

Frequently Asked Questions

HIRT swiss descending windows can be found in private houses and business premises all over the globe. The perfected production process has had a tremendous impact on increasing the availability of this specialty product and presents the descender front as an adaptable solution, when architecture focuses on the fusion of indoors and outdoors.

How do HIRT swiss descending windows work?

Our descender fronts are not hung. Instead they stand on a support structure, which in turn is connected to a counterweight. They are moved silently by a small motor in perfect balance. Gigantic glass panels seem virtually weightless and sink in the floor at the press of a button to create a completely unrestricted opening of space. Even extremely heavy facades can disappear effortlessly as a descender front in the floor.

What is the maximum size of descender fronts that can be manufactured?

The larger, the more impressive. That said, there are technically no limits. HIRT swiss descending windows are designed for impressing. The small HIRT SF 90 model has a width of max. 6 m and a height of max. 6 m and an area of max. 18 m². The HIRT SF XL is virtually unlimited and can reach enormous proportions. It is fascinating that standard components can be inserted up to a surface area of 40 m², the HIRT SF Special comes into play for bigger surfaces. The largest descender front to date is 20 metres long and weighs 7,500 kg. But bigger is always possible.

Are HIRT swiss descending windows reliable?

Our descender fronts can easily withstand extreme climatic conditions and have already proved themselves under the harshest conditions. HIRT swiss descending windows are designed so that they can be installed anywhere in the world. Our descending windows have already been in use for many years in a wide variety of different climate zones worldwide. From the moderate climate of Central Europe and salty, windy coastal areas through to the humid tropics or desert areas with extreme temperature changes.

Is it possible to lower facade panels without glass?

Of course! The principle used for weightlessly lowering the windows should work with all conceivable types of facades. Whether constructed in metal, stone or wood, all possible walls can be lowered effortlessly in the floor. In such cases, the effect is even more impressive compared to glass panels. Where once a solid wall stood, there is now an impressive opening, extending from wall to wall without any visible limitation.

Are the descender fronts safe?

Yes. Our descender fronts are rigorously built according to EN standards. CE conformity has been verified by a testing institute in a type test. Compliance with the machinery directives ensures a safe operation.

Are the descender fronts well insulated?

Yes, very well insulated in fact. Depending on the glass, it is possible to achieve a thermal transmittance (U value) of up to 0.75 W/m²K with a thermally separated design.

What is the maximum glass thickness that can be installed?

For the HIRT SF 90 model, the maximum glass thickness is 63 mm, and for the HIRT SF XL it is 70 mm.

What types of glass can be used in a descender front?

Practically all modern functional glass can be installed, as either triple-glazed, double-glazed or single pane glass. Optionally, special-purpose glass may also be used, for instance, bullet-resistant safety glass.

Do descender fronts also offer sun protection?

Yes. As with normal windows, sunscreens may also be used as a standard solution for protection against solar radiation. Glass panes equipped with a sunlight-mitigating coating are possible as well. Net curtains may also be adapted directly as a special solution to the HIRT swiss descending windows; that includes conventional products like blinds or shades.

Can doors also be installed in a descender front?

Yes, a descender front can be equipped, for instance, with swing doors or sliding doors.

How does one operate a descender front with built-in doors?

Descender fronts with built-in doors are always monitored electronically. This ensures that the descender front may only be operated if the door is locked.

Is there any break-in protection?

Based on their design, descender fronts do provide very good protection against break-ins. There is no other possible opening besides lowering the descending window panel. If doors are also built into the descender front, they can be equipped with systems to protect against break-ins.

What structural measures have to be planned?

The equipment room in the basement, which is necessary for accommodating the counterweight and serving as a storage area for the lowered panel, must be cast in concrete. The equipment room will also house the control system, motor, drive shaft, compressor and pneumatic components.

What has to be taken into account when designing the equipment room?

The size of the equipment depends on the size of the descender front and must also have a minimum size for personal safety reasons. The documents, system plan and product description that are provided for the installation work contain the exact project-specific dimensions.

Does the equipment room have to have a drainage system?

The descender front is equipped with an integrated water gutter. A small amount of water may accumulate there, which has to be guided to a drain or a pump well.

What loads should the floor be able to withstand?

The weight of the descender front is generally distributed on the basement ceiling. This load transfer is calculated on an individual basis. Optionally the supports can be used to transmit the loads to the floor of the equipment room.

What does the electrician have to take care of on site?

The wiring for the motor, limit switches, control box and other peripheral components of the HIRT swiss descending windows is already prepared ready for use. The electrician must only take care of connecting the control system to the mains.

Is it possible to close a descender front during a power outage?

Yes, the emergency manual override does work even without electricity.

During what phase of construction can the descender front be installed?

The descender front is installed after the building shell is completed. The building shell should be completed to ensure that the equipment is protected against weather influences and any dirt and debris that may result from construction work.

When is the glass installed?

The glass panes are also installed during the assembly of the descender front so that the function check can be carried out. After completing the installation work, the glass is checked and protected on site.

How does one operate HIRT swiss descending windows?

The descender front is operated using a key switch or a maintained contact switch with a dead man's control and visual monitoring of the panel's travel. As an alternative, a fully automatic control system is possible, with which the descender front can be conveniently operated using a tablet or touchscreen.

Is the mechanical system protected against sand and salt air close to the sea?

The electronics are protected by the closed control box. The mechanical system comprises high-quality components, such as sealed ball bearings and a special coating to prevent corrosion.

How often does a descender front require maintenance?

The relevant directives call for a periodical inspection to be carried out every two years. For descender fronts that are opened and closed frequently, we recommend an annual inspection. In addition to that, remote maintenance via an internet connection is also possible. That is the most efficient way to access the system for software updates and for evaluating problems, if necessary.