Waldner Fume Hoods

SECUFLOW VISION

WALDNER

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THE CONCEPT OF THE TRANSPARENT FUME HOOD CREATES NEW, REVOLUTIONARY LABORATORY ENVIRONMENTS.

MORE TRANSPARENCY – BETTER COMMUNICATION

With the demands placed on the laboratories of tomorrow, openness in design, communication and collaboration play an increasingly important role. The Secuflow Vision stands out with its glazed side and rear walls as well as the sloping front. But many other functional features also offer great added value for the user. It is important that communication between laboratory users is not restricted by physical barriers or distance.

The concept of the transparent fume hood creates new laboratory environments that revolutionise the feeling of space and collaboration.

DIFFERENT VARIANTS

TRANSPARENT SIDE AND REAR PANELS

The fume hood sides and the fume hood rear wall were developed in different glazed variants.
They allow direct communication with the workstation opposite and offer maximum transparency for an open and bright laboratory.

VARIANTS SIDE PANEL

FULLY GLAZED SIDE

completely made of glass, which allows a very high chemical resistance to be achieved

SOLID CORE FRAME

The glass used for the door, like the fully glazed version, offers maximum transparency and also allows easy installation of, for example, a sluice in the solid core area

VARIANTS BACK PANEL

FULLY GLAZED REAR WALL

with a view of the installation and pipework

GLAZING ABOVE THE MEDIA MODULES

optionally switchable from clear glass to frosted glass

FEATURES

OPEN SASH ALARM

Safety is the most important feature of a fume hood. Therefore, the opening of the sash is constantly monitored. Conventional fume hoods usually monitor an opening of the front sash. The fume hood uses a motion detector to detect whether a person is working on the fume hood. If this is not the case, the fume hood automatically closes an open sash. However, it is often the case that people work with the sash closed and at the same time with the sliding window partially open in order to protect themselves from splashing liquids, for example. With the Secuflow Vision, the sliding windows are therefore also monitored. If they remain open when the person leaves the fume hood, the fume hood monitoring system issues an alarm. An eye-catching red LED light strip and an audiable alarm signal to all employees that all sashes must be closed for optimum safety. These faults are also displayed in the control panel.

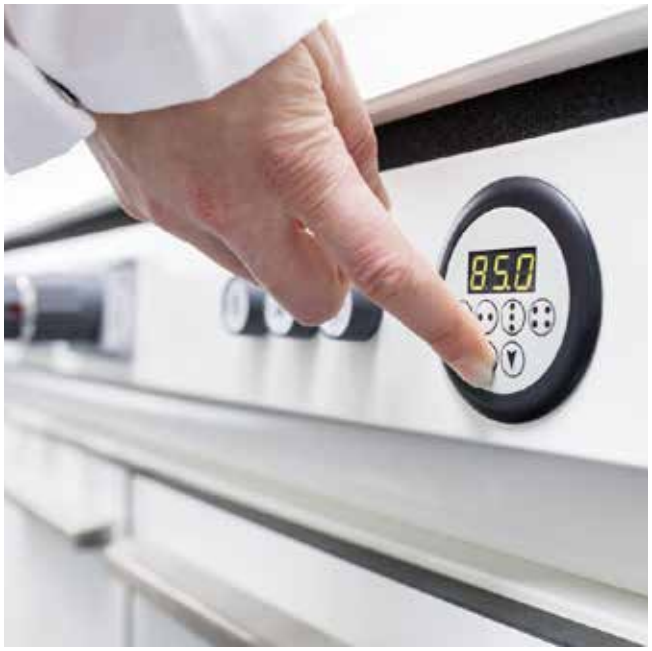
INCLINED FRONT

The inclination of the fume hood´s sash makes working at the fume hood easier and promotes an ergonomic posture.

FEATURES

ELECTRICAL HEIGHT ADJUSTMENT

What is now taken for granted with desks is usually missing in the laboratory environment: the adaptation of the work surface to the size of the people working there. With the electric height adjustment, the working height can be continuously adjusted from 850 to 1000 mm. The optimum height of the work surface is the prerequisite for ergonomic working at the fume hood.



CONTROL ELEMENT

In addition to the LCD display and the associated display of system-relevant data, the new control panel in the side profile also offers the possibility of direct access for service works. System-relevant data such as set points and actual values, maintenance intervals, error messages in plain text and energy consumption data are displayed. This enables a quick error analysis by the user or the facility management without additional devices.

FEATURES

MONITORING BY CAMERA

Thanks to the integrated webcam in the fume hood ceiling, it is possible to monitor the test sequence at all times and from anywhere. The camera image can be transferred to PCs and mobile devices via appropriate interfaces. This saves walking distances to the fume hood.

KEYBOARD EXTENSION

The extendable keyboard supports digital documentation. If required, it can be extended, used and then completely stowed away again.

FOOT SWITCH FOR SASH

In order to be able to open the sash safely, the fume hood is equipped with a foot switch. This allows the fume hood to be opened without the use of hands, leaving them free for materials or equipment that need to be brought into the fume hood.

GLOVE DISPENSER & PAPER TOWEL DISPENSER

The glove and paper dispenser is a practical solution for keeping consumables handy at the right moment. The holder is integrated directly into the door of a base cabinet in the fume hood and allows space-saving storage and quick access.

CONTAINER FOR CONSUMABLES

Concentrating on the essentials also means having the required consumables at hand at all times. Movements of the laboratory staff influence the air flow. Safety is significantly increased by reducing these movements (disturbance factors).

TECHNICAL DATA

Dimensions	**1200**	**1500**	**1800**	**2100**
Width [mm]	1200	1500	1800	2100
Depth [mm]	900			
Height [mm]	2400 + 285 mm with 900 mm sash opening			
Clear width, internal workspace [mm]	1150	1450	1750	2050
Clear height, internal workspace [mm]	1250			
Working height [mm]	900			
Electric working height adjustment [mm]	900 -50 / +100 as an option			

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

Design characteristics	**1200**	**1500**	**1800**	**2100**
Supporting construction	H-frame with push-in underbench units, height-adjustable as an option			
Fume hood front	Inclined, straight as an option			
Two-piece sash	3 horizontal sashes		4 horizontal sashes	
Side panel of the fume hood	Glass pane on the left and/or right as an option Material lock on the left and/or right as an option			
Rear panel of the fume hood	Glazing panels above the servicemoduls as an option			
Max. number of devices for scaffold points, ø 12 to 13 mm	9		12	
Max. load per scaffold point with scaffold rod length 300 mm [kg]	5			
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

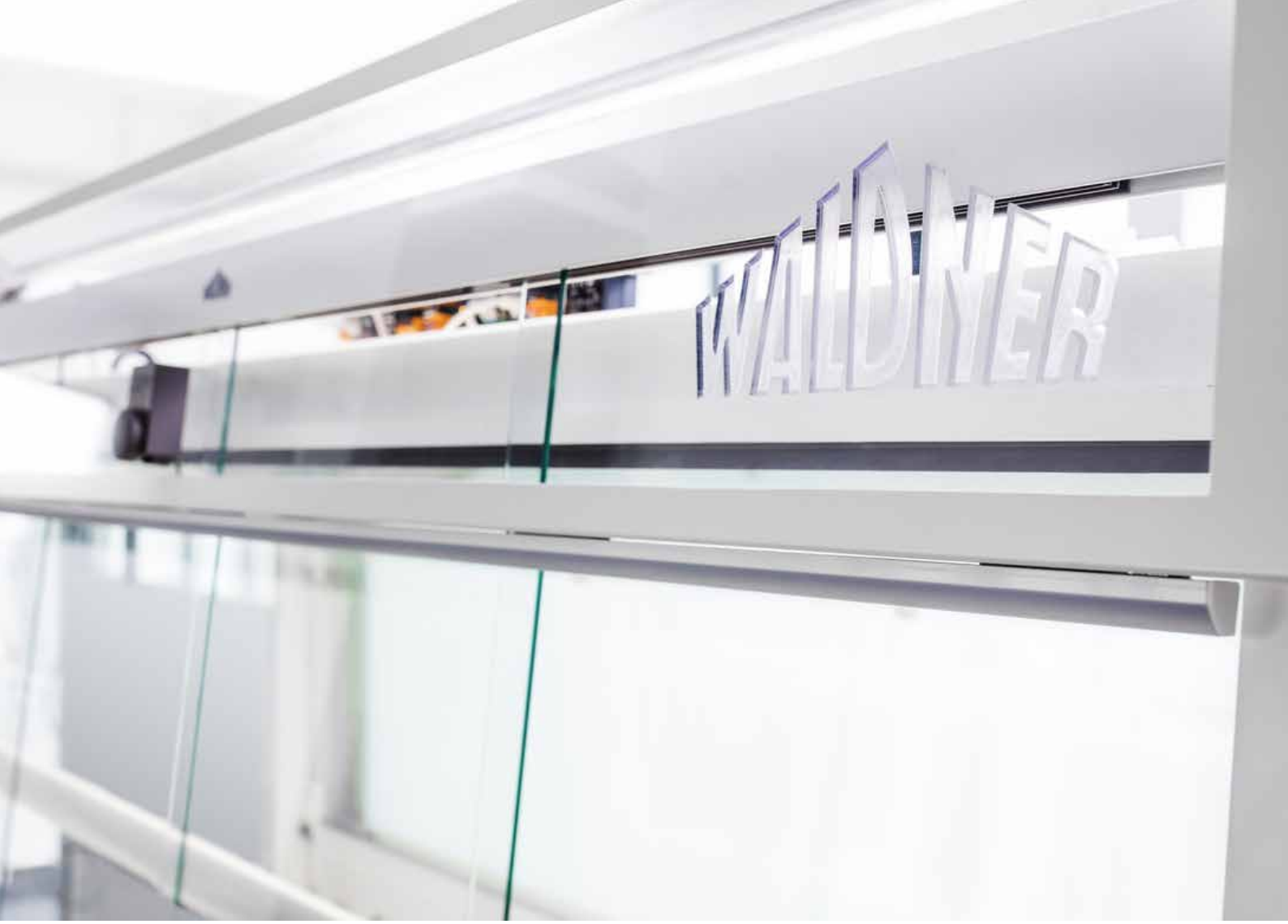
Ventilation technology	**1200**	**1500**	**1800**	**2100**
Minimum air exchange rate [m³/h] 1)	330	410	490	570
Function display	FAZ			
Airflow damper, variable	Airflow-Controller AC			
Connection height [mm] for FAZ with extract manifold Ø 250 mm	2270			
Connection height [mm] for FAZ with extract manifold Ø 315 mm 2)	2270			
Connection height [mm] for AC with extract manifold Ø 250 mm	2640			
Connection height [mm] for AC with extract manifold Ø 315 mm 2)	2610			
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 hoods 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 Glass Epoxy
Internal lining	Melamine resin facing Solid grade laminate



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