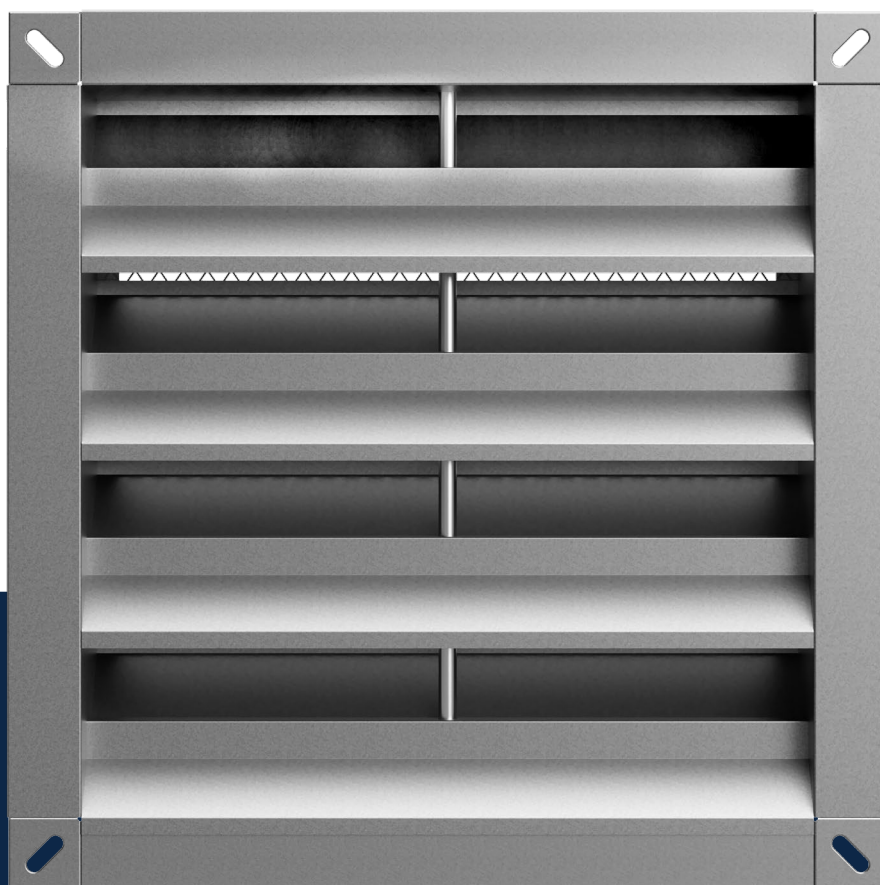


Air through perfection

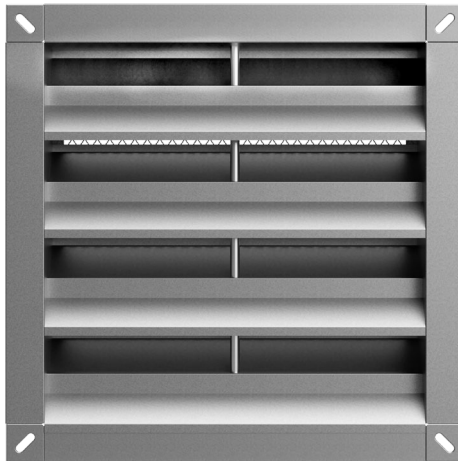
Exterior grille

**WPL-T**



**ACP**  
Smoke evacuation grilles

## Exterior grille WPL-T



### Description

The WPL-T exterior grille, made of galvanized steel is used to introduce or evacuate air.

The outdoor grille is weather resistant and is intended for mounting on the exterior walls of buildings.

### Technical specifications

#### Characteristics

The grille is provided with fixed anti-rain blades, positioned at 45°, parallel to the “L” (length).

WPL-T has a wire mesh with 10x10 mm.

The product is made standard with oval holes for fixing with screws.

The standard finish is natural galvanized steel.

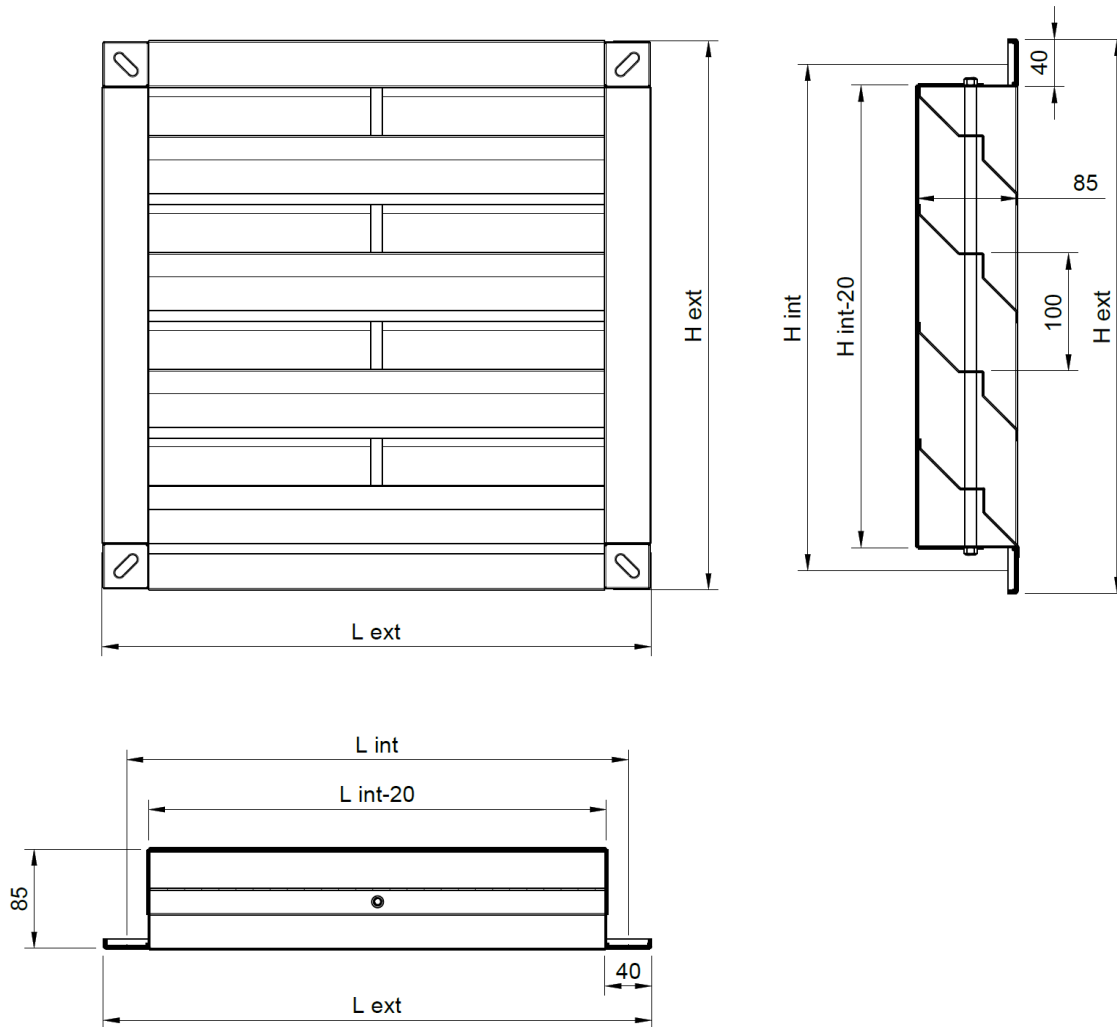
Dimensional limits: minimum 200 x 200 and maximum 2000 x 2000 mm.

### Materials

The grille is made of galvanized steel with natural finishing.

On request, the product can be painted in electrostatic field in any shade from the RAL palette.

### Technical drawing



## Functional parameters

L x H [mm]	Discharge area Ak [m <sup>2</sup> ]															
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
500	0.12	0.14	0.17	0.20	0.22	0.25	0.27	0.30	0.33	0.35	0.38	0.40	0.43	0.46	0.48	0.51
600	0.15	0.18	0.21	0.25	0.28	0.31	0.34	0.38	0.41	0.44	0.47	0.51	0.54	0.57	0.61	0.64
700	0.18	0.22	0.26	0.30	0.34	0.38	0.42	0.46	0.50	0.54	0.59	0.63	0.67	0.71	0.75	0.79
800	0.21	0.26	0.31	0.36	0.40	0.45	0.50	0.55	0.59	0.64	0.69	0.74	0.78	0.83	0.88	0.93
900	0.24	0.29	0.35	0.40	0.45	0.51	0.56	0.61	0.67	0.72	0.77	0.83	0.88	0.93	0.99	1.04
1000	0.27	0.33	0.39	0.45	0.51	0.57	0.63	0.69	0.75	0.81	0.88	0.94	1.00	1.06	1.12	1.18
1100	0.30	0.37	0.44	0.51	0.57	0.64	0.71	0.78	0.84	0.91	0.98	1.05	1.11	1.08	1.25	1.32
1200	0.33	0.40	0.48	0.55	0.62	0.70	0.77	0.84	0.92	0.99	1.06	1.14	1.21	1.28	1.36	1.43
1300	0.36	0.44	0.52	0.60	0.68	0.76	0.84	0.92	1.00	1.08	1.17	1.25	1.33	1.41	1.49	1.57
1400	0.39	0.48	0.57	0.66	0.74	0.83	0.92	1.01	1.09	1.18	1.27	1.36	1.44	1.53	1.62	1.71
1500	0.42	0.51	0.61	0.70	0.79	0.89	0.98	1.07	1.17	1.26	1.35	1.45	1.54	1.63	1.73	1.82
1600	0.45	0.55	0.65	0.75	0.85	0.95	1.05	1.15	1.25	1.36	1.46	1.56	1.66	1.76	1.86	1.96
1700	0.48	0.59	0.70	0.81	0.91	1.02	1.13	1.24	1.34	1.45	1.56	1.67	1.77	1.88	1.99	2.10
1800	0.51	0.62	0.73	0.85	0.96	1.08	1.19	1.30	1.42	1.53	1.64	1.76	1.87	1.98	2.10	2.21
1900	0.54	0.66	0.78	0.90	1.02	1.14	1.26	1.38	1.50	1.63	1.75	1.87	1.99	2.11	2.23	2.35
2000	0.57	0.70	0.83	0.95	1.08	1.21	1.34	1.47	1.59	1.72	1.85	1.98	2.10	2.23	2.36	2.49

Air flow [m <sup>3</sup> /h]	Ak [m <sup>2</sup> ]	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6	0.8	1	1.5	2	2.5		
1000	Veff [m/s]	2.6														
	ΔPt asp [Pa]	28.0														
	ΔPt ref [Pa]	23.0														
2000	Veff [m/s]	5.2	3.6	2.7	2.2											
	ΔPt asp [Pa]	100.0	48.0	32.0	18.0											
	ΔPt ref [Pa]	80.0	40.0	23.0	12.0											
3000	Veff [m/s]	8.2	5.3	4.2	3.4	2.8	2.2									
	ΔPt asp [Pa]	190.0	110.0	65.0	45.0	32.0	17.0									
	ΔPt ref [Pa]	160.0	85.0	55.0	35.0	23.0	8.0									
4000	Veff [m/s]		7.1	5.6	4.6	3.8	2.8	2.3								
	ΔPt asp [Pa]		170.0	120.0	78.0	60.0	35.0	22.0								
	ΔPt ref [Pa]		140.0	90.0	63.0	45.0	22.0	14.0								
5000	Veff [m/s]			7.0	5.6	4.7	3.6	2.8	2.5							
	ΔPt asp [Pa]			165.0	118.0	82.0	49.0	35.0	26.0							
	ΔPt ref [Pa]			135.0	86.0	68.0	41.0	23.0	17.0							
6000	Veff [m/s]			8.0	6.5	5.7	4.2	3.3	3.0	2.2						
	ΔPt asp [Pa]			190.0	150.0	120.0	70.0	45.0	38.0	16.0						
	ΔPt ref [Pa]			150.0	125.0	90.0	55.0	35.0	28.0	8.0						
7000	Veff [m/s]			9.2	7.4	6.3	4.7	3.8	3.3	2.3						
	ΔPt asp [Pa]			220.0	180.0	150.0	85.0	52.0	42.0	22.0						
	ΔPt ref [Pa]			200.0	145.0	125.0	65.0	43.0	35.0	18.0						
8000	Veff [m/s]				8.5	7.3	5.6	4.4	3.8	2.6	2.1					
	ΔPt asp [Pa]				220.0	180.0	125.0	78.0	55.0	28.0	18.0					
	ΔPt ref [Pa]				200.0	145.0	92.0	60.0	45.0	22.0	8.0					
9000	Veff [m/s]					8.6	6.2	4.8	4.2	2.9	2.4					
	ΔPt asp [Pa]					220.0	140.0	90.0	65.0	38.0	23.0					
	ΔPt ref [Pa]					180.0	120.0	75.0	55.0	26.0	15.0					
10000	Veff [m/s]						7.1	5.7	4.8	3.6	2.6					
	ΔPt asp [Pa]						175.0	125.0	85.0	45.0	32.0					
	ΔPt ref [Pa]						140.0	95.0	70.0	38.0	22.0					
12000	Veff [m/s]							8.6	6.8	5.8	4.1	3.3	2.2			
	ΔPt asp [Pa]							210.0	160.0	128.0	65.0	41.0	18.0			
	ΔPt ref [Pa]							170.0	135.0	95.0	53.0	28.0	13.0			
16000	Veff [m/s]									7.8	5.7	4.5	3.1	2.2		
	ΔPt asp [Pa]									200.0	130.0	75.0	38.0	20.0		
	ΔPt ref [Pa]									160.0	100.0	60.0	28.0	13.0		
20000	Veff [m/s]										7.1	5.8	3.8	2.8	2.3	
	ΔPt asp [Pa]										170.0	130.0	65.0	35.0	22.0	
	ΔPt ref [Pa]										140.0	100.0	48.0	25.0	13.0	
25000	Veff [m/s]											7.2	5.1	3.7	3.1	
	ΔPt asp [Pa]											170.0	100.0	52.0	38.0	
	ΔPt ref [Pa]											140.0	78.0	43.0	27.0	
30000	Veff [m/s]												8.6	5.8	4.3	3.6
	ΔPt asp [Pa]												200.0	130.0	67.0	50.0
	ΔPt ref [Pa]												160.0	100.0	58.0	43.0
40000	Veff [m/s]													7.8	5.5	4.4
	ΔPt asp [Pa]													180.0	110.0	70.0
	ΔPt ref [Pa]													145.0	85.0	60.0
50000	Veff [m/s]														6.8	5.5
	ΔPt asp [Pa]														165.0	120.0
	ΔPt ref [Pa]														135.0	90.0

The legend

Ak [m<sup>2</sup>] - The free surface

Veff [m/s] - The speed of air in the grille

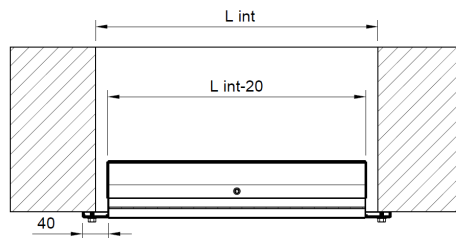
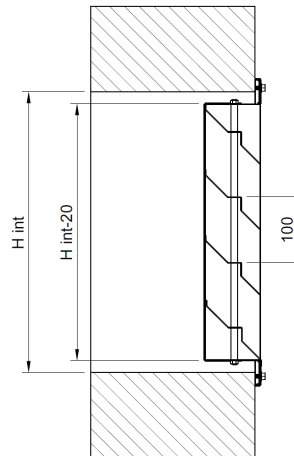
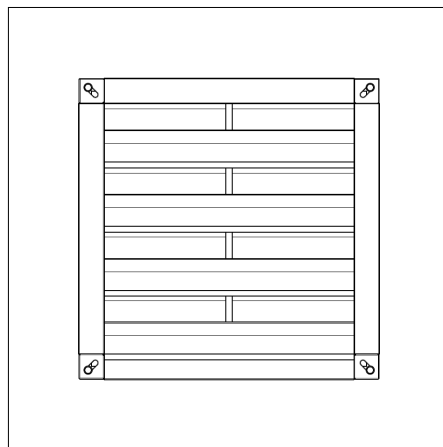
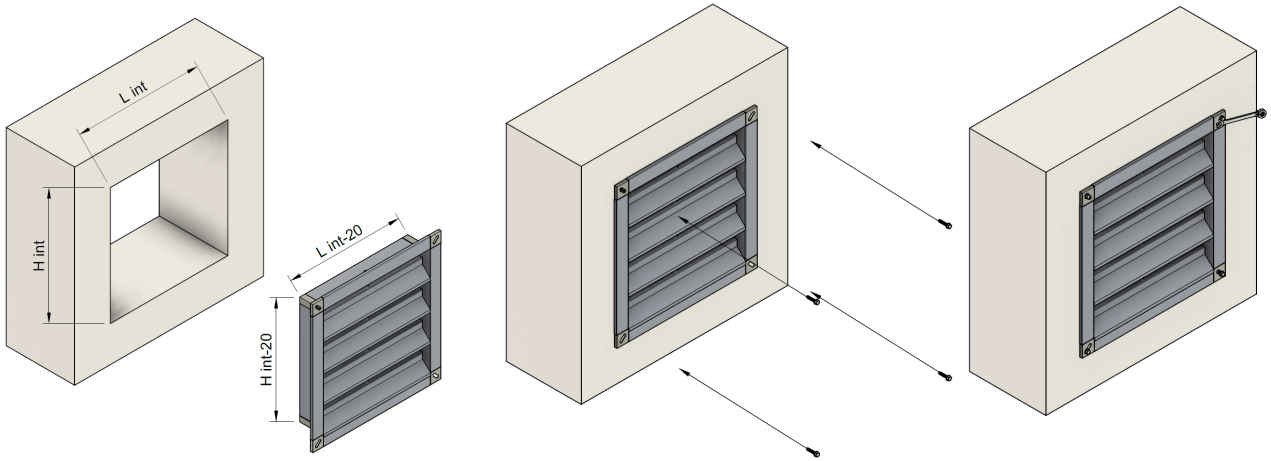
ΔPt asp [Pa] - Pressure loss at extraction

ΔPt ref [Pa] - Pressure loss at discharge

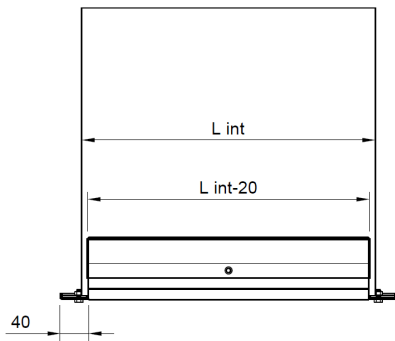
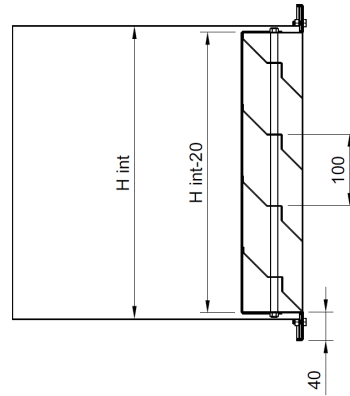
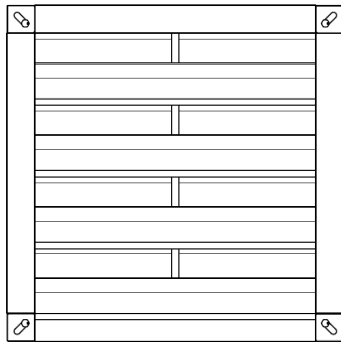
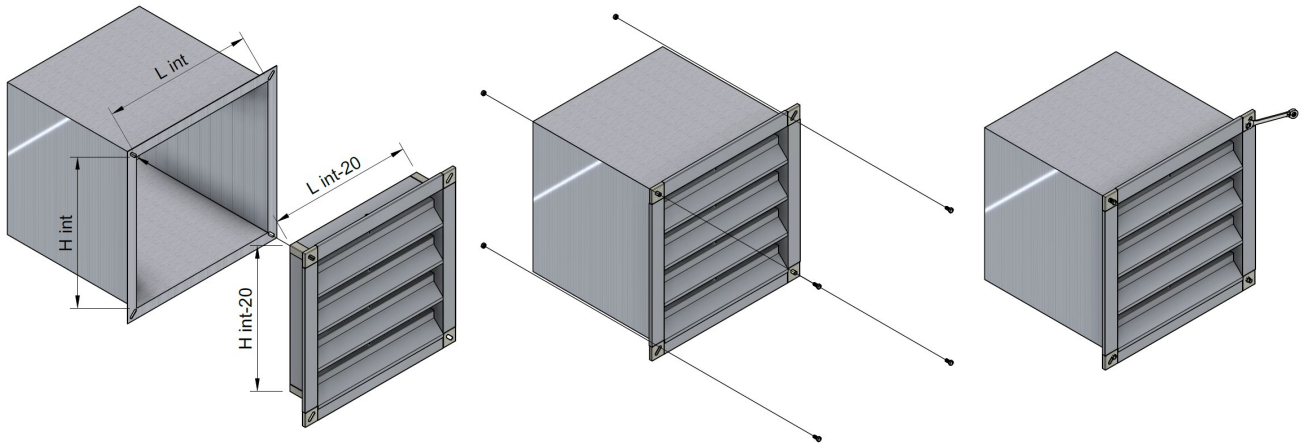
## Installation

The mounting/fixing of the grille is done with screws.

### Wall mounting



Rectangular duct mounting



Order code

Example on how to place an order

Type	Dimensions	Finish
WPL-T		
On request		
Natural (galvanized steel)		
RAL..- Other RAL colors on request		