

# INSULATED CHIMNEYS

## TYPE SLIM NEGATIVE PRESSURE

Example of marking elements manufactured according to the standard EN 1856-1

	EN 1856-1	T450	N1	W	V <sub>m</sub>	L30050	G100
Standard number	↓						
Maximum working temperature		↓					
Pressure class (N: negative pressure, P: positive pressure)			↓				
Resistance to condensate (W: wet; D: dry)				↓			
Resistance to corrosion according to type and thickness of material					↓		
Material specification (50-1.4404, 20-1.4301, 30-1.4307)						↓	
Thickness of material (0.XX mm)							↓
Resistance to soot fire (G: yes; O: no), distance from flammable materials (100 mm)							↓



# INSULATED CHIMNEYS

## TYPE SLIM NEGATIVE PRESSURE

Insulated chimneys type SLIM are used to carry off exhaust flue gases from gas heating units and dry exhaust flue gases from boilers combusting fuel oil, wood and wood pellets. The system consists of thin-walled components from stainless steel. As a result, using the low thermal inertia of the chimney, the dew point is exported beyond its area - and thus the chimney operates in a dry mode. An entire range of boilers and units, except for condensation units, may be successfully supported by this type of chimney with a proper regulation of working parameters and operation under normal conditions. Keeping the dry operation mode is supported by the use of draught regulators. The insulated chimney type SLIM is also a perfect solution for ventilation purposes.

Properly assembled chimneys completely comply with domestic building regulations and fire safety regulations as well as European technical standards. Chimneys type SLIM may be used both inside and outside buildings. After the segments are assembled, the chimneys, depending on the variant of execution, are fixed with the use of special clasps to the walls of buildings, neighboring structures (e.g. boiler stations) or supported on independent support structures.

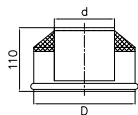
The elements of insulated chimneys type SLIM consist of:

- an internal chimney liner made from acid-proof steel type 1.4301
- a thermal insulation from special mineral wool, thickness 30 mm and density at least 100 kg/m<sup>3</sup>
- an external jacket made from acid-proof steel type 1.4301, polished surface.

Their easy configuration from simple, modified components of the chimney run, the structure of washout hole, connection and support components provides a permanent and sound product after assembly with high rigidity achieved due to the use of socket joints, length 60 mm. The structure and applied insulation materials eliminate the presence of heat bridges and the necessity to use the compensators of linear expansion by ensuring free operation (expansion and shortening resulting from the thermal expansion of steel) for the internal liner with respect to the external jacket.

Insulated chimneys type SLIM comply with the following European standards: EN 1443 and EN 1856-1. The production of insulated chimneys is covered by a system of factory production control, certificate No 1020-CPD-070038635 (TZUS Praga). KOMIN-FLEX has implemented and maintains a quality management system compliant with the requirements of the standard EN ISO 9001:2015 certified by TZUS Praga.

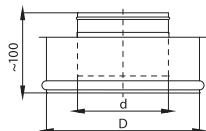
Chimneys by KOMIN-FLEX have received a positive opinion and are recommended by the professional association of Polish chimney sweeps.



**MOUTHPIECE SLIM**

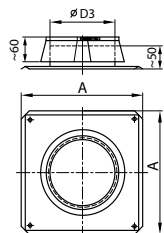
\*in diameters 150, 180 i 200 mm the tip of the mouthpiece makes it possible to mount chimney covers

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560



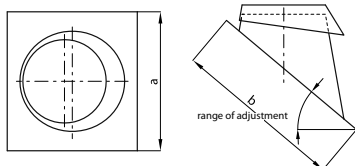
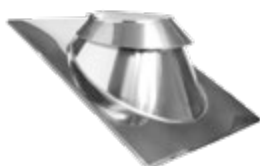
**UPPER INSULATION ENDING**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560



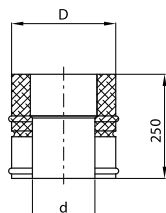
**ROOF PASSAGE + OPD SLIM**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
D3	202	222	232	252	272	297	322	372	422	472	522	572
A	333		400		450		500		550	600	650	



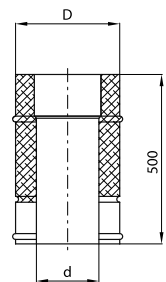
**ADJUSTABLE ROOF PASSAGE + OPD**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	200	220	220	250	270	295	295	320	320	370		
range of adjustment	base board dimension a x b											
5° ± 30°	400 x 400		450 x 450				600 x 600					
above. 30° ± 50°	400 x 450		450 x 550				600 x 750					



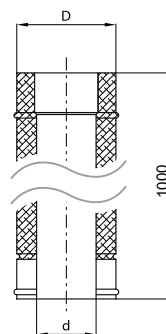
**PIPE SLIM 0,25 m**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560



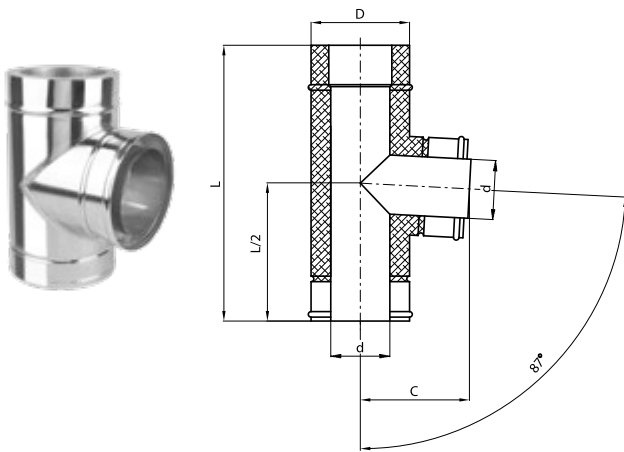
**PIPE SLIM 0,5 m**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560

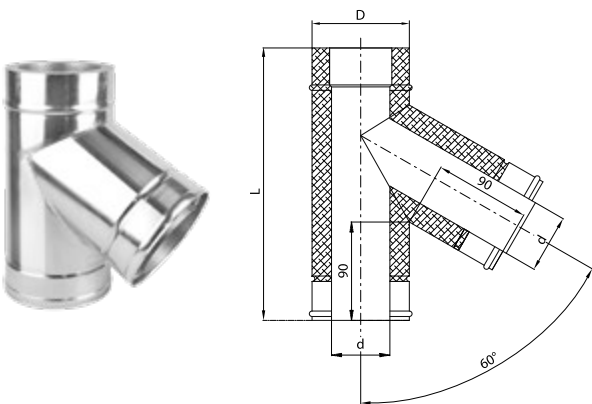


**PIPE SLIM 1 m**

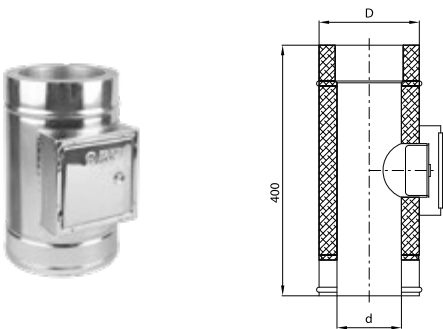
trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560


**TEE SLIM 87°**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560
L	400			450		500		550	600	650	700	750
C	185	195	200	210	220	233	245	270	295	320	345	370


**TEE SLIM 60°**

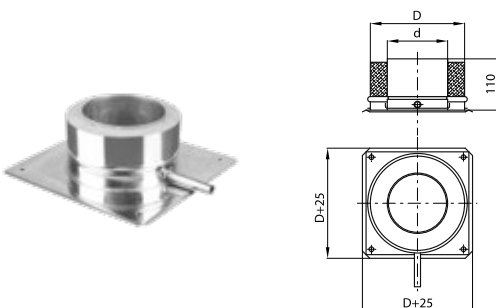
trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560
L	450			500		550		600	650	750	800	850


**CLEANING HOLE SLIM**

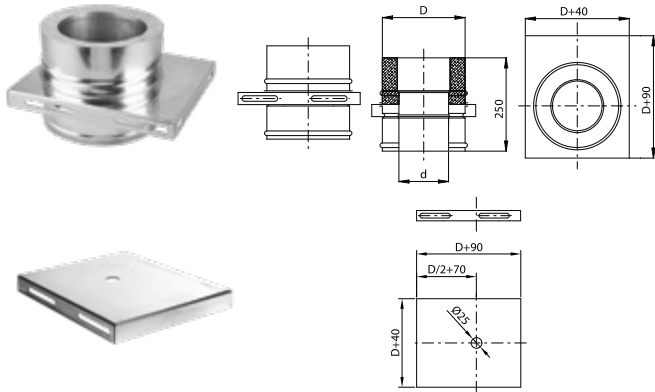
trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560


**BOTTOM SLIM**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560

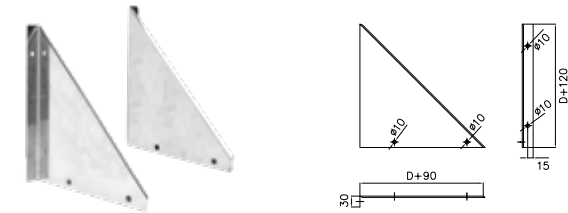

**ANCHOR PLATE SLIM WITH BOTTOM**

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560



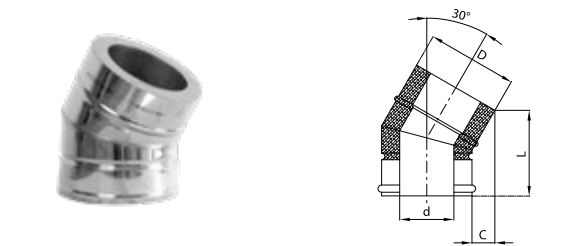
COUNTERBALANCE CONSOLE PLATE SLIM

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560



SUPPORT CONSOLE PLATE SLIM

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560

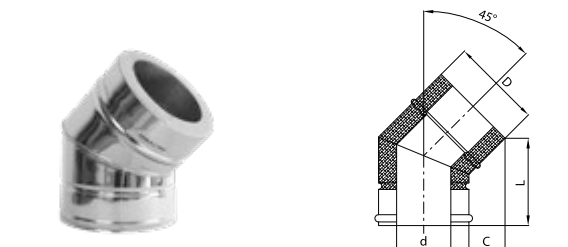


CONSOLE SUPPORT SLIM SET

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560

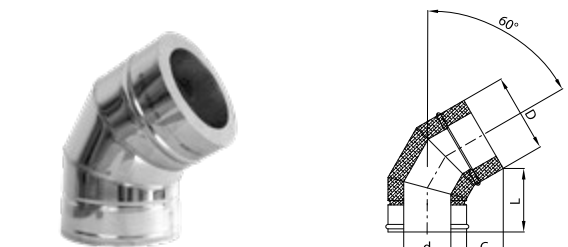
ELBOW SLIM 30°

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560
L	177											
C	45											



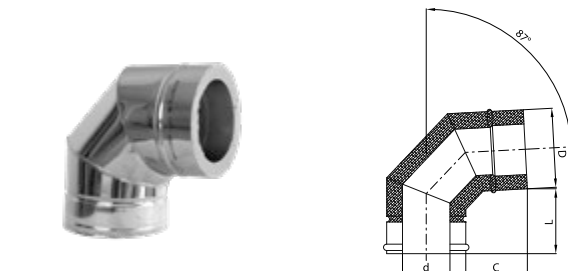
ELBOW SLIM 45°

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560
L	162											
C	62											



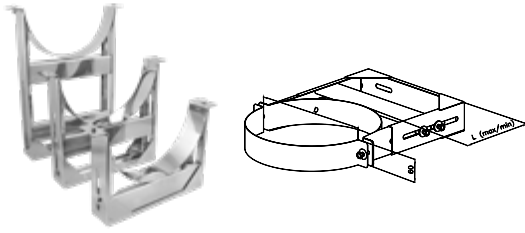
ELBOW SLIM 60°

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560
L	168											
C	95											



ELBOW SLIM 87°

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	560
L	120											
C	115											



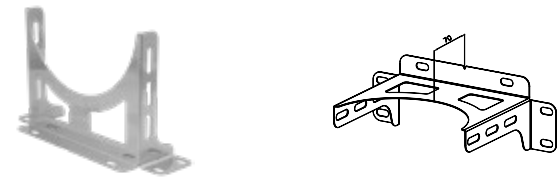
### CLAMPING RING OBD SLIM 1, 2 OR 3

trade diam. d	250	300	350	400	450	500	RANGE OF ADJUSTMENT:		
trade diam. D	310	360	410	460	510	560	- OBD 1: 70-150 mm	- OBD 2: 150-300 mm	- OBD 3: 300-500 mm



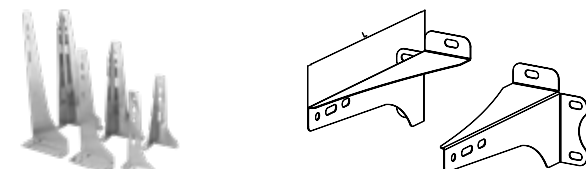
### CLIP OBL SLIM

trade diam. d	130	150	160	180	200	225	250	300
trade diam. D	190	210	220	240	260	285	310	360



### SUPPORT W1 OBL SLIM

trade diam. d	130	150	160	180	200	225	250	300
trade diam. D	190	210	220	240	260	285	310	360



### SUPPORT W2, W3, W4 OBL SLIM

	Range of adjustment	L
Support W2 OBL	150 - 250	240
Support W3 OBL	250 - 330	340
Support W4 OBL	350 - 430	440



### MOUNTING CLAMP SLIM

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
D3	190	210	220	240	260	285	310	360	410	460	510	570



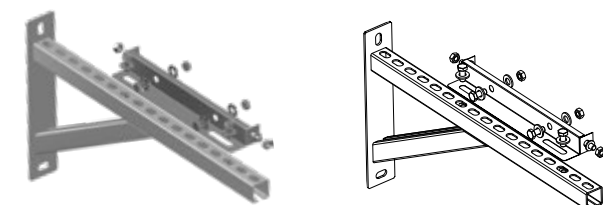
### ROSETTE SLIM

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	570



### INSULATION ENDING

trade diam. d	130	150	160	180	200	225	250	300	350	400	450	500
trade diam. D	190	210	220	240	260	285	310	360	410	460	510	570



### ADJUSTABLE CONSOLE SUPPORT SLIM SET

trade diam. d [mm]	130	150	160	180	200	225	250	300
trade diam. D [mm]	190	210	220	240	260	285	310	360
range of adjustment Lmin. + Lmax. [mm]	70 + 390	70 + 370	70 + 350	70 + 340	70 + 320	70 + 285	70 + 270	70 + 210

# ASSEMBLY MANUAL

## VERSION I AND II

1. Forge openings in the wall according to the flue pipe run.
2. Set two rings in the opening for the flue pipe (on both sides of the wall) in such a way so that their common axis is level.
3. Mount a horizontal pipe into the embedded rings. Make sure that the flue operates in a slide manner.
4. Fix an connecting component with the boiler's flue on the pipe from item 3, from the side of the boiler station. When an adjustable component is used, adjust the dimension, lock and seal the pipes facing one another.
5. Mount a tee with a washout hole on the external side of the pipe from item 3 and fix them facing one another with a mounting clamp.
6. Find a vertical axis for the chimney in a defined distance from the external wall.
7. Mount the flue chimney's support console.
8. Mount counterbalance consoles in intended places as the chimney's installation progresses (see figures 1, 2).
9. Mount the chimney's vertical sections one by one. If an installation drawing is provided, the mounting sequence should follow the assigned numbering. Clamp particular elements with the use of mounting clamps. Mount the clamps according to the symbols placed on the inner side of the element. The method of mounting the chimney's particular elements is shown on the drawings: „Mounting stages of chimney elements”.
10. Fasten the mounted flue chimney to the external wall with available clamping rings every approx. 2 m (see figures 1, 2).
11. The last clamping ring needs to be located no more than 0.1 to 0.2 m from the wall top.
12. The maximum height of the chimney between the supports is 15m. If the chimney is higher, use counterbalance console.
13. Mount the last two pipe elements separately and put a mouthpiece over them. The connection may be additionally strengthened by jacket riveting.
14. Mount the chimney termination prepared in this manner on the installed flue chimney and fix with the last clamping ring. Pay attention to the maximum projection of the chimney above the last clamping ring (see figures 1, 2).

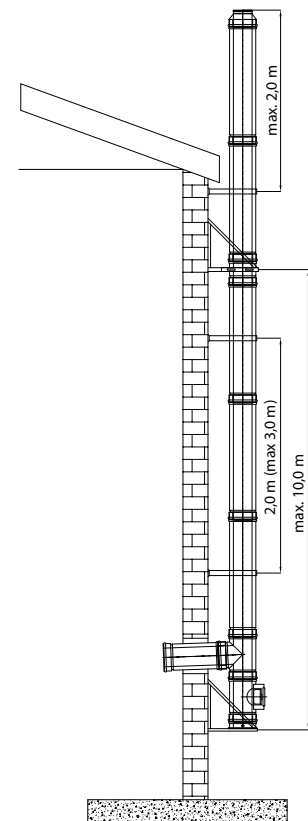
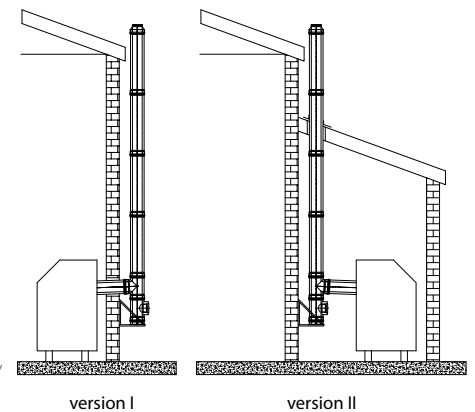


Fig. no. 1

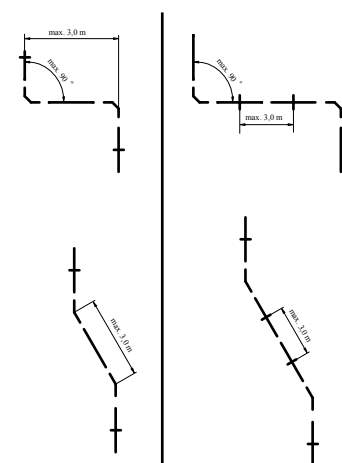


Fig. no. 2