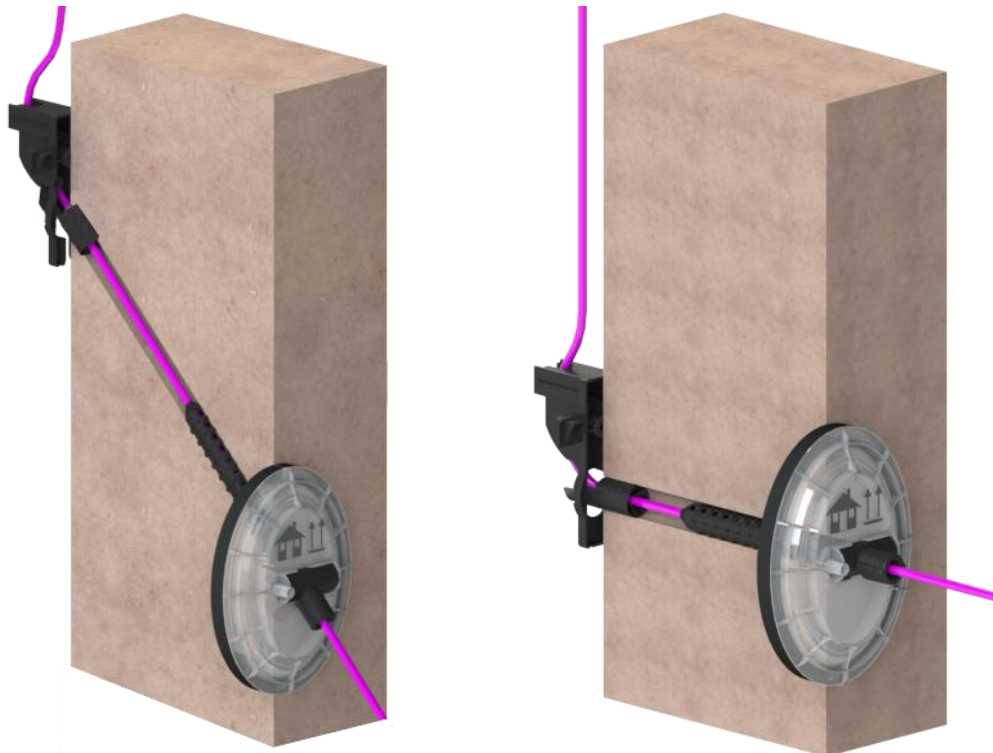# Installation Instructions

- VarioPipe Plus optical fibre building cable & pipe entry system;
- VarioPipe Plus optical fibre building cable & pipe entry system with cover;
- VarioPipe Plus optical fibre building cable & pipe entry system with adapter for cartridge gun

for wall thicknesses from 200 mm;
for core drill hole ø 25 mm;
for media cables: 1x copper or optical fibre cable ø 6–13 mm
                          1x SpeedNet pipe ø 7–12 mm
                          1x oval cable 4/8 mm
                          2x micro-duct pipes ø 7 mm

Contents

1   General information

> **Note!**
> Any person involved in the installation, operation and repair of the product must first read, understand and follow these instructions. We accept no liability for damage and operating malfunctions caused by failure to comply with these instructions.

In the interest of further development, we reserve the right to change individual assemblies and accessories as considered necessary for enhanced safety and performance improvements, while preserving the main features.

The copyright of these instructions remains with Langmatz GmbH.

2   Safety information

The product complies with the state-of-the-art technology at the time of printing and is delivered in an operationally safe condition.
Unauthorised modifications, particularly to safety-related parts, are prohibited.
Langmatz GmbH warns against the misuse of the product.

The operator is responsible for installing, operating and maintaining the fixtures.

The operator is responsible for the following:
- Preventing danger to the life and limb of users and third parties.
- Ensuring safe operation.
- Preventing downtime and environmental impact due to incorrect handling.
- Ensuring that protective clothing is worn when working with or on the product.

Use of a damaged product is prohibited. Please contact the hotline (see section 13 Contact).

> **Note!**
> Comply with applicable occupational safety and environmental protection regulations during installation, operation, maintenance, and repair.

> **Warning!**
> Note the following when using L100 sealing foam:
> As from 24/08/2023, appropriate training must be given before industrial or commercial use – for link, see cartridge imprint or section 12.
> In general, the safety instructions on the cartridge must be observed!

3   Product description

The wall duct is used for the gas and water-tight sealing of copper or optical fibre cables inserted into buildings and can be used for wall thicknesses
of from 200 mm.

Properties:

- Gas and water-tight to 1 bar | Water impact class to DIN 18533;
- W1.1-E / W1.2-E / W2.1-E;
- Waterproof concrete stress class 1 to DAfStb 2017;
- Waterproof concrete stress class 2 to DAfStb 2017;
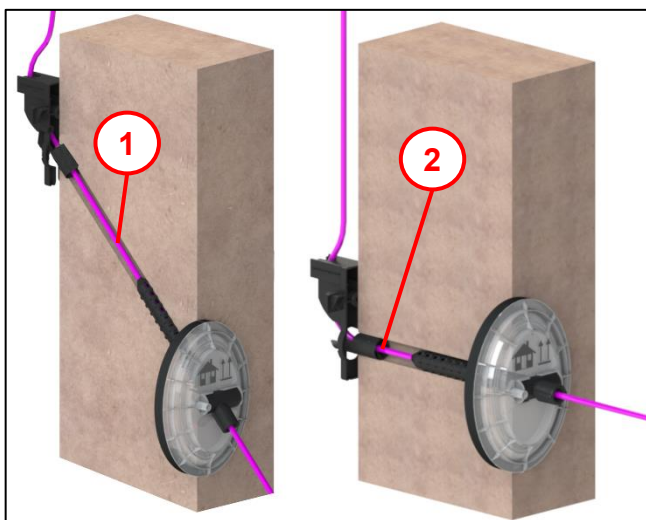
3.1   Installation options

Fig. 1

The system can be installed straight at 90° **(2)** or inclined **(1)** up to 45° upwards. Installation is identical in both cases.

Straight installation is illustrated in these instructions.
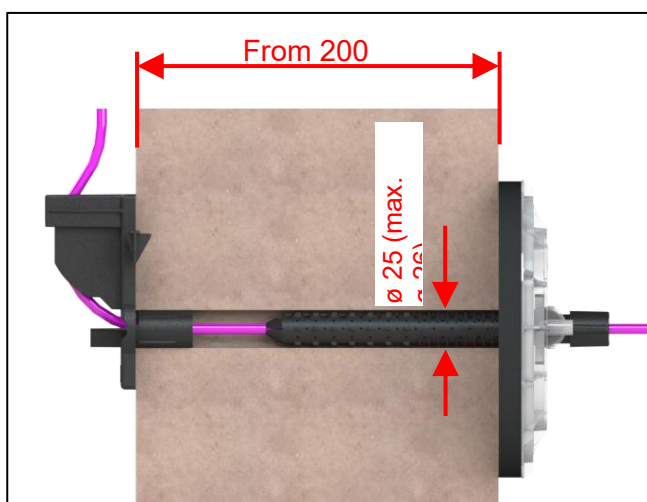
3.2   Dimensions

From 200

ø 25 (max. ø 26)

Fig. 2

- For wall thicknesses of from 200 mm
- Core hole ø 25 mm (max. ø 26 mm)

4   Package includes

Fig. 3

Item 1 Guide element

Item 2 Foam pipe

Item 3 Outside flange

Item 4 Universal seal ø 6 – 13 mm

Item 5 Dust guard for SpeedNet pipe

Item 6 Dowel nail 6 x 40 mm

Item 7 Universal seal 2x ø 7 mm

Item 8 Work gloves

Item 9 Cover (depending on version)

Item 10 L100 sealing foam cartridge and mixing pipe

Item 11 Self-adhesive foam tape

5   Required tools

Fig. 4

2-part cartridge gun
(e.g. Ponal PP 6) or standard cartridge gun with adapter **(1)** for 2-part cartridges (see section 7 Accessories for this).

<u>Not shown:</u>
- Rubber mallet
- Drill ø 25 mm
- Phillips screwdriver
  Pozidriv size 2

5

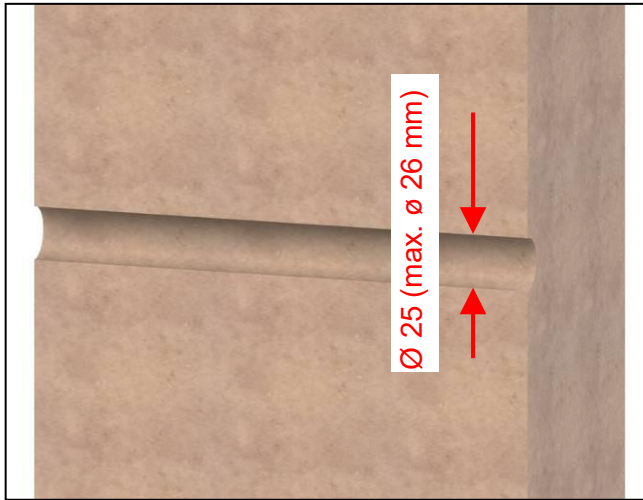# 6   Installation

6.1   Drill hole

Ø 25 (max. ø 26 mm)

Fig. 5

- The substrate must be clean, largely dry, free of dust and grease, and there should be no standing water.
- Drill a ø 25 mm (max. ø 26 mm) hole from the inside to the outside.
- At the drill exit point (if present), cut out and remove thermal insulation (polystyrene or rigid foam panels) including any dimpled sheet that may be present.
- Caution!
  Smooth any uneven exterior masonry around the contact surface of the self-adhesive foam tape or alternatively finish it smoothly with quick-setting mortar.
  Ensure that the entire surface of the outside flange is in contact with the self-adhesive foam tape.
- Restore plaster chipping or spalling > 50 mm as well as damaged bitumen coatings in "tanked walls" that are not covered completely by the outside flange of the wall duct.
  Note: The bitumen coating must be touched up in accordance with DIN 18533. Ensure a seamless join to the existing coating.
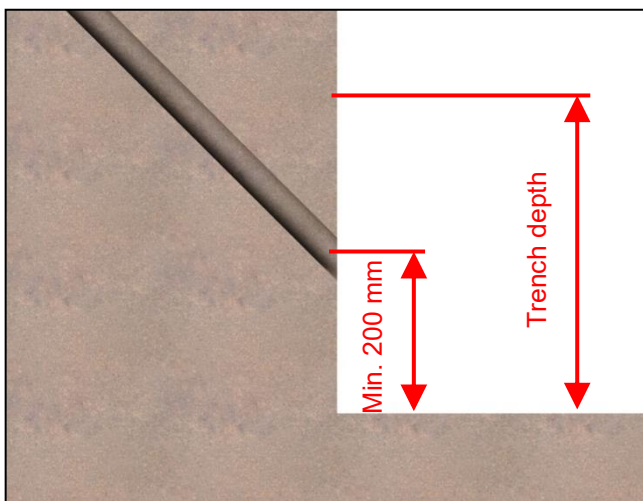

Min. 200 mm

Trench depth

Fig. 6

Note for inclined installation:
Trench depth = wall hole exit + 200 mm.
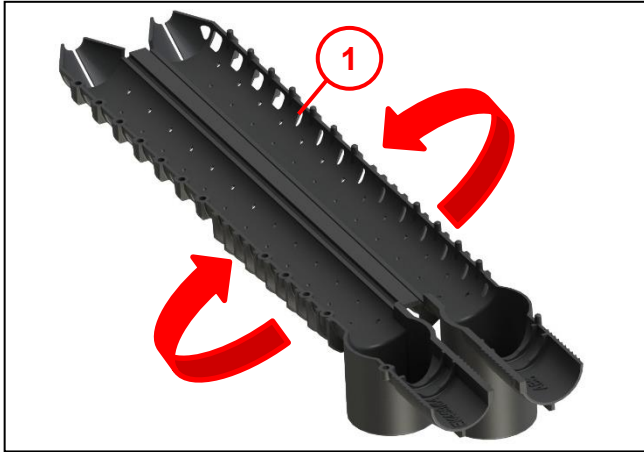This clearance is needed for installation.

6.2 Preparing the wall duct

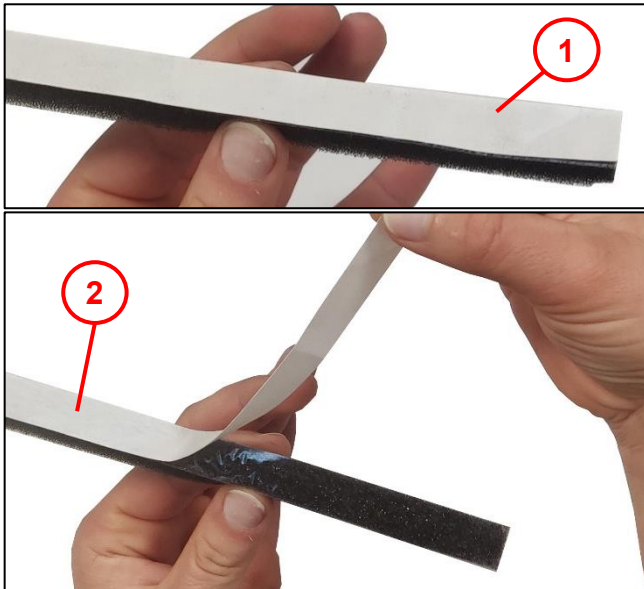**Fig. 7**

- Fold together the foam pipe **(1)**.

Fig. 8

- Gently press together the foam tape **(1)**.
- Remove the separating film **(2)**.

  Note: refer also to the installation instructions in the bag!

Fig. 9

- Stick the self-adhesive foam tape **(3)** around the outside flange **(1)**.
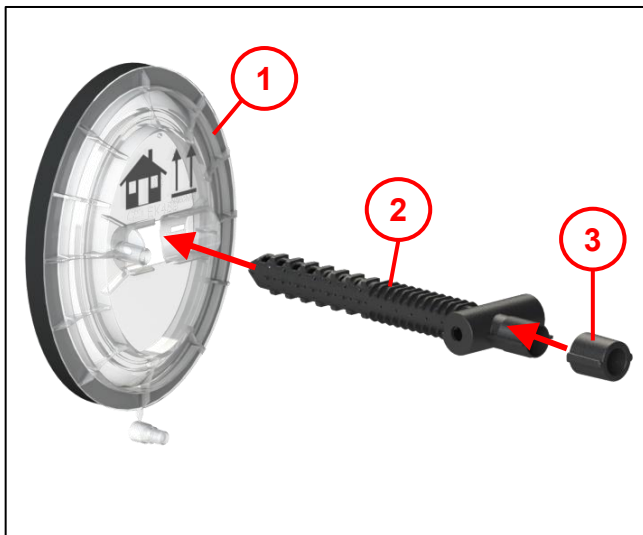 **Note:** stick it starting at the top (as shown) along the inner edge **(2)**.

Fig. 10

- Place the universal seal ø 6–13 mm or 2x ø 7 mm **(3)** on the foam pipe **(2)**.
- Insert the foam pipe into the outside flange **(1)**.
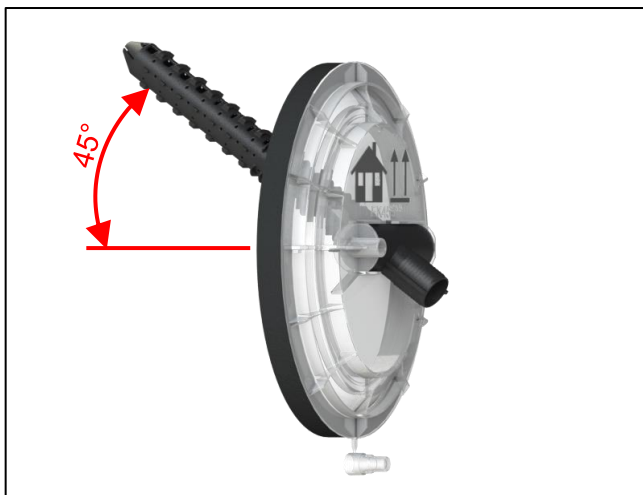

45°

Fig. 11
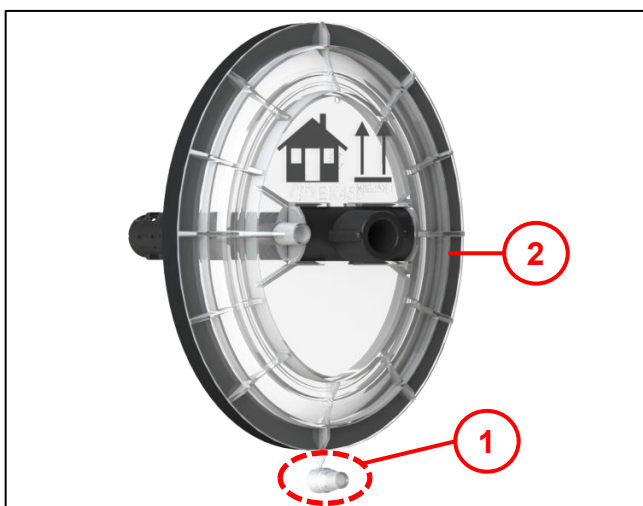
Inclined installation is possible up to 45° upwards.

Fig. 12

- Remove the dust guard **(1)** from the outside flange **(2)**.

6.3   Preparing the media cable

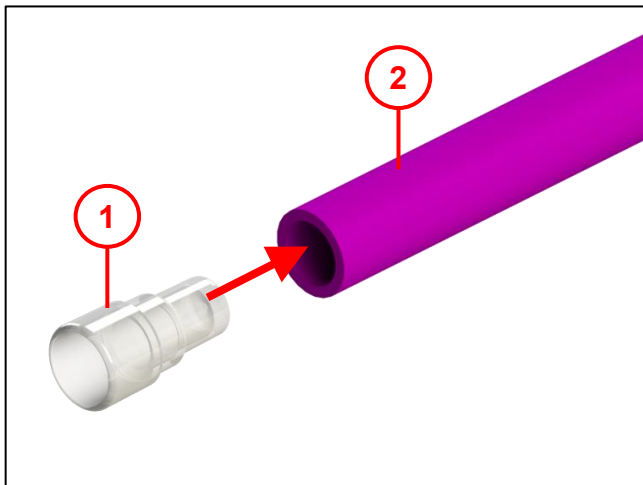**Note:** Clean the micro-duct pipe before use!

Fig. 13

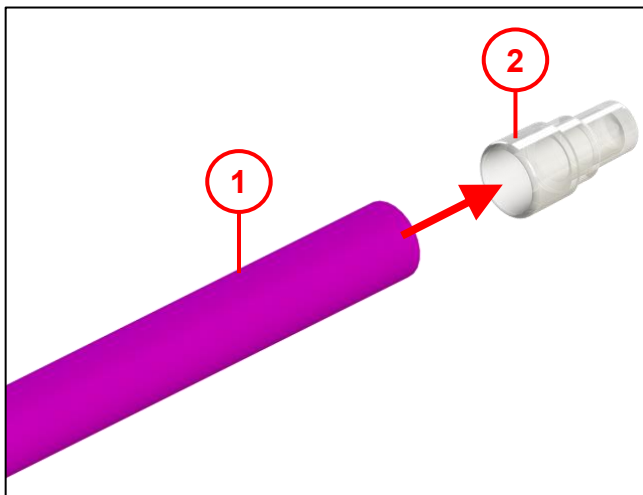- Insert the dust guard **(1)** into the micro-duct pipe ø 12 **(2)**.

Fig. 14

- Insert the micro-duct pipe ø 7 or ø 10 **(1)** into the dust guard **(2)**.
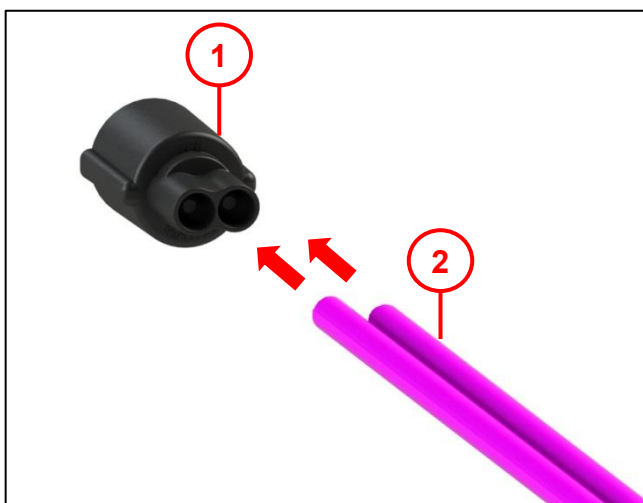

Fig. 15

- When fitted with micro-duct pipes 2x ø 7 mm **(2)**, the dust guard is already integrated in the universal seal **(1)**.
  Note:
  Do not use a separate dust guard here!
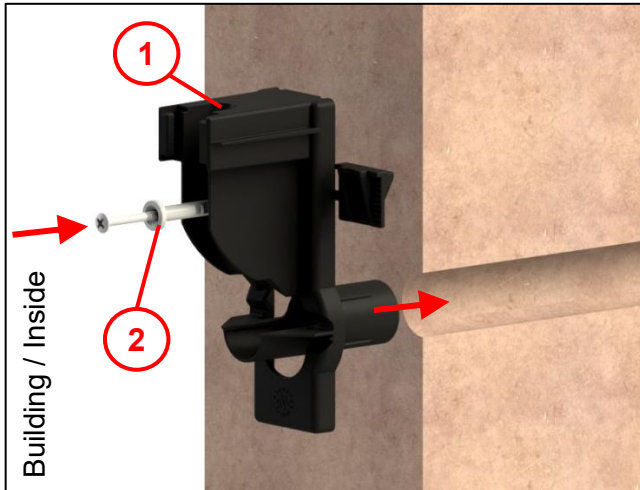
9

6.4 Inserting the wall duct

Fig. 16

Note: with installations just above the base plate, continue with Fig. 18.

- Position the guide element **(1)** at the hole and drive in until the base plate is in contact with the wall.
- Drill a hole ø 6 at least 50 mm deep.
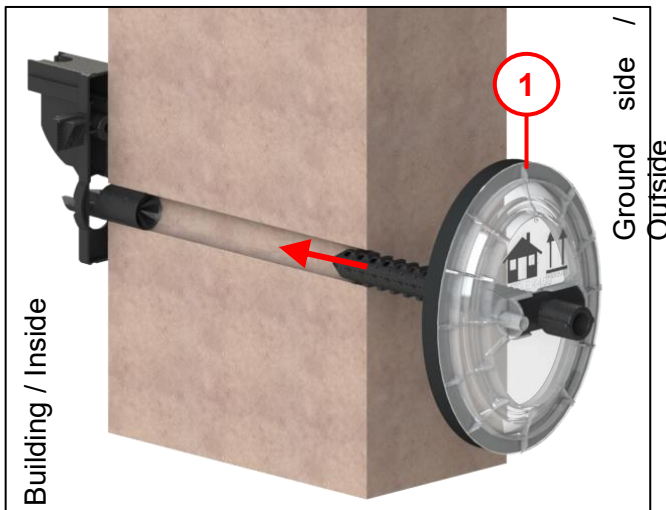- Drive the dowel nail 6x40 mm **(2)** into the wall and tighten.

Fig. 17

- Place the foam pipe with outside flange with foam tape **(1)** into the core hole and insert it as far as the beginning of the snap lug (Note Fig. 20).
- Use a rubber mallet to tap in the foam pipe with outside flange until the outside flange with the foam tape is fully in place.

   Note:
   Alternatively, the guide element **(1)** can also be installed after the outside flange **(2)**, but **Note:** the wall duct must be completely installed before foaming!
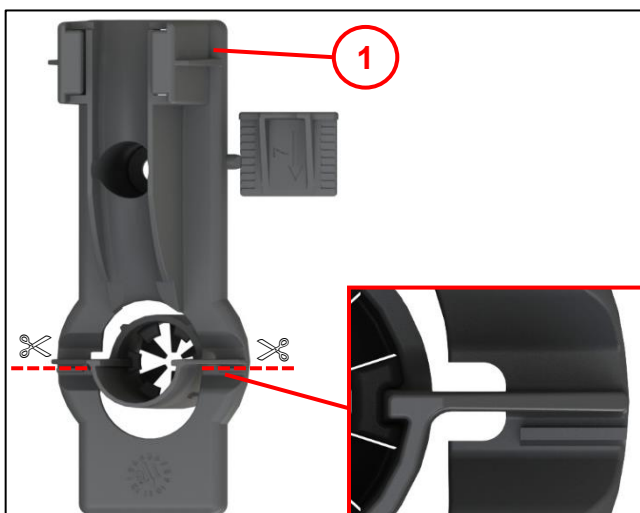
Continue with Fig. 20

Fig. 18

With installations just above the base plate, cut off the lower part of the guide element.

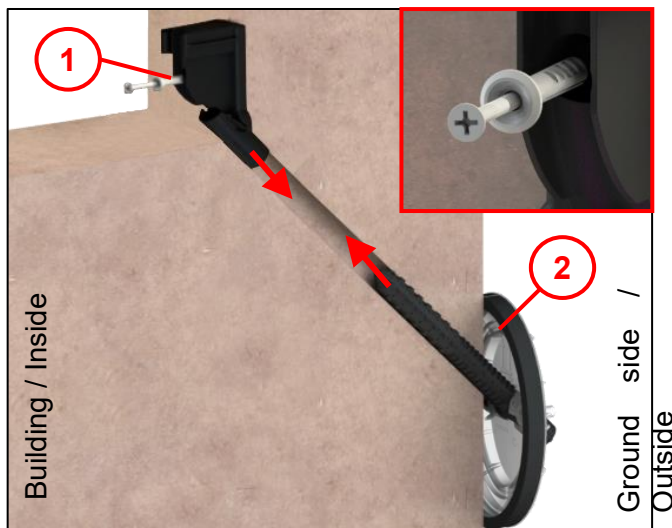- Cut off the guide element **(1)** below the marking ridges.

Fig. 19

- Position the shortened guide element **(1)** at the hole and drive in until the base plate is in contact with the wall.
- Drill a hole ø 6 at least 50 mm deep.
- Drive the dowel nail 6x40 mm **(3)** into the wall and tighten.
- Place the foam pipe and outside flange with foam tape **(2)** into the core hole and insert as far as the beginning of the snap lug.
- Use a rubber mallet to tap in the foam pipe with outside flange until the outside flange with the foam tape is fully in place.

Note:
Alternatively, the guide element **(1)** can also be installed after the outside flange **(2)**, but **Note:** the wall duct must be completely installed before foaming!
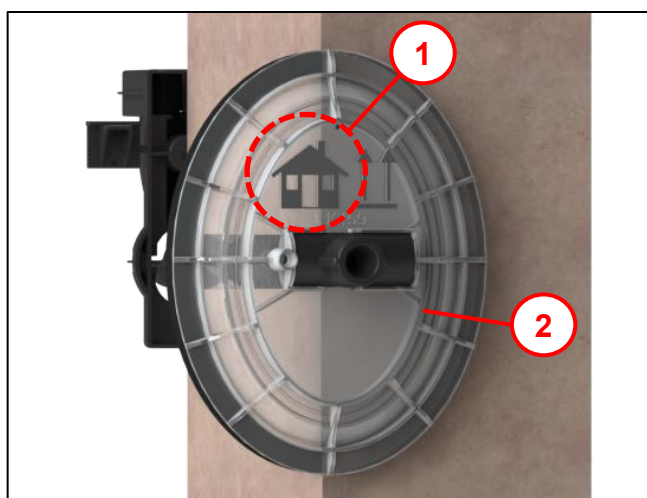

Fig. 20

Note:
When inserting the outside flange **(2)**, pay attention to the direction of installation: install with the "house pointing up" **(1)**.
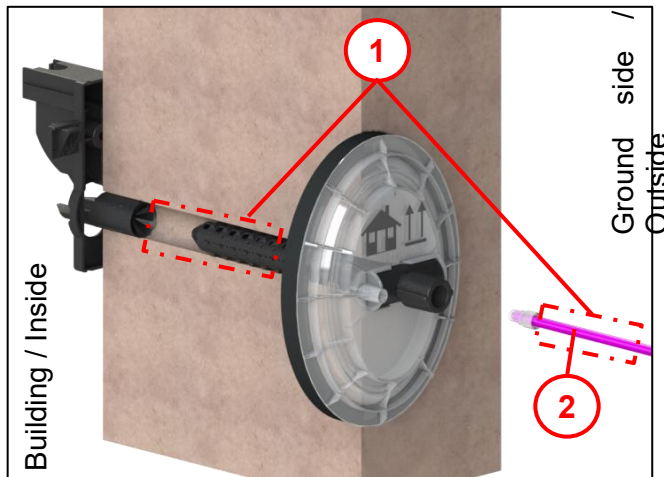
6.5 Inserting the media cable

Fig. 21

Note:
Keep the media cable **(2)** free of grease in the foaming area **(1)**.
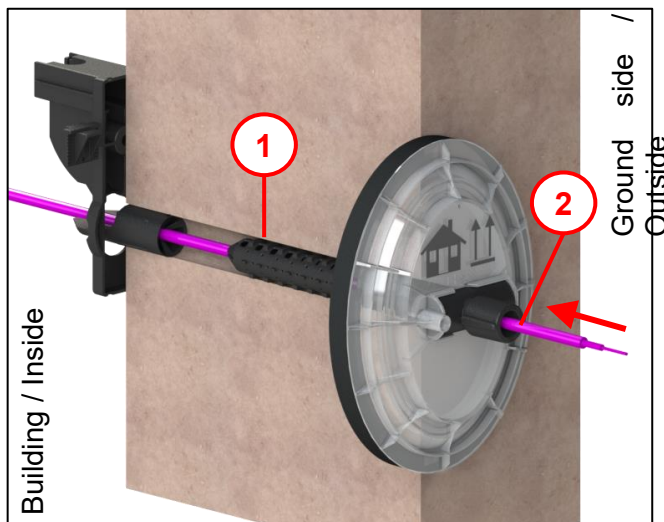

Fig. 22

- Pull the media cable **(2)** straight and insert it through the foam pipe **(1)** from the ground side.

Note:
Ensure sufficient cable length (on the basement side)! The cable can no longer be pulled further once the L100 sealing foam has been injected.
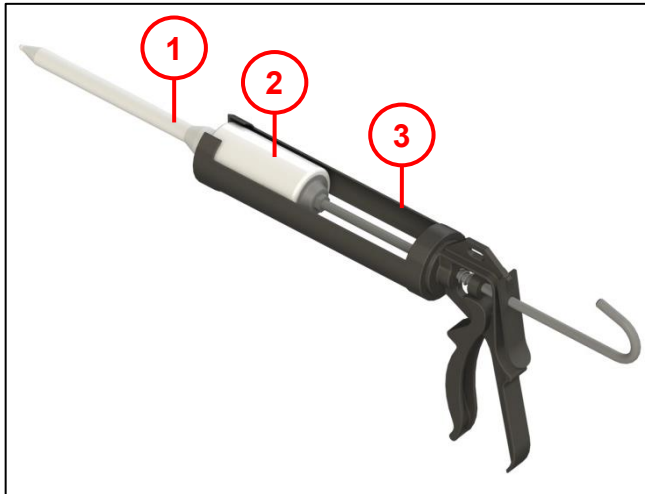
6.6   Injecting the sealing foam

Fig. 23

Note:
  - Reconfiguration is no longer possible after filling with foam!
  - Use a suitable cartridge gun or alternatively
    an adapter (see section 7 Accessories) for the cartridge **(2)**.
    Pay attention to the expiry date! Refer to the cartridge label.
- Wear work gloves.
- Place the cartridge **(2)** in the cartridge gun **(3)**.
- Screw on the mixing nozzle **(1)**.
- Fill the mixing nozzle using the cartridge gun.
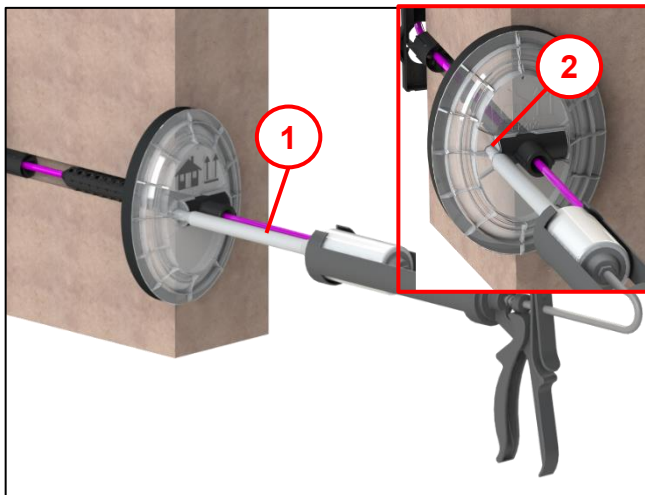- Squirt the next two strokes into the packaging bag.

Fig. 24

- Insert the mixing nozzle **(1)** into the backfill opening **(2)**.
- Inject the L100 sealing foam and always **empty the cartridge completely**.
- Leave the mixing nozzle with cartridge in the backfill opening for a few minutes (for disposal, see section 11).
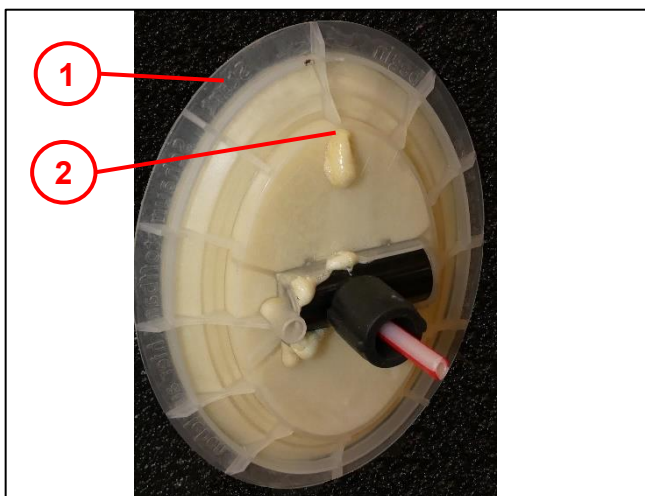

Fig. 25

The optical fibre building cable & pipe entry system is correctly installed when there is foam completely around the outside flange **(1)** and foam is escaping from the exit hole **(2)**.

Note: escaping foam is not serious and can be disposed off with normal household waste.
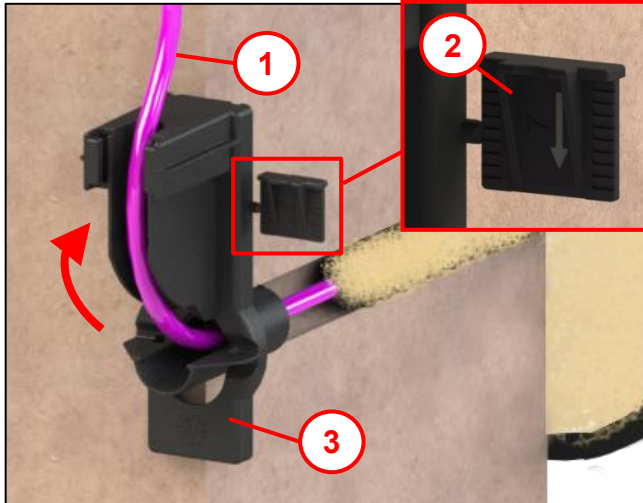
6.7   Continuing the media cable

Fig. 26

Note:
- Before continuing, remove the dust guard and, if necessary, use a suitable tool to clip off the micro-duct pipe.
- Only continue the media cable upwards **after** the fibres have been blown in!

- Guide the media cable **(1)** over the guide element **(3)** to the wall.
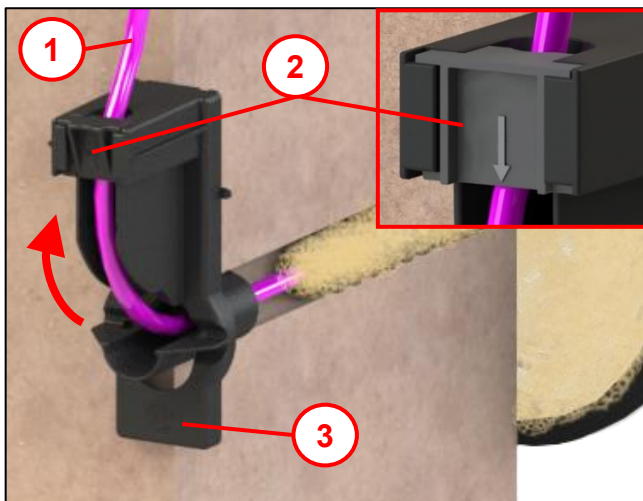- Remove the wedge **(2)** from the guide element.

Fig. 27

- Secure the media cable **(1)** with the wedge **(2)**.
- Insert the wedge flush into the guide element **(3)** from above.
  Caution:
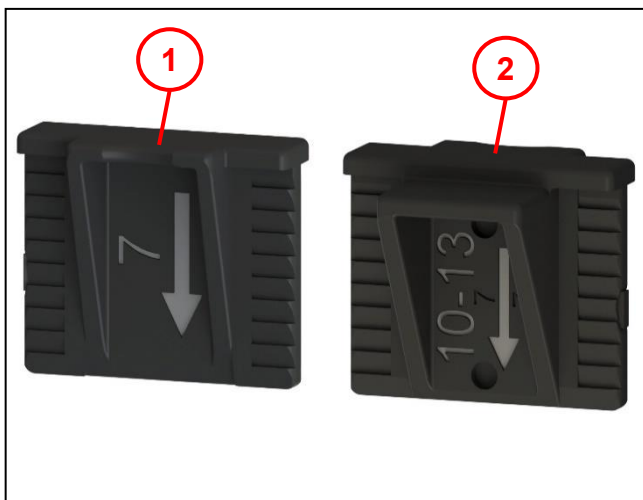 Pay attention to the direction of installation of the wedge, see Fig. 28.

Fig. 28

Item 1   For media cable ø 7 mm

Item 2   For media cable ø 10–13 mm

6.8 Cover (optional)
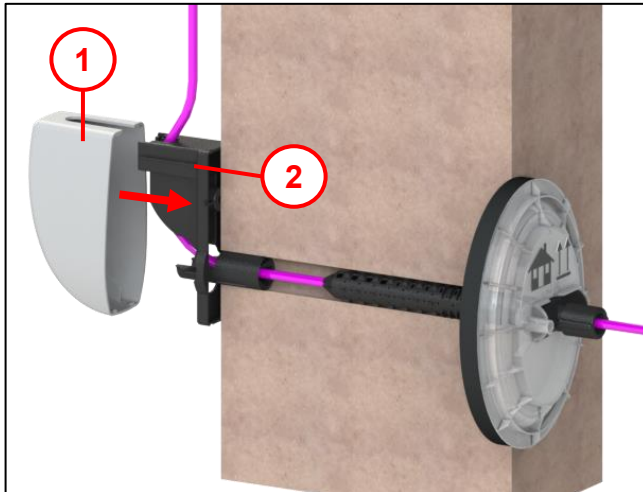
Fig. 29

- Place the cover **(1)** on the guide element **(2)**.

7 Accessories

Article number	Designation	Figure
700732500/012	Accessories kit with adapter for cartridge gun Packaging unit: 12x	
094592020/012	Cover for wall duct Packaging unit: 12x	

8   Material defects

Langmatz GmbH assumes liability for material defects in the product
for 24 months as per Section 434 BGB (German Civil Code), starting from the date on the purchase receipt.
Within the scope of liability, all parts that become damaged due to manufacturing faults or material defects will be replaced or repaired free of charge.
The purchaser must report any deficiency complaints immediately in writing.
Claims by the purchaser for damages due to material defects or for whatever legal reason will not be accepted.
Any damage or failure caused by the following are also excluded from liability
- Incorrect use,
- Natural wear and tear
- Intervention by third parties.
We accept no liability for damage caused by force majeure or transport.
Repairs due to a complaint about a defect do not extend the warranty period for the replaced parts or for the product.
This product conforms to the latest state-of-the-art technology. Nevertheless, if you experience any problems with it, please contact our hotline (see section 13 Contact).

9   Quality management

The Langmatz GmbH quality management system is certified to DIN EN ISO 9001.

10   Disclaimer/Warranty

The information in this technical document is presented appropriately and correctly in compliance with the technical regulations, and to the best of our knowledge. However, this does not confer any guarantee of particular characteristics. In this context, the company that operates the products supplied by Langmatz GmbH is expressly obliged to decide, based on its own judgement, whether the products are suitable and appropriate for the application or use being considered. The product liability accepted by Langmatz GmbH relates exclusively to our conditions of sale, delivery, and payment. Langmatz GmbH accepts no liability on the basis of random, indirect and resultant consequential damage, or of any damage attributable to any use of the product other than its intended purpose as described.

11   Disposal

Dispose of the contents and containers in accordance with all local, regional, national and international laws.

12 Safety information for L100 sealing foam

Isocyanate training

https://isopa-aisbl.idloom.events/048-de

T048: 048 Professional application of adhesives and sealants / Small packaging at ambient temperature

Safety information sheet

https://www.q-wa.net/doku/Dichtschaum%20L%20100

13 Contact

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