1 Fume cupboards and extraction devices

Energy efficiency, maximum ergonomics and a larger internal workspace make working with our new fume cupboards even safer and more convenient.

A new design together with an enlarged product range characterise the fume cupboards of our new ***SCALA*** laboratory range.

Combined with grid lengths up to 2400 mm of our fume cupboards, we offer the most comprehensive product range available in the market. Almost all fume cupboards are also available with Secuflow technology.

1 Fume cupboards and extraction devices

All laboratory work during which gases, fumes, particles or liquids are handled in dangerous quantities and concentrations must be performed in fume cupboards.

Our new fume cupboards ensure maximum safety, excellent ergonomics and maximum economy.

Reduced energy consumption – increased profitability

The fluid mechanics have been further optimised which means considerably reduced energy consumption of our new fume cupboards while maintaining the high safety level. Our bench-mounted fume cupboards with side installation which are tested in accordance with EN 14175, e.g., use 350 m^3/h/lfm, all bench-mounted fume cupboards with Secuflow technology require 270 m^3/h/lfm.

As an important part of the overall laboratory ventilation scheme, our fume cupboards can be perfectly integrated into the building ventilation concept.

The fact that our Secuflow fume cupboard technology also reduces the investment and operating costs for the ventilation system is another commercial advantage that is made possible by the integrated supportive flow technology. You will find further information on this topic in our Secuflow brochure.

Improved ergonomics with the inclined operating panel

The operating panel is inclined towards the user for easier handling and operation of all fittings and functions.

Safety through the intake airflow profile on the front edge of the fume cupboard worktop

It prevents turbulence that could carry pollutant emissions.

Air flowing into the fume cupboard is guided via the airfoil-like profile geometry (with low turbulence) over the worktop to the rear panel low level extraction which ensures the safe removal of heavy gases, e.g. solvent fumes, directly above the worktop.

For more safety

Maximum user safety is provided by our toothed belt sash mounting along with significantly reduced maintenance effort. The stainless steel reinforced toothed belts prove maximum resistance during endurance tests with more than 200,000 load cycles. The shape of the sash frame offers maximum protection from splashes and splinters.

Anti-slip device for additional protection

In the unlikely case that both sash mountings fail, the sash is stopped in fractions of a second.

Largest possible access area

The slender, patented side posts of our fume cupboards offer an increased nominal width of the internal workspace and due to their special shape ensure that there is little turbulence in the intake air.

Larger capacity of the internal workspace

The internal workspace is 10 % higher thus increasing the entire internal workspace. Useful when working with tall and wide items of experimental equipment.

1 Fume cupboards and extraction devices

Clear view of all processes in the workspace

The high level glazed panel enables tall experimental equipment and processes to be clearly seen.

The new scaffold points

Scaffold rods with diameters of 12 and 13 mm can be firmly secured.

All functions at a glance

The Soft Touch control element integrated in the fume cupboard side post provides information on the operational state of the fume cupboard at eye level.

Sash handle with air guiding function

Air is pushed into the workspace when the sash is opened and pollutant emissions due to the opening sash are prevented. The balanced and free-moving sash mechanism including the release for the sash stop can be operated with one hand.

The automatic sash

The sash is closed automatically if there is nobody working on the fume cupboard. The photoelectric barrier stops the closing process if there are objects protruding from inside the workspace.

New fume cupboard widths available

Our bench-mounted fume cupboards are now also available with a width of 2100 mm, the side-installed fume cupboards with a width of 2400 mm. Of course also with Secuflow technology.

New lighting for the internal workspace

Energy saving lamps that can be switched from the side post illuminate the entire internal workspace.

The barrier-free sitting height fume cupboard

Fume cupboards with side installation are also available wheelchair accessible. The position of all control units provides for optimum ergonomics and freedom of movement when performing work at the fume cupboard while seated.

The best for equipment and variability

Along with the convenient basic equipment, our fume cupboards provide a wide range of variable equipment options. Depending on the application, the worktop is made of stoneware, epoxy resin, polypropylene or stainless steel. Our fume cupboards are mounted with self-supporting underbench units or on a steel support frame. You can install plinth mounted, mobile or solvent cabinets under the fume cupboard.

Service modules that can be equipped as desired

The replaceable service modules are integrated in the rear and side panels of our fume cupboards and ensure the mechanical and electrical services supply. The integrated sink module for water offers more freedom when using the internal workspace.

Our certified test laboratory for fume cupboard measurements

We established our new test laboratory for fume cupboards when the EN 14175 was published. The latest technical equipment and the GS certification by TÜV Product Service GmbH guarantee optimum measurement results with respect to accuracy and reproducibility.

We test fume cupboards in accordance with EN 14175. We can also carry out measurements in accordance with ASHRAE 110/1995.

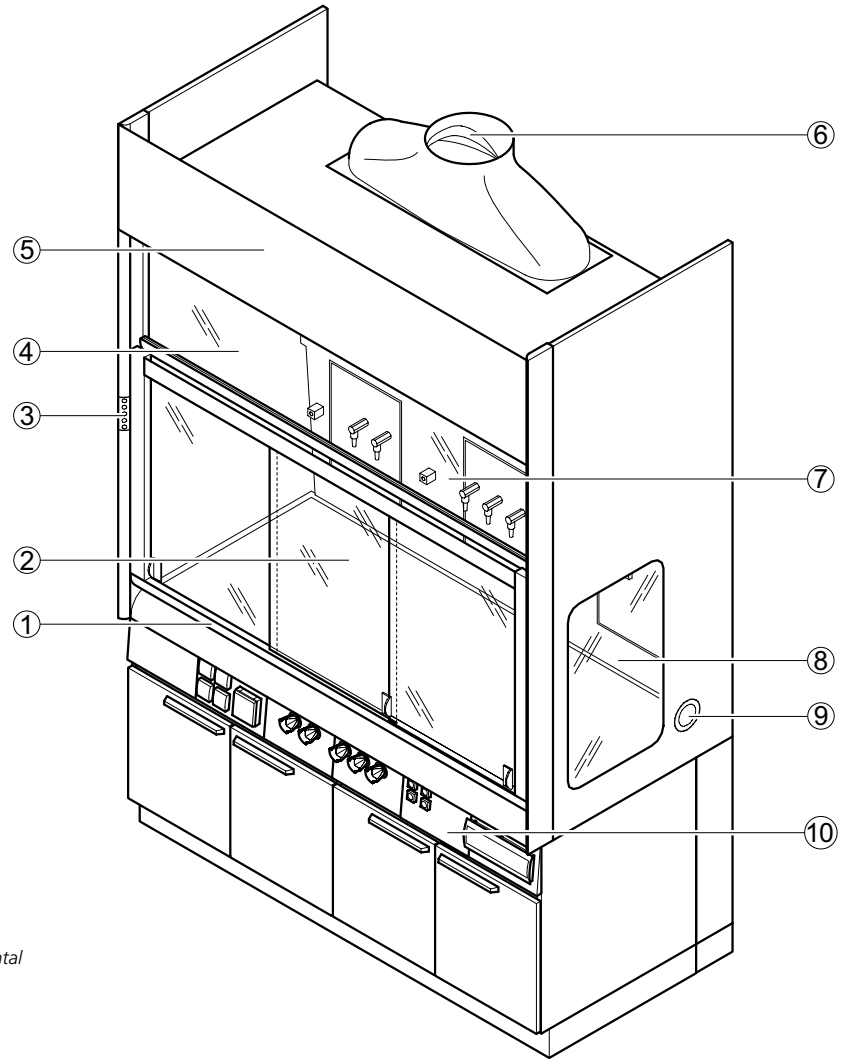
With our ISO 9001 certification and the GS mark for our entire product range, we have closed the circle in relation to fume cupboard tests and had our test laboratory tested and certified by TÜV Product Service GmbH according to the German law on equipment safety (Gerätesicherheitsgesetz).

Bench-mounted fume cupboards
Bench-mounted fume cupboard

Intended use

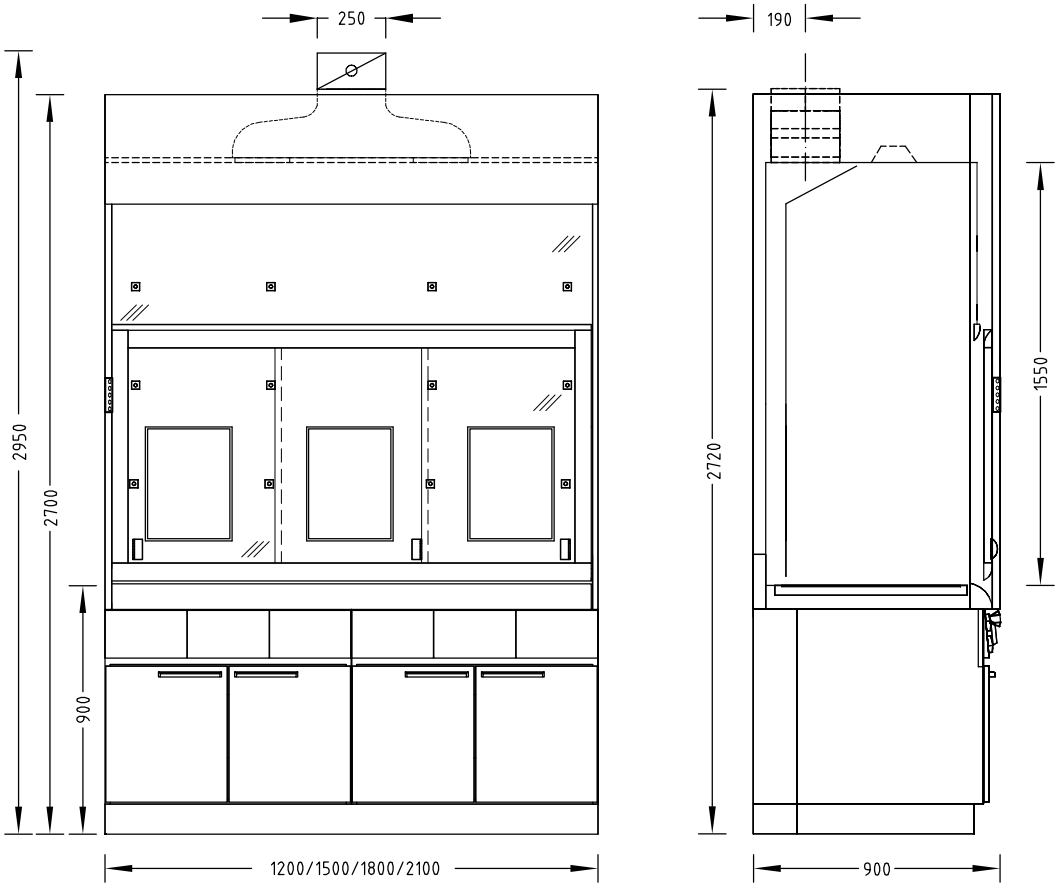
- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- 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

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 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 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 [m³/h] [1]	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 [2]	2830			
Connection height [mm] for AC with extract manifold Ø 250 mm	2950			
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	3070			
Underbench exhaust	As an option, depending on requirements and regulations			

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

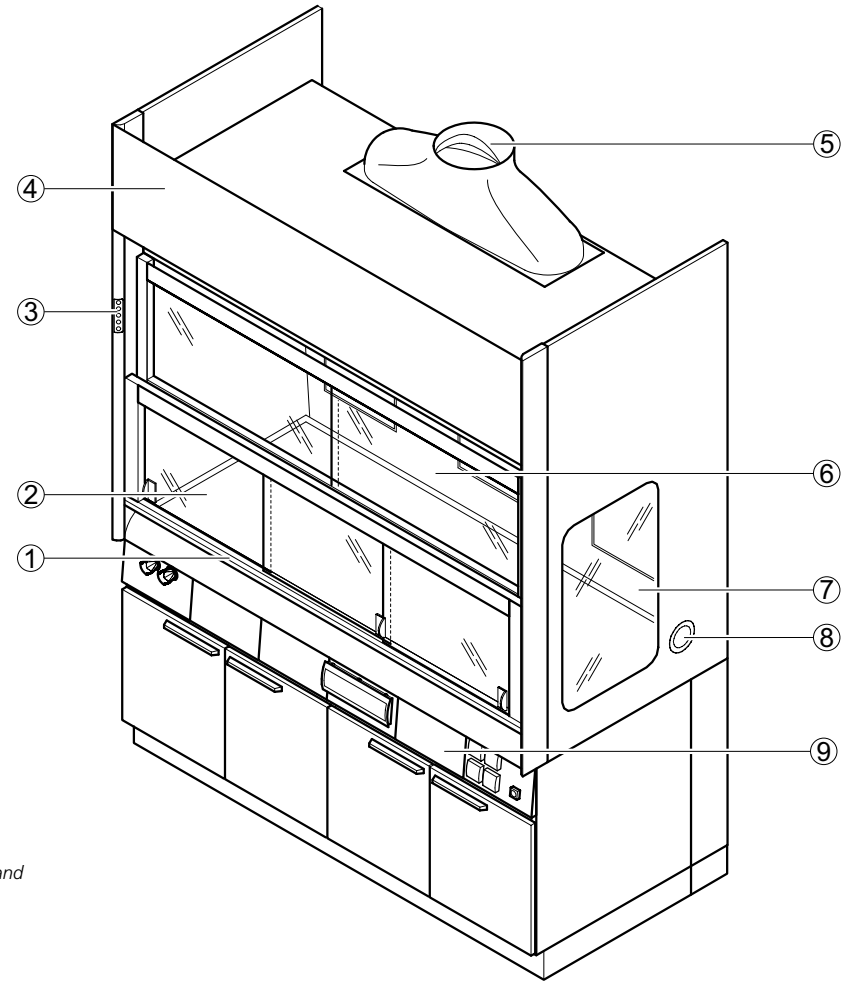
Material/surface	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Melamine resin facing Solid grade laminate Stoneware

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

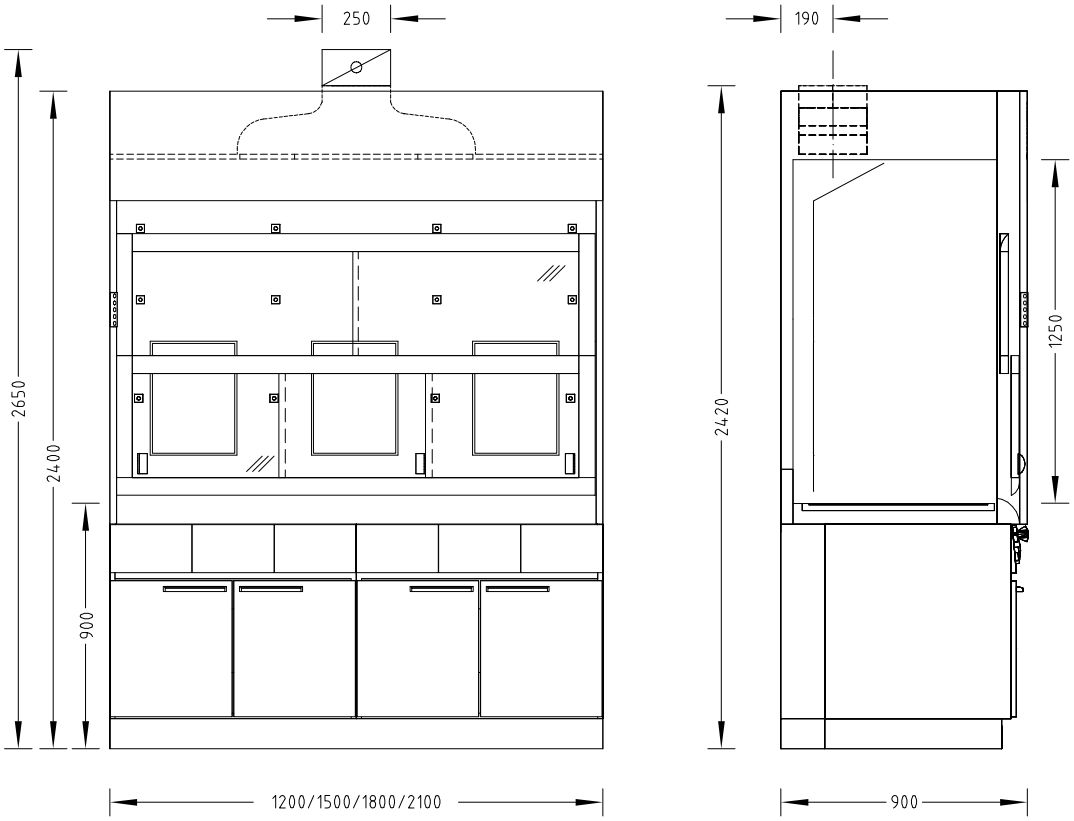
Design



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 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
Low ceiling bench-mounted fume cupboard

Electrics	
Electrical supply	External sockets in service panels 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 [m³/h] [1]	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 [2]	2530			
Connection height [mm] for AC with extract manifold Ø 250 mm	2650			
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	2770			
Underbench exhaust	As an option, depending on requirements and regulations			

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

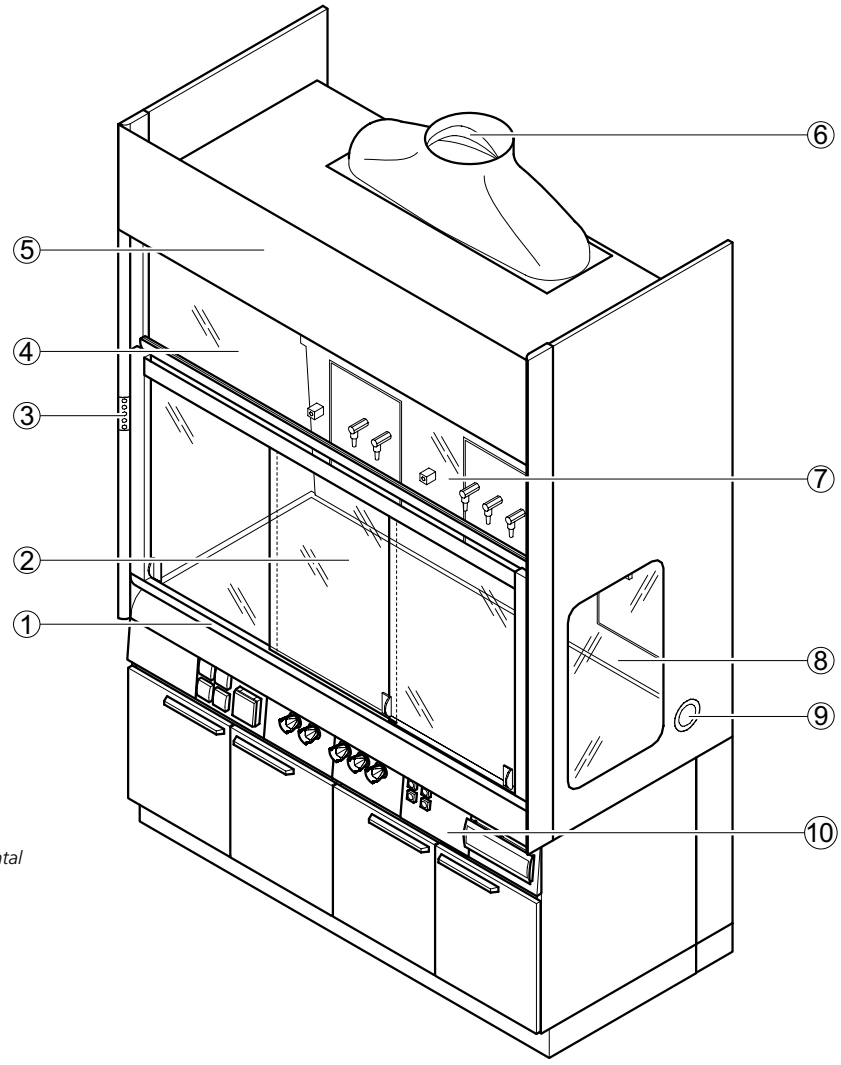
Material/surface	
Worktop	Stoneware Polypropylene Stainless steel Epoxy
Internal lining	Melamine resin facing Solid grade laminate Stoneware

Bench-mounted fume cupboards
Secuflow bench-mounted fume cupboard

Intended use

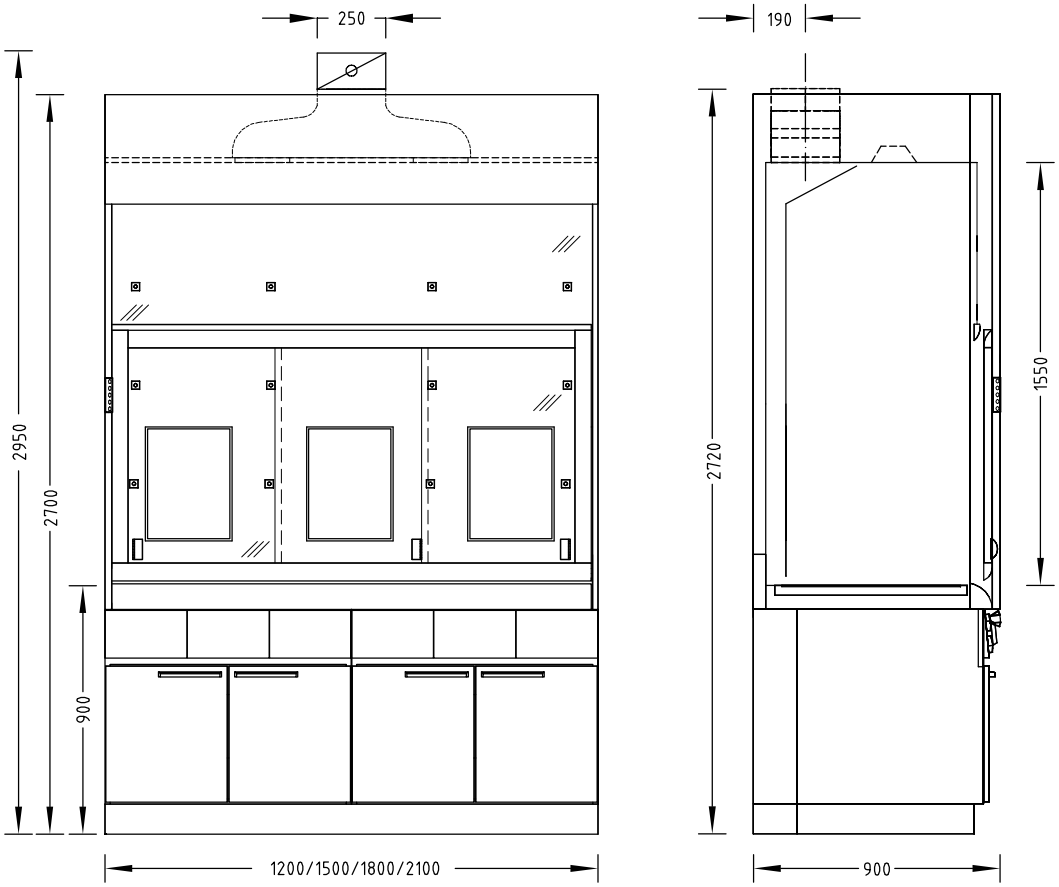
- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- 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*

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 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 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 [m³/h] [1]	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 [2]	2830			
Connection height [mm] for AC with extract manifold Ø 250 mm	2950			
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	3070			
Underbench exhaust	As an option, depending on requirements and regulations			

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

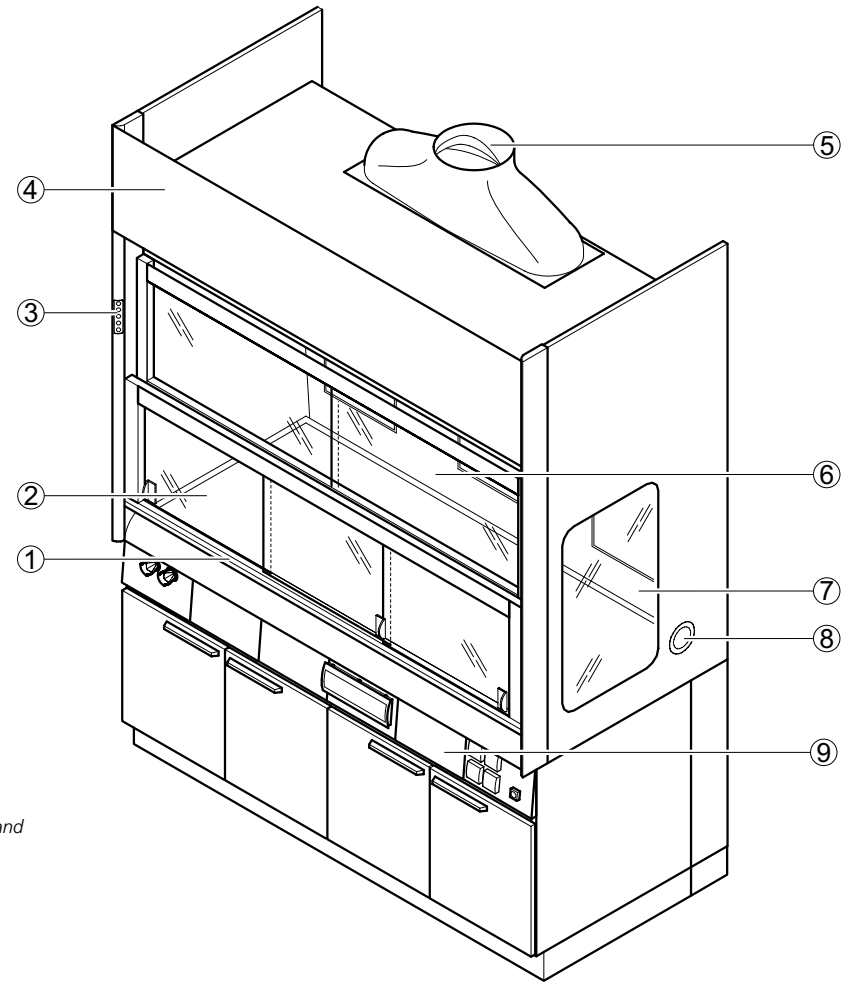
Material/surface	
Worktop	Stoneware Polypropylene Stainless steel Epoxy
Internal lining	Melamine resin facing Solid grade laminate Stoneware

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
- 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
- Suitable for rooms with low ceiling height

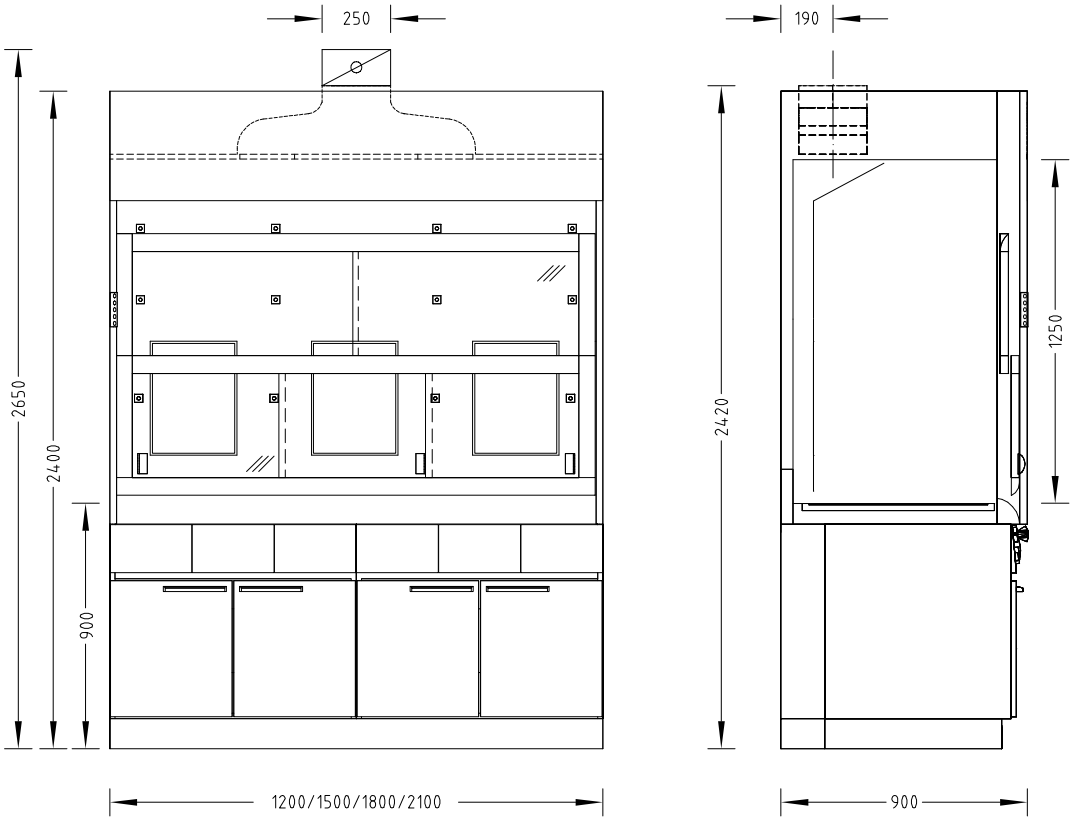
Design



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 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 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 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 [m³/h] [1]	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 [2]	2530			
Connection height [mm] for AC with extract manifold Ø 250 mm	2650			
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	2770			
Underbench exhaust	As an option, depending on requirements and regulations			

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

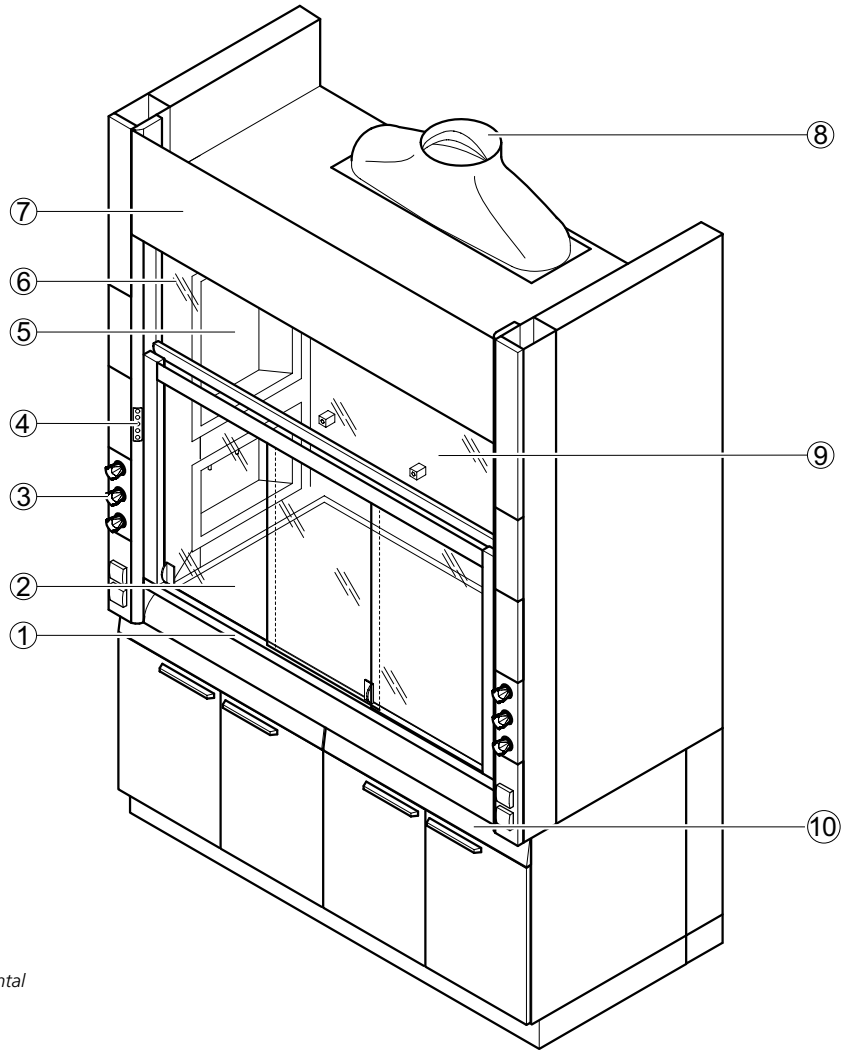
Material/surface	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Melamine resin facing Solid grade laminate Stoneware

Bench-mounted fume cupboards with side installation
Bench-mounted fume cupboard with side installation

Intended use

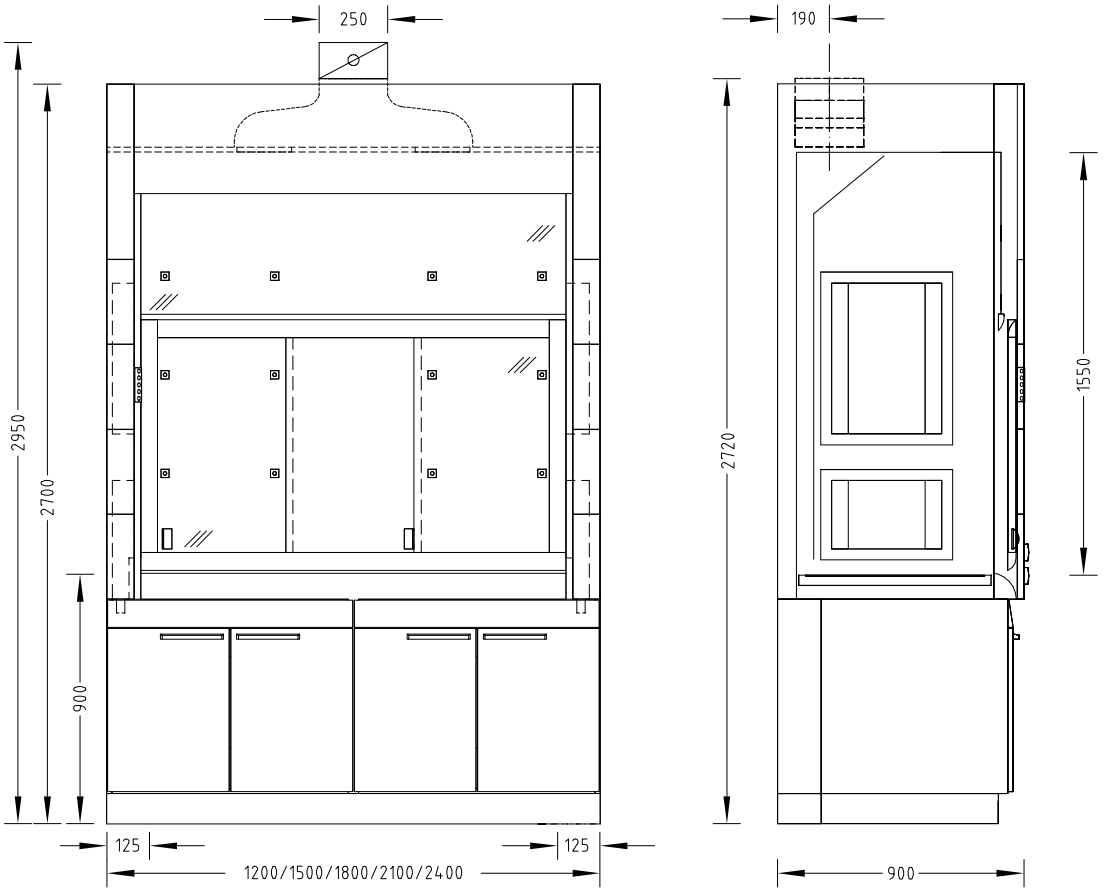
- Protective device for the user, tested in acc. with EN 14175
- Extraction of fumes, aerosols and dust from the internal workspace to prevent dangerous amounts of pollutants from escaping into the laboratory
- To prevent the formation of dangerous potentially explosive atmospheres in the internal workspace
- 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 service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels

Design



1 *Sash with handle and horizontal sashes*
2 *Worktop*
3 *Service panel*
4 *FAZ or AC control panel*
5 *Service modules in the side panel of the fume cupboard*
6 *Upper sash window*
7 *Removable fascia panel*
8 *Extract manifold*
9 *Baffle with scaffold points*
10 *Self-supporting underbench unit*

Dimensional drawing



Technical data

Dimensions	1200	1500	1800	2100	2400
Width [mm]	1200	1500	1800	2100	2400
Depth [mm]			900		
Height [mm]			2700		
Clear width, internal workspace [mm]	950	1250	1550	1850	2150
Clear height, internal workspace [mm]			1550		
Working height [mm]			900		

Weight	1200	1500	1800	2100	2400
Without installation [kg]	Approx. 320	Approx. 390	Approx. 450	Approx. 510	Approx. 570

Bench-mounted fume cupboards with side installation
Bench-mounted fume cupboard with side installation

Design characteristics	1200	1500	1800	2100	2400
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 if service modules are installed in the side panel of the fume cupboard Material lock on the left and/or right as an option				
Max. number of devices for scaffold points, ø 12 to 13 mm	9	12			15
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement				

Electrics	
Electrical supply	External sockets in service panels 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	2400
Minimum air exchange rate [m³/h] [1]	420	530	630	740	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 [2]	2830				
Connection height [mm] for AC with extract manifold Ø 250 mm	2950				
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	3070				
Underbench exhaust	As an option, depending on requirements and regulations				

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

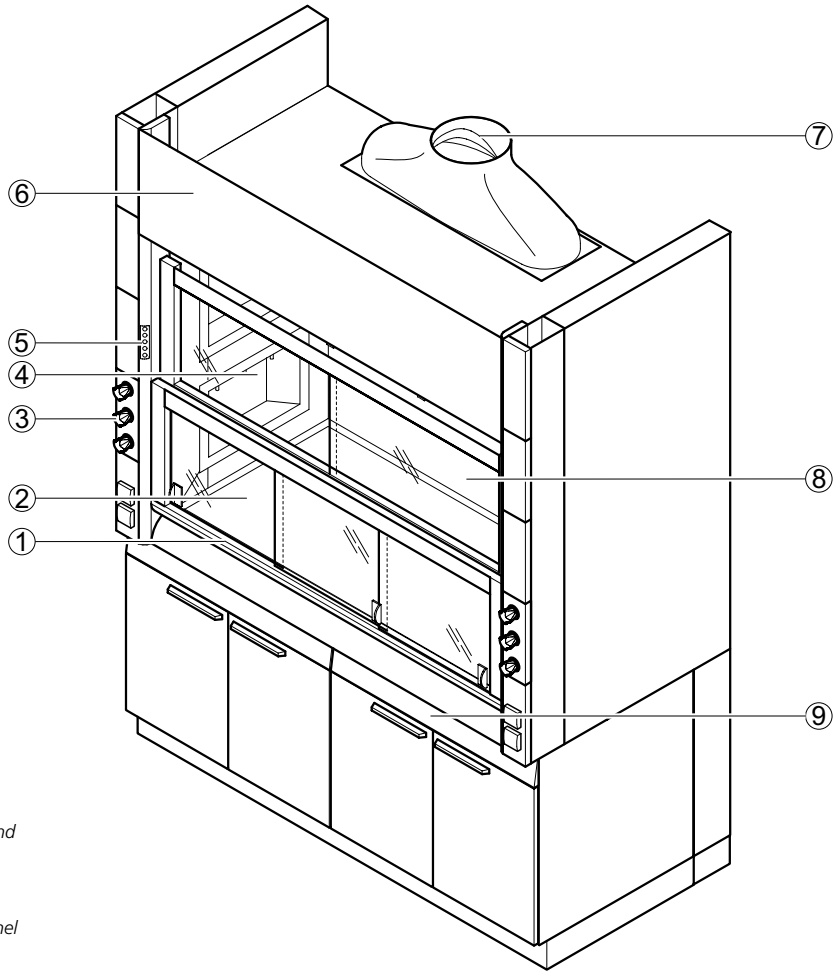
Material/surface	
Worktop	Stoneware (not for bench-mounted fume cupboard with a width of 2400 mm) Polypropylene Epoxy Stainless steel
Internal lining	Solid grade laminate Stainless steel Melamine resin facing

Low ceiling bench-mounted fume cupboard with side installation

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 service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels
- Suitable for rooms with low ceiling height

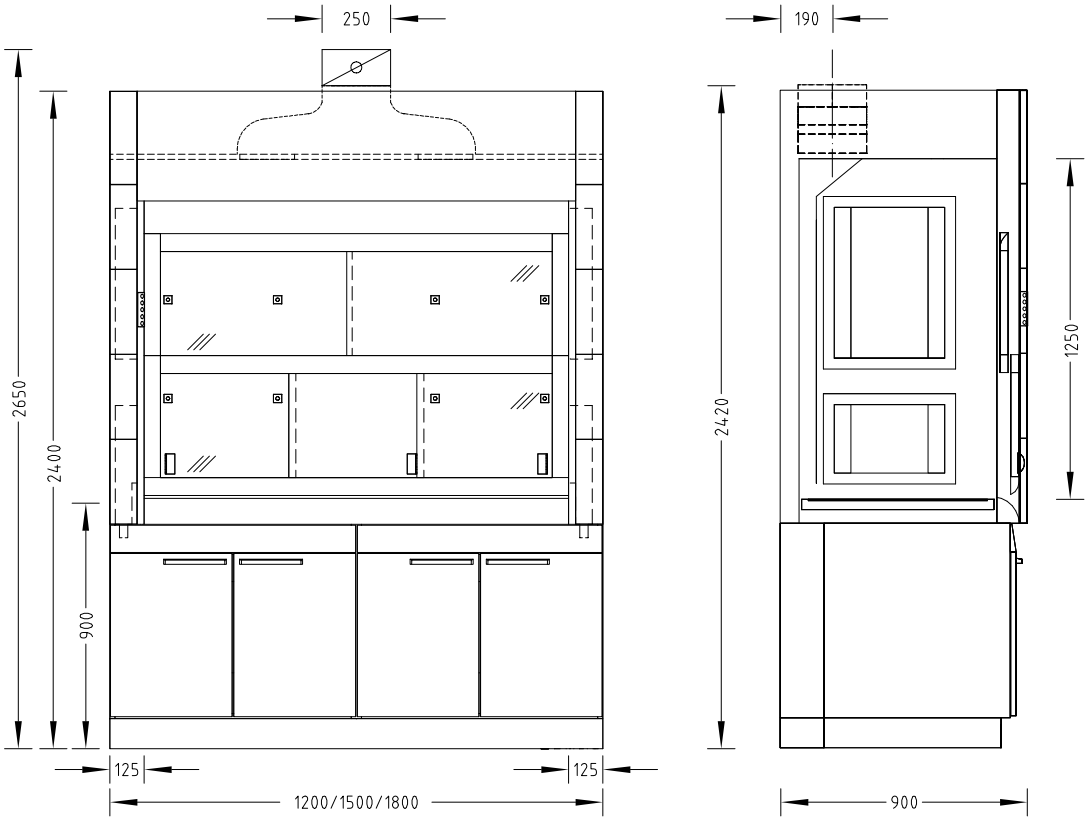
Design



1 *Two-piece sash with handle and horizontal sashes*
2 *Worktop*
3 *Service panel*
4 *Service module in the side panel of the fume cupboard*
5 *FAZ or AC control panel*
6 *Removable fascia panel*
7 *Extract manifold*
8 *Baffle with scaffold points*
9 *Self-supporting underbench unit*

Bench-mounted fume cupboards with side installation
Low ceiling bench-mounted fume cupboard with side installation

Dimensional drawing



Technical data

Dimensions	1200	1500	1800
Width [mm]	1200	1500	1800
Depth [mm]		900	
Height [mm]		2400	
Clear width, internal workspace [mm]	950	1250	1550
Clear height, internal workspace [mm]		1250	
Working height [mm]		900	

Weight	1200	1500	1800
Without installation [kg]	Approx. 220	Approx. 260	Approx. 300

Design characteristics	1200	1500	1800
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 if service modules are installed in the side panel of the fume cupboard, not with stoneware internal lining Material lock on the left and/or right as an option		
Max. number of devices for scaffold points, ø 12 to 13 mm	6	8	
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement		

Bench-mounted fume cupboards with side installation
Low ceiling bench-mounted fume cupboard with side installation

Electrics	
Electrical supply	External sockets in service panels 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**
Minimum air exchange rate [m³/h] [1]	420	530	630
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 [2]	2530		
Connection height [mm] for AC with extract manifold Ø 250 mm	2650		
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	2770		
Underbench exhaust	As an option, depending on requirements and regulations		

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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 Polypropylene Epoxy Stainless steel
Internal lining	Solid grade laminate Stainless steel Melamine resin facing

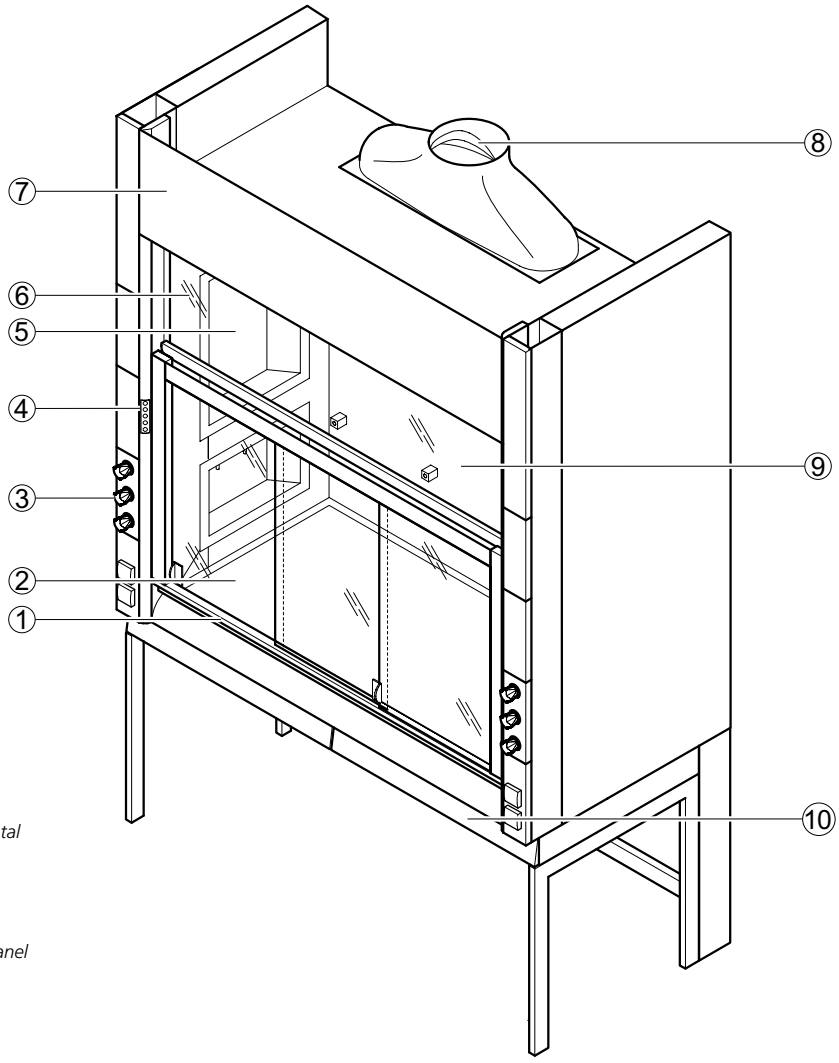
Bench-mounted fume cupboards with side installation

Secuflow bench-mounted fume cupboard with side installation

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 service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels

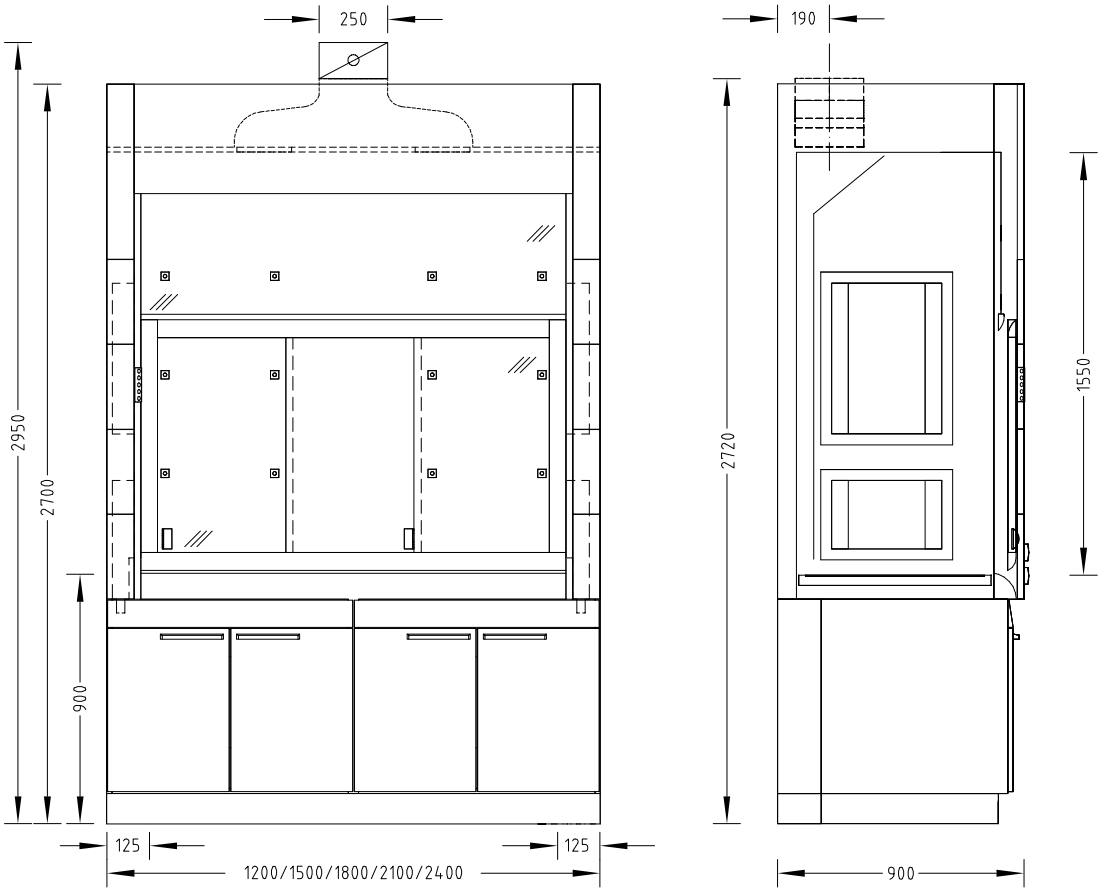
Design



1 Sash with handle and horizontal sashes
2 Worktop
3 Service panel
4 FAZ or AC control panel
5 Service modules in the side panel of the fume cupboard
6 Upper sash window
7 Removable fascia panel
8 Extract manifold
9 Baffle with scaffold points
10 Support frame with push-in underbench units as an option

Bench-mounted fume cupboards with side installation
Secuflow bench-mounted fume cupboard with side installation

Dimensional drawing



Technical data

Dimensions	1200	1500	1800	2100	2400
Width [mm]	1200	1500	1800	2100	2400
Depth [mm]			900		
Height [mm]			2700		
Clear width, internal workspace [mm]	950	1250	1550	1850	2150
Clear height, internal workspace [mm]			1550		
Working height [mm]			900		

Weight	1200	1500	1800	2100	2400
Without installation [kg]	Approx. 320	Approx. 390	Approx. 450	Approx. 510	Approx. 570

Bench-mounted fume cupboards with side installation
Secuflow bench-mounted fume cupboard with side installation

Design characteristics	1200	1500	1800	2100	2400
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 if service modules are installed in the side panel of the fume cupboard Material lock on the left and/or right as an option				
Max. number of devices for scaffold points, ø 12 to 13 mm	9	12			15
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement				

Electrics	
Electrical supply	External sockets in service panels 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	2400
Minimum air exchange rate [m³/h] [1]	330	410	490	570	650
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 [2]	2830				
Connection height [mm] for AC with extract manifold Ø 250 mm	2950				
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	3070				
Underbench exhaust	As an option, depending on requirements and regulations				

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

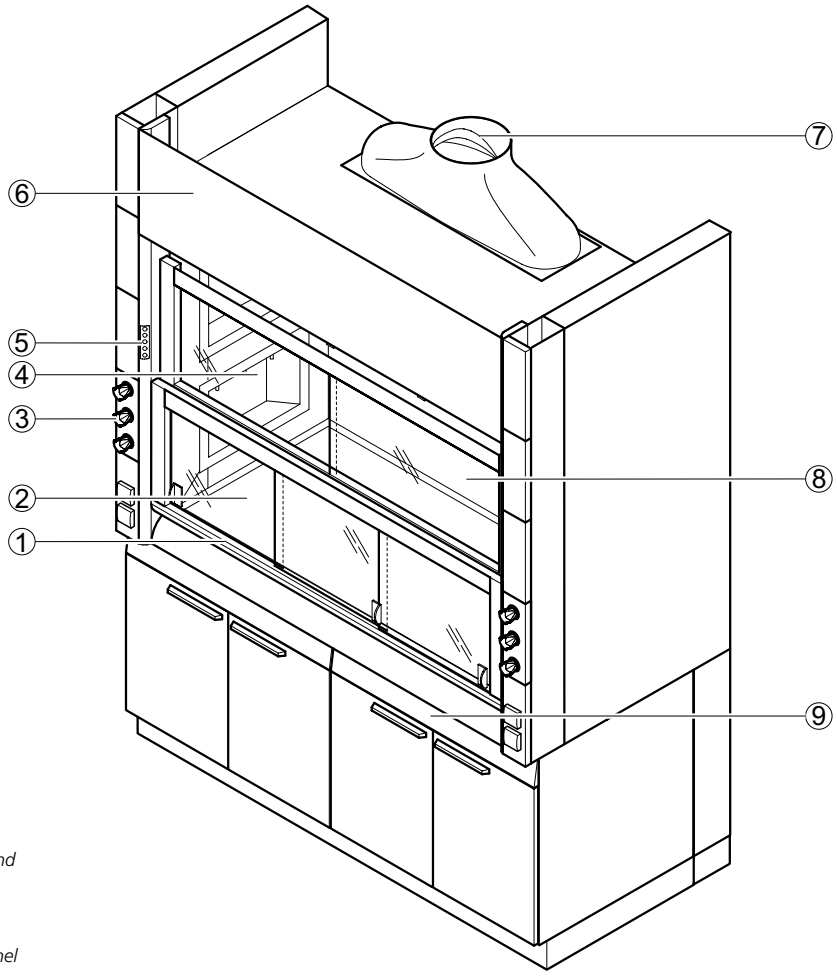
Material/surface	
Worktop	Stoneware (not for bench-mounted fume cupboard with a width of 2400 mm) Polypropylene Epoxy Stainless steel
Internal lining	Solid grade laminate Stainless steel Melamine resin facing

Secuflow low ceiling bench-mounted fume cupboard with side installation

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 service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels
- Suitable for rooms with low ceiling height

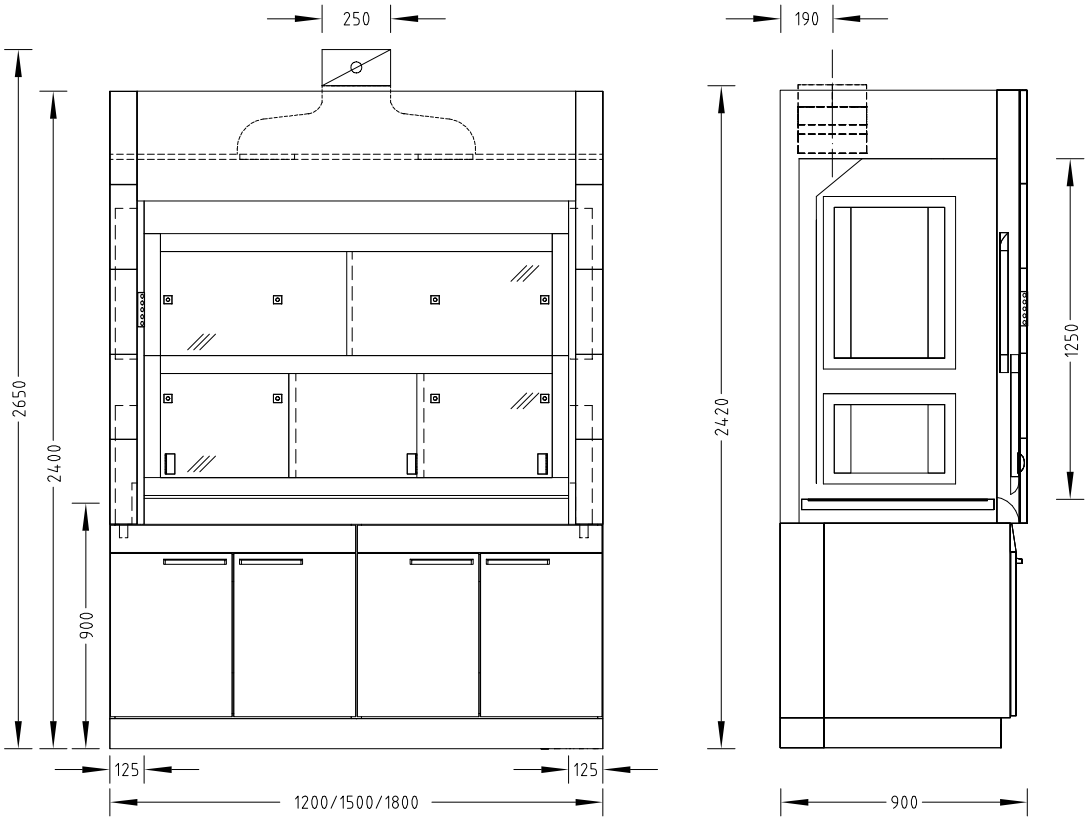
Design



1 *Two-piece sash with handle and horizontal sashes*
2 *Worktop*
3 *Service panel*
4 *Service module in the side panel of the fume cupboard*
5 *FAZ or AC control panel*
6 *Removable fascia panel*
7 *Extract manifold*
8 *Baffle with scaffold points*
9 *Self-supporting underbench unit*

Bench-mounted fume cupboards with side installation
Secuflow low ceiling bench-mounted fume cupboard with side installation

Dimensional drawing



Technical data

Dimensions	1200	1500	1800
Width [mm]	1200	1500	1800
Depth [mm]		900	
Height [mm]		2400	
Clear width, internal workspace [mm]	950	1250	1550
Clear height, internal workspace [mm]		1250	
Working height [mm]		900	

Weight	1200	1500	1800
Without installation [kg]	Approx. 220	Approx. 260	Approx. 300

Bench-mounted fume cupboards with side installation
Secuflow low ceiling bench-mounted fume cupboard with side installation

Design characteristics	1200	1500	1800
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 if service modules are installed in the side panel of the fume cupboard, not with stoneware internal lining 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	6	9	
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement		

Electrics	
Electrical supply	External sockets in service panels 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
Minimum air exchange rate [m³/h] [1]	330	410	490
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 [2]	2530		
Connection height [mm] for AC with extract manifold Ø 250 mm	2650		
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	2770		
Underbench exhaust	As an option, depending on requirements and regulations		

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Solid grade laminate Stainless steel Melamine resin facing

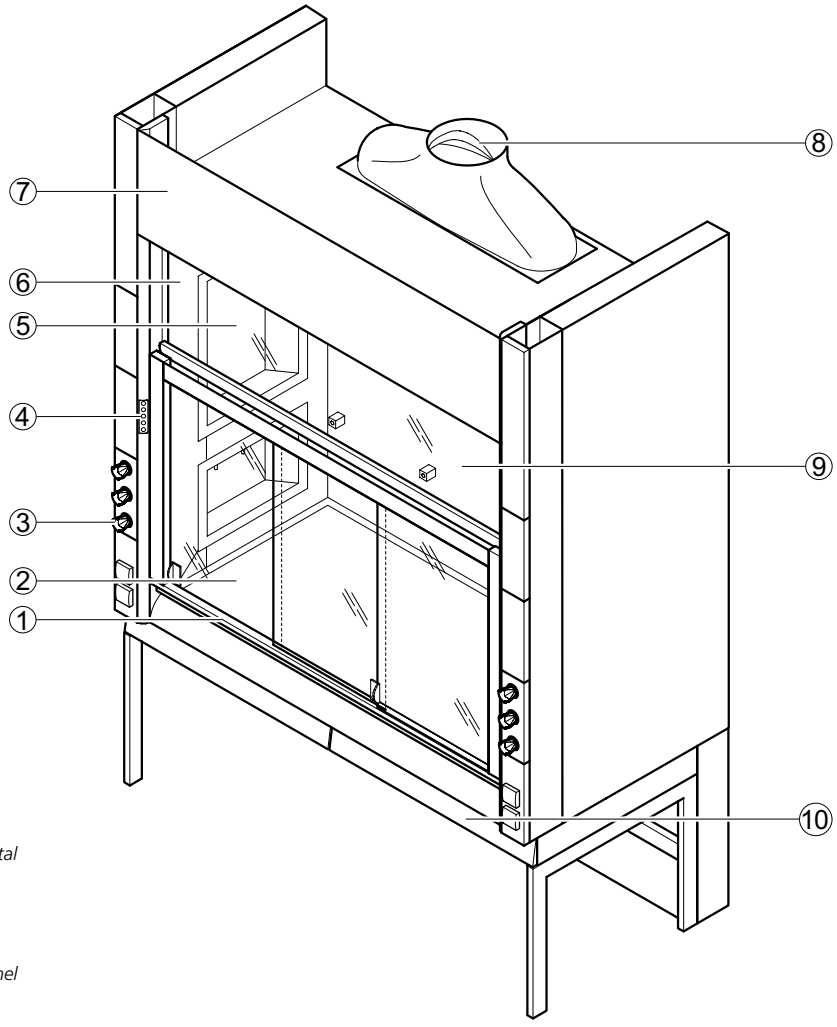
Bench-mounted fume cupboards with side installation

Bench-mounted fume cupboard with side installation for work performed while seated

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
- Suitable for work performed while seated
- Service outlets in the service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels

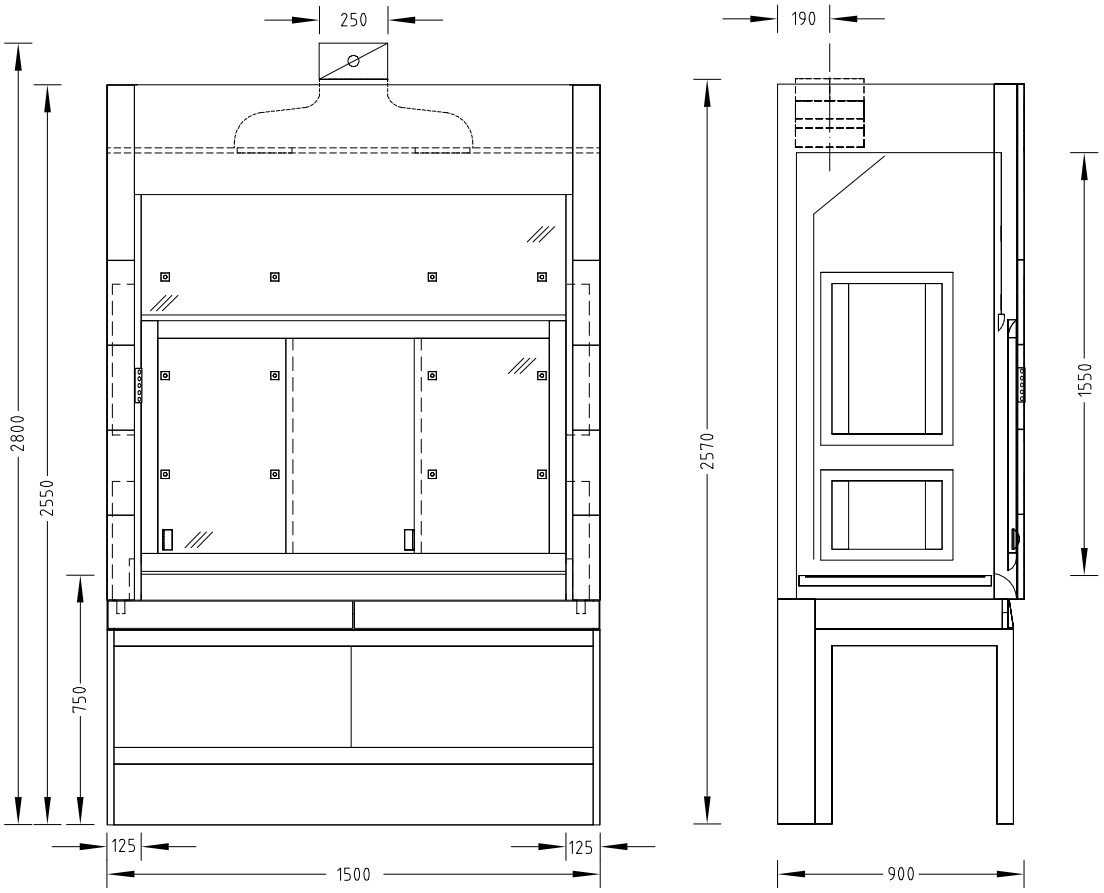
Design



1 *Sash with handle and horizontal sashes*
2 *Worktop*
3 *Service panel*
4 *FAZ or AC control panel*
5 *Service module in the side panel of the fume cupboard*
6 *Upper sash window*
7 *Removable fascia panel*
8 *Extract manifold*
9 *Baffle with scaffold points*
10 *Support frame with push-in underbench units as an option*

Bench-mounted fume cupboards with side installation
Bench-mounted fume cupboard with side installation for work performed while seated

Dimensional drawing



Technical data

Dimensions	
Width [mm]	1500
Depth [mm]	900
Height [mm]	2550
Clear width, internal workspace [mm]	1250
Clear height, internal workspace [mm]	1550
Working height [mm]	750

Weight	
Without installation [kg]	Approx. 390

Bench-mounted fume cupboards with side installation
Bench-mounted fume cupboard with side installation for work performed while seated

Design characteristics	
Supporting construction	H-frame
Sash	2 horizontal sashes
Side panel of the fume cupboard	Glass pane on the left and/or right as an option; not if service modules are installed in the side panel of the fume cupboard Material lock on the left and/or right as an option
Max. number of devices for scaffold points, ø 12 to 13 mm	12
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement

Electrics	
Electrical supply	External sockets in service panels 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	
Minimum air exchange rate [m³/h] [1)]	530
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	2570
Connection height [mm] for FAZ with extract manifold Ø 315 mm [2)]	2730
Connection height [mm] for AC with extract manifold Ø 250 mm	2800
Connection height [mm] for AC with extract manifold Ø 315 mm [2)]	2920
Underbench exhaust	As an option, depending on requirements and regulations

[1)] 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.

[2)] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

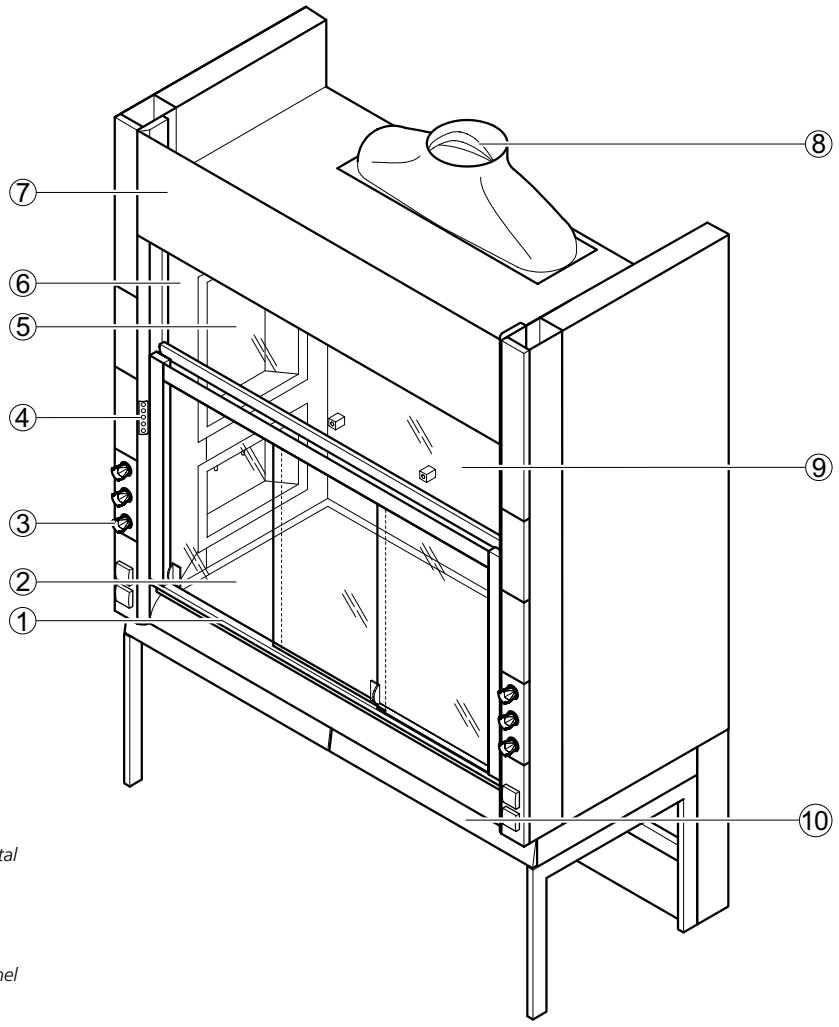
Material	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Solid grade laminate Melamine resin facing

Secuflow bench-mounted fume cupboard with side installation for work performed while seated

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
- Suitable for work performed while seated
- Active supportive flow technology (Secuflow technology) reduces the energy consumption while regulations and standards are observed
- Service outlets in the service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels

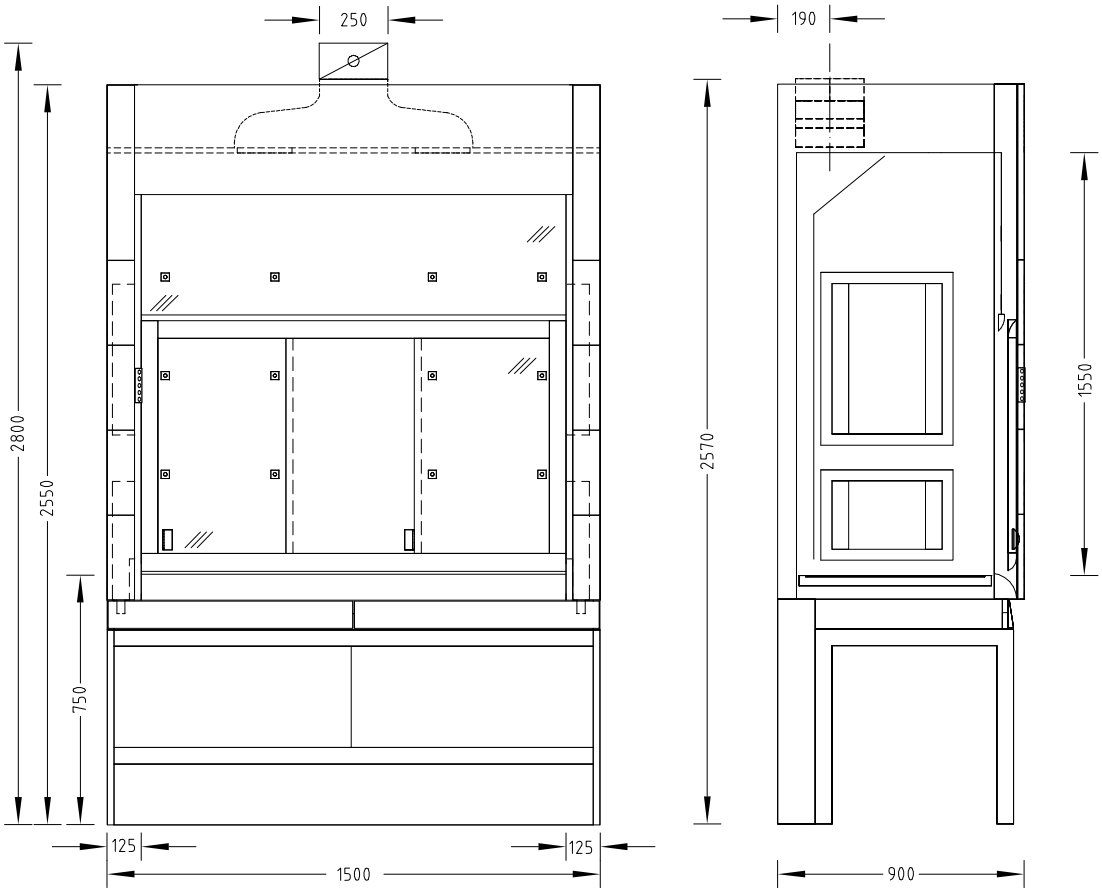
Design



1 Sash with handle and horizontal sashes
2 Worktop
3 Service panel
4 FAZ or AC control panel
5 Service module in the side panel of the fume cupboard
6 Upper sash window
7 Removable fascia panel
8 Extract manifold
9 Baffle with scaffold points
10 Support frame with push-in underbench units as an option

Bench-mounted fume cupboards with side installation
Secuflow bench-mounted fume cupboard with side installation for work performed while seated

Dimensional drawing



Technical data

Dimensions	
Width [mm]	1500
Depth [mm]	900
Height [mm]	2550
Clear width, internal workspace [mm]	1250
Clear height, internal workspace [mm]	1550
Working height [mm]	750

Weight	
Without installation [kg]	Approx. 390

Bench-mounted fume cupboards with side installation
Secuflow bench-mounted fume cupboard with side installation for work performed while seated

Design characteristics	
Supporting construction	H-frame
Sash	2 horizontal sashes
Side panel of the fume cupboard	Glass pane on the left and/or right as an option; not if service modules are installed in the side panel of the fume cupboard Material lock on the left and/or right as an option
Max. number of devices for scaffold points, ø 12 to 13 mm	12
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement

Electrics	
Electrical supply	External sockets in service panels 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	
Minimum air exchange rate [m³/h] [1)]	410
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	2570
Connection height [mm] for FAZ with extract manifold Ø 315 mm [2)]	2730
Connection height [mm] for AC with extract manifold Ø 250 mm	2800
Connection height [mm] for AC with extract manifold Ø 315 mm [2)]	2920
Underbench exhaust	As an option, depending on requirements and regulations

[1)] 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.

[2)] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

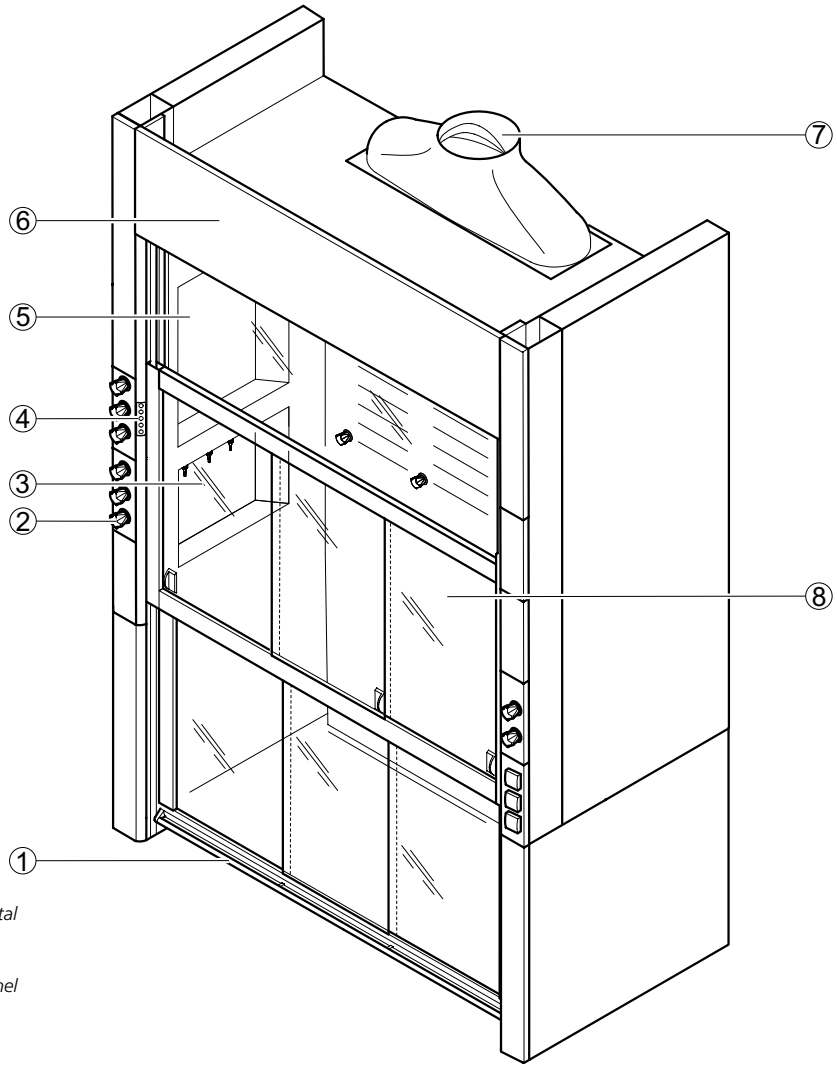
Material/surface	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Solid grade laminate Melamine resin facing

Walk-in fume cupboards
Walk-in fume cupboard with side installation

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
- Suitable for barrier-free entering of the internal workspace
- Service outlets in the service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels
- Suitable for high experimental set-ups

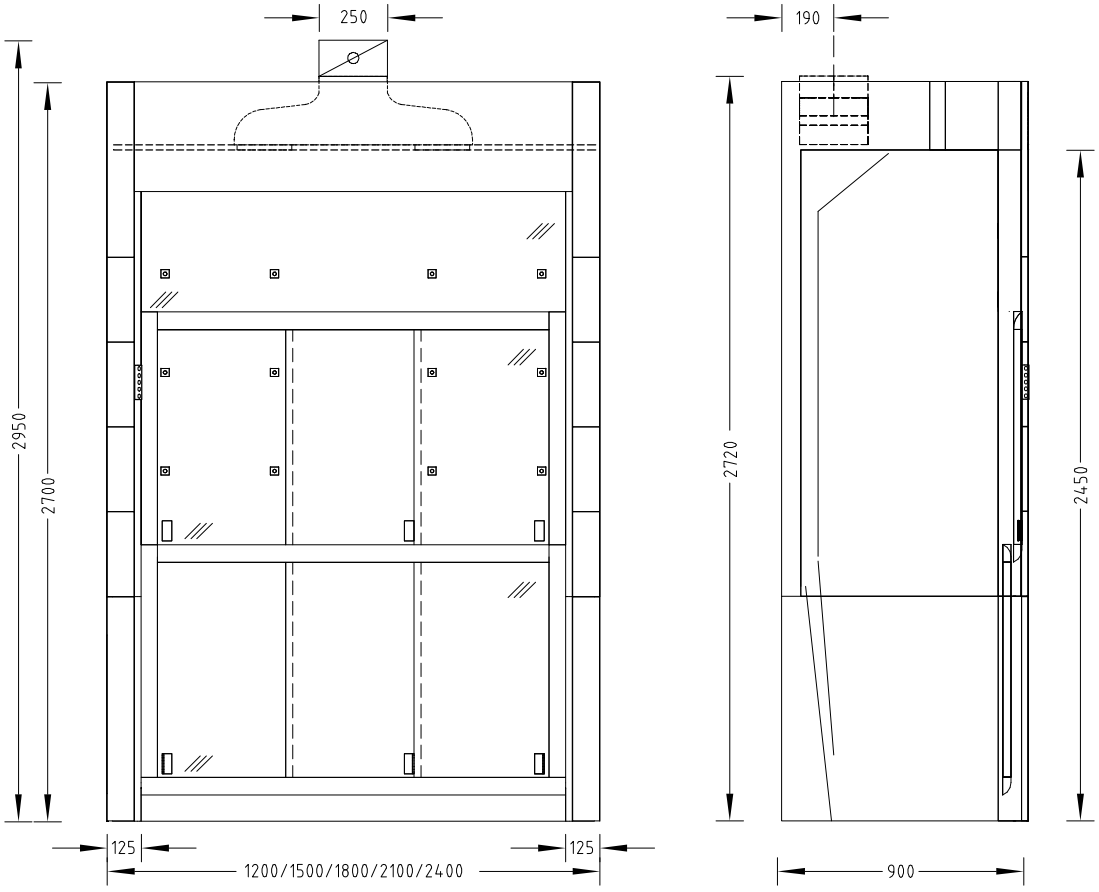
Design



1 *Sash with handle and horizontal sashes*
2 *Service panel*
3 *Service module in the side panel of the fume cupboard*
4 *FAZ or AC control panel*
5 *Upper sash window*
6 *Removable fascia panel*
7 *Extract manifold*
8 *Baffle with scaffold points*

Walk-in fume cupboards
Walk-in fume cupboard with side installation

Dimensional drawing



Technical data

Dimensions	1200	1500	1800	2100	2400
Width [mm]	1200	1500	1800	2100	2400
Depth [mm]			900		
Height [mm]			2700		
Clear width, internal workspace [mm]	950	1250	1550	1850	2150
Clear height, internal workspace [mm]			2450		

Weight	1200	1500	1800	2100	2400
Without installation [kg]	Approx. 320	Approx. 390	Approx. 450	Approx. 510	Approx. 570

Walk-in fume cupboards
Walk-in fume cupboard with side installation

Design characteristics	1200	1500	1800	2100	2400
Two-piece sash	2 horizontal sashes at the top and bottom		3 horizontal sashes at the top and bottom		
Side of fume cupboard	Glass pane on the left and/or right as an option; not if service modules are installed in the side panel of the fume cupboard Material lock on the left and/or right as an option				
Number of devices for scaffold points, ø 12 to 13 mm	9	12			15
Service modules	In the left and/or right side panel of the fume cupboard, depending on requirement				

Electrics	
Electrical supply	External sockets in service panels 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	2400
Minimum air exchange rate [m³/h] [1]	480	600	720	840	960
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 [2]	2830				
Connection height [mm] for AC with extract manifold Ø 250 mm	2950				
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	3070				

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

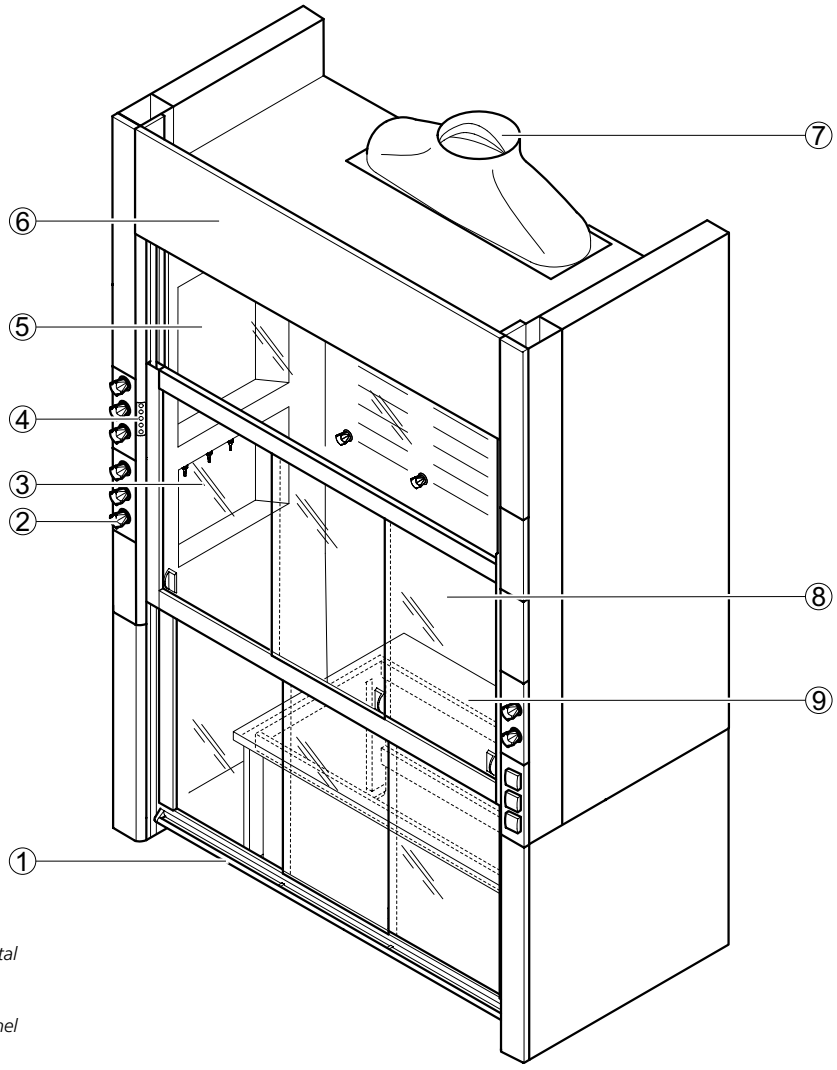
Material	
Internal lining	Solid grade laminate Melamine resin facing

Low level fume cupboard with side installation

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
- Suitable for experimental set-ups on an add-on table
- Service outlets in the service modules of the side panels of the internal workspace
- Control units located vertically on the side service panels

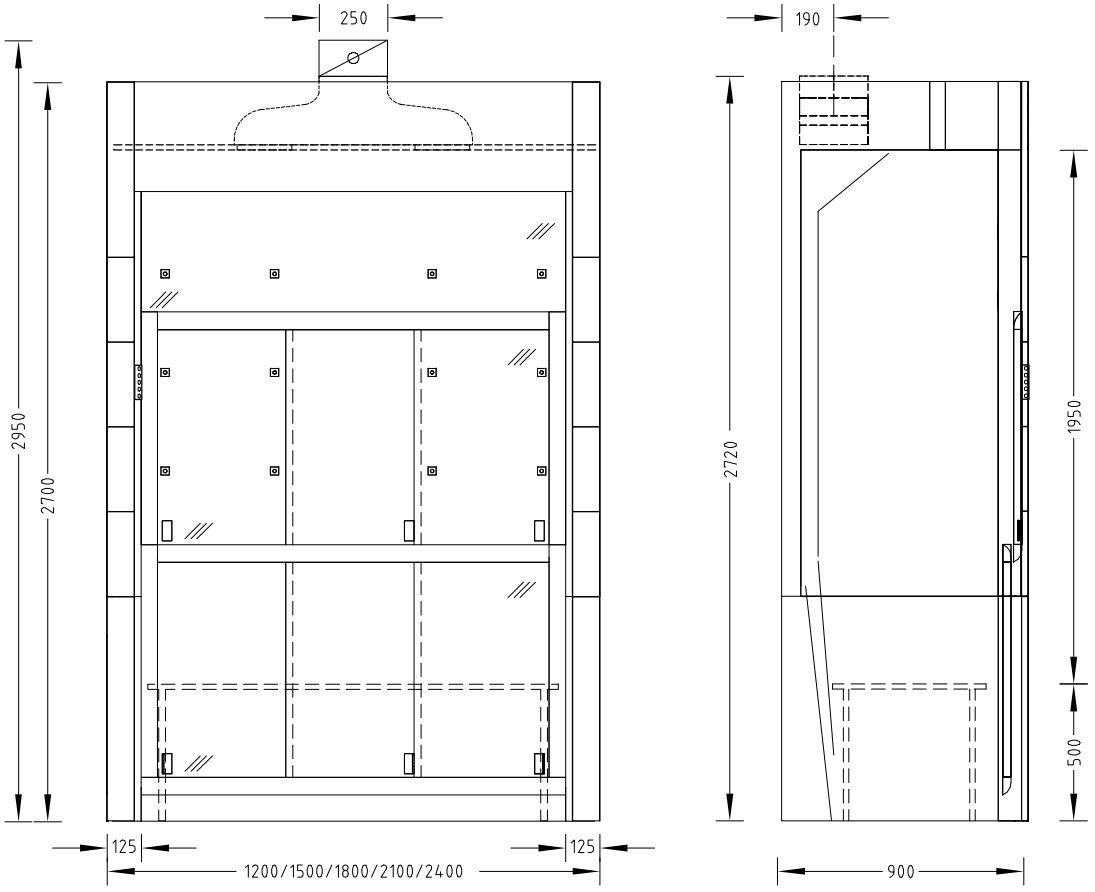
Design



1 *Sash with handle and horizontal sashes*
2 *Service panel*
3 *Service module in the side panel of the fume cupboard*
4 *FAZ or AC control panel*
5 *Upper sash window*
6 *Removable fascia panel*
7 *Extract manifold*
8 *Baffle with scaffold points*
9 *Add-on table*

Low level fume cupboards
Low level fume cupboard with side installation

Dimensional drawing



Technical data

Dimensions	1200	1500	1800	2100	2400
Width [mm]	1200	1500	1800	2100	2400
Depth [mm]			900		
Height [mm]			2700		
Clear width, internal workspace [mm]	950	1250	1550	1850	2150
Clear height, internal workspace [mm]			1950		
Add-on table with H-frame [mm]	900 x 575	1200 x 575	1500 x 575	1800 x 575	2100 x 575
Working height [mm]			500		

Weight	1200	1500	1800	2100	2400
Without installation [kg]	Approx. 320	Approx. 390	Approx. 450	Approx. 510	Approx. 570

Low level fume cupboards
Low level fume cupboard with side installation

Design characteristics	1200	1500	1800	2100	2400
Work surface	Add-on table H-frame with surrounding increased edge				
Two-piece sash	2 horizontal sashes at the top and bottom		3 horizontal sashes at the top and bottom		
Side of fume cupboard	Glass pane on the left and/or right as an option; not if service modules are installed in the side panel of the fume cupboard Material lock on the left and/or right as an option				
Number of devices for scaffold points, ø 12 to 13 mm	9	12			15
Service modules	Service modules in the left and/or right side panel of the fume cupboard, depending on requirement				

Electrics	
Electrical supply	External sockets in service panels 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	2400
Minimum air exchange rate [m³/h] [1]	480	600	720	840	960
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 [2]	2830				
Connection height [mm] for AC with extract manifold Ø 250 mm	2950				
Connection height [mm] for AC with extract manifold Ø 315 mm [2]	3070				
Underbench exhaust	As an option, depending on requirements and regulations				

[1] 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.

[2] In order to minimise noise and pressure losses, for air volumes >1000 m³/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.

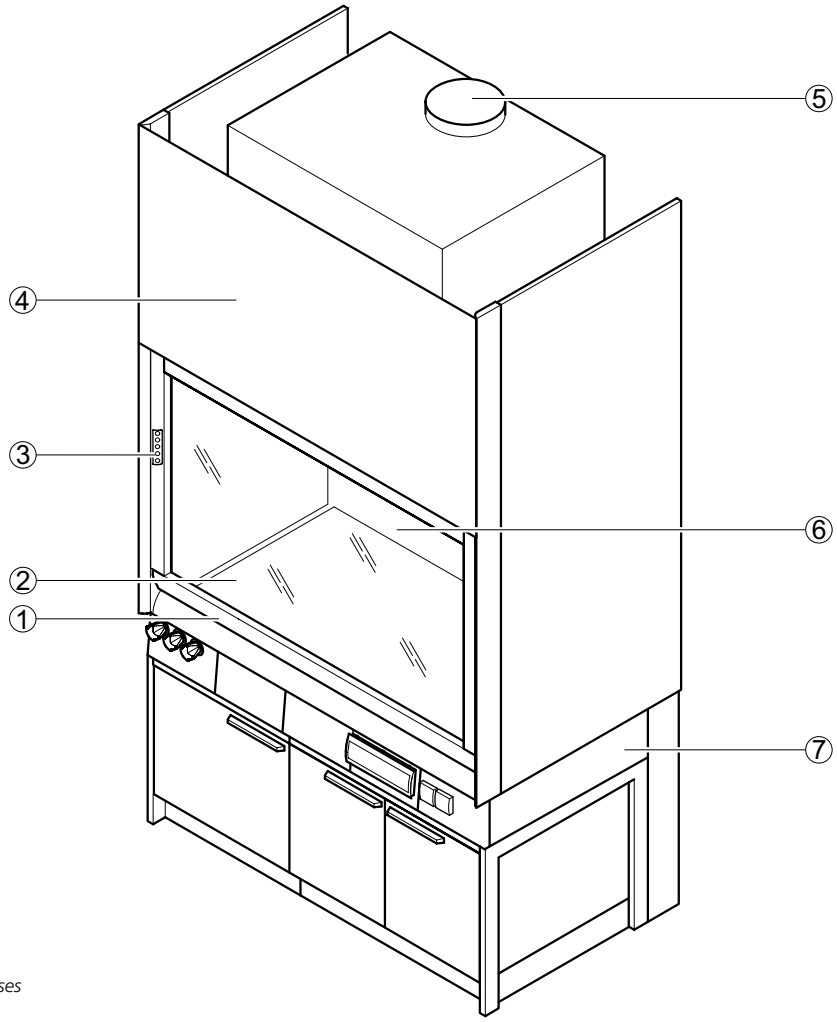
Material	
Worktop H-frame with surrounding increased edge	Polypropylene Epoxy Stoneware Stainless steel
Internal lining	Solid grade laminate Melamine resin facing

Special fume cupboards
Special application fume cupboard

Intended use

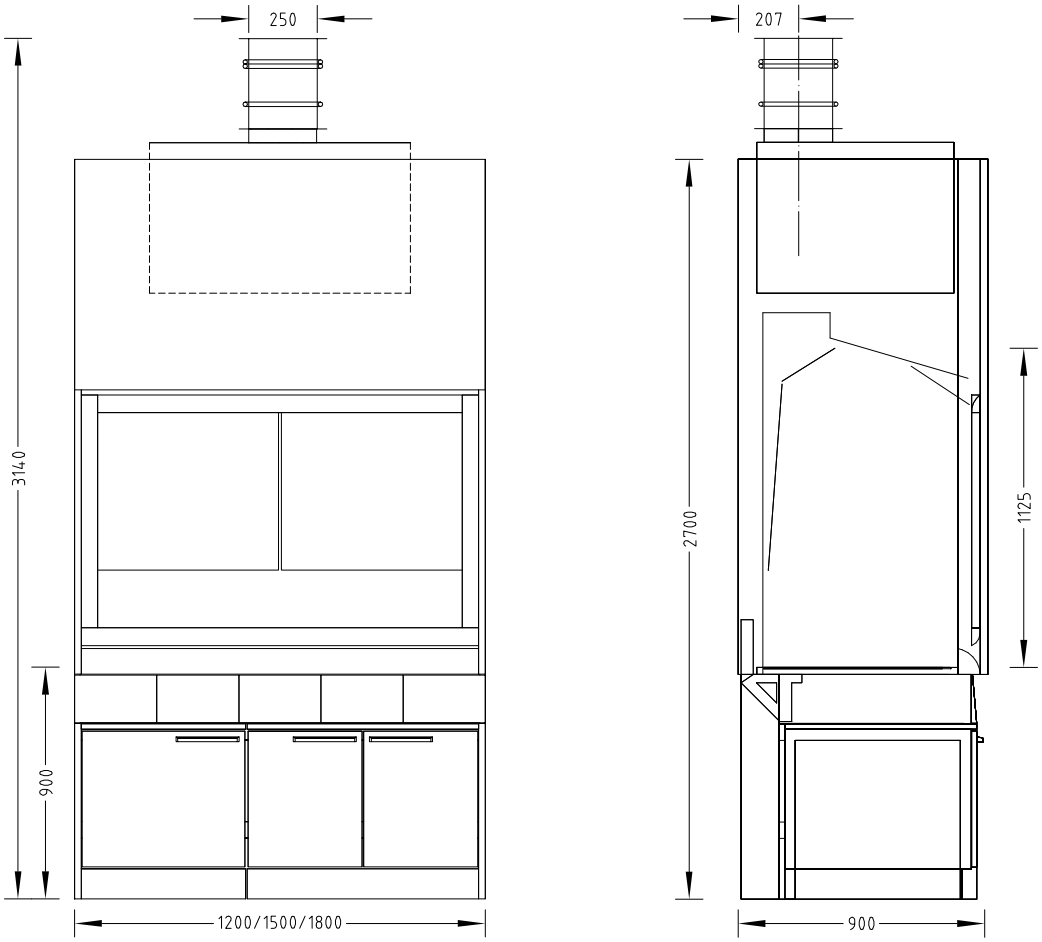
- Protective device for the user, tested in acc. with DIN 12924-2
- Suitable for open, thermal processes of breaking down chemicals with aggressive media such as e. g. sulphuric acid, perchloric acid, hydrofluoric acid or aqua regia
- The construction of the fume cupboard and the materials of the inner lining of the internal workspace determine which aggressive media the device can be used for
- 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 in the internal workspace
- Protection from flying particles, bodies or parts escaping from the internal workspace
- Fume cupboards constructed in acc. with DIN 12924-2, are normally not permitted for use with radioactive substances or microorganisms

Design



1 *Sash with handle*
2 *Worktop*
3 *FAZ or AC control panel*
4 *Removable fascia panel*
5 *Extract air spigot integrated in fume-scrubber for harmful gases*
6 *Baffle*
7 *H-frame with push-in under-bench unit with support and service panels*

Dimensional drawing



Technical data

Dimensions	1200	1500	1800
Width [mm]	1200	1500	1800
Depth [mm]		900	
Height [mm]		2700	
Clear width, internal workspace [mm]	1150	1450	1750
Clear height, internal workspace [mm]		1125	
Working height [mm]		900	

Weight	1200	1500	1800
Without installations and fume-scrubber [kg]	Approx. 250	Approx. 300	Approx. 350
Fume-scrubber without filling [kg]	90 (type C 54)		100 (type C 90)

Special fume cupboards
Special application fume cupboard

Design characteristics	
Supporting construction	H-frame with push-in underbench units
Fume-scrubber	Optional
Extract manifold with condensate drain	Optional
Extract manifold with sprinkler	Optional
Neutralisation unit underbench unit	Optional

Electrics	
Electrical supply	External sockets in service panels
Fuse box	Optional
Sash controller SC	Optional

Sanitary technology	
Sanitary supply	With take-off valves for vacuum, gases and/or waters and drip cup integrated in the worktop as an option

Ventilation technology	1200	1500	1800
Minimum air exchange rate [m³/h] [1]	600	750	900
Pressure loss, extract manifold with condensate drain [Pa]	45/120	50/120	85/150
Pressure loss, extract manifold with FAZ/AC [Pa]	FAZ 250/AC 300	FAZ 300/AC 350	FAZ 440/AC 500
Pressure loss, fume cupboard with fume-scrubber [Pa]	410/460	460/510	850/900
Fume-scrubber Friatec	C 54		C 90
Function display	FAZ		
Airflow damper, constant	Airflow-Controller AC		
Connection height [mm] for FAZ and AC with extract air spigot Ø 250 mm with fume-scrubber	3140		
Connection height [mm] for FAZ with extract manifold Ø 250 mm without fume-scrubber	2260		
Connection height [mm] for AC with extract manifold Ø 250 mm without fume-scrubber	2490		
Underbench exhaust	As an option, depending on requirements and regulations		

[1] 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).

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.

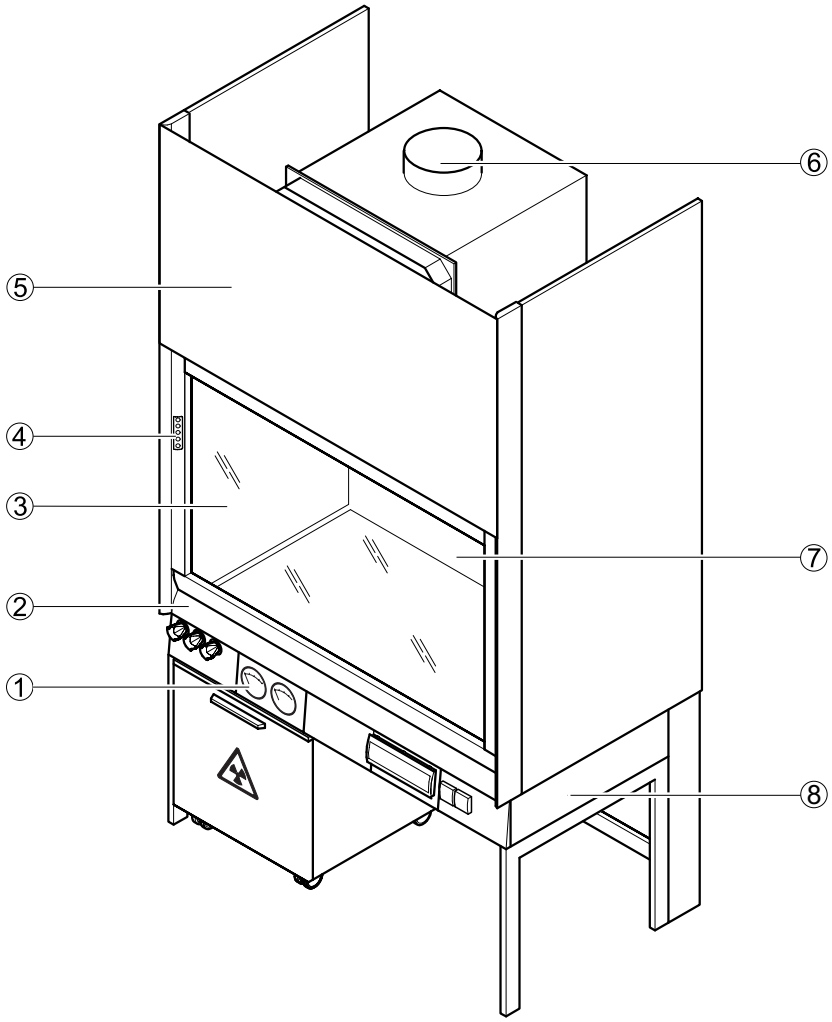
Material/surface	
Internal lining including worktop	Stoneware (when sulphuric acid, aqua regia, perchloric acid are used) Polypropylene (when hydrofluoric acid is used)

Special fume cupboards
Radio-isotope fume cupboard

Intended use

- Protective device for the user, tested in acc. with DIN 25466
- Extraction during work with radioactive substances if increased requirements for radiation protection apply
- Protection from incorporation, contamination and external radiation exposure
- 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 in the internal workspace
- Protection from flying particles, bodies or parts escaping from the internal workspace
- Fume cupboards constructed in acc. with DIN 25466 are normally not permitted for use with microorganisms
- Not suitable for openly breaking down chemicals

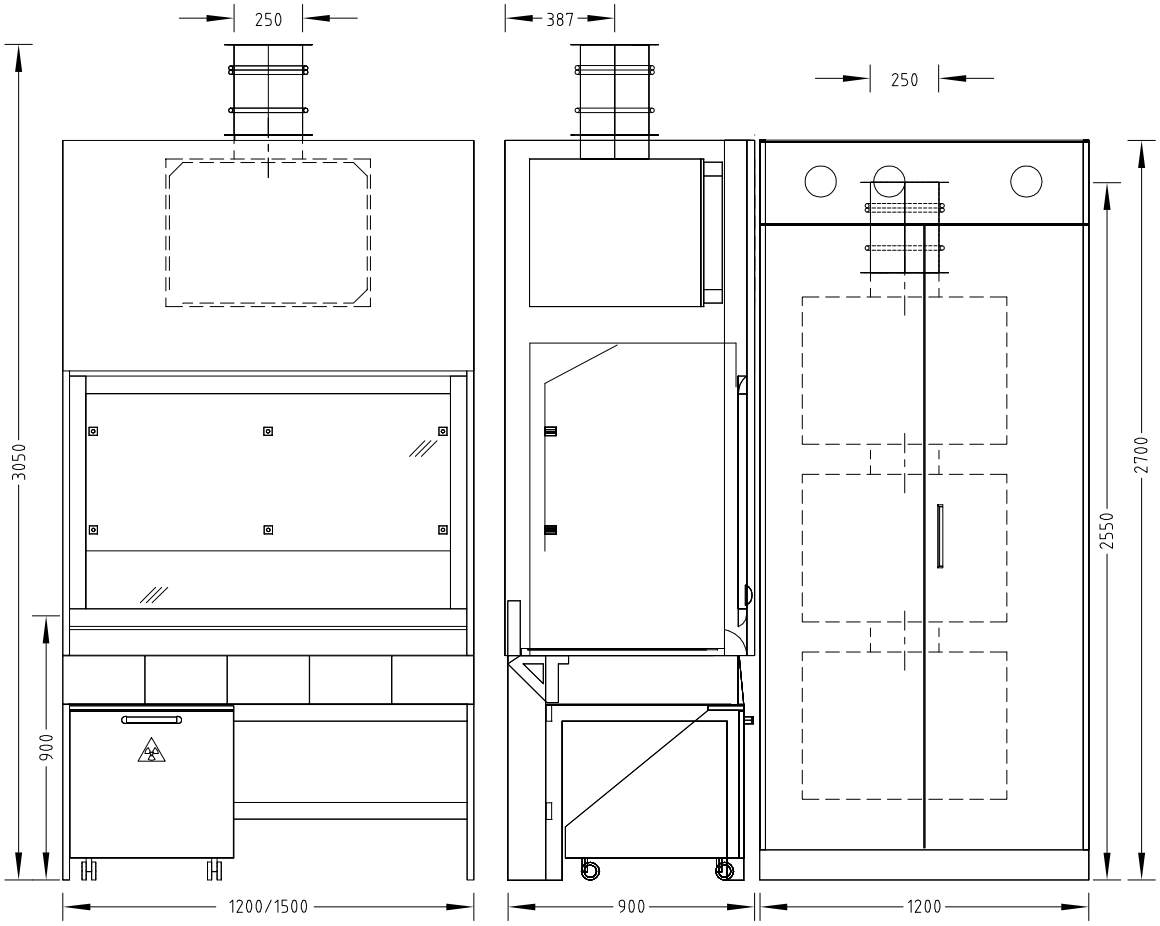
Design



1 *Differential pressure gauge*
2 *Sash with handle*
3 *Worktop*
4 *FAZ or AC control panel*
5 *Removable fascia panel*
6 *Extract air spigot integrated in filter housing*
7 *Baffle with scaffold points*
8 *H-frame with push-in under-bench unit with support and service panels*

Special fume cupboards
Radio-isotope fume cupboard

Dimensional drawing



Technical data

Dimensions	1200	1500
Width [mm]	1200	1500
Depth [mm]	900	
Height [mm]	2700	
Clear width, internal workspace [mm]	1150	1450
Clear height, internal workspace [mm]	1053	
Working height [mm]	900	
Filter housing, width x depth x height [mm]	820 x 775 x 674	

Weight	1200	1500
Without installations and lead insert [kg]	Approx. 250	Approx. 300
Filter housing [kg]	90	

Special fume cupboards
Radio-isotope fume cupboard

Design characteristics	
Supporting construction	Self-supporting underbench units or H-frame with push-in underbench units
Sash	One-piece
Number of devices for scaffold points, ø 12 to 13 mm	6
Filter, fume cupboard roof	Standard equipment: Filter F7 / particle filter H13
Filter, lateral cabinet (max. 3 filter housings)	Filter housing, top: Particulate filter Filter housing, centre: Active charcoal filter Filter housing, bottom: Filter and particle filter
Differential pressure gauges	Display of the degree of saturation of the filters (not for active charcoal filter)
Lead insert	Optional
Waste disposal system for radio-isotope residual material in the underbench unit	Canister for liquid radio-isotope residual material as an option Collapsible boxes for solid radio-isotope residual material as an option Level indicator and/or opening in the worktop as an option

Electrics	
Electrical supply	External sockets in service panels
Fuse box	Optional
Sash controller SC	Optional

Sanitary technology	
Sanitary supply	With take-off valves for vacuum and gases as an option

Ventilation technology	1200	1500
Minimum air exchange rate [m³/h] [1]	480	600
Pressure loss, filter [Pa] [2]	25/200	30/235
Pressure loss, particle filter [Pa] [2]	50/300	60/350
Pressure loss, active charcoal filter [Pa] [2]	25/25	30/30
Pressure loss, particulate filter [Pa] [2]	30/250	35/290
Function display	FAZ	
Airflow damper, constant	Airflow-Controller AC	
Airflow damper, variable	Airflow-Controller AC	
Connection height [mm] for FAZ and AC with extract manifold Ø 250 mm	3050	
Underbench exhaust	As an option, depending on requirements and regulations	

[1] 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).

[2] Pressure loss values refer to the states clean/contaminated.

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.
In the case of fume cupboards with filters, the pressure loss of the integrated filter stages must be added to the pressure loss of the fume cupboard.

Material/surface	
Internal lining including worktop	Polypropylene Stainless steel

Special fume cupboards
Radio-isotope fume cupboard

Filter (filter in the filter cabinet or on the fume cupboard roof)	
Dimensions [mm]	610 x 610 x 46 (+ 8 mm seal)
Pressure loss [Pa] at 1900 m³/h	110
Design characteristics	Filter element (fine particle filter); filter class EN 779: F7 Frame made of multilayer board with grip and type label on the 610-mm side; PU seal on the dust-laden air side
Use	Fine particle filter for particle adsorption, e.g.: Oil smoke and agglomerated soot, tobacco smoke, metal oxide smoke Average efficiency (Em) 80–90%

Particle filter (filter in the filter cabinet or on the fume cupboard roof)	
Dimensions [mm]	610 x 610 x 292 (+ 7 mm seal)
Pressure loss [Pa] at 2435 m³/h	250
Design characteristics	Particle filter element type: Hepa H13; efficiency: MPPS Frame made of multilayer board with grip and type label on the 610-mm side; PU tight seat seal on the clean air side; filter medium flush on the clean air side
Use	Particle filter for the adsorption of particles up to H13; particle adsorption 99.95 %; transmittance 0.05%

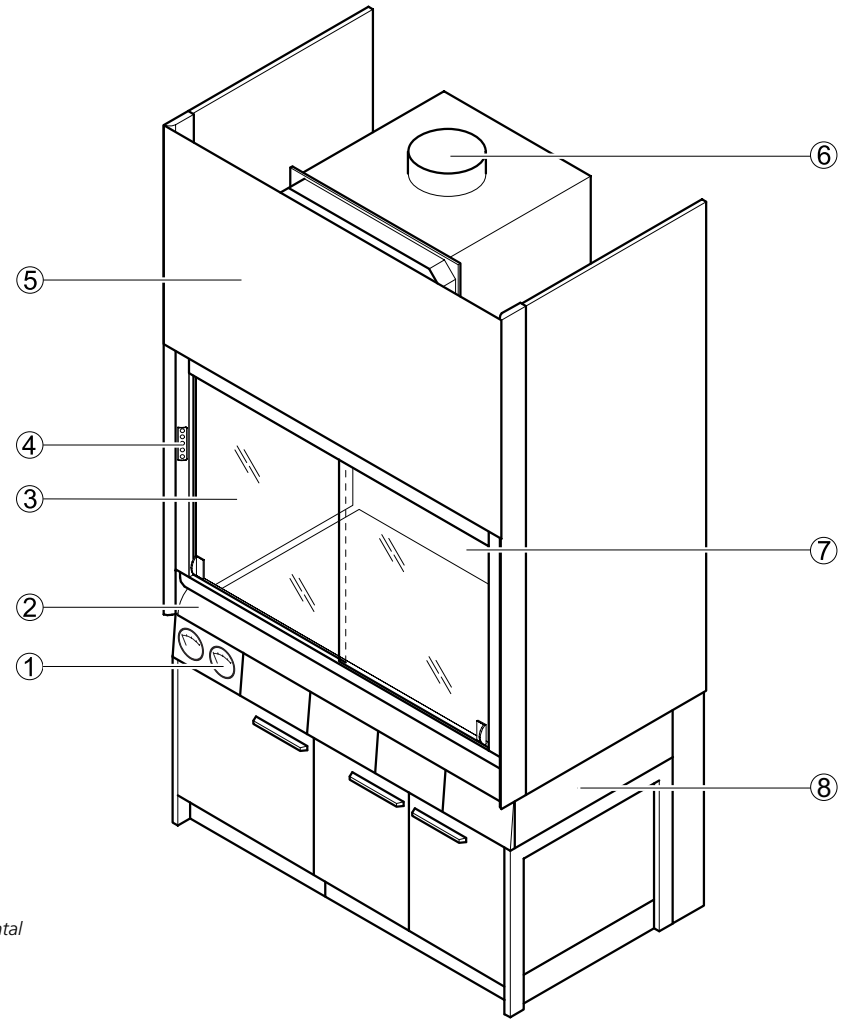
Active charcoal filter (filter in the filter cabinet)	
Dimensions [mm]	610 x 610 x 292 (+ 7 mm seal)
Pressure loss [Pa] at 600 m³/h	9
Design characteristics	Activated charcoal cell 7C for 16 x activated charcoal cartridges Frame galvanised sheet metal; 2 x U handle and type plate on the 610-mm side; PU tight seat seal on the clean air side
Use	Standard impregnation: for all common radioactive materials, radioactive iodine compounds, radioactive iodomethane, radioactive gases. (A filter with filters class F7 in acc. with EN 779 is recommended.)

Particulate filter (filter in the filter cabinet)	
Dimensions [mm]	610 x 610 x 292 (+ 7 mm seal)
Pressure loss [Pa] at 1965 m³/h	125
Design characteristics	Particulate- or Micretain filter element type: Hepa H11 in acc. with EN 1822 Frame made of multilayer board with grip and type label on the 610-mm side; PU tight seat seal on the clean air side; filter medium flush on the clean air side
Use	Particle filter for the adsorption of particles up to H11; particle adsorption 95 %; transmittance 5%; to be installed after active charcoal filters to bind the charcoal dust contamination from the charcoal filter.

Intended use

- Before the extract air from the internal workspace is released into the environment, it is cleaned by a filter unit

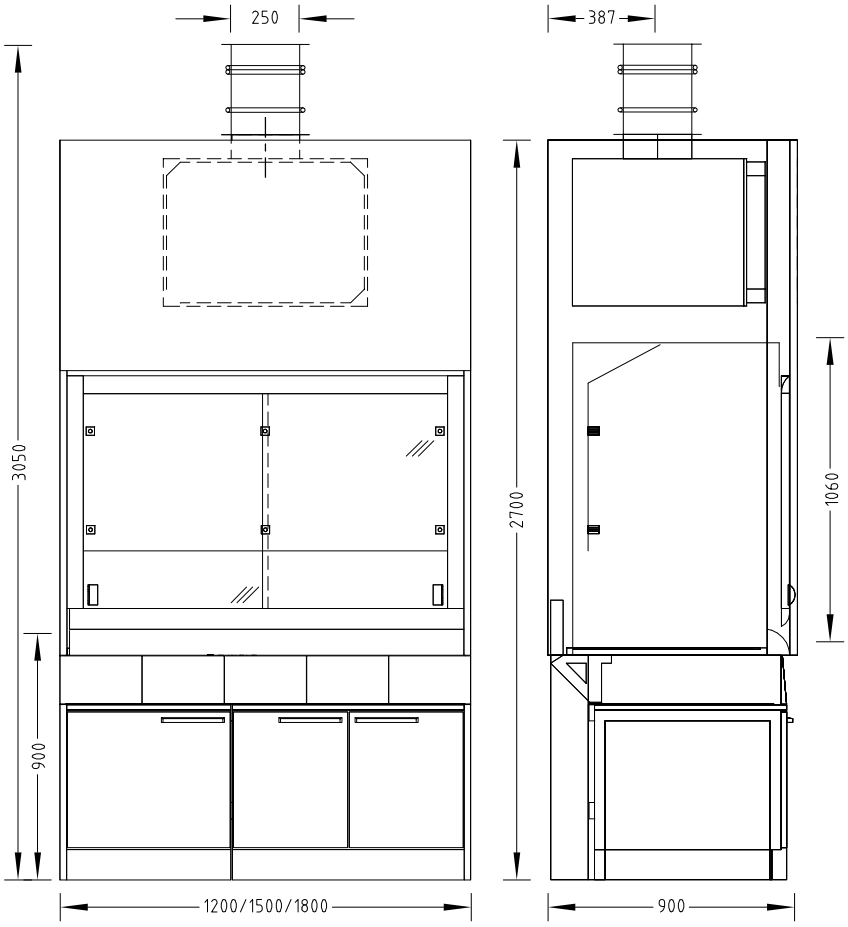
Design



1 *Differential pressure gauge*
2 *Sash with handle and horizontal sashes*
3 *Worktop*
4 *FAZ or AC control panel*
5 *Removable fascia panel*
6 *Extract air spigot*
7 *Baffle with scaffold points*
8 *H-frame with push-in under-bench unit with support and service panels*

Special fume cupboards
Filter fume cupboard

Dimensional drawing



Technical data

Dimensions	1200	1500	1800
Width [mm]	1200	1500	1800
Depth [mm]		900	
Height [mm]		2700	
Clear width, internal workspace [mm]	1150	1450	1750
Clear height, internal workspace [mm]		1060	
Working height [mm]		900	
Filter housing, width x depth x height [mm]		820 x 775 x 674	

Weight	1200	1500	1800
Filter fume cupboard without installations [kg]	Approx. 270	Approx. 320	Approx. 370
Filter housing [kg]		90	

Special fume cupboards
Filter fume cupboard

Design characteristics	1200	1500	1800
Supporting construction	H-frame with push-in underbench units		
Sash	2 horizontal sashes		3 horizontal sashes
Glass pane in the side wall	Possible on the left and/or right side of the fume cupboard; not with stoneware internal lining		
Number of devices for scaffold points, ø 12 to 13 mm	6		8
Material lock	Possible on the left and/or right side of the fume cupboard		
Filter, fume cupboard roof	Standard equipment: Filter F7 / particle filter H13		
Differential pressure gauges	Display of the degree of saturation of the filters		

Electrics	
Electrical supply	External sockets in service panels
Fuse box	Optional
Sash controller SC	Optional

Sanitary technology	
Sanitary supply	With take-off valves for vacuum, gases and/or waters and drip cup integrated in the worktop as an option

Ventilation technology	1200	1500	1800
Minimum air exchange rate [m³/h] [1]	480	600	720
Pressure loss, filter [Pa] [2]	35/200	45/235	65/290
Pressure loss, particle filter [Pa] [2]	70/300	95/365	130/430
Pressure loss, active charcoal filter [Pa] [2]	35/25	45/30	65/35
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 and AC with extract air spigot Ø 250 mm	3050		
Underbench exhaust	As an option, depending on requirements and regulations		

[1] 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).

[2] Pressure loss values refer to the states clean/contaminated.

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.
In the case of fume cupboards with filters, the pressure loss of the integrated filter stages must be added to the pressure loss of the fume cupboard.

Material/surface	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Melamine resin facing Solid grade laminate

Special fume cupboards
Filter fume cupboard

Material/surface	
Worktop	Stoneware Polypropylene Epoxy Stainless steel
Internal lining	Melamine resin facing Solid (grade) laminate

Filter	
Dimensions [mm]	610 x 610 x 46 (+ 8 mm seal)
Pressure loss [Pa] at 1900 m³/h	110
Design characteristics	Filter element (fine particle filter); filter class EN 779: F7 Frame made of multilayer board with grip and type label on the 610-mm side; PU seal on the dust-laden air side
Use	Fine particle filter for particle adsorption, e.g.: Oil smoke and agglomerated soot, tobacco smoke, metal oxide smoke Average efficiency (Em) 80–90%

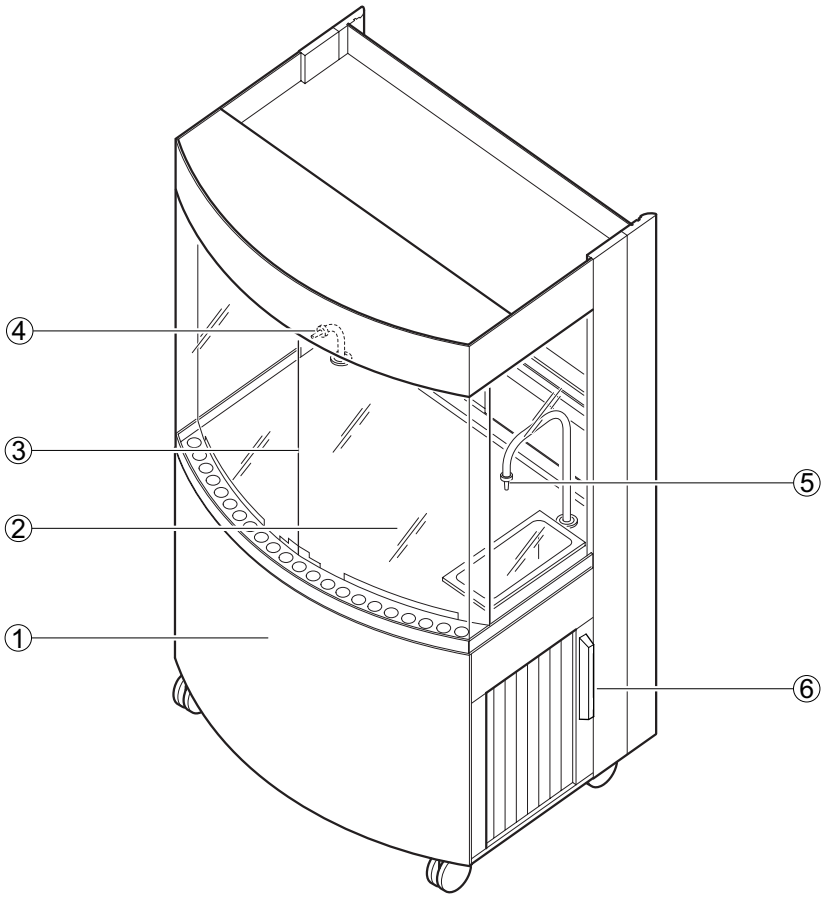
Particle filter	
Dimensions [mm]	610 x 610 x 292 (+ 7 mm seal)
Pressure loss [Pa] at 2435 m³/h	250
Design characteristics	Particle filter element type: Hepa H13; efficiency: MPPS Frame made of multilayer board with grip and type label on the 610-mm side; PU tight seat seal on the clean air side; filter medium flush on the clean air side
Use	Particle filter for the adsorption of particles up to H13; particle adsorption 99.95 %; transmittance 0.05%

Intended use

- Can be used where required, with connections for the services supply, e. g. service wings
- Unrestricted view into the cupboard from all sides
- Service outlets in the internal workspace
- Control units located horizontally on the service rail of the support unit

Design

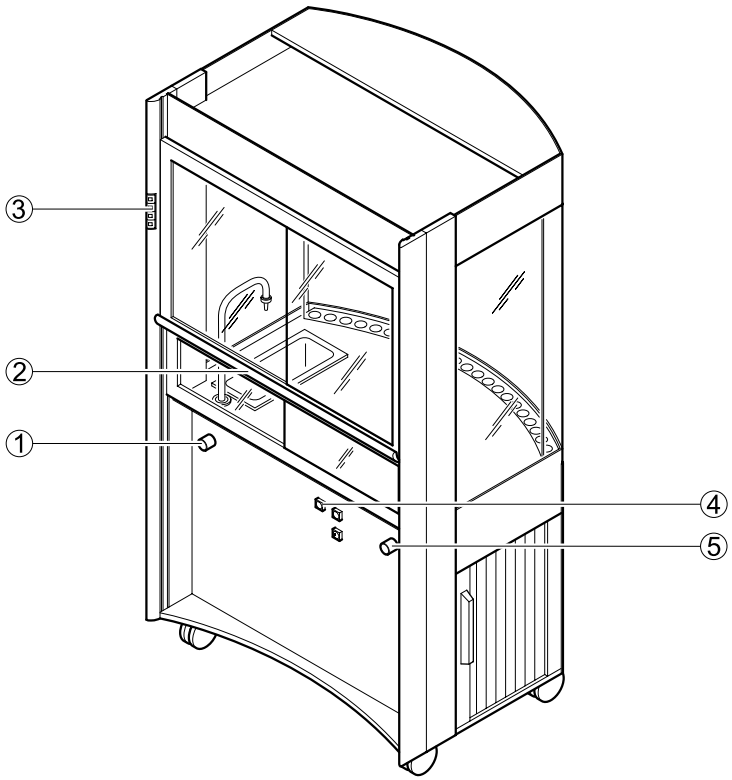
Front view



1 *Trolley*
2 *Worktop with surrounding increased edge*
3 *Viewing window and baffle (safety glass)*
4 *Gas outlet*
5 *Water outlet with sink and waste water lifting unit*
6 *Openings for pipes and cables*

Mobile fume cupboards AeroEm

Rear view



1 *Valve for water outlet*
2 *Handle with sash and horizontal sash*
3 *FAZ control panel*
4 *Switch for internal sockets*
5 *Valve for gas outlet*

Technical data

Dimensions	
Width [mm]	1050
Depth [mm]	815
Height [mm]	1975
Working height [mm]	900
Height, castors [mm]	120

Weight	
Weight [kg]	180

Design characteristics	
Sash	Two-piece, moves up and down with 2 horizontal sashes each
Glass pane in the side wall	All 4 sides of the fume cupboard
Lighting	Dazzle-free, can be switched from the outside
Roller shutter guiding	For pipes and cables on the left and right side of the fume cupboard

Electrics	
Electrical supply	2 sockets in the internal workspace, can be switched individually from the outside
Total power of sockets [W]	1000
Connection voltage [V AC]	230
Voltage of waste water lifting unit [V]	230
Power of lighting [W]	55
Length, electrical connection cable [mm]	2500

Sanitary technology	
Water connection	Optional
Waste water connection	Waste water quick release outlet as an option
Gas connection	Optional
Water fitting (tap)	Cold water WPC or WNC (EN) as an option, with drip cup, can be operated from the outside
Gas outlet	Optional

Ventilation technology	
Minimum air exchange rate [m³/h] [1)]	300
Air-supply assistance fan	Can be switched on the FAZ
Function display	FAZ
2 extract air spigots Ø [mm]	90
Length of extract air duct [mm]	2500

[1)] 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).

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-composite worktop with raised Polypropylene edge

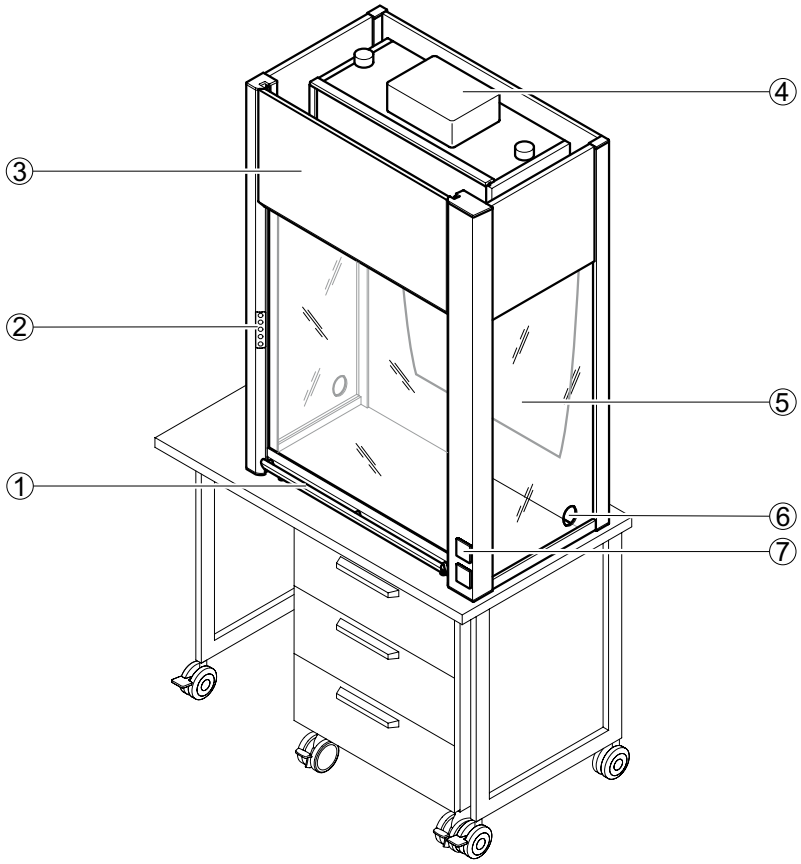
Mobile fume cupboards
MobilAir

Intended use

- Can be used where required (only in air-circulating mode)
- Control units located externally

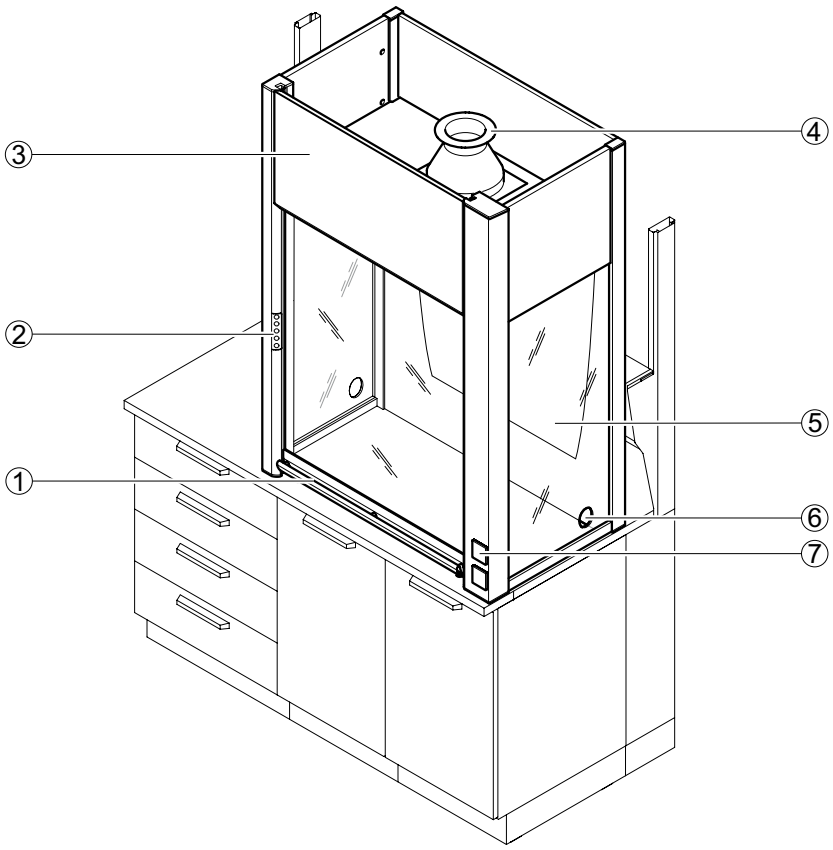
Design

Air-circulating mode



1 Sash with handle
2 FAZ control panel
3 Removable fascia panel
4 Filter housing with ventilator in air-circulating mode
5 Rear panel with air guiding profile
6 Material lock
7 Sockets

Extract air operation



1 *Sash with handle*
2 *FAZ control panel*
3 *Removable fascia panel*
4 *Extract air spigot*
5 *Rear panel with air guiding profile*
6 *Material lock*
7 *Sockets*

Technical data

Dimensions	
Width [mm]	900
Depth [mm]	600
Height with sash closed/open [mm]	1215/1620
Access width [mm]	730
Clear width, internal workspace [mm]	850
Effective depth [mm]	503
Clear internal height up to lamp [mm]	846
Clear internal height up to ceiling [mm]	935

Weight	
MobilAir for extract air operation [kg]	Approx. 70
MobilAir for air-circulating mode incl. filter [kg]	Approx. 82

Mobile fume cupboards MobilAir

Design characteristics	
Air-circulating mode	With ventilator and filter
Extract air operation	Extract air spigot connected to on-site extract air system
Lighting	Dazzle-free, can be switched from the outside
Sash	Moves vertically
Material lock	Possible on the left and/or right side of the fume cupboard

Electrics	
Electrical supply	2 external sockets
Total power of sockets [W]	1000
Connection voltage [V AC]	230
Lighting [W]	13
Ventilator power [W]	115

Ventilation technology	
Minimum air exchange rate [m³/h]	300
Function display	FAZ as an option
Connection height [mm] Extract air spigot Ø 125 mm	1137

Material	
Side panel design, sash	Plexiglas

Filter type „A“ no.5, gas filter	
Dimensions [mm]	610 x 305 x 150 (+ 8 mm seal)
Pressure loss [Pa] at 300 m³/h	130
Design characteristics	Gas filter cell with 5 layers of activated carbon mat, type „A“; MDF frame; with white-painted grid on both sides, with grip and type label on the 610-mm-side, PU seal on the dust-laden air side
Use	Separable substances: organic gases and vapours (e.g. solvents, petrol fumes, toluol, benzol, kerosine, odours, hydrocarbons with mass weights 30 and higher), cold, non-boiling (VOC, high-boiling substances)

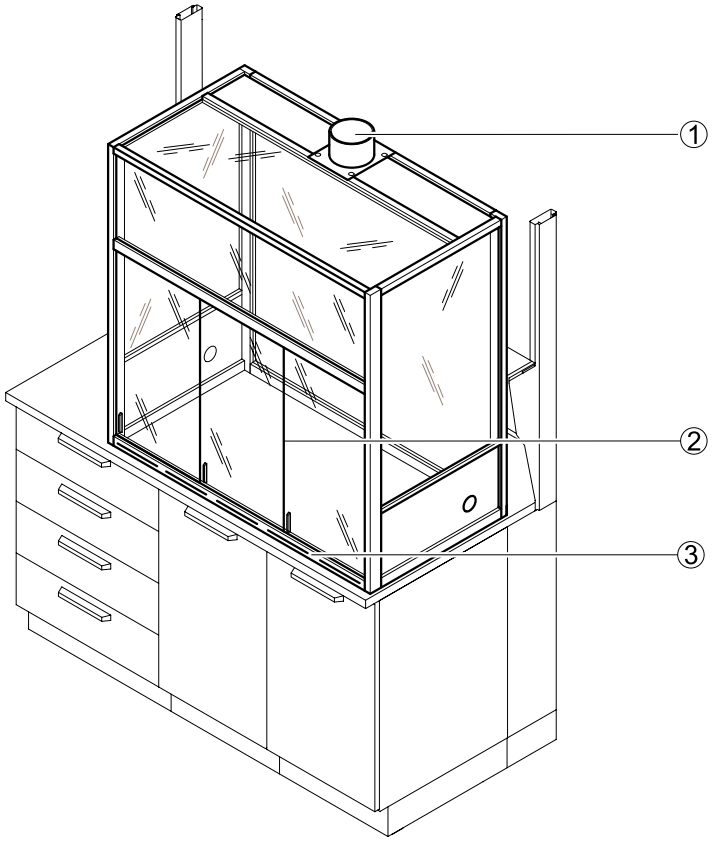
Filter type „BEP“, gas and particle filter	
Dimensions [mm]	610 x 305 x 150 (+ 8 mm seal)
Pressure loss [Pa] at 300 m³/h	240
Design characteristics	Combination filter Hepa H13 with activated carbon mat and particle filter, type „BEP; MDF frame, with white-painted grid on both sides, with grip and type label on the 610-mm-side, PU seal on the dust-laden air side
Use	Separable substances: inorganic gases and vapours (e.g. chlorine, hydrosulphides, sulphur dioxide, hydrogen chlorides, cold and heated). Molecules and particle separation 99.95 % MPPS

Filter type „P“, particle filter cell	
Dimensions [mm]	610 x 305 x 150 (+ 8 mm seal)
Pressure loss [Pa] at 300 m³/h	150
Design characteristics	Particle filter, type „P“, Hepa H13, Midilar MDSA; MDF frame, with white-painted grid on both sides, with grip and type label on the 610-mm-side, fold height 45 mm, PU seal on the dust-laden air side, filter medium flush on the dust-laden air side
Use	Separable substances: Particle separation 99.95 % MPPS, Hepa H13

Intended use

- Extraction of thermal loads, gases, fumes, aerosols or dust escaping from the internal workspace of the housing
- Reduced sound emission
- Not suitable for openly breaking down chemicals
- Not suitable as a replacement for bench-mounted fume cupboards in acc. with EN 14175

Design



1 Extract air spigot
2 Horizontal sash
3 Ventilation slots

Technical data

Dimensions	1200	1500	1800	2100
Width [mm]	1200	1500	1800	2100
Depth [mm]	565 715 750 900			
Height [mm]	1450			
Height incl. extract air spigot [mm]	1550			
Height incl. extract manifold [mm]	1750			

Housings
Permanent enclosure

Design characteristics	1200	1500	1800	2100
Construction	Shorter rear panel for using the services if combined with service spines			
Sash	2 horizontal sashes	3 horizontal sashes		
Extract air operation	Connected to on-site extract air system Extract manifold as an option			
Material lock	Optional			
Lighting	Optional			
Shelf board, inside	Optional			

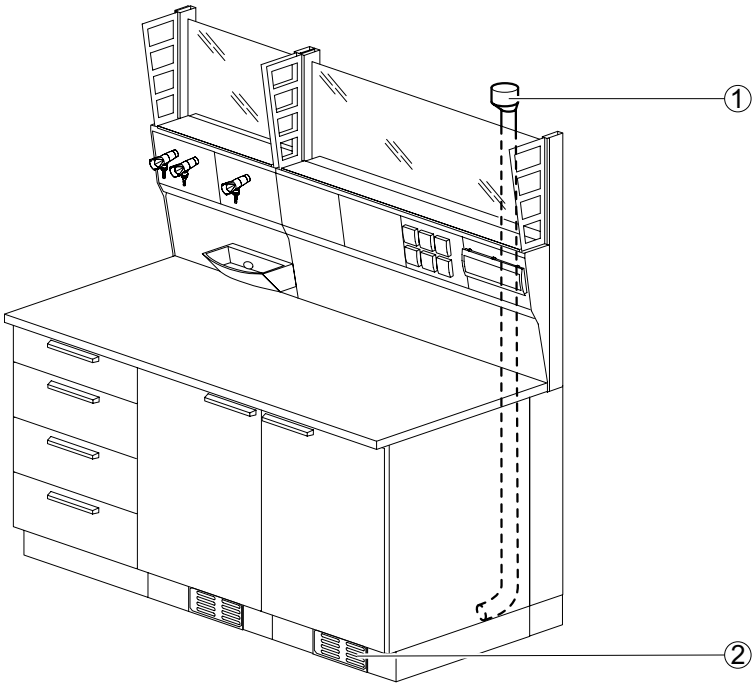
Ventilation technology	
Function display	FAZ as an option
Connection height [mm] for extract air spigot Ø 125 mm	1550

Material	
Side panel design, sash	Safety glass

Intended use

- For the extraction of safety cabinets (underbench units) used for the storage of hazardous materials
- For the extraction of underbench units in service spines and fume cupboards

Design



1 Extract air spigot
2 Ventilation slots

Technical data

Ventilation technology	
Air exchange rate [m³/h]	40
Ventilation connection (ascending duct) Ø [mm]	90

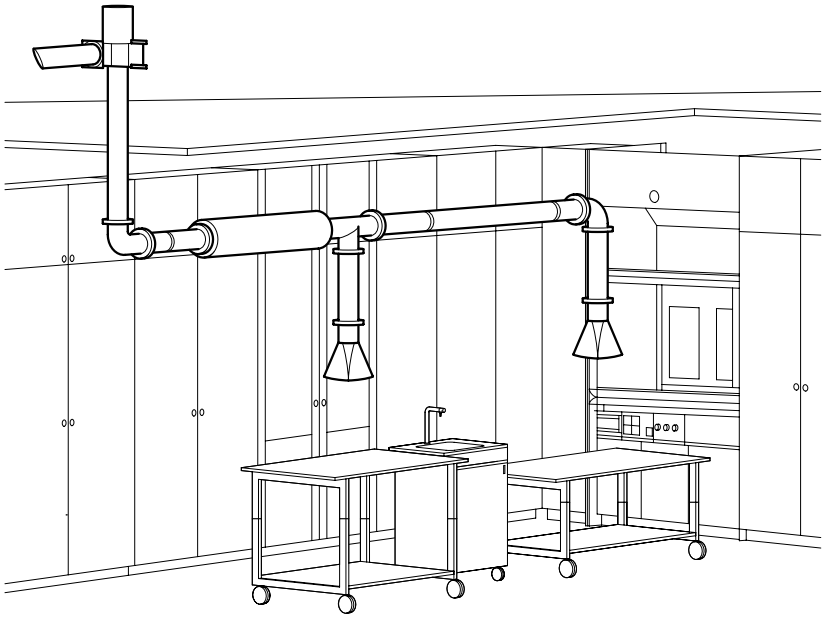
Material	
Ventilating pipe	PPS

Local extraction devices
AAS extract system

Intended use

- For the extraction of combustion residues in laboratories
- For the extraction of cold and hot flames
- To stabilise the burner flame
- To protect the instruments from corrosive fumes

Design



Technical data

Dimensions	
Dimensioning	Project-planning as required

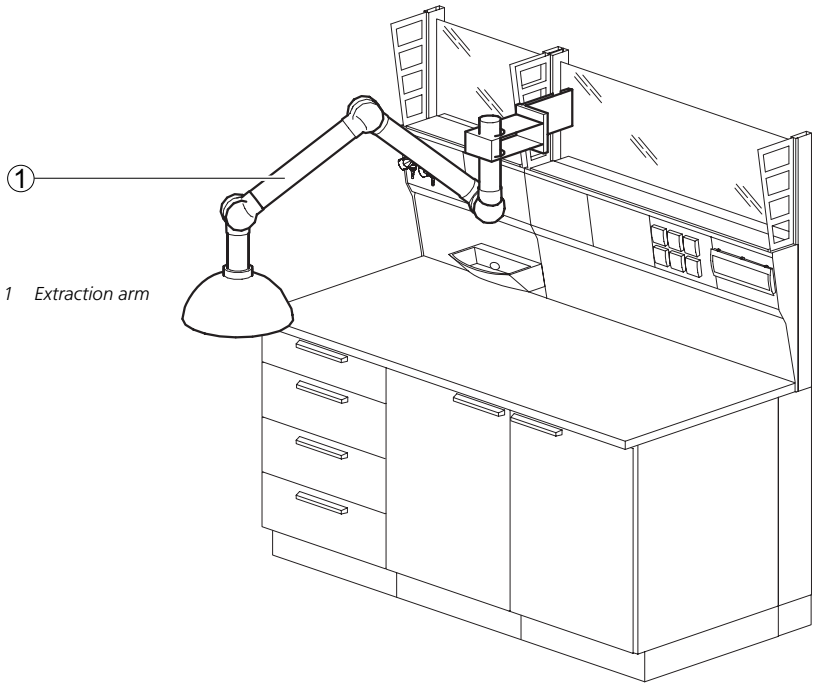
Design characteristics	
Standard	AAS extractor hood Telescopic tube Pipe systems Ventilators Blow-out unit Fastening elements
Acoustic insulation	Installation of the ventilators and blow-out unit outside the laboratory as an option

Material	
Pipe systems	Stainless steel
AAS extractor hood	Stainless steel

Intended use

- For the extraction of a specific area
- For fixing to service wings, service spines or the wall

Design



1 Extraction arm

Technical data

Dimension	50	75
Pipe system Ø [mm][1)]	50	75
Coupling hood Ø [mm]	350	
Extraction maximum [mm]	50	75

[1)] Pipe system Ø 50 mm only for fastening to the service wing

Ventilation technology	50	75
Minimum air exchange rate [m³/h]	50	100
Admission pressure [Pa]	150	
Admission pressure [Pa] with Waldner airflow damper	200	

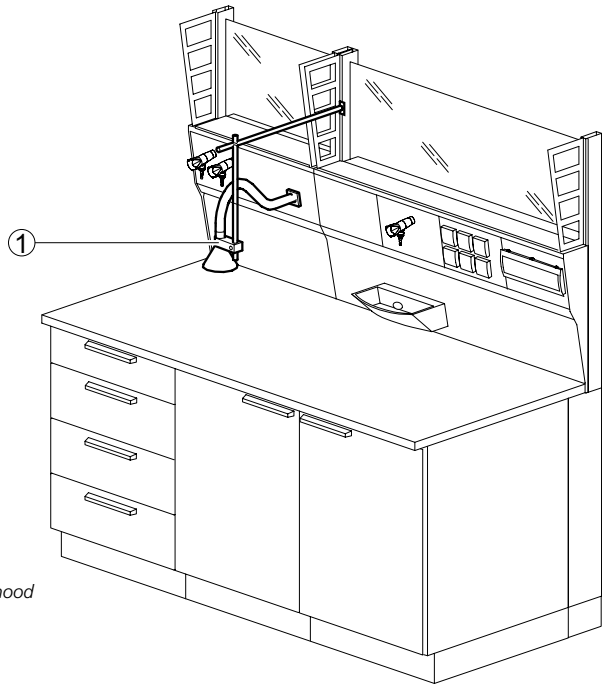
Material	
Pipe	Anodised aluminium
Hinged bracket	Polypropylene
Coupling hood	Polycarbonate
Suction tip	Anodised aluminium

Local extraction devices
Snorkel hood

Intended use

- For the specific extraction of fumes
- Connection to extract air adapter in the service panel

Design



1 Snorkel hood

Technical data

Dimensions	
Length of pipe system [mm] at Ø 40 mm	1000
Hood Ø [mm]	120
Suction tip [mm]	50

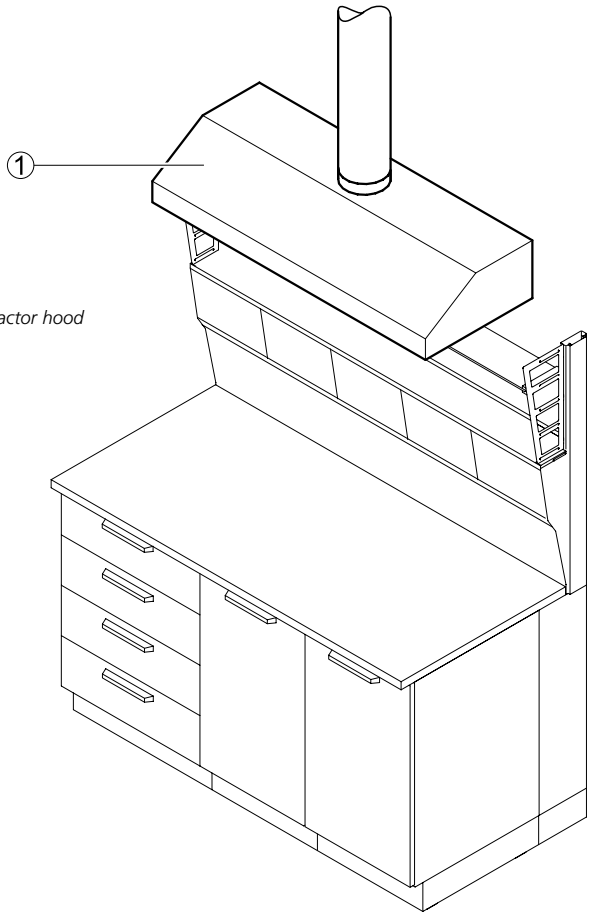
Ventilation technology	
Minimum air exchange rate [m³/h]	5
Admission pressure [Pa]	200

Material	
Pipe and hood	Plastic

Intended use

- For the extraction of a specific area
- For fixing to service spines and to the wall

Design



1 Extractor hood

Technical data

Dimensions	**1200**	**1500**
Width [mm]	1200	1500
Height x depth [mm]	300 x 600	
Extract air spigot Ø [mm]	200	

Ventilation technology	**1200**	**1500**
Minimum air exchange rate [m³/h]	480	600
Admission pressure [Pa]	25	30
Admission pressure [Pa] with Waldner airflow damper	150	

Material	
Extractor hood	Polypropylene