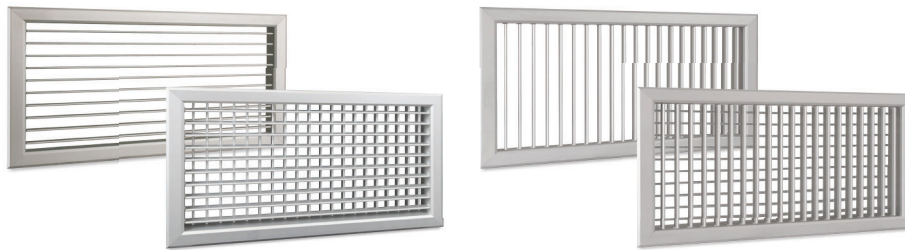


NOVA-A

An Aluminium Diffusion Grille for Rectangular Ducts



Ordering Code

NOVA-A -		[] [] [] [] [] [] [] []
Single-row		1
Double-row		2
Mounting ¹	screws	1
	spring clips	2
	mounting mechanism	4
Dimensions		L × H
Damper Type ²	R1, RS1	[] [] [] [] [] [] [] []
	R2, RS2	
	R3, RS3	
	R4, RS4	
Mounting frame ¹		UR
Blades	horizontal	H
	vertical ³	V
Surface finish ⁴		RALxxxx

Ordering code example:

NOVA-A - 2 - 2 - 400 × 200 - R1 - UR - H - RAL9010

An aluminium grille for rectangular ducts with two rows of blades and mounting with spring clips, intended for a structural opening with dimensions 400 × 200 mm, type 1 damper, mounting frame included, with the first row of blades horizontally oriented and a powder paint RAL 9010 surface finish.

- The mounting frame is not automatically included in a standard order for mounting types "1" and "2", if interested, please remember to add the "UR" option into the ordering code.
In case of mounting type "4", there is no need to enter the "UR" into the ordering code (it will be automatically included in the delivery).
- Damper type RS is supplied with a powder-lacquered RAL 9005 surface finish (black).
- In case the blade alignment – horizontal (H) or vertical (V) – is not specified in the ordering code, the product with a horizontal blade alignment (H) will be delivered as default.
- In case the RAL surface finish is not specified in the ordering code, the product will be delivered with a natural eloxal surface finish as default.

Description

NOVA-A is a rectangular aluminium diffusion grille with one or two rows of adjustable blades. It is adequate for usage in such premises that require a higher emphasis on appearance. The NOVA-A diffusion grille directs the air using its adjustable blades in a horizontal, as well as vertical direction. It is designed for air supply and air extract. For a balanced distribution of air through the entire diffusion grille it is recommended to use a damper or a plenum box.

Information about the NOVA grille accessories is available on page 36.

- NOVA-R1, -R2, -R3, -R4 – dampers
- NOVA-UR – mounting frame
- ODEN – plenum box
- PB-NOVA – plenum box

Mounting

The NOVA-A diffusion grille can be mounted directly onto a rectangular duct using countersunk screws (type "1" mounting), or onto a wall using a mounting frame and spring clips (type "2" mounting + UR) and, if appropriate, it can also be placed onto a wall and a ceiling using a mounting frame and a mounting mechanism (type "4" mounting).

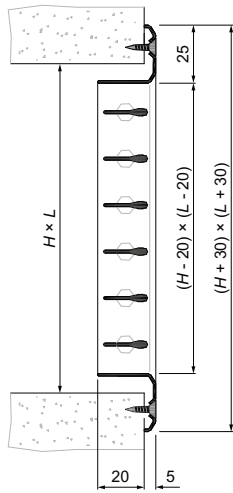
Design

Material used:

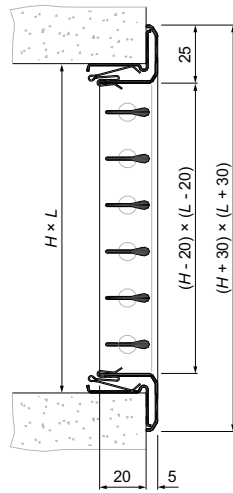
The NOVA-A diffusion grille is manufactured from aluminium profiles with eloxal coating or, if appropriate, a powder-lacquered (RAL 9010 - white) surface finish; other RAL types are available upon request.

Type of blades:

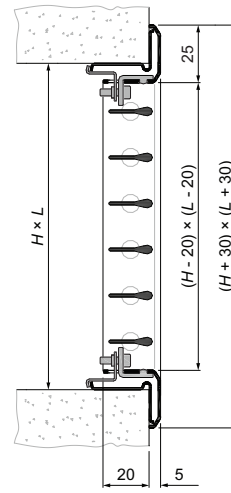
Single-row as well as double-row diffusion grilles can have both horizontal and vertical front blade alignment. The second row of blades is always perpendicular to the first row. The blades' axial pitch is 20 mm.



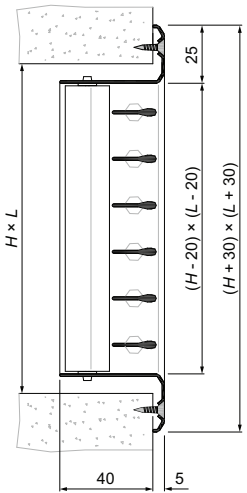
NOVA-A-1-1-LxH-H



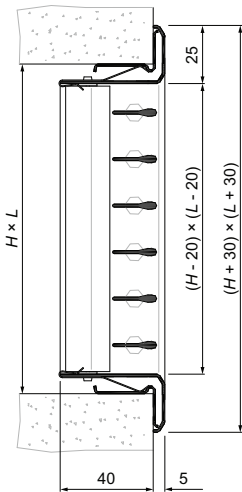
NOVA-A-1-2-LxH-H



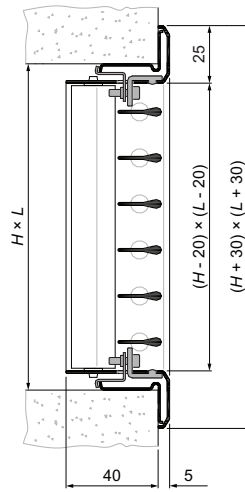
NOVA-A-1-4-LxH-H



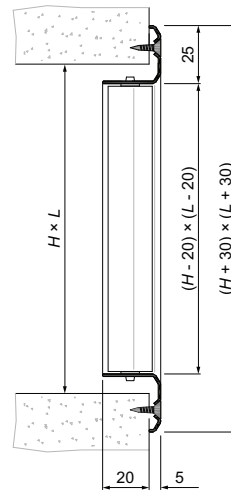
NOVA-A-2-1-LxH-H



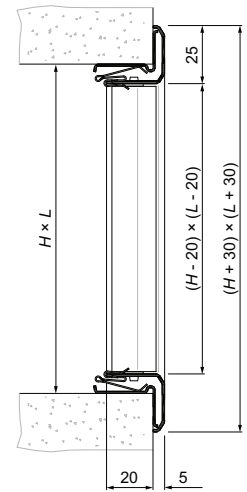
NOVA-A-2-2-LxH-H-UR



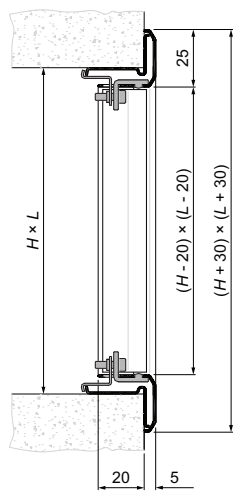
NOVA-A-2-4-LxH-H



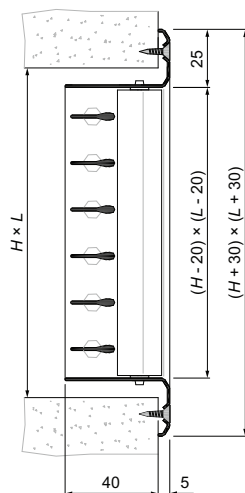
NOVA-A-1-1-LxH-V



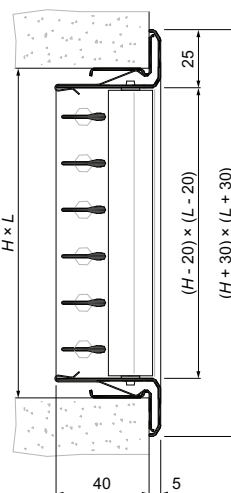
NOVA-A-1-2-LxH-V-UR



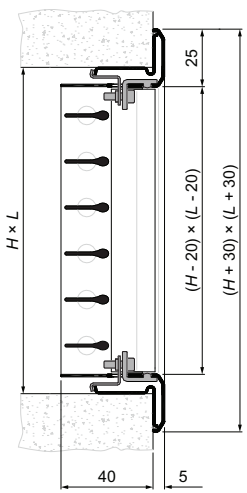
NOVA-A-1-4-LxH-V



NOVA-A-2-1-LxH-V



NOVA-A-2-2-LxH-V-UR



NOVA-A-2-4-LxH-V

Fig. 1: Basic NOVA-A dimensions and diffusion grille types

Technical Details

Dimensions

Dimensions		Free area		Weight		
L	H	A _{v1}	A _{v2}	m ₁	m ₂	
(mm)		(m ²)		(kg)		
200	100	0,012	0,009	0,20	0,30	
	150	0,019	0,016	0,25	0,40	
	200	0,026	0,021	0,32	0,52	
300	100	0,018	0,015	0,27	0,42	
	150	0,030	0,024	0,34	0,57	
	200	0,041	0,033	0,44	0,73	
300	300	0,064	0,051	0,60	1,04	
	400	100	0,025	0,020	0,34	0,54
		150	0,041	0,033	0,43	0,73
200		0,055	0,045	0,55	0,95	
300		0,086	0,070	0,77	1,35	
400	400	0,117	0,095	0,98	1,75	
	500	100	0,031	0,025	0,41	0,67
		150	0,051	0,042	0,52	0,89
		200	0,070	0,057	0,67	1,16
		300	0,109	0,088	0,93	1,66
400		0,148	0,120	1,19	2,16	
500	500	0,187	0,151	1,45	2,65	
	600	100	0,038	0,030	0,48	0,79
		150	0,062	0,050	0,61	1,05
		200	0,085	0,068	0,79	1,38
		300	0,132	0,107	1,10	1,97
400		0,179	0,145	1,40	2,56	
600	500	0,226	0,183	1,71	3,15	
	800	100	0,051	0,041	0,63	1,03
		150	0,084	0,068	0,79	1,38
		200	0,114	0,092	1,03	1,81
		300	0,177	0,143	1,43	2,58
400		0,240	0,194	1,83	3,36	
800	500	0,303	0,246	2,23	4,14	
	1000	100	0,064	0,051	0,77	1,27
		150	0,105	0,085	0,97	1,71
		200	0,143	0,116	1,26	2,23
		300	0,222	0,180	1,76	3,20
400		0,302	0,244	2,25	4,17	
1000	500	0,381	0,309	2,74	5,13	
	1200	100	0,076	0,062	0,91	1,51
		150	0,126	0,102	1,15	2,03
		200	0,172	0,139	1,50	2,66
		300	0,268	0,217	2,09	3,82
400		0,363	0,294	2,67	4,97	
1200	500	0,459	0,372	3,26	6,13	

Dimensions		Free area		Weight		
L	H	A _{v1}	A _{v2}	m ₁	m ₂	
(mm)		(m ²)		(kg)		
225	75	0,010	0,008	0,17	0,26	
	125	0,018	0,014	0,25	0,39	
	225	0,034	0,028	0,38	0,62	
325	75	0,014	0,012	0,22	0,35	
	125	0,026	0,021	0,33	0,53	
	225	0,051	0,041	0,50	0,86	
325	325	0,076	0,062	0,68	1,19	
	425	75	0,019	0,016	0,28	0,44
		125	0,035	0,028	0,41	0,67
225		0,068	0,055	0,63	1,09	
325		0,100	0,082	0,85	1,52	
425		0,133	0,108	1,08	1,94	
525	75	0,024	0,019	0,33	0,53	
	125	0,043	0,035	0,49	0,81	
	225	0,084	0,068	0,76	1,33	
	325	0,125	0,102	1,03	1,85	
	425	0,166	0,135	1,30	2,36	
525	525	0,207	0,168	1,57	2,88	
	625	75	0,029	0,023	0,38	0,62
		125	0,052	0,042	0,57	0,95
		225	0,101	0,082	0,88	1,56
		325	0,150	0,122	1,20	2,18
425		0,199	0,162	1,52	2,79	
625	525	0,248	0,201	1,84	3,40	
	825	75	0,038	0,031	0,48	0,80
		125	0,069	0,056	0,73	1,24
		225	0,134	0,109	1,14	2,04
		325	0,200	0,162	1,55	2,84
425		0,265	0,215	1,96	3,64	
825	525	0,330	0,268	2,37	4,44	
	1025	75	0,048	0,039	0,59	0,98
		125	0,086	0,070	0,89	1,52
		225	0,168	0,136	1,39	2,51
		325	0,249	0,202	1,90	3,50
425		0,331	0,268	2,41	4,48	
1025	525	0,412	0,334	2,91	5,47	
	1225	75	0,057	0,046	0,69	1,16
		125	0,104	0,084	1,05	1,80
		225	0,201	0,163	1,65	2,98
		325	0,299	0,242	2,25	4,15
425		0,396	0,321	2,85	5,33	
1225	525	0,494	0,401	3,45	6,51	

A_{v1}, m₁, ...NOVA-A-1 - single-row

A_{v2}, m₂, ...NOVA-A-2 - double-row

Tab. 1: Dimensions, free area and weight of the NOVA-A diffusion grilles

NOTE: Further technical details for the NOVA-A diffusion grilles are available on pages 12-14.