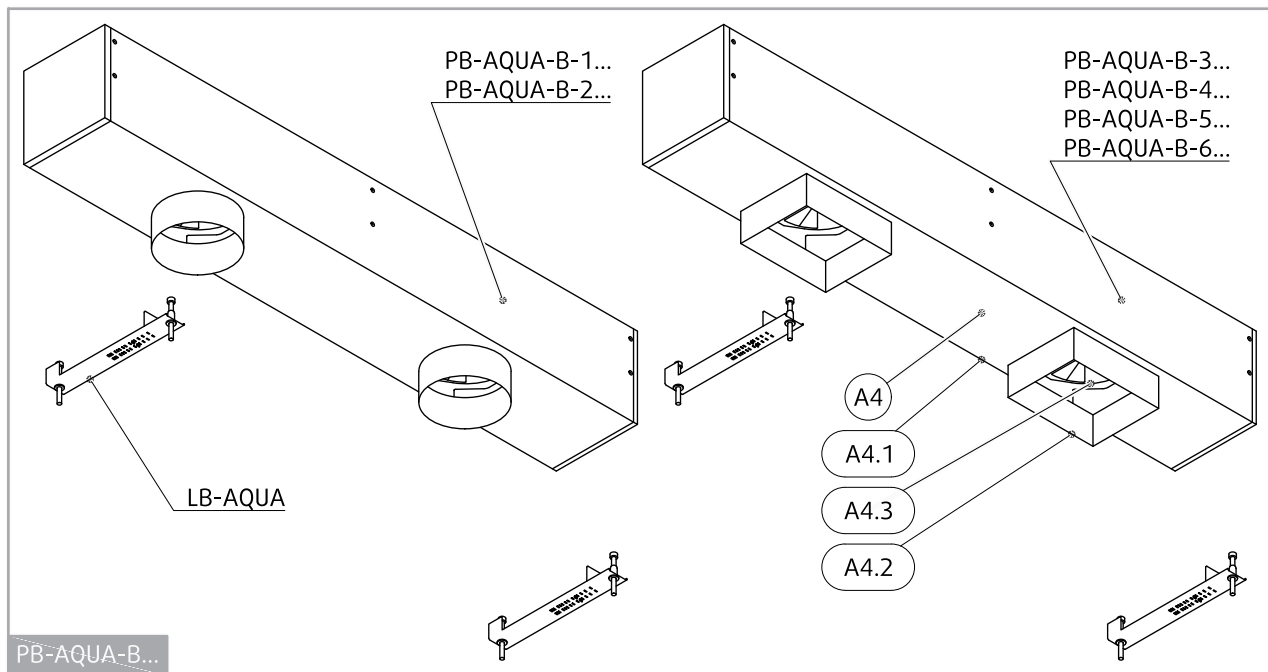
PB-AQUA is a plenum box. The product is intended for pressure reduction, as well as for balancing and adjusting the airflow. The product is installed with slot diffuser AQUA-H.

The box is available in two versions:

- PB-AQUA-B with vertical duct connection on the bottom.
- PB-AQUA-S with horizontal duct connection on the side.

Design

PB-AQUA is manufactured from stainless steel A316L sheet. The product consists of a plenum box and duct connections with dampers. The duct connections have circular or rectangular shape according to the diffuser capacity. The duct connections are flat without a gasket. The duct connections on the box are localized in regular distances, the first one 250 mm from the edge of the box and the next ones in 500 mm from each other. PB-AQUA-S has sloped bottom and drainage holes sealed by detachable plugs. A drainage nipple is available for use when plugged into the hole.



Product Parts

A4 - PB-AQUA-B..., Plenum Box (accessory)

A4.1 - Casing

A4.2 - Duct connection

A4.3 - Regulation

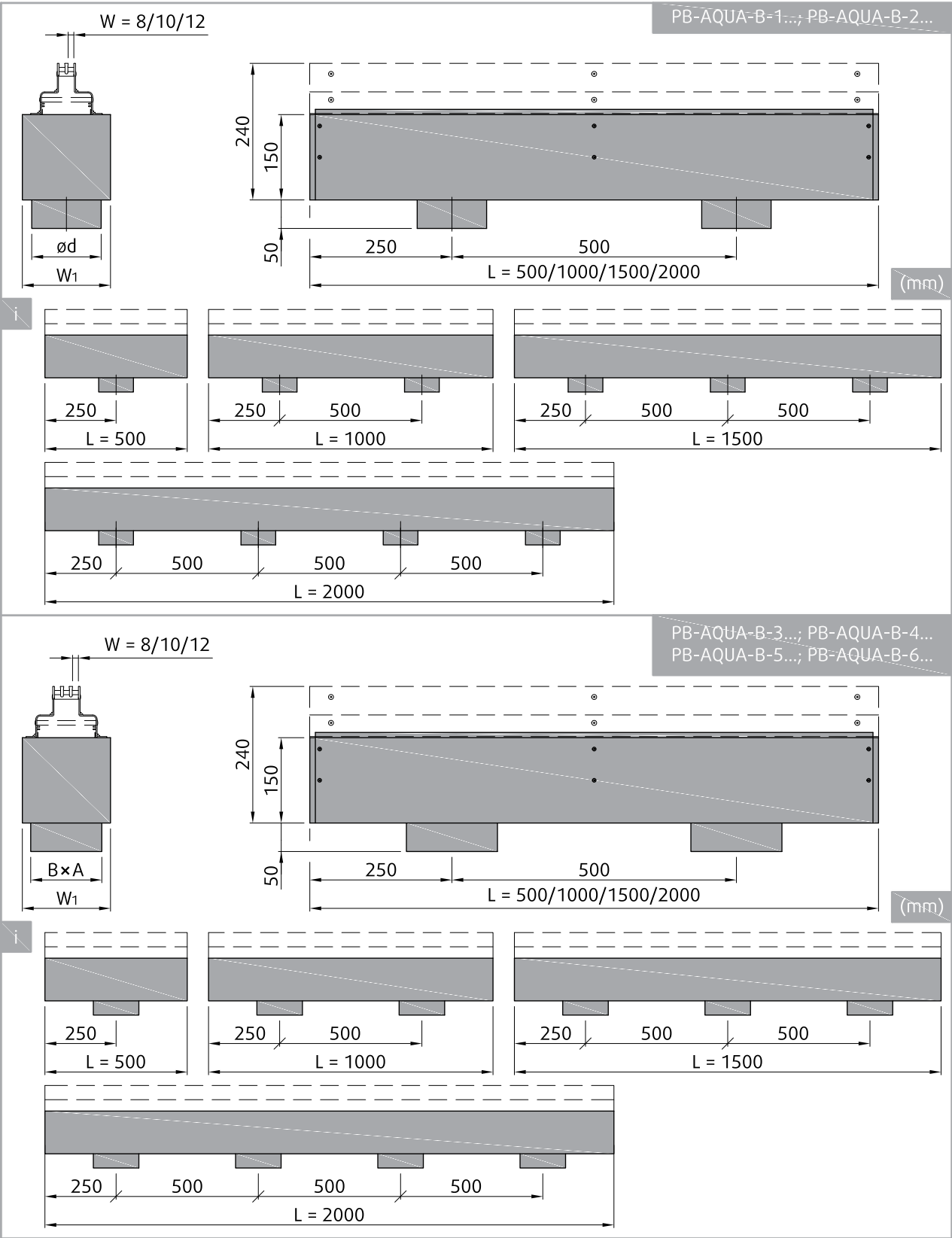
A5 - PB-AQUA-S..., Plenum Box (accessory)

A5.1 - Casing

A5.2 - Duct connection

A5.3 - Regulation

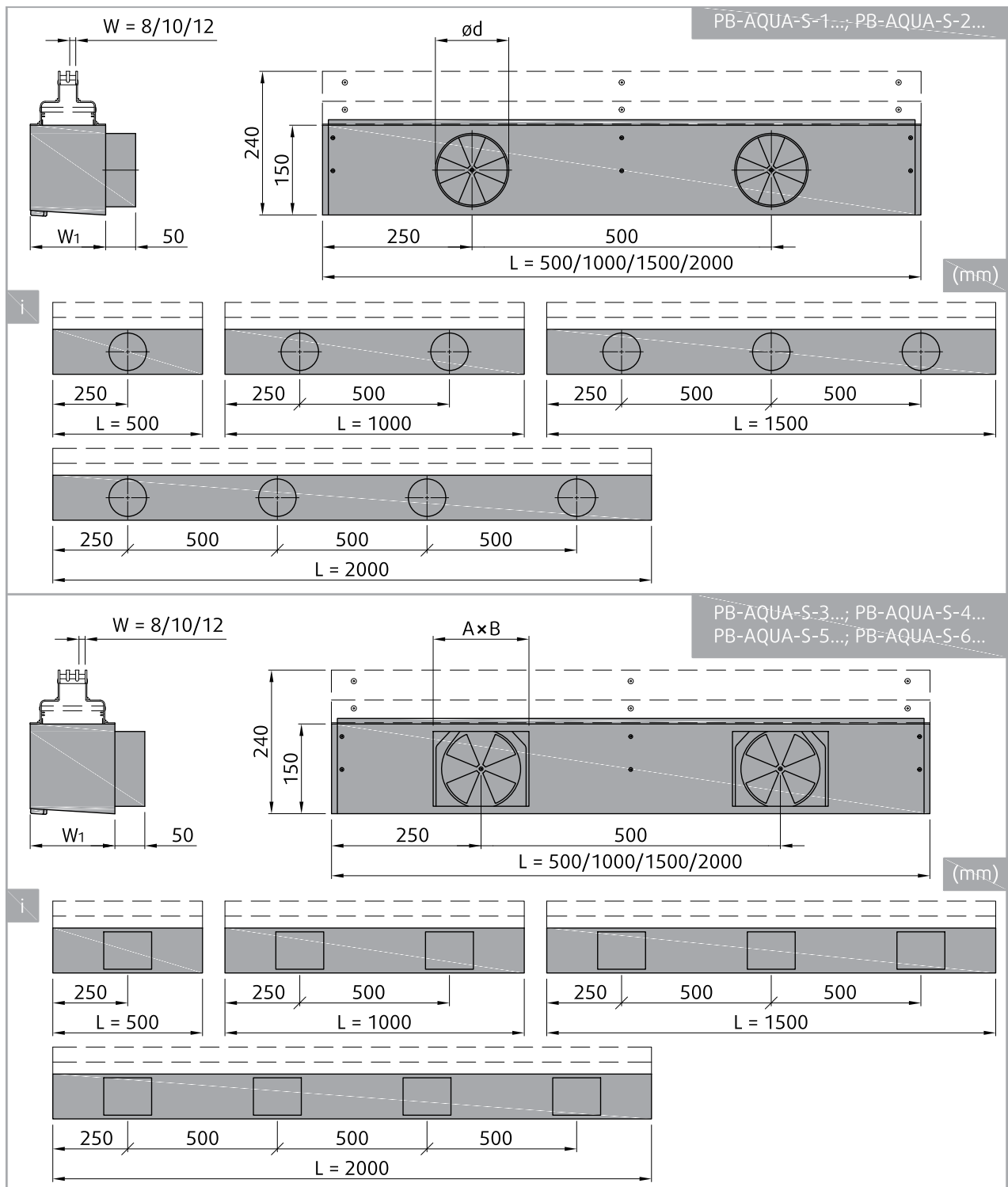
Dimensions & Weights of PB-AQUA



PB-AQUA-B...	W ₁	ød	A	B
	mm			
PB-AQUA-B-1-8...	155	98	-	-
PB-AQUA-B-1-10...				
PB-AQUA-B-1-12...				
PB-AQUA-B-2-8...		123		
PB-AQUA-B-2-10...				
PB-AQUA-B-2-12...				
PB-AQUA-B-3-8...			160	125
PB-AQUA-B-3-10...				
PB-AQUA-B-3-12...				
PB-AQUA-B-4-8...				
PB-AQUA-B-4-10...				
PB-AQUA-B-4-12...				
PB-AQUA-B-5-8...				
PB-AQUA-B-5-10...				
PB-AQUA-B-5-12...				
PB-AQUA-B-6-8...				
PB-AQUA-B-6-10...				
PB-AQUA-B-6-12...				

m (kg)	W (mm)		
	8	10	12
PB-AQUA-B-1...500	2,3	2,4	2,4
PB-AQUA-B-1...1000	4,6	4,5	4,5
PB-AQUA-B-1...1500	6,7	6,7	6,7
PB-AQUA-B-1...2000	8,9	8,9	8,8
PB-AQUA-B-2...500	2,3	2,2	2,3
PB-AQUA-B-2...1000	4,5	4,4	4,4
PB-AQUA-B-2...1500	6,6	6,5	6,5
PB-AQUA-B-2...2000	8,7	8,7	8,6
PB-AQUA-B-3...500	2,3	2,3	2,3
PB-AQUA-B-3...1000	4,4	4,4	4,3
PB-AQUA-B-3...1500	6,5	6,4	6,4
PB-AQUA-B-3...2000	8,6	8,5	8,4

m (kg)	W (mm)		
	8	10	12
PB-AQUA-B-4...500	2,3	2,3	2,3
PB-AQUA-B-4...1000	4,3	4,3	4,4
PB-AQUA-B-4...1500	6,4	6,3	6,4
PB-AQUA-B-4...2000	8,4	8,3	8,5
PB-AQUA-B-5...500	2,3	2,3	2,4
PB-AQUA-B-5...1000	4,3	4,4	4,5
PB-AQUA-B-5...1500	6,4	6,5	6,7
PB-AQUA-B-5...2000	8,4	8,6	8,8
PB-AQUA-B-6...500	2,3	2,4	2,5
PB-AQUA-B-6...1000	4,4	4,6	4,7
PB-AQUA-B-6...1500	6,5	6,8	6,8
PB-AQUA-B-6...2000	8,5	8,9	9,0



PB-AQUA-S...	W ₁	ød	A	B
	mm			
PB-AQUA-S-1-8...	109	98	-	-
PB-AQUA-S-1-10...	111			
PB-AQUA-S-1-12...	113			
PB-AQUA-S-2-8...	122	123		
PB-AQUA-S-2-10...	126			
PB-AQUA-S-2-12...	130			
PB-AQUA-S-3-8...	136	-	160	125
PB-AQUA-S-3-10...	142			
PB-AQUA-S-3-12...	148			
PB-AQUA-S-4-8...	149			
PB-AQUA-S-4-10...	157			
PB-AQUA-S-4-12...	165			
PB-AQUA-S-5-8...	163			
PB-AQUA-S-5-10...	173			
PB-AQUA-S-5-12...	183			
PB-AQUA-S-6-8...	179			
PB-AQUA-S-6-10...	189			
PB-AQUA-S-6-12...	199			

m (kg)	W (mm)		
	8	10	12
PB-AQUA-S-1...500	2,3	2,4	2,4
PB-AQUA-S-1...1000	4,6	4,5	4,5
PB-AQUA-S-1...1500	6,7	6,7	6,7
PB-AQUA-S-1...2000	8,9	8,9	8,8
PB-AQUA-S-2...500	2,3	2,2	2,3
PB-AQUA-S-2...1000	4,5	4,4	4,4
PB-AQUA-S-2...1500	6,6	6,5	6,5
PB-AQUA-S-2...2000	8,7	8,7	8,6
PB-AQUA-S-3...500	2,3	2,3	2,3
PB-AQUA-S-3...1000	4,4	4,4	4,3
PB-AQUA-S-3...1500	6,5	6,4	6,4
PB-AQUA-S-3...2000	8,6	8,5	8,4

m (kg)	W (mm)		
	8	10	12
PB-AQUA-S-4...500	2,3	2,3	2,3
PB-AQUA-S-4...1000	4,3	4,3	4,4
PB-AQUA-S-4...1500	6,4	6,3	6,4
PB-AQUA-S-4...2000	8,4	8,3	8,5
PB-AQUA-S-5...500	2,3	2,3	2,4
PB-AQUA-S-5...1000	4,3	4,4	4,5
PB-AQUA-S-5...1500	6,4	6,5	6,7
PB-AQUA-S-5...2000	8,4	8,6	8,8
PB-AQUA-S-6...500	2,3	2,4	2,5
PB-AQUA-S-6...1000	4,4	4,6	4,7
PB-AQUA-S-6...1500	6,5	6,8	6,8
PB-AQUA-S-6...2000	8,5	8,9	9,0

Ordering Codes

PB-AQUA

Duct connection orientation

- B Vertical, from bottom
- S Horizontal, from the side

Number of slots on corresponding diffuser (N)

- 1
- 2
- 3
- 4
- 5
- 6

Slot width (mm)

- 8
- 10
- 12

Length (mm)

- 500
- 1000
- 1500
- 2000

NOTE:

Plenum boxes PB-AQUA have for each 500 mm of their length one connection (horizontal or vertical). The connection shape and dimension is adapted to the number of diffuser slots.

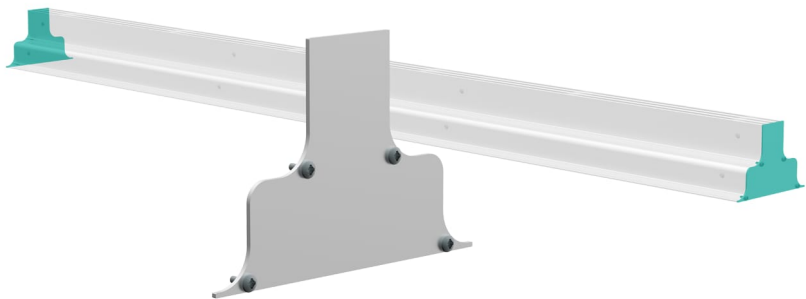
Example of the Ordering Code

PB-AQUA-S-4-10-1500

PB-AQUA plenum box, for AQUA-H diffuser with 4 slots, 10 mm slot width. 1500 mm length, horizontal side connection.

EC-AQUA-H

End Cap



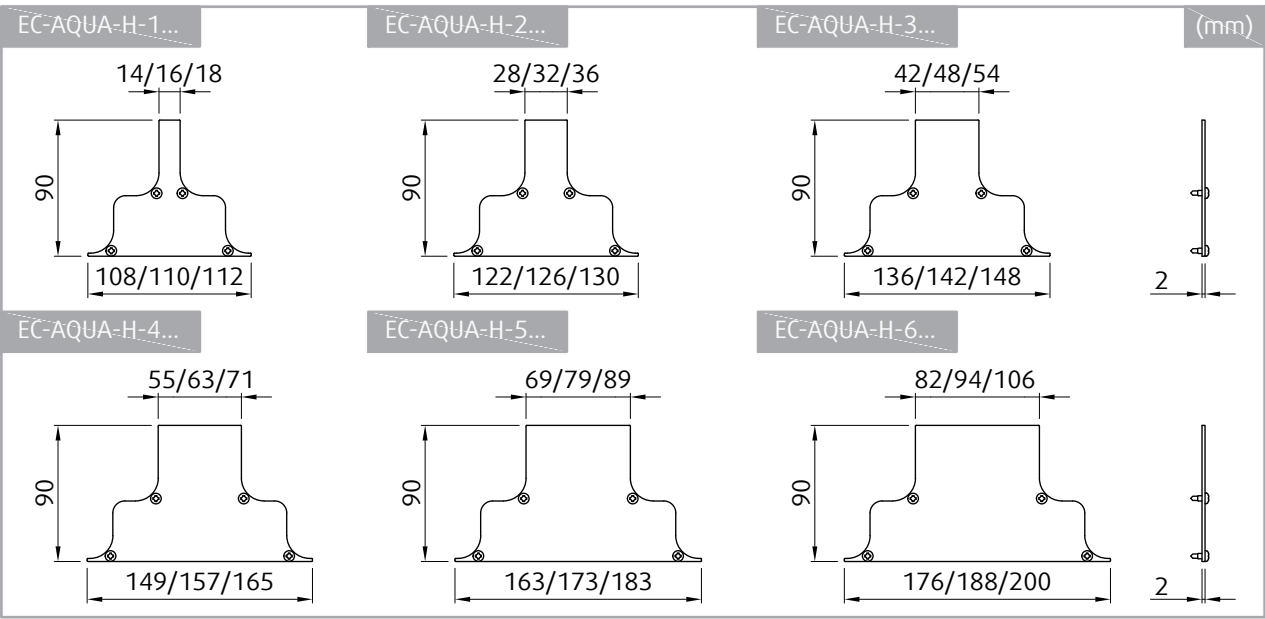
Description

EC-AQUA-H is an end cap for AQUA-H. The product covers the end of a diffuser or a multiple-diffuser array. The product is intended to prevent the fluid building materials (concrete, mortar...) from intruding into the diffuser console during installation and floor finishing.

Design

EC-AQUA-H is manufactured from anodized aluminium sheet. The product can be attached to the diffuser by screws. The screws are included in the package.

Dimensions



Ordering Codes

EC-AQUA-H

Number of slots (N)

- 1
- 2
- 3
- 4
- 5
- 6

Slot width (mm)

- 8
- 10
- 12

NOTE:

One ordering unit is 1 end cap with 4 screws in a package.

Example of the Ordering Code

EC-AQUA-H-2-10

EC-AQUA-H end cap, for AQUA-H diffuser with 2 slots, 10 mm slot width.

CP-HELLA

Connecting Pins



Description

CP-HELLA are connecting pins. The pins are intended for joining multiple AQUA-H diffusers in an array.

Design

CP-HELLA is manufactured from stainless steel. The pins are applied in the holes at the ends of the longitudinal frame profiles of the AQUA-H diffuser.

Ordering, Calculation

The quantity of CP-HELLA needed for multiple diffusers in an array: $p = 4 \cdot (n - 1)$

p = number of CP-HELLA pins

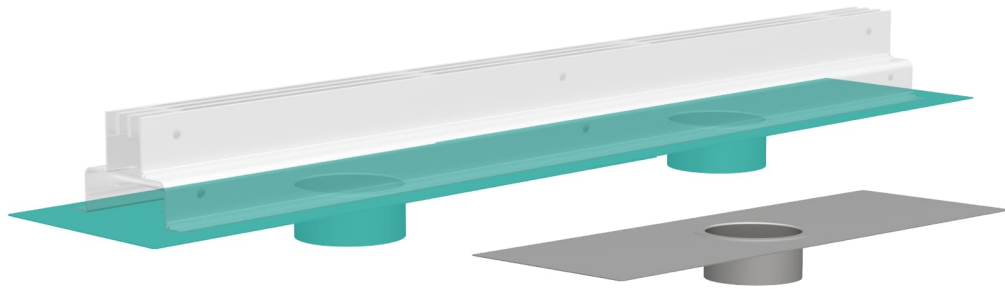
n = number of AQUA-H diffusers in an array

CP-HELLA can be ordered in a package unit of 50 pieces.

Item No. 141358.

DC-AQUA-H

Duct Connector
Item No. 455875



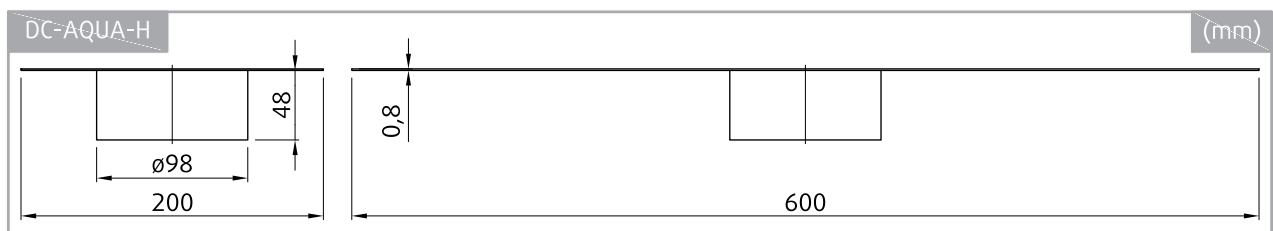
Description

DC-AQUA-H is a duct connector. The product is intended for connecting the AQUA-H diffuser directly to the duct. The product is installed to the bottom of the diffuser using polyurethane adhesive and self-tapping screws.

Design

DC-AQUA-H is manufactured from A316L stainless steel sheet.

Dimensions



LB-AQUA

Levelling bridge for AQUA-H diffuser and PB-AQUA plenum box
Item No. 247218



DN-AQUA

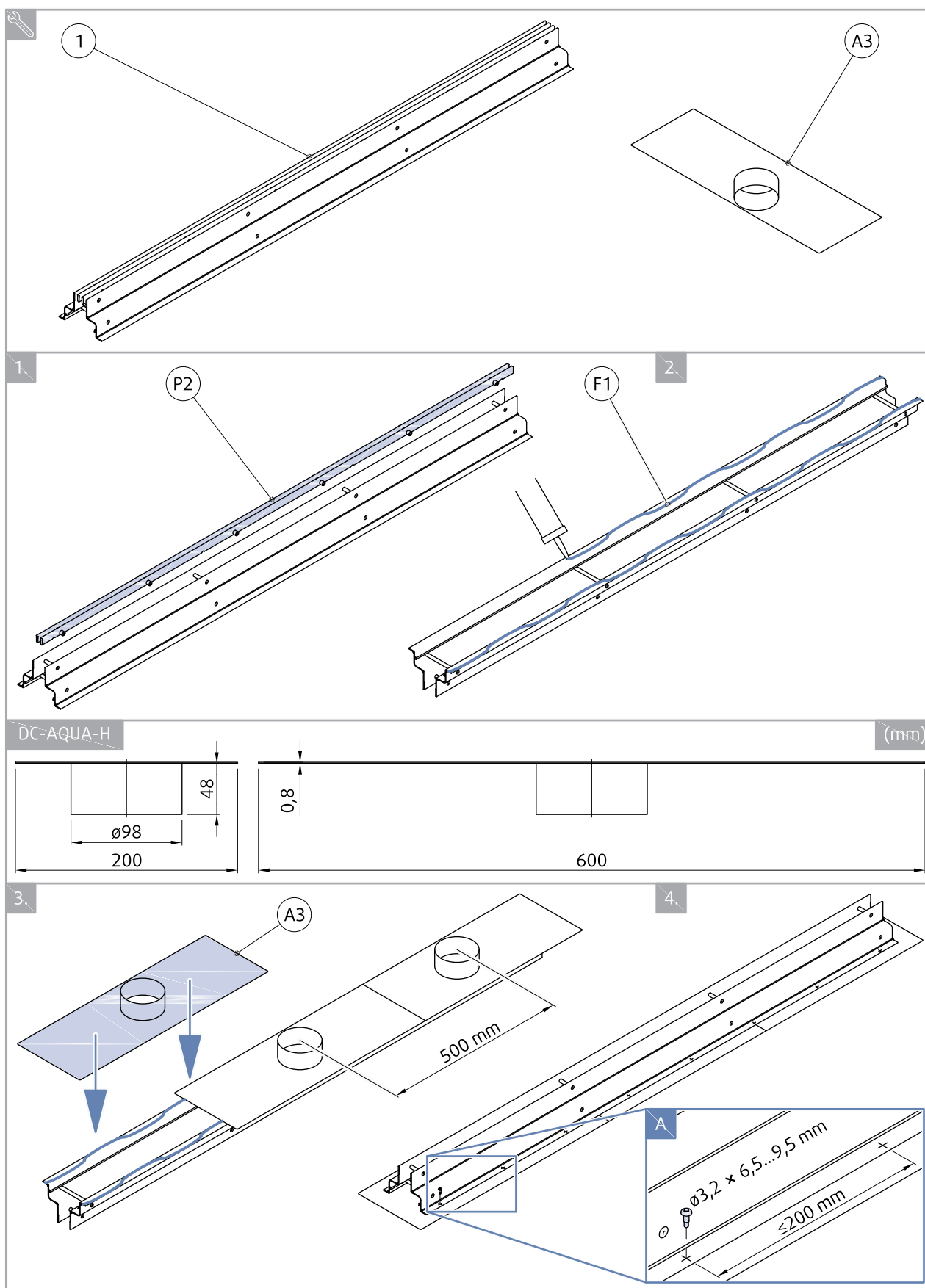
Drainage nipple size $\varnothing 1/2"$, for PB-AQUA-S plenum box
Item No. 247220



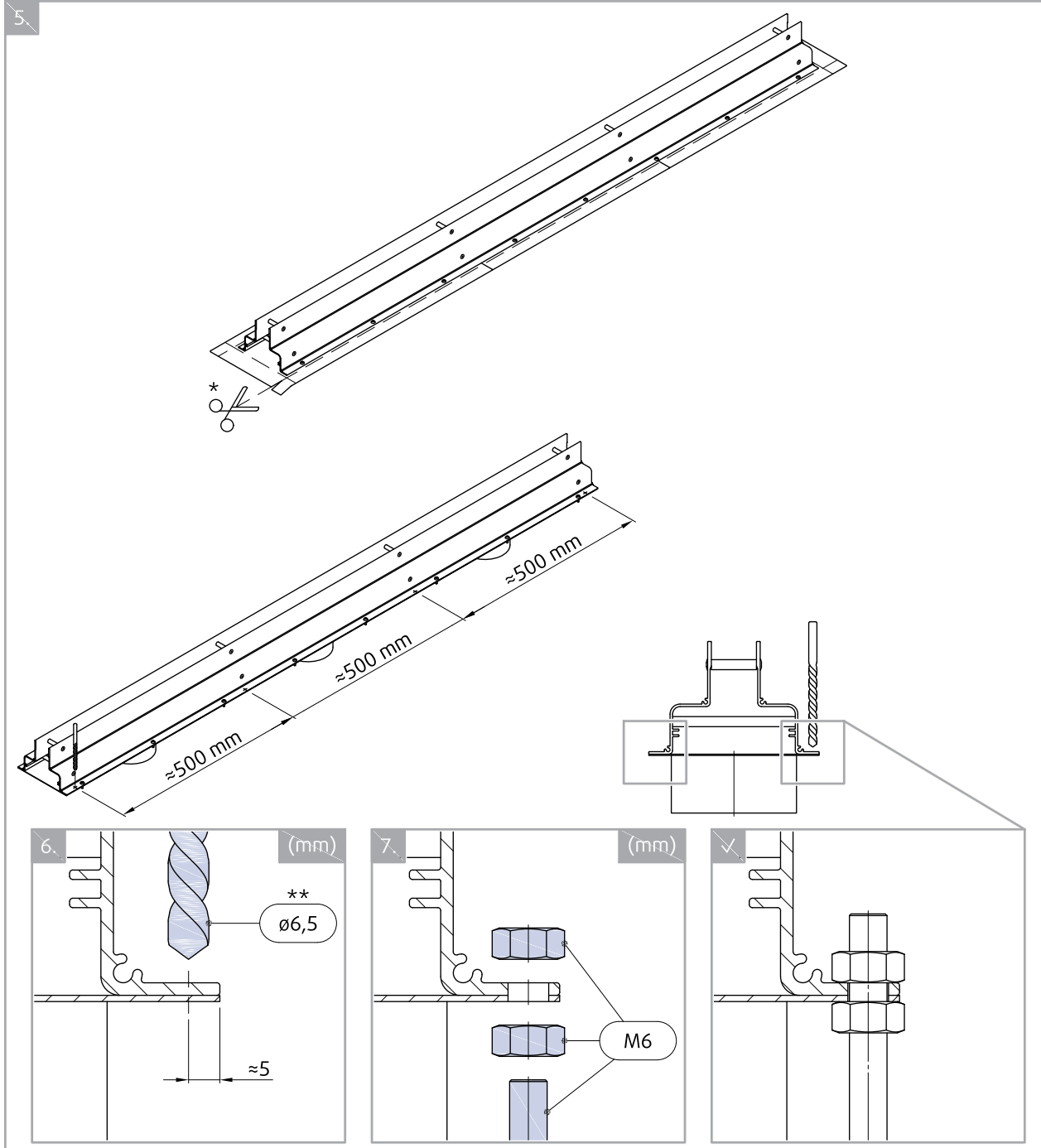
Technical Parameters

Diagrams and technical parameters are available in the DESIGN selection tool (product AQUA-H).

Installation



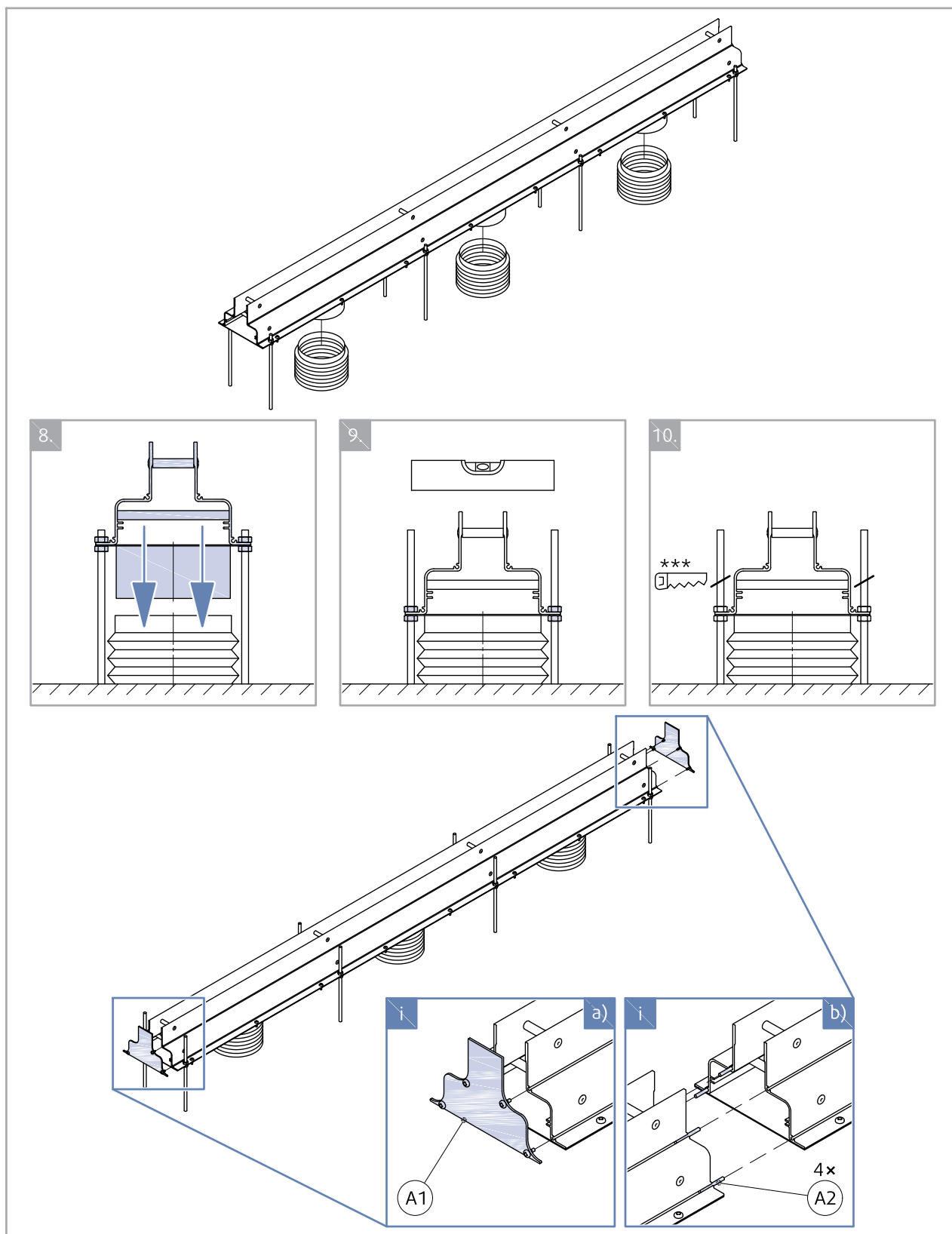
5



NOTE:

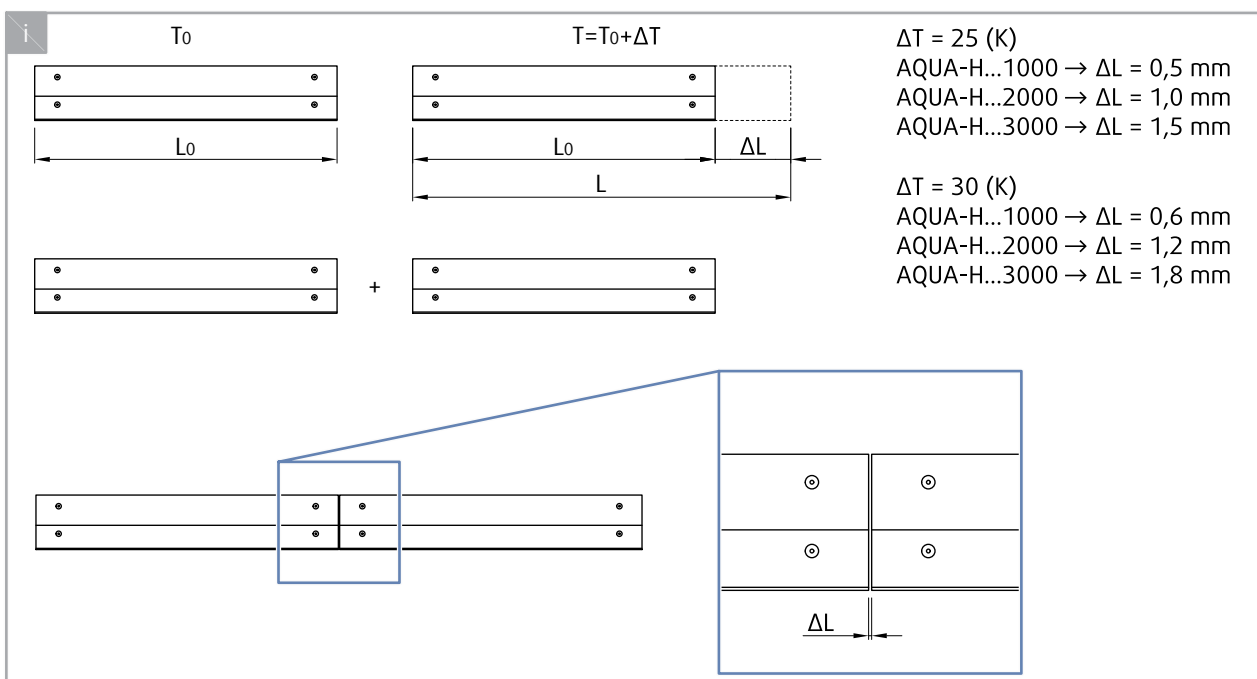
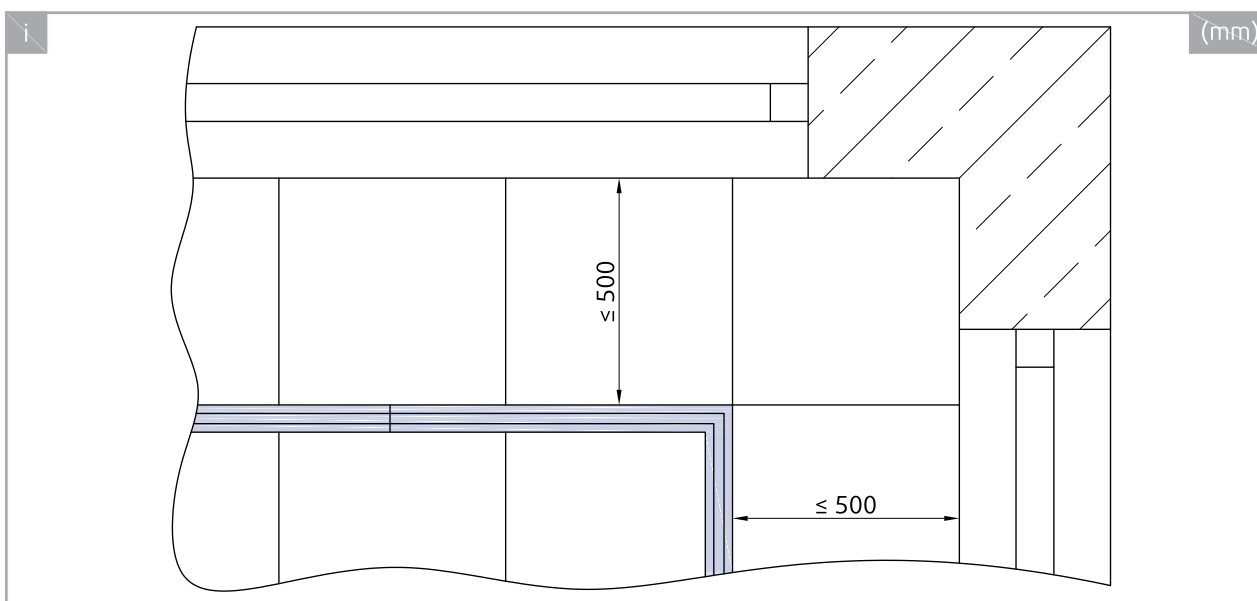
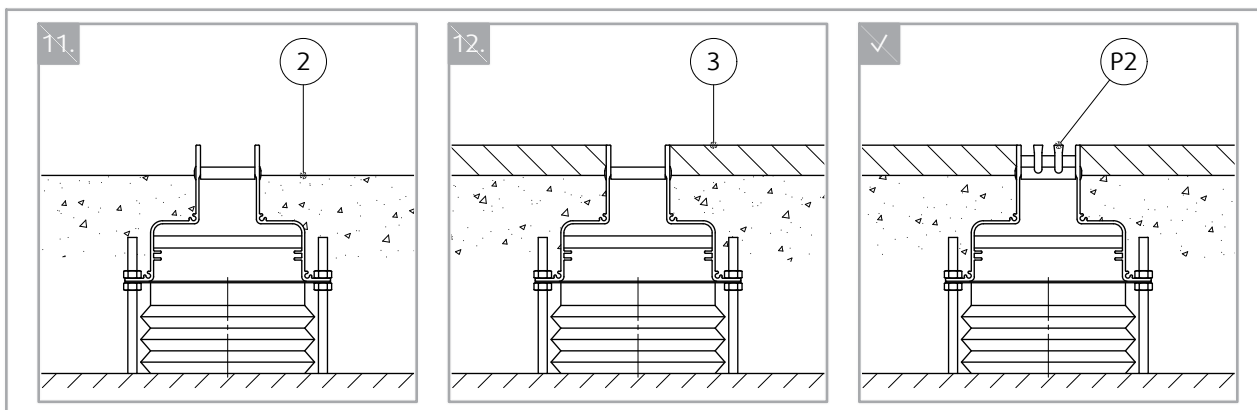
* Optional

** Use drilling bit for stainless steel



NOTE:

*** Optional



Legend for installation AQUA-H + DC-AQUA-H

1 - AQUA-H

2 - Concrete

3 - Tiles

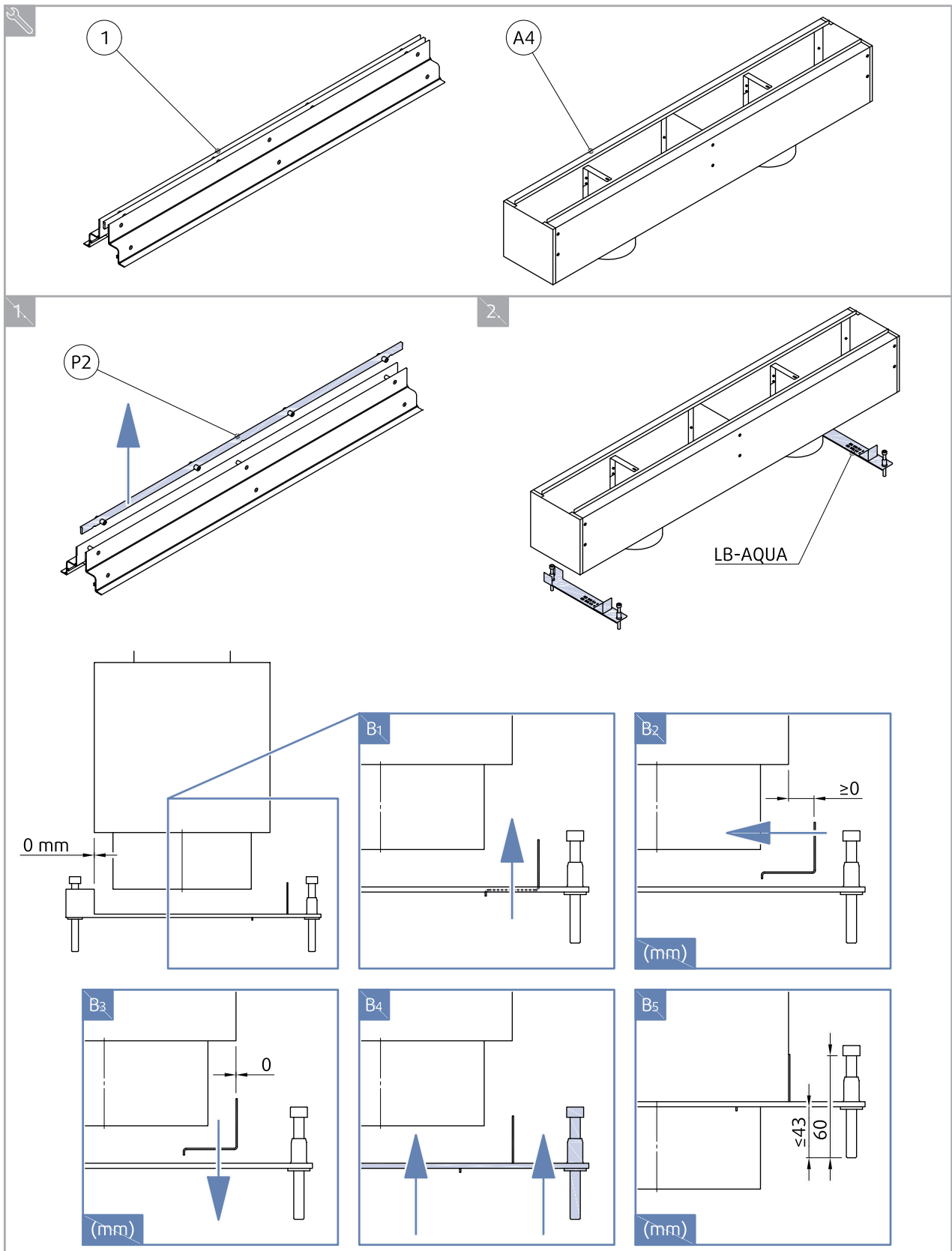
A1 - EC-AQUA, End Cap (accessory)

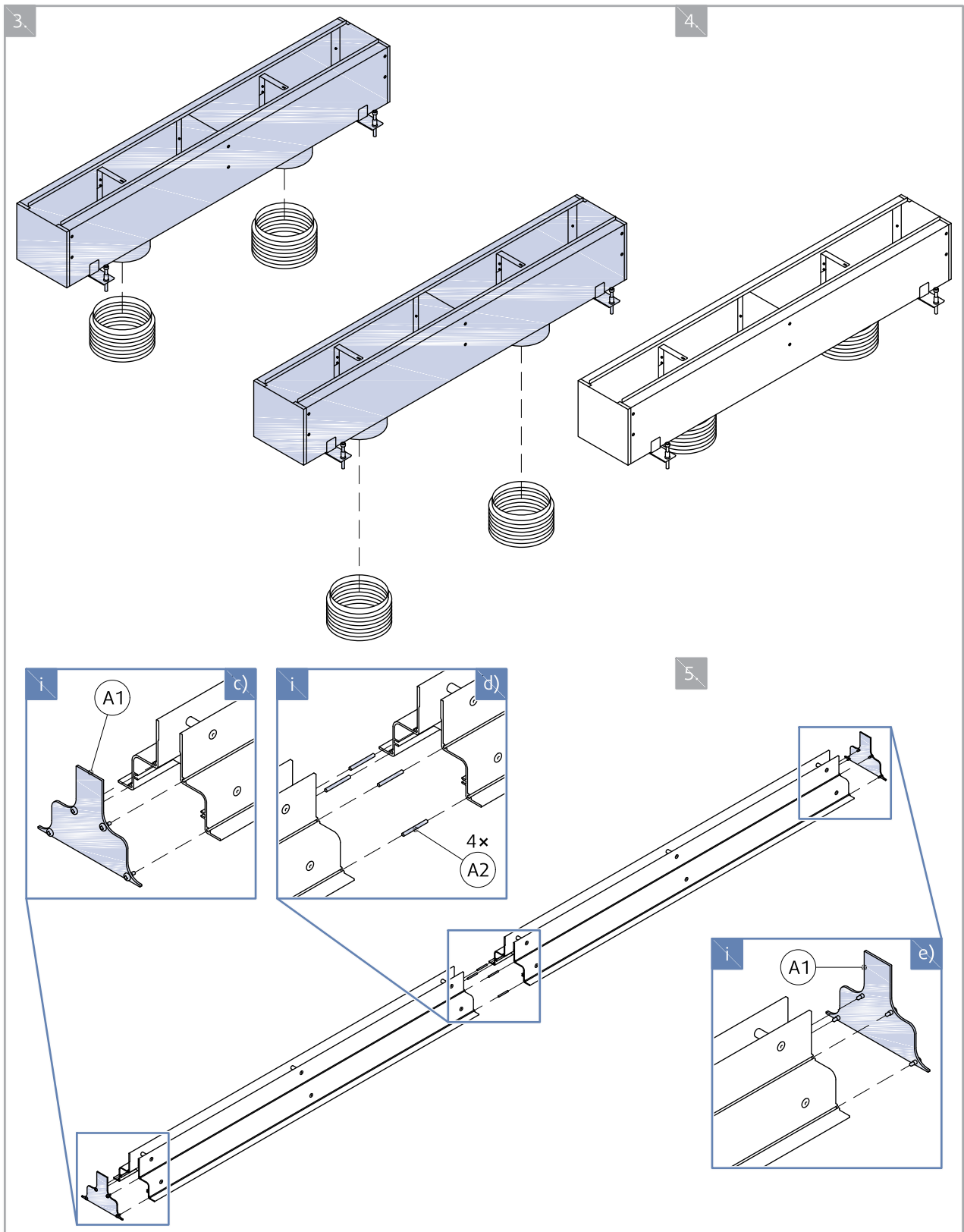
A2 - CP-HELLA, Connecting Pins (accessory)

A3 - DC-AQUA-H, Duct Connector (accessory)

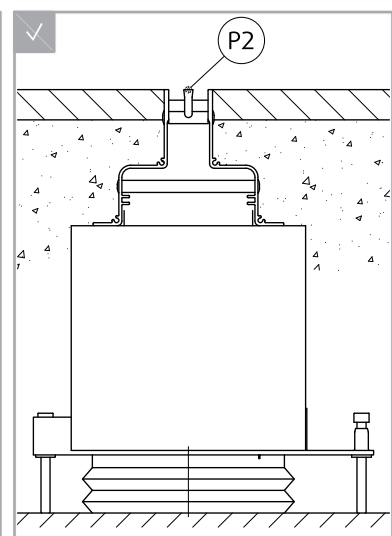
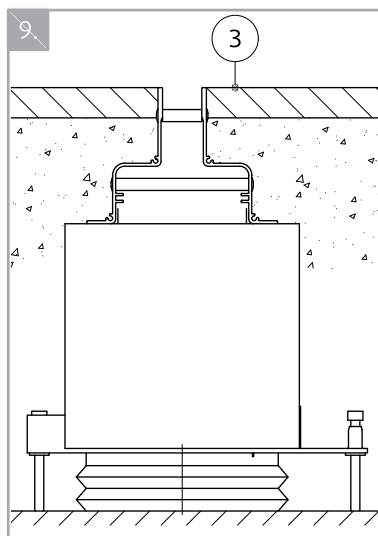
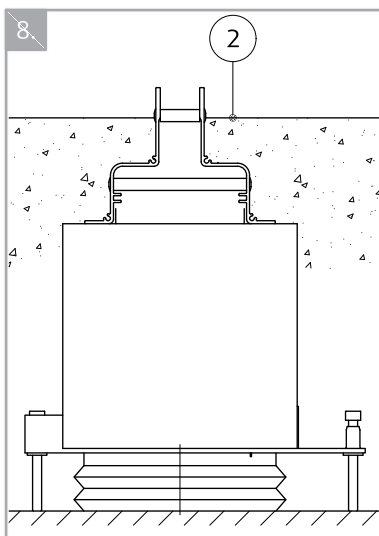
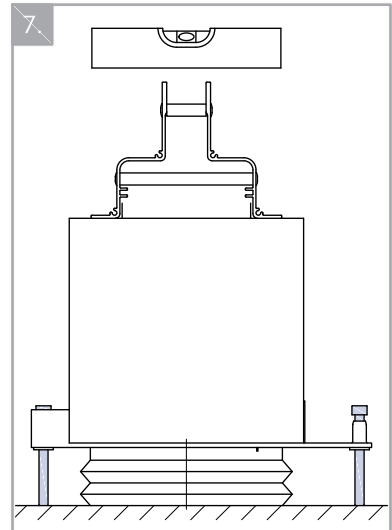
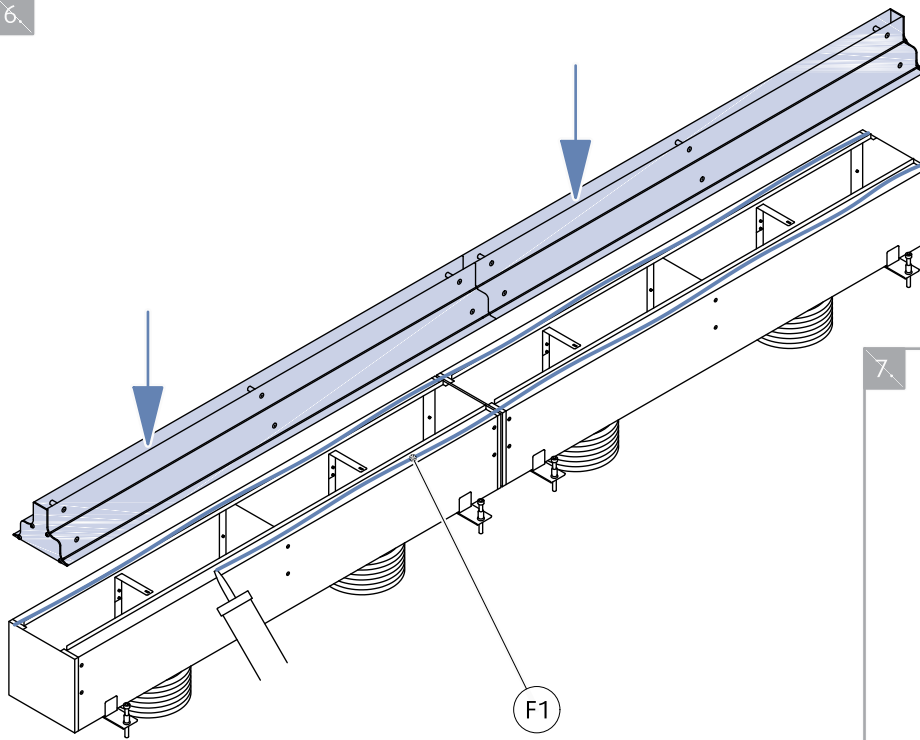
F1 - Polyurethane adhesive/sealant e.g. Sikaflex®-221 RLT

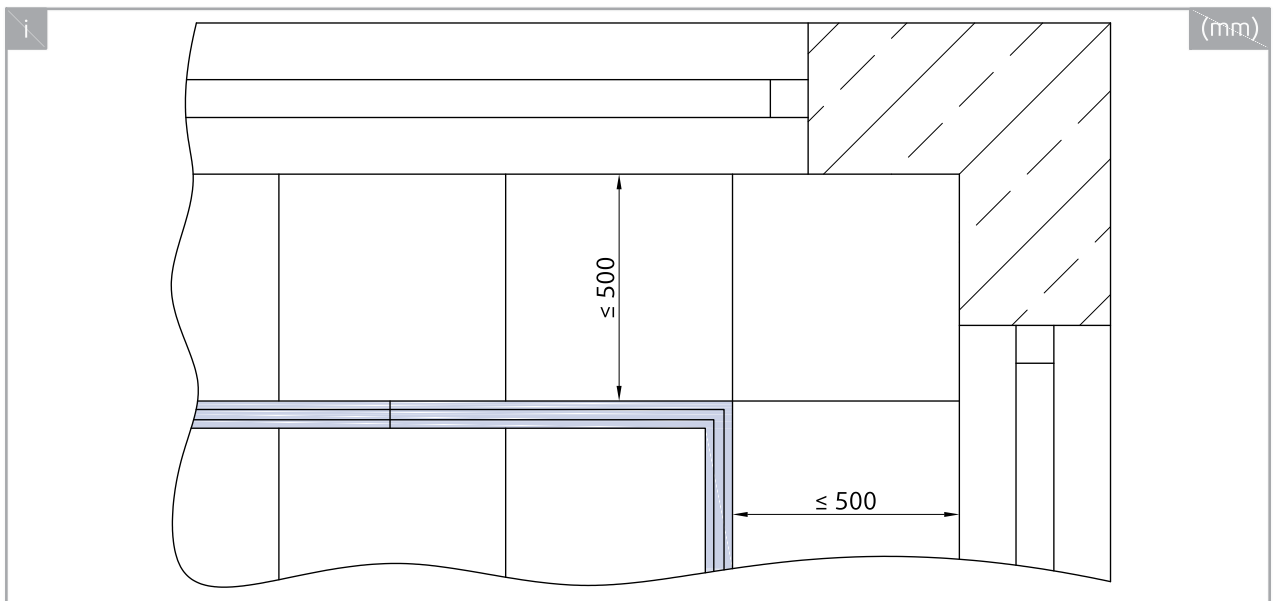
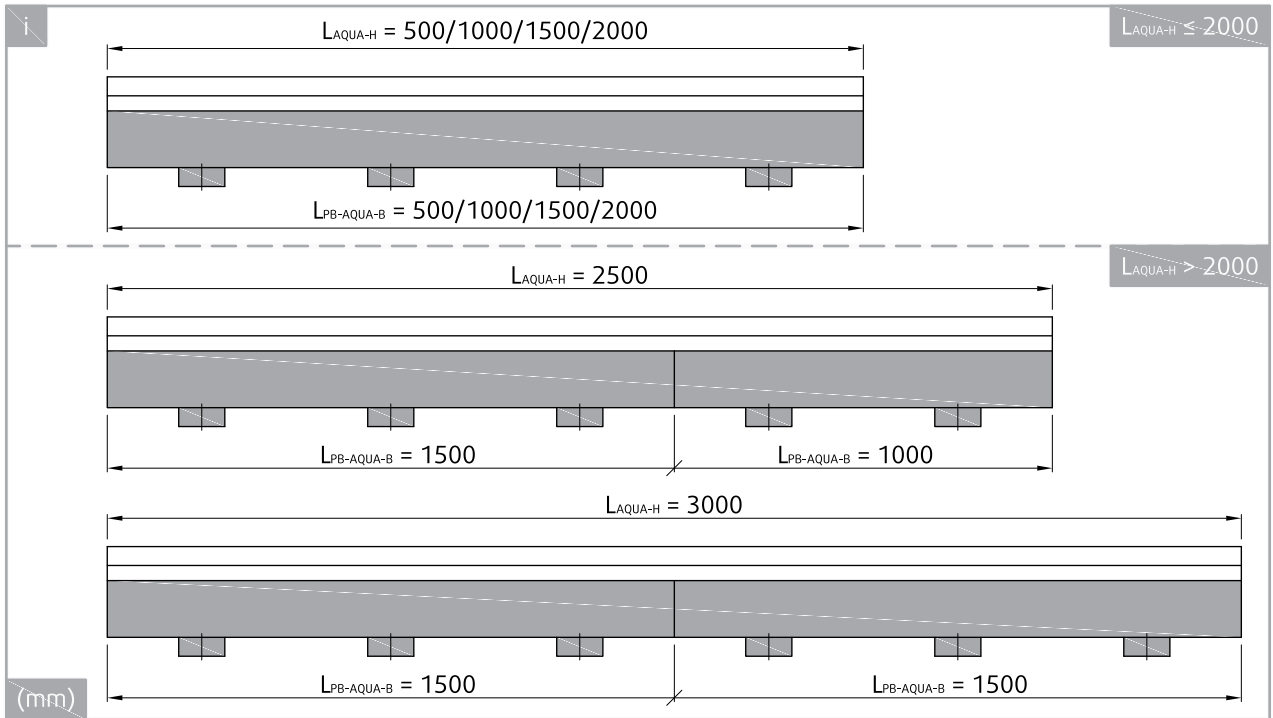
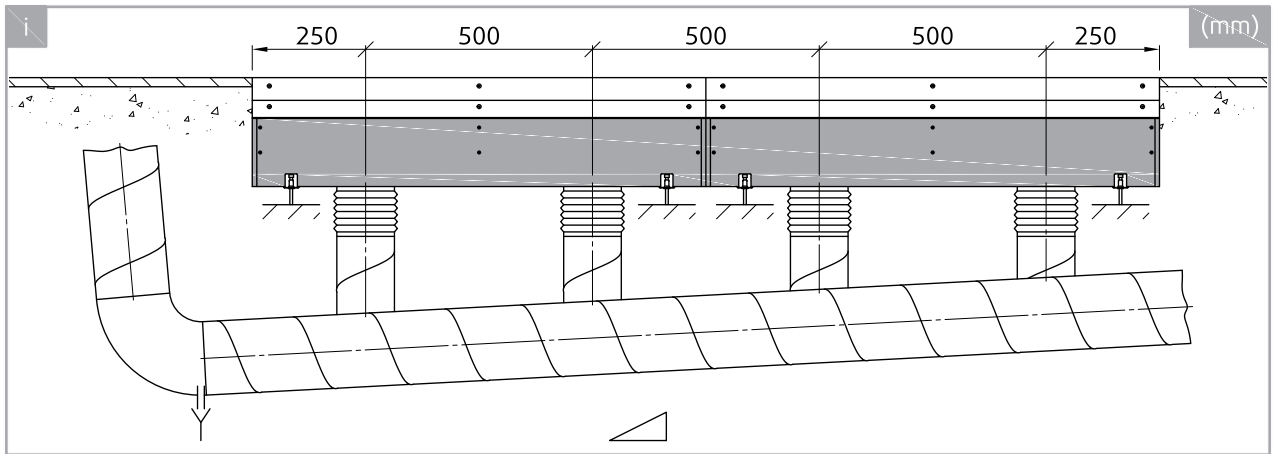
P2 - Slot dividing profile

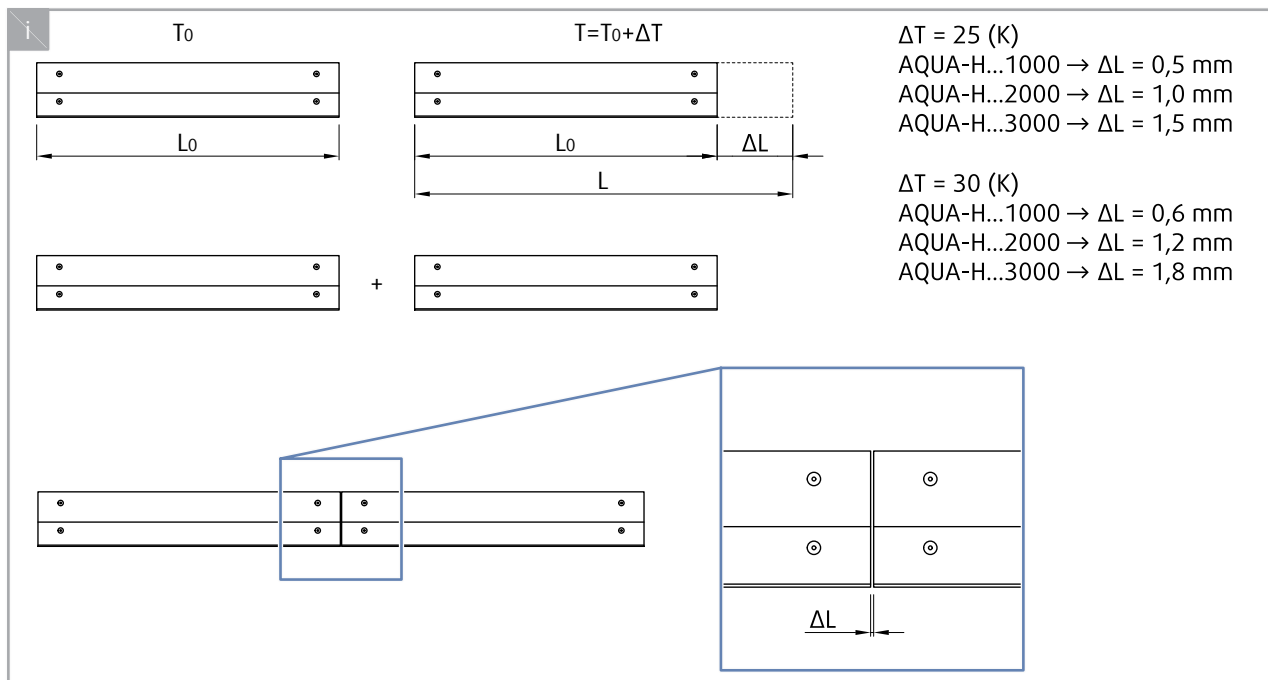




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Legend for installation AQUA-H + PB-AQUA-B

1 - AQUA-H

2 - Concrete

3 - Tiles

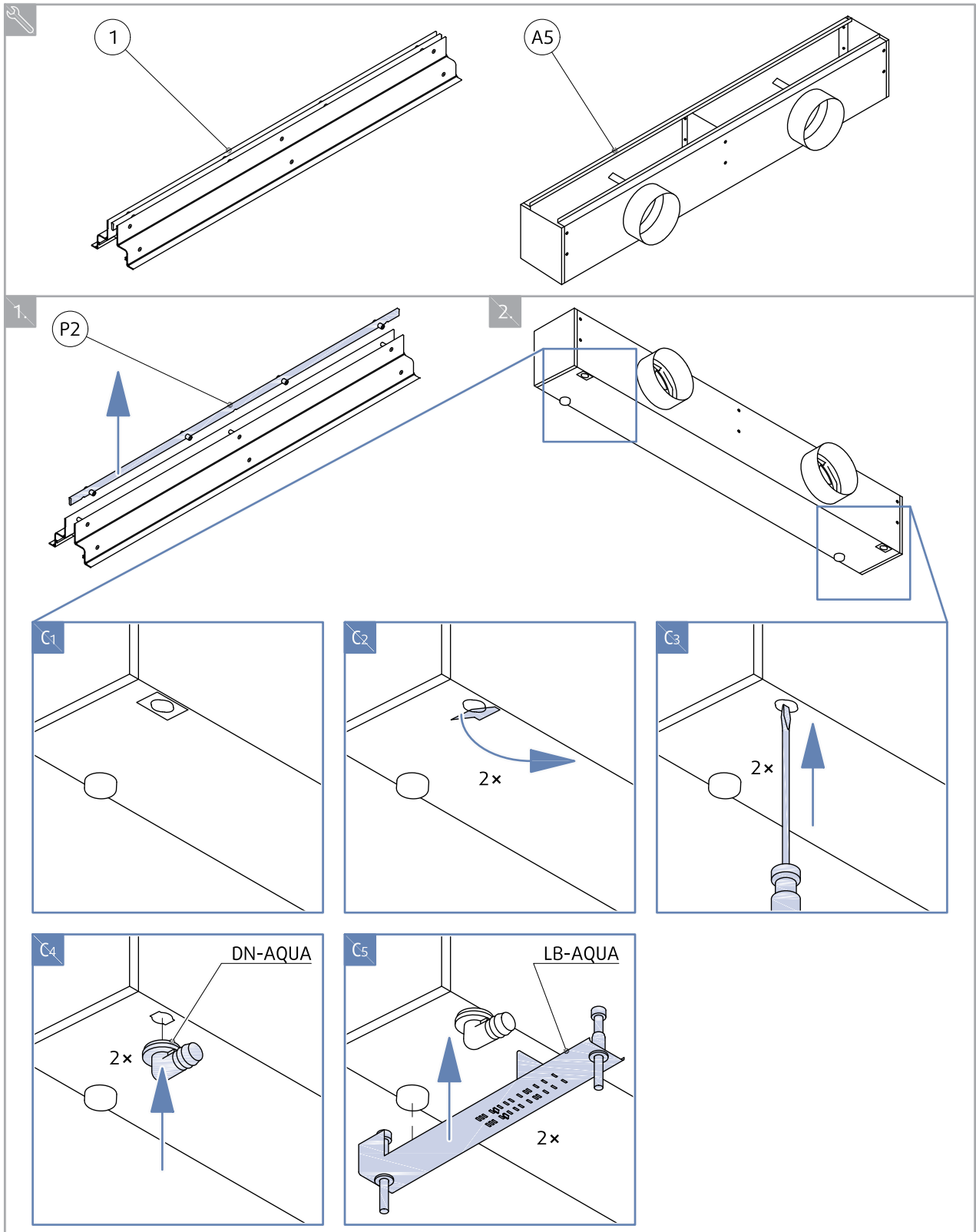
A1 - EC-AQUA, End Cap (accessory)

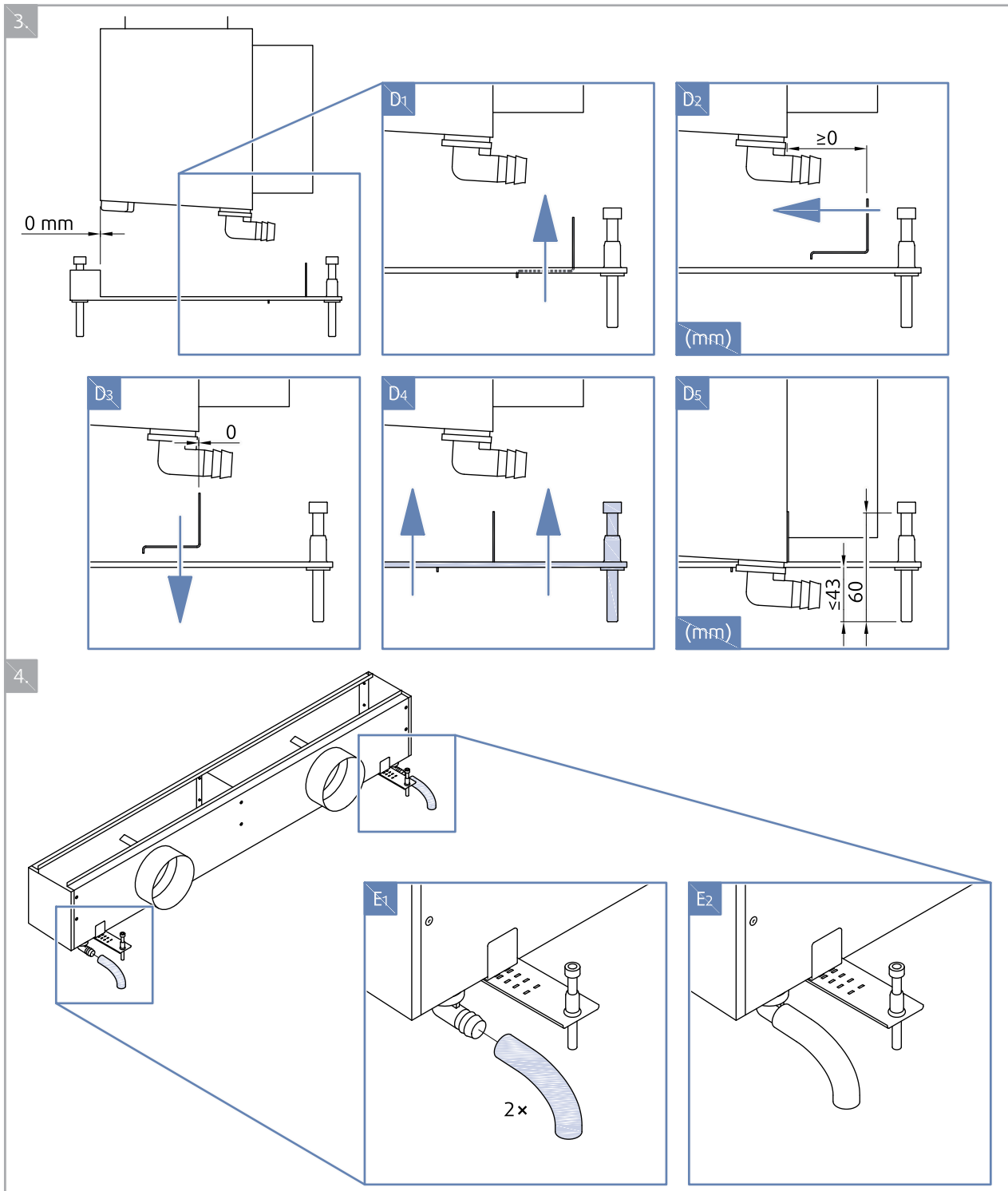
A2 - CP-HELLA, Connecting Pins (accessory)

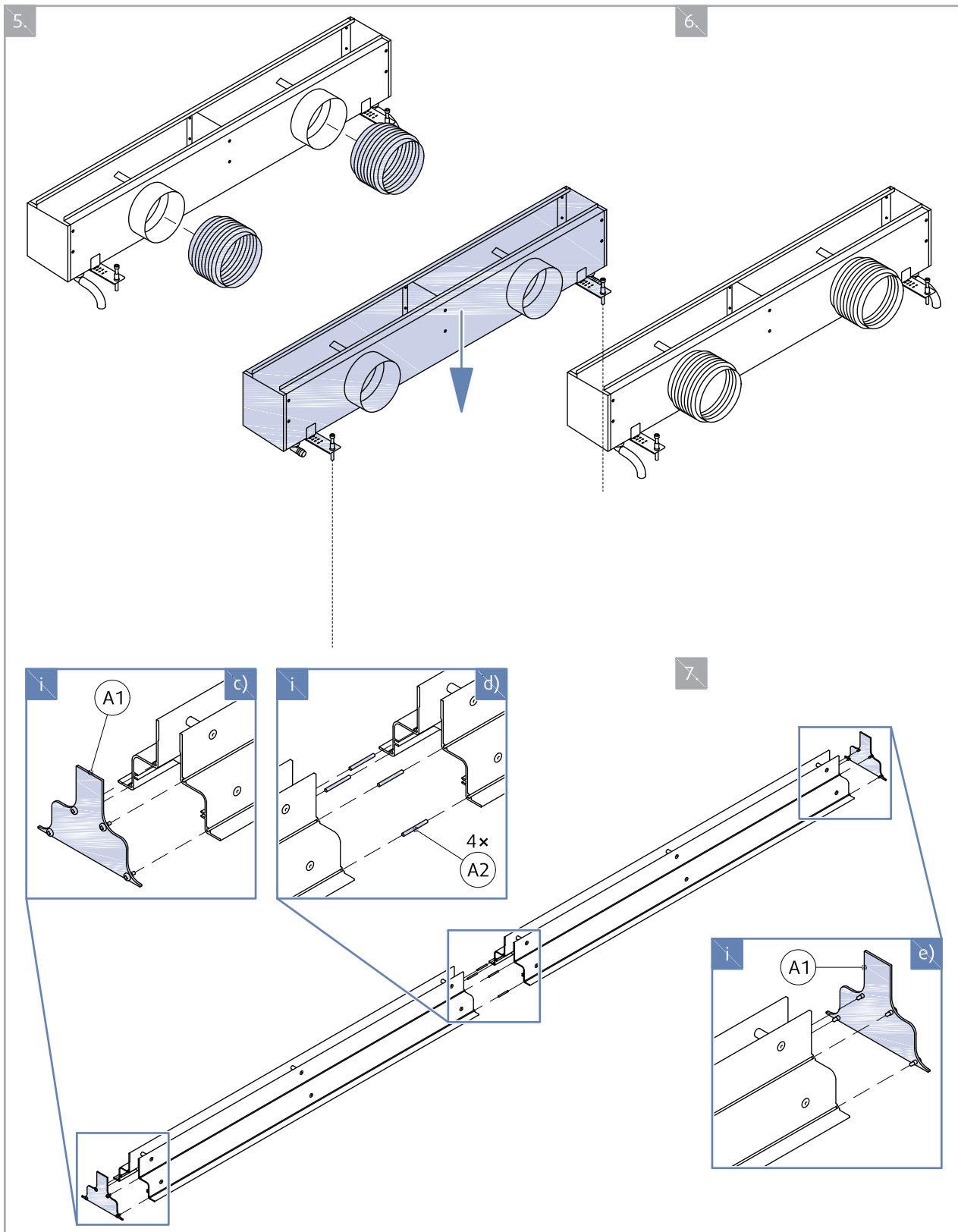
A4 - PB-AQUA-B..., Plenum Box (accessory)

F1 - Polyurethane adhesive/sealant e.g. Sikaflex®-221 RLT

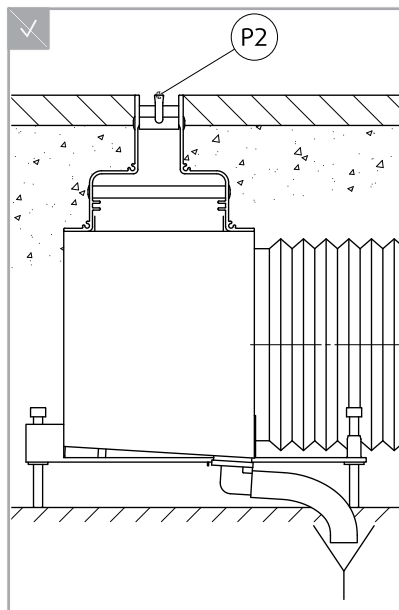
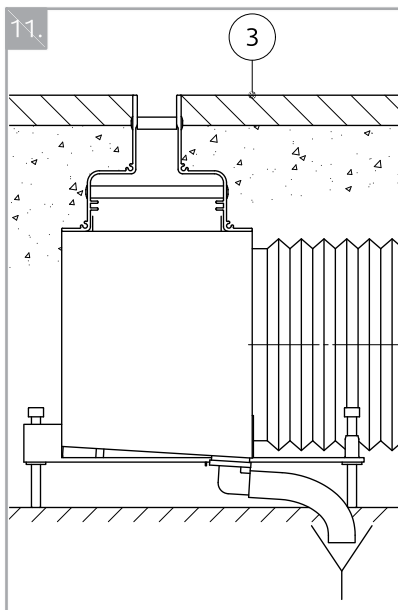
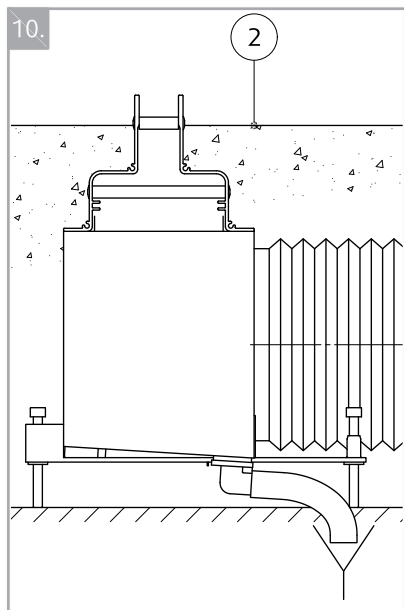
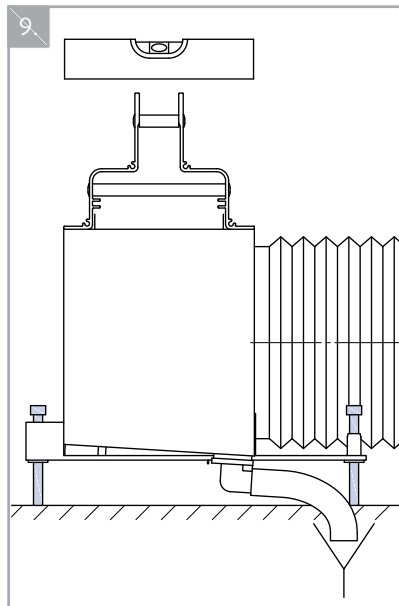
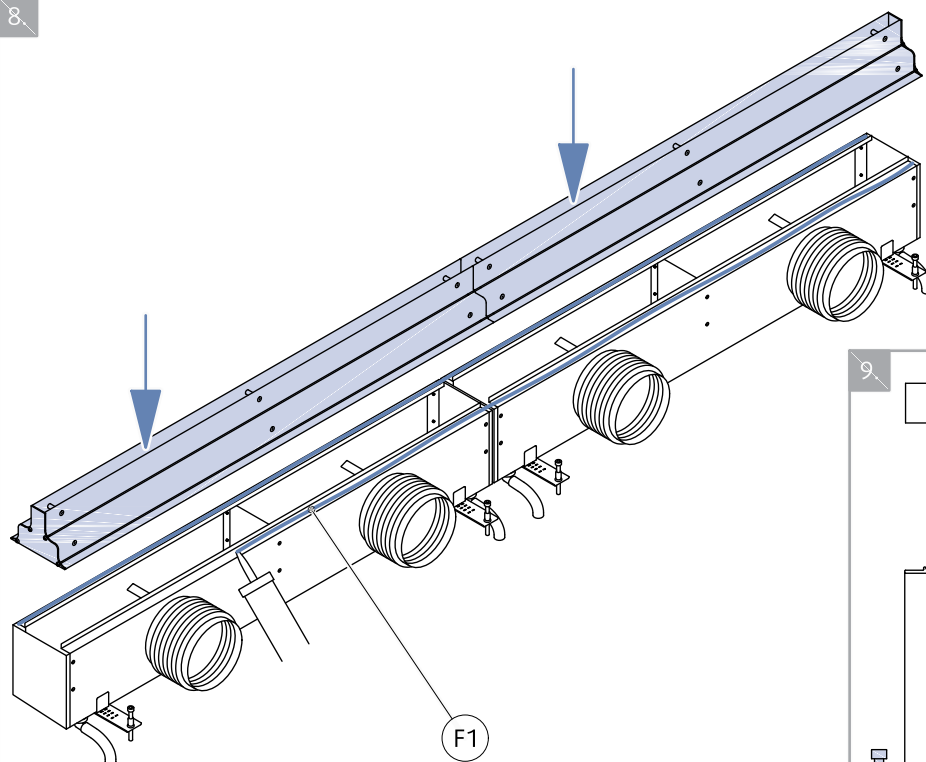
P2 - Slot dividing profile

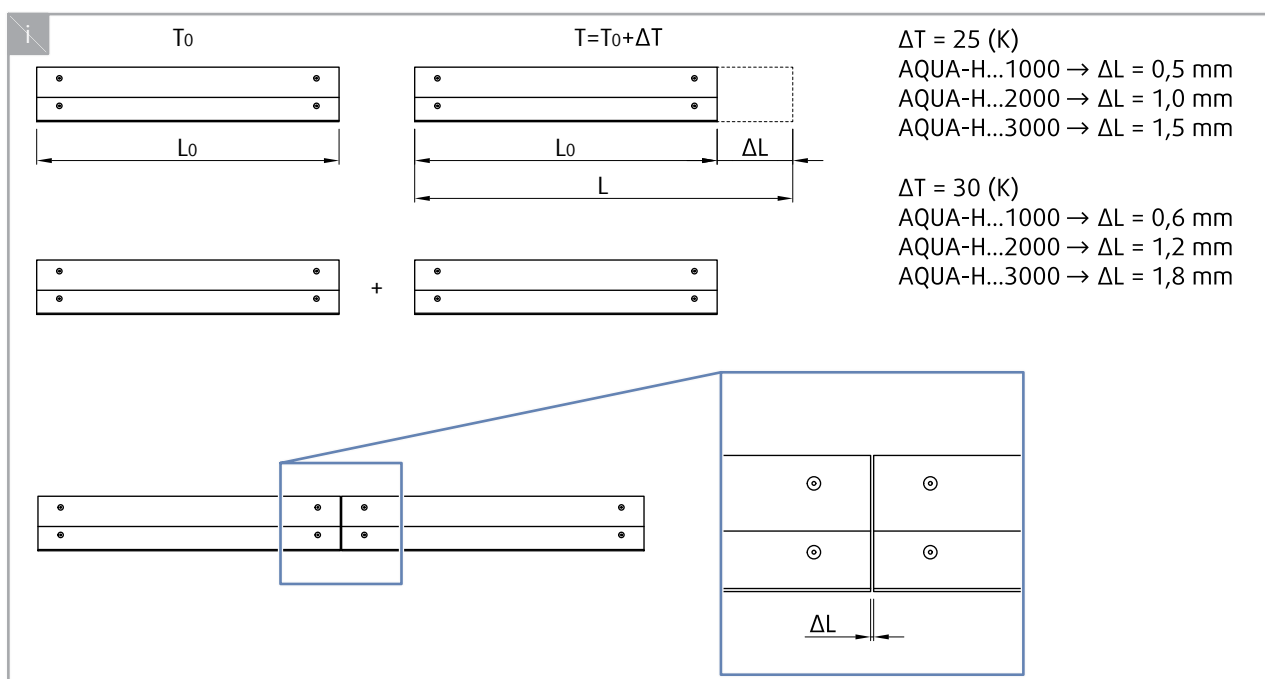
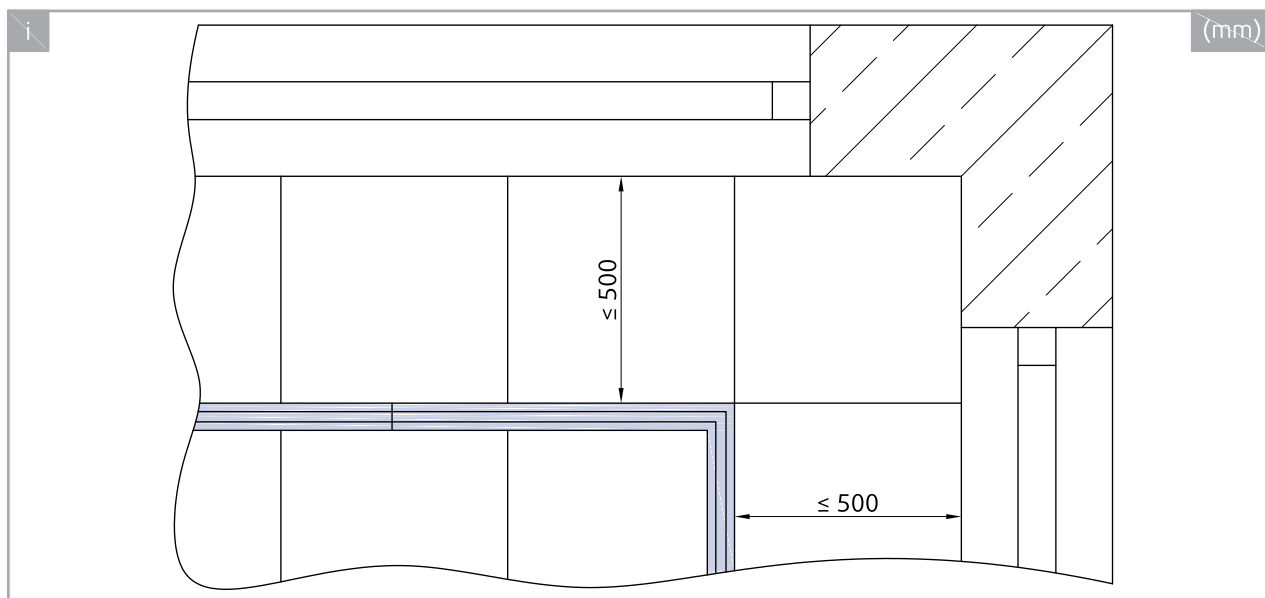
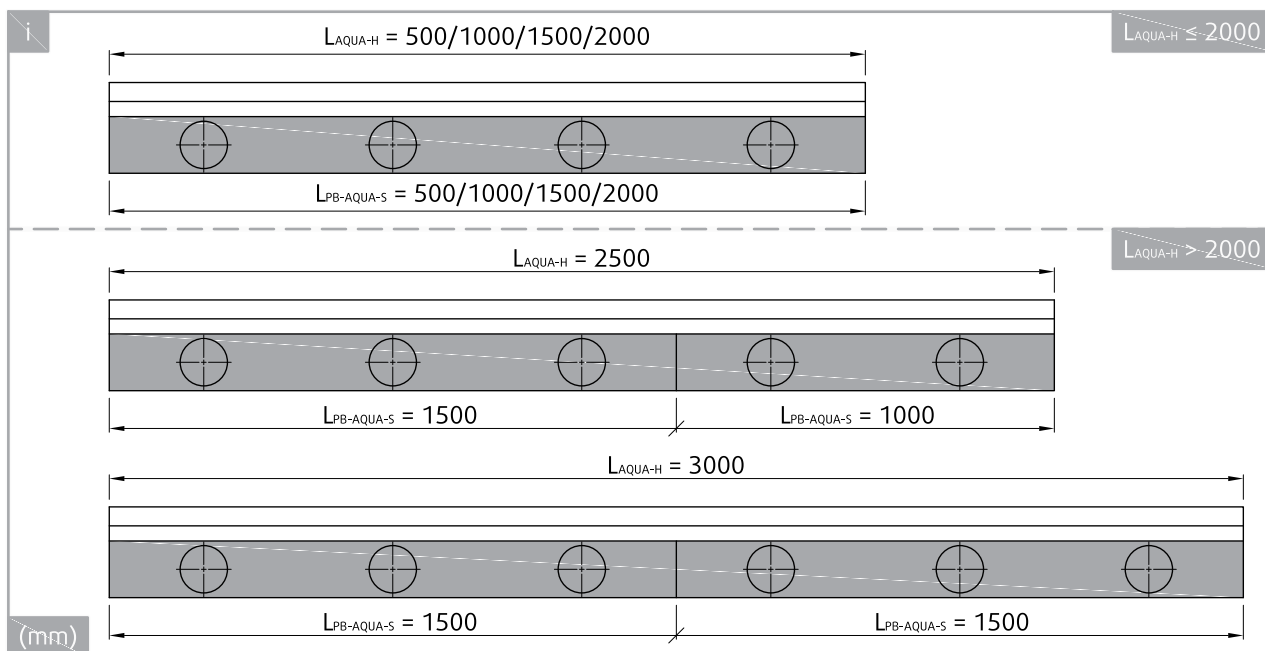






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Legend for installation AQUA-H + PB-AQUA-S

1 - AQUA-H

2 - Concrete

3 - Tiles

A1 - EC-AQUA, End Cap (accessory)

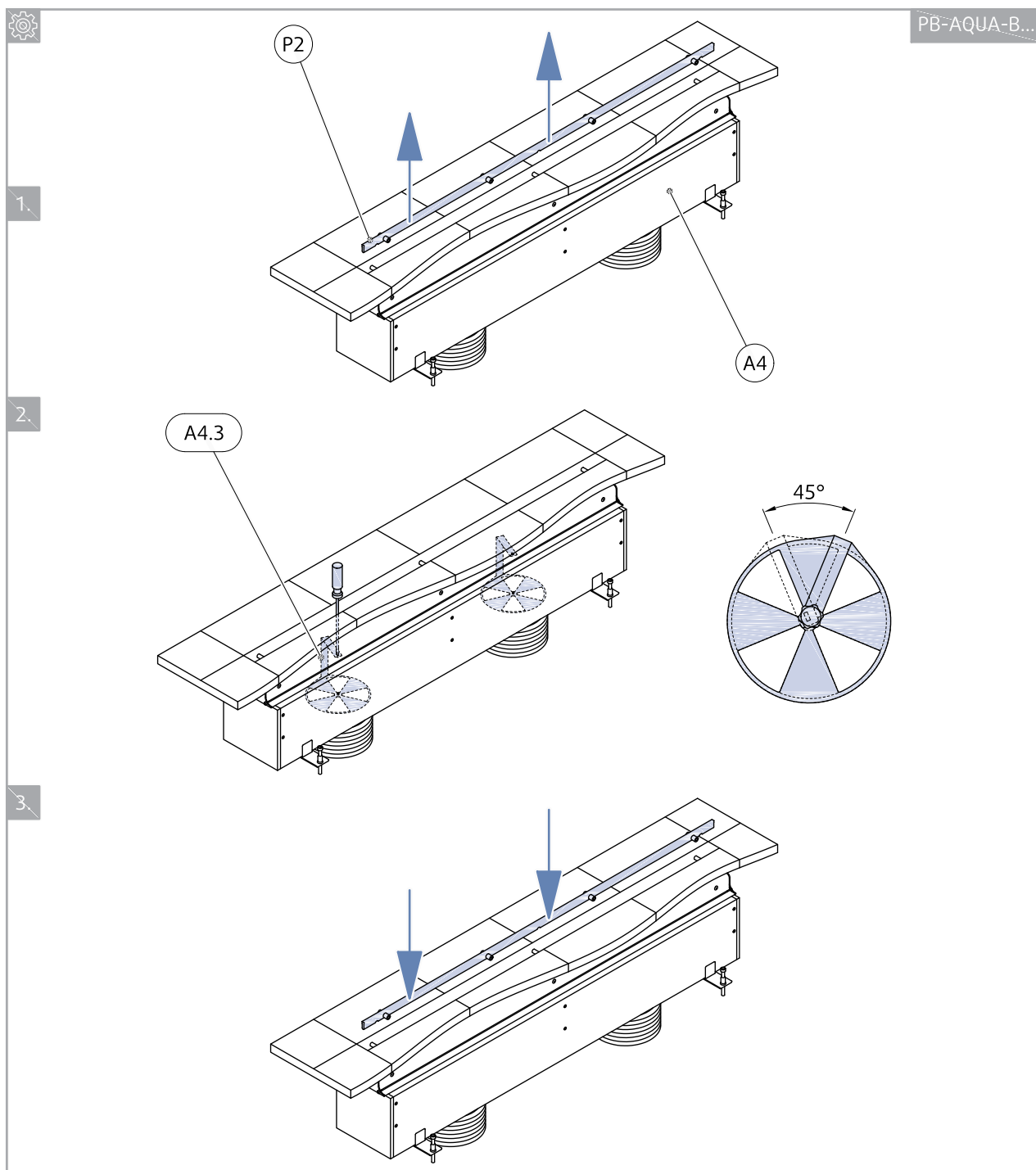
A2 - CP-HELLA, Connecting Pins (accessory)

A5 - PB-AQUA-S..., Plenum Box (accessory)

F1 - Polyurethane adhesive/sealant e.g. Sikaflex®-221 RLT

P2 - Slot dividing profile

Setting

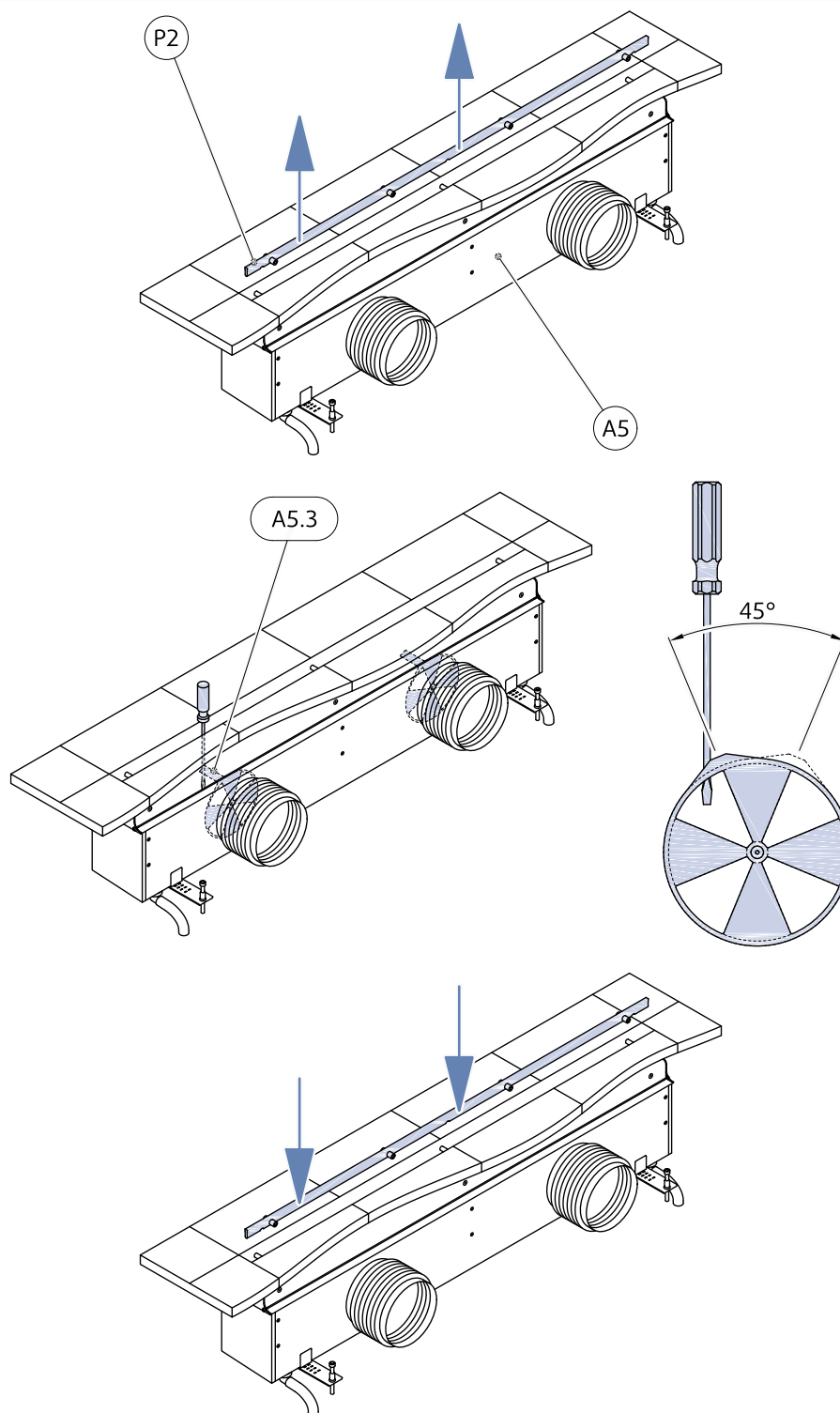


Legend for setting PB-AQUA-B

A4 - PB-AQUA-B..., Plenum Box (accessory)

A4.3 - Regulation

P2 - Slot dividing profile



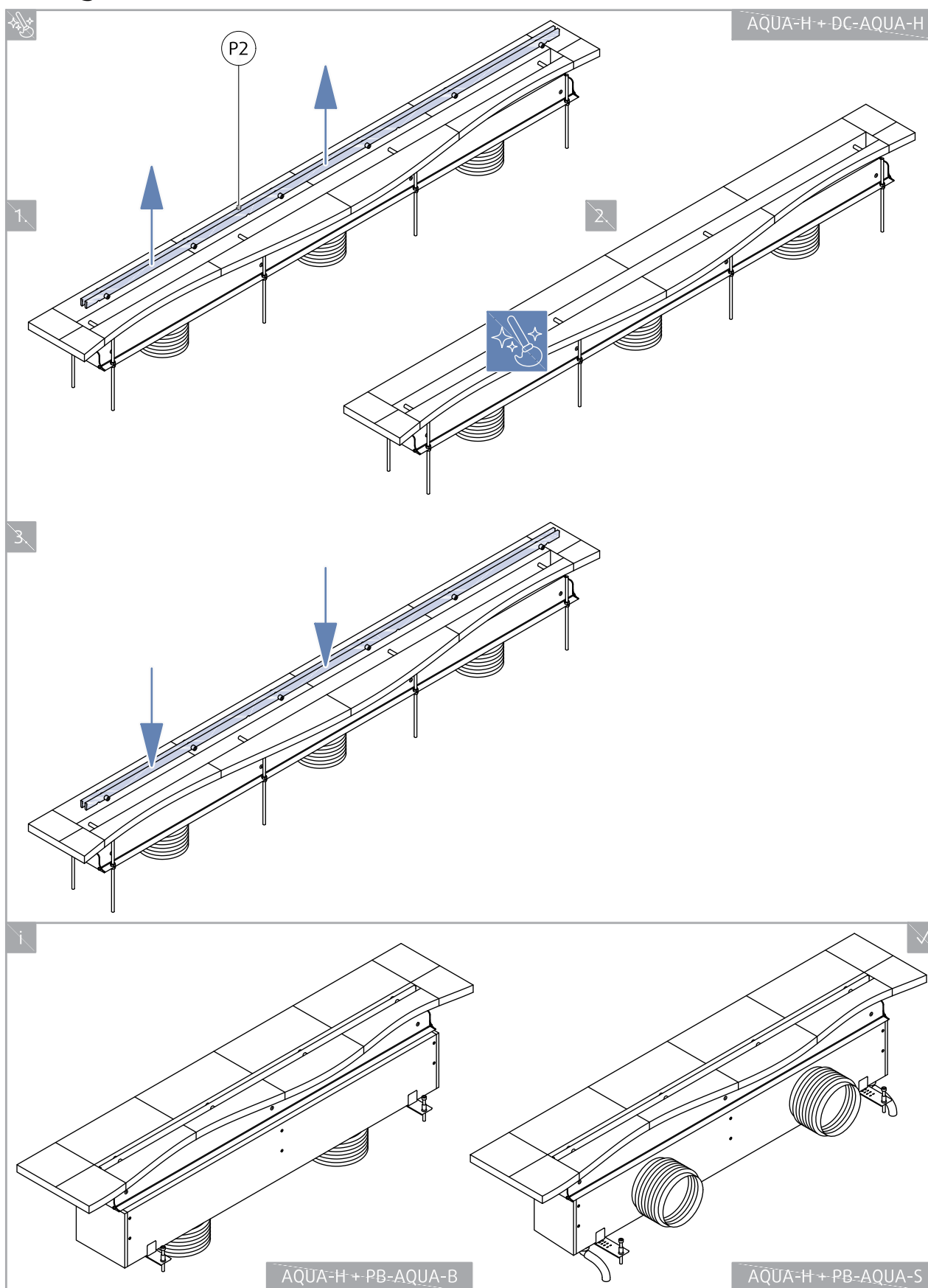
Legend for setting PB-AQUA-S

A5 - PB-AQUA-S..., Plenum Box (accessory)

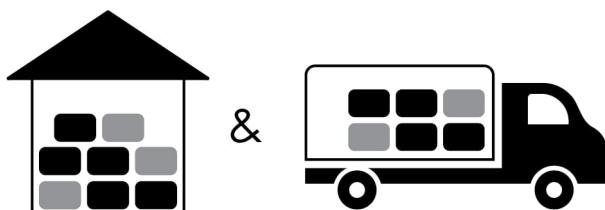
A5.3 - Regulation

P2 - Slot dividing profile

Cleaning



Transport, Storage and Operation



 °C -40 °C ... +50 °C

 % ≤ 95%



 °C -20 °C ... +70 °C

 % ≤ 95%

Supplement

Any deviations from the technical specifications contained herein and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters.

Current information on all products is available on design.systemair.com.



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