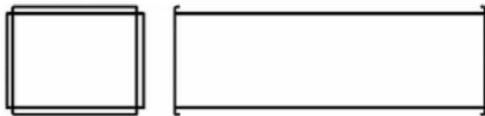


# Smoke ducts, suspensions and fastening materials

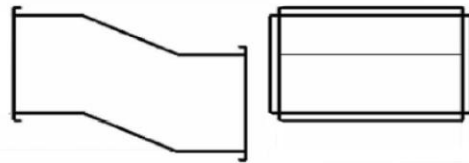
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## Smoke duct sections

1. Square duct



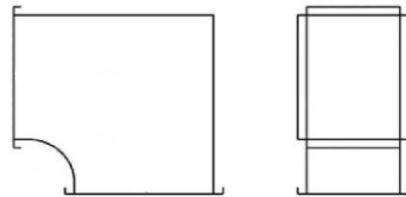
2. S Bends



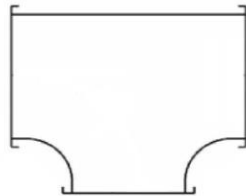
3. Taper



4. Bends



5. T-piece



6. Compensator



7. Collar



8. End cover



## 1. Square duct – Technical data

### Cross section area $A_c$ (m<sup>2</sup>)

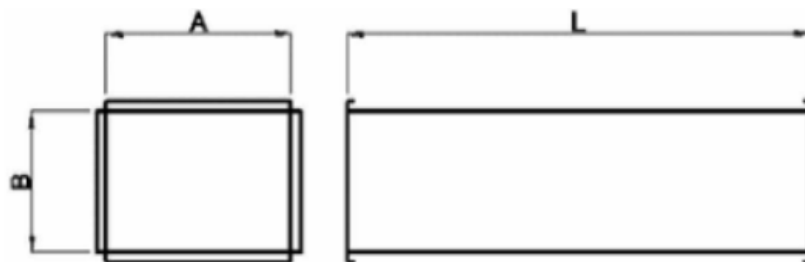
$$A_c = a \times b$$

b/a	200	250	300	400	500	600	800	1000	1200
100	0,02	0,03	0,03	0,04					
150	0,03	0,04	0,05	0,06	0,08	0,09			
200	0,04	0,05	0,06	0,08	0,10	0,12	0,16		
250		0,06	0,08	0,10	0,13	0,15	0,20	0,25	
300			0,09	0,12	0,15	0,18	0,24	0,30	0,36
400				0,16	0,20	0,24	0,32	0,40	0,48
500					0,25	0,30	0,40	0,50	0,60
600						0,36	0,48	0,60	0,72
800							0,64	0,60	0,96
1000								1,00	1,20

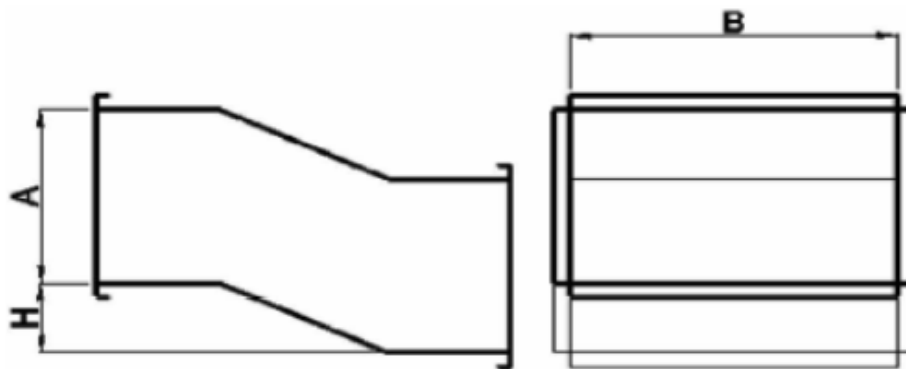
### Circumference $O$ (m<sup>2</sup>)

$$O = 2 \times (a+b)$$

b/a	200	250	300	400	500	600	800	1000	1200
100	0,6	0,7	0,8	1,0					
150	0,7	0,8	0,9	1,1	1,3	1,5			
200	0,8	0,9	1,0	1,2	1,4	1,6	2,0		
250		1,0	1,1	1,3	1,5	1,7	2,1	2,5	
300			1,2	1,4	1,6	1,8	2,2	2,6	3,0
400				1,6	1,8	2,0	2,4	2,8	3,2
500					2,0	2,2	2,6	3,0	3,4
600						2,4	2,8	3,2	3,6
800							3,2	3,6	4,0
1000								4,0	4,4



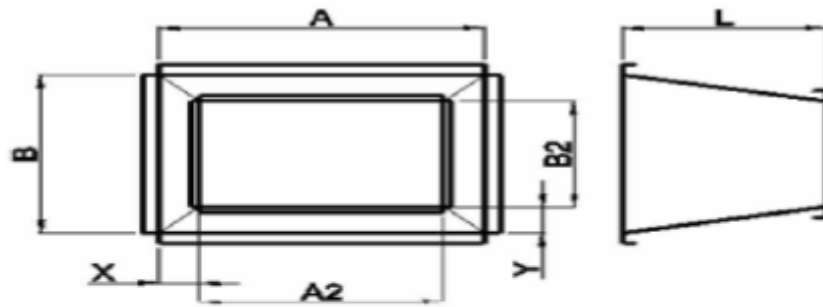
## 2. S-Bends



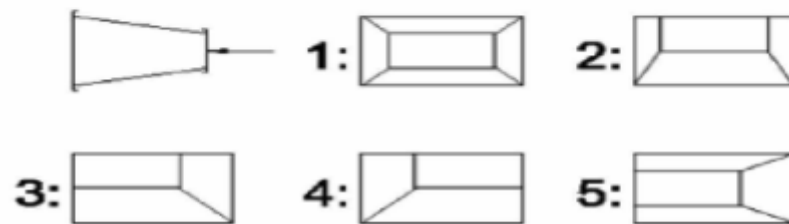
A, Length & H in mm

A	Length	H
100	400	300
150	400	300
200	400	300
250	400	300
300	500	300
350	500	300
400	600	400
450	600	400
500	600	400
600	700	400
700	800	500
800	900	500
900	1000	500
1000	1100	500

### 3. Taper



**Sijainti:**



A & Length in mm

A	Length
100	300
150	300
200	300
250	300
300	300
350	300
400	450
450	450
500	450
600	450
700	450
800	600
900	600
1000	600

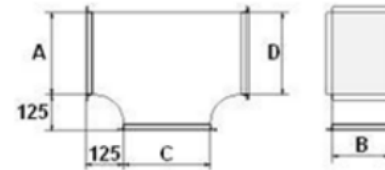
#### 4. Bends

Standard bend lengths are 125 mm with angles 90°, 60°, 45° and 15°. Other angles and lengths can also be ordered



#### 5. T-piece

Standard design  $l_1 = l_2 = l_3 = 125$  mm

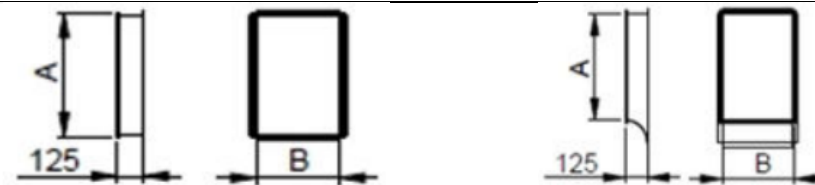


Compensator is CE marked and made by ETS Nord Oy

#### 6. Compensator

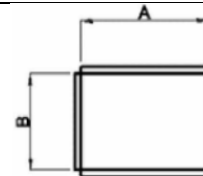
#### 7. Collar

The collar is used for connection to rectangular duct.



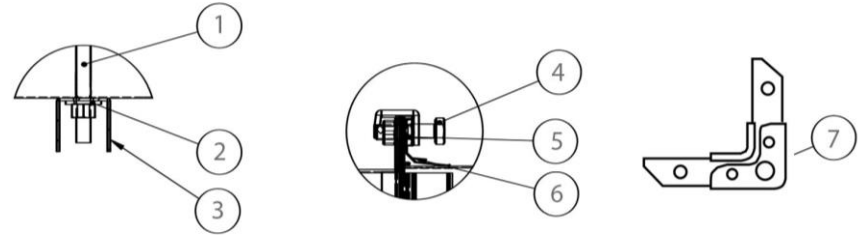
#### 8. End cover

The end cover is used as an end cover of a duct.



## Suspensions and fastening materials

Fire resistant sealant must be applied 1) on the entire perimeter of connecting flange, 2) flange corners and 3) places where the stiffeners are connected to the duct. Distance between joint clamps should not exceed 200 mm. Ducts shall be connected by M10 bolts, washers and nuts.



### Full material listing

Materiaali	Tarkennus
Pelti	DX51D+Z275 0,9
Mutterit	M10 DIN 934 zinc coated
Mutterit	M8 DIN 934 zinc coated
Kuusioruuvit	M10 DIN 933 zinc coated
Niitit	3.2x9.9 ST/ST Multigrip
Kierretanko	M8 x 200mm
Aluslevyt	M8 DIN9021 zinc coated
U-kisko	U-kisko 30x30x2 2M
Nurkkaliitin	H 30 kulmaliitin
Sinkilät	DW Kiinnike, Euro
Listat	DW/EU 30 Liitoslista 8331424
Kompensaattori	ECR-T Compensator (CE -marked)
Palosilikoni	FFRS - Elastomeric fire-resistant sealant