

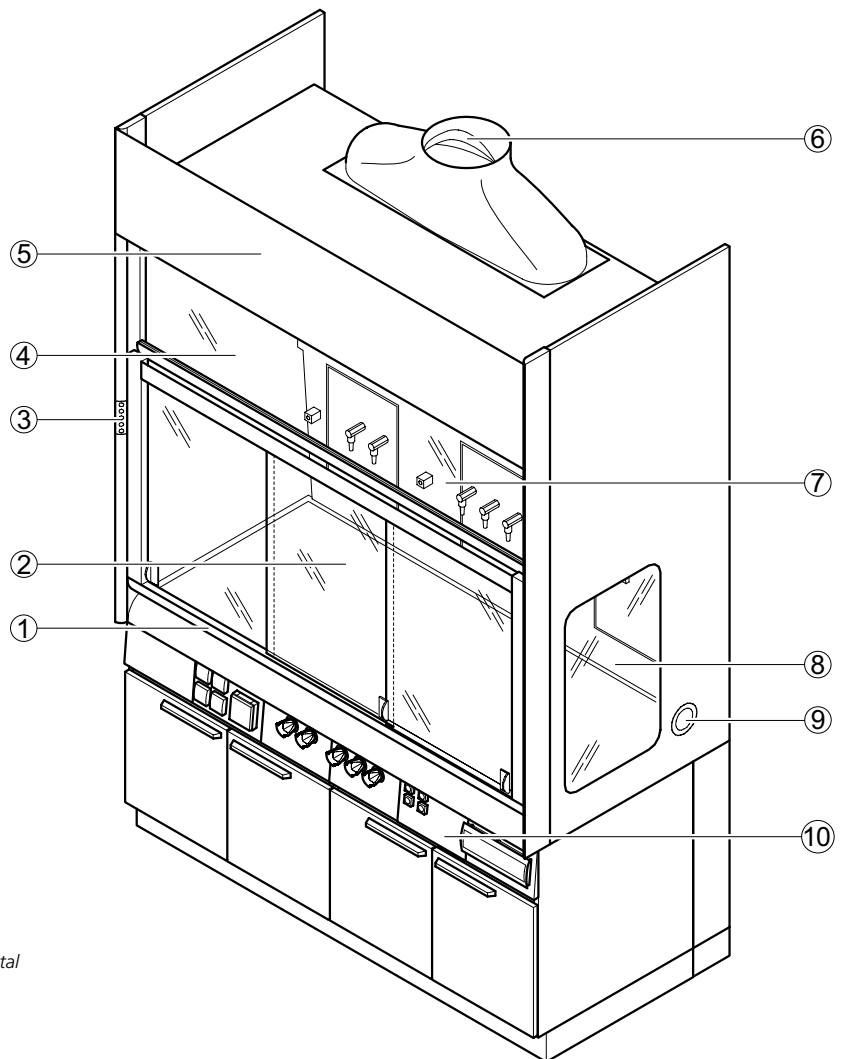
## Bench-mounted fume cupboards

### Bench-mounted fume cupboard

#### Intended use

- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- Protection from splashes of hazardous substances
- Protection from flying particles, bodies or parts escaping from the internal workspace
- General fume cupboards constructed in acc. with EN 14175 are normally not suited for use with radioactive substances or microorganisms
- Not suitable for openly breaking down chemicals
- Service outlets in the rear panel of the internal workspace
- Control units located horizontally on the service rail of the support unit

#### Design

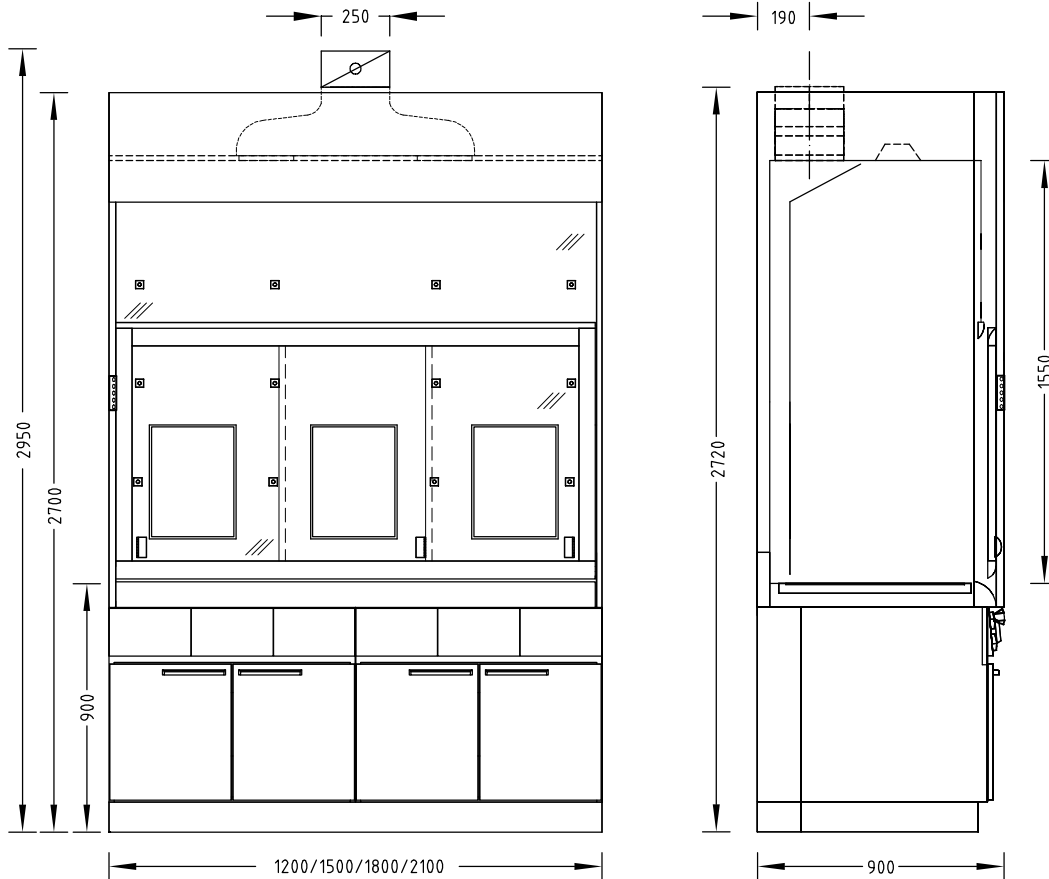


- 1 Sash with handle and horizontal sashes
- 2 Worktop
- 3 FAZ or AC control panel
- 4 Upper sash window
- 5 Removable fascia panel
- 6 Extract manifold
- 7 Baffle with service modules
- 8 Glass pane in the side wall
- 9 Material lock
- 10 Self-supporting underbench unit with support and service panels

# Bench-mounted fume cupboards

## Bench-mounted fume cupboard

### Dimensional drawing



### Technical data

| Dimensions                            | 1200 | 1500 | 1800 | 2100 |
|---------------------------------------|------|------|------|------|
| Width [mm]                            | 1200 | 1500 | 1800 | 2100 |
| Depth [mm]                            | 900  |      |      |      |
| Height [mm]                           | 2700 |      |      |      |
| Clear width, internal workspace [mm]  | 1150 | 1450 | 1750 | 2050 |
| Clear height, internal workspace [mm] | 1550 |      |      |      |
| Working height [mm]                   | 900  |      |      |      |

| Weight                    | 1200        | 1500        | 1800        | 2100        |
|---------------------------|-------------|-------------|-------------|-------------|
| Without installation [kg] | Approx. 250 | Approx. 300 | Approx. 350 | Approx. 400 |

# Bench-mounted fume cupboards

## Bench-mounted fume cupboard

| Design characteristics                               | 1200  | 1500 | 1800                | 2100 |
|--|---|------|---------------------|------|
| Supporting construction                              | Self-supporting underbench units or H-frame with push-in underbench units   |      |                     |      |
| Sash   | 2 horizontal sashes   |      | 3 horizontal sashes |      |
| Side panel of the fume cupboard                      | Glass pane on the left and/or right as an option; not with stoneware internal lining<br>Material lock on the left and/or right as an option; not with stoneware internal lining |      |                     |      |
| Number of devices for scaffold points, ø 12 to 13 mm | 9   |      | 12                  |      |
| Service modules                                      | 2   |      | 3                   |      |

| Electrics          |   |
|--------------------|---|
| Electrical supply  | External sockets in service panels<br>Internal sockets in service modules |
| Fuse box           | Optional  |
| Sash controller SC | Optional  |

| Sanitary technology |  |
|---------------------|--|
| Sanitary supply     | Service modules with take-off valves for vacuum, gases and/or waters and integrated sink (PP) as an option |

| Ventilation technology  | 1200  | 1500 | 1800 | 2100 |
|---|---|------|------|------|
| Minimum air exchange rate [m <sup>3</sup> /h] <sup>1)</sup>                 | 480   | 600  | 720  | 840  |
| Function display  | FAZ   |      |      |      |
| Airflow damper, constant  | Airflow-Controller AC                                   |      |      |      |
| Airflow damper, variable  | Airflow-Controller AC                                   |      |      |      |
| Detector of sash position   | Only variable with Airflow-Controller AC                |      |      |      |
| Connection height [mm] for FAZ with extract manifold ø 250 mm               | 2720  |      |      |      |
| Connection height [mm] for FAZ with extract manifold ø 315 mm <sup>2)</sup> | 2830  |      |      |      |
| Connection height [mm] for AC with extract manifold ø 250 mm                | 2950  |      |      |      |
| Connection height [mm] for AC with extract manifold ø 315 mm <sup>2)</sup>  | 3070  |      |      |      |
| Underbench exhaust  | As an option, depending on requirements and regulations |      |      |      |

<sup>1)</sup> All air volume specifications refer to an opening height of the sash window of 500 mm (test opening in acc. with EN 14175) and the maximum tracer gas values recommended by German Standard (BG Chemie). Shown rates correspond to a face velocity of 0.24 m/s. For other design face velocities, please contact your Waldner sales representative.

<sup>2)</sup> In order to minimise noise and pressure losses, for air volumes >1000 m<sup>3</sup>/h Waldner recommends using the extract manifold with a connection diameter of 315 mm.

A maximum admission pressure of 600 Pa should not be exceeded in the case of fume cupboards with airflow dampers. The indicated minimum air exchange rates were determined under specified test conditions in acc. with EN 14175-3. These minimum air exchange rates must be adapted when dimensioning the ventilation system  
If on-site extract air monitoring systems or airflow dampers are used, the required air volumes may be different. The operating limitations must be agreed upon with Waldner.

| Material/surface |  |
|------------------|--|
| Worktop          | Stoneware<br>Polypropylene<br>Epoxy<br>Stainless steel     |
| Internal lining  | Melamine resin facing<br>Solid grade laminate<br>Stoneware |

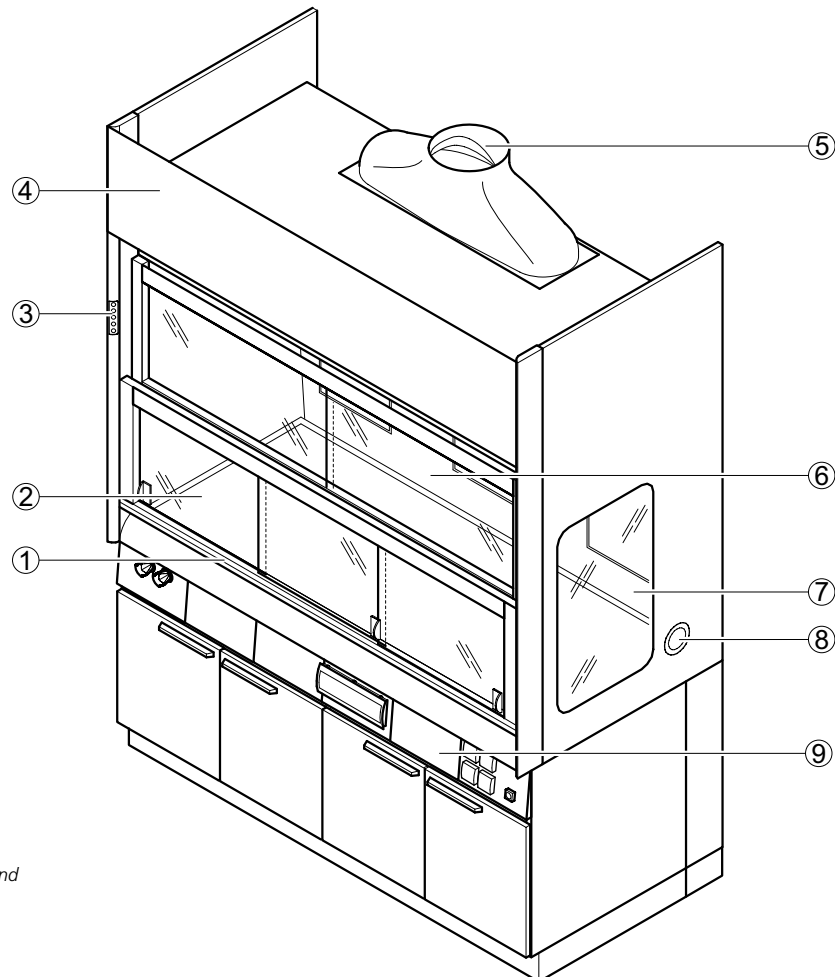
## Bench-mounted fume cupboards

### Low ceiling bench-mounted fume cupboard

#### Intended use

- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- Protection from splashes of hazardous substances
- Protection from flying particles, bodies or parts escaping from the internal workspace
- General fume cupboards constructed in acc. with EN 14175 are normally not suited for use with radioactive substances or microorganisms
- Not suitable for openly breaking down chemicals
- Service outlets in the rear panel of the internal workspace
- Control units located horizontally on the service rail of the support unit
- Suitable for rooms with low ceiling height

#### Design

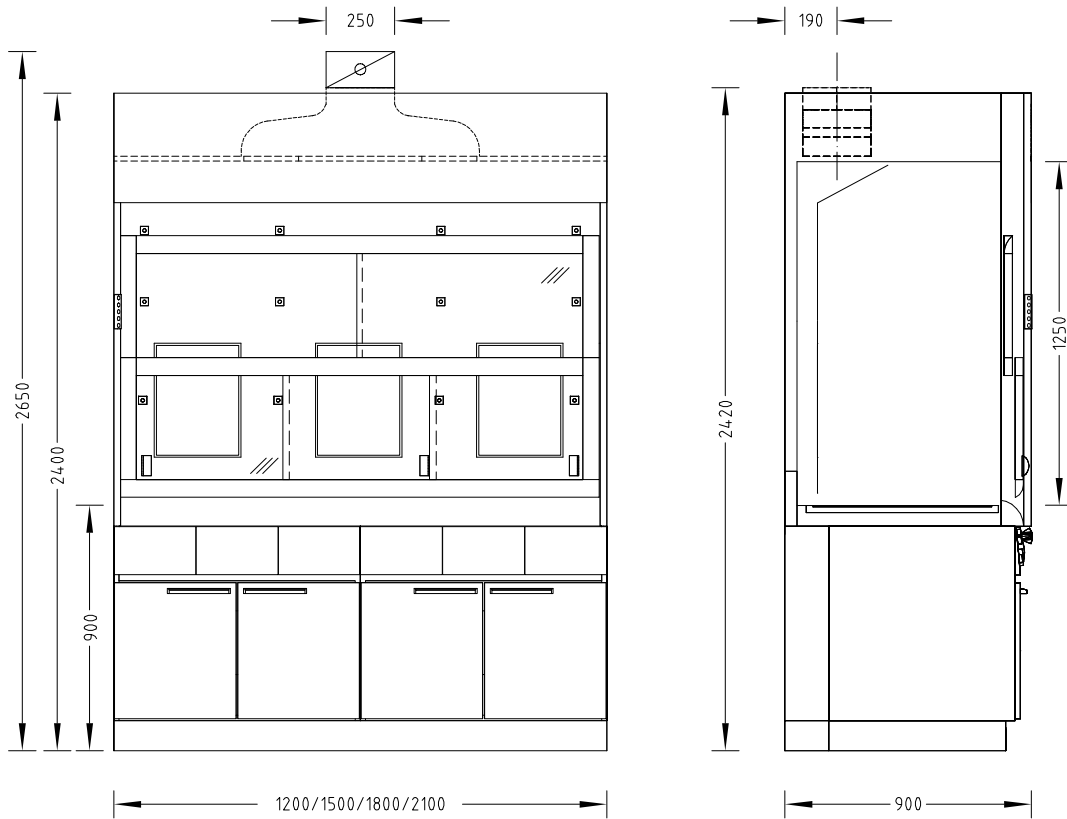


- 1 Two-piece sash with handle and horizontal sashes
- 2 Worktop
- 3 FAZ or AC control panel
- 4 Removable fascia panel
- 5 Extract manifold
- 6 Baffle with service modules
- 7 Glass pane in the side wall
- 8 Material lock
- 9 Self-supporting underbench unit with support and service panels

## Bench-mounted fume cupboards

### Low ceiling bench-mounted fume cupboard

#### Dimensional drawing



#### Technical data

| Dimensions                            | 1200 | 1500 | 1800 | 2100 |
|---------------------------------------|------|------|------|------|
| Width [mm]                            | 1200 | 1500 | 1800 | 2100 |
| Depth [mm]                            | 900  |      |      |      |
| Height [mm]                           | 2400 |      |      |      |
| Clear width, internal workspace [mm]  | 1150 | 1450 | 1750 | 2050 |
| Clear height, internal workspace [mm] | 1250 |      |      |      |
| Working height [mm]                   | 900  |      |      |      |

| Weight                    | 1200        | 1500        | 1800        | 2100        |
|---------------------------|-------------|-------------|-------------|-------------|
| Without installation [kg] | Approx. 220 | Approx. 260 | Approx. 300 | Approx. 350 |

| Design characteristics  | 1200  | 1500 | 1800                | 2100 |
|---|---|------|---------------------|------|
| Supporting construction   | Self-supporting underbench units or H-frame with push-in underbench units   |      |                     |      |
| Two-piece sash  | 2 horizontal sashes   |      | 3 horizontal sashes |      |
| Side panel of the fume cupboard                                       | Glass pane on the left and/or right as an option; not with stoneware internal lining<br>Material lock on the left and/or right as an option; not with stoneware internal lining |      |                     |      |
| Max. number of devices for scaffold points, $\varnothing$ 12 to 13 mm | 9   |      | 12                  |      |
| Service modules   | 2   |      | 3                   |      |

# Bench-mounted fume cupboards

## Low ceiling bench-mounted fume cupboard

| Electrics          |   |
|--------------------|---|
| Electrical supply  | External sockets in service panels<br>Internal sockets in service modules |
| Fuse box           | Optional  |
| Sash controller SC | Optional  |

| Sanitary technology |  |
|---------------------|--|
| Sanitary supply     | Service modules with take-off valves for vacuum, gases and/or waters and integrated sink (PP) as an option |

| Ventilation technology  | 1200  | 1500 | 1800 | 2100 |
|---|---|------|------|------|
| Minimum air exchange rate [m <sup>3</sup> /h] <sup>1)</sup>                 | 480   | 600  | 720  | 840  |
| Function display  | FAZ   |      |      |      |
| Airflow damper, constant  | Airflow-Controller AC                                   |      |      |      |
| Airflow damper, variable  | Airflow-Controller AC                                   |      |      |      |
| Detector of sash position   | Only variable with Airflow-Controller AC                |      |      |      |
| Connection height [mm] for FAZ with extract manifold Ø 250 mm               | 2420  |      |      |      |
| Connection height [mm] for FAZ with extract manifold Ø 315 mm <sup>2)</sup> | 2530  |      |      |      |
| Connection height [mm] for AC with extract manifold Ø 250 mm                | 2650  |      |      |      |
| Connection height [mm] for AC with extract manifold Ø 315 mm <sup>2)</sup>  | 2770  |      |      |      |
| Underbench exhaust  | As an option, depending on requirements and regulations |      |      |      |

<sup>1)</sup> All air volume specifications refer to an opening height of the sash window of 500 mm (test opening in acc. with EN 14175) and the maximum tracer gas values recommended by German Standard (BG Chemie). Shown rates correspond to a face velocity of 0.24 m/s. For other design face velocities, please contact your Waldner sales representative.

<sup>2)</sup> In order to minimise noise and pressure losses, for air volumes >1000 m<sup>3</sup>/h Waldner recommends using the extract manifold with a connection diameter of 315 mm.

A maximum admission pressure of 600 Pa should not be exceeded in the case of fume cupboards with airflow dampers.

The indicated minimum air exchange rates were determined under specified test conditions in acc. with EN 14175-3. These minimum air exchange rates must be adapted when dimensioning the ventilation system.

If on-site extract air monitoring systems or airflow dampers are used, the required air volumes may be different. The operating limitations must be agreed upon with Waldner.

| Material/surface |  |
|------------------|--|
| Worktop          | Stoneware<br>Polypropylene<br>Stainless steel<br>Epoxy     |
| Internal lining  | Melamine resin facing<br>Solid grade laminate<br>Stoneware |

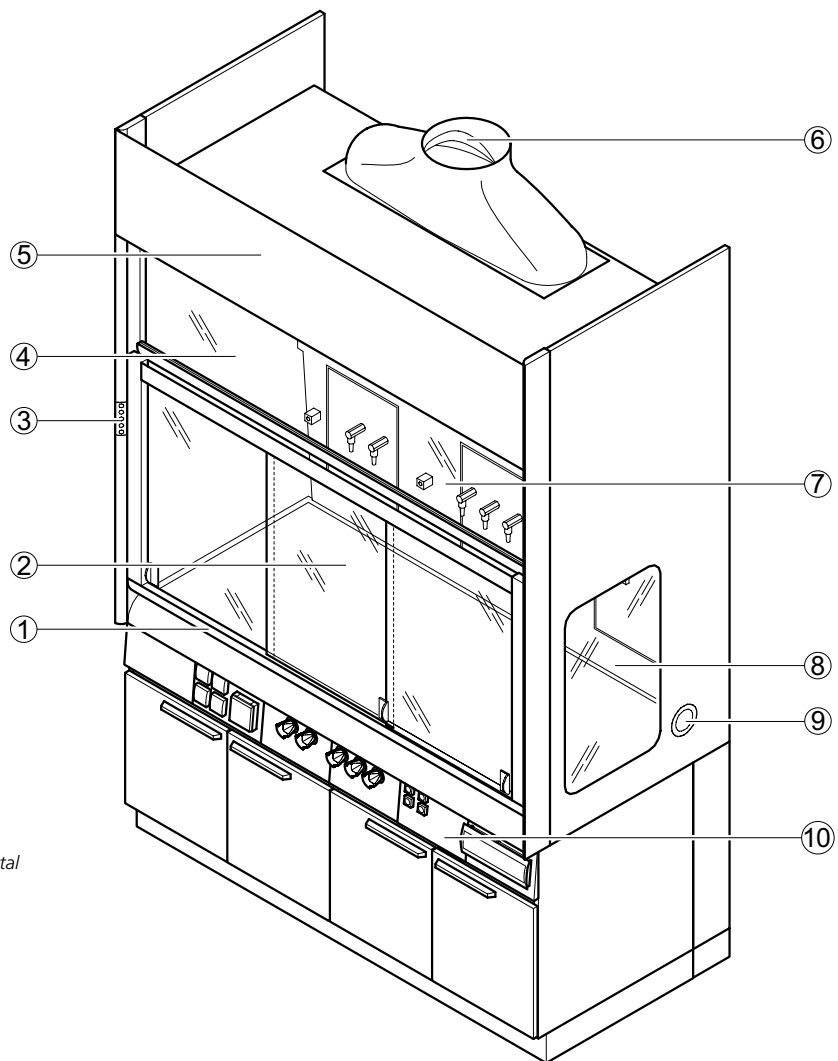
## Bench-mounted fume cupboards

### Secuflow bench-mounted fume cupboard

#### Intended use

- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- Protection from splashes of hazardous substances
- Protection from flying particles, bodies or parts escaping from the internal workspace
- General fume cupboards constructed in acc. with EN 14175 are normally not suited for use with radioactive substances or microorganisms
- Not suitable for openly breaking down chemicals
- Active supportive flow technology (Secuflow technology) reduces the energy consumption while regulations and standards are observed
- Service outlets in the rear panel of the internal workspace
- Control units located horizontally on the service rail of the support unit

#### Design

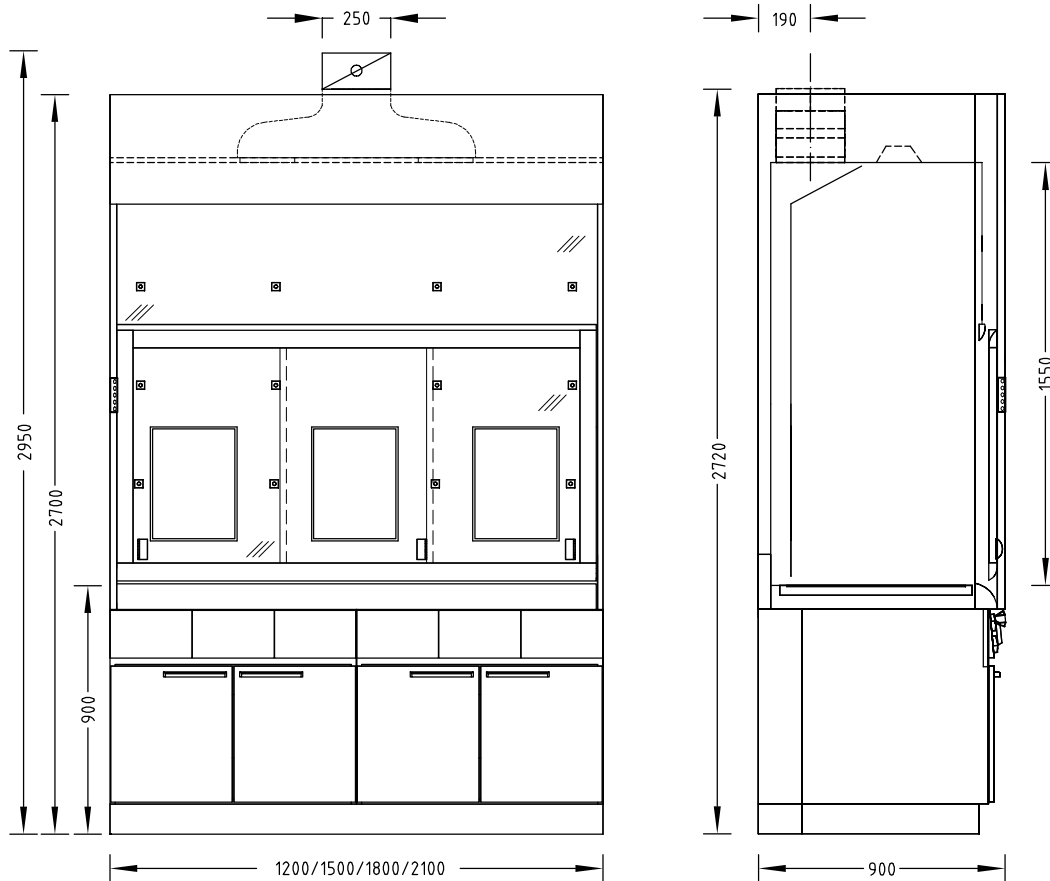


- 1 Sash with handle and horizontal sashes
- 2 Worktop
- 3 FAZ or AC control panel
- 4 Upper sash window
- 5 Removable fascia panel
- 6 Extract manifold
- 7 Baffle with service modules
- 8 Glass pane in the side wall
- 9 Material lock
- 10 Self-supporting underbench unit with support and service panels

# Bench-mounted fume cupboards

## Secuflow bench-mounted fume cupboard

### Dimensional drawing



### Technical data

| Dimensions                            | 1200 | 1500 | 1800 | 2100 |
|---------------------------------------|------|------|------|------|
| Width [mm]                            | 1200 | 1500 | 1800 | 2100 |
| Depth [mm]                            | 900  |      |      |      |
| Height [mm]                           | 2700 |      |      |      |
| Clear width, internal workspace [mm]  | 1150 | 1450 | 1750 | 2050 |
| Clear height, internal workspace [mm] | 1550 |      |      |      |
| Working height [mm]                   | 900  |      |      |      |

| Weight                    | 1200        | 1500        | 1800        | 2100        |
|---------------------------|-------------|-------------|-------------|-------------|
| Without installation [kg] | Approx. 250 | Approx. 300 | Approx. 350 | Approx. 400 |

# Bench-mounted fume cupboards

## Secuflow bench-mounted fume cupboard

| Design characteristics                                       | 1200  | 1500 | 1800                | 2100 |
|--|---|------|---------------------|------|
| Supporting construction                                      | Self-supporting underbench units or H-frame with push-in underbench units   |      |                     |      |
| Sash   | 2 horizontal sashes   |      | 3 horizontal sashes |      |
| Side panel of the fume cupboard                              | Glass pane on the left and/or right as an option; not with stoneware internal lining<br>Material lock on the left and/or right as an option; not with stoneware internal lining |      |                     |      |
| Max. number of devices for scaffold points, ø 12 mm to 13 mm | 9   |      | 12                  |      |
| Service modules  | 2   |      | 3                   |      |

| Electrics          |   |
|--------------------|---|
| Electrical supply  | External sockets in service panels<br>Internal sockets in service modules |
| Fuse box           | Optional  |
| Sash controller SC | Optional  |

| Sanitary technology |  |
|---------------------|--|
| Sanitary supply     | Service modules with take-off valves for vacuum, gases and/or waters and integrated sink (PP) as an option |

| Ventilation technology  | 1200  | 1500 | 1800 | 2100 |
|---|---|------|------|------|
| Minimum air exchange rate [m <sup>3</sup> /h] <sup>1)</sup>                 | 330   | 410  | 490  | 570  |
| Function display  | FAZ   |      |      |      |
| Airflow damper, constant  | Airflow-Controller AC                                   |      |      |      |
| Airflow damper, variable  | Airflow-Controller AC                                   |      |      |      |
| Detector of sash position   | Only variable with Airflow-Controller AC                |      |      |      |
| Connection height [mm] for FAZ with extract manifold Ø 250 mm               | 2720  |      |      |      |
| Connection height [mm] for FAZ with extract manifold Ø 315 mm <sup>2)</sup> | 2830  |      |      |      |
| Connection height [mm] for AC with extract manifold Ø 250 mm                | 2950  |      |      |      |
| Connection height [mm] for AC with extract manifold Ø 315 mm <sup>2)</sup>  | 3070  |      |      |      |
| Underbench exhaust  | As an option, depending on requirements and regulations |      |      |      |

<sup>1)</sup> All air volume specifications refer to an opening height of the sash window of 500 mm (test opening in acc. with EN 14175) and the maximum tracer gas values recommended by German Standard (BG Chemie). Shown rates correspond to a face velocity of 0.15 m/s. For other design face velocities, please contact your Waldner sales representative.

<sup>2)</sup> In order to minimise noise and pressure losses, for air volumes >1000 m<sup>3</sup>/h Waldner recommends using the extract manifold with a connection diameter of 315 mm.

A maximum admission pressure of 600 Pa should not be exceeded in the case of fume cupboards with airflow dampers. The indicated minimum air exchange rates were determined under specified test conditions in acc. with EN 14175-3. These minimum air exchange rates must be adapted when dimensioning the ventilation system.

If on-site extract air monitoring systems or airflow dampers are used, the required air volumes may be different. The operating limitations must be agreed upon with Waldner.

| Material/surface |  |
|------------------|--|
| Worktop          | Stoneware<br>Polypropylene<br>Stainless steel<br>Epoxy     |
| Internal lining  | Melamine resin facing<br>Solid grade laminate<br>Stoneware |

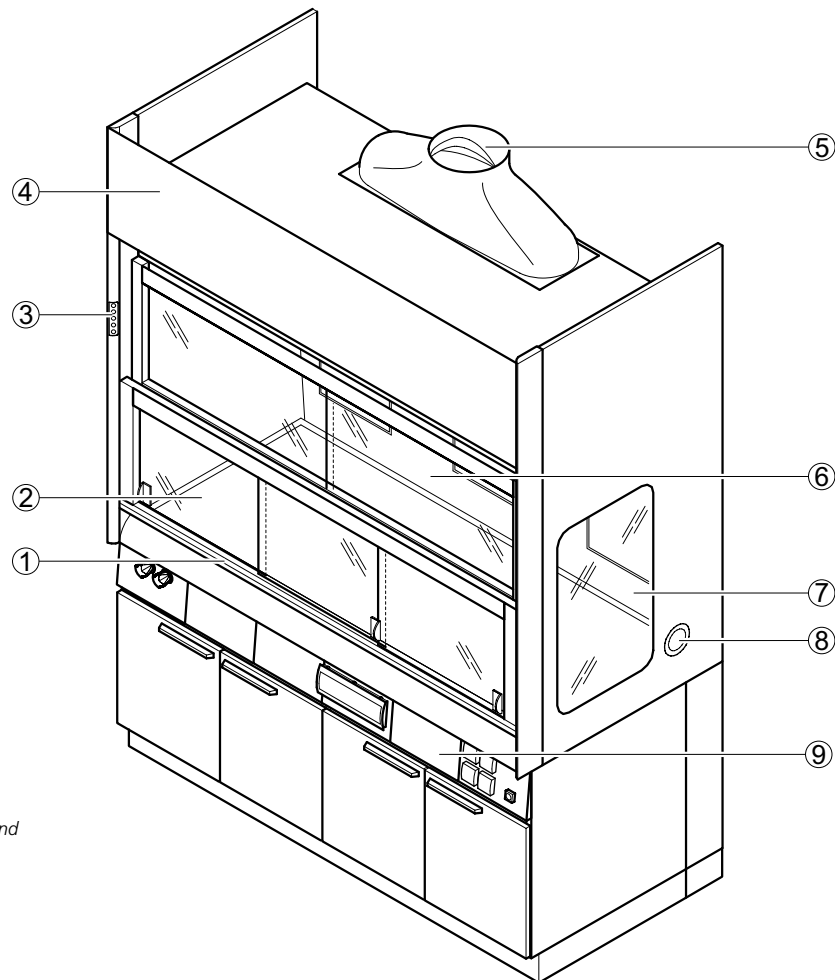
## Bench-mounted fume cupboards

### Secuflow low ceiling bench-mounted fume cupboard

#### Intended use

- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- Protection from splashes of hazardous substances
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- General fume cupboards constructed in acc. with EN 14175 are normally not suited for use with radioactive substances or microorganisms
- Not suitable for openly breaking down chemicals
- Active supportive flow technology (Secuflow technology) reduces the energy consumption while regulations and standards are observed
- Service outlets in the rear panel of the internal workspace
- Control units located horizontally on the service rail of the support unit
- Suitable for rooms with low ceiling height

#### Design

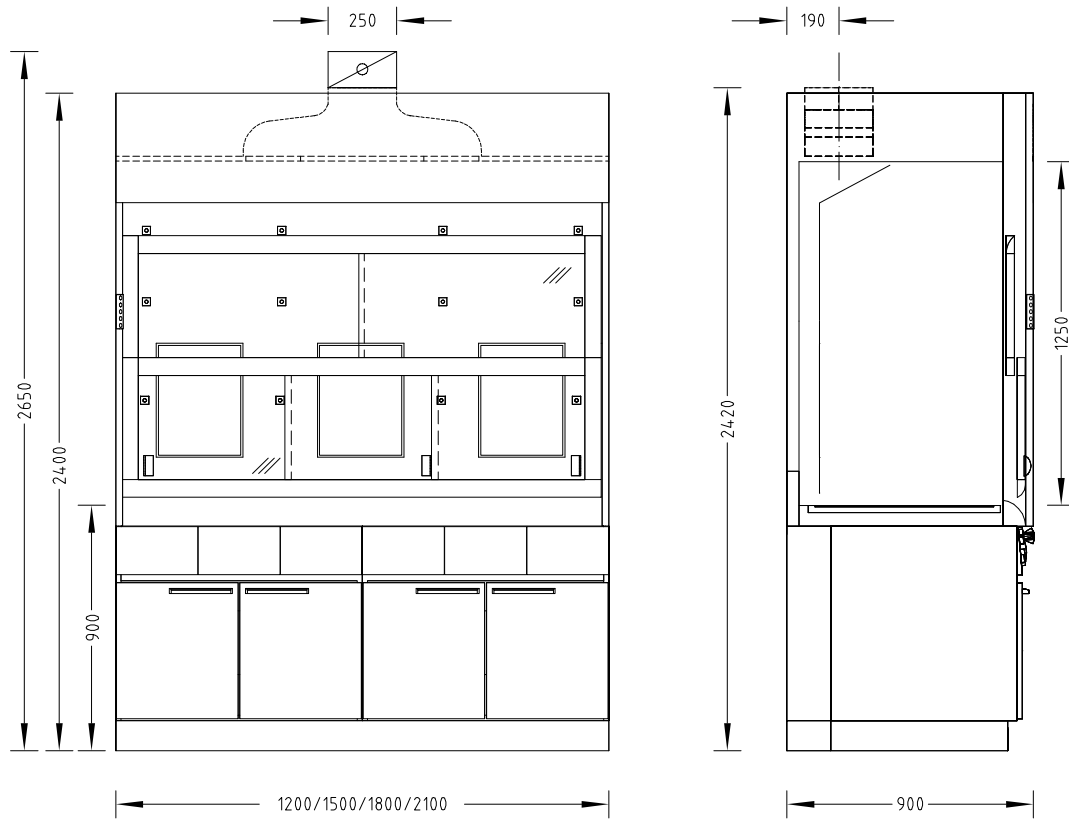


- 1 Two-piece sash with handle and horizontal sashes
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- 3 FAZ or AC control panel
- 4 Removable fascia panel
- 5 Extract manifold
- 6 Baffle with service panel
- 7 Glass pane in the side wall
- 8 Material lock
- 9 Self-supporting underbench unit with support and service panels

## Bench-mounted fume cupboards

### Secuflow low ceiling bench-mounted fume cupboard

#### Dimensional drawing



#### Technical data

| Dimensions                            | 1200 | 1500 | 1800 | 2100 |
|---------------------------------------|------|------|------|------|
| Width [mm]                            | 1200 | 1500 | 1800 | 2100 |
| Depth [mm]                            | 900  |      |      |      |
| Height [mm]                           | 2400 |      |      |      |
| Clear width, internal workspace [mm]  | 1150 | 1450 | 1750 | 2050 |
| Clear height, internal workspace [mm] | 1250 |      |      |      |
| Working height [mm]                   | 900  |      |      |      |

| Weight                    | 1200        | 1500        | 1800        | 2100        |
|---------------------------|-------------|-------------|-------------|-------------|
| Without installation [kg] | Approx. 220 | Approx. 260 | Approx. 300 | Approx. 350 |

| Design characteristics                                    | 1200  | 1500 | 1800                | 2100 |
|---|---|------|---------------------|------|
| Supporting construction                                   | Self-supporting underbench units or H-frame with push-in underbench units   |      |                     |      |
| Two-piece sash  | 2 horizontal sashes   |      | 3 horizontal sashes |      |
| Side panel of the fume cupboard                           | Glass pane on the left and/or right as an option; not with stoneware internal lining<br>Material lock on the left and/or right as an option; not with stoneware internal lining |      |                     |      |
| Max. number of devices for scaffold points, ø 12 to 13 mm | 9   |      | 12                  |      |
| Service modules   | 2   |      | 3                   |      |

# Bench-mounted fume cupboards

## Secuflow low ceiling bench-mounted fume cupboard

| Electrics          |   |
|--------------------|---|
| Electrical supply  | External sockets in service panels<br>Internal sockets in service modules |
| Fuse box           | Optional  |
| Sash controller SC | Optional  |

| Sanitary technology |  |
|---------------------|--|
| Sanitary supply     | Service modules with take-off valves for vacuum, gases and/or waters and integrated sink (PP) as an option |

| Ventilation technology  | 1200  | 1500 | 1800 | 2100 |
|---|---|------|------|------|
| Minimum air exchange rate [m <sup>3</sup> /h] <sup>1)</sup>                 | 330   | 410  | 490  | 570  |
| Function display  | FAZ   |      |      |      |
| Airflow damper, constant  | Airflow-Controller AC                                   |      |      |      |
| Airflow damper, variable  | Airflow-Controller AC                                   |      |      |      |
| Detector of sash position   | Only variable with Airflow-Controller AC                |      |      |      |
| Connection height [mm] for FAZ with extract manifold Ø 250 mm               | 2420  |      |      |      |
| Connection height [mm] for FAZ with extract manifold Ø 315 mm <sup>2)</sup> | 2530  |      |      |      |
| Connection height [mm] for AC with extract manifold Ø 250 mm                | 2650  |      |      |      |
| Connection height [mm] for AC with extract manifold Ø 315 mm <sup>2)</sup>  | 2770  |      |      |      |
| Underbench exhaust  | As an option, depending on requirements and regulations |      |      |      |

<sup>1)</sup> All air volume specifications refer to an opening height of the sash window of 500 mm (test opening in acc. with EN 14175) and the maximum tracer gas values recommended by German Standard (BG Chemie). Shown rates correspond to a face velocity of 0.15 m/s. For other design face velocities, please contact your Waldner sales representative.

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| Material/surface |  |
|------------------|--|
| Worktop          | Stoneware<br>Polypropylene<br>Epoxy<br>Stainless steel     |
| Internal lining  | Melamine resin facing<br>Solid grade laminate<br>Stoneware |