The Partition Wall







The **feco**-forum. Our imagination space.

3,500 m² of exhibition space

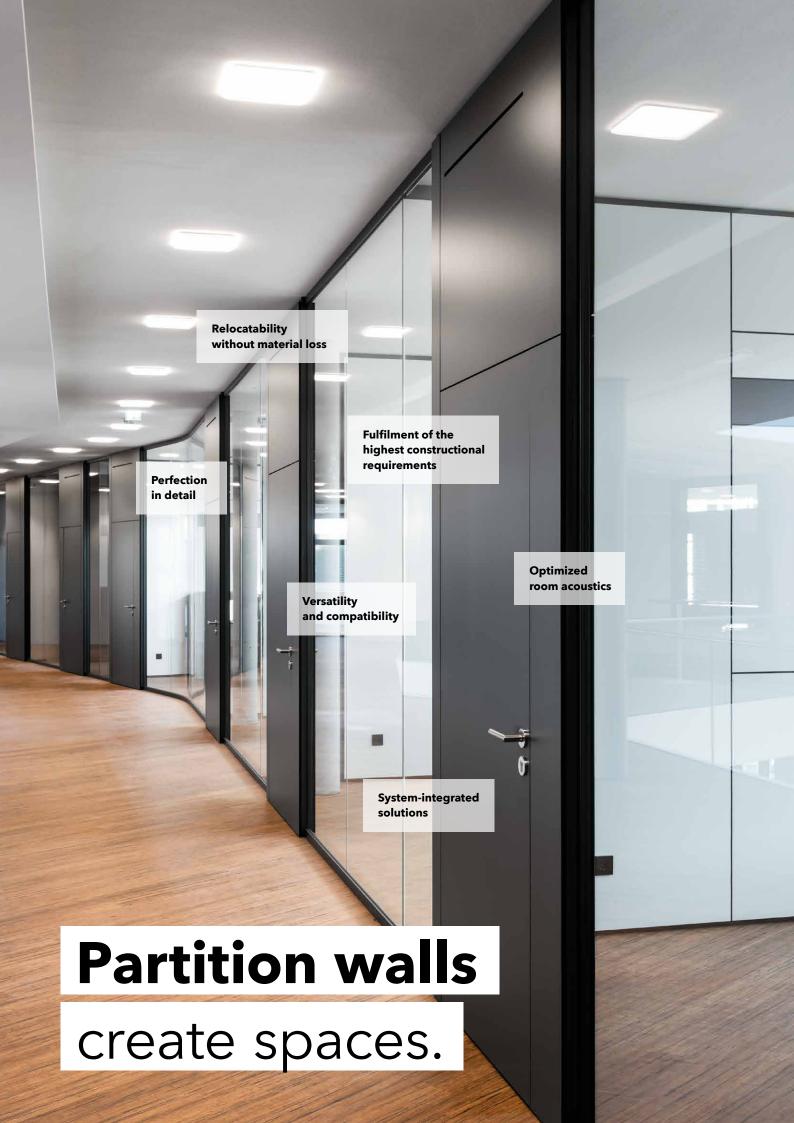
Even though the photographs on these pages might convey a first impression, they cannot replace a visit to our showroom. The architecture of the feco-forum fascinates with the spatial experiences of an exceptional exhibition building. In realistic office rooms we present the complete product range of the feco partition wall system. Future you can touch.







Experience our partition wall systems at feco-forum Karlsruhe – our lively marketplace for architects, planners, builders, investors and users looking for the right spatial solution.



The **feco** system. Visible perfection.



feco partition wall systems are as individual as your project.

System partition walls are lightweight, non-loadbearing, unitized and removable interior walls with closed and transparent surfaces made of wood, glass and metal. They consist of a metal substructure and two-sided cladding with intermediate insulation as well as glazings and doors. The wall elements are prefabricated building-specific at the factory and assembled on site in short, clean assembly processes.

feco system partition walls meet the highest construction-related requirements in terms of sound insulation, sound absorption, fire protection and statics.

Add to this, the wide-ranging design options. In addition to a wide variety of surfaces, the feco system offers a wide range of glazing options for every requirement and every taste.

The big advantage of the feco system partition walls is their relocatability.

In conjunction with an element system matched to the building grid, rooms can be subsequently adapted to requirements, walls installed and removed or doors exchanged for wall elements – if desired, even during ongoing business operations. The additional investment compared to drywall walls usually pays for itself with the first conversion measure.

The partition wall elements - whether solid wall, glazing or door units – all have a basic wall thickness of 105 mm. Door and glass frames are face-flush with the closed wall elements and separated by 6 mm shadow joints. The only exceptions to this wall thickness are the recessed-designed fecoplan glazings and the special design variants with wall thicknesses of 125 mm and 175 mm respectively for exceptional static and acoustic requirements.

All fastenings are concealed as standard. Screw connections or other point connections are not visible, neither in the closed wall elements nor in glass walls. Connections to the floor, wall and ceiling have recessed shadow joints. The ceiling connection has a standard telescopic design to accommodate construction tolerances and structural movements.

One special aspect of the feco partition wall system is the way in which the wall panels are connected to the substructure.

In the patented feco clamping system, wall panels are clipped into the system uprights using the fulllength, reverse-mounted steel retaining rails. This method provides more stability, more accurate joint alignment and increased sound insulation values compared to structures with only point fixture. The wall panels contribute to high static strength across their entire surface area, while the slim system uprights reduce the transmission of sound waves.

Wall heights of up to 5.000 mm, sound insulation values up to R_{wP} = 52 dB, and fire resistance ratings up to 90 minutes with a uniform wall thickness of 105 mm are possible, as proven by numerous test reports, test certificates and approvals.

Please contact us for more information on how we can individually meet your specific requirements.



Flexible

into the future.

feco**wand.**The solid wall.



Its versatility makes the partition wall a classic.

Melamine, laminate, veneer, textile or metal, standard or high sound insulation, with or without fire resistance – whatever version you select, the visual impression is perfect. The same applies to the acoustic quality, because even the basic version of fecowand achieves a sound insulation of $R_{\rm w,P}$ = 47 dB – naturally in fire resistance ratings up to EI90.

Only with the patented feco clip system are the wall panels invisibly clipped to the partition wall uprights by means of clip rails running along the entire length. The advantages as compared to a simple point fixture are:

Improved stability: The inserted full-length clip rails form a solid connection with the partition wall upright, thereby increasing the strength – as proven by tests according to DIN 4103.

More exact joints: At the same time, the partition wall panels are precisely fixed to prevent them moving sideways. This ensures longitudinal stability and, in particular, a precisely-fitting joint pattern.

Higher acoustic insulation: The full-length solid connections between the partition wall panels and the substructure result in excellent acoustic insulation.









As a certified company, we can offer FSC®- and PEFC--certified certified solid walls and wooden door panels manufactured in our own factory.

- Moveable modular partition wall as solid wall
- Wall thickness 105 mm, for special versions 125-175 mm
- Slender 6 mm shadow gap between the elements
- Concealed fixture of all wall panels
- Recessed connections on floor, wall and ceiling
- Integrated negative base, no skirting board required
- Smooth ceiling connection as standard
- Substructure from system steel profiles
- Insulation with bio-soluble mineral fibrous sheet
- Covering from wood-based material, usually three-layered quality chipboard (for EI90 plaster composite materials)
- Standard surface finished with direct melamine resin coating, optionally laminate, real wood veneer, metal, fibreglass fabric, textile or varnish
- High level of prefabrication ensures short installation times
- Exceptionally high acoustic insulation by means of patented feco clip system with full-height clip rails
- Sound insulation test certificates for solid wall $R_{_{\rm wP}}$ = 47 dB up to 52 dB



fecoorga.

The organized office wall.



Organizable - the wall becomes furniture

System-integrated shelf supports and horizontal aluminium orga-profiles allow the system wall to be organized either vertically or horizontally, while numerous flexible, tool-free elements such as shelves and whiteboards are available for wall organization purposes.

With writeable and pinnable wall surfaces, the fecoorga element wall becomes a tool for agile working methods such as Scrum, Kanban and Design Thinking.

Inner connection - wall shell and partition wall uprights

The feco system partition wall convinces with its high workmanship quality. Steel retaining strips applied to the rear of the 19-mm wall shells at the factory create a linear connection with the upright profiles and ensure 6-mm system joints as standard.





- System-integrated wall organization
- Horizontal structure with aluminium horizontal joints as suspension rails, flush-mounted in the wall panelling
- Vertical organization with slotted upright substructure, suspension slits with 32 mm spacing in the 6 mm modular joints
- Structural certification for wall loading
- Consistent wall thickness of 105 mm







fecophon.

Optimized room acoustics.



Peace and quiet for concentrated work

Due to the omission of suspended ceilings in sustainably-planned office, administration and school buildings with concrete core temperature control ceilings, the acoustically-effective wall surfaces of system partition walls have gained enormously in importance.

A wide variety of porous absorbers ensure peace and quiet in the office, with perforated, slotted and micro-perforated wall surfaces improving the room acoustics. The uniform wall thickness of 105 mm achieves a sound insulation of up to R_{wP} = 47 dB, whilst simultaneously absorbing sound on both sides.

By reducing the reverberation times, speech intelligibility is improved, facilitating communication and lessening the need to speak loudly. The improved acoustics have a positive effect on productivity.



Product features

The combination of glass sound shields to prevent sound propagation and acoustic absorbers allows open office concepts to be realized in which doors can be largely dispensed

fecophon wood

Wall-integrated absorbers fecophon wood are possible with one-colour decor or realwood veneer surfaces. The base panel of the horizontally- or vertically-slotted fecophon absorbers can be natural MDF or dyed black to match the surface.

fecophon metal

Sheet-steel absorbers fecophon metal with perforated surfaces can also be used as magnetic surfaces.

fecophon fabric

Fabric-covered metal absorbers fecophon fabric convey a homely atmosphere with calming surfaces.







fecoplan. The all glass system.



The all-glass construction

Only fixed to the floor and ceiling with slender aluminium profiles, the vertically frameless glass panes are reversibly glued with transparent tape.

50 mm connection profiles allow the acceptance of building tolerances and provide a stable connection. Corresponding element: The fecoplan system doorframe with integrated glass groove. Unique in the market due to its integrated aluminium technical panel for electrical installations and individual room signage. Innovation by feco.

Maximum transparency

The all-glass fecoplan partition wall system offers maximum transparency. The joints of the all-glass partition wall system are sealed with transparent glass adhesive tapes with passivated front edges as dry bonding, ensuring a uniform joint quality. In this way, the all-glass construction becomes a system partition wall solution that can be dismantled and reassembled.



- Central single-pane glazing as a post-free all-glass structure
- Aluminium retention profile with a width of only 50 mm
- Wall thickness of 35 mm
- Glass joints as translucent dry bonding
- Glass pane insertion of 18-25 mm according
- Acceptance of building tolerance and movements of up to +/- 15 mm
- Aluminium door frame tapered to 70 mm with integrated glass groove
- Surfaces optionally finished with anodised aluminium or powder-coated in RAL-colours
- Design available as fall-protective glazing
- Sound insulation test certificates for glass wall $R_{WP} = 35 \text{ dB up to } 42 \text{ dB}$





fecofix.

Double glazing flush with the wall.



Exemplary sound insulation

The flush double glazing fecofix with its discreet, slender 20 mm aluminium profiles provides the appropriate framework for offices. Not a single joint disturbs the transparency. Due to its large cavity, the double glazing achieves exemplary sound insulation results of up to R_{wP} = 50 dB.

Clean on arrival - factory cleaning of the inner pane surfaces

What is special about feco double glazing is that the panes are produced as closed glass elements in clean manufacturing conditions, transported to the construction site and assembled, with no need to clean the spaces between the panes after delivery since the inner pane surfaces are already clean. However, fecofix and fecostruct monoblock glass elements can still be opened for inspection purposes without having to be removed thanks to the carefully thought-out detail design.

- Double glazing flush with the wall
- Aluminium glass frame with a 20 mm width all-around
- Wall thickness 105 mm, flush with solid wall and door elements
- Undivided glass frame in the double glazing cavity (without a central joint)
- Prefabrication of the double-glazed elements ex works ensures the cleanliness of the internal glass surfaces
- Venetian blinds can be centrally integrated in the double glazing cavity
- Surfaces optionally finished with anodised aluminium or powder-coated in RAL-colour
- Use as fall-proof glazing possible
- Sound insulation test certificates for glass wall $R_{wP} = 39 \text{ dB up to } 49 \text{ dB}$
- Sound insulation test certificates for top glazing wall $R_{wP} = 39 \text{ dB up to } 50 \text{ dB}$





fecostruct.

Frameless flush structural glazing.

The frameless flush fecostruct structural glazing meets exclusive design requirements.

Transparency and flushness are an expression of current architecture. In fecostruct they find their structural counterpart. Especially impressive is the glueing of the frameless flush glazing onto the concealed aluminium frame, which is only 20 mm wide. The result is completely level glass walls, which are fascinating and yet so natural.

Clean on arrival - factory cleaning of the inner pane surfaces

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- Flush single-pane or double glazing
- Frameless structural glazing construction method
- Glueing of glass panes onto aluminium base frame
- Width of glued area only 20 mm all-around
- Wall thickness 105 mm, flush with solid wall and door elements
- Permanent, UV-resistant, surface-homogeneous glueing
- Glass frame without a central joint in the double-glazing cavity
- Prefabrication of the double-glazed elements ensures the cleanliness of internal glasss surfaces
- Venetian blinds can be centrally integrated in the double-glazing cavity
- Base frame from anodised aluminium, powder coated in RAL or veneered in natural oak, adhesive aluminium coloured or black
- Use as fall-proof glazing possible
- Sound insulation test certificates for glass wall $R_{wP} = 39 \text{ dB up to } 47 \text{ dB}$
- Sound insulation test certificates for top glazing wall $R_{wP} = 37 \text{ dB up to } 49 \text{ dB}$





feco**tür** doors. Please come in.



Variety of frames for all requirements

Numerous aluminium frame profiles have been developed for varying sound insulation and design requirements. Pressed solid aluminium brackets in the chambers of the aluminium frame profiles ensure permanently precise mitre corners.

Powder-coated steel frames with welded, ground mitre corners and height-adjustable frame shoes are also available. This robust solution is particularly appreciated in school construction. Common to all frames is the 3D-adjustable hinge support for the use of object door hinges.



Product features

fecotür wood

Wooden doors can be clad with visually-striking real wood veneer from feco's own factory.

fecotür H40 (bis $R_{w,P}$ = 37 dB), H70-, H85- and H105 H70, H85 and H105 wooden door elements have been successfully tested as sound insulation doors up to $R_{w,P}$ = 42 dB and more. The aluminium frame doors with wooden panelling can as flush door elements with concealed frames on the corridor side be used as portal doors with technology door side panels. The H105 wooden door elements, which are flush on both sides, can include concealed hinges.

Fire protection requirements can also be met with wooden doors. T30 RS fire doors have been successfully tested and approved for use in F30 glass walls.

feco**tür** glass

A wide variety of glass door solutions are available for the feco partition wall system.

Swing door elements all-glass door fecotür G10, the aluminium frame glass door elements fecotür A40, A70 and A85, as well as the structural glazing door elements fecotür S70 and S105 in combination with our numerous aluminium door frames with sound insulation values (laboratory) of $R_{\rm w,p}$ up to 42 dB.

Thus, we offer solutions for room-side or corridor-side or room and corridor flush doors, according to your design requirements. These are supplemented by the all-glass sliding door fecotür ST 10 B with a sound insulation value (laboratory) of $R_{\rm w,p}$ up to 27 dB.



fecotür wood H40



fecotür glass G10



fecotür wood H40



fecotür glass A40



fecotür wood H70



fecotür wood H40 with integrated top panel



fecotür glass G10 with transom and top glazing



fecotür wood H70 corridor flush with integrated top panel



fecotür glass sliding-door ST10B



fecotür wood H105 corridor/office flush with solid wall top and side panel



fecotür wood H40 room height



fecotür glass A40 room height



fecotür glass A70 room height



fecotür glass S70 room height



fecotür wood H70 room height

feco**tür** doors. Sound-insulation test values for door elements

and the combination possibilities of door leaves and door frames.

	Door frame	Alum. 35/50T70	Alum. 35/35	Steel 35/50	Alum. 35/50/15	Steel 35/65	Alum. 18/50	Alum. 18/0	Alum. 35/0-65
Door leaf	$R_{\scriptscriptstyle{\mathrm{w.P}}}$								
Wood H40		23 dB 32 dB 37 dB	23 dB 32 dB 37 dB	23 dB 32 dB 37 dB	-	-	-	-	-
Wood H70		37 dB	37 dB 40 dB	37 dB 40 dB	42 dB	42 dB 45 dB	37 dB 40 dB	37 dB 40 dB	-
Wood H85		-	-	-	-	-	42 dB	42 dB	-
Wood H105		-	-	-	-	-	-	-	37 dB 42 dB
Glass G10		23 dB 32 dB	23 dB 32 dB	23 dB 32 dB	-	-	23 dB 32 dB	23 dB 32 dB	-
Glass A40		32 dB 35 dB 37 dB	32 dB 35 dB 37 dB	32 dB 35 dB 37 dB	-	-	-	-	-
Glass A70		37 dB	37 dB 40 dB	37 dB 40 dB	42 dB	42 dB	37 dB 40 dB	37 dB 40 dB	-
Glass A85		-	-	-	-	-	42 dB	42 dB	-
Glass S70		37 dB	37 dB	37 dB	-	-	37 dB	37 dB	-
Glass S105		-	-	-	-	-	-	-	37 dB 42 dB

All the values are $R_{w,P}$ sound-insulation test values; bold = popular combinations $R_{w,P} = 32 \text{ dB} \triangleq \text{sound insulation class 1}$, $R_{w,P} = 37 \text{ dB} \triangleq \text{sound insulation class 2}$, $R_{w,P} = 42 \text{ dB} \triangleq \text{sound insulation class 3}$

feco product overview.

The feco partition wall system is constantly being further developed. Ask us about the latest innovations.

Product	Detail	Description	Wall thickness	Panel/glass/ door leaf thickness	Visible width vertical/ horizontal	Sound insulation test values R _{w,P}	Fire resistance
feco wand		Solid wall	105 mm	2 x 19 mm	-	47-52 dB	E130 E190
feco wand		Solid wall in special thickness	125 mm 175 mm	2 x 19 mm	-	47-57 dB	El30
feco orga		Wall organization	105 mm	2 x 19 mm	-	45-52 dB	E130 E190
feco phon	2000	Acoustic solid wall	105 mm	2 x 19 mm	-	27-49 dB	-
feco plan		All-glass construction	35 mm	10-18 mm	0/50 mm	35-42 dB	-
feco cent		Wall-centered glazing	105 mm	8 mm 28 mm	35/35 mm	32-37 dB 37-42 dB	G30 F30
feco fix		Wall-flush glazing	105 mm	1 x 5-8 mm 2 x 5-8 mm	20/20 mm	32-37 dB 39-49 dB	F30
feco struct		Face-flush glazing	105 mm	1 x 6-8 mm 2 x 6-8 mm	20/20 mm	32-37 dB 39-47 dB	-
feco tür Wood		Wooden doors	105 mm	40-105 mm	18-50 mm	23-42 dB	Т30
feco tür Glass		Glass doors	105 mm	10 mm 40-105 mm	18-50 mm	23-32 dB 32-42 dB	-

feco.de/en/projects/

Be inspired by feco projects. Discover the potential of partition systems, system-compatible door and acoustic elements.



Disy Informationssysteme GmbH



Microsoft Germany's headquarters, Munich



Deutsche Börse AG, Eschborn





FC-Campus, Karlsruhe





KVBW Kommunaler Versorgungsverband Baden-Württemberg, Karlsruhe



Frankfurt School of Finance & Management, Frankfurt



European Central Bank (ECB), Frankfurt

Surfaces

Wall panels and wooden doors



Pure white U-05 M1



Premium white U-07 M2



White aluminium M-23 M5



Decorative oak
D-EI M5



Beech veneer, natural F-BU F1



American walnut veneer F-NB F4



Traffic white U-06 M1



White grey U-10 M2



Graphite grey U-75 M4



Light grey U-15 M2



Anthracite grey U-80 M3



Maple veneer, natural F-AH F2



F6

Smoked oak veneer F-RE



Oak veneer, natural F-El F2

On request we can provide you with original surface samples.



Glass frames and door frames

G1



Aluminium natural E6/EV1



Pure white RAL 9010 G2



Grey aluminium RAL 9007 G2



Traffic white RAL 9016 G2



Graphite grey

G2

DB 703



White aluminium **RAL 9006**



G2

Anthracite grey RAL 7016 G2

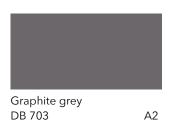
Connecting profiles



Anthracite grey RAL 7016 Α1







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