

Moveable Walls



MULTIWAL



Multi Electric Moveable walls at the cutting edge

MULTIWAL

Multi Electric, precise and dynamic

Crank starting a car engine was once a standard practice from a bygone era. What was then perceived a normal activity now appears almost laughable and more suited to black and white news-reels. Everything changed when the automatic starter motor was invented.

Cranks and levers still have their place in engineering and it became the industry standard to use strength and technique to manually operate the seals for moveable walls. Until Multiwal designed and developed the Multi Electric: a unique system that automatically extends the top and bottom acoustic seals to the correct position.

Someday the Multi Electric system will be commonplace and 'someday' is sooner than you might think. Multiwal is already delivering their type Select and Commandoor as standard with the Multi Electric system without any added costs. With Multiwal no one has to tolerate outdated technology.



Multiwal moveable walls are perfect for making flexible use of the available room space. The Multi Electric operating system has now made these walls even more customer-friendly, allowing you to open/close the Multiwal moveable wall in seconds.

The secret of Multi Electric is the ingenious design of the electrically driven top and bottom pressure seals. This offers a great improvement on traditional moveable walls, as opening and closing the walls by hand is a time-consuming and unpredictable activity.

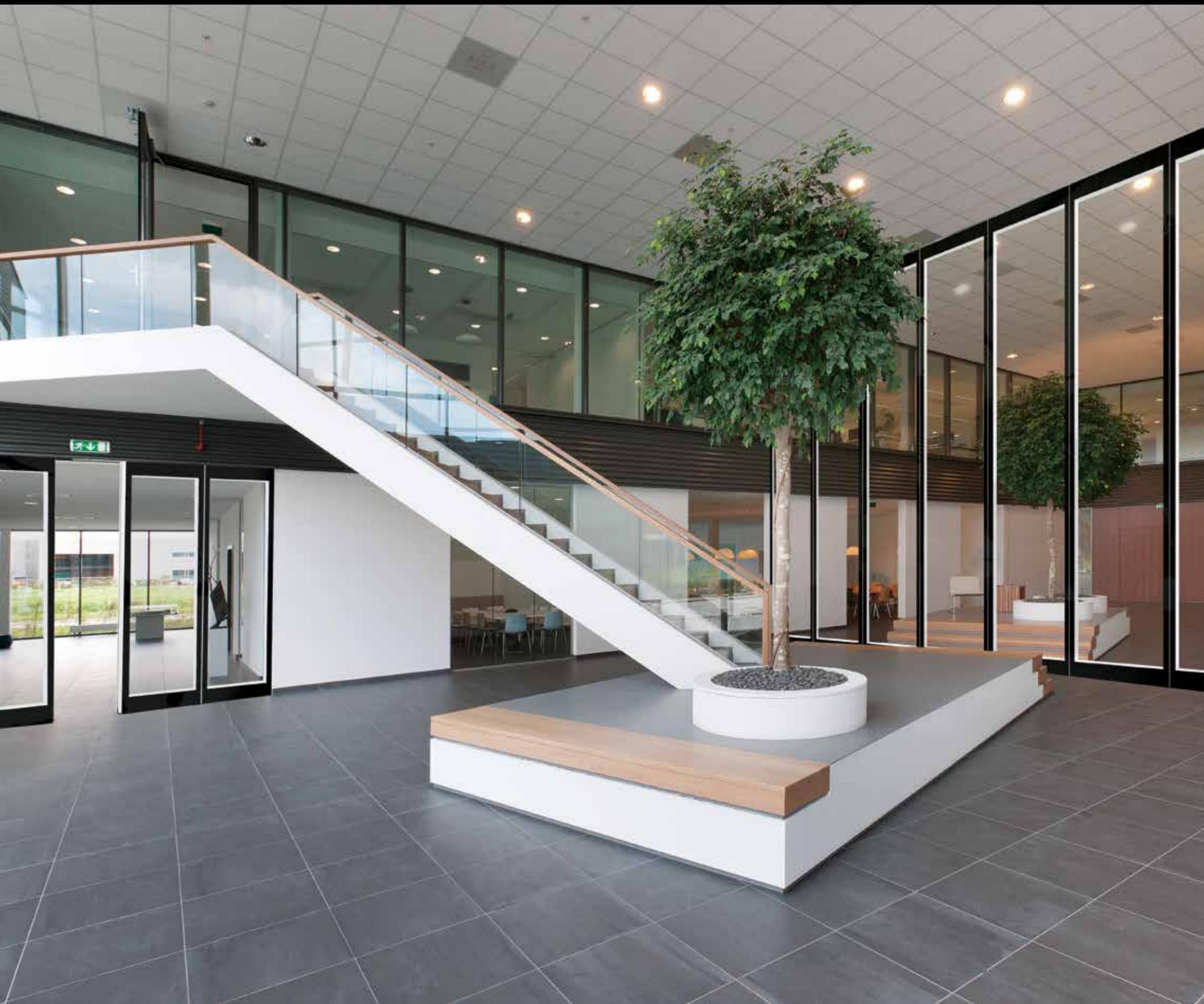
For your comfort and convenience

The specially developed Multi Electric system makes it possible to open and close Multiwal moveable walls with the minimum of effort. The electrically operated pressure seals guarantee a tight closure of the panels and ensure the best possible sound insulation.

Advantages of Multi Electric

- > Feather light operation
- > Optimum customer-friendliness
- > Guaranteed sound insulation
- > Super fast opening and closing
- > Plug & Play
- > Vastly superior fire and smoke barrier

▶ Look at the [video](http://www.multiwal.co.uk) on www.multiwal.co.uk and discover the simplicity of Multiwal's Multi Electric.



Moveable walls of the highest quality

MULTIWAL

Besides the traditional moveable walls and glass walls, Multiwal has developed a completely new concept: Commandoor moveable wall. This wall combines the openness and transparency of glass with a high sound insulation.

The Commandoor is a moveable wall comprising two sheets of safety glass, encapsulated by aluminium profiles which ensure structural stability. Consistent with traditional moveable walls, the Commandoor is delivered with the Multi Electric system as standard. Factory crafted double glazing enhances the acoustic insulation.

The permutations of profile finishes and glazing types are endless and result in a functional and stylish piece of engineering.





Where history and modern technology merge

Beautiful historical buildings are revitalised. The remarkable Veemarkthallen market buildings designed by Den Bosch architecture and built in 1931 were given the ultimate 'makeover' and transformed into a magnificent conference centre.

The architect designed magnificent conference rooms in this historical building without diminishing the important period features. The traditional design is perfectly complimented by the new technology of Multiwal's Multi Electric moveable walls.



MULTIWAL



Acoustic walls in every finish

It is possible to add finishing touches to the walls with special acoustic panels. These panels can be finished with both synthetic material and wood veneer. The level of sound absorption of the acoustic panels depends on the perforation method and the surface area of the wall. A large number of options are possible.

Beautiful design

Ingenious Multiwal moveable walls provide the architect with creative freedom, making it possible to combine numerous panel types and finishes. In addition to superb acoustic performance, aesthetically pleasing new areas and spaces can be created.



One large hall or several conference rooms? Multiwal moveable walls make your space flexible and multifunctional.

Multiwal moveable walls blend seamlessly with the space they occupy. Thanks to a cleverly designed track system, the walls can be parked sideways and out of sight.

Multiwal offers customers unlimited creative freedom

MULTIWAL

Outer beauty, inner strength

Multiwal moveable walls are aesthetically appealing and rock-solid once they are positioned. They are secured between the ceiling tracks and the floor using telescopic pressure seals with a flexible twin contact face, assuring optimal sound insulation.

The rigidity and the stability of the moveable walls are guaranteed using a strong construction, consisting of a steel inner frame with vertical aluminium profiles. The sophisticated track systems and noiseless bearing rollers ensure that very little effort is required to move and park the panels.





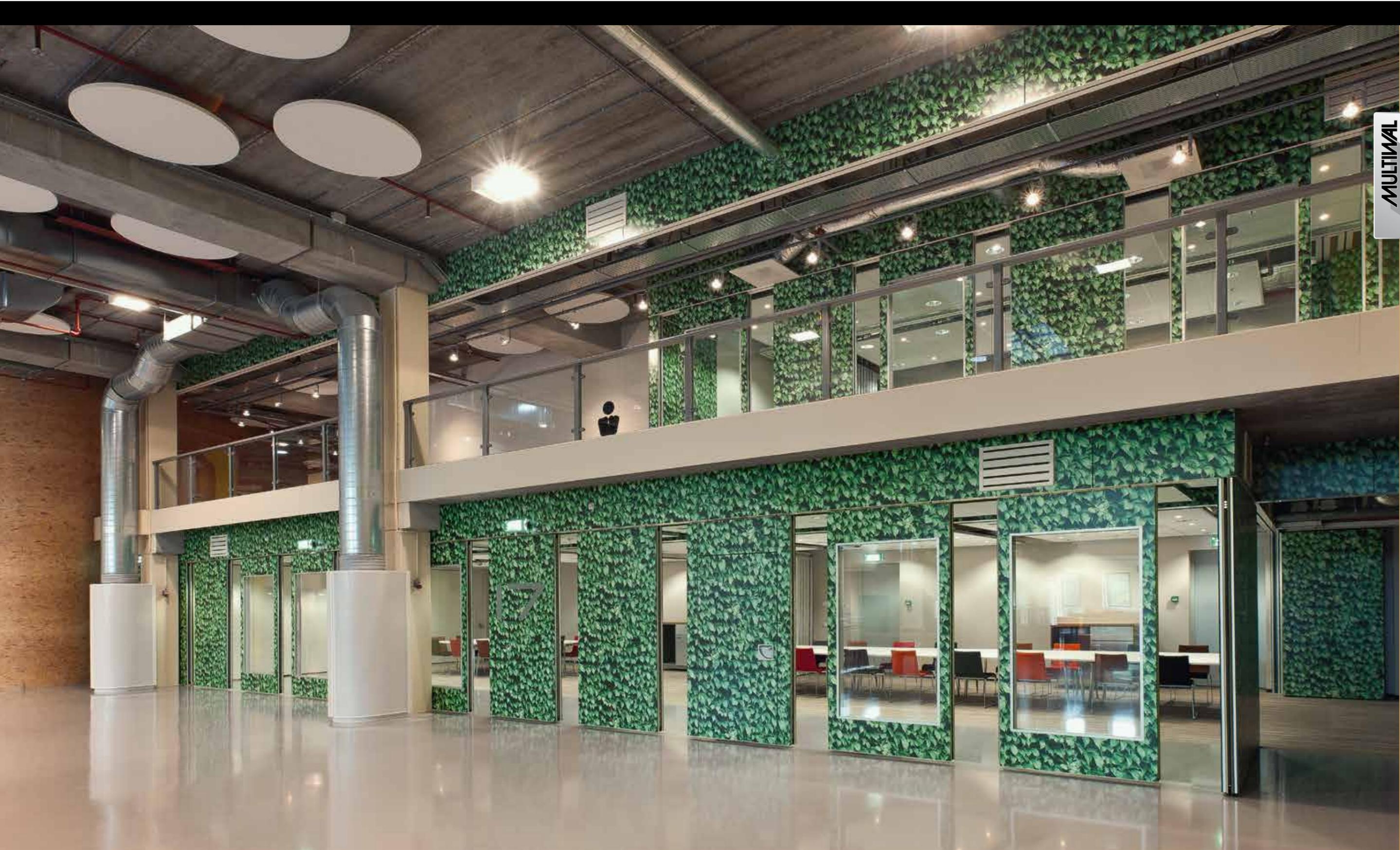
MULTIWAL

Wide range of materials and colours

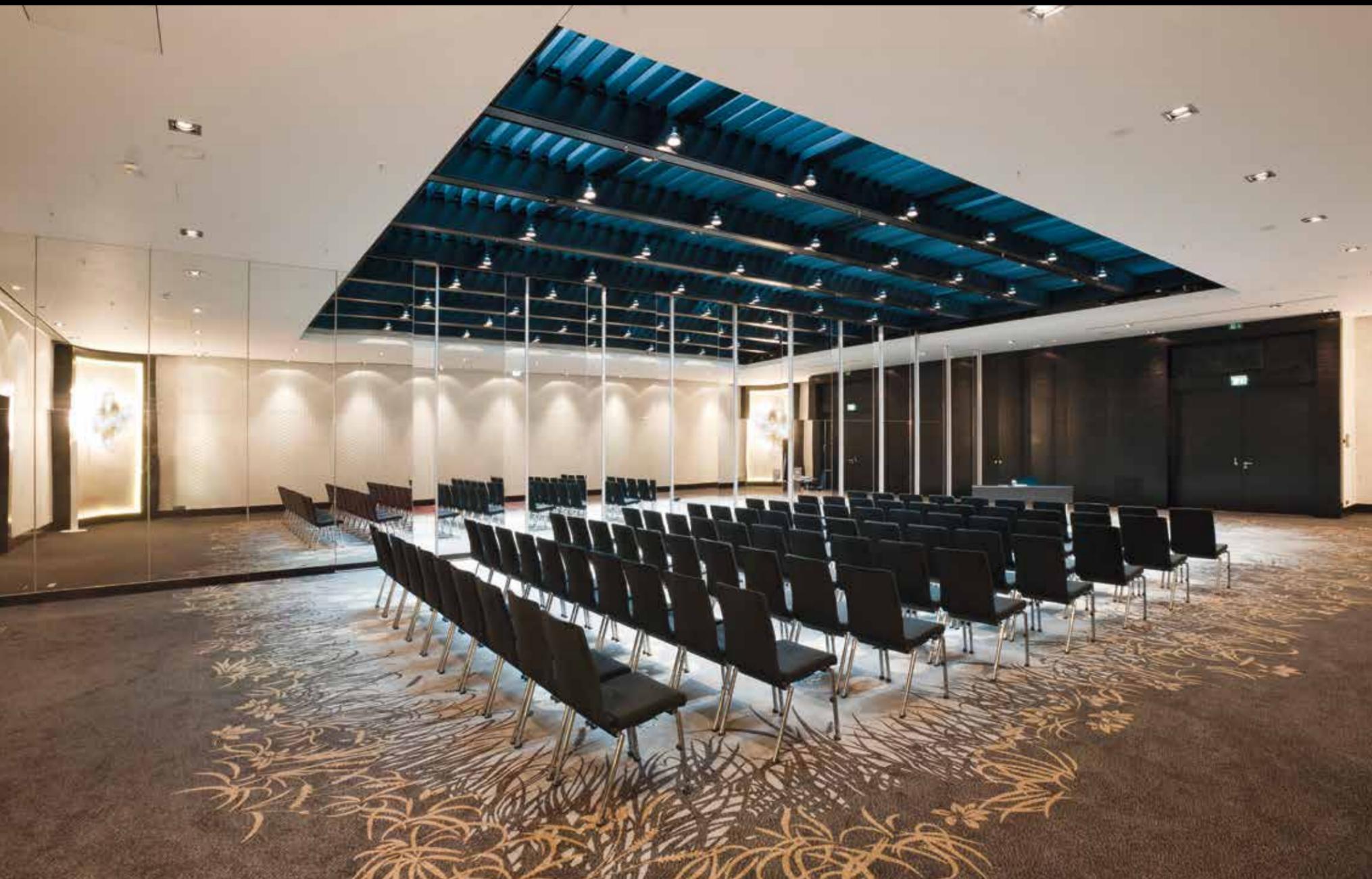
Traditional or cutting edge: Multiwal moveable walls are available in countless designs, colours and materials from top-quality high-grade veneer to fabric or synthetic material.

Exclusive panel-work is also possible and if required, even with windows, frames and mirrors. Should you require a bespoke design, it can be submitted to us and we will make sure that the Multiwal moveable wall becomes harmoniously integrated with your organisation's image and corporate identity.





MULTIVAL



Multiwal moveable walls enhance your company's dynamics

MULTIWAL

Progressive organisations need to have premises that are multi-functional, with spaces that are simple to adapt without having to carry out major construction work. This can be easily achieved, without major disruption. With Multiwal moveable walls, every space, whether large or small, can be arranged and rearranged in a matter of minutes. Multiwal makes it possible to work efficiently, no matter what your space requirement may be.

Whether it involves great heights, different levels in ceilings and floors or unusually-shaped spaces, the great flexibility of the Multiwal moveable wall system makes it possible to satisfy almost every need. The walls are easy to use and available in a wide range of materials and colours. Other options include varying degrees of sound insulation as well as fire resistance.

Complete solutions

Multiwal offers you the complete solution in your design concerning the space configuration. Our moveable walls can be combined beautifully with our glass walls. Your creative solutions for a moveable wall with a high sound insulation can also be provided using our glass walls. Please view our Multi Design brochure for examples.



Multi Electric; high specification is our standard

For your comfort and convenience

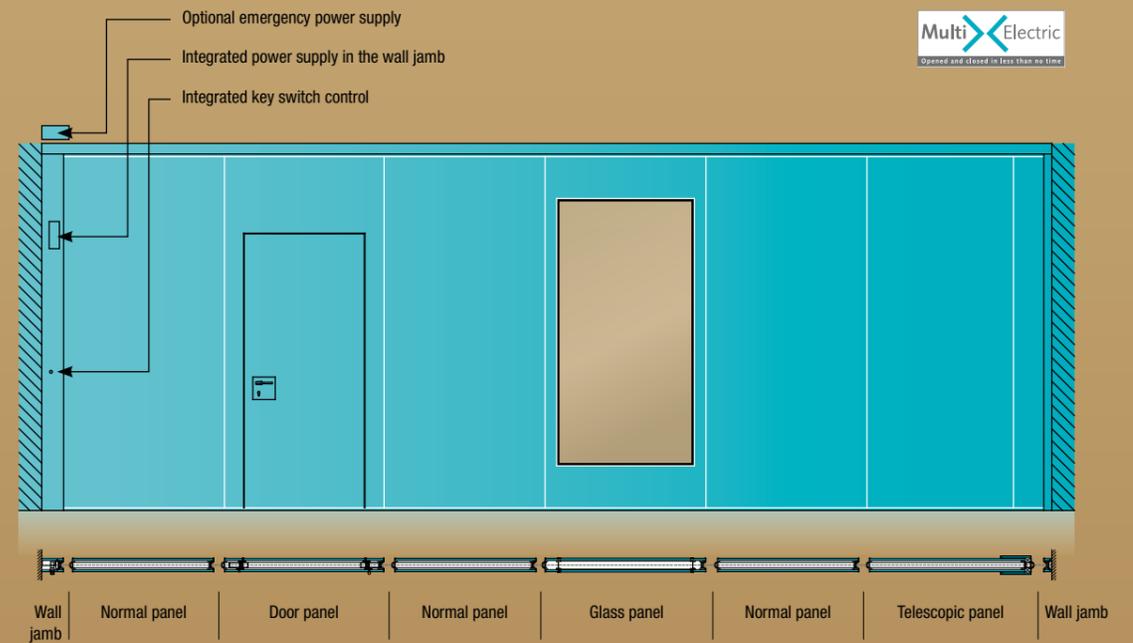
Not only does the use of the Multi Electric system save a great deal of time but it ensures a perfect seal each and every time it is used compared with the traditional spindle system using a hand crank. The user-friendly operation simply requires the panels to be moved together with a minimum of pressure. Contacts designed especially for Multi Electric are then linked and a

low voltage electrical connection is made between the panels and the integrated electronic control system does the rest.

Safety first

The Multi Electric system is available in either a 110V or 230V version, with a special transformer (included) to convert the voltage to 24V, thus ensuring safety for the customer. The transformer is integrated into

the wall jamb as standard or can be fitted in a position specified by the customer. An integrated key switch control is also included in the wall jamb. The key can be removed to prevent unauthorised use.



ADVANTAGES OF MULTI ELECTRIC

Certification

The Multi Electric system is certified according to the latest most stringent European legislation for optimal safety.

Electronics

The microprocessor system guarantees an optimal compressive force of 2kN/m². This can be adjusted according to customer's requirements.

Maintenance-free motors

The Multi Electric functions by means of high-quality maintenance-free motors, which are designed and manufactured using the latest technology. This electro-mechanical technology is also practiced by the motor vehicle industry and is used by some of the most notable manufacturers including Jaguar, Mercedes-Benz and Porsche.

Emergency power supply

An integrated emergency battery

can be provided as an option in the unlikely event of a power failure.

Plug & Play

All electrical components are fully integrated within the wall components. The 24V operating system is compatible with either 110V or 230V power supply and only requires a localised electrical supply.

Floor and track connections

Because of the excellent compressive force, there is no requirement for a

floor track or panel locking bolt system. The Multi Electric system guarantees optimal wall panel connection thus ensuring high-quality sound insulation.

Maximum safety

The telescopic panel is fitted with a 'dead-mans' push button control in accordance with international Health & Safety legislation.

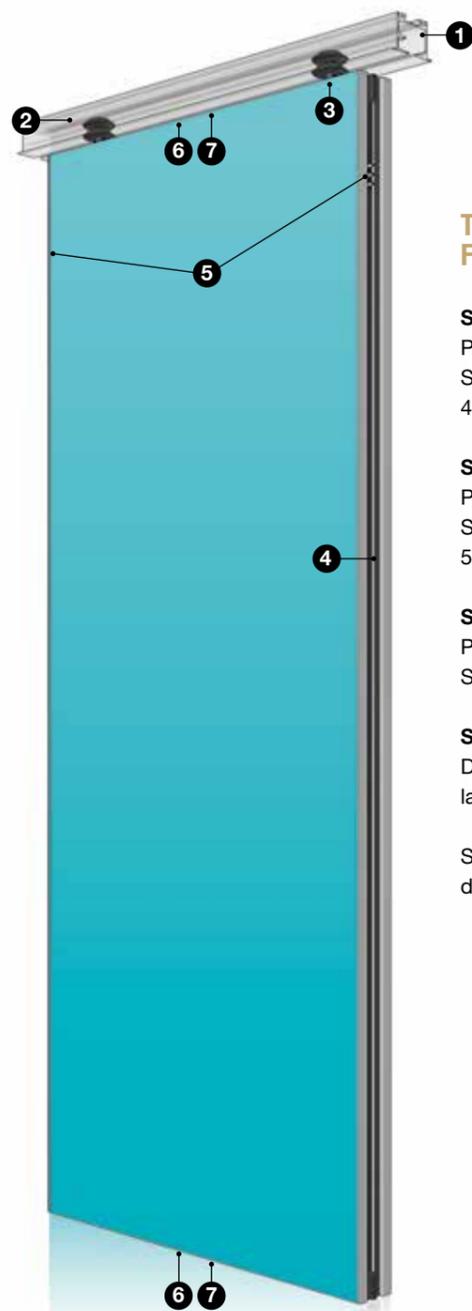
Multi Electric 'the fastest'

Each motor needs only 3 seconds to extend the pressure seal at the top and bottom automatically.



Pressure seals extend automatically with Multi Electric

The technical detail



TECHNICAL FEATURES

Select 100 U/K standard version
 Panel thickness 100 mm
 Soundproofing: Rw, P 41, 43, 45, 46, 47, 48, 49, 50, 51, 52 and 53 dB

Select 110 U/K
 Panel thickness 110 mm
 Soundproofing: Rw, P 54, 55 and 56 dB

Select 120 U/K
 Panel thickness 110 mm
 Soundproofing: Rw, P 59 dB

Soundproofing
 DIN and ISO 10140 – 1,2,4,5 laboratory values

Surface weight 20 - 50 kg/m² depending on the sound insulation

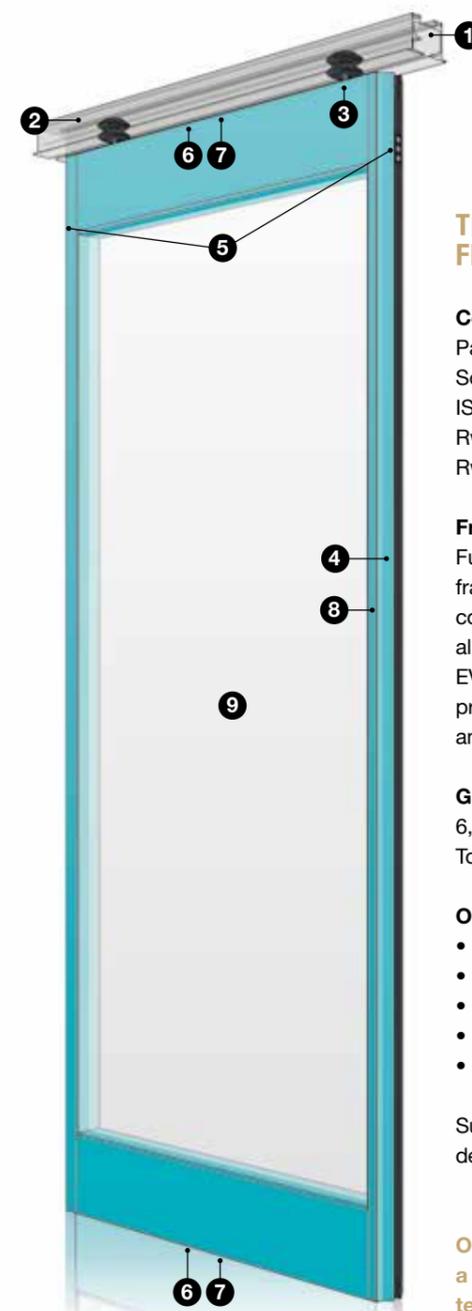
Frame construction
 Specially developed steel and aluminium frames and free-hanging exterior panels make the walls extremely sturdy and provide excellent sound insulation. The panel connections consist of vertical aluminium panel side profiles, E6/EV anodised. The vertical aluminium profiles can also be colour coated as an option.

Cover panels
 The Multiwal moveable walls are faced with 12, 16 or 19 mm high-quality chipboard V20E1/720. These cover panels are suspended on the rubber profiles of the frame. Due to the unique suspended construction, the cover panels can easily be replaced. If required, MDF exterior panels can also be used.

- Optional cover panels**
- B1 low flammability
 - A2 non-flammable
 - B1 finishes

Finishes
 To customer's requirements.

Operation
 All type Select and Commandoor models are provided as standard with the Multi Electric system. Manual operation is optional.



TECHNICAL FEATURES

Commandoor
 Panel thickness 90 - 110 mm
 Soundproofing: DIN and ISO 10140 – 1,2,4,5
 Rw, P 40, 41,42 en 43 dB
 Rw, P 46 – 50 dB*

Frame construction ③
 Fully self-supporting aluminium frame construction. The panel connections consist of vertical aluminium panel side profiles, E6/EV anodised. Vertical aluminium profiles can be colour coated as an option.

Glass ⑨
 6, 8 and 10 mm Laminated or Toughened glass.

- Optional**
- Etched glass
 - Sand-blasted glass
 - Silk-screened glass
 - Fire-retardant glass
 - Bulletproof glass

Surface weight 30 - 50 kg/m² depending on the sound insulation

Our strength:
 a combination of two techniques in one design.

GENERAL FEATURES

Track ①
 Aluminium track in standard colour RAL 9010. All other colours are available upon request.

Running gear ②
 Bearing rollers with high-quality roller technology have been specially developed for the Multiwal moveable walls. Combined with an ingenious aluminium track system, the panels can be easily moved.

Panel height adjustment ③
 Panel height is fully adjustable without dismantling the main assembly. Disturbing the ceiling finish is not necessary to fine tune the panels.

Vertical interface ④
 Concave/convex aluminium profiles guarantee that the seal is effective and insulates properly. The solid and precise connection between the panels is achieved by means of strong, full height magnetic strips and purpose made sound sealing strips located on the inner face.

Electrical contacts ⑤
 Specially developed low voltage electrical contacts are housed in unique concave/convex aluminum profiles that guarantee ease of operation and an uninterrupted and safe electrical flow between the panels.

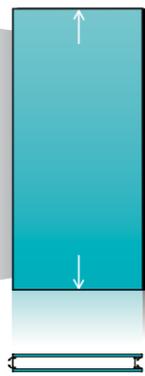
Horizontal closing ⑥
 To obtain the best soundproofing effect, the wall must fit tightly against the floor and ceiling. To achieve this, the moveable walls have a Multi Electric system used to extend the pressure seals, which have flexible rubber pads. The pressure seals naturally compensate for possible unevenness in the floor.

Pressure seals ⑦
 Each panel is fitted with black anodised pressure seals at the top and bottom. The compressive force of 2 kN/m² can be tuned by the microprocessor.

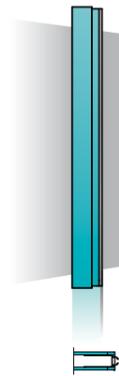


* In combination with type Select

PANEL TYPES



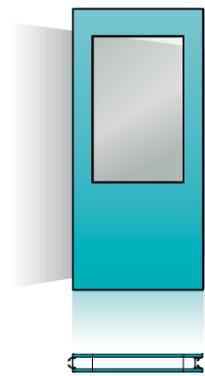
NE Normal panel
Standard basic panel



TEW Telescopic wall jamb
The Select 120 and the Commandoor is fitted as standard with a telescopic wall jamb. The Select 100 and 110 models can also be delivered with a telescopic wall jamb. The major advantage of this option is that all electrical components i.e. transformer, microprocessor and key switch for the Multi Electric are fully integrated within the assembly. The telescopic wall jamb has the same finish as the wall.



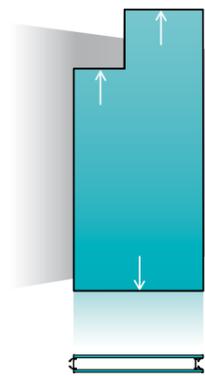
TE Telescopic panel
Each wall is normally equipped with one telescopic panel. The panel is fitted with an external moveable sleeve. This is the first panel to be opened when opening the wall and the last panel to be closed when closing the wall. The telescopic moveable sleeve has the same finish as the wall.



FE Glass panel
All panels can be supplied with windows if required. Every conceivable configuration can be applied to the panels, giving the designer creative freedom.



TEF Internal telescopic panel
Models Select 100 and 110 can be optionally provided with an internal moveable sleeve (TEF). When the telescopic panel is fully extended, it is flush with the face of the wall. The telescopic moveable sleeve has the same finish as the wall.



EE/SE Corner panel or special panel
Panels can be supplied with optional corner connections (EE), to facilitate the connection to other adjacent moveable walls. Limitless other special panels (SE) can also be supplied.



FT Fixed pass door
The telescopic panel can be replaced by or used in conjunction with a fixed pass door. The pass door is full height and is fixed to one end of the existing building structure. The door is equipped with pressure seals at the top and bottom, which extend automatically during the closing action of the door.



DT Pass door panel (single hinged)
This fully moveable pass door is constructed with a high-quality welded steel frame. This solid construction makes any type of floor track or locking mechanism redundant. The door is equipped with a pressure seal at the bottom, which extends automatically during the closing action of the door. During sliding of the pass door panel, the door will be secured automatically.

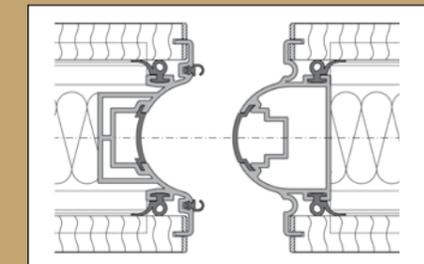


DTZ Pass door panel (double hinged)
This fully moveable pass door is constructed with a high-quality welded steel frame. This solid construction makes any type of floor track or locking mechanism redundant. The doors are equipped with pressure seals at the bottom, which extend automatically during the closing action of the doors. During sliding of the pass door panels, the doors will be secured automatically.

PANEL CONNECTION TYPE SELECT

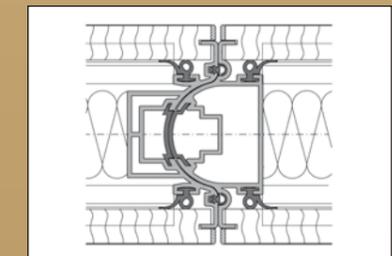
Type K standard version

- When the wall is closed, there are no visible aluminium profiles
- Double internal rubber sealing strips
- 2 mm ABS edgings to match the colour of the wall
- Solid edges are optional
- Approximately 4 mm shadow gap between the closed panels



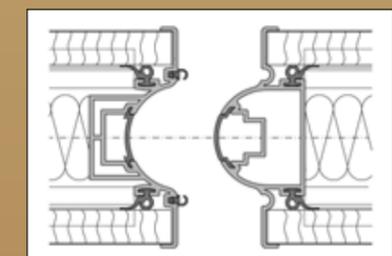
Optional Type KA

- When the wall is closed, there are no visible aluminium profiles
- Double internal rubber sealing strips
- 2 mm ABS edgings to match the colour of the wall
- Solid edges are optional
- Approximately 2 mm shadow gap between the closed panels



Optional Type U

- When the wall is closed, there are visible aluminium profiles
- Double internal rubber sealing strips
- When the wall is closed, there is 5 mm of visible aluminium profiles



Finish 'S' stands for steel-panel finish.

- Steel-panel finish can be applied to both types U and K
- Steel-panel finish in a colour specified by the customer



TRACKS AND TRACK SUSPENSION – PARKING OPTIONS

RAILS EN OPHANGING

Easy to use right down to the smallest detail

Thanks to the well-balanced construction of the track and the precision running gear, Multiwal moveable walls can easily be moved by hand. Based on years of experience, Multiwal has developed a number of silent track systems that can be used for all of its moveable walls. Multiwal has three standard types, each with its own roller technology. In addition to the three standard types, special bespoke track systems can be developed upon request.



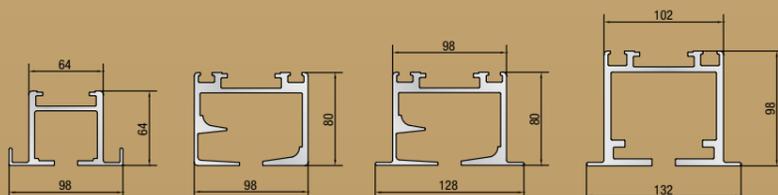
Track type MA



Track type MR-1 with ceiling support flange
Track type MR without ceiling support flange



Track type MR-S



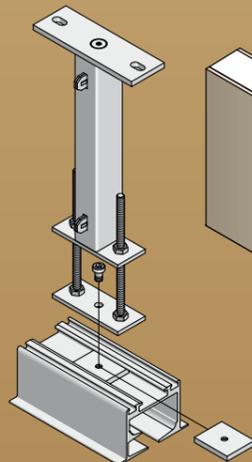
- All tracks are aluminium with precision bearing rollers
- Standard powder-coating colour is RAL 9010
- All other colours can be provided upon request

Track suspension

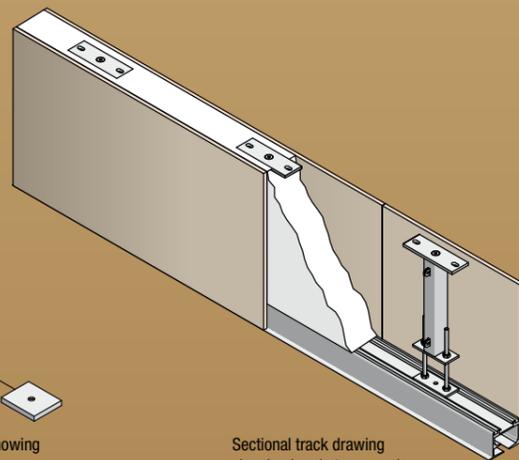
Tracks can be installed with or without a sound baffle between the ceiling and the building structure as required. The desired sound insulation is achieved by using soundproofing materials such as a compressed mineral wool slab, Sonorex or plasterboard.

The bracket suspension system ensures a precise track height and comprises:

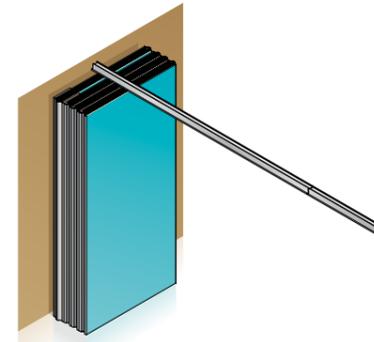
- Tubular steel sections 40 x 50 mm
- Galvanized steel assembly plates
- Adjustable threaded steel connection rods at the base
- Soundproofing materials, dependent on the desired sound insulation



Sectional track drawing showing bracket suspension

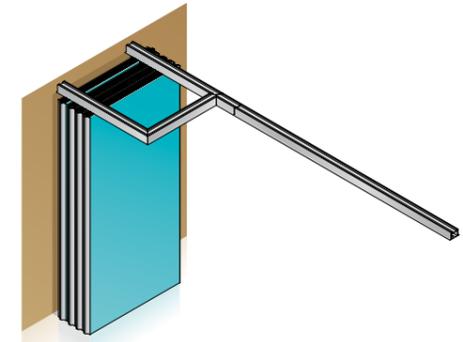


Sectional track drawing showing bracket suspension with acoustic baffle/barrier



Single suspension point, MA track

Each panel is suspended by one centrally fixed, quadruple surface, bearing roller. This enables panels to be easily moved to the parking position without the use of an auxiliary track.

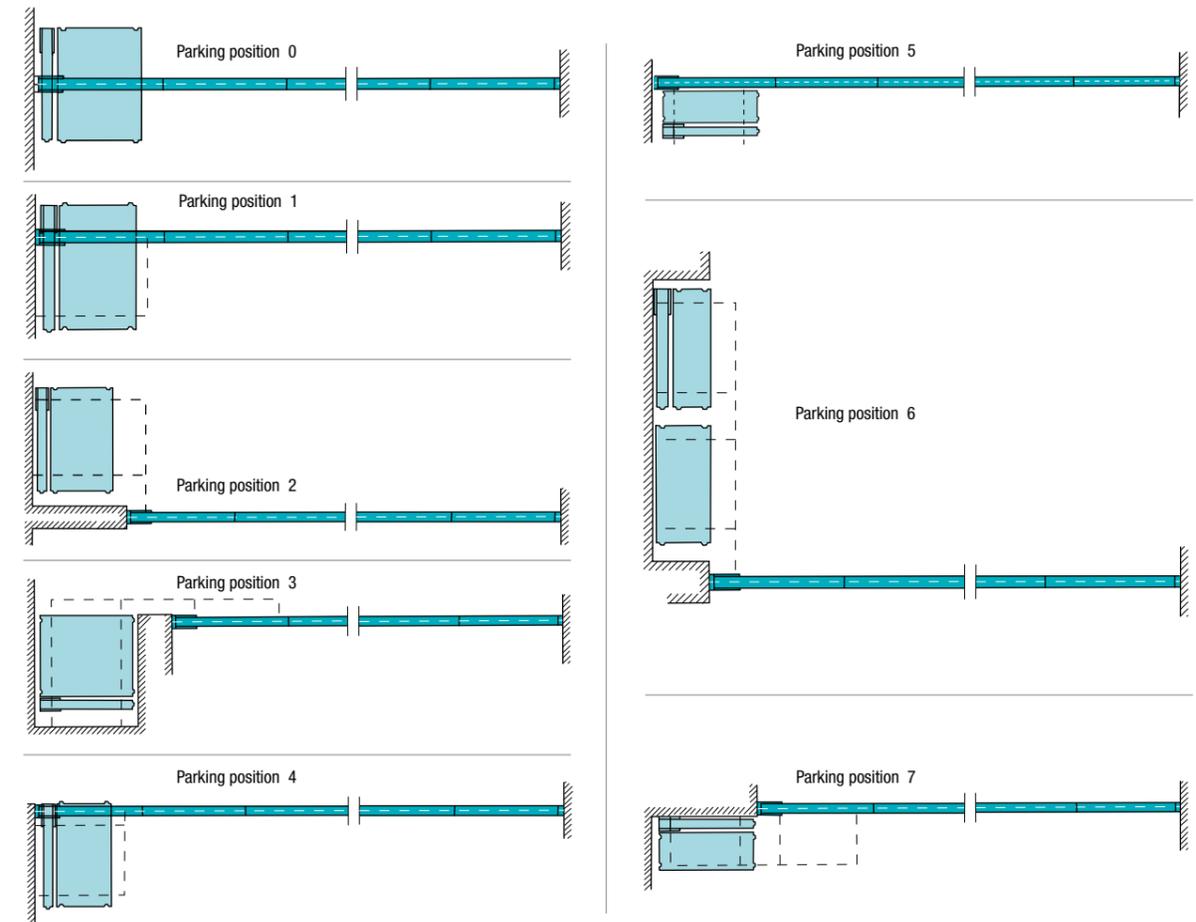


Double suspension point, MR/MR-1 and MR-S track

Each panel is suspended by two bearing rollers, which enables it to be moved in every required direction to the parking position using an auxiliary track.

Customised parking

The eight most common standard parking positions are shown below. The Multiwal track constructions allow a variety of possibilities to achieve practically all imaginable parking solutions.



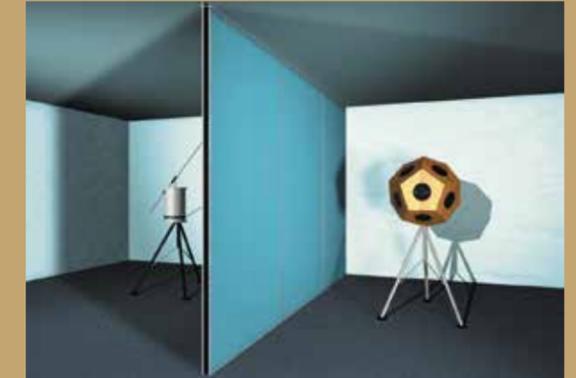
Safety first

Multiwal considers the safety of you, your staff and business data and equipment to be vitally important. That is why all of our moveable wall systems are also available in fire resistant and fire proof models.

Effective fire protection is essential to Multiwal. The effects of fire can be disastrous for your organisation. Multiwal is dedicated to providing effective fire safety systems that limit smoke and fire damage as much as possible for the safety of everyone in the building. That is why Multiwal has developed moveable walls with special fire-retardant finishes. Various fire-retardant types are possible.

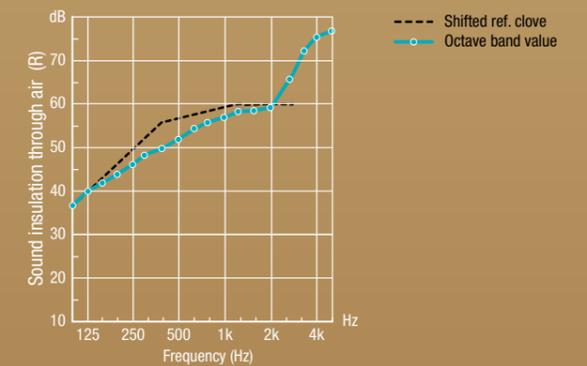
Safety is our top priority!

Fire resistance 30 and/or 60 minutes.



Silence to order

Efficient arrangement of available space involves not only a visual barrier but also a good sound insulation. Multiwal has carefully considered these requirements, developing special components, a technically flawless construction and first class quality control procedures. Our moveable walls have been tested by TNO Technical Physical Service at Delft University of Technology at ITA and Fraunhofer-Institut in Germany. Soundproofing up to 59 dB is possible. A level that is every bit as good as the most modern fixed walls.



Multiwal is fully certified

Permanent control

Multiwal has in-house design and production facilities in The Netherlands and Germany. Implementing advanced technologies is innate to Multiwal walls. Multiwal will remain committed to your project, even after the walls have been expertly installed and final inspection has been carried out. Periodical inspections by the Multiwal team of specialists will ensure that your dividing walls remain in perfect condition.

Quality guaranteed

To ensure our quality standard, Multiwal is certified according to quality management system DIN EN ISO 9001 : 2008 ISO.

Furthermore, the following certificates are available:

- Sound insulation according to DIN EN 10140-2 / 20140-3, laboratory values by international testing laboratories.
- Fire resistance according to EN 1364-1: 1999 and EN 1634-1: 2008
- TÜV-certification, durability test, construction test, ball-proof test according to DIN EN 1023-3: 2001-01, DIN 4103-1: 1994-07, DIN 18032-3: 1997-04, DIN EN 60335-1 (VDE 0700 Teil 1): 2007-02

FSC®-certified

Multiwal/Niche have acquired the international independent FSC® label. This ensures that the raw materials for our wood and paper products comes only from responsibly managed forests, with special attention paid to the people who depend on the forest.

All major environmental and development organisations recommend FSC®. This makes FSC® unique. Therefore Multiwal/Niche's choice of using only FSC® timber and paper certified products, helps contribute to the protection of forests worldwide.



Multi Design

The space in which we work defines the effectiveness of our thoughts and actions. Colour is a determining factor in the atmosphere and thus the mood of a space. That is why Multiwal supplies walls in a large variety of colours and finishes, so the mood of your working environment contributes to an optimal performance.

Another dimension is now added. Multi Design transforms the walls into actual works of art, with pictures and paintings of noted artists or with your own design. The wall is no longer just a partition to seal off a space; it becomes a design feature and focus of imagination.

Because Multiwal provides customised solutions, it is always better if our advisers become involved in your project as early as possible in the planning phase. In that way, we can jointly arrive at intelligent solutions for the most flexible arrangement of your space.

Multiwal products make it possible to work efficiently in every space in which flexibility and stylishness are combined. Whether it involves great heights, different levels in ceilings and floors or unusually-shaped spaces, the great flexibility of Multiwal moveable walls makes it possible to satisfy almost every need. Colours, sound insulation and customer-friendliness with the Multi Electric system are important factors.



Worldwide service

Multiwal is an internationally operating company focusing on moveable walls, with its main office in The Netherlands, production in The Netherlands and Germany and subsidiaries in France and the UK.

Multiwal designs, manufactures and installs moveable partitions that create space worldwide. Whether creating space in multi-functional centres, banks, schools, hotels, restaurants or offices, Multiwal sliding partitions are

extremely versatile. They offer creative freedom in every possible design.

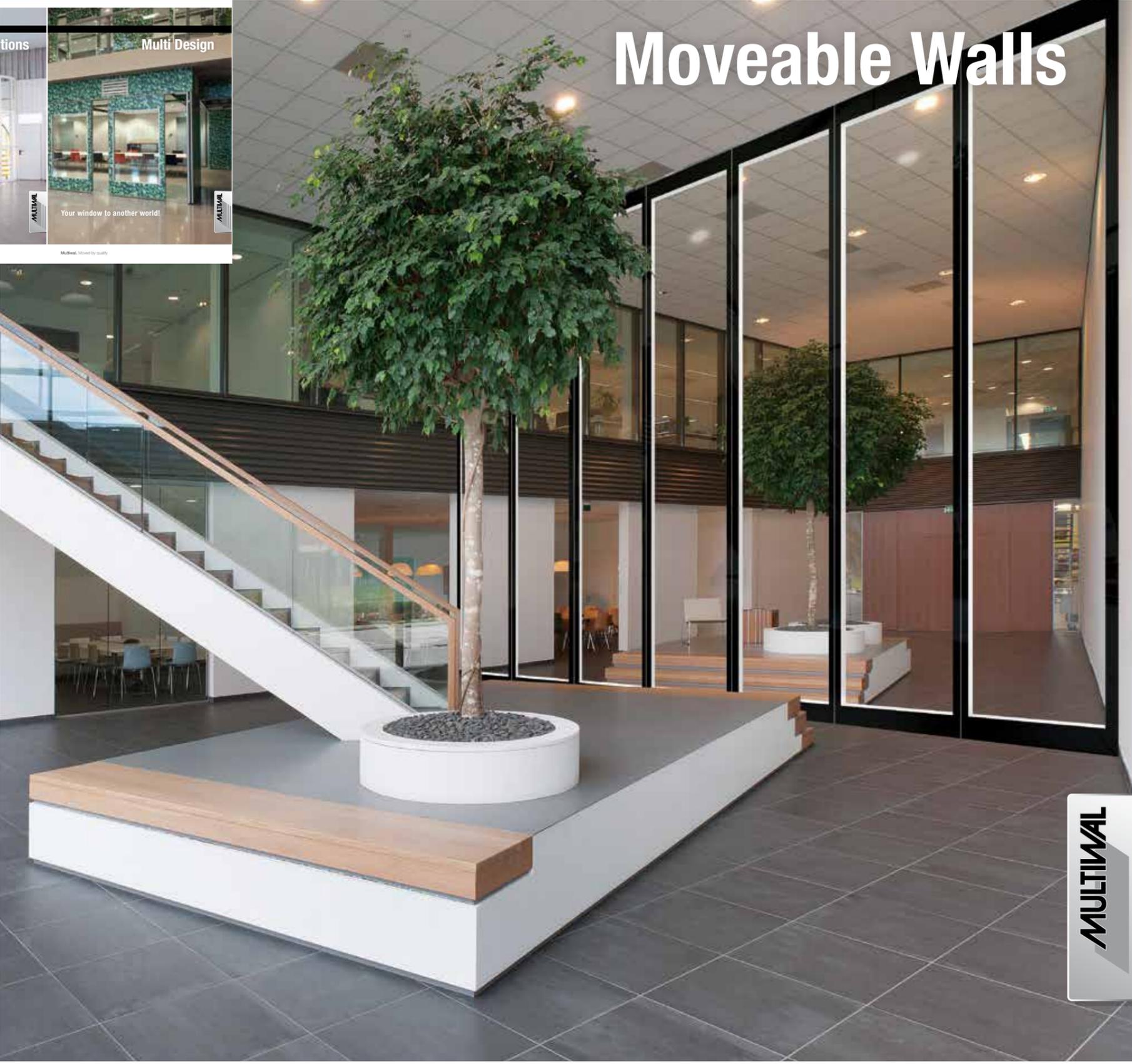
Service nearby

The best service is local service, close to the customer. That is why Multiwal has established operations worldwide to maintain strong relations with all our customers now and in the future.

The information in this brochure has been compiled with the utmost care. However, we reserve the right to change specifications or other information without further notice.



Moveable Walls



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