

# MOUNTING DIRECTION

### **GLAVA LAMELLA MAT**









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## 1.Duct insulation - straight ducts



1. The insulation length for circular ducts ia cutting by the following formula: Cutting length =  $(\pi xd) + 50 \rightarrow 100$ mm overlap. Remove the insulation under the overlap. d = duct diameter +  $(2 \times 100)$  insulation thickness)



2. Longitudinal overlap are stapled with special stapler, BOSTITCH T5. Staple distance is approximately 100mm.



3. Then GLAVA VVS Tape 75M overlays the the joints and the staple so that the perforated surface by stapling are covered and done diffusion tight. Then place the tape around the duct to cover the joints to adjacent insulation. The tape shall be non-reinforced, fire-rated and diffusion. The tape should not be stretched during installation. The surface must be dry and free of dust, grease, etc.



4. The surface of the tape should be rapid over the grid from the alufoil of Lamella mat until the grid is visible through the alutap. Only then, the tape is properly installed.

The tape application temperature: 0°C to +55°C. Best adhesion is achieved by storing the tape at room temperature 18-20°C for one day before installation.

See also the separate instructions for the tape at Glavas website; www.glava.no

5. On rectangular ducts customize length by placing the mat around the duct. Remember to take into account the overlap of 50 → 100mm where the insulation is removed and then stapled and taped. On the underside of the duct and vertical sides the insulation is fixed by pins or similar. Pin distance approx. 300mm.

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### 2.Duct insulation - bend

Insulate first the bends, T-pieces, dimension changes etc. and then insulate the straight ducts

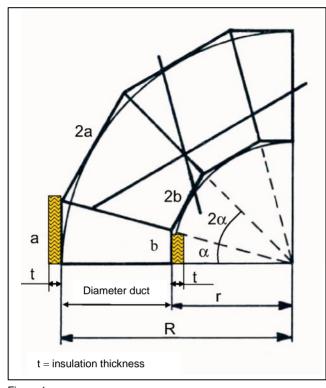


Figure 1

Figure 1 shows a 90° bend with four segments, which consists of two center-segments and two end-segments. The dimensions **a** and **b** must be calculated so that the mat can be constructed as shown in figure 2. You You read the tangent value from Table 1 below.

a = Tangent Value x (R + 1 x insulation thickness)b = Tangent Value x (r - 1 x insulation thickness)

(R = r + duct diameter)

If a bend is in more than 90°, you must read the cutting angle ( $\alpha$ ) in table 1 to find the right tangent value. For example, a 45° bend insulated with 2 segments will have a cutting angle  $\alpha$  = 22.5°. Table 1 show the tangent value being 0,41 and you can then calculate a and b in the above formula and construct two end-segments.

For seam-welded and pressed (smooth) 90° bend up to Ø250mm it is common to insulate in three segments (One center-segment and 2 end-segments).

Segments 90° bend	Cutting- angle, $\alpha$	Tangent- value	Center-segment + end-segments
2	45°	1,00	0 + 2
3	22,5°	0,41	1 + 2
4	15°	0,27	2 + 2
5	11,25°	0,20	3 + 2

Table 1

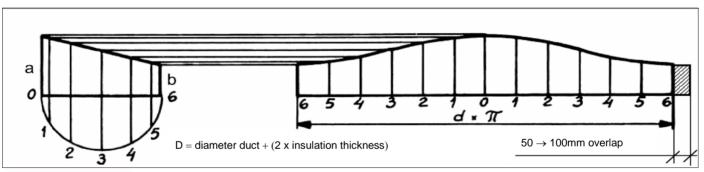


Figure 2

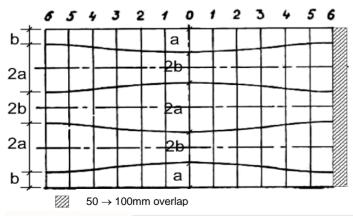


Figure 3

Figure 3 shows how the marking should be performed to minimize waste of material. Remove first the 50 -> 100mm insulation overlap. The marking begins by drawing an end-segment, then follow the center-segment(s) and then the other end-segment.

#### **GLAVA AS**

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