



VENTILATION GRILLES

OVERVIEW

UM SERIES

UM: Residential ventilation grilles 20 mm pitch in anodised extruded aluminium.

CHARACTERISTICS:

Frame: made from extruded aluminium, 25 mm wide, with rounded edges, constructed in four parts connected invisibly by mechanical assembly.

Fins: made of extruded aluminium with 20 mm spacing, single or double row, vertical or horizontal, pivoted into a plastic guide support incorporated into the frame.

Transverse reinforcement: provided on all sizes with base dimension greater than 600 mm.

Damper, optional: all-steel, with multiple fins with opposing movement.

Mounting frame, optional: sheet steel construction.

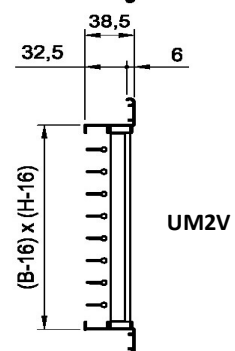
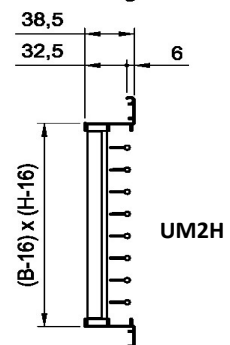
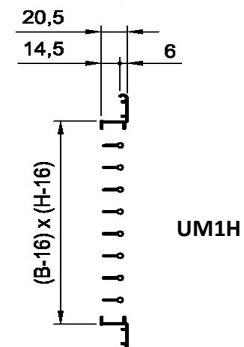
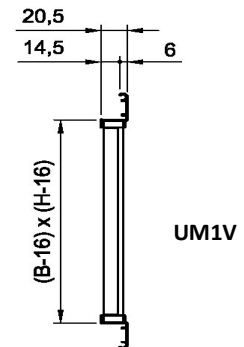
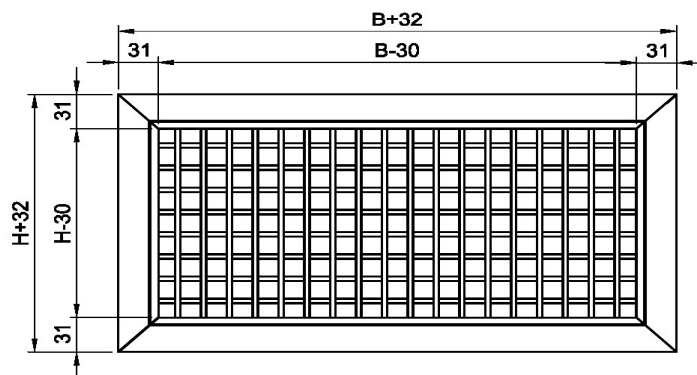
Grille installation: with screwless system with clips;
with traditional screw system directly in the duct or on the wall;
with hidden screw system "U-FIX" and mounting frame.
For ceiling installations, the use of clips is not recommended.

Finish: available in natural anodised aluminium or powder-coated RAL 9010 or RAL 9003.

Other types of painting available on request.

UNSUITABLE ENVIRONMENTS

The aluminum products are not suitable for installation in environments with an atmosphere containing corrosive substances for this material and in particular containing chlorine, such as swimming pools, spas and some types of food industries.

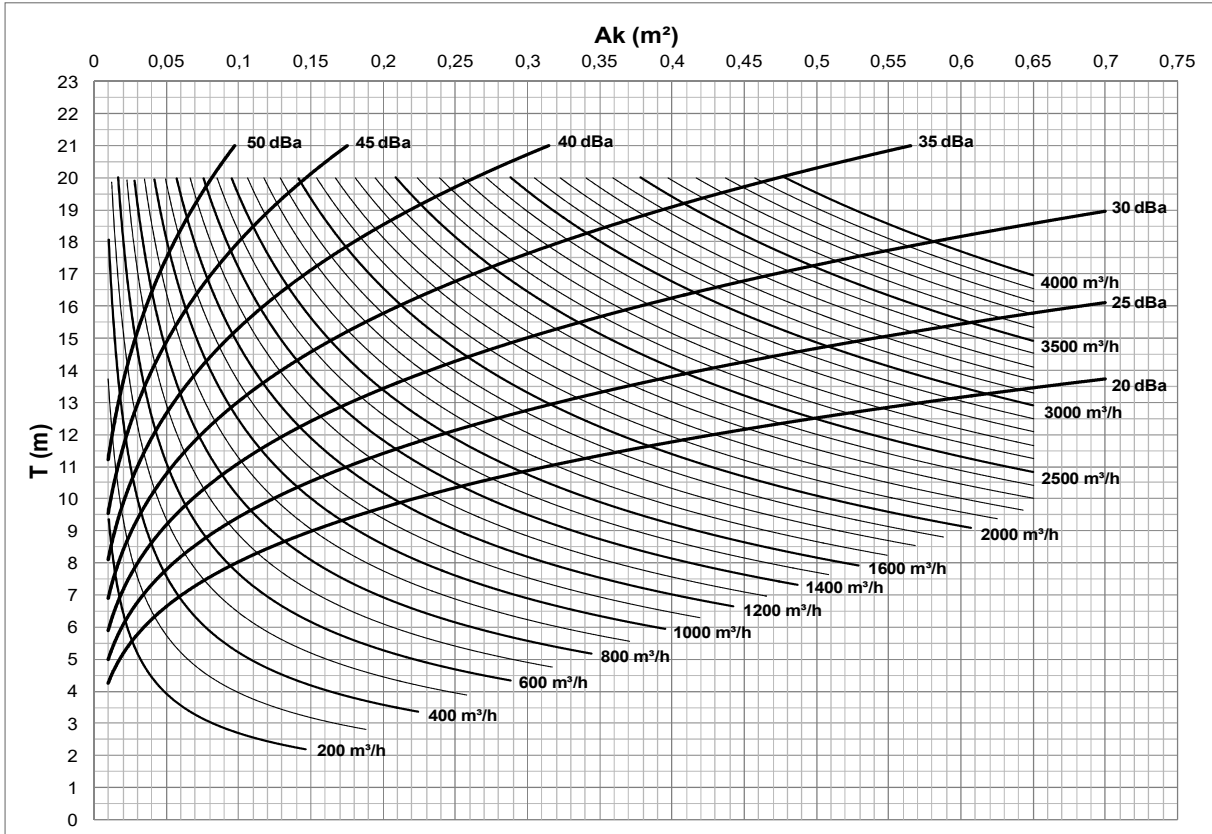




VENTILATION GRILLES

UM SERIES

PERFORMANCE



EFFECTIVE AREA A_k [m²]

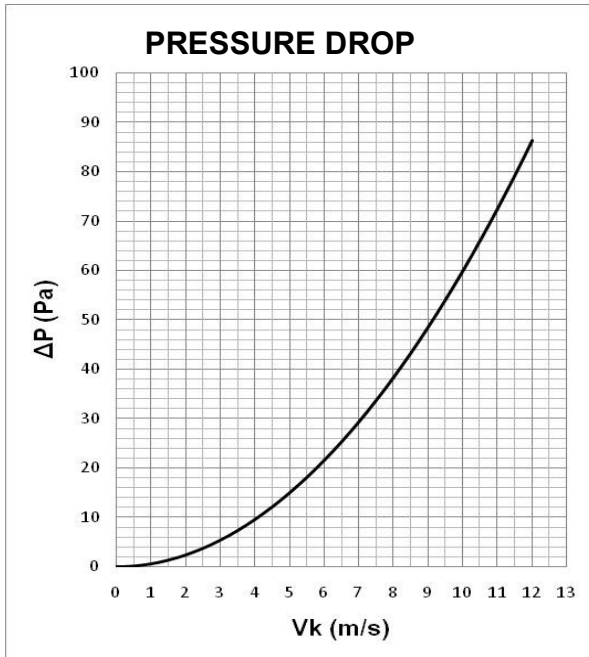
HEIGHT [mm]	BASE [mm]																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
75	0,003	0,007	0,012	0,016	0,021	0,025	0,029	0,034	0,038	0,043	0,047	0,051	0,056	0,060	0,065	0,069	0,073	0,078	0,082	0,087
100	0,005	0,012	0,018	0,025	0,032	0,039	0,046	0,053	0,060	0,066	0,073	0,080	0,087	0,094	0,101	0,107	0,114	0,121	0,128	0,135
200	0,012	0,028	0,045	0,062	0,078	0,095	0,111	0,128	0,145	0,161	0,178	0,195	0,211	0,228	0,244	0,261	0,278	0,294	0,311	0,328
300	0,018	0,045	0,071	0,098	0,124	0,151	0,177	0,203	0,230	0,256	0,283	0,309	0,335	0,362	0,388	0,415	0,441	0,467	0,494	0,520
400	0,025	0,062	0,098	0,134	0,170	0,206	0,242	0,279	0,315	0,351	0,387	0,423	0,460	0,496	0,532	0,568	0,604	0,640	0,677	0,713
500	0,032	0,078	0,124	0,170	0,216	0,262	0,308	0,354	0,400	0,446	0,492	0,538	0,584	0,630	0,676	0,722	0,768	0,814	0,860	0,906
600	0,039	0,095	0,151	0,206	0,262	0,318	0,373	0,429	0,485	0,541	0,596	0,652	0,708	0,764	0,819	0,875	0,931	0,987	1,042	1,098
700	0,046	0,111	0,177	0,242	0,308	0,373	0,439	0,505	0,570	0,636	0,701	0,767								
800	0,053	0,128	0,203	0,279	0,354	0,429	0,505	0,580	0,655	0,730	0,806	0,881								
900	0,060	0,145	0,230	0,315	0,400	0,485	0,570	0,655	0,740	0,825	0,910	0,996								
1000	0,066	0,161	0,256	0,351	0,446	0,541	0,636	0,730	0,825	0,920	1,015	1,110								
1100	0,073	0,178	0,283	0,387	0,492	0,596	0,701	0,806	0,910	1,015	1,120	1,224								
1200	0,080	0,195	0,309	0,423	0,538	0,652	0,767	0,881	0,996	1,110	1,224	1,339								
1300	0,087	0,211	0,335	0,460	0,584	0,708														
1400	0,094	0,228	0,362	0,496	0,630	0,764														
1500	0,101	0,244	0,388	0,532	0,676	0,819														



VENTILATION GRILLES

UM SERIES

PERFORMANCE



Aerologic data measured in isothermic conditions in accordance with international standards:

ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*

Measured data with perpendicular fins and without regulation damper.

For other conditions apply the corrections specified in the table

Acoustic data measured in reverberation room in accordance with international standards:

ISO 3741 1999: *Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms*

ISO 5135 1997: *Acoustic - determination of sound power levels of noise from air-terminal devices ; air terminal units; dampers and valves by measurement in a reverberation room.*

The data presented does not take into account the attenuation given by the installation environment. This attenuation is normally between 6 and 10 dBA and is determined by the size of the room, the shape of the room and the characteristics of the furniture.

Sound power

Lw +		Lw +	
α°	Addendum	α°	Addendum
10	1,53	20	0,77
15	2,26	25	1,15
20	2,98	30	1,53
25	3,67	35	1,90
30	4,35	40	2,26
35	5,00	45	2,62
40	5,64	50	2,98
45	6,25	55	3,33
		60	3,67
		65	4,01
		70	4,35
		75	4,68
		80	5,00
		85	5,32
		90	5,64

Pressure drop

ΔP x		ΔP x	
α°	Coefficient	α°	Coefficient
10	1,13	20	1,13
15	1,19	25	1,16
20	1,26	30	1,19
25	1,33	35	1,22
30	1,40	40	1,26
35	1,47	45	1,29
40	1,55	50	1,33
45	1,62	55	1,36
		60	1,40
		65	1,44
		70	1,47
		75	1,51
		80	1,55
		85	1,59
		90	1,62

Throw

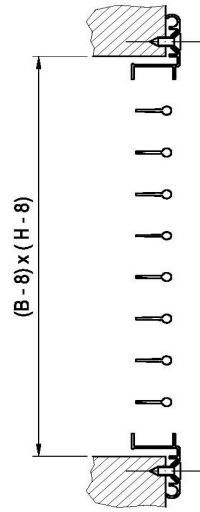
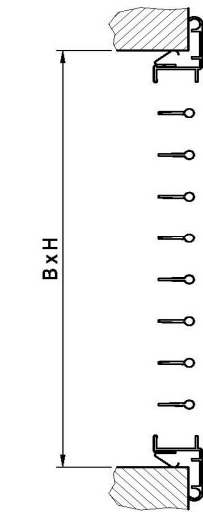
T x		T x	
α°	Coefficient	α°	Coefficient
10	0,98	20	0,98
15	0,97	25	0,98
20	0,94	30	0,97
25	0,91	35	0,95
30	0,87	40	0,94
35	0,82	45	0,92
40	0,77	50	0,91
45	0,71	55	0,89
		60	0,87
		65	0,84
		70	0,82
		75	0,79
		80	0,77
		85	0,74
		90	0,71



VENTILATION GRILLES

STANDARD FIXING METODS

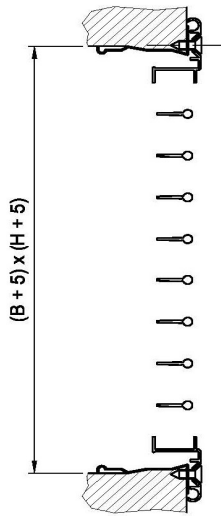
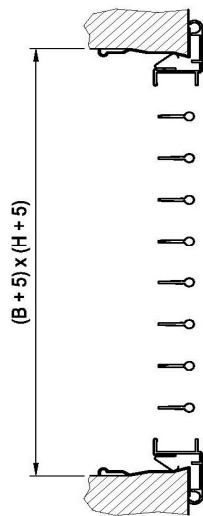
UM SERIES



Fixing without
counterframe

With clips

With screws



Fixing with counterframe

With clips

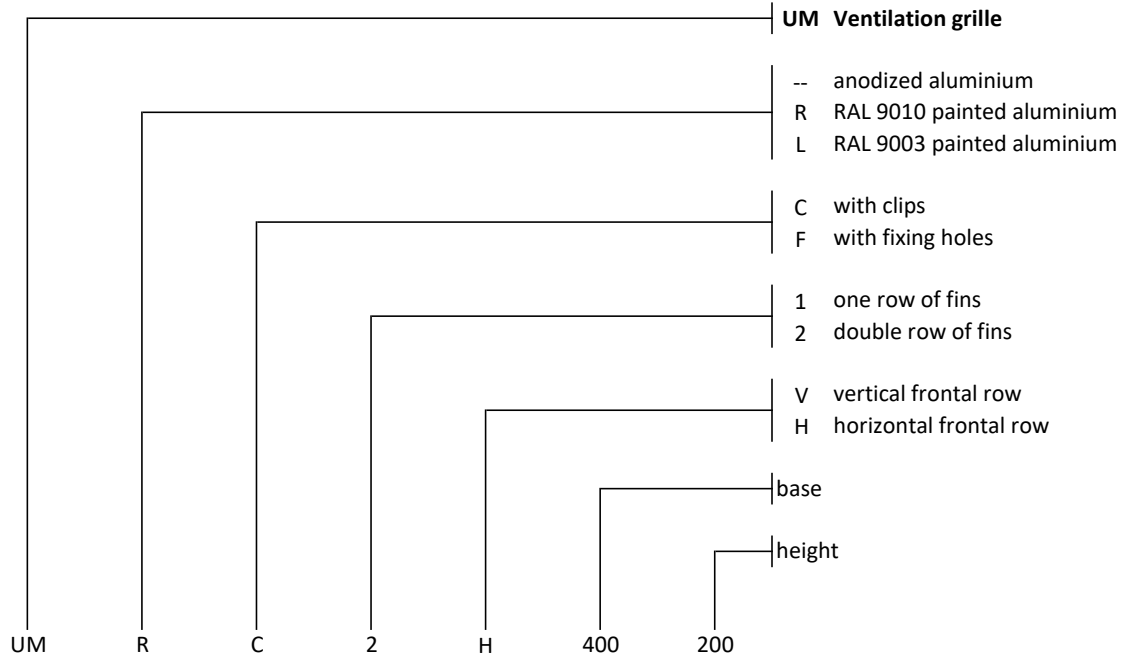
With screws



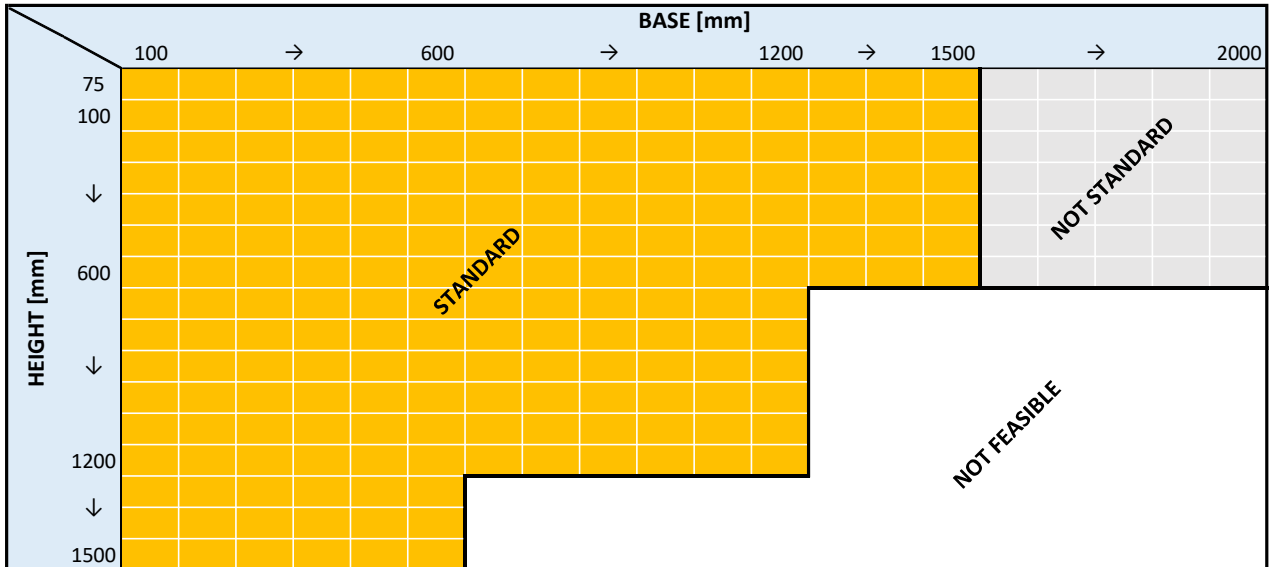
VENTILATION GRILLES

UM SERIES

HOW TO ORDER



FEASIBLE SIZES - STANDARD STEP 50mm





VENTILATION GRILLES

UM SERIES

WEIGHTS

WEIGHT [kg] UM1V - ONE ROW OF VERTICAL FINIS

HEIGHT [mm]	BASE [mm]																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
75	0,17	0,23	0,29	0,35	0,43	0,50	0,55	0,63	0,71	0,77	0,83	0,89	0,97	1,03	1,09	1,18	1,25	1,30	1,38	1,43
100	0,19	0,25	0,33	0,39	0,48	0,56	0,62	0,71	0,80	0,85	0,94	1,01	1,09	1,17	1,23	1,33	1,41	1,47	1,55	1,62
200	0,25	0,34	0,46	0,56	0,68	0,80	0,90	1,03	1,14	1,24	1,37	1,47	1,58	1,70	1,80	1,94	2,05	2,15	2,27	2,36
300	0,30	0,44	0,60	0,73	0,88	1,04	1,18	1,34	1,50	1,63	1,79	1,92	2,08	2,24	2,38	2,53	2,69	2,83	2,98	3,12
400	0,36	0,54	0,73	0,90	1,09	1,29	1,45	1,65	1,85	2,02	2,21	2,38	2,58	2,77	2,94	3,14	3,34	3,50	3,70	3,87
500	0,42	0,63	0,86	1,07	1,30	1,52	1,73	1,97	2,20	2,40	2,64	2,85	3,08	3,30	3,51	3,75	3,97	4,18	4,42	4,63
600	0,48	0,72	0,99	1,24	1,50	1,76	2,01	2,29	2,55	2,79	3,06	3,31	3,57	3,83	4,08	4,35	4,62	4,87	5,13	5,37
700	0,55	0,85	1,17	1,49	1,80	2,12	2,45	2,76	3,08	3,39	3,72	4,03								
800	0,62	0,96	1,30	1,67	2,02	2,37	2,73	3,08	3,43	3,78	4,14	4,50								
900	0,68	1,05	1,44	1,84	2,23	2,60	3,01	3,40	3,78	4,16	4,56	4,96								
1000	0,74	1,15	1,57	2,01	2,43	2,85	3,29	3,71	4,13	4,55	4,99	5,41								
1100	0,80	1,25	1,71	2,17	2,63	3,09	3,57	4,02	4,48	4,94	5,41	5,88								
1200	0,86	1,34	1,83	2,35	2,84	3,34	3,84	4,35	4,84	5,33	5,84	6,35								
1300	0,94	1,48	2,04	2,60	3,15	3,70														
1400	1,01	1,58	2,18	2,78	3,36	3,95														
1500	1,07	1,68	2,32	2,94	3,56	4,20														

WEIGHT [kg] UM1H - ONE ROW OF HORIZONTAL FINIS

HEIGHT [mm]	BASE [mm]																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
75	0,15	0,20	0,25	0,30	0,36	0,41	0,48	0,55	0,60	0,66	0,70	0,76	0,82	0,86	0,92	0,98	1,03	1,08	1,15	1,20
100	0,19	0,25	0,30	0,36	0,42	0,48	0,55	0,62	0,68	0,74	0,80	0,86	0,94	1,00	1,06	1,13	1,19	1,24	1,33	1,39
200	0,25	0,34	0,44	0,54	0,63	0,72	0,85	0,96	1,05	1,15	1,25	1,34	1,48	1,57	1,67	1,78	1,87	1,97	2,13	2,22
300	0,33	0,46	0,60	0,73	0,86	0,99	1,17	1,30	1,44	1,57	1,71	1,83	2,04	2,17	2,31	2,44	2,58	2,71	2,91	3,04
400	0,39	0,56	0,73	0,90	1,07	1,24	1,49	1,67	1,84	2,01	2,17	2,35	2,60	2,77	2,93	3,11	3,28	3,44	3,70	3,87
500	0,48	0,68	0,88	1,09	1,30	1,50	1,80	2,02	2,23	2,43	2,63	2,84	3,15	3,35	3,55	3,77	3,97	4,18	4,50	4,71
600	0,56	0,80	1,04	1,29	1,52	1,76	2,12	2,37	2,60	2,85	3,09	3,34	3,70	3,94	4,19	4,43	4,68	4,92	5,28	5,52
700	0,62	0,90	1,18	1,45	1,73	2,01	2,45	2,73	3,01	3,29	3,57	3,84								
800	0,71	1,03	1,34	1,65	1,97	2,29	2,76	3,08	3,40	3,71	4,02	4,35								
900	0,80	1,14	1,50	1,85	2,20	2,55	3,08	3,43	3,78	4,13	4,48	4,84								
1000	0,85	1,24	1,63	2,02	2,40	2,79	3,39	3,78	4,16	4,55	4,94	5,33								
1100	0,94	1,37	1,79	2,21	2,64	3,06	3,72	4,14	4,56	4,99	5,41	5,84								
1200	1,01	1,47	1,92	2,38	2,85	3,31	4,03	4,50	4,96	5,41	5,88	6,35								
1300	1,09	1,58	2,08	2,58	3,08	3,57														
1400	1,18	1,71	2,25	2,78	3,31	3,84														
1500	1,24	1,81	2,39	2,95	3,52	4,09														



VENTILATION GRILLES

UM SERIES

WEIGHTS

WEIGHT [kg] UM2 - TWO ROWS OF FINS

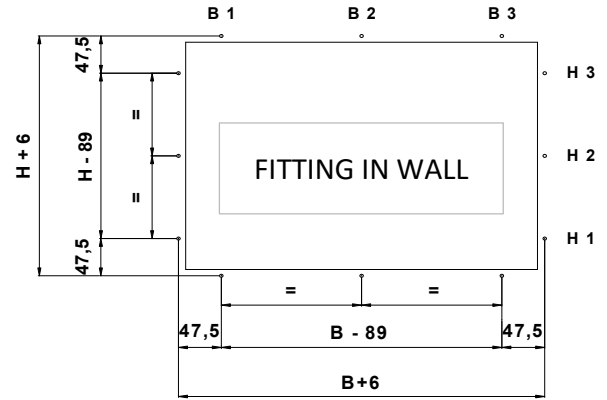
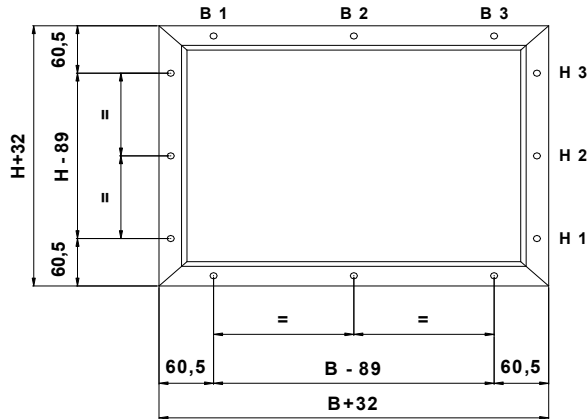
HEIGHT [mm]	BASE [mm]																			
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
75	0,22	0,30	0,41	0,49	0,59	0,70	0,81	0,92	1,03	1,11	1,22	1,31	1,41	1,51	1,60	1,72	1,82	1,91	2,02	2,12
100	0,26	0,36	0,49	0,58	0,71	0,83	0,94	1,08	1,19	1,29	1,42	1,52	1,66	1,78	1,88	2,01	2,14	2,23	2,38	2,48
200	0,36	0,54	0,73	0,91	1,10	1,29	1,50	1,70	1,89	2,07	2,26	2,43	2,68	2,87	3,04	3,25	3,44	3,62	3,87	4,04
300	0,49	0,73	1,00	1,24	1,51	1,78	2,07	2,34	2,61	2,86	3,12	3,37	3,71	3,97	4,22	4,50	4,77	5,01	5,35	5,60
400	0,58	0,91	1,24	1,56	1,91	2,24	2,65	3,01	3,34	3,66	4,00	4,32	4,74	5,08	5,40	5,75	6,09	6,41	6,83	7,15
500	0,71	1,10	1,51	1,91	2,32	2,72	3,22	3,64	4,05	4,45	4,86	5,25	5,77	6,18	6,57	6,99	7,40	7,80	8,33	8,72
600	0,83	1,29	1,78	2,24	2,72	3,22	3,79	4,28	4,77	5,23	5,71	6,19	6,80	7,29	7,75	8,24	8,73	9,20	9,80	10,27
700	0,94	1,50	2,07	2,65	3,22	3,79	4,53	5,11	5,68	6,24	6,83	7,40								
800	1,08	1,70	2,34	3,01	3,64	4,28	5,11	5,75	6,39	7,03	7,69	8,35								
900	1,19	1,89	2,61	3,34	4,05	4,77	5,68	6,39	7,10	7,81	8,55	9,26								
1000	1,29	2,07	2,86	3,66	4,45	5,23	6,24	7,03	7,81	8,61	9,40	10,19								
1100	1,42	2,26	3,12	4,00	4,86	5,71	6,83	7,69	8,55	9,40	10,27	11,15								
1200	1,52	2,43	3,37	4,32	5,25	6,19	7,40	8,35	9,26	10,19	11,15	12,09								
1300	1,66	2,68	3,71	4,74	5,77	6,80														
1400	1,79	2,88	3,98	5,09	6,19	7,30														
1500	1,89	3,05	4,23	5,41	6,58	7,76														



VENTILATION GRILLES

UM SERIES

STANDARD FIXING METODS



REFERENCE TO NOMINAL SIZES OF GRILLE

B=BASE

H= HEIGHT

NECESSARY HOLES							
B	B1	B2	B3	H	H1	H2	H3
100				100		X	
200				200		X	
300				300		X	
400				400	X		X
				500	X		X
				600	X		X
				700	X		X
				800	X	X	X
				900	X	X	X
				1000	X	X	X
				1100	X	X	X
				1200	X	X	X
				1300	X	X	X
				1400	X	X	X

NECESSARY HOLES							
B	B1	B2	B3	H	H1	H2	H3
500	X		X	100			
600	X		X	200			
700	X		X	300			
800	X	X	X	400			
900	X	X	X	500			
1000	X	X	X	600		X	
1100	X	X	X	700		X	
1200	X	X	X	800		X	
1300	X	X	X	900		X	
1400	X	X	X	1000	X	X	X
1500	X	X	X	1100	X	X	X
				1200	X	X	X
				1300	X	X	X
				1400	X	X	X
				1500	X	X	X



RESIDENTIAL GRILLES

HIDDEN SCREWS FIXING

U-FIX SERIES

Fixing with hidden screw

The U-FIX kit allows a quick fixing of the grille to the counterframe simply rotating a hidden screw behind the front fins.

The kit is suitable for grilles with two rows or a single row of fins.

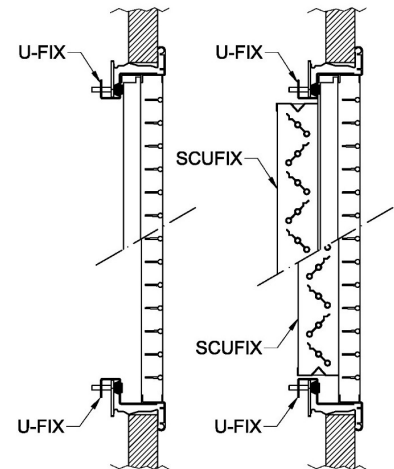
This solution allows you to quickly disassemble and reassemble the grid for any cleaning or maintenance.

The kit consists of two or four elements, depending on the size of the grille.

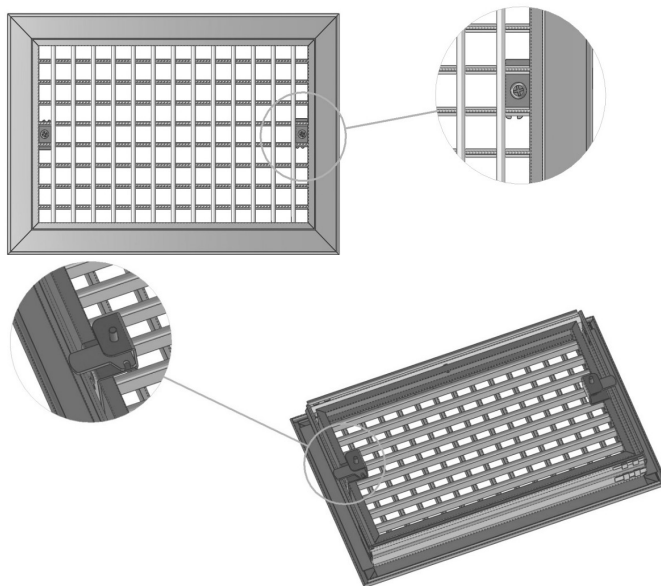
The kit comes already assembled on the grille.

For the sizes up to 1000x300 and 600x600 it is possible to provide an SC damper mounted during manufacturing on the grille frame.

HEIGHT [mm]	BASE [mm]			
	200 →	600 →	1000 →	1200
75				
100	U-FIX2			
↓	compatible with			
300	the damper SCUFIX			
↓				
600	U-FIX4			
↓	not compatible with			
1000	the damper SCUFIX			



Grille with
hidden screws fixing





RESIDENTIAL GRILLES

U-FIX SERIES

HIDDEN SCREWS FIXING HOW TO ORDER

HOW TO ORDER

The code of the grille must be with "clips configuration" (not with "holes configuration").
Standard clips will not be provided in presence of U-FIX kit mounted.

The counterframe must be ordered according to standard counterframe dimension.

In case of regulation damper request, please use the specific code SCUFIX

ORDER EXAMPLES

Grille UM 400x200mm with U-FIX and counterframe

1)	UM1HC400200	q.ty	1
2)	U-FIX2	q.ty	1
3)	UTCC0400200	q.ty	1

Grille UM 700x400mm with U-FIX and counterframe

1)	UM1HC700400	q.ty	1
2)	U-FIX4	q.ty	1
3)	UTCC0700400	q.ty	1

Grille UM 400x200mm with U-FIX , counterframe and regulation damper

1)	UM1HC400200	q.ty	1
2)	U-FIX2	q.ty	1
3)	UTCC0400200	q.ty	1
4)	SCUFIX400200	q.ty	1



RESIDENTIAL GRILLES

UM SERIES

ACCESSORIES



PP30 Plenum with rear connection
insulated and non insulated version



PP40 Plenum with lateral connection
insulated and non insulated version



SC Control damper



UTC Counterframe



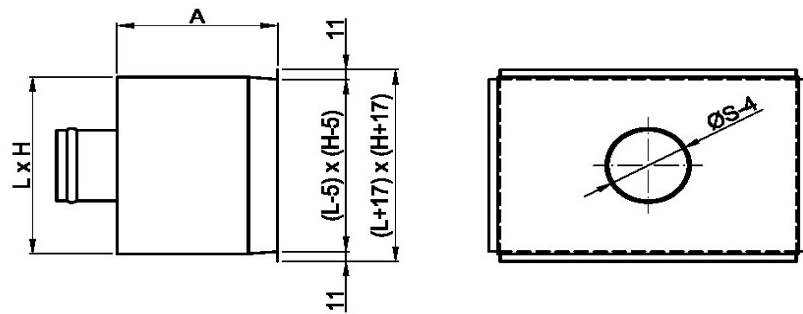
PLENUM FOR VENTILATION GRILLES

PP 30 SERIES

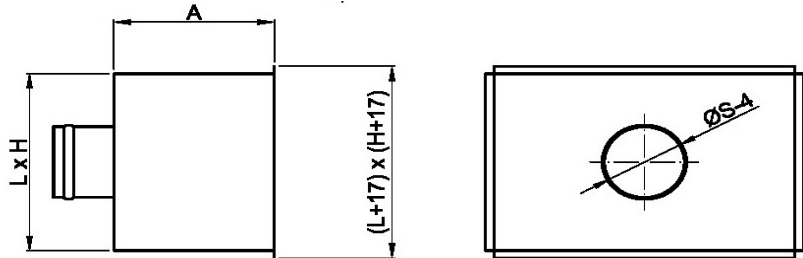
TECHNICAL CHARACTERISTICS

L	H	A	N°	S
200	100	140	1	80
300	100	140	1	80
400	100	140	1	80
500	100	140	2	80
600	100	140	2	80
700	100	140	2	80
800	100	140	2	80
200	150	180	1	127
300	150	180	1	127
400	150	180	1	127
500	150	180	2	127
600	150	180	2	127
700	150	180	2	127
800	150	180	2	127
900	150	180	2	127
1000	150	180	2	127
200	200	220	1	150
300	200	220	1	150
400	200	220	1	180
500	200	220	1	180
600	200	220	2	150
700	200	220	2	150
800	200	220	2	150
900	200	220	2	180
1000	200	220	2	180
200	250	220	1	200
300	250	220	1	200
400	250	220	1	200
500	250	220	1	200
600	250	220	2	150
700	250	220	2	150
800	250	220	2	150
900	250	220	2	180
1000	300	220	2	180
300	300	260	1	250
400	300	260	1	250
500	300	260	1	250
600	300	260	2	160
700	300	260	2	160
800	300	260	2	160
900	300	260	2	200
1000	300	260	2	200
400	400	260	1	350
500	400	260	1	350
600	400	260	2	160
700	400	260	2	160
800	400	260	2	160
900	400	260	2	200
1000	400	260	2	200

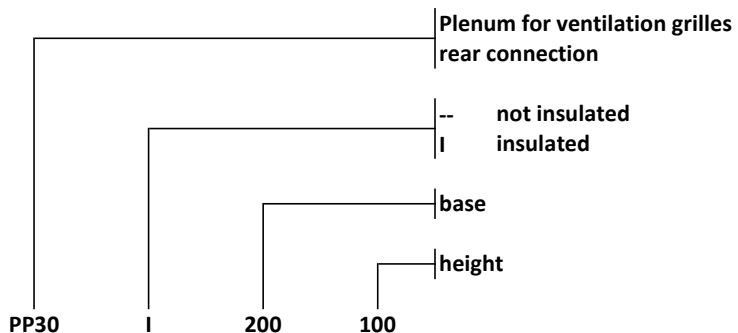
PP 30



STANDARD GRILLE



GRILLE WITH FILTERHOLDER FRAME



For S = 125 - 160 - 200 - 250 connection in ABS - steel on request
For other diameters connection in steel

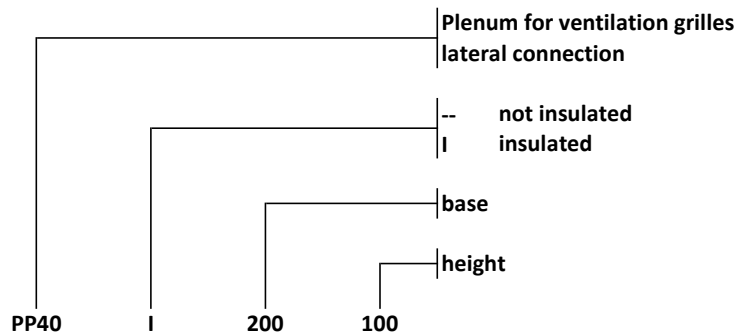
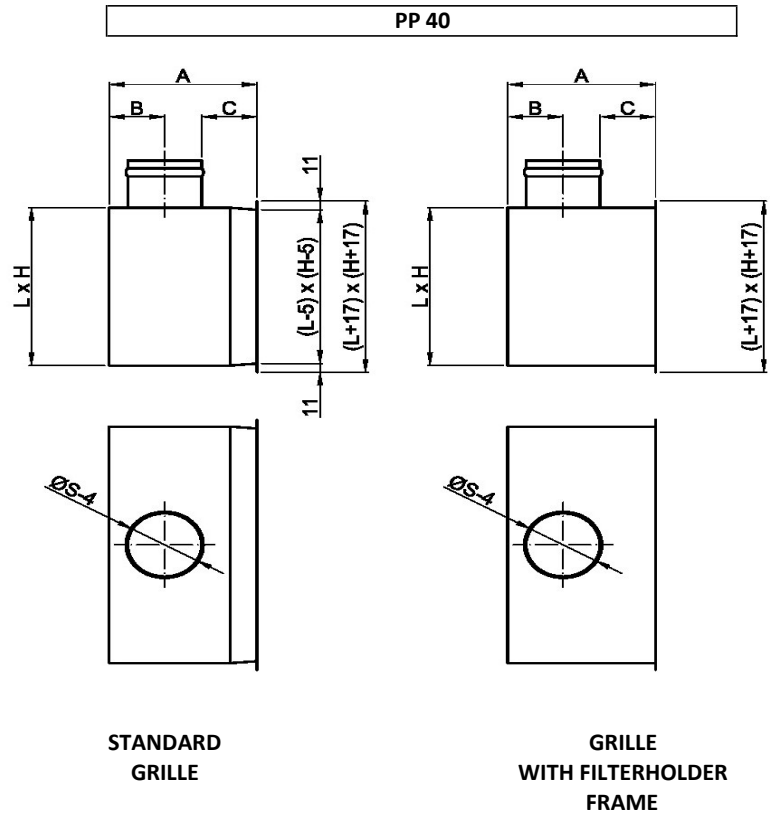


**PLENUM FOR
VENTILATION GRILLES**

**PP 40
SERIES**

TECHNICAL CHARACTERISTICS

L	H	A	B	C	N°	S
200	100	200	70	80	1	100
300	100	250	95	80	1	150
400	100	250	95	80	1	150
500	100	300	120	80	1	200
600	100	300	120	80	1	200
700	100	350	145	80	1	250
800	100	350	145	80	1	250
200	150	250	95	80	1	150
300	150	300	120	80	1	200
400	150	300	120	80	1	200
500	150	350	145	80	1	250
600	150	350	145	80	1	250
700	150	350	145	80	1	250
800	150	415	178	80	1	315
900	150	415	178	80	1	315
1000	150	415	178	80	1	315
200	200	250	95	80	1	150
300	200	250	95	80	1	150
400	200	350	145	80	1	250
500	200	350	145	80	1	250
600	200	415	178	80	1	315
700	200	415	178	80	1	315
800	200	415	178	80	1	315
900	200	450	195	80	1	350
1000	200	450	195	80	1	350
200	250	300	120	80	1	200
300	250	300	120	80	1	200
400	250	350	145	80	1	250
500	250	350	145	80	1	250
600	250	415	178	80	1	315
700	250	415	178	80	1	315
800	250	415	178	80	1	315
900	250	450	195	80	1	350
1000	250	450	195	80	1	350
300	300	350	145	80	1	250
400	300	415	178	80	1	315
500	300	450	195	80	1	350
600	300	450	195	80	1	350
700	300	450	195	80	1	350
800	300	450	195	80	1	350
900	300	500	220	80	1	400
1000	300	500	220	80	1	400
400	400	450	195	80	1	350
500	400	450	195	80	1	350
600	400	450	195	80	1	350
700	400	450	195	80	1	350
800	400	450	195	80	1	350
900	400	500	220	80	1	400
1000	400	500	220	80	1	400



For S = 125 - 160 - 200 - 250 connection in ABS - steel on request
For other diameters connection in steel



CONTROL DAMPERS

SC SERIES

OVERVIEW TECHNICAL CHARACTERISTICS

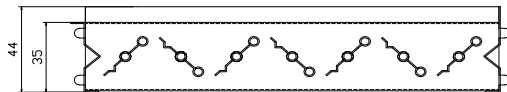
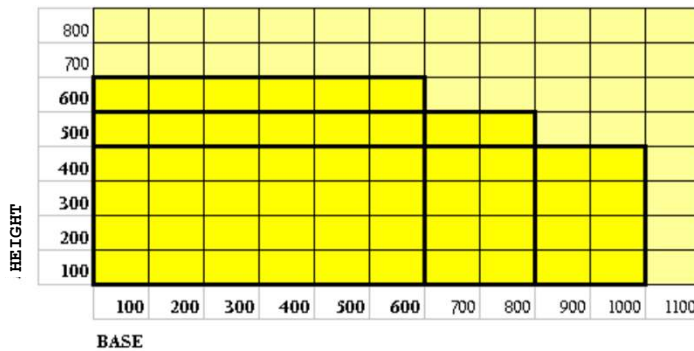
OVERVIEW AND CHARACTERISTICS :

The contrast control dampers of SC series can be fitted to UF KG UM UR GI KN e CR-KN series . They are held in place by special patented clips, designed both for fitting the damper to the grill and for fitting it on a false frame.

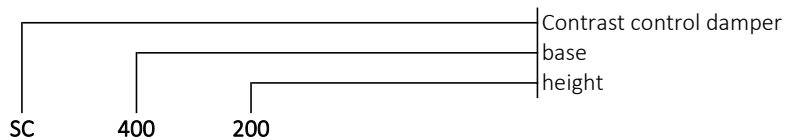
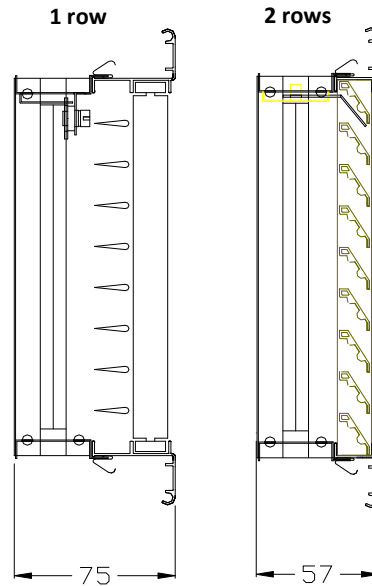
The SC series dampers are made entirely of galvanised steel and have a mechanism for moving and closing all the blades simultaneously.

This mechanism is a simple longitudinal plate that links all the blades, and can be removed by unscrewing a nut using a screwdriver. The careful design, precise assembly, and the quality of the materials used, make this an economical, practical, and efficient component.

Contrast control damper- dimensions that can be created in a single solution



Contrast control damper - overall dimensions





COUNTERFRAMES FOR SUPPLY AND RETURN GRILLES

UTC SERIES

OVERVIEW

OVERVIEW

The UTC series counterframes used for supply and return grilles are a strong frame on which the fixing clips can rest. They are required if the grilles need to be frequently removed for cleaning, inspection, filter changing and other similar jobs.

The UTC counterframes can be installed both next to steel ducts and on masonry walls.

Bendable parts are placed inside the fixing agent of the wall and a frame that will be completely hidden from the frame of the grille itself, for fixing by means of screws or rivets to the duct wall.

The use of the counterframe on the side of the steel duct allows the use of grilles with fixing clips rather than with screws, therefore allowing to undertake jobs that require removing and reinstalling the grille with the up most simplicity without the need of tools.

The use of the counterframe on masonry walls allows for an almost unlimited number of removals and replacements of the grille without ever damaging or wearing-out the border of the hole made in the wall. The position of the grille can therefore be maintained, precise and secure.

TECHNICAL CHARACTERISTICS

The UTC Series counterframes are made of four separate parts, of galvanized carbon steel sheet, fixable to each other without the need of tools. The parts are completely interchangeable as the particular system of connection eliminated the need to distinguish between horizontal and vertical parts and with between left and right parts.

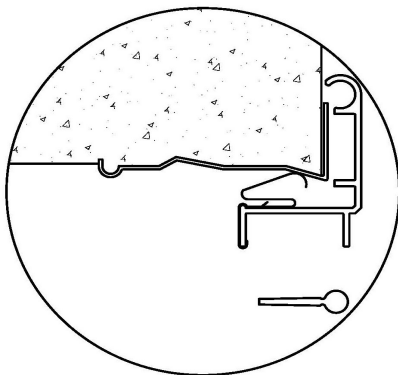
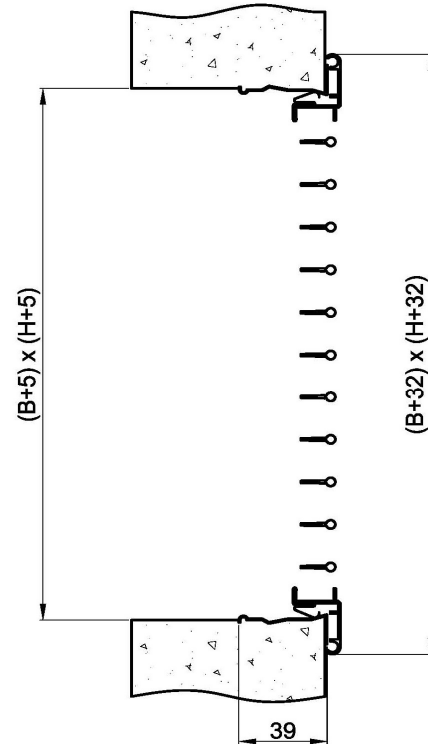
As shown in the illustration, the necessary space for the counterframe needs to be 5mm more than the nominal size of the grille.

AVAILABLE SIZES

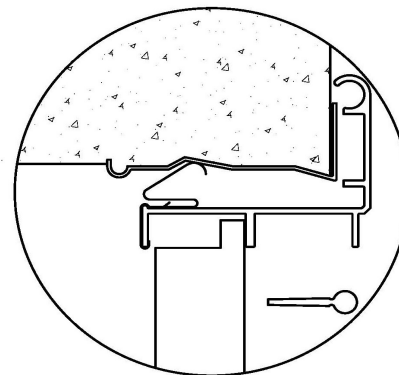
The available sizes for each part range from 100mm up to a maximum of 1400mm, in multiples of 50mm.

Special sizes are also available on request.

By composing the various sizes, all the necessary sizes are achievable.



Mounting with single deflection grille



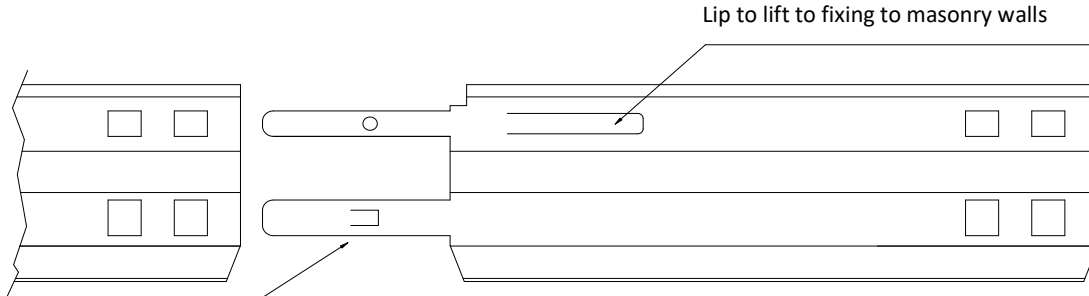
Mounting with double deflection grille



COUNTERFRAMES FOR SUPPLY AND RETURN GRILLES

UTC SERIES

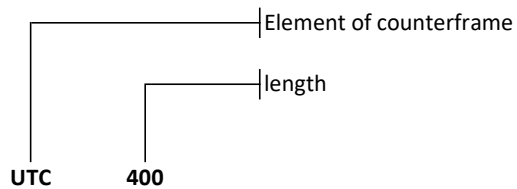
OVERVIEW



blades to bend at 90° and insert in the attaching part to assemble the counterframe

Detail of the fixing method between parts

This system allows to quickly assemble the counterframe, even during the construction phase.



Example:

To order a counterframe for a 400x200mm grille,
request:

UTC-400 - 2 pieces

UTC-200 - 2 pieces

To order a counterframe for a 300x300 grille,
request:

UTC-300 - 4 pieces