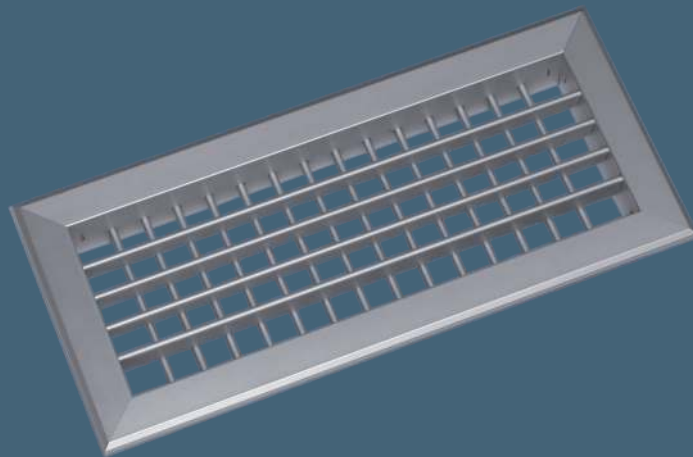


MANDÍK[®]

ADJUSTABLE VENT

VNM



These technical specifications state a row of manufactured sizes and models of rectangular comfort, one-row and two-row vents with R1, R2 and R3 regulation (further only vents) VNM. It is valid for manufacture, designing, ordering, delivery, assembly and operation.

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II. GENERAL INFORMATION

1. Description

- 1.1.** Vents are end air-conditioning elements used to distribute air in air-conditioned, ventilated and heated rooms.
- 1.2.** Comfort vents made of aluminium sections are supplied with concealed fastening fixed by spring clips or with screwed fastening.
- They consist of rectangular frame which holds either one row or two rows of rotating blades (one- or two-row vents).
- Vents can be equipped with regulation R1, R2, R3 or R5, R6 with fixing frame UR eventually with separate fixing frame UR.
- The tightness of vents is ensured along the perimeter by means of sealing.
- 1.3.** Vents are designed for macroclimatic areas with mild climate according to EN 60 721-3-3 zm.A2.
- 1.4.** Vents are suitable for systems without abrasive, chemical and adhesive particles.
- 1.5.** Temperature in the place of installation is permitted to range from - 20°C to + 70°C.
- 1.6.** If is not noticed other way, all dimensions and weight are in millimeters and kilograms.

2. Design

- 2.1.** Vents are supplied, according to the number of rows of rotating blades, as one- or two-row vents. Blades are pitched at 20 mm.
- One-row vents are installed primarily for air outlet and two-row vents are installed primarily for air inlet.
- Vents can be equipped with R1 type regulation through counter-rotating blades, R2 type regulation through tilting arm of directing blades, R3 type regulation through fixed and adjustable regulation strip, parallel to vent frame, R5 type regulation through large format tilting blade and R6 type regulation through fixed and adjustable regulation strip, oblique to vent frame.
- Regulation R2 is intended for air inlet, regulations R1, R3, R5 and R6 are intended for air inlet and air outlet. Vents are installed by using of regulations R1, R2 and R3 or fixing frame UR.
- 2.2.** If is requested installation in gypsum constructions it's to be mentioned in a order (in this case are used adapted regulations R1, R2 and R3 or fixing frame UR for installation in the gypsum constructions).
- 2.3.** Vents are supplied with concealed fastening or screwed fastening.
- 2.4.** Vents with concealed fastening are installed by using fixing frame (UR or fixing frame UR for installation in the gypsum constructions), frame of regulation or an atypical frame furnished with an edge for gripping the spring clips (see detail of leaf of fixation frame).
- 2.5.** Vents with screwed fastening are installed by using fixing frame (UR or fixing frame UR for installation in the gypsum constructions) or frame of regulation. It's possible direct mounting to the wall without fixing frame or regulation.

Fig. 1 Two-row vent with concealed fastening and regulation R3

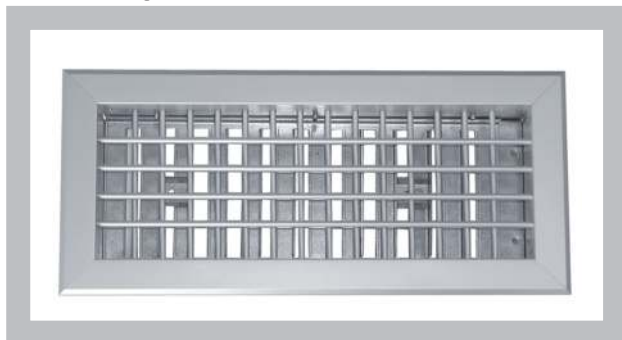
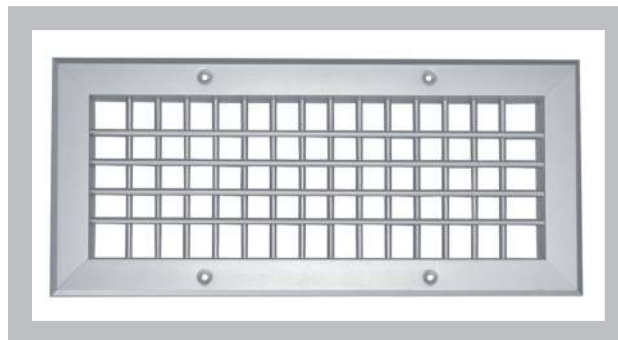


Fig. 2 Two-row vent with screwed fastening



3. Dimestions, weights

3.1. Dimensions and weights of vents and weights with UR, R1, R2 a R3

Tab. 3.1.1. Dimensoins, weights

Nominal dimensions	One-row					Two-row				
	Vent	with UR	with R1	with R2	with R3	Vent	with UR	with R1	with R2	with R3
200 x 75	0,20	0,52	0,64	0,72	0,65	0,24	0,55	0,68	0,76	0,68
x 80	0,21	0,57	0,65	0,73	0,67	0,25	0,61	0,69	0,78	0,71
x 100	0,25	0,67	0,73	0,82	0,78	0,30	0,72	0,79	0,88	0,84
x 120	0,27	0,75	0,80	0,89	0,88	0,35	0,82	0,87	0,97	0,95
x 125	0,28	0,80	0,82	0,92	0,90	0,35	0,88	0,90	1,00	0,98
x 140	0,30	0,88	0,87	0,98	0,98	0,39	0,97	0,96	1,07	1,07
x 200	0,38	1,02	1,09	1,21	1,28	0,51	1,15	1,22	1,35	1,41
x 220	0,41	1,10	1,15	1,29	1,38	0,56	1,24	1,30	1,44	1,53
x 225	0,41	0,83	1,17	1,31	1,40	0,56	0,98	1,32	1,46	1,55
x 280	0,49	0,96	1,37	1,52	1,68	0,68	1,16	1,56	1,72	1,87
x 320	0,55	1,07	1,51	1,68	1,88	0,77	1,29	1,73	1,90	2,10
x 325	0,55	1,13	1,52	1,70	1,90	0,77	1,35	1,75	1,92	2,12
x 425	0,68	1,32	1,88	2,08	2,40	0,98	1,62	2,18	2,38	2,70
x 525	0,82	1,51	2,23	2,47	2,90	1,19	1,88	2,60	2,85	3,27
220 x 75	0,22	0,96	0,69	0,78	0,70	0,26	1,00	0,73	0,83	0,75
x 80	0,22	1,02	0,70	0,80	0,75	0,27	1,06	0,75	0,85	0,80
x 100	0,26	0,79	0,79	0,90	0,85	0,33	0,85	0,86	0,96	0,92
x 120	0,29	0,87	0,86	0,97	0,93	0,37	0,95	0,94	1,05	1,02
x 125	0,29	0,93	0,89	1,00	0,98	0,38	1,01	0,97	1,08	1,07
x 140	0,32	1,01	0,95	1,06	1,06	0,42	1,11	1,04	1,16	1,16
x 200	0,41	1,15	1,17	1,32	1,30	0,56	1,30	1,32	1,47	1,45
x 220	0,44	1,23	1,25	1,40	1,46	0,60	1,40	1,41	1,57	1,63
x 225	0,44	1,29	1,26	1,42	1,58	0,61	1,46	1,43	1,59	1,75
x 280	0,52	1,43	1,48	1,66	1,82	0,74	1,64	1,70	1,87	2,03
x 320	0,58	1,22	1,63	1,82	2,10	0,83	1,47	1,88	2,07	2,35
x 325	0,58	1,27	1,65	1,84	2,31	0,84	1,53	1,90	2,10	2,56
x 425	0,73	1,47	2,03	2,26	2,72	1,07	1,81	2,37	2,60	3,06
x 525	0,87	1,67	2,41	2,69	3,14	1,30	2,09	2,83	3,11	3,56
225 x 75	0,22	1,07	0,70	0,80	0,72	0,27	1,11	0,75	0,84	0,76
x 80	0,22	1,13	0,72	0,81	0,77	0,27	1,18	0,76	0,86	0,82
x 100	0,27	1,22	0,81	0,91	0,87	0,33	1,29	0,87	0,97	0,93
x 120	0,30	1,31	0,88	0,99	0,95	0,38	1,39	0,96	1,07	1,04
x 125	0,30	1,04	0,90	1,01	1,00	0,38	1,13	0,98	1,10	1,09
x 140	0,33	1,12	0,96	1,08	1,08	0,42	1,22	1,06	1,18	1,18
x 200	0,41	1,26	1,19	1,33	1,33	0,56	1,41	1,34	1,48	1,48
x 220	0,44	1,35	1,26	1,42	1,49	0,61	1,51	1,43	1,58	1,66
x 225	0,45	1,40	1,28	1,43	1,61	0,62	1,57	1,45	1,60	1,78
x 280	0,53	1,54	1,50	1,67	1,85	0,75	1,76	1,71	1,89	2,07
x 320	0,59	1,66	1,65	1,84	2,14	0,84	1,90	1,90	2,09	2,39
x 325	0,59	1,71	1,66	1,86	2,35	0,85	1,97	1,92	2,12	2,61
x 425	0,74	1,59	2,05	2,29	2,78	1,08	1,93	2,39	2,62	3,11
x 525	0,89	1,79	2,43	2,71	3,20	1,31	2,21	2,85	3,13	3,62

Nominal dimensions	One-row					Two-row				
	Vent	with UR	with R1	with R2	with R3	Vent	with UR	with R1	with R2	with R3
280 x 75	0,26	1,22	0,84	0,97	0,88	0,32	1,28	0,90	1,02	0,94
x 80	0,26	1,27	0,86	0,98	0,94	0,33	1,34	0,92	1,05	1,00
x 100	0,31	1,38	0,96	1,10	1,05	0,40	1,46	1,05	1,18	1,14
x 120	0,35	1,46	1,04	1,19	1,16	0,45	1,57	1,15	1,30	1,26
x 125	0,35	1,52	1,07	1,22	1,22	0,46	1,63	1,18	1,33	1,33
x 140	0,38	1,61	1,14	1,30	1,31	0,51	1,74	1,27	1,43	1,44
x 200	0,48	1,44	1,41	1,59	1,61	0,68	1,64	1,61	1,79	1,80
x 220	0,52	1,53	1,50	1,69	1,80	0,74	1,75	1,72	1,91	2,02
x 225	0,52	1,59	1,51	1,71	1,95	0,75	1,81	1,74	1,94	2,18
x 280	0,62	1,74	1,77	1,99	2,24	0,91	2,03	2,05	2,28	2,53
x 320	0,69	1,86	1,94	2,19	2,59	1,02	2,20	2,28	2,53	2,93
x 325	0,70	1,92	1,96	2,22	2,86	1,03	2,26	2,30	2,55	3,20
x 425	0,87	2,15	2,41	2,71	3,36	1,32	2,60	2,86	3,16	3,81
x 525	1,04	2,37	2,86	3,21	3,86	1,60	2,94	3,42	3,77	4,42
320 x 75	0,29	1,35	0,94	1,08	0,99	0,36	1,42	1,01	1,15	1,06
x 80	0,29	1,41	0,96	1,10	1,06	0,37	1,49	1,03	1,18	1,13
x 100	0,34	1,52	1,07	1,22	1,19	0,44	1,62	1,17	1,32	1,29
x 120	0,38	1,61	1,16	1,33	1,30	0,51	1,73	1,28	1,45	1,43
x 125	0,39	1,66	1,18	1,36	1,37	0,52	1,80	1,32	1,49	1,50
x 140	0,42	1,75	1,26	1,44	1,48	0,57	1,91	1,41	1,59	1,63
x 200	0,54	1,92	1,55	1,77	1,80	0,77	2,15	1,78	2,00	2,03
x 220	0,57	2,01	1,65	1,87	2,03	0,83	2,27	1,90	2,13	2,28
x 225	0,58	1,75	1,67	1,89	2,20	0,84	2,01	1,93	2,16	2,46
x 280	0,69	1,91	1,94	2,20	2,52	1,02	2,25	2,28	2,54	2,85
x 320	0,77	2,05	2,14	2,42	2,92	1,15	2,43	2,52	2,80	3,31
x 325	0,77	2,10	2,16	2,44	3,22	1,16	2,50	2,55	2,83	3,62
x 425	0,96	2,35	2,64	2,98	3,78	1,49	2,87	3,17	3,51	4,30
x 525	1,15	2,59	3,13	3,52	4,33	1,81	3,25	3,78	4,18	4,99
325 x 75	0,29	1,79	0,95	1,10	1,01	1,58	3,08	2,24	2,39	2,30
x 80	0,30	1,84	0,97	1,12	1,07	1,59	3,13	2,26	2,41	2,36
x 100	0,35	0,71	1,08	1,24	1,21	0,63	0,99	1,36	1,52	1,49
x 120	0,39	0,86	1,17	1,34	1,32	0,80	1,27	1,58	1,75	1,73
x 125	0,39	0,97	1,20	1,37	1,39	0,93	1,51	1,74	1,91	1,93
x 140	0,43	1,11	1,27	1,46	1,50	1,10	1,79	1,95	2,13	2,17
x 200	0,54	1,34	1,57	1,78	1,83	1,34	2,14	2,37	2,58	2,63
x 220	0,58	1,48	1,66	1,89	2,05	1,51	2,41	2,59	2,82	2,99
x 225	0,58	1,59	1,68	1,91	2,23	1,65	2,66	2,74	2,97	3,29
x 280	0,70	1,92	1,96	2,22	2,55	2,02	3,25	3,28	3,54	3,88
x 320	0,78	2,22	2,15	2,43	2,96	2,36	3,80	3,73	4,02	4,54
x 325	0,78	1,20	2,17	2,46	3,27	1,06	1,48	2,45	2,74	3,55
x 425	0,97	1,50	2,66	3,00	3,83	1,38	1,91	3,07	3,41	4,24
x 525	1,17	1,80	3,15	3,55	4,40	1,71	2,34	3,69	4,09	4,94
400 x 75	0,35	1,09	1,14	1,33	1,22	1,21	1,95	2,01	2,20	2,09
x 80	0,35	1,20	1,16	1,35	1,31	1,38	2,23	2,19	2,38	2,33
x 100	0,41	1,37	1,29	1,50	1,46	1,61	2,56	2,49	2,69	2,66
x 120	0,46	1,52	1,40	1,62	1,60	1,82	2,88	2,77	2,98	2,96
x 125	0,46	1,74	1,43	1,66	1,68	2,16	3,44	3,13	3,36	3,38
x 140	0,50	2,00	1,52	1,76	1,81	2,53	4,03	3,56	3,79	3,85
x 200	0,64	1,16	1,87	2,15	2,20	1,00	1,53	2,23	2,51	2,57
x 220	0,68	1,32	1,99	2,28	2,48	1,21	1,85	2,52	2,80	3,01
x 225	0,69	1,43	2,01	2,30	2,70	1,38	2,12	2,71	3,00	3,39
x 280	0,82	1,67	2,34	2,67	3,08	1,69	2,54	3,20	3,53	3,95
x 320	0,91	1,87	2,57	2,93	3,57	1,94	2,90	3,60	3,96	4,60
x 325	0,92	1,98	2,60	2,96	3,95	2,11	3,18	3,79	4,16	5,15
x 425	1,14	2,32	3,18	3,61	4,62	2,51	3,68	4,54	4,97	5,99
x 525	1,37	2,76	3,76	4,26	5,29	3,07	4,46	5,46	5,96	6,99
420 x 75	0,36	1,10	1,19	1,40	1,28	1,28	2,02	2,10	2,31	2,19
x 80	0,36	1,21	1,21	1,42	1,37	1,45	2,30	2,30	2,51	2,45
x 100	0,43	1,38	1,34	1,57	1,53	1,69	2,64	2,60	2,83	2,79
x 120	0,47	1,54	1,45	1,70	1,67	1,91	2,98	2,89	3,14	3,11

Nominal dimensions	One-row					Two-row				
	Vent	with UR	with R1	with R2	with R3	Vent	with UR	with R1	with R2	with R3
420 x 125	0,48	1,75	1,48	1,74	1,76	2,27	3,55	3,28	3,53	3,55
x 140	0,52	2,02	1,58	1,84	1,90	2,67	4,16	3,72	3,99	4,04
x 200	0,66	1,19	1,93	2,25	2,31	1,04	1,57	2,31	2,64	2,69
x 220	0,71	1,35	2,05	2,39	2,59	1,27	1,90	2,61	2,95	3,15
x 225	0,71	1,46	2,07	2,41	2,82	1,45	2,19	2,80	3,15	3,56
x 280	0,85	1,70	2,40	2,80	3,22	1,77	2,62	3,32	3,72	4,13
x 320	0,95	1,91	2,64	3,08	3,74	2,04	2,99	3,73	4,16	4,82
x 325	0,95	2,02	2,66	3,11	4,14	2,22	3,28	3,93	4,37	5,40
x 425	1,19	2,36	3,26	3,79	4,84	2,63	3,80	4,70	5,23	6,28
x 525	1,43	2,82	3,85	4,48	5,53	3,22	4,61	5,64	6,27	7,33
425 x 75	0,37	1,86	1,21	1,41	1,29	2,12	3,61	2,96	3,16	3,04
x 80	0,37	1,92	1,23	1,43	1,38	2,12	3,67	2,98	3,18	3,13
x 100	0,43	0,79	1,37	1,58	1,54	0,81	1,18	1,75	1,96	1,92
x 120	0,48	0,95	1,48	1,71	1,69	1,04	1,51	2,04	2,27	2,24
x 125	0,48	1,06	1,51	1,75	1,78	1,22	1,80	2,25	2,49	2,51
x 140	0,53	1,21	1,61	1,86	1,92	1,44	2,13	2,52	2,77	2,83
x 200	0,67	1,47	1,98	2,27	2,33	1,76	2,55	3,06	3,36	3,41
x 220	0,72	1,62	2,10	2,41	2,62	1,98	2,88	3,36	3,67	3,88
x 225	0,72	1,73	2,12	2,43	2,85	2,16	3,17	3,56	3,87	4,29
x 280	0,86	2,09	2,47	2,82	3,26	2,66	3,88	4,26	4,62	5,05
x 320	0,96	2,40	2,71	3,10	3,78	3,10	4,54	4,86	5,24	5,92
x 325	0,96	1,38	2,74	3,13	4,18	1,34	1,76	3,12	3,51	4,56
x 425	1,20	1,73	3,35	3,81	4,89	1,76	2,29	3,91	4,37	5,44
x 525	1,44	2,08	3,96	4,50	5,59	2,18	2,81	4,70	5,24	6,33
520 x 75	0,43	1,18	1,45	1,70	1,56	1,59	2,33	2,60	2,85	2,72
x 80	0,44	1,29	1,47	1,72	1,67	1,81	2,66	2,84	3,09	3,05
x 100	0,51	1,46	1,63	1,90	1,86	2,10	3,06	3,22	3,49	3,46
x 120	0,56	1,63	1,76	2,05	2,04	2,38	3,45	3,58	3,87	3,85
x 125	0,57	1,85	1,80	2,09	2,14	2,83	4,11	4,07	4,36	4,41
x 140	0,62	2,11	1,91	2,22	2,31	3,33	4,82	4,62	4,93	5,02
x 200	0,79	1,32	2,34	2,70	2,80	1,27	1,80	2,82	3,18	3,29
x 220	0,85	1,48	2,48	2,86	3,15	1,55	2,19	3,19	3,56	3,86
x 225	0,85	1,59	2,51	2,89	3,44	1,78	2,52	3,44	3,82	4,37
x 280	1,02	1,87	2,91	3,35	3,92	2,17	3,02	4,07	4,50	5,08
x 320	1,13	2,09	3,20	3,67	4,55	2,51	3,46	4,57	5,04	5,93
x 325	1,14	2,20	3,23	3,70	5,05	2,73	3,80	4,82	5,30	6,64
x 425	1,42	2,59	3,94	4,51	5,89	3,24	4,41	5,76	6,33	7,71
x 525	1,71	3,09	4,66	5,31	6,73	3,97	5,36	6,93	7,58	9,00
525 x 75	0,44	1,18	1,46	1,71	1,58	1,59	2,33	2,61	2,86	2,73
x 80	0,44	1,29	1,48	1,74	1,69	1,81	2,66	2,85	3,11	3,06
x 100	0,51	1,47	1,64	1,91	1,88	2,11	3,06	3,23	3,51	3,47
x 120	0,57	1,63	1,77	2,06	2,05	2,39	3,45	3,59	3,88	3,87
x 125	0,57	1,85	1,81	2,11	2,16	2,84	4,12	4,08	4,37	4,43
x 140	0,63	2,12	1,92	2,23	2,33	3,34	4,83	4,63	4,94	5,04
x 200	0,80	1,32	2,36	2,72	2,83	1,28	1,81	2,84	3,20	3,31
x 220	0,86	1,49	2,50	2,88	3,18	1,56	2,19	3,20	3,58	3,89
x 225	0,86	1,60	2,52	2,91	3,47	1,79	2,53	3,45	3,83	4,40
x 280	1,03	1,88	2,93	3,36	3,96	2,18	3,03	4,08	4,52	5,11
x 320	1,14	2,10	3,22	3,69	4,60	2,51	3,47	4,59	5,06	5,97
x 325	1,15	2,21	3,25	3,72	5,09	2,74	3,80	4,84	5,32	6,69
x 425	1,43	2,60	3,96	4,53	5,94	3,25	4,42	5,78	6,35	7,76
x 525	1,72	3,11	4,68	5,34	6,79	3,99	5,37	6,95	7,60	9,06
560 x 75	0,46	1,96	1,55	1,81	1,68	2,86	4,35	3,94	4,21	4,07
x 80	0,47	2,01	1,57	1,84	1,80	2,86	4,41	3,96	4,24	4,19
x 100	0,54	0,90	1,73	2,02	2,00	1,06	1,43	2,25	2,55	2,52
x 120	0,60	1,07	1,88	2,19	2,18	1,36	1,84	2,64	2,95	2,94
x 125	0,60	1,18	1,91	2,23	2,30	1,61	2,19	2,92	3,24	3,30
x 140	0,66	1,35	2,03	2,36	2,48	1,91	2,60	3,28	3,61	3,73
x 200	0,84	1,64	2,49	2,87	3,00	2,33	3,12	3,97	4,36	4,49
x 220	0,90	1,81	2,63	3,04	3,38	2,63	3,53	4,36	4,77	5,11

Nominal dimensions	One-row					Two-row				
	Vent	with UR	with R1	with R2	with R3	Vent	with UR	with R1	with R2	with R3
560 x 225	0,91	1,92	2,66	3,07	3,69	2,88	3,89	4,63	5,04	5,66
x 280	1,09	2,31	3,09	3,55	4,20	3,54	4,77	5,54	6,01	6,66
x 320	1,21	2,65	3,39	3,89	4,88	4,14	5,58	6,32	6,82	7,82
x 325	1,21	1,63	3,42	3,93	5,41	1,73	2,15	3,94	4,45	5,93
x 425	1,51	2,04	4,17	4,77	6,31	2,28	2,80	4,94	5,54	7,08
x 525	1,82	2,45	4,93	5,62	7,21	2,82	3,46	5,93	6,63	8,22
620 x 75	0,51	1,25	1,70	2,00	1,85	1,90	2,64	3,09	3,39	3,24
x 80	0,51	1,36	1,72	2,03	1,98	2,17	3,01	3,38	3,68	3,64
x 100	0,59	1,54	1,90	2,22	2,20	2,52	3,47	3,83	4,15	4,12
x 120	0,65	1,72	2,06	2,40	2,40	2,85	3,92	4,25	4,60	4,60
x 125	0,66	1,94	2,10	2,45	2,53	3,40	4,68	4,84	5,19	5,27
x 140	0,72	2,21	2,23	2,59	2,73	3,99	5,49	5,50	5,87	6,00
x 200	0,92	1,45	2,72	3,15	3,30	1,50	2,03	3,30	3,73	3,88
x 220	0,99	1,62	2,88	3,33	3,72	1,84	2,47	3,73	4,18	4,57
x 225	0,99	1,73	2,91	3,36	4,06	2,11	2,85	4,03	4,49	5,18
x 280	1,19	2,03	3,38	3,89	4,62	2,58	3,43	4,77	5,28	6,02
x 320	1,32	2,27	3,70	4,26	5,37	2,97	3,93	5,36	5,92	7,03
x 325	1,32	2,38	3,74	4,30	5,96	3,25	4,31	5,66	6,23	7,89
x 425	1,65	2,82	4,56	5,22	6,94	3,85	5,02	6,75	7,42	9,14
x 525	1,98	3,37	5,38	6,15	7,93	4,72	6,11	8,12	8,89	10,67
625 x 75	0,51	1,25	1,71	2,01	1,86	1,90	2,64	3,10	3,40	3,26
x 80	0,51	1,36	1,73	2,04	2,00	2,17	3,02	3,39	3,70	3,65
x 100	0,59	1,55	1,91	2,24	2,22	2,52	3,48	3,84	4,17	4,14
x 120	0,66	1,72	2,07	2,42	2,42	2,86	3,92	4,27	4,62	4,62
x 125	0,66	1,94	2,11	2,46	2,55	3,40	4,68	4,85	5,20	5,29
x 140	0,73	2,22	2,24	2,61	2,75	4,00	5,49	5,51	5,88	6,02
x 200	0,93	1,45	2,73	3,17	3,33	1,51	2,03	3,31	3,75	3,91
x 220	0,99	1,63	2,90	3,35	3,75	1,84	2,48	3,75	4,20	4,60
x 225	1,00	1,74	2,92	3,38	4,09	2,12	2,86	4,05	4,50	5,21
x 280	1,19	2,04	3,39	3,91	4,66	2,59	3,44	4,79	5,30	6,05
x 320	1,33	2,28	3,72	4,28	5,41	2,98	3,94	5,38	5,93	7,07
x 325	1,33	2,39	3,75	4,32	6,01	3,26	4,32	5,68	6,25	7,93
x 425	1,66	2,83	4,58	5,24	7,00	3,86	5,03	6,77	7,44	9,20
x 525	2,00	3,38	5,40	6,17	7,99	4,74	6,12	8,14	8,91	10,73
720 x 75	0,58	2,07	1,95	2,31	2,14	3,71	5,20	5,08	5,44	5,27
x 80	0,58	2,13	1,97	2,34	2,29	3,71	5,26	5,11	5,48	5,42
x 100	0,67	1,03	2,17	2,57	2,54	1,35	1,72	2,85	3,25	3,22
x 120	0,74	1,22	2,35	2,78	2,77	1,74	2,22	3,35	3,77	3,77
x 125	0,75	1,33	2,39	2,83	2,92	2,06	2,64	3,71	4,15	4,23
x 140	0,82	1,51	2,54	3,00	3,15	2,45	3,14	4,17	4,63	4,78
x 200	1,05	1,84	3,10	3,64	3,80	2,99	3,79	5,04	5,58	5,75
x 220	1,12	2,03	3,28	3,85	4,28	3,38	4,29	5,54	6,11	6,54
x 225	1,13	2,14	3,31	3,89	4,68	3,70	4,71	5,89	6,46	7,25
x 280	1,35	2,58	3,84	4,49	5,33	4,56	5,79	7,05	7,70	8,54
x 320	1,50	2,94	4,21	4,92	6,19	5,34	6,78	8,05	8,76	10,03
x 325	1,50	1,92	4,24	4,97	6,87	2,19	2,60	4,93	5,65	7,56
x 425	1,88	2,41	5,17	6,03	8,00	2,88	3,41	6,17	7,03	9,00
x 525	2,26	2,89	6,09	7,10	9,13	3,58	4,21	7,41	8,42	10,45
725 x 75	0,58	1,32	1,96	2,32	2,15	2,22	2,96	3,59	3,96	3,78
x 80	0,58	1,43	1,99	2,36	2,30	2,53	3,38	3,93	4,30	4,24
x 100	0,67	1,63	2,18	2,58	2,55	2,93	3,89	4,44	4,84	4,81
x 120	0,75	1,81	2,36	2,79	2,79	3,33	4,39	4,94	5,37	5,36
x 125	0,75	2,03	2,41	2,84	2,94	3,96	5,24	5,62	6,06	6,15
x 140	0,83	2,32	2,56	3,01	3,17	4,66	6,16	6,39	6,85	7,00
x 200	1,05	1,58	3,11	3,65	3,83	1,74	2,26	3,79	4,34	4,51
x 220	1,13	1,76	3,30	3,87	4,31	2,13	2,76	4,29	4,86	5,31
x 225	1,13	1,87	3,33	3,90	4,71	2,45	3,19	4,64	5,22	6,02
x 280	1,36	2,21	3,85	4,51	5,36	2,99	3,84	5,49	6,14	7,00
x 320	1,51	2,47	4,22	4,94	6,23	3,45	4,41	6,17	6,88	8,17
x 325	1,51	2,58	4,26	4,99	6,92	3,77	4,84	6,52	7,25	9,18

Nominal dimensions	One-row					Two-row				
	Vent	with UR	with R1	with R2	with R3	Vent	with UR	with R1	with R2	with R3
x 425	1,89	3,07	5,19	6,06	8,05	4,47	5,64	7,77	8,63	10,63
x 525	2,27	3,66	6,12	7,13	9,19	5,49	6,87	9,33	10,34	12,40
820 x 75	0,65	1,39	2,20	2,61	2,42	2,52	3,27	4,07	4,48	4,30
x 80	0,65	1,50	2,23	2,65	2,59	2,88	3,73	4,45	4,87	4,82
x 100	0,75	1,71	2,44	2,90	2,87	3,34	4,30	5,04	5,49	5,47
x 120	0,84	1,90	2,64	3,13	3,14	3,79	4,86	5,60	6,08	6,09
x 125	0,84	2,12	2,69	3,18	3,31	4,52	5,80	6,38	6,87	6,99
x 140	0,92	2,41	2,86	3,37	3,56	5,32	6,82	7,26	7,77	7,97
x 200	1,18	1,70	3,47	4,08	4,30	1,96	2,48	4,26	4,87	5,09
x 220	1,26	1,89	3,68	4,32	4,85	2,41	3,04	4,82	5,47	5,99
x 225	1,26	2,00	3,71	4,36	5,30	2,77	3,51	5,22	5,87	6,81
x 280	1,52	2,36	4,30	5,03	6,03	3,39	4,24	6,17	6,91	7,90
x 320	1,69	2,64	4,71	5,51	7,00	3,91	4,87	6,94	7,74	9,23
x 325	1,69	2,75	4,75	5,56	7,79	4,28	5,34	7,34	8,15	10,38
x 425	2,11	3,28	5,78	6,75	9,06	5,07	6,24	8,74	9,70	12,01
x 525	2,54	3,92	6,81	7,94	10,33	6,22	7,61	10,50	11,62	14,01
825 x 75	0,65	2,15	2,21	2,62	2,44	4,25	5,74	5,80	6,22	6,03
x 80	0,66	2,20	2,24	2,66	2,61	4,25	5,80	5,83	6,25	6,20
x 100	0,75	1,12	2,46	2,91	2,89	1,54	1,90	3,24	3,69	3,67
x 120	0,84	1,31	2,66	3,14	3,15	1,99	2,46	3,80	4,29	4,30
x 125	0,84	1,42	2,70	3,20	3,32	2,35	2,93	4,21	4,71	4,83
x 140	0,93	1,61	2,87	3,39	3,58	2,80	3,49	4,74	5,26	5,46
x 200	1,18	1,98	3,49	4,10	4,33	3,41	4,21	5,72	6,33	6,56
x 220	1,27	2,17	3,69	4,34	4,87	3,86	4,76	6,29	6,93	7,47
x 225	1,27	2,28	3,73	4,38	5,33	4,23	5,24	6,68	7,33	8,28
x 280	1,52	2,75	4,32	5,05	6,06	5,21	6,43	8,00	8,74	9,75
x 320	1,69	3,13	4,73	5,53	7,04	6,10	7,54	9,13	9,93	11,45
x 325	1,70	2,12	4,77	5,58	7,83	2,48	2,90	5,55	6,36	8,61
x 425	2,12	2,65	5,80	6,77	9,11	3,27	3,80	6,95	7,92	10,25
x 525	2,55	3,19	6,83	7,96	10,39	4,06	4,70	8,34	9,47	11,90
1020 x 75	0,79	1,53	2,70	3,22	3,00	3,15	3,89	5,06	5,58	5,35
x 80	0,80	1,65	2,74	3,27	3,21	3,60	4,45	5,54	6,07	6,01
x 100	0,91	1,87	3,00	3,57	3,55	4,17	5,13	6,26	6,83	6,80
x 120	1,02	2,08	3,25	3,85	3,87	4,73	5,79	6,96	7,57	7,58
x 125	1,02	2,30	3,31	3,92	4,08	5,65	6,93	7,94	8,55	8,71
x 140	1,12	2,61	3,51	4,15	4,40	6,65	8,15	9,04	9,68	9,93
x 200	1,43	1,96	4,26	5,02	5,30	2,41	2,94	5,25	6,00	6,28
x 220	1,53	2,17	4,51	5,31	5,97	2,97	3,61	5,95	6,75	7,41
x 225	1,54	2,28	4,55	5,36	6,53	3,43	4,18	6,45	7,25	8,43
x 280	1,85	2,69	5,27	6,18	7,43	4,20	5,05	7,63	8,54	9,79
x 320	2,05	3,01	5,78	6,76	8,64	4,85	5,81	8,58	9,56	11,44
x 325	2,06	3,12	5,83	6,82	9,61	5,31	6,38	9,08	10,08	12,87
x 425	2,57	3,75	7,09	8,28	11,17	6,29	7,46	10,80	11,99	14,88
x 525	3,09	4,48	8,34	9,73	12,72	7,72	9,11	12,97	14,36	17,35
1225 x 75	0,94	1,68	3,21	3,84	3,58	3,78	4,52	6,05	6,67	6,42
x 80	0,94	1,79	3,26	3,89	3,84	4,31	5,16	6,63	7,26	7,21
x 100	1,08	2,04	3,56	4,24	4,24	5,00	5,96	7,48	8,16	8,16
x 120	1,20	2,27	3,85	4,57	4,62	5,67	6,74	8,32	9,04	9,09
x 125	1,20	2,48	3,91	4,65	4,87	6,78	8,06	9,49	10,22	10,44
x 140	1,32	2,82	4,15	4,92	5,25	7,99	9,48	10,81	11,58	11,91
x 200	1,69	2,22	5,03	5,93	6,32	2,88	3,40	6,22	7,12	7,51
x 220	1,82	2,45	5,33	6,27	7,13	3,55	4,18	7,06	8,00	8,86
x 225	1,82	2,56	5,37	6,32	7,80	4,10	4,84	7,65	8,61	10,08
x 280	2,18	3,03	6,21	7,29	8,87	5,02	5,87	9,05	10,12	11,70
x 320	2,43	3,39	6,80	7,96	10,31	5,80	6,76	10,17	11,33	13,68
x 325	2,43	3,50	6,86	8,04	11,48	6,35	7,42	10,78	11,96	15,40
x 425	3,05	4,22	8,33	9,73	13,33	7,52	8,69	12,80	14,20	17,80
x 525	3,66	5,05	9,80	11,42	15,18	9,23	10,62	15,38	16,99	20,75

Atypical dimensions should be discussed with the manufacturer.
 Weights of other possible assemblies on request from the manufacturer.

Fig. 3 One-row vent ($W < 750$ mm) horizontal blades - 1A

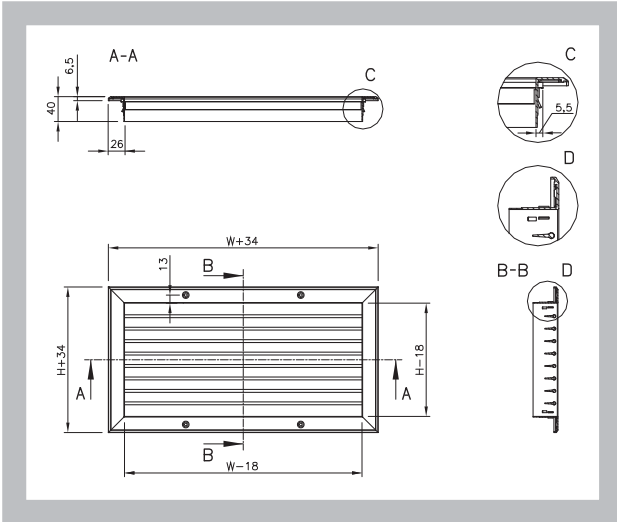


Fig. 4 One-row vent ($W < 750$ mm) vertical blades - 1B

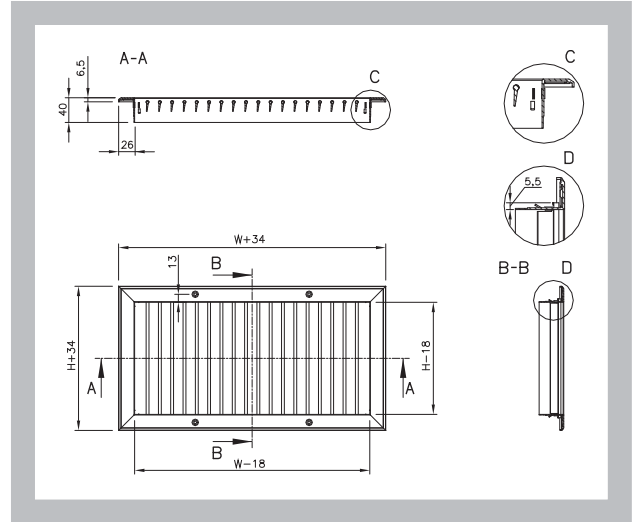


Fig. 5 One-row vent ($W \geq 750$ mm) horizontal blades - 1A

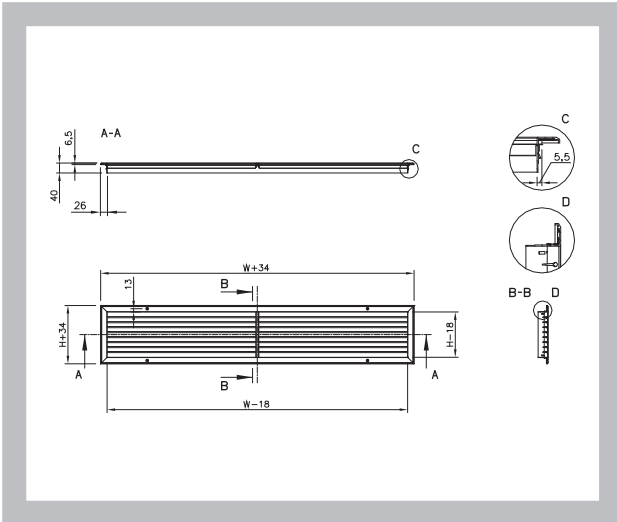


Fig. 6 One-row vent ($W \geq 750$ mm) vertical blades - 1B

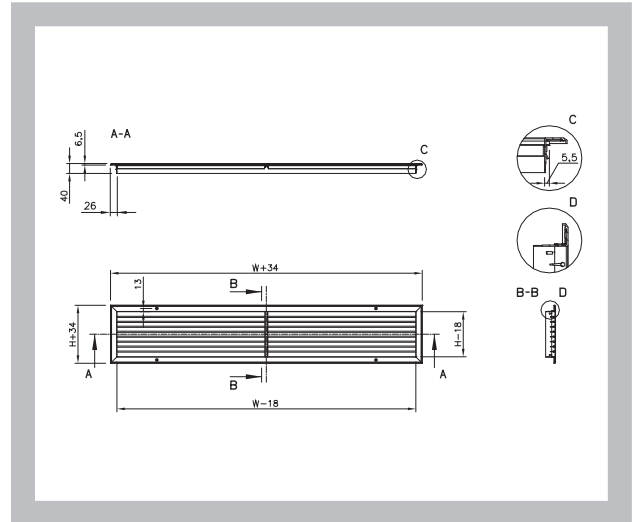


Fig. 7 Two-row vent ($W < 750$ mm) front blades are horizontal - 2A

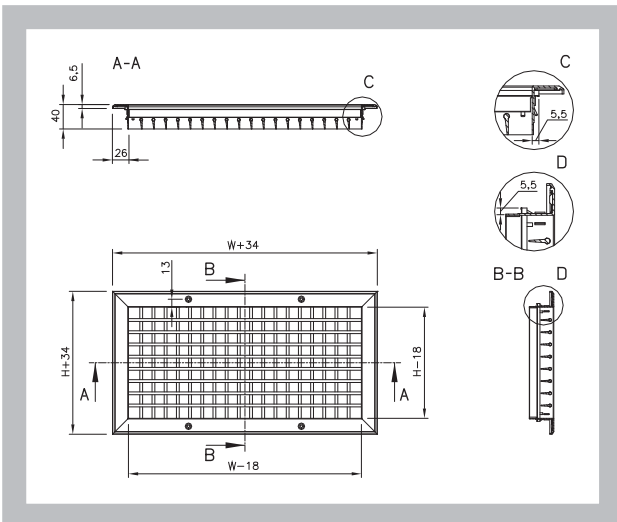


Fig. 8 Two-row vent ($W < 750$ mm) front blades are vertical - 2B

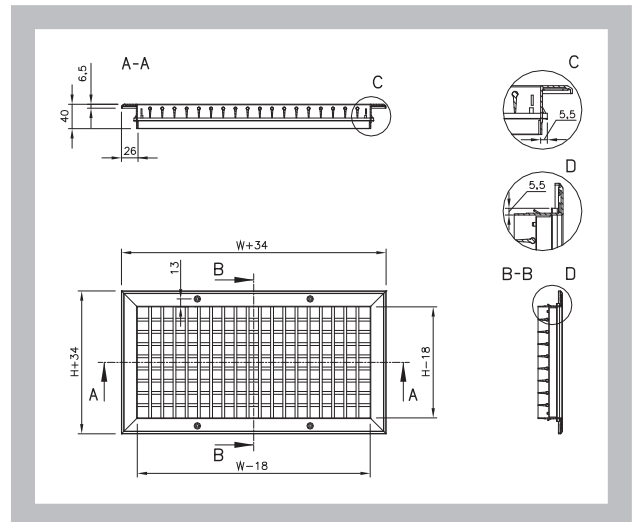


Fig. 9 Two-row vent (W ≥ 50 mm) front blades are horizontal - 2A

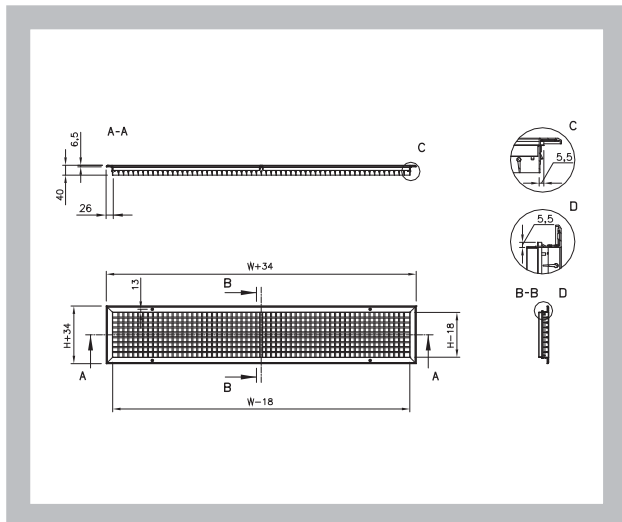
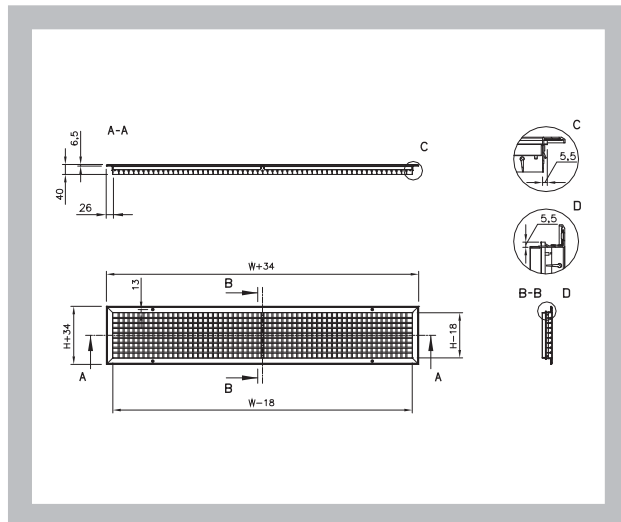


Fig. 10 Two-row vent (W ≥ 50 mm) front blades are vertical - 2B



3.2. Regulations

Fig. 11 Regulation R1

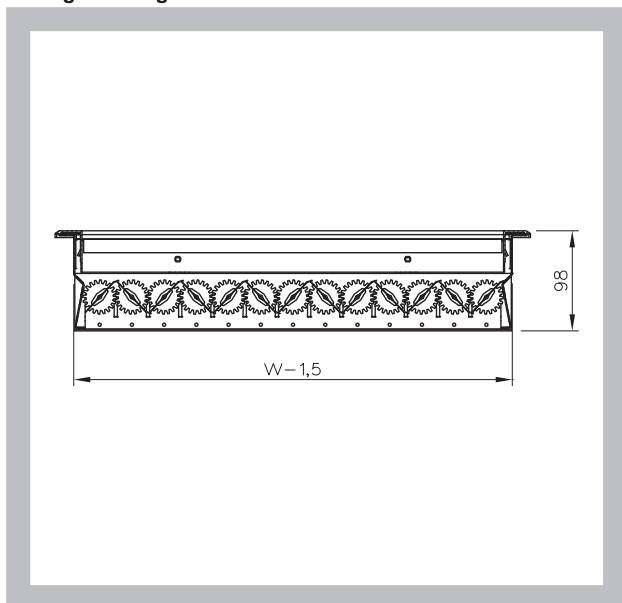


Fig. 12 Regulation R3

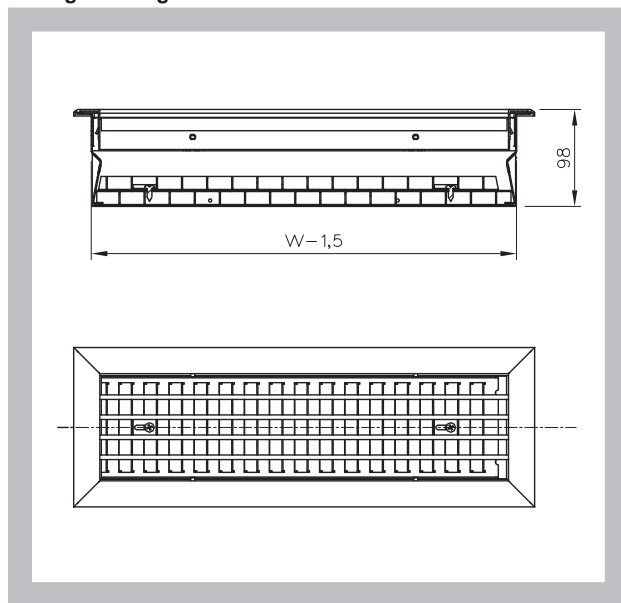


Fig. 13 Regulation R2 (closed position)

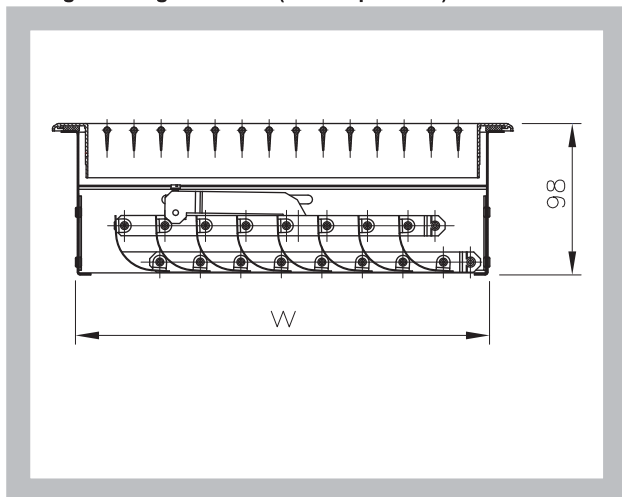


Fig. 14 Regulation R2 (opened position)

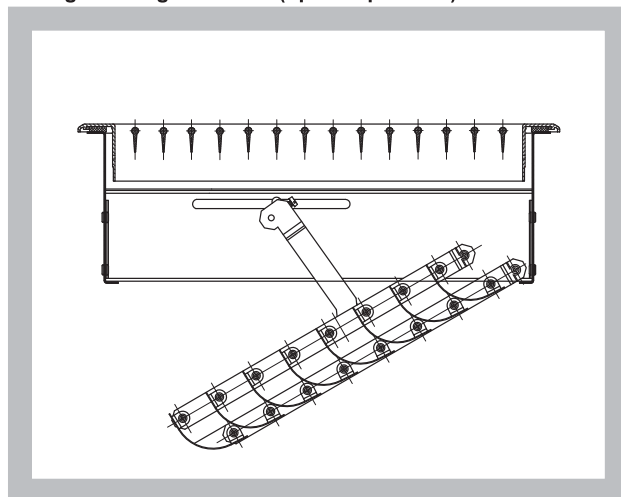


Fig. 15 Regulation R5

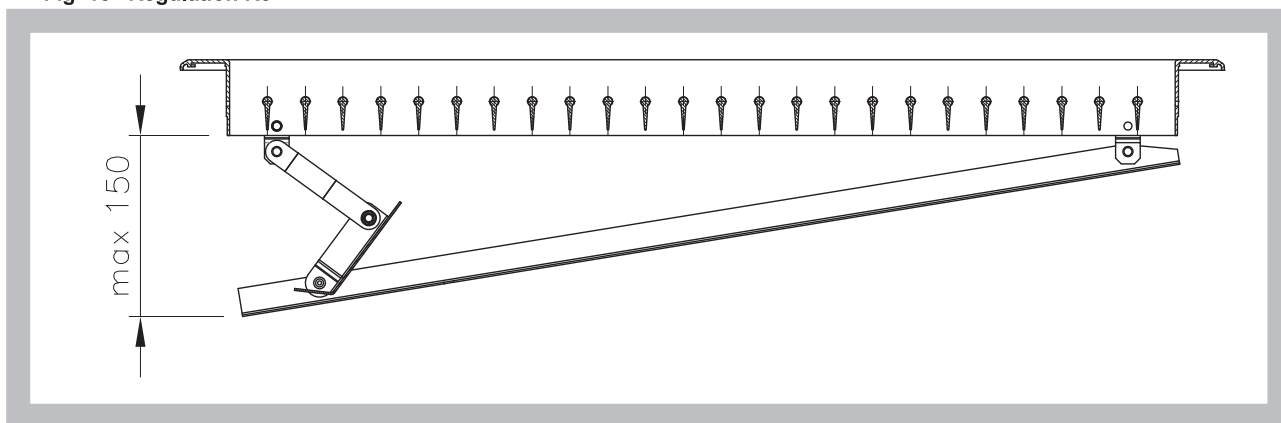
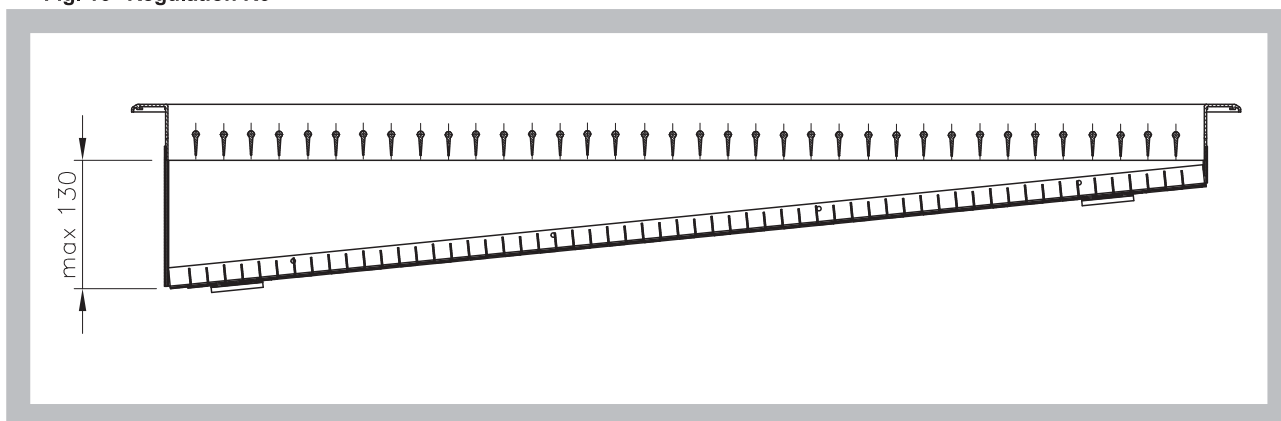


Fig. 16 Regulation R6



3.3. Fixing frame

Fig. 17 Fixing frame UR

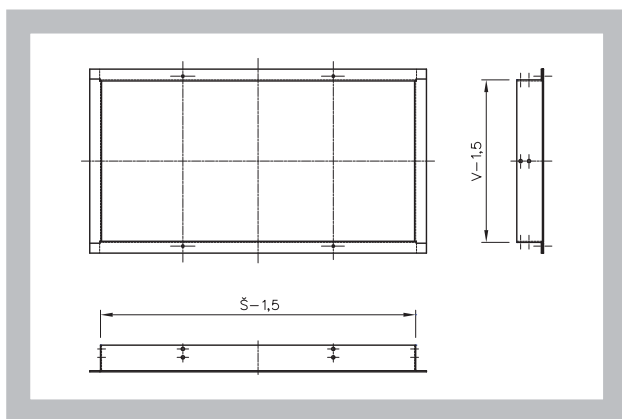


Fig. 18 Fixing frame UR adapted for installation in the gypsum constructions

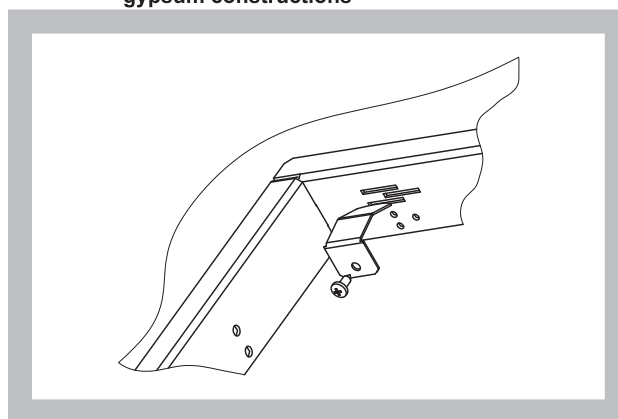


Fig. 19 Fixing frame UR adapted for installation in the gypsum constructions

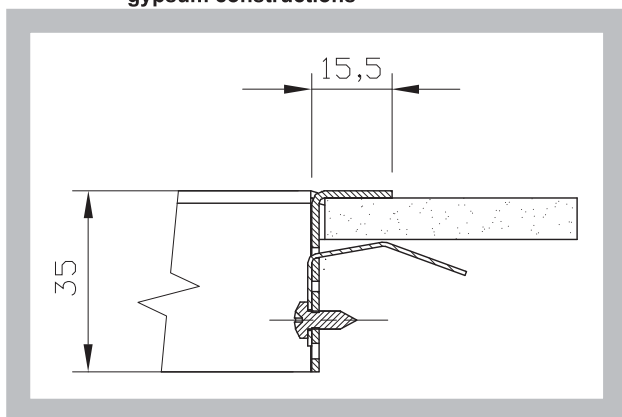
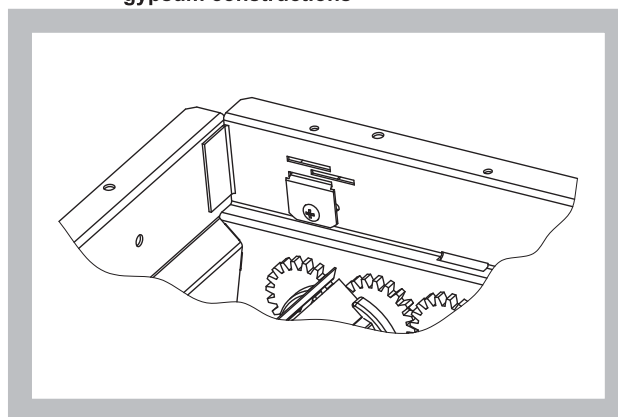


Fig. 20 Regulation R1 adapted for installation in the gypsum constructions



3.4. Details

Fig. 21 Detail of blade profile

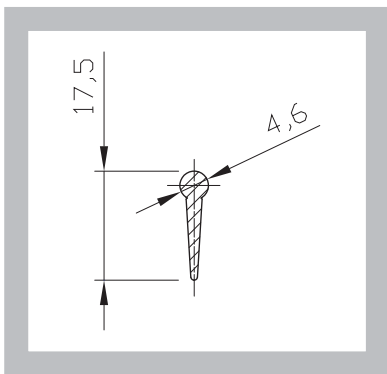


Fig. 22 Detail of concealed fastening

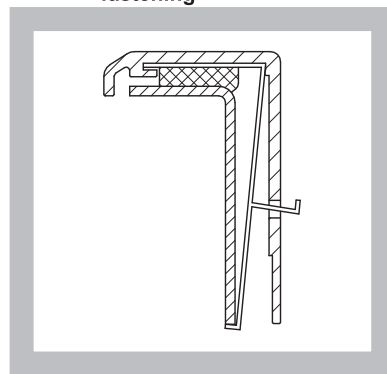


Fig. 23 Detail of leaf on fixation frame

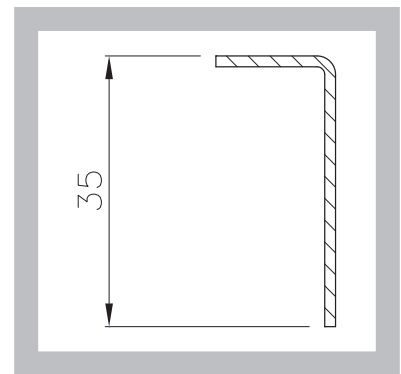
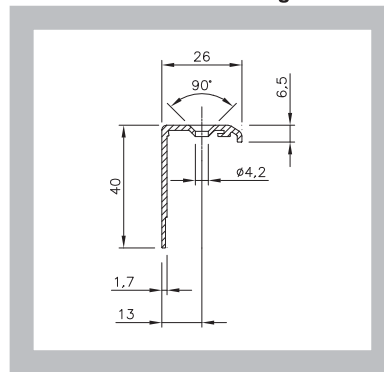


Fig. 24 Detail of spring clip



Fig. 25 Detail of vent frame for screwed fastening

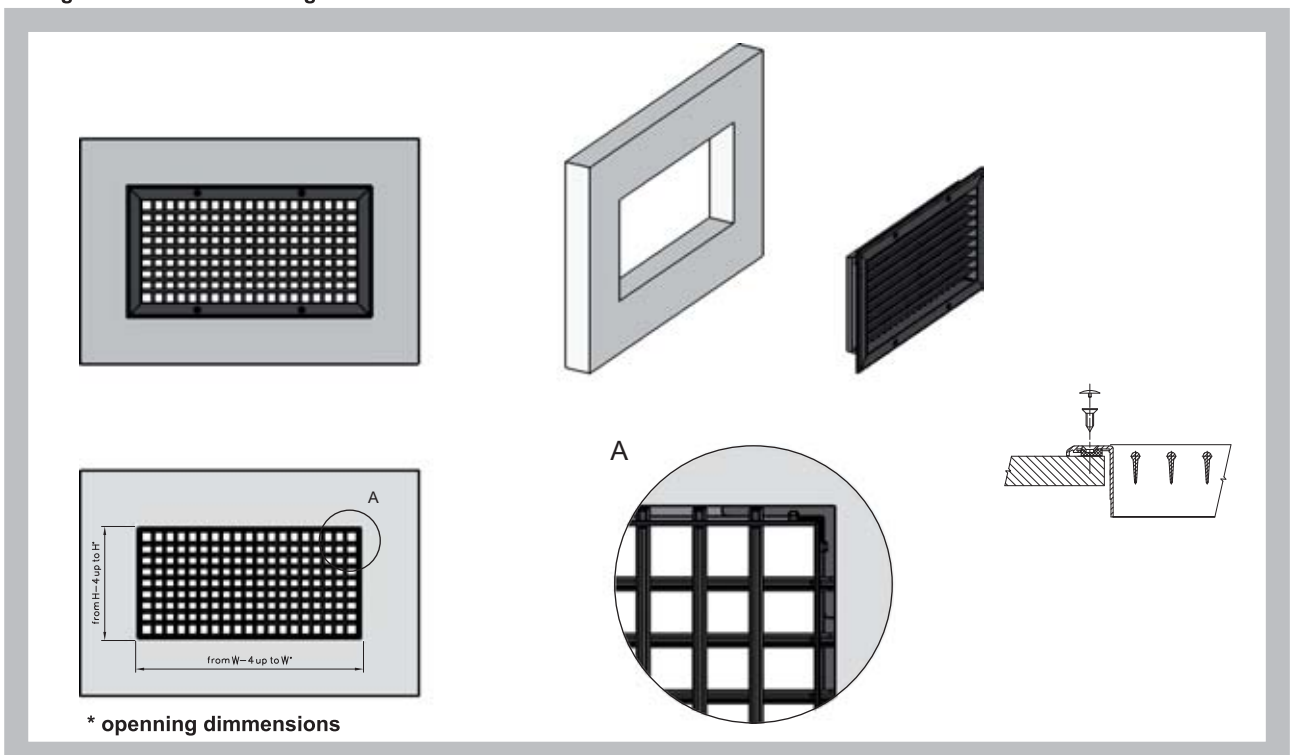


4. Installation and location

4.1. Vents are intended for installation in piping, partition walls and lower ceilings by using fixing frame UR or regulation R1, R2 or R3. For screwed fastening is possible direct mounting without fixing frame or regulation.

4.2. Vents Installation

Fig. 26 Screwed fastening



4.2. Installation by using fixing frame UR

Fig. 27 Installation by using fixing frame UR - screwed fastening

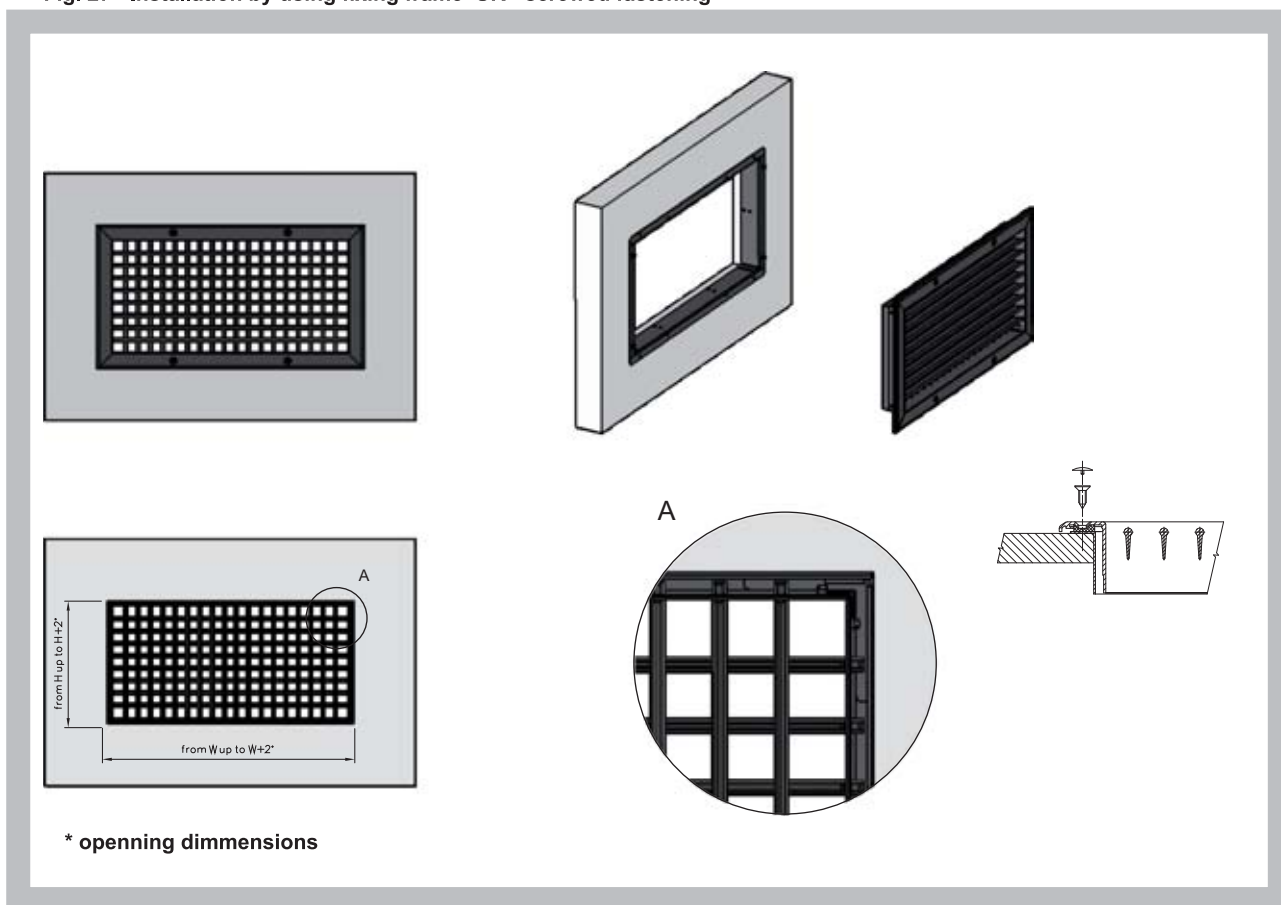
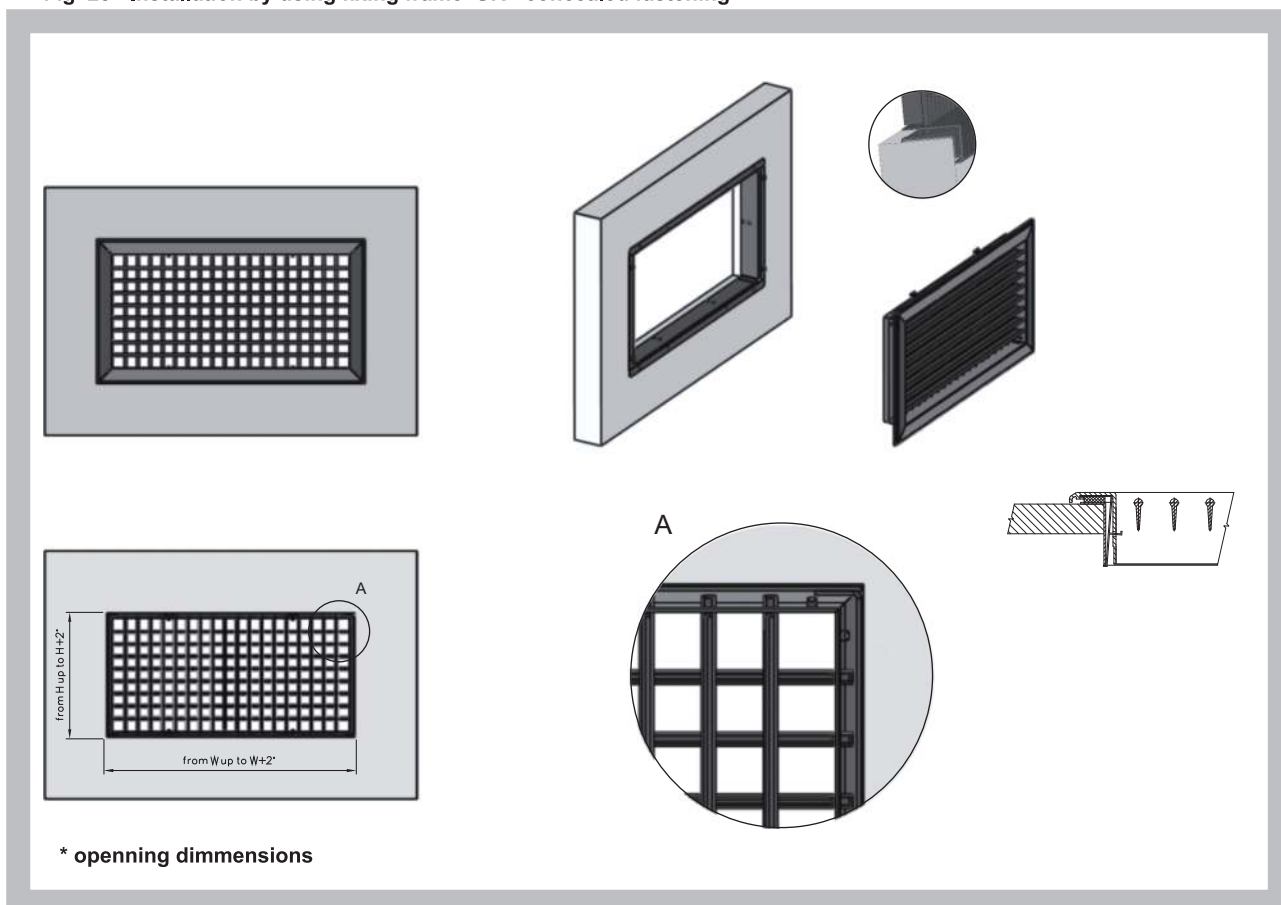
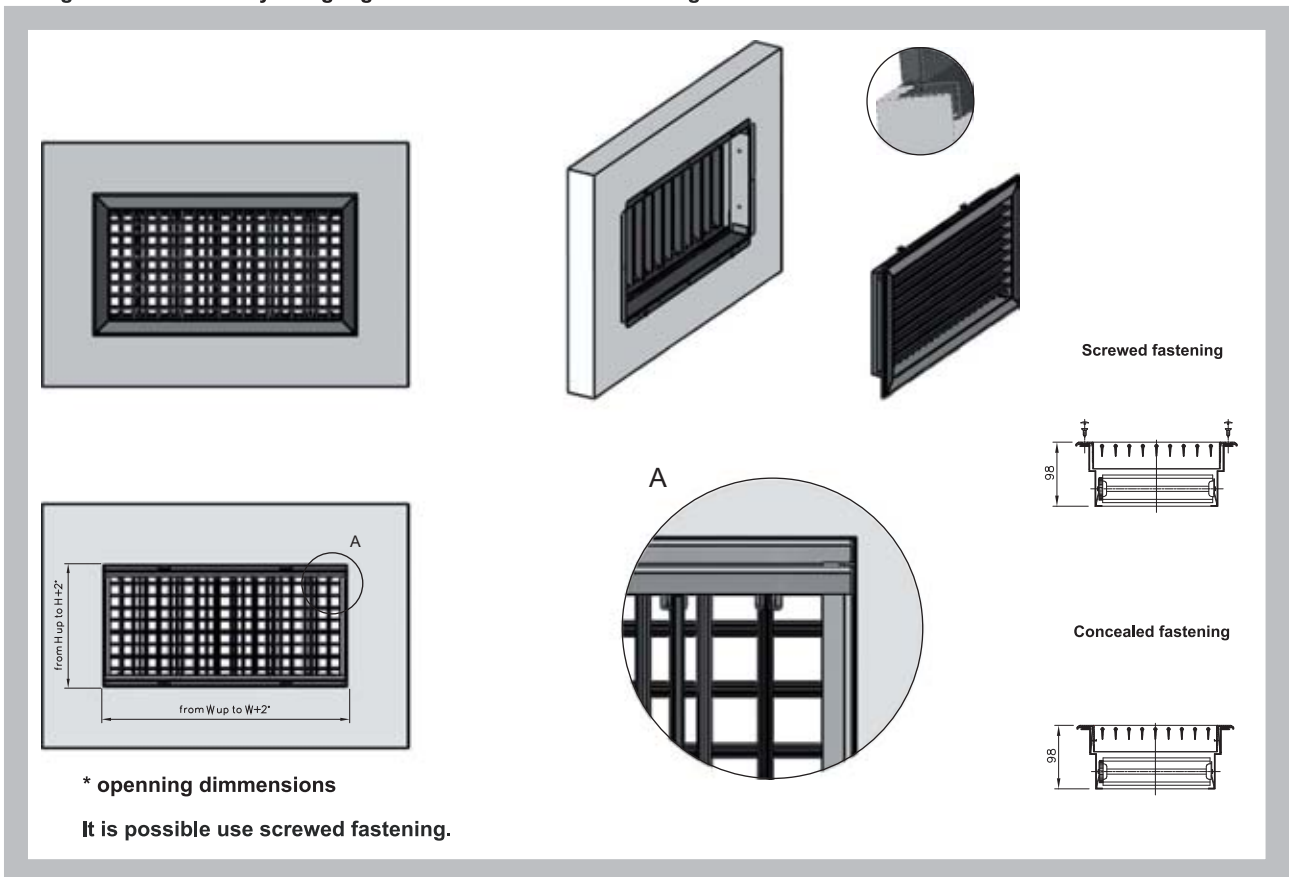


Fig. 28 Installation by using fixing frame UR - concealed fastening



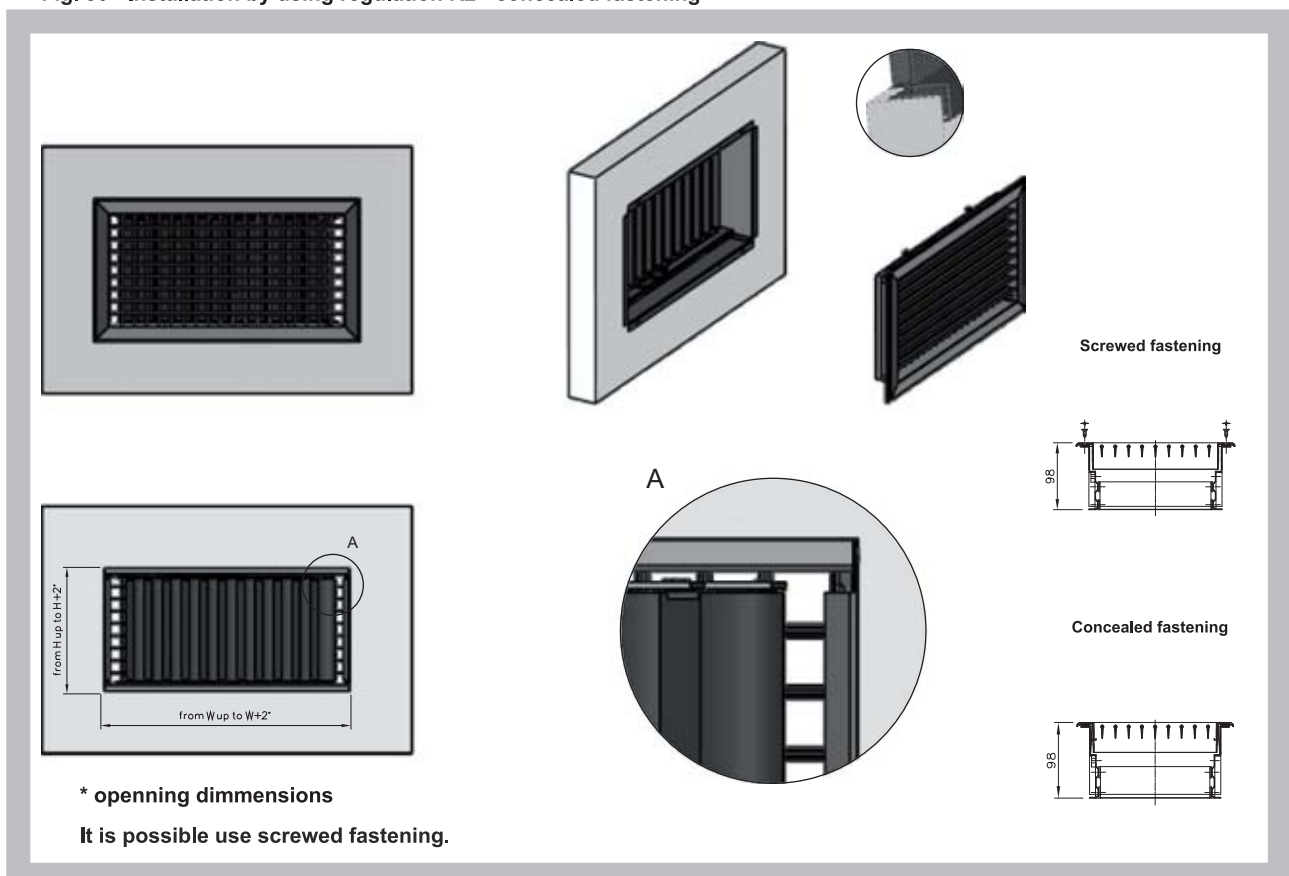
4.3. Installation by using regulation R1

Fig. 29 Installation by using regulation R1 - concealed fastening



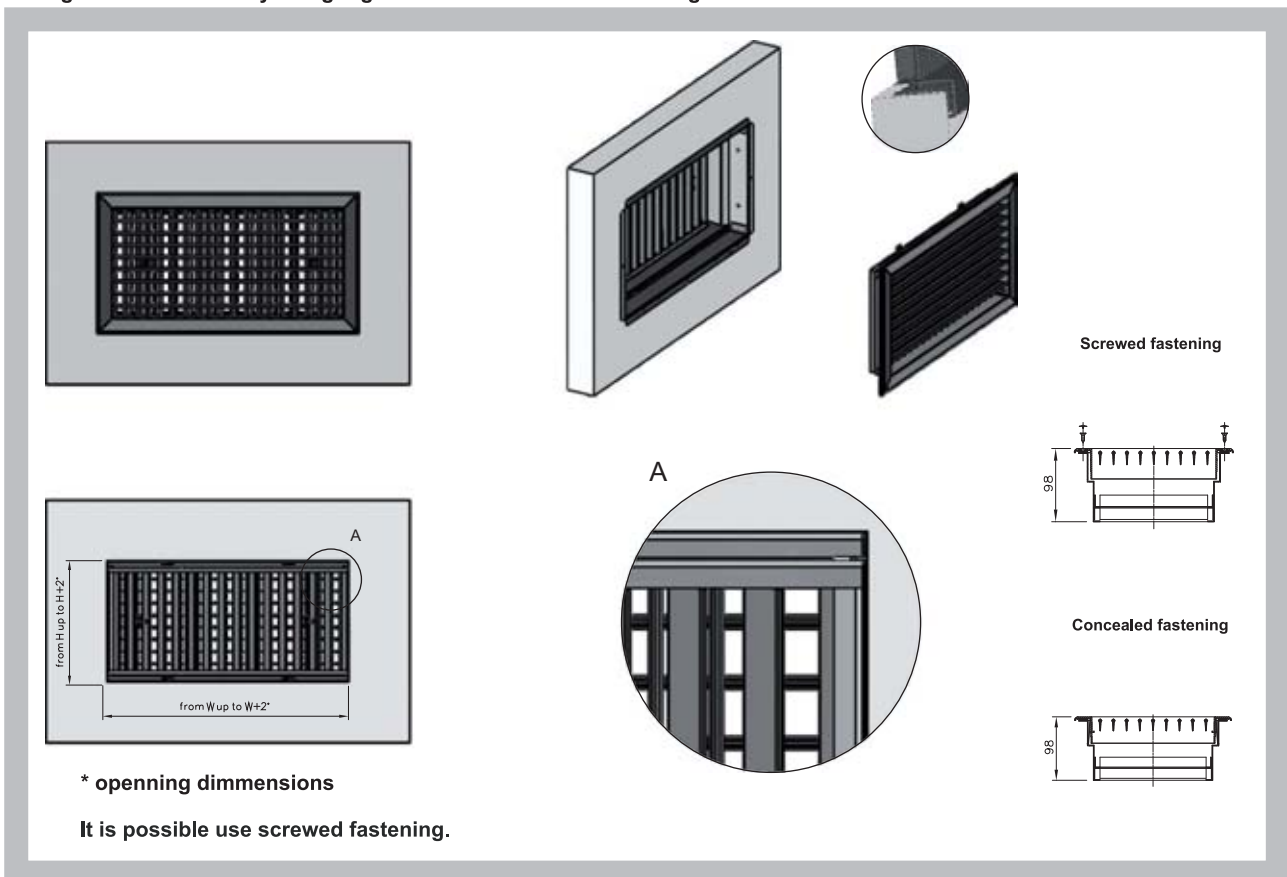
4.4. Installation by using regulation R2.

Fig. 30 Installation by using regulation R2 - concealed fastening



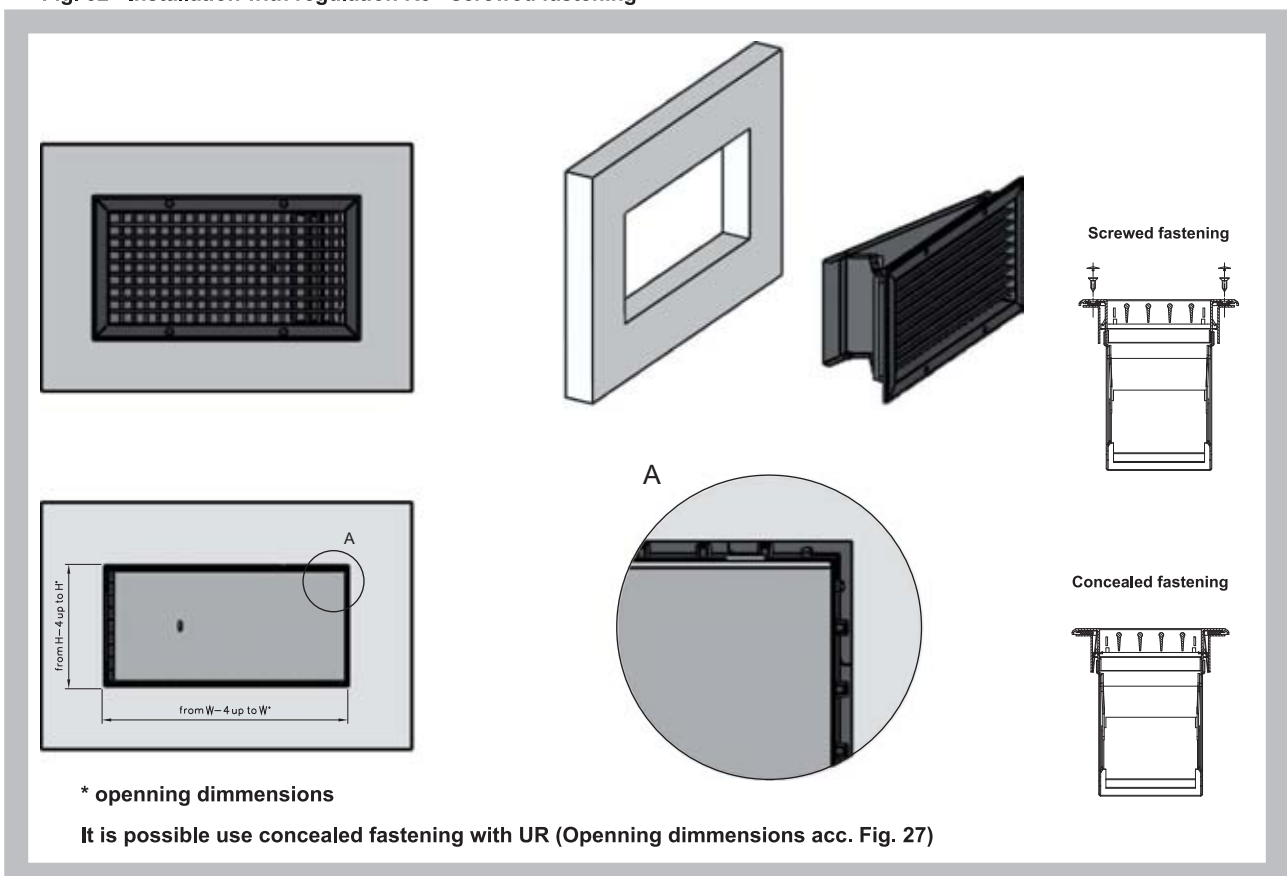
4.5. Installation by using regulation R3.

Fig. 31 Installation by using regulation R3 - concealed fastening



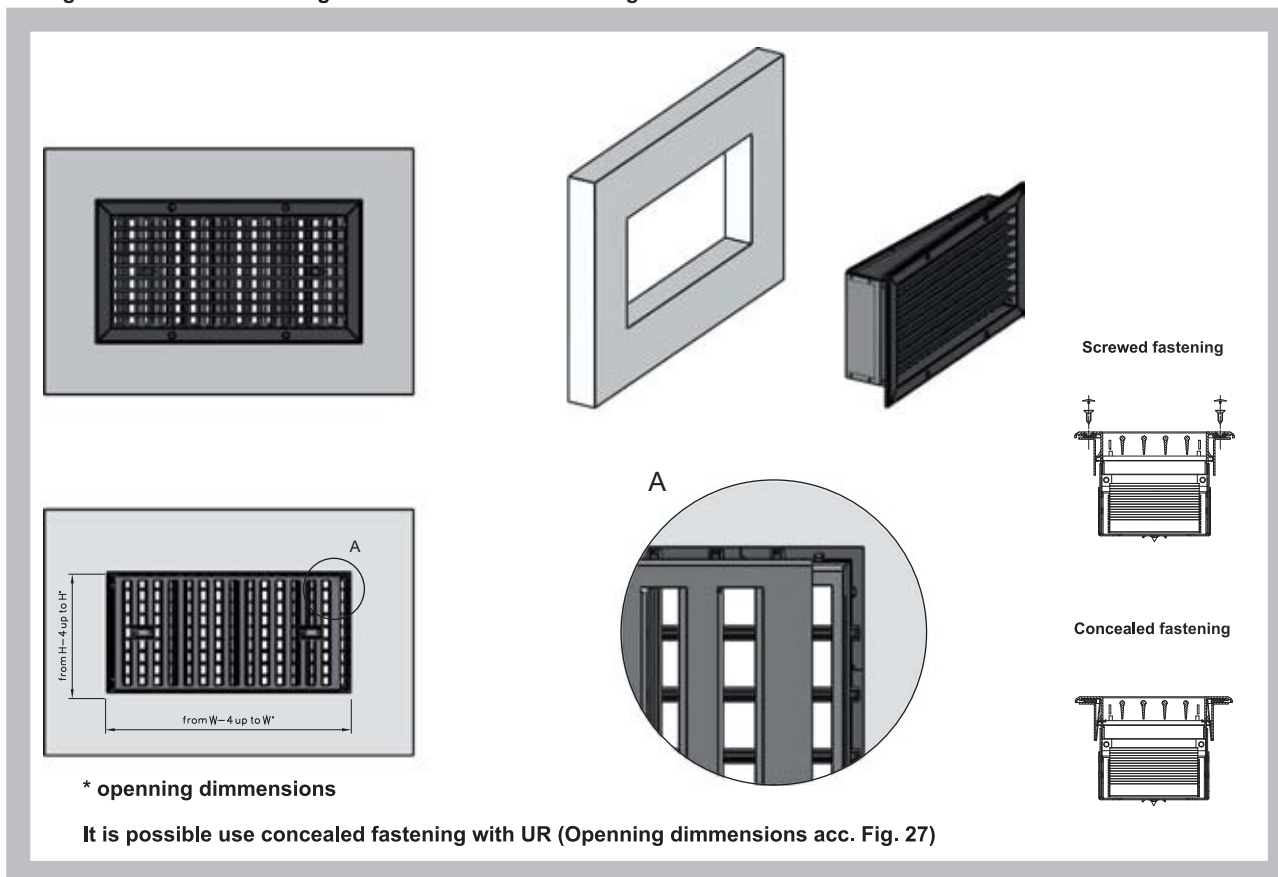
4.6. Installation with regulation R5.

Fig. 32 Installation with regulation R5 - screwed fastening



4.7. Installation with regulation R6.

Fig. 33 Installation with regulation R6 - screwed fastening



III. TECHNICAL DATA

5. Basic parameters

5.1. Effective area

Tab. 5.1.1. VNM 1

VNM 1		Effective area S_{ef} [m ²]													
Nom. dimensions		H													
		75	80	100	120	125	140	200	220	225	280	320	325	425	525
W	200	0,0094	0,0103	0,0132	0,0160	0,0169	0,0189	0,0274	0,0303	0,0312	0,0388	0,0445	0,0454	0,0597	0,0739
	220	0,0104	0,0114	0,0146	0,0178	0,0188	0,0209	0,0304	0,0335	0,0346	0,0430	0,0493	0,0503	0,0661	0,0819
	225	0,0107	0,0117	0,0150	0,0182	0,0192	0,0214	0,0311	0,0344	0,0354	0,0441	0,0505	0,0516	0,0677	0,0839
	280	0,0135	0,0148	0,0189	0,0229	0,0243	0,0270	0,0393	0,0434	0,0447	0,0556	0,0638	0,0651	0,0855	0,1059
	320	0,0155	0,0170	0,0217	0,0264	0,0279	0,0311	0,0452	0,0499	0,0514	0,0640	0,0734	0,0749	0,0984	0,1219
	325	0,0157	0,0173	0,0221	0,0268	0,0284	0,0316	0,0459	0,0507	0,0523	0,0650	0,0746	0,0761	0,1000	0,1239
	400	0,0196	0,0215	0,0274	0,0333	0,0353	0,0393	0,0571	0,0630	0,0649	0,0808	0,0926	0,0946	0,1242	0,1538
	420	0,0206	0,0226	0,0288	0,0351	0,0371	0,0413	0,0600	0,0663	0,0683	0,0850	0,0974	0,0995	0,1307	0,1618
	425	0,0208	0,0229	0,0292	0,0355	0,0376	0,0418	0,0608	0,0671	0,0691	0,0860	0,0986	0,1007	0,1323	0,1638
	520	0,0257	0,0282	0,0360	0,0437	0,0463	0,0515	0,0748	0,0826	0,0851	0,1059	0,1215	0,1240	0,1629	0,2018
	525	0,0259	0,0285	0,0363	0,0442	0,0467	0,0520	0,0756	0,0834	0,0860	0,1070	0,1227	0,1253	0,1645	0,2038
	560	0,0277	0,0304	0,0388	0,0472	0,0499	0,0556	0,0808	0,0892	0,0919	0,1143	0,1311	0,1339	0,1758	0,2178
	620	0,0307	0,0338	0,0431	0,0524	0,0554	0,0617	0,0897	0,0990	0,1020	0,1269	0,1456	0,1486	0,1952	0,2418
	625	0,0310	0,0340	0,0434	0,0528	0,0559	0,0622	0,0904	0,0998	0,1028	0,1280	0,1468	0,1498	0,1968	0,2438
	720	0,0358	0,0393	0,0502	0,0611	0,0646	0,0719	0,1045	0,1153	0,1189	0,1479	0,1696	0,1731	0,2274	0,2817
	725	0,0361	0,0396	0,0506	0,0615	0,0650	0,0724	0,1052	0,1162	0,1197	0,1490	0,1708	0,1744	0,2290	0,2837
820	0,0409	0,0449	0,0573	0,0697	0,0737	0,0821	0,1193	0,1317	0,1357	0,1689	0,1937	0,1977	0,2597	0,3217	
825	0,0411	0,0452	0,0577	0,0701	0,0742	0,0826	0,1200	0,1325	0,1366	0,1699	0,1949	0,1989	0,2613	0,3237	
1020	0,0511	0,0561	0,0716	0,0870	0,0921	0,1025	0,1489	0,1644	0,1694	0,2108	0,2418	0,2468	0,3242	0,4016	
1225	0,0615	0,0675	0,0862	0,1048	0,1108	0,1234	0,1793	0,1980	0,2040	0,2539	0,2911	0,2972	0,3903	0,4835	

Tab. 5.1.2. VNM 2

VNM 2		Effective area S_{ef} [m ²]													
Nom. dimen- sions	H	H													
		75	80	100	120	125	140	200	220	225	280	320	325	425	525
W	200	0,0075	0,0083	0,0106	0,0128	0,0136	0,0151	0,0220	0,0242	0,0250	0,0311	0,0357	0,0364	0,0478	0,0592
	220	0,0083	0,0091	0,0116	0,0142	0,0150	0,0167	0,0242	0,0268	0,0276	0,0343	0,0394	0,0402	0,0528	0,0654
	225	0,0086	0,0094	0,0120	0,0146	0,0154	0,0172	0,0250	0,0276	0,0284	0,0354	0,0406	0,0414	0,0544	0,0674
	280	0,0107	0,0117	0,0149	0,0182	0,0192	0,0214	0,0311	0,0343	0,0354	0,0440	0,0505	0,0515	0,0677	0,0838
	320	0,0122	0,0134	0,0171	0,0208	0,0220	0,0245	0,0357	0,0394	0,0406	0,0505	0,0579	0,0591	0,0776	0,0961
	325	0,0125	0,0137	0,0175	0,0213	0,0225	0,0251	0,0364	0,0402	0,0414	0,0515	0,0591	0,0603	0,0792	0,0981
	400	0,0154	0,0169	0,0215	0,0262	0,0277	0,0308	0,0448	0,0494	0,0510	0,0634	0,0727	0,0742	0,0975	0,1208
	420	0,0161	0,0177	0,0226	0,0275	0,0291	0,0324	0,0471	0,0520	0,0535	0,0666	0,0764	0,0780	0,1025	0,1269
	425	0,0164	0,0180	0,0230	0,0279	0,0296	0,0329	0,0478	0,0528	0,0544	0,0677	0,0776	0,0792	0,1041	0,1289
	520	0,0200	0,0220	0,0281	0,0342	0,0361	0,0402	0,0585	0,0646	0,0665	0,0828	0,0949	0,0969	0,1273	0,1577
	525	0,0203	0,0223	0,0285	0,0346	0,0366	0,0408	0,0592	0,0654	0,0674	0,0838	0,0961	0,0981	0,1289	0,1597
	560	0,0216	0,0237	0,0303	0,0368	0,0390	0,0434	0,0630	0,0696	0,0717	0,0892	0,1024	0,1045	0,1372	0,1700
	620	0,0240	0,0263	0,0336	0,0408	0,0432	0,0481	0,0699	0,0772	0,0795	0,0989	0,1135	0,1158	0,1521	0,1885
	625	0,0242	0,0266	0,0339	0,0413	0,0437	0,0486	0,0706	0,0780	0,0804	0,1000	0,1147	0,1171	0,1538	0,1904
	720	0,0279	0,0306	0,0391	0,0475	0,0503	0,0560	0,0813	0,0898	0,0925	0,1151	0,1320	0,1347	0,1770	0,2192
	725	0,0281	0,0309	0,0394	0,0479	0,0507	0,0565	0,0820	0,0906	0,0933	0,1161	0,1332	0,1360	0,1786	0,2212
	820	0,0318	0,0349	0,0445	0,0542	0,0573	0,0638	0,0927	0,1023	0,1055	0,1313	0,1505	0,1536	0,2018	0,2500
825	0,0320	0,0352	0,0449	0,0546	0,0578	0,0643	0,0935	0,1032	0,1063	0,1323	0,1517	0,1549	0,2034	0,2520	
1020	0,0396	0,0435	0,0555	0,0675	0,0714	0,0795	0,1155	0,1275	0,1314	0,1636	0,1876	0,1915	0,2515	0,3115	
1225	0,0477	0,0524	0,0668	0,0813	0,0860	0,0957	0,1391	0,1536	0,1582	0,1969	0,2258	0,2305	0,3028	0,3751	

6. Calculation and determination values

Fig. 34 Air flow without affecting the ceiling

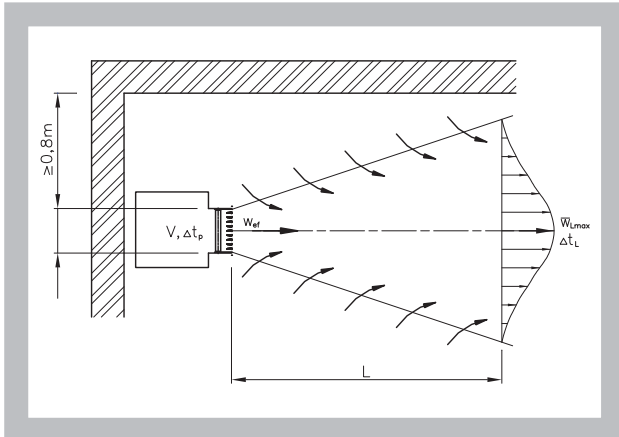


Fig. 35 Air flow with affecting the ceiling

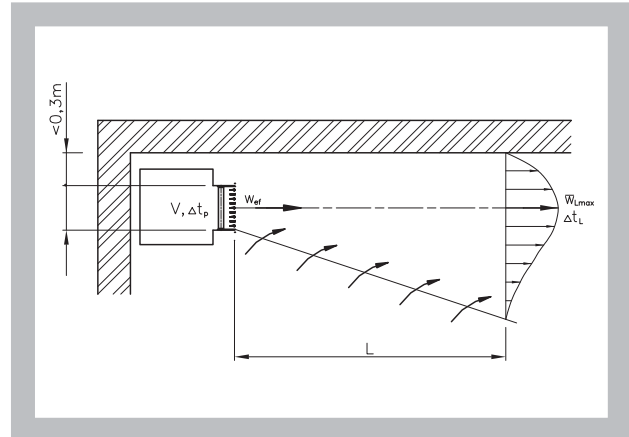
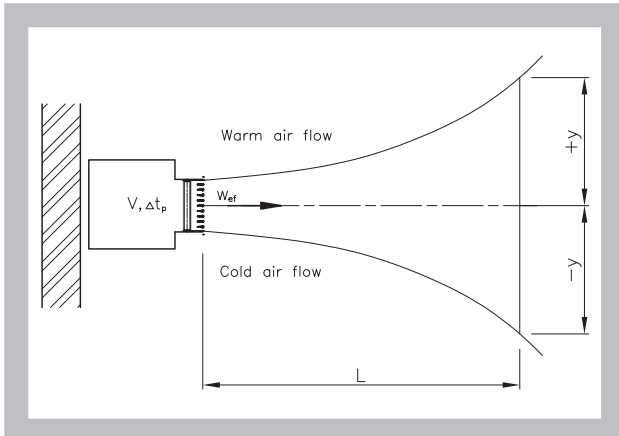


Fig. 36 Deflection of air flow - non isothermal air flow



Effective velocity w_{ef}

$$w_{ef} [m.s^{-1}] = (\dot{V} [m^3.h^{-1}] / 3600) / S_{ef} [m^2]$$

- \dot{V} [m³.h⁻¹] volumetric air flow for one vent
- Δp_c [Pa] total pressure loss at $\rho = 1,2 \text{ kg.m}^{-3}$
- w_{ef} [m.s⁻¹] effective air velocity in vent
- L_{WA} [dB(A)] acoustic power level
- S_{ef} [m²] effective vent area
- t [m] flow length
- w_L [m.s⁻¹] air flow velocity in L distance L
- t_p [K] difference between inlet air temperature and room air temperature
- Δt_L [K] difference between room air temperature and the air temperature in flow axis in L distance
- y [m] deflection of air flow axis

7. Ventilation values

7.1. Acoustic powers and pressure losses

Diagram 7.1.1. VNM with regulation R1 - inlet

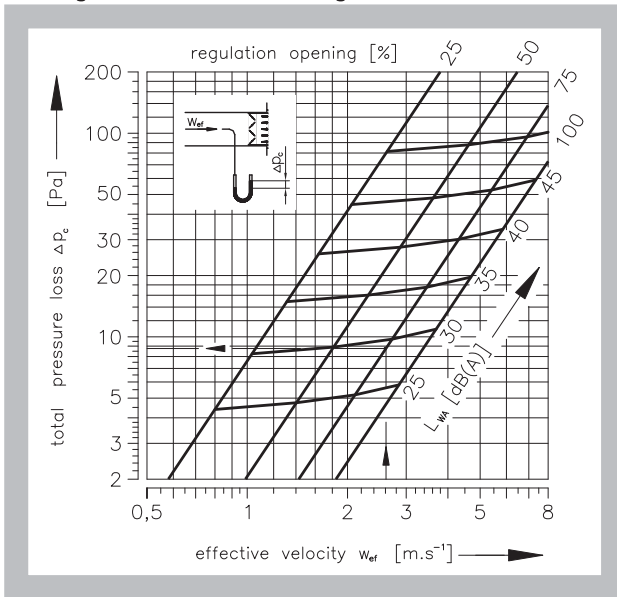
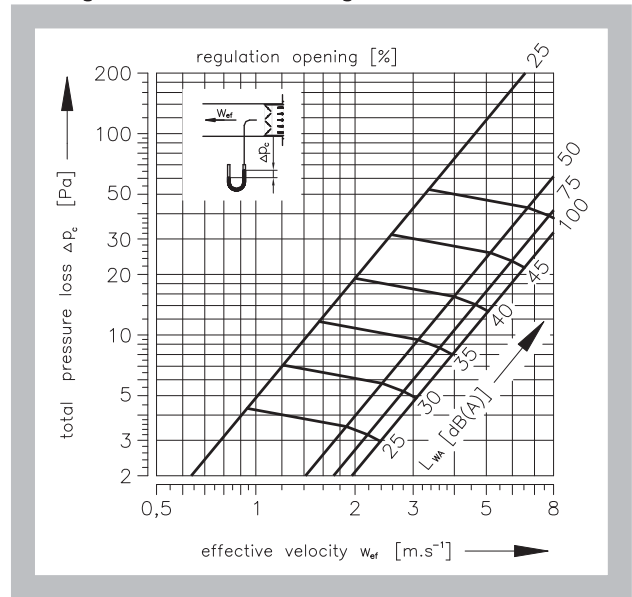


Diagram 7.1.2. VNM with regulation R1 - outlet



The same values as for 100% regulation opening apply to grilles without regulation.

7.2. Air flow velocity, flow length and deflection of air flow axis

Diagram 7.2.1. Air flow velocity and flow length - isotherm air flow, without affecting the ceiling

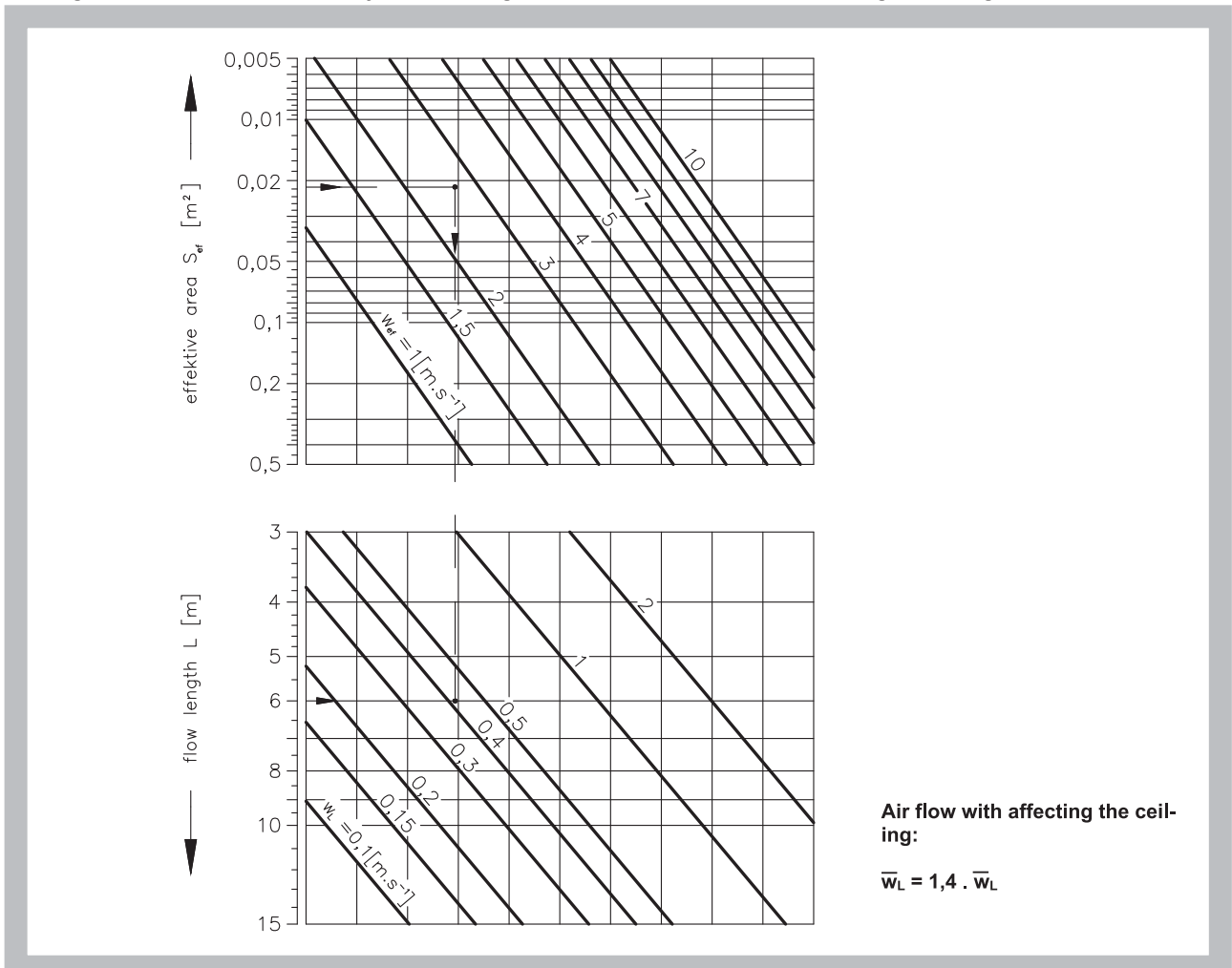


Diagram 7.2.2. Deflection of air flow axis

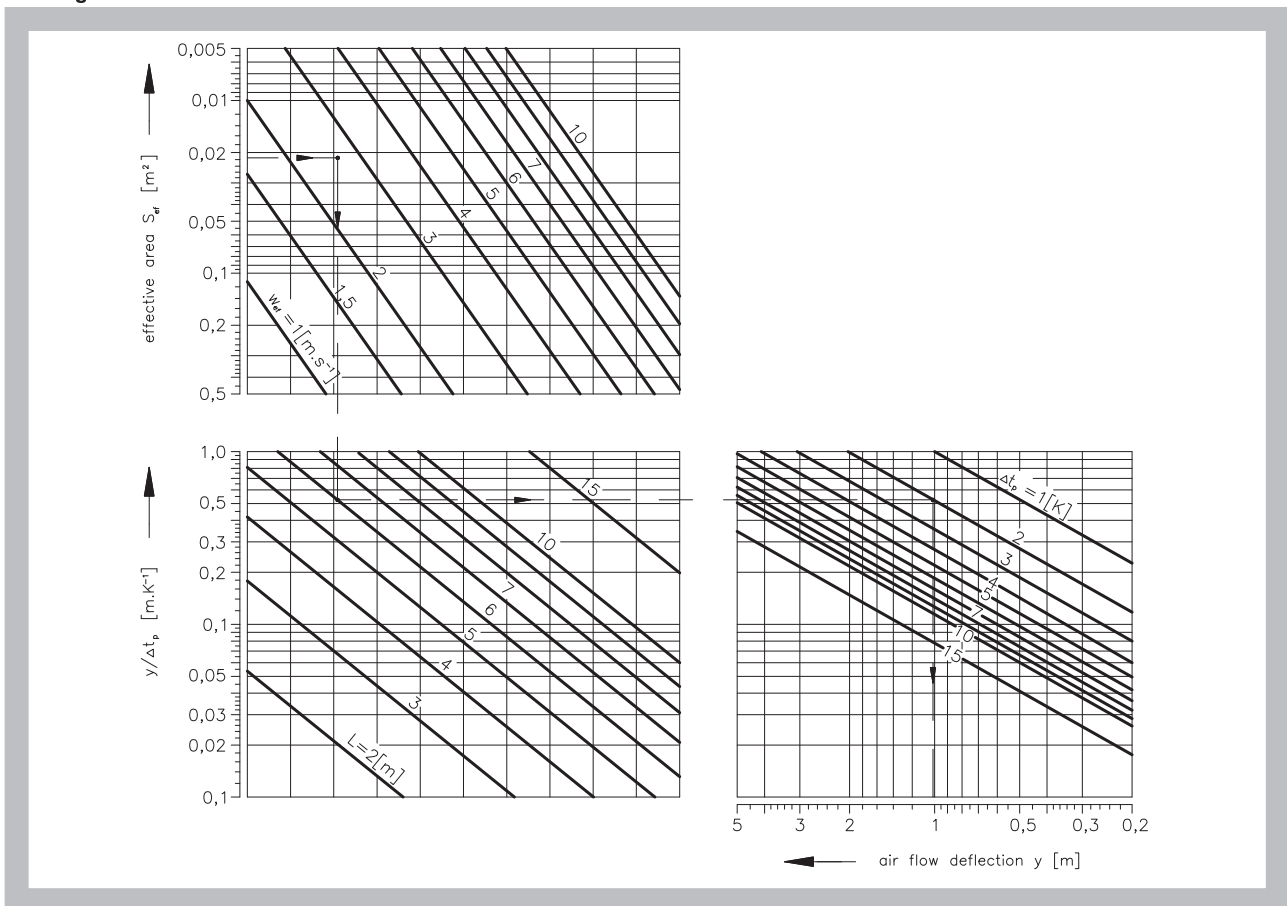


Fig. 37 Example

Given data: Vent VNM 2 280 x 140 with regulation R1 for air inlet (regulation opening 75%), without affecting the ceiling

$$\dot{V} = 200 \text{ m}^3 \cdot \text{h}^{-1}$$

$$L = 6 \text{ m}$$

$$\Delta t_p = 2 \text{ K}$$

Tab. 5.1.2. : $S_{ef} = 0,0214 \text{ m}^2$

Calculation: $W_{ef} = (\dot{V} / 3600) / S_{ef} = (200 / 3600) / 0,0214 = 2,6 \text{ m} \cdot \text{s}^{-1}$

Diagram 7.1.1. : $\Delta p_c = 8,7 \text{ Pa}$

$$L_{WA} = 29 \text{ dB(A)}$$

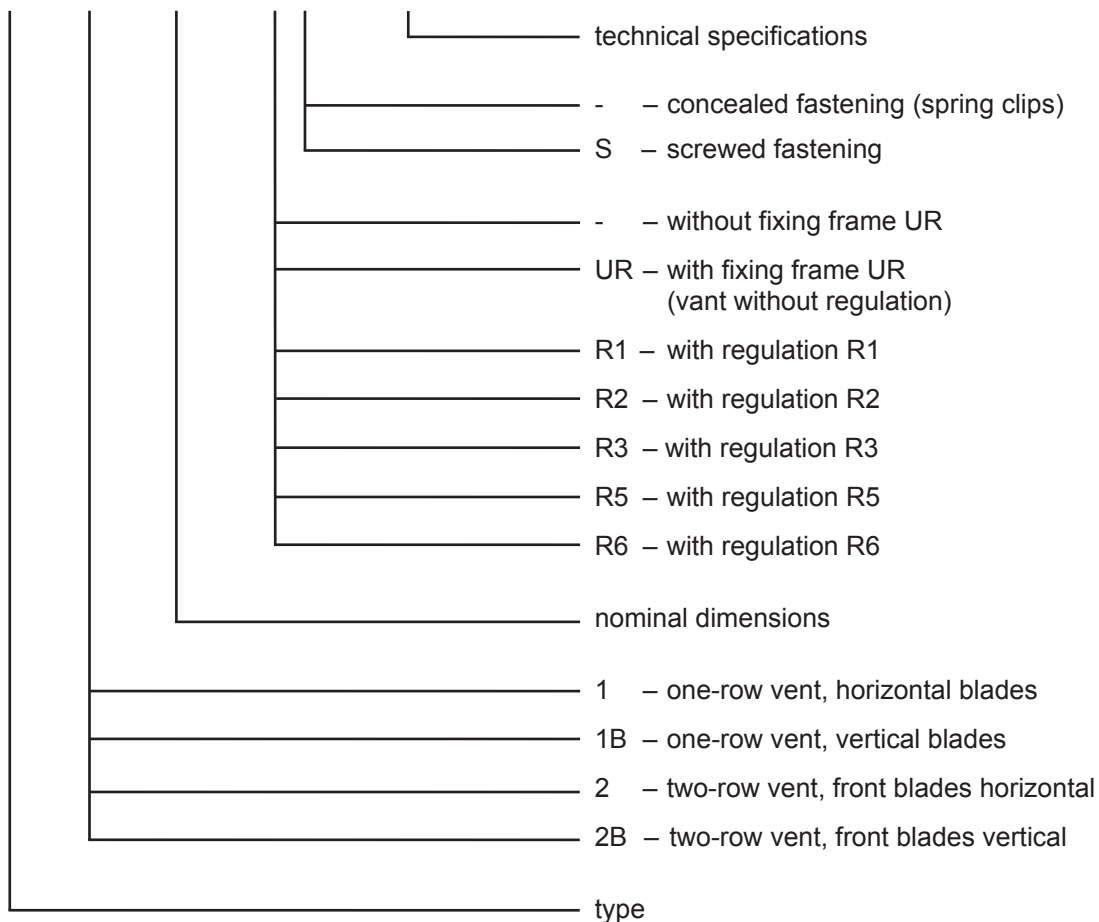
Diagram 7.2.1. : $\bar{w}_L = 0,4 \text{ m} \cdot \text{s}^{-1}$

Diagram 7.2.2. : $y = \text{cca } 1 \text{ m}$

IV. ORDERING INFORMATION

8. Ordering key

VNM 2A 280x140 R1/S TPM 015/01



V. MATERIAL, FINISHING

9. Material

- 9.1. The components of vents are made of drawn aluminium sections. Section surfaces are eloxal coated.
- 9.2. Fixing frames with fixtures are made of galvanized sheet. Spring clips are made of spring steel with galvanized surface.
- 9.3. The sealing along the grille perimeter is made of plastic foam self-adhesive tape.

VI. INSTALATION

10. Assembly and disassembly

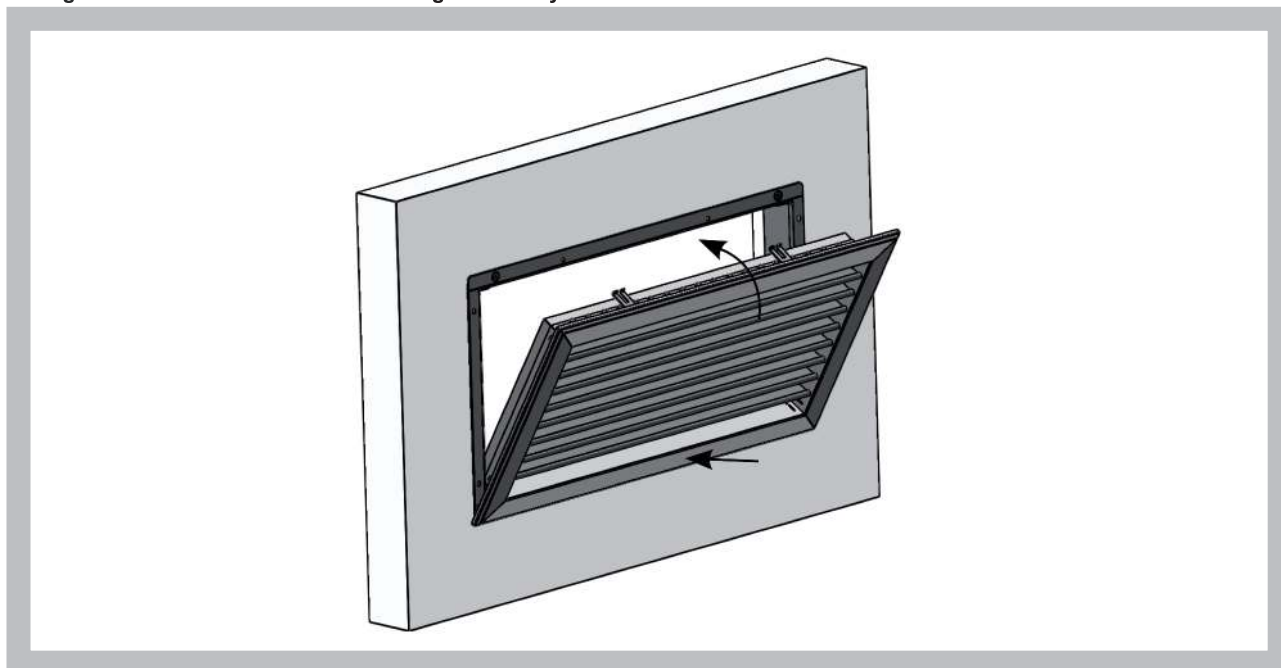
10.1. Vents with concealed fastening - assembly

Delivery components of the vents are the spring clips (up to an vent width of 750 mm, 4 units; more than 750 mm, 8 units) and the seal.

- 1) Install the regulation R1, R2 or R3 or fixation frame UR or if required, the atyFigal frame furnished with an edge for gripping the spring clips (see page 12 - detail of leaf on fixation frame)
- 2) If a regulation is installed, adjust the flow of air through the vent.
- 3) Set the position of the front row of the vent's blades.

- 4) Place the vent into the body of the regulation or the fixation frame, press the spring clips and push in the vent. The tongues of the spring clips grip onto the edge of the frame.

Fig. 38 Vents with concealed fastening - assembly



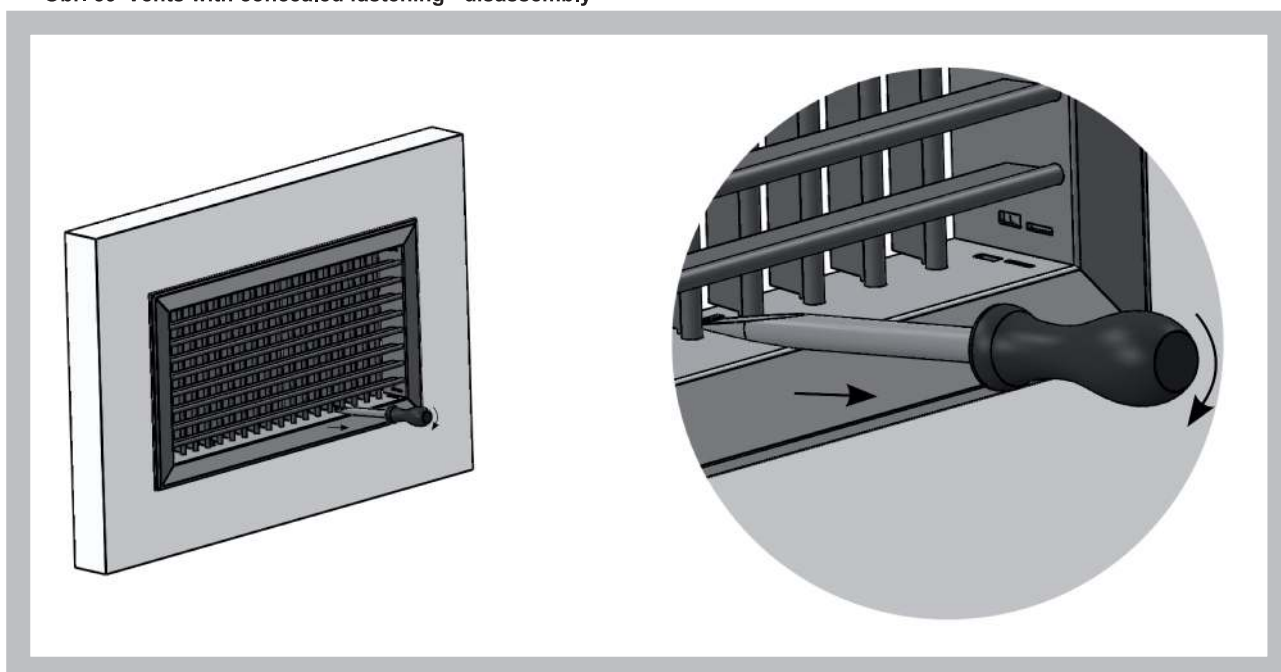
10.2. Vents with screwed fastening - assembly

Delivery components of the vents are screws, covers and seal.

- 1) Install the regulation R1,R2 or R3 or the fixation frame UR.
- 2) If a regulation is installed, adjust the flow of air through the vent.
- 3) Set the position of the front row of the vent's blades.
- 4) Place the vent into the fixation frame and secure the screws.

10.3. Vents with concealed fastening - disassembly

Obr. 39 Vents with concealed fastening - disassembly



- 1) With a screwdriver (through the openings between the lamellas of the vent), press beyond the jutting-out the tongues of the spring clips from the edge of the frame.
- 2) Take out the grille.

10.4. Vents with screwed fastening - disassembly

- 1) Unscrew the screws.
- 2) Take out the vent.

VII. PACKING, TRANSPORTATION, TAKE-OVER, STORAGE AND GUARANTEE

11. Logistic terms

- 11.1. Vents are supplied packed in shrinking foil. While transported and stored they must be protected against mechanical damage and weather conditions.
- 11.2. If no method of take-over is mentioned in the order, handing the goods over to the carrier will be considered as a take-over.
- 11.3. Vents have to be stored in closed premises, in the environment without aggressive steams, gases and dusts. Temperature range have to be from -5 to +40°C and relative humidity max. 80%.

12. Guarantee

- 12.1. The manufacturer provides a guarantee to the adjustable vents for the period of 24 months from the date of shipment.

MANDÍK, a.s.
Dobříšská 550
26724 Hostomice
Czech Republic
Tel.: +420 311 706 706
Fax: +420 311 584 810, 311 584 382
E-Mail: mandik@mandik.cz
www.mandik.com

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