

More space, more possibilities.



Flexible combinations: movable partition walls.

A movable wall makes more of your space. It makes it possible for you to divide one room into several rooms as and when you need.

A 100 person conference room can become two rooms; one for 70 and the other for 30 persons. One large concert hall can become one middle-sized and two small rooms for simultaneous performances. A foyer can be turned into a dining room with a separate buffet room – and, within minutes, back into a foyer. All to your requirements, without complication and, above all, easy to operate.



There are no limits to either possibilities or functionality. A Nüsing Premium 100 movable wall combines the advantages of modern movable wall technology with the highest requirements of architecture and aesthetics, and of acoustics and sound reduction, fire and smoke protection. It also helps, for example, to make intelligent savings on building and energy costs. All this is assured.

Simply make more of the space you have available – with a Nüsing Premium 100 wall.



Our expertise: your satisfaction.

As one of the world's largest manufacturers in the movable partition wall market, Franz Nüsing GmbH & Co. KG provides exactly what its customers need: simple solutions.

Our high involvement with our customers shows not only in our uncompromised testing and certified product quality but also in the value we put on reliable, close and fully confident co-operation. At every step from the advice and planning stages right through to installation and service, we are your partner and are permanently pursuing a clear aim – your satisfaction.

We are helped towards this aim by our considerable experience – the Nüsing family business was founded in 1878 and has been manufacturing movable walls for over eighty years. This, together with the continuing and consistent development of our products result in our real and unique expertise, which has made us the market leaders in the fields of sound reduction, fire resistance and smoke resistance. We pass this expertise on to our customers in the form of a range of products which combine quality, functionality and practical value of the highest order.

Simple, fully practical solutions – Nüsing is your partner for made-to-measure partitioning concepts.

Open to your wishes.



Our finishes: your choicel.

Each of our movable wall solutions is made to suit not only your practical needs, but we also offer you a multitude of different possibilities to individually match your movable wall to the overall design concept – through our large choice of different finishes.

The movable wall can, for example, be finished the same as the rest of the walls in the room – which basically means that all types of wall finishes can be considered. Whether it is to be plastic laminate, wallpaper, foil, mirrors, textile wallcovering or carpet, you and your interior decorator simply make your choice and we apply it.



Or do you see your movable wall with a contrasting finish – for example, in the form of a natural wood veneer, which can be simply polished or also stained, brushed or grained. This together with mouldings, panelling, coffers, acoustic panelling or all types of grooves, routings and metal sheets make your movable wall a focus point.

An unlimited choice of finishes – anything you want!

Perfect in form and function.



Our offer: your taste.

At Nüsing, we have no preconceived, inflexible, standard design solutions – we have specialised in completing every project in accordance with the individual concepts and requirements of our customers.

Do you want specially made glazing cut-outs in the wall panels? Combined with blinds – between

the window panes? Do you need finishes incorporating your firm's logo? Do you have an exact idea of how your finished movable wall should look – and of how it fits into your scheme? Do you also need a space saving stacking system for your movable wall?



Simply talk to us about it. We will build you the movable partition wall you want – and in accordance with all the latest joinery codes of practice. Really effective space solutions only come about when experience, expertise and creativity are combined in the best way.

For frequently used rooms.



Our know-how: your sound insulation and acoustics.

Whether it is specially effective sound insulation or a targeted improvement in acoustics that is important – Nüsing is your partner in successful and proven solutions. You can rely on our expertise.

Sound insulation

We are the market leaders in high sound insulation values. Our movable partition panels are tested to the latest Sound Insulation Standard, DIN, BS, EN 20140-3, under which we achieve sound insulation values of R_w, P 39 – 59 dB. Together with our experienced sound insulation experts, we will develop a solution for you which complies with your concept of how the space will be used. We can show you proof of on-site values of $R'w$ 54 dB for our movable walls.



Acoustics

Drilled or slotted Nüsing acoustic boards can easily be included in your design and are available in many different versions. We have developed these Nüsing Acoustic Boards specifically for mounting on movable walls. The test results included in our special brochure about these products indicate the thicknesses of the various panels. Our qualified acoustic experts will be pleased to give you their personal, comprehensive advice on this subject.

Sound insulation and acoustics combined

Combining sound insulation with acoustic boards on our movable wall panels necessitates special construction methods, because the oscillation characteristics are completely changed. We have met this challenge by testing these combinations, with outstanding results of up to $R_w, P 57$ dB.

We take care that your rooms can be both seen – and heard.

Planned protection.



Our technology: your safety.

In Germany, for example, there is a building fire every three minutes. The severity of its effects depends to a great extent on what safety precautions have been taken in the building. Nüsing movable walls are available in special versions which make effective contributions to fire and smoke protection – and can thus save lives.

The greatest danger in building fires is smoke – if it can spread quickly, it can affect the breathing of people in the building, and it leads to reduced visibility which hinders the tasks of extinguishing the fire and saving people. With a special version of Nüsing movable wall providing smoke protection to DIN 18095, the spread of smoke can be reliably prevented.



In its fire protection version, the Nüsing movable wall, when closed, provides up to 60 minutes fire resistance – including smoke protection. This has, of course, been tested and approved in accordance with building regulations.

Ask us about the smoke and fire protection possibilities with Nüsing walls – you are assured of competent advice from us.

Everything comes easily to hand.



Our concept: your ease of use.

The most refined movable wall designs are of little use when their operation becomes annoying to their user. Nüsing movable walls are outstanding in their extremely simple and easy operation – so that, in any situation, their high functionality becomes obvious quickly and without complication.

This means that you only need to turn the crank handle about three times for the panel seals to reach full pressure – effortlessly and easily. And because every Nüsing Premium 100 wall is made-to-measure, each panel can always be moved and positioned completely smoothly.



You can also choose to have semi-automatic operation. By equipping the panels with electric motors, the top and bottom seals, and also the vertical telescopic seal, are made to extend and retract at the turn of a key. If the mains electricity supply fails, there is, of course, a manual emergency operation system.

Practical, easy and reliable – operating your Nüsing movable wall combines functionality with ease of use.

Always made to suit you.



Our service: your added value.

No one Nüsing wall is identical to any other, because each of our projects is made-to-measure to suit the relevant space, the structural and technical requirements and, naturally, the customers' wishes.

As a result, our individually designed walls start well before their actual production.

The start of any project is always free advice and planning which leads through the preliminary drawing stage to a concrete quotation calculation – this is so that you have view of the budget right from the start.



Finally, we take over complete technical and sales administration of the project – one of our 35 skilled advisors takes personal responsibility on your behalf for all details right up to the completed installation of your movable wall.

Even after installation we remain your partner. In addition to fully training your operators, we will, if you wish, make you an offer for ongoing maintenance of your Nüsing movable wall. This is how we support you in making full use of your movable wall from the beginning – and in the long term.

Nüsing 100 wall

Functional details.

Functional details: 100 mm

Panel thickness: 16 mm, Quality particle board E1/V20

Boards can be replaced individually

Special versions:

B1 boards = difficult to ignite

A2 boards = non-flammable

B1 finishes

B1 veneer = veneer with German test certificate
P-3083/6099MPA BS

Frame:

welded peripheral steel frame

Finish: as chosen by customer

Sound insulation to DIN EN 20140-3

Rw, P 39, 44, 46, 48, 51, 52, 55, 56, 57, 59 dB
(59 dB has panels 120 mm thick)

Inter-panel joints:

Aluminium tongue and groove profiles EG/EV 1, natural anodised, with magnetic strip 70 N/m

Pressure seals:

each panel has top and bottom aluminium pressure seals with special sealing rubbers and sound insulation

Seal pressure:

by double scissor jack mechanism up to 2000 N/m (adjustable)

Manual operation:

by removable crank handle, about 3 turns to apply maximum pressure

Semi-automatic operation: Panel movement manual, Seal movement electric

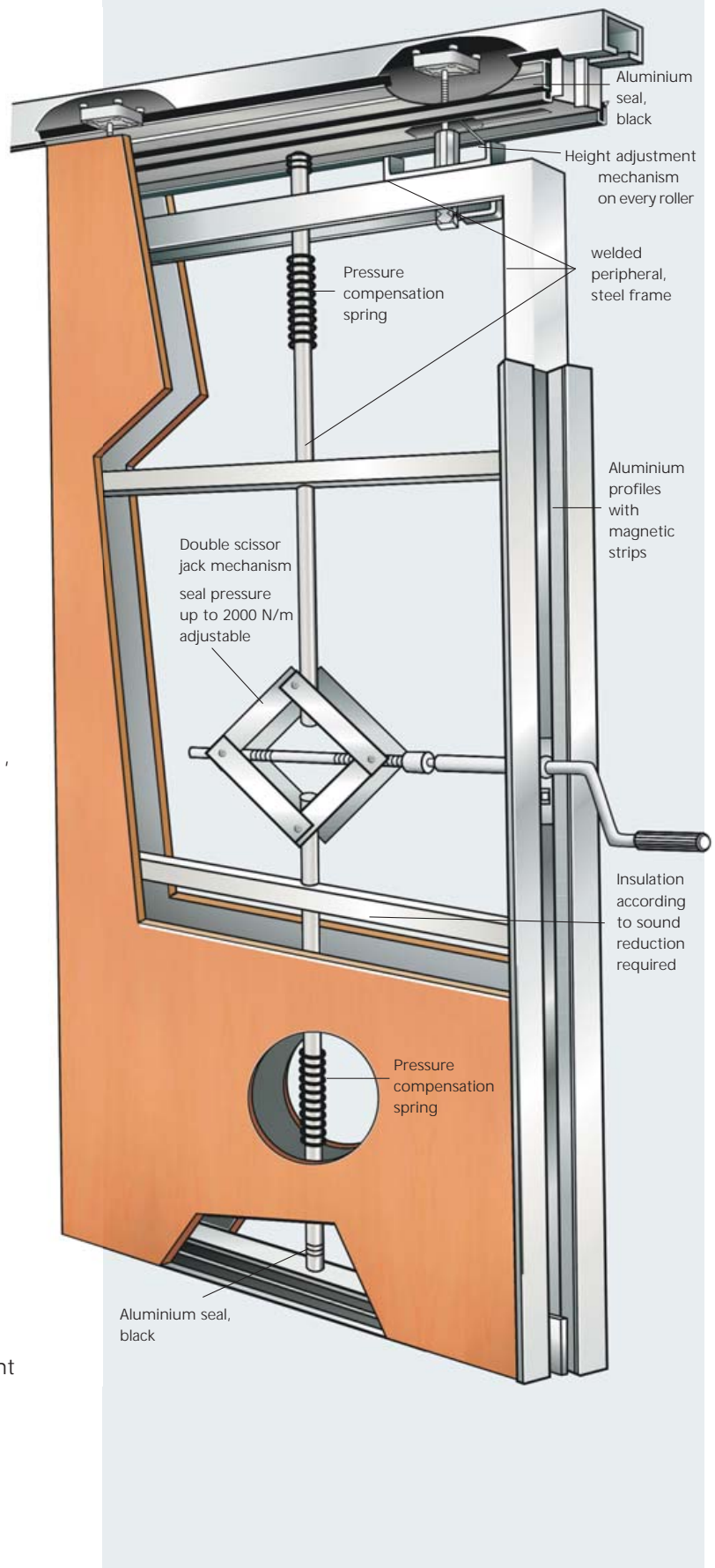
Fully automatic operation: Please enquire

Panel height adjustment:

Each roller is equipped with a self-locking height adjustment mechanism which can be operated at any time without dismantling the ceiling

Track:

Aluminium or steel, Powder coating and ceiling support angles available

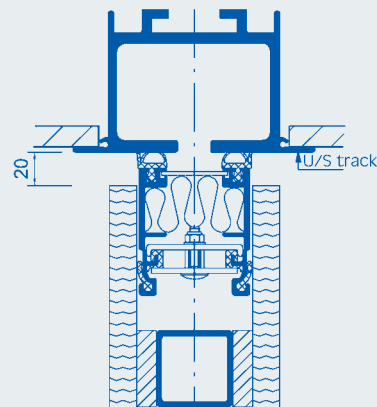


Peripheral joints

Good connections all round.

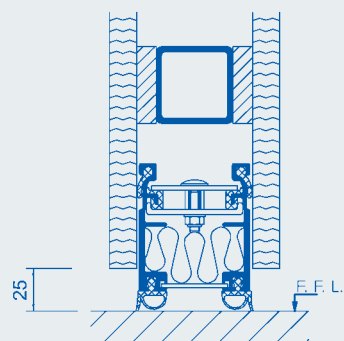
1) Top seal

Aluminium track with roller guides.
Clearance between track and top of panel is about 20 mm. The top seal exerts 2000 N pressure per running metre on the track to ensure the best possible stability and sound insulation.



2) Bottom seal

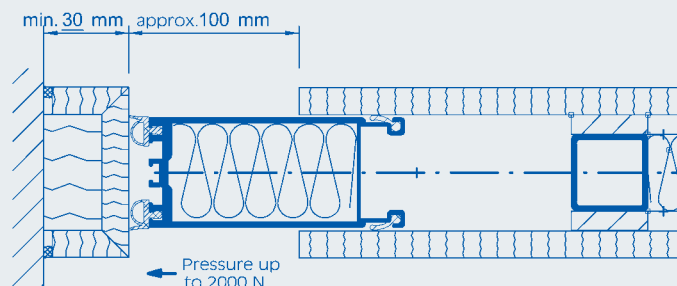
Clearance between bottom of panel and finished floor is about 25 mm. The bottom seal exerts 2000 N pressure per running metre on the floor to ensure the best possible stability and sound insulation.



3) Seals against structural walls

Telescope wall post with telescopic section extended

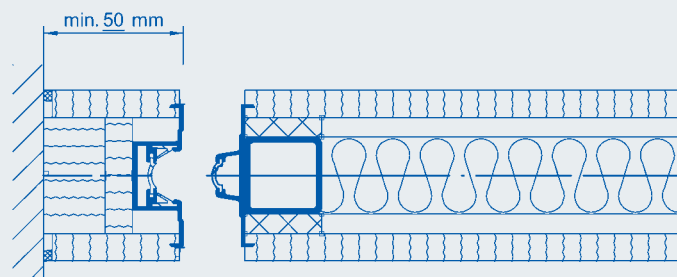
The internal aluminium section extends sideways from the panel to meet the telescope wall post. Both wall post and telescopic section are finished the same as the rest of the wall. As a special version, the telescopic section can seal direct against the structural wall.



Wall seal post with panel about to close

The wall seal post receives the nose profile of the first panel. It is finished the same as the rest of the wall. This post is fitted with an aluminium rear profile including a magnetic strip. The first panel is fitted with an aluminium nose profile, also with a magnetic strip, thus ensuring an excellent joint.

Special and recessed versions are available.



Panel types

One system, many possibilities.

We offer you a complete partition system including all types of panel. All the panels are the same width; or different widths if the customer wishes.

1.) Standard panel:

Panel with top and bottom seals, operation from rear edge of panel with manual crank handle.

2.) Telescopic panel:

One wall panel is made with a telescopic section to close off the wall. The panel has top and bottom seals as well as a full height, vertical telescopic section on one side. (See detail on Page 17). When retracted and stacked, this internal telescopic section is flush inside the panel. The telescopic section is finished the same as the rest of the wall. Extension and retraction of the telescopic section is done by means of a crank handle from the face of the panel.

3.) Window panel:

All panels can be fitted with an optional window cut-out. Please refer to our technical details for exact cut-out dimensions.

4.) Wicket door single wing:

The movable wicket door panel comprises a peripheral steel frame with two vertical jambs and top and bottom seals.

This stable construction means that no floor bolt is necessary.

The standard hinges and handles are in stainless steel. The door leaf has an adjustable bottom seal with automatic operation. The door leaf is bolted in the closed position when the panel is moved.



1.) Standard panel

2.) Telescopic panel

3.) Window panel

4.) Single leaf wicket door panel

5.) Wicket door panel

double wing:

The movable wicket door panels comprise a peripheral steel frame with two vertical jambs and top and bottom seals. As the two panels come together, a lock above the door leaves engages to fasten the panels together. This stable construction means that no floor bolt is necessary. The standard hinges and handles are in stainless steel. The door leaves have an adjustable bottom seal with automatic operation. The door leaves are automatically bolted closed when the panels are moved.

6.) Fixed door panel:

The panel is full room height and is fixed to a structural wall. The standard hinges and handles are in stainless steel. The door leaf has an adjustable bottom seal with automatic operation. The lock side jamb must be a doorjamb panel.

7.) Door jamb panel:

This panel has top and bottom seals and is fitted on one vertical edge with a jamb profile for the fixed door panel.

8.) Corner panel:

Corner panels are fitted with a corner post on one or both faces, either in mid face or at the end of the panel. These corner posts form either an end post for another movable wall or a change in direction for a straight section of wall. The panel and the corner post both have extendable top and bottom seals.



5.) Wicket door double wing



6.) Fixed door panel
7.) Door jamb panel



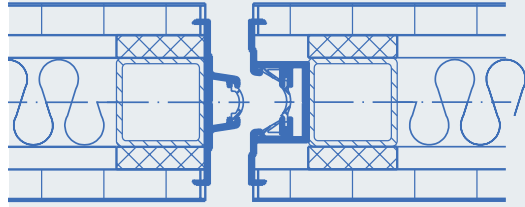
8.) Corner panel

Panel edges/inter panel joints

Panel edges

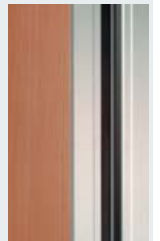
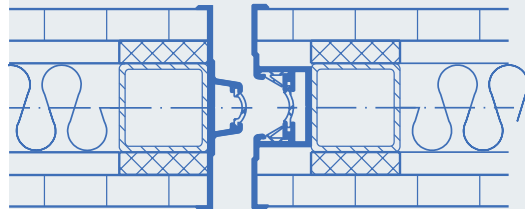
Type CP (Concealed Profile)

- Vertical panel edges veneered to match rest of panels; when wall is closed, no aluminium profiles visible
- With plastic finishes edging in thick ABS.
- Solid edges available
4mm vertical grooves between panels.



Type EP (Exposed Profile)

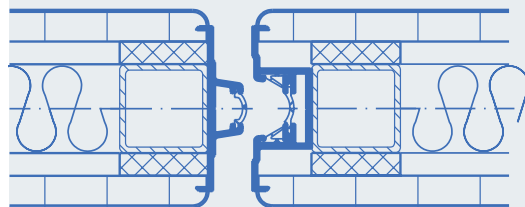
- Vertical panel edges protected by 8 mm aluminium returns



Type CP - Postforming

(possibility of use depends on finish material)

- Vertical panel edge rounded,
when wall closed, no aluminium profiles visible



Inter-panel joints

Aluminium profiles

EV 1 natural anodised to form inter-panel joints

Tongue and groove profiles

Guarantee that the panels are built up exactly plumb

Also available:

- Powder coating
- Anodising
- Paint finish

Panel height adjustment is carried out directly on the panel

Magnetic strips

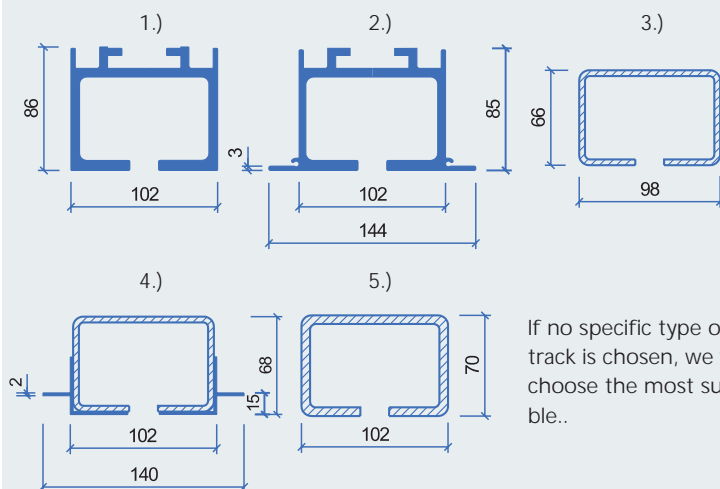
Additionally ensures full inter-panel joints

Tracks/suspension/ sound baffle/roller system

Tracks

- 1.) Aluminium RAL 9010 white powder coated.
102 x 86 mm
- 2.) Aluminium RAL 9010 white powder coated.
102 (144) x 86 mm
- 3.) Galvanised steel 98 x 66 mm
- 4.) Galvanised steel 98 (140) x 66 mm with raised
support angle for centre hung panels
- 5.) Stahl verzinkt, 102 x 70 mm

Tracks painted in other RAL colours
available.



If no specific type of
track is chosen, we will
choose the most suitable..

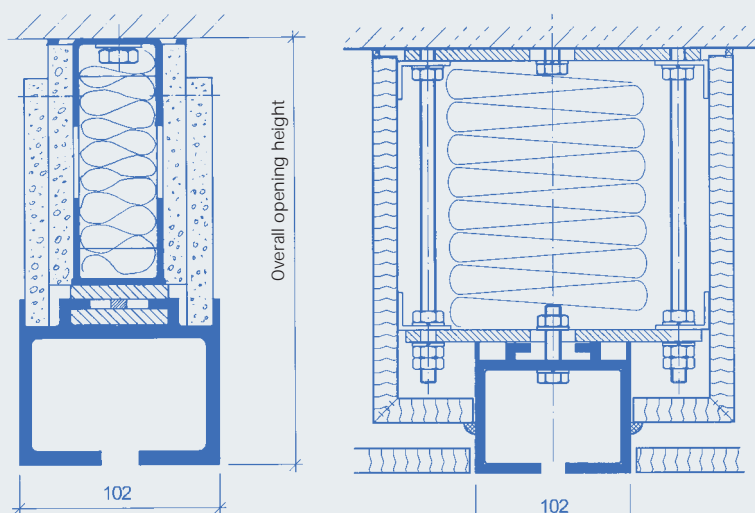
Suspension

1.) Suspension with welded steel construction

Panel height adjustment is carried out
directly on the panel.

2.) Suspension with threaded rods

Panel height adjustment is carried out either
directly on the panel or on the suspension.



1.) Welded suspension with
sound baffle

2.) Adjustable suspension with threaded
rods and sound baffle

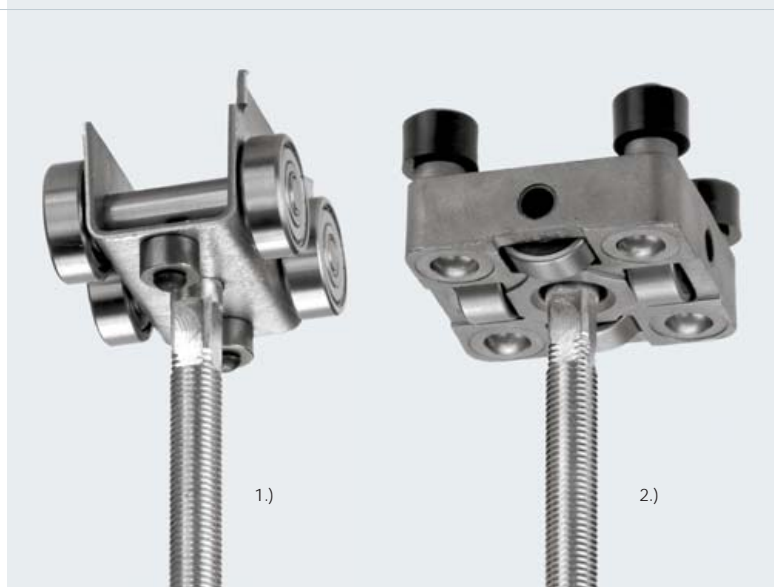
Sound baffle

Particle board or plasterboard with sound insulating
infill suitable for the required sound insulation.

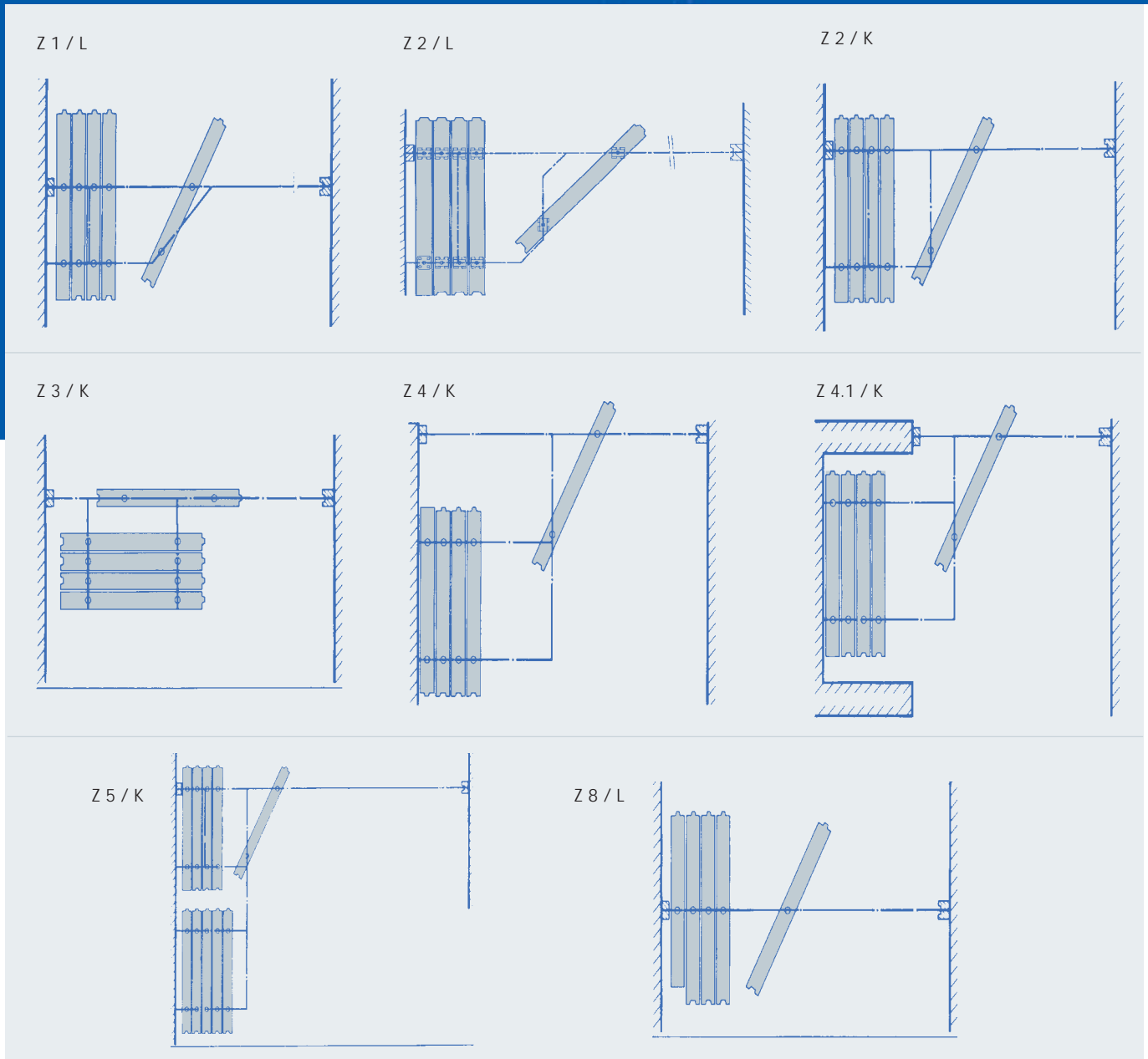
Roller system

Our top rollers, which are the result of continuous
development work, are almost wear free and are
outstanding for their high weight carrying capacity.
This means that ease of operation is pre-pro-
grammed and enables problem free movement
of the panels into their positions.

- 1.) The ball bearing guide roller trolley ensures
automatic movement of the panels through
135° track joints.
- 2.) Our ball bearing roller with 4 extra support
balls for 90° track joints prevents the panels
from dropping into gaps at the joints.



Panel stacking



The illustrations above only show a small selection of possible ways of stacking the panels. Many other stacking layouts can be chosen – always exactly complementing each particular building layout.

Even at planning stage we would be pleased to show you the almost limitless possibilities presented by our highly developed technology.

Our continuous development work on the various stacking systems has enabled us to bring to the market almost wear free special rollers - such as the

guide roller and the ball bearing roller with support balls. Panels can be suspended using either one or two rollers.

Track joints are welded together at our factory by us, delivered to site by us and installed by us. We can therefore guarantee that our highest precision and quality demands are fully met.

Assuredly well made.

Test certificates

Fire resistance/smoke resistance:

If you wish, we will send you a full copy of the test reports for the various versions of Nüsing walls.

TÜV test certificate:

For complete panels to DIN 310.00/3.79. with endurance test of 3500 operations including telescopic and wicket door panels and also production supervision test.

DIN-ISO 9001

UH-Certificate of compliance with German building regulations

Thermal conductivity P 10-152/89:

to $W/m\dot{C} k = 0.5 - 0.6$

Ball impact test:

Tested to DIN18032/3 with test report

Stability test to DIN 4103-1



Schalldämm-Maß nach DIN EN 20140-3

Antragsteller: FRANZ NÜSING GmbH + Co. KG, 48163 Münster

P-BA 264/2001
Bild 5

Prüfgegenstand
Zweischalige, bewegliche Trennwand in Holztafelbauart (Prüfobjekt S 9066-03), Typ NW 100. Die Trennwand bestand aus 4 Einzelelementen, je 1022 mm x 2860 mm, eines davon als Teleskopelement ausgeführt. Die Trennwand war in funktionsfähigem Zustand.

Aufbau der Elemente:
16 mm Beplankung aus Holzspanplatte
5 mm Schwermatte (aufgeklammert), flächenbezogene Masse: 12 kg/m²
52 mm Zwischenraum, darin 4 Lagen 13/10 mm Mineralfaserplatten (Produktbezeichnung: G + H Iover, Typ 731, 13/10, Raumgewicht nach Herstellerangabe ca. 70 kg/m³), lose eingelegt
5 mm Schwermatte (aufgeklammert), flächenbezogene Masse: 12 kg/m²
16 mm Beplankung aus Holzspanplatte.

Trennwanddicke: 100 mm
Flächenbezogene Masse: 54 kg/m²

Weitere Beschreibungen siehe Seite 2 des Prüfberichtes sowie Bilder 1 bis 4 und Tabelle 2.

Prüffläche: 12,5 m²
Prüfräume: Volumen: V_S = 68,6 m³, V_R = 76,4 m³
Labor: leer
Prüfbedingungen: Lufttemperatur: 20°C, rel. Feuchte: 43 %
Prüfdatum: 04. Dez. 2001

Bewertetes Schalldämm-Maß und Spektrum-Anpassungswerte
 $R_w (C; C_{tr}; C_{tr, 100-5000}; C_{tr, 100-5000}) = 57 (-2; -8; -1; -8) \text{ dB}$

Die Prüfung wurde in einem Prüflaboratorium des IBP durchgeführt, das nach DIN EN 45001 durch das DAP mit der Nr. DAP-PL-2135-17 akkreditiert ist.
Stuttgart, den 11. Dezember 2001
Prüfstellenleiter: *S. V. D. Leuch*

ZERTIFIKAT
Der DQS GmbH
Deutsche Gesellschaft zur Zertifizierung von Managementsystemen

beschreibt, bescheinigt, dass das Unternehmen
Franz Nüsing GmbH & Co. KG
mobile Trennwandtechnik
Barkstraße 5
48163 Münster
für den Geltungsbereich
Planung, Konstruktion, Produktion, Montage
und Wartung von mobilen Trennwänden
sowie Handel mit mobilen Trennwänden
ein
Qualitätsmanagementsystem
eingeführt hat und anwendet.

Durch ein Audit, dokumentiert in einem Bericht, wurde der Nachweis erbracht, dass dieses Qualitätsmanagementsystem die Forderungen der folgenden Norm erfüllt:
DIN EN ISO 9001 : 2000
Ausgabe: Dezember 2000

Dieses Zertifikat ist gültig bis: 2008-09-22
Zertifikat-Registrier-Nr.: 003863 04
Frankfurt am Main, Berlin: 2003-09-23

P. H. S. (Dr.-Ing. H. Hesse) *W. G. H.* (Dr.-Ing. S. Hesse)

IBP Institut Bauphysik

Z2/K

Z3/K

TD 02.06 4.000
Fo 01.01.0100

The Nüsing product range offers you many possibilities:



Nüsing Premium 100 wall

- a movable wall with individual panels
- sound insulation up to R_w, P 59dB
- acoustic, smoke protection and fire protection versions available
- also available as Nüsing Eco wall



Nüsing Visioline Glass wall

- glass movable wall with individual panels
- many different variations in décor (foil, paint, screen printing etc.)
- aluminium top and bottom profiles



Nüsing Faltina-plan

- solid double skin construction
- made to measure
- flat surface when closed
- sound insulation up to R_w, P 34 dB



Nüsing Flexi 60 folding wall

- individual panels joined together by hinges
- access door standard
- glazed panels available
- sound insulation up to R_w, P 39 dB

We reserve the right to make technical changes in line with our policy of continuous product improvement.



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Nüsing Premium 100 Wall

for the flexible use of space.

Nüsing – movable wall technology