

Frequently Asked Questions

HIRT kinetics® 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 HIRT kinetics® as an adaptable solution, when architecture focuses on the fusion of indoors and outdoors.

How do HIRT kinetics® work?

Our kinetic elements 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 retract into the floor at the click of a button to create a completely unrestricted opening of space. Even extremely heavy facades can disappear effortlessly in the floor.

What is the maximum size of HIRT kinetics®?

The larger, the more impressive. That said, there are technically no limits. HIRT kinetics® are designed to impress. The small HIRT kinetics® SF 90 has a width of max. 6 m, a height of max. 6 m and a surface area of max. 18 m². The HIRT kinetics® 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 kinetics® SF Special comes into play for bigger surfaces. The largest moving front to date is 20 m long and weighs 7500 kg. But bigger is always possible.

Are HIRT kinetics® reliable?

HIRT moving architecture easily withstands extreme climatic conditions and has already proved itself under the harshest conditions. HIRT kinetics® are designed to be installed anywhere in the world. They have already been in use for many years in a wide range of different climate zones worldwide. From the moderate climate of Central Europe and salty, windy coastal areas to humid tropics or desert areas with extreme temperature changes.

Is it possible to lower walls or facade panels without glass?

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

Are HIRT kinetics® safe?

Yes. All HIRT kinetics® 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 safe operation.

Are HIRT kinetics® well insulated?

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

What is the maximum glass thickness that can be installed?

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

What types of glass can be used in HIRT kinetics®?

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 HIRT kinetics® 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 HIRT kinetics®; that includes conventional products like blinds or shades.

Can doors also be installed in HIRT kinetics®?

Yes, both swing doors and sliding doors can be installed in HIRT kinetics®. This is an option that we highly recommend because it further increases the flexibility of use.

How are HIRT kinetics® operated with built-in doors?

HIRT kinetics® with built-in doors are always monitored electronically. This ensures that they can only be operated when the door is locked.

Is there burglary protection?

Based on their design, HIRT kinetics® provide very good protection against burglaries. There is no other possible opening besides lowering the entire element. If doors are built into a HIRT kinetics®, 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 HIRT kinetics® 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?

HIRT kinetics® are equipped with an integrated water gutter. A small amount of water may accumulate there and has to be guided to a drain or a pump well.

What loads should the floor be able to withstand?

The weight of HIRT kinetics® 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 kinetics® are already prepared ready for use. The electrician must only take care of connecting the control system to the mains.

Is it possible to close HIRT kinetics® during a power outage?

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

During what phase of construction should HIRT kinetics® be installed?

HIRT kinetics® are 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 installed during assembly of HIRT kinetics® so that a function check can be carried out. After completing the installation work, the glass is checked and protected on site.

How are HIRT kinetics® operated?

HIRT kinetics® are 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 a closed control box. The mechanical system comprises high-quality components, such as sealed ball bearings and a special coating to prevent corrosion.

How often do HIRT kinetics® require maintenance?

The relevant directives call for a periodical inspection to be carried out every two years. For units that are opened and closed very 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.