

Rectangular ducting 2025



## About the products

#### General

The present catalogue contains information materials about rectangular ducts and fittings produced by us. The products are made according to standard EVS-EN 1505. Standard products are made of hot-dip galvanized sheet steel. We also make products of other materials, if necessary. Products made of stainless, acid-proof or zinc-magnesium coated steel sheet have better protection against corrosion and are more durable. If necessary, we also produce ducts and fittings not available in the catalogue, according to drawings.

#### Measurements

The nominal dimension of rectangular duct and fittings are inner dimension of the sides of the pipe a and b in millimetres. a marks the visible side. For the reducer of rectangular duct, the dimensions of the smaller end are shown with letters c and d, where c marks the visible side. Dimension I marks the useful length which influences the total length of the channel system upon installation. It is possible to order the duct and the fittings with side dimension150–2500 mm.

#### **Tolerances**

L tolerance of the straight ventilation duct is  $\pm 0.005$ L Angle tolerance  $\pm 2^{\circ}$ . Tolerances of values a, b, c, d, e and s range

Tolerances of values a, b, c, d, e and s range 0-4 mm.

### **Joinings**

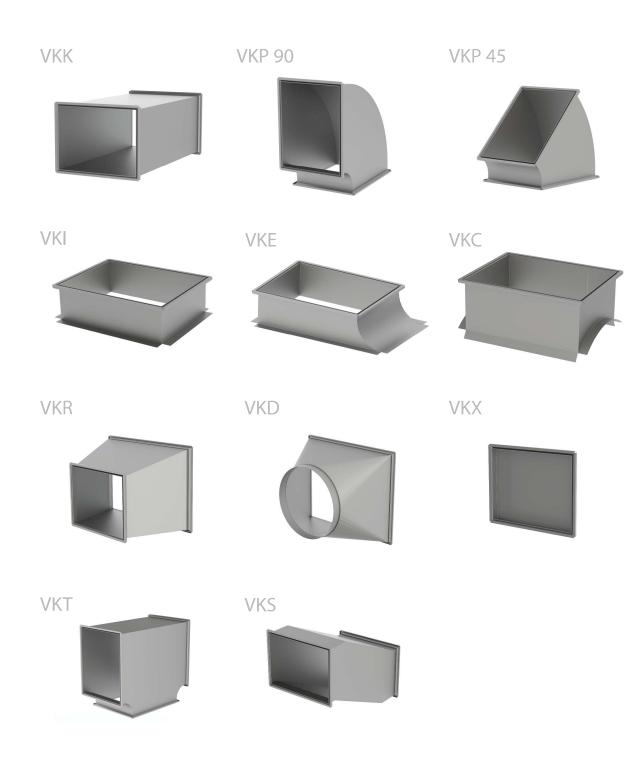
For joining the ventilation ducts and the fittings, the products are supplied with a joining profile (Z-profile is used as a standard solution). It is also possible to order products with europrofile and flange profile. If a ventilation system is mounted according to the installation instruction, it is possible to achieve the following tightness with various fittings of the ducting of Metaline by different connection methods:

- Z-profile connection, class C
- euro profile connection, class D
- flange connection, class D (welded ducting)



# Rectangular ducting

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## **VKK** duct

#### Description

VKK rectangular duct where both ends are supplied with a joining profile (z-profile) as a standard. Depending on the size of the duct, it is stiffened with rods and corner bits.

1. Duct is stiffened with rods and corner bits (standard):

- 600 < a,b < 1200 1 rod and 1 corner bit at both ends
- 1200 ≤a,b ≤1600 2 rods and 2 corner bits at both ends
- 1600 < a,b ≤ 2400 3 rods and 2 corner bits at both ends
- 2. U-corrugated duct has outside stiffening profiles with installation height of 20 mm.

a,b ≤ 600

 $600 < a,b \le 1200$ 

a,b > 1200

### Marking of the product

#### 1. Marking

#### 2. Material

-ZN: Galvanized steel (standard, not marked)

-ZM: Zinc-magnesium coated steel

-R: Stainless steel

-H: Acid-proof steel

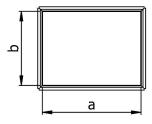
#### 3. a-Width

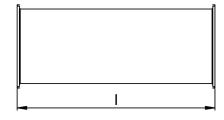
#### 4. b - Height

#### 5. I - Length

if a or b <= 1200, then I = 1250 or 2000mm. if a or b > 1200, then I = 1250 mm

VKK	-R	500	х	300	L-1250
1	2	3		4	5









## VKP 90° bend

### Kirjeldus

Both ends of VKP bend are supplied with a joining profile (z-profile). If the length of side a > 600 mm, bend is stiffened with a guide blade. Standard radius r = 125 mm. Standard angle  $\alpha$  = 90 °.

### Marking of the product

- 1. Marking
- 2. Material

-ZN: Galvanized steel (standard, not marked)

-ZM: Zinc-magnesium coated steel

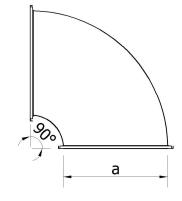
-R: Stainless steel

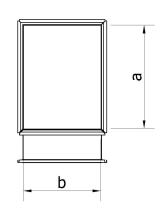
-H: Acid-proof steel

3. Angle - 90°

4. a - Form side b - Curved side

VKP	-R	-90	500	х	300
1	2	3	4		5









## VKP 45° bend

### Description

Both ends of VKP bend are supplied with a joining profile (z-profile). Standard radius r=125 mm. Standard angle  $\alpha=45$  °.

### Marking of the product

- 1. Marking
- 2. Material

-ZN: Galvanized steel (standard, not marked)

-ZM: Zinc-magnesium coated steel

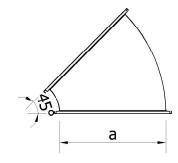
-R: Stainless steel-H: Acid-proof steel

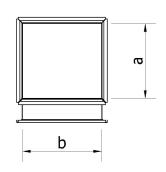
3. Angle - 45°

4. a - Form side

5. b - Curved side

VKP	-R	<b>-</b> 45	500	х	300
1	2	3	4		5









## **VKI** saddle

#### Description

VKI saddle is used for connection to rectangular duct. One end of the saddle is supplied with a joining profile (z-profile). Standard length 125 mm.

### Marking of the product

- 1. Marking
- 2. Material

-ZN: Galvanized steel (standard, not marked)

-ZM: Zinc-magnesium coated steel

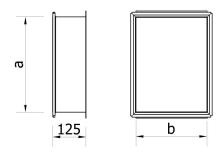
-R: Stainless steel

-H: Acid-proof steel

3. a - Width

4. b - Height

VKI	-R	500	х	300
1	2	3		4







## **VKE** saddle

#### Description

VKE saddle is used for connection to rectangular duct. One end of the saddle is supplied with a joining profile (z-profile). Standard length 125 mm.

### Marking of the product

- 1. Marking
- 2. Material

-ZN: Galvanized steel (standard, not marked)

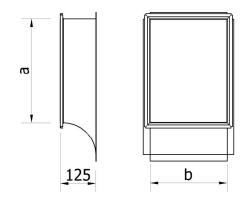
-ZM: Zinc-magnesium coated steel

-R: Stainless steel-H: Acid-proof steel

3. a - Width

4. b - Height

VKE	-R	500	х	300
1	2	3		4







## **VKC** saddle

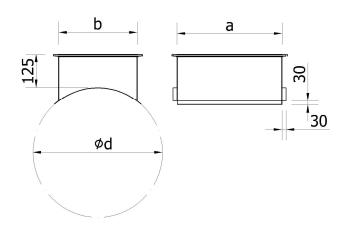
#### Description

VKC saddle is used for connection to circular duct. The rectangular end is provided with joining profile (z-profile). The rounded end has an edge for fixing. Standard length 125 mm.

### Marking of the product

- 1. Marking
- 2. Material
  - -ZN: Galvanized steel (standard, not marked)
  - -ZM: Zinc-magnesium coated steel
  - -R: Stainless steel
  - -H: Acid-proof steel
- 3. a Width
- 4. b Height
- 5. d Duct diameter

VKC	-R	500	х	300	/	315
1	2	3		4		5







## VKR reducer r/r

#### Description

VKR reducer are used to connect rectangular duct of different sizes. The ends of the reducer are supplied with a joining profile (z-profile).

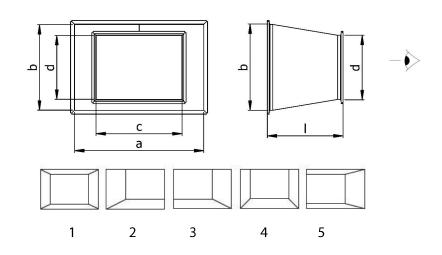
Standard length 300 mm, if a or b < 800 mm.

Standard length 500 mm, if a or b > 800 mm.

### Marking of the product

- 1. Marking
- 2. Material
  - -ZN: Galvanized steel (standard, not marked)
  - -ZM: Zinc-magnesium coated steel
  - -R: Stainless steel
  - -H: Acid-proof steel
- 3. a-Width
- 4. b Height
- 5. c-Width
- 6. d Height
- 7. Eccentricity: 1,2,3,4,5
- 8. I Length

VKR	-R	500	х	300	/400	х	200	-1	- 300
1	2	3		4	5		6	7	8







## VKD reducer r/c

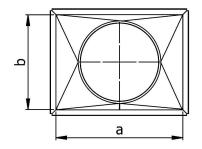
#### Description

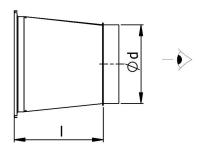
VKD reducer are used to connect rectangular and circular ducts. The rectangular end of the reducer is supplied with a joining profile (z-profile) and the circular end is with safe seal. Standard length 300 mm, if a or b < 800 mm. Standard length 500 mm, if or b > 800 mm.

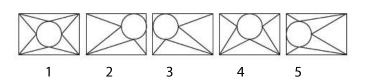
### Marking of the product

- 1. Marking
- 2. Material
  - -ZN: Galvanized steel (standard, not marked)
  - -ZM: Zinc-magnesium coated steel
  - -R: Stainless steel
  - -H: Acid-proof steel
- 3. a Width
- 4. b Height
- 5. d Diameter
- 6. Eccentricity 1,2,3,4,5
- 7. I Length

VKD	-R	500	х	300	/315	-1	-300
1	2	3		4	5	6	7











## VKX end cover

#### Description

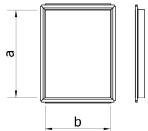
VKX end cover is used as and cover in duct.

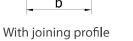
The standard version of the product is without a connection strip.

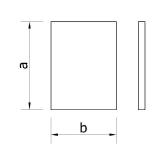
### Marking of the product

- 1. Marking
- 2. Material
  - -ZN: Galvanized steel (standard, not marked)
  - -ZM: Zinc-magnesium coated steel
  - -R: Stainless steel
  - -H: Acid-proof steel
- 3. a Width
- 4. b Height

VKX	-R	500	х	500
1	2	3		4







Standard - without joining profile





# VKT T-piece

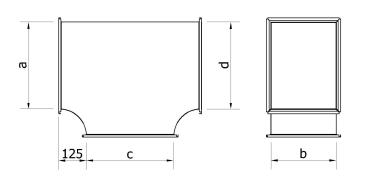
### Description

VKT T-piece is used to divide a duct with an angle of 90°. The ends of the T-piece are supplied with a joining profile (z-profile).

### Marking of the product

- 1. Marking
- 2. Materjal
  - -ZN: Galvanized steel (standard, not marked)
  - -ZM: Zinc-magnesium coated steel
  - -R: Stainless steel
  - -H: Acid-proof steel
- 3. a Width
- 4. b Height
- 5. c Height
- 6. d Height

VKT	-R	500	х	300	/400	/600
1	2	3		4	5	6







## **VKS S-bend**

#### Description

VKS S-bend is used for deflections of the duct system, for example where ducts cross. Both ends of the S-bend are supplied with a joining profile (z-profile). In order to ensure the required air flow, it is recommended to choose suitable measurements for length I and offset s.

### Marking of the product

- 1. Marking
- 2. Material

-ZN: Galvanized steel (standard, not marked)

-ZM: Zinc-magnesium coated steel

-R: Stainless steel-H: Acid-proof steel

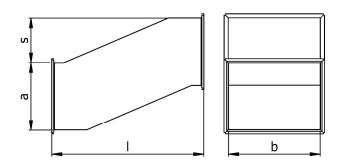
3. a - Height

4. b-Width

5. s - Shift

6. I - Length

VKS	-R	500	х	300	-50	-300
1	2	3		4	5	6



# Metaline OÜ

Marja 7, 10617 Tallinn ESTONIA

www.metaline.ee