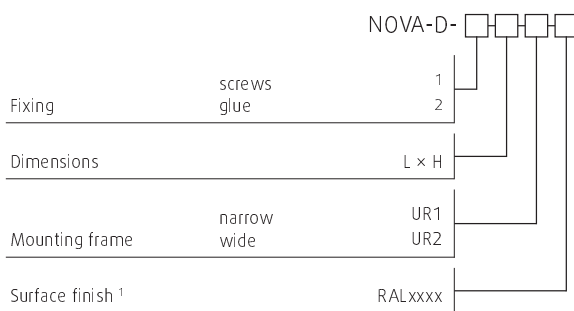


NOVA-D

An Aluminium Door Grille



Ordering Code



Ordering code example:

NOVA-D - 2 - 400 x 150 - UR1

An aluminium door grille with fixing to door using glue, intended for a structural opening with dimensions 400 x 150 mm, with a type 1 mounting frame.

1. 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-D is a rectangular non-transparent aluminium grille with fixed blades. It is adequate for usage in such premises that require a higher emphasis on appearance and is designed for a free air flow through both sides of the grille.

Mounting

The NOVA-D grille can be mounted into the door using countersunk screws (type "1" mounting), or it can be supplied without pre-drilled holes for fixing using glue. It is possible to choose from two types of mounting frames for a more narrow (UR1) or a wider (UR2) door (please see Fig. 17).

NOTE: for mounting type "1" it is recommended to reduce the cut-out height dimension "H" by 10mm. This helps fixing the grille in proper position.

Design

Material used:

The NOVA-D 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:

The grille's blades are fixed with an axial pitch 15 mm in the shape of an upturned letter "V".

The blades overlap each other.

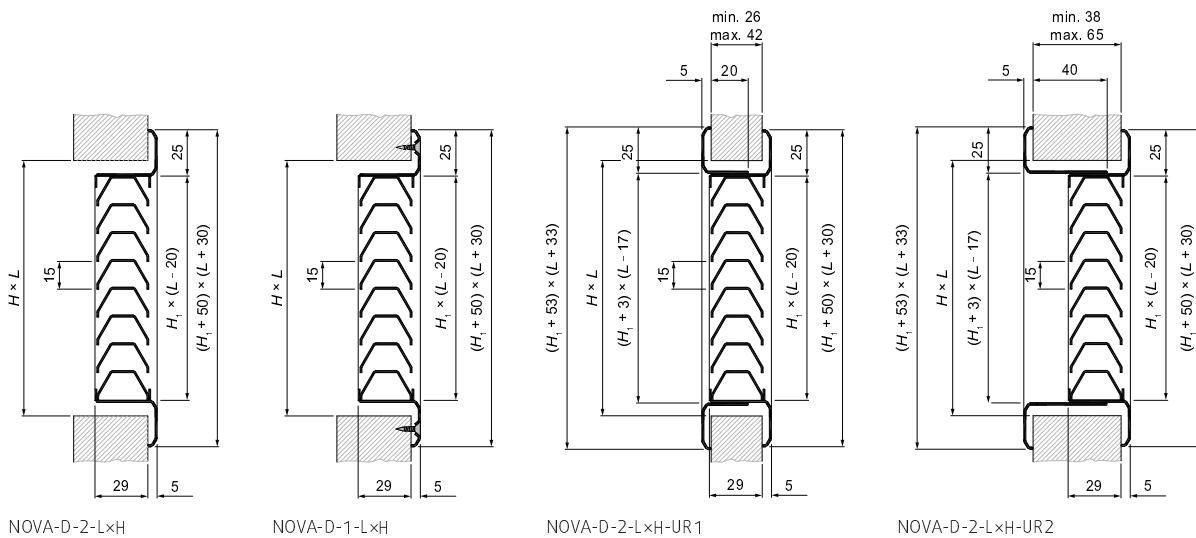


Fig. 17: Basic NOVA-D dimensions and grille types

NOTE: for mounting type „1“ it is recommended to reduce the cut-out height dimension „H“ by 10mm. This helps fixing the grille in proper position.

Technical Details

Dimensions

NOVA-D

Dimensions			Free area A_v	Weight		
L	H	H_1		m	UR1	UR2
(mm)			(m ²)	(kg)		
200	100	91	0,005	0,33	0,14	0,17
	150	136	0,007	0,43	0,15	0,19
	200	181	0,009	0,53	0,17	0,21
300	100	91	0,007	0,46	0,17	0,21
	150	136	0,011	0,60	0,18	0,23
	200	181	0,015	0,75	0,20	0,26
	300	286	0,023	1,09	0,23	0,30
400	100	91	0,010	0,58	0,20	0,30
	150	136	0,015	0,77	0,22	0,28
	200	181	0,020	0,96	0,23	0,30
	300	286	0,032	1,40	0,27	0,35
	400	391	0,043	1,84	0,30	0,40
500	100	91	0,013	0,71	0,24	0,31
	150	136	0,019	0,94	0,25	0,33
	200	181	0,025	1,17	0,27	0,35
	300	286	0,040	1,71	0,30	0,39
	400	391	0,055	2,25	0,34	0,44
	500	491	0,070	2,78	0,37	0,49
600	100	91	0,015	0,84	0,27	0,35
	150	136	0,023	1,11	0,28	0,37
	200	181	0,031	1,38	0,30	0,39
	300	286	0,048	2,02	0,33	0,44
	400	391	0,066	2,66	0,37	0,49
	500	491	0,084	3,29	0,40	0,53
800	100	91	0,021	1,10	0,34	0,44
	150	136	0,031	1,45	0,35	0,46
	200	181	0,041	1,81	0,37	0,48
	300	286	0,065	2,64	0,40	0,53
	400	391	0,089	3,48	0,44	0,58
	500	491	0,114	4,30	0,47	0,61
1000	100	91	0,026	1,35	0,40	0,53
	150	136	0,039	1,79	0,42	0,55
	200	181	0,052	2,24	0,43	0,57
	300	286	0,082	3,27	0,47	0,62
	400	391	0,113	4,30	0,50	0,67
	500	491	0,143	5,32	0,54	0,71
1200	100	91	0,031	1,61	0,47	0,62
	150	136	0,047	2,13	0,49	0,64
	200	181	0,063	2,66	0,50	0,66
	300	286	0,099	3,89	0,54	0,71
	400	391	0,136	5,12	0,57	0,76
	500	491	0,172	6,34	0,60	0,80

Rozmery			Free area A_v	Weight		
L	H	H_1		m	UR1	UR2
(mm)			(m ²)	(kg)		
225	125	116	0,007	0,43	0,15	0,19
	225	211	0,012	0,66	0,18	0,23
325	125	116	0,011	0,59	0,19	0,24
	225	211	0,019	0,90	0,22	0,28
	325	316	0,028	1,27	0,25	0,33
425	125	116	0,014	0,75	0,22	0,28
	225	211	0,025	1,14	0,25	0,33
	325	316	0,037	1,61	0,29	0,37
525	425	416	0,050	2,07	0,32	0,42
	125	116	0,018	0,90	0,25	0,33
	225	211	0,031	1,39	0,28	0,37
	325	316	0,047	1,95	0,32	0,42
625	425	416	0,062	2,50	0,35	0,46
	525	511	0,075	2,99	0,38	0,51
	125	116	0,021	1,06	0,29	0,37
	225	211	0,037	1,63	0,32	0,42
	325	316	0,056	2,29	0,35	0,46
825	425	416	0,075	2,94	0,39	0,51
	525	511	0,091	3,51	0,42	0,55
	125	116	0,028	1,37	0,35	0,46
	225	211	0,050	2,11	0,38	0,51
	325	316	0,075	2,97	0,42	0,56
1025	425	416	0,099	3,82	0,45	0,60
	525	511	0,121	4,56	0,49	0,64
	125	116	0,036	1,68	0,42	0,56
	225	211	0,062	2,59	0,45	0,6
	325	316	0,093	3,64	0,49	0,65
1225	425	416	0,124	4,70	0,52	0,69
	525	511	0,151	5,60	0,55	0,73
	125	116	0,043	1,99	0,49	0,65
	225	211	0,075	3,07	0,52	0,69
	325	316	0,112	4,32	0,55	0,74
1225	425	416	0,149	5,57	0,59	0,78
	525	511	0,181	6,65	0,62	0,83

Tab. 16: Dimensions, free area and weight of the NOVA-D grilles

A Design Diagram

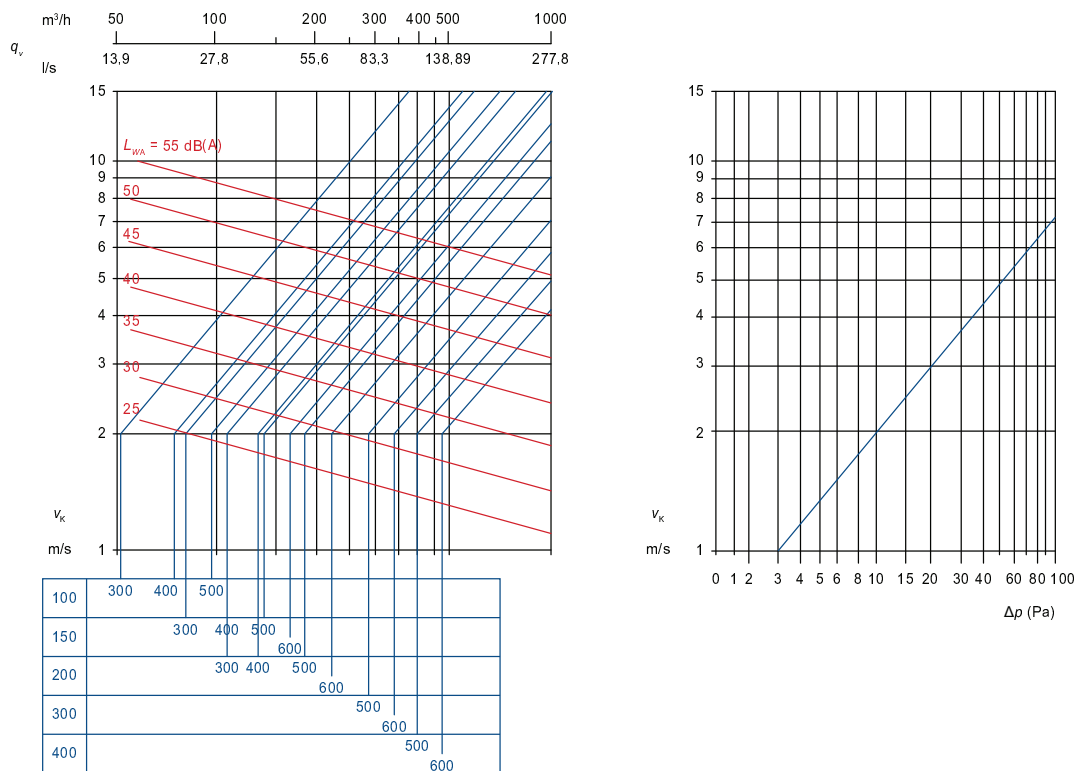


Diagram 12: A design diagram for NOVA-D

Legend

h	(m)	- Distance from the ceiling
l	(m)	- Throw distance
q_v	(m³/h)	- Supply air flow
q_l	(m³/h)	- Air flow at distance l
v_l	(m/s)	- Maximum velocity in the occupied area
v_A	(m/s)	- Free area velocity
A_{v2}	(m²)	- Free area
L_{WA}	[dB (A)]	- Acoustic performance level weighted by Filter A
Δp_t	(Pa)	- Pressure loss
Δt_0	(K)	- Difference between the supply air temperature and the room air temperature
Δt_l	(K)	- Difference between the room air temperature and the room air temperature at distance l
C_A		- A correction coefficient of the room
C_H		- A correction coefficient of placement from the ceiling