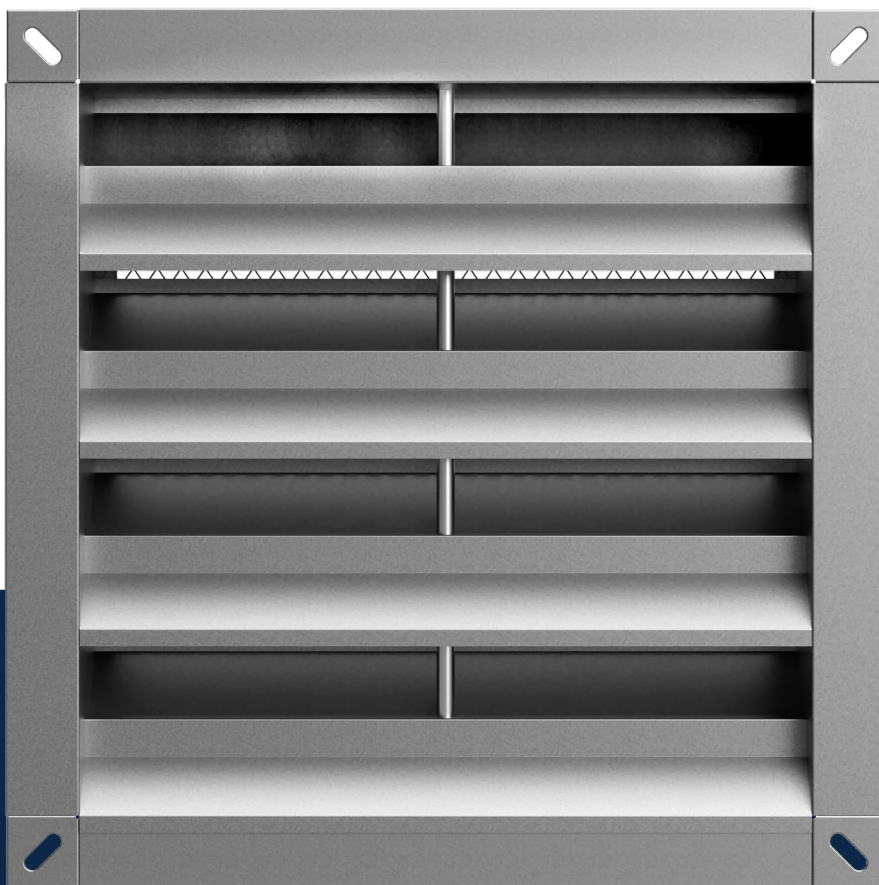


Air through perfection

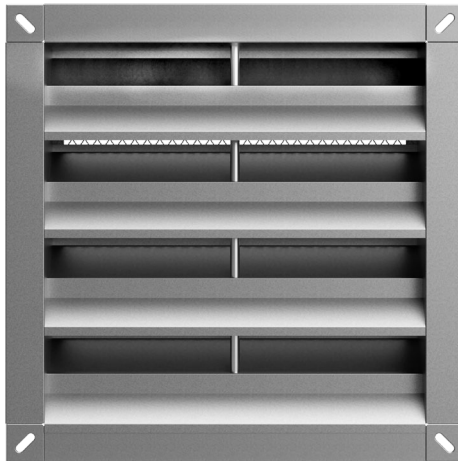
Exterior grille

**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.

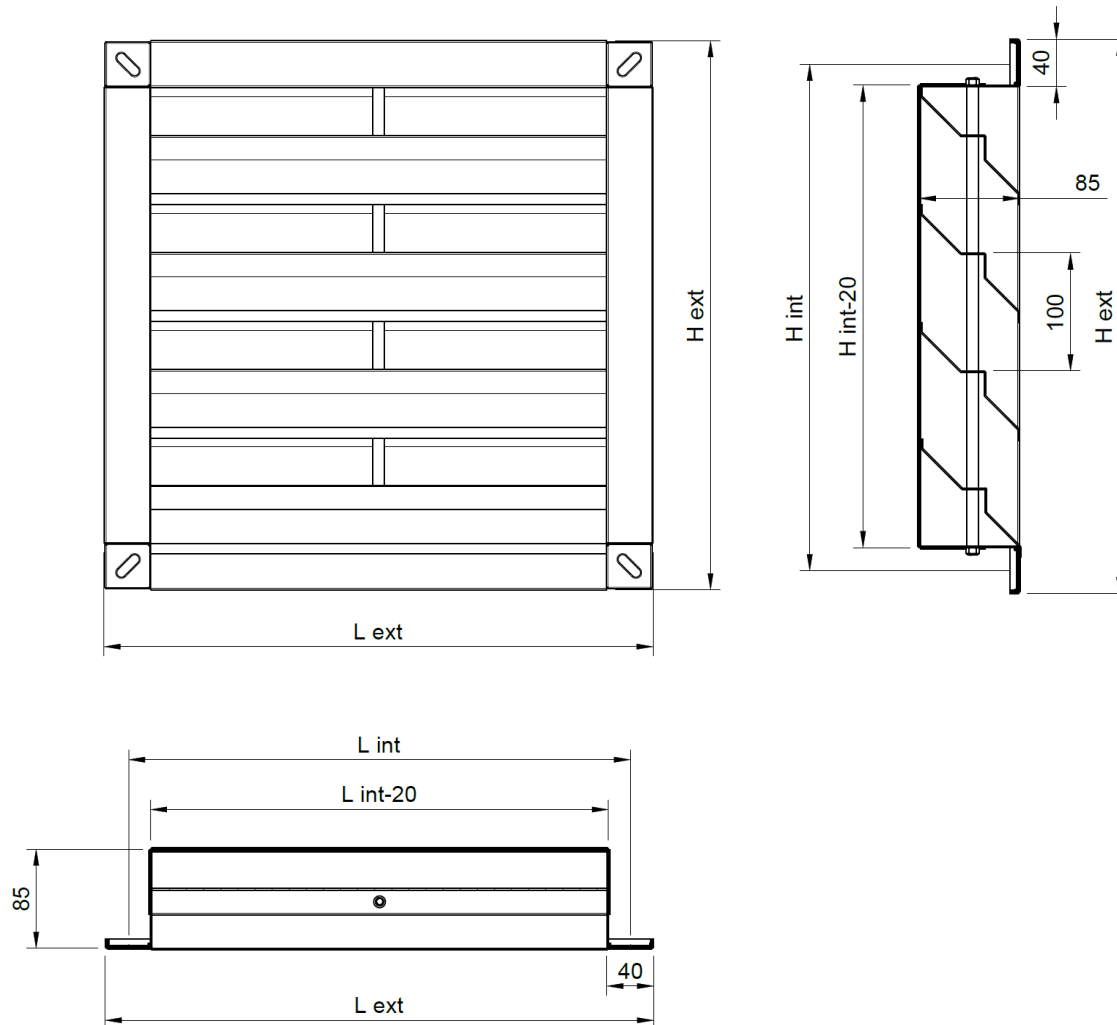
Dimensional limits: minimum 200 x 200 and maximum 2000 x 2000 mm.

## 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<br>[mm] | Discharge area Ak [m²] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|               | 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<br>[m³/h] | Ak [m²]      | 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 [m²] - The free surface

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

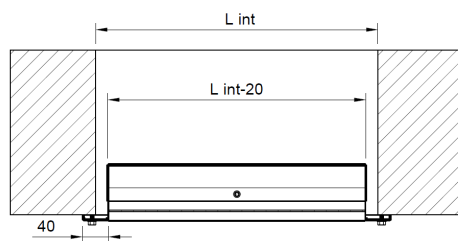
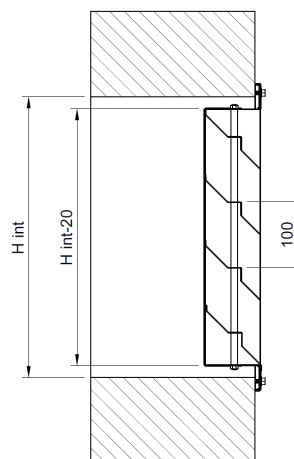
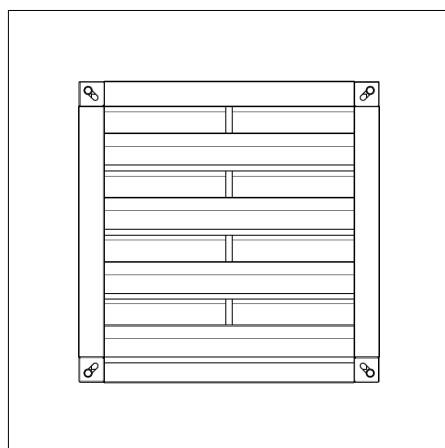
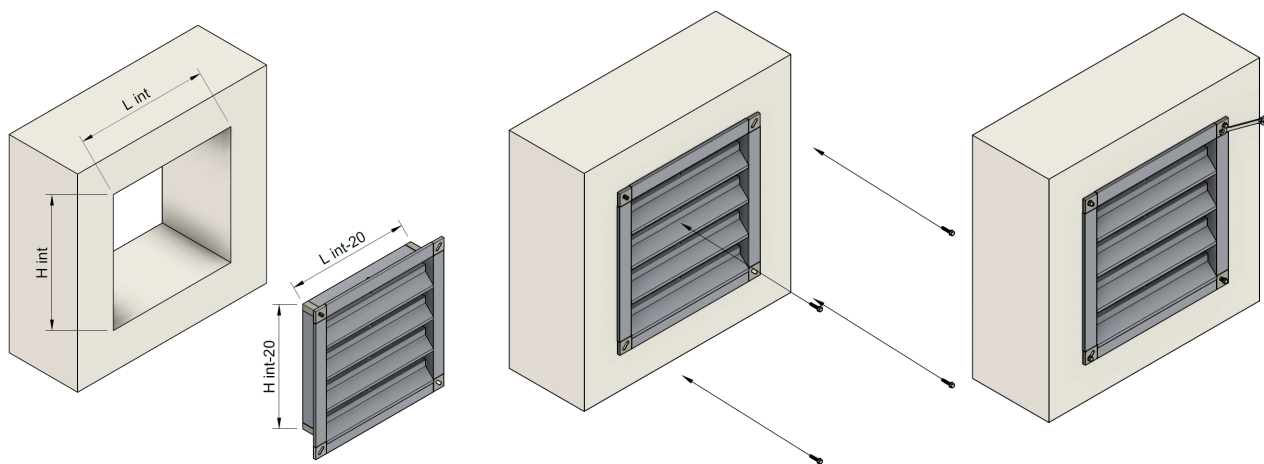
ΔPt asp [Pa] - Pressure loss at extraction

ΔPt ref [Pa] - Pressure loss at discharge

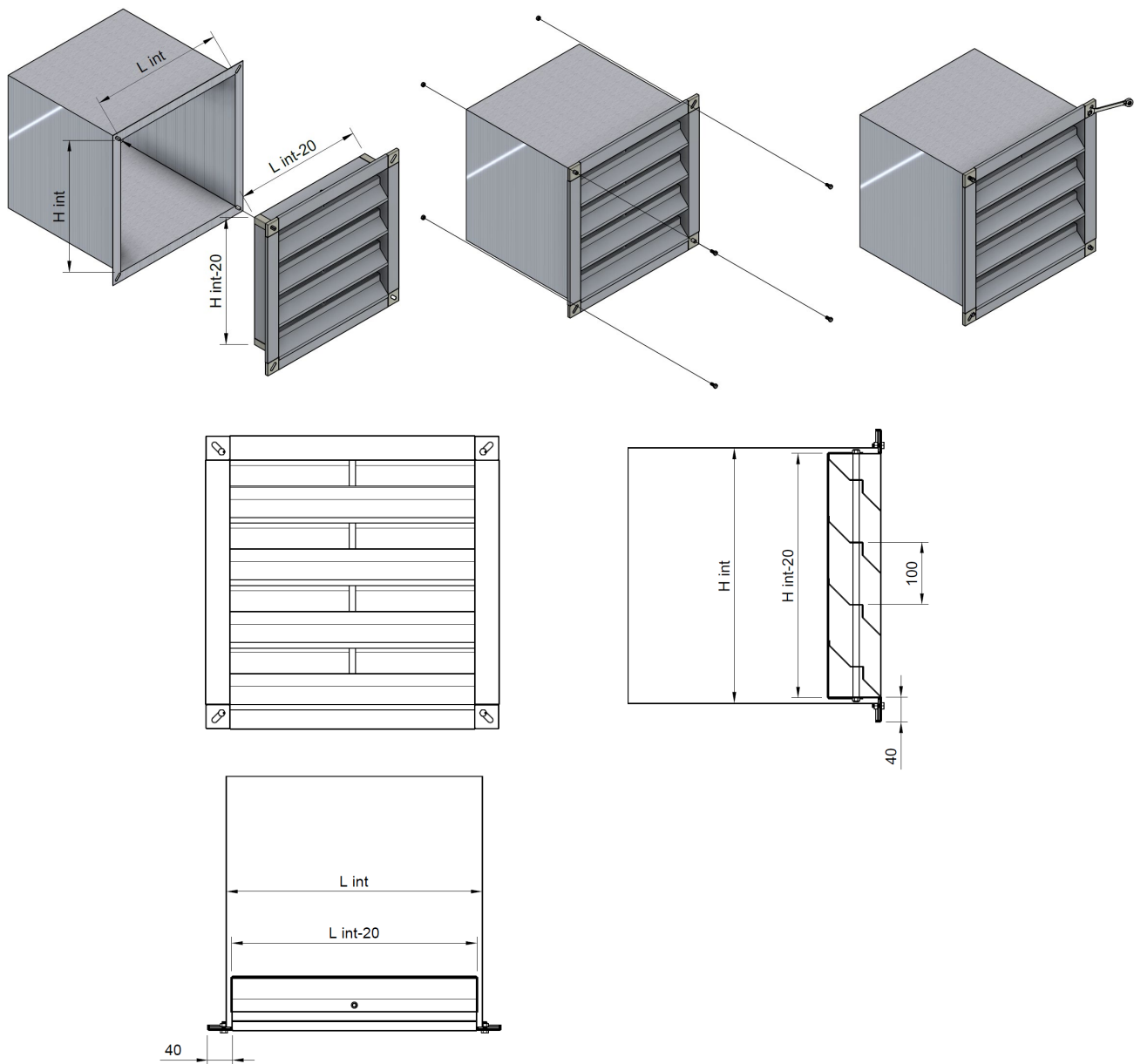
## Installation

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 |            |        |