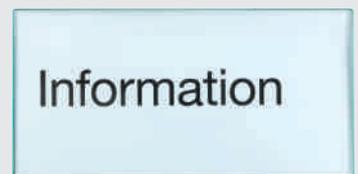
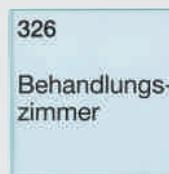
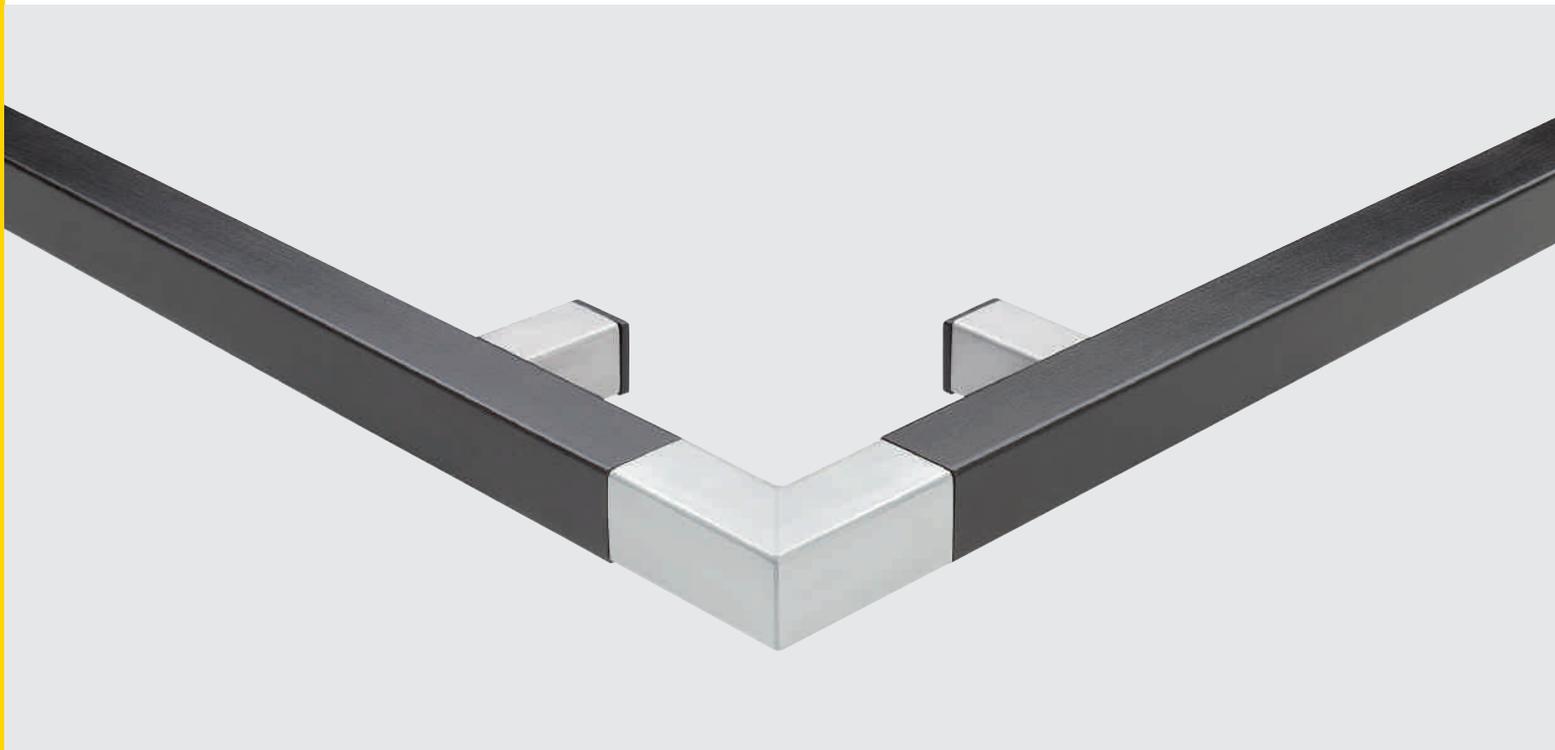


# Handrails Signage Systems Wall Protection

Innovative System Solutions  
for Architecture



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# ENTRO Handrail Systems Overview

## Polyamide

### SYSTEM COLOUR

colour handrails can be optimally adapted to the building circumstances. A large choice of colours provides numerous design options. The polyamide material has a pleasantly warm surface and is particularly easy to clean.



System colour / pure white  
page 14

## Solid Timber

### SYSTEM LIGNUM

Made from solid timber, the lignum handrail system has a convincingly timeless, clear design. With lignum protect, a handrail system with integrated collision protection is available.



System lignum / Wenge stained beech  
page 24



System lignum protect / Beech  
page 28



System lignum multiplex / Beech  
page 32

### POLYAMIDE COLOURS

buttercup yellow (13) / orange (24) / burgundy (30) / ruby red (33)  
steel blue (50) / ultramarine blue (53) / apple green (74) / meadow green (73)

signal white (98) / pure white (99) / light grey (97) / stone grey (95)  
anthracite grey (92) / jet black (90)



### TIMBER SPECIES

Beech multiplex / Birch multiplex  
Beech / Wenge stained beech / European maple / Oak /  
Steamed bamboo



---

**SERVICE AND  
MADE-TO-MEASURE**

ENTRO supplies precise handrail systems, which are individually made to your specifications. In this way, the ENTRO systems can be installed directly on site, without additional adjustment work.

**ORDER DETAILS**

The ENTRO handrails are made to the relevant standards, on the basis of the measurement, system, material and support details provided.

---

## Stainless Steel

**SYSTEM 100**

A handrail system, which unites functionality and design. The handrails can be combined with matching hardware and sanitary products for consistent, continuous design.



System 100 / Beech, stained black  
page 34



System 100 / Beech, stained black  
page 34

**SYSTEM CIRCUM**

Made from high-quality stainless steel, with its coordinated system elements, circum offers numerous design options. Stainless steel is hygienic. It is easy to clean. It is also particularly robust and shockproof.



System circum / Stainless steel  
page 40

---

**TIMBER SPECIES**

Beech / Wenge stained beech / Beech, stained black

---

**STAINLESS STEEL**

Stainless steel 1.4301



ENTRO provides modular solutions for handrails, wall protection and signage. Its many years of experience make ENTRO a reliable, strong partner. ENTRO products have convincingly high functionality, certified quality and clear design. The coordinated shapes and forms of the systems, diverse materials and differentiated designs enable unique design options. ENTRO products can be combined with all HEWI systems, provide the opportunity for consistent and continuous coordination, from the door to the sanitary area.

# Services Covering Every Aspect of Handrail Systems

## ENTRO Expertise

ENTRO offers modular systems, which can be perfectly matched with each other. The modular principle enables diverse possible combinations. This means that not only solutions can be implemented, which are precisely tailored to individual requirements, but also numerous design options are possible. ENTRO products' use of high-quality materials, durable quality and high degree of functionality are convincing.



### Consulting

Our experience is our strength. We will be pleased to advise you. We explain to you the possibilities of the ENTRO systems, which are a suitable solution for your project. Our advice is based on the current standards and regulations.



### Planning & Design Made-to-Measure

All relevant regulations concerning the area of use are taken into account in the planning & design. ENTRO's technicians design your handrail system to your measurements.

We will be pleased to provide you with tender specifications.

ENTRO handrails are made-to-measure. In this way, we can provide solutions precisely matched to the circumstances on site.



### Purchasing Aid

We will be pleased to provide product samples and preprinted measurement sheets. We help you to select and combine handrails and supports, so that you can be certain that you get the optimum solution with regard to function and design. With us you can plan and order for a specific project.

**STRONG PARTNER**

ENTRO is a subsidiary of HEWI. ENTRO products can be combined with all HEWI systems and therefore enable consistent, continuous fixtures and fittings, from the door through to the sanitary area.

[www.hewi.com](http://www.hewi.com)



## Delivery

ENTRO supplies the precise-fitting handrails as a kit, so that they can be installed directly, without additional adjustment work.

We deliver to your requirements – even directly to the construction site. Part-deliveries in line with the completion of construction phases are naturally also possible.



## Installation Service

We can provide you with a complete package – from the measurement, the engineering preparation through to production, delivery and installation.



## Sustainability

The timber handrails are made from raw materials, which solely come from sustainable forestry. The timber products are certified to PEFC. Acting in an ecologically responsible way is part of ENTRO's self-image.

# Modular Solutions for Handrail Systems

## The ENTRO Principle

With ENTRO, precise fitting solutions are possible. Different materials and a large selection of combinable supports and endpieces enable handrails, which are perfectly matched to individual requirements. The modular system enables diverse functional and design options.

### 1 Material Selection

#### POLYAMIDE

System colour made from polyamide offers a large choice of colours. The surface is particularly pleasant to grip.



Signal white



Orange



Apple green

The material polyamide is also available in HEWI neutral and base colours.

#### TIMBER

Diverse timber species are available to choose from. The surfaces are extremely resistant, as they are multi-sanded and sealed with UV-cured varnish.



Beech



Maple



Oak



Bamboo

Further types of timber on request

#### STAINLESS STEEL

The outstanding features of the stainless steel handrails of the System circum are their robustness and that they are therefore especially suitable for use in public areas.



Stainless steel

## 2 Support Options

### CURVED AND ANGULAR SUPPORTS

The material and design options enable the fixing to be perfectly matched to the circumstances on site.



Curved support / W20



Curved support / W3



Curved support / W22



Angle support / W6



Curved support / W23



Angle support / W6 oval

## 3 Handrail Ends

### VARIANTS

You can choose between straight endpieces or handrail ends, which end facing the wall (optionally as a 90° bend or as a mitred endpiece).



90° curved end / stainless steel



90° curved end / timber



90° curved end / polyamide

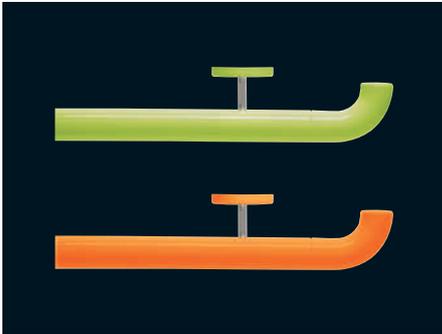


90° curved end / stainless steel with mitre cut

# Standardised Planning Aspects

## DIN 18040

Demographic change and the associated increasing ageing of society are setting new requirements for architectural design. The importance of the demographic change in society reflects the DIN 18040. With its objective of creating an accessible environment, apart from its original intention, to promote integration of the disabled in society, the standard is increasingly taking the needs of the elderly into account. The universal usability of buildings for all should become a basic, inherent standard.



### Contrast

Handrails reduce the risk of falling and therefore increase safety. Handrails are also easy to use guidance systems for people with limited sight. This effect can be strengthened by design that is high in contrast. If objects are displayed in contrast to their surroundings, they can be perceived even by persons with reduced sight. Handrails made from coloured polyamide, such as those in System color, enable high-contrast design, which facilitates orientation.



### Orientate

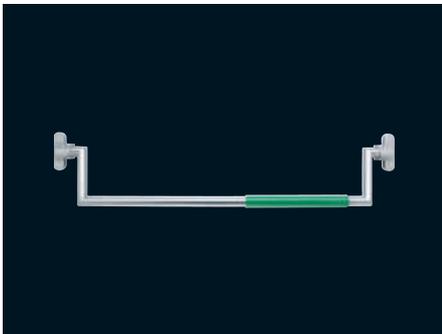
Information signs integrated into handrails with tactile indications and information can be felt by people with limited vision. The signs should contain both Braille and profiled lettering.



### Communicating Information

Information signs with Braille and profiled lettering make an important contribution to enabling orientation within the building for people with sensory limitations too and therefore ensure their independence.

For example, appropriately designed signs with tactile information on the doors of meeting rooms, hotel rooms or sanitary rooms can be easily felt by touching them with the fingertips.



## Two Senses Principle

Highly contrasting colour design can be used to communicate information visually. For example, the panic bar made of polished stainless steel has a gripping area made of polyamide in a clearly different colour. The information is communicated visually and tactually and therefore fulfils the „two senses principle“ which is requested in the DIN 18040. This in turn visualises clear handling and enables intuitive use.



## U Shape

An easy to grip U shape of the door handle prevents injuries. With door handles, the force is transferred as a linear hand or arm movement. Compared to rotary knobs, curved door handles require less force, fine motor functions (easy to grip) and movement coordination (simple movement processes) to open or close the door.



## Opening and Closing

A height of 85 cm is recommended so that wheelchair users or children can open and close heavy doors, for example, entrance or compartment doors. This makes pressing the door handle uncomfortable for tall people and walking frame users. A suitable solution is lever handles. These enable accessible, easy use at variable gripping height. Lever handles are particularly suitable for heavy doors, as only a small force is required to open and close them

# Standardised Planning & Design Aspects

## Tested Quality

The requirements of the respective standard (DIN 18040 and DIN 18065) should be taken into account in the planning of stairs and their handrails or balustrades. They must conform to the regulations of the respective state or national building code. The modularity of the handrail systems enables standardised solutions. ENTRO handrails provide tested quality and therefore safety. For example, they are certified by the materials testing agency of North-Rhine Westphalia.



**DIN**  
18040

### Handrails on Stairs

Handrails (balustrades) should be available on both sides of flights of stairs. The inner handrail must not be interrupted at the stairwell or at intermediate landings. The handrails must be installed at a height of 85 to 90 cm and extend 30 cm horizontally beyond the start and end of the stairs. The risk of injury is reduced by positioning the holders on the underside of the handrail and by a rounded end facing the wall.



**DIN**  
13411

### Safety in the Health Sector

For use in hospitals, for clinics and care facilities, ENTRO has handrails that conform to the special requirements of DIN 13411. Handrails enable a secure grip. A profile cross-section of 38–45 mm is recommended for optimum grippability. Handrails, which end with a 90° bend or closed facing the wall, minimise the risk of injuries. Such shaped endpieces prevent sleeves from catching as people pass and therefore increase safety. The clear distance from the handrail to the wall should be at least 40 mm.



**MPA NRW**  
Materialprüfungsamt Nordrhein-Westfalen

### Tested Loading Capacity

A particular feature of ENTRO handrails is their high loading capacity. They fulfil the loading requirements of DIN 13411 (point load 1 kN). For example, the polyamide handrails of System colour are reinforced with a corrosion-protected, zinc-plated steel core, in order to increase stability. The load test has been certified by the material testing agency (MPA) of North-Rhine Westphalia.



## Fire Safety

DIN 4102 classifies the fire performance of building materials and components and explains how the structural fire protection defined in the respective building codes is to be realised. The ENTRO handrail systems colour, lignum and System 100 each fulfil the requirements of building material class B2 – they are normally flammable. The ENTRO handrail system circum conforms to the requirements of building material class A2 – it is not flammable.



## Resistance

ENTRO timber handrails are sealed with varnish and are therefore extremely resistant. Especially in health facilities, surfaces must be resistant to the usual cleaning agents, cleaning solutions and disinfectants. The varnishing of the surface makes ENTRO timber handrails resistant to cleaning agents and disinfectant. The varnish used is UV-cured and solvent-free. The varnish also fulfils the exposure criteria of group 1B of DIN 68861.

# Handrail Systems Made from Polyamide Tempered Surfaces for the Public Sector

High-gloss surfaces characterise the ENTRO colour handrails made from polyamide. The System colour handrails have a pore-free surface and are therefore particularly hygienic and easy to clean. Polyamide is extremely robust – the handrails are impact-resistant. A corrosion-protected, zinc-coated steel core reinforces the handrail inside and therefore increases stability. ENTRO handrails made from polyamide are therefore particularly suitable for use in public areas. Polyamide has a pleasant temperature when touched and contributes to the sense of well-being.

#### SYSTEM COLOUR

The colour handrail system is made from coloured polyamide. The robust handrail is not only suitable for use in highly-frequented public areas but also in the private sector. The use of high-grade materials and excellent workmanship enable durable quality.

Ø 40 mm

Ø 33 mm



System colour / Support W22



System colour / Support G11



System colour / Straight endpiece / Angle support W11

## Material and Colour

System colour is made from seamless, through-dyed and abrasion-proof polyamide tubes. An appropriate colour selection enables coloured handrails to be used as guide and orientation systems in buildings. For example, if each storey is assigned a specific colour. Handrails are perceivable guide systems, especially for people with restricted vision. In order to increase this effect, the handrails should clearly stand out from the background by using highly contrasting colours. System colour is available in selected HEWI colours and provides diverse design options.



buttercup yellow (13)



orange (24)



burgundy (30)



ruby red (33)



steel blue (50)



ultramarine blue (53)



apple green (74)



meadow green (73)



signal white (98)



pure white (99)



light grey (97)



stone grey (95)



anthracite grey (92)

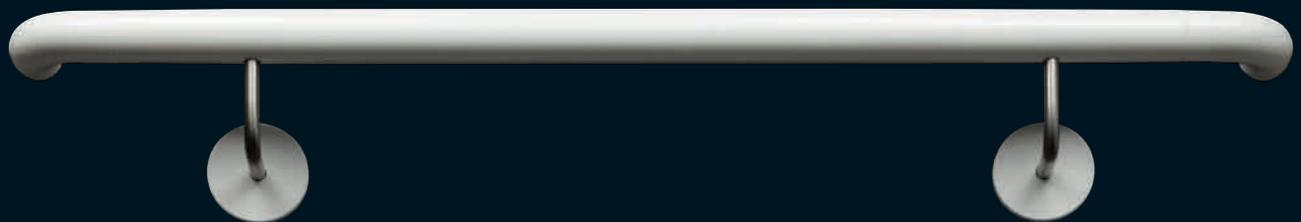


jet black (90)



# System colour Surfaces for the Public Sector

The modular product range provides intelligent system solutions, which enable functional, timeless design. The modular principle opens up diverse possible combinations. This in turn enables solutions to be realised, which are precisely matched to individual requirements. The diameter of the round tubular design of System colour is optimally matched to the hand and can therefore be securely gripped. The pleasant warm polyamide surface increases gripping comfort. The pore-free surface is easy to clean and is particularly hygienic.

**COLOUR HANDRAIL**

Pure white polyamide / 90° bend made from polyamide / Support W22

**DIAMETER**

Ø 40 mm / Ø 33 mm

**MATERIAL AND SURFACES**

System colour is made from through-dyed, seamless and abrasion-proof polyamide. The handrails are reinforced with a corrosion-proof steel core.

- Polyamide / 13 (buttercup yellow)
- Polyamide / 24 (orange)
- Polyamide / 30 (burgundy)
- Polyamide / 33 (ruby red)
- Polyamide / 50 (steel blue)
- Polyamide / 53 (ultramarine blue)
- Polyamide / 74 (apple green)
- Polyamide / 73 (meadow green)
- Polyamide / 98 (signal white)
- Polyamide / 99 (pure white)
- Polyamide / 97 (light grey)
- Polyamide / 95 (stone grey)
- Polyamide / 92 (anthracite grey)
- Polyamide / 90 (jet black)
- Beech
- Wenge stained beech
- European maple
- Oak

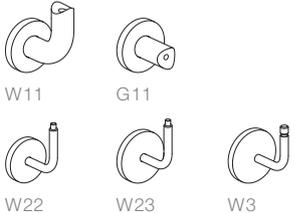
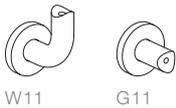
**APPLICATION AREA**

System colour is suitable for use indoors, not only in highly frequented public buildings but also in the private sector.

**STANDARDS**

DIN 18040  
 DIN 13411  
 Tested by MPA NRW  
 DIN 4102 normally flammable (building material class B2)  
 DIN 18065  
 Timber variant:  
 DIN 68861 Part 1 B

**PRODUCT RANGE**

<p><b>STRAIGHT ENDPiece</b>                  Handrail ends are available as a straight variant with free end. A pushed-on cap forms a clean end.</p> <p>CO.40.8101 ...      Ø40 mm                  CO.33.8101 ...      Ø33 mm</p>	 <p>Available in HEWI colours</p>	<p><b>MATCHING SUPPORTS</b>                  More detailed information on the combinable supports is available on page 44.</p>
<p><b>90° BEND</b>                  Handrails, which end with 90° bend towards the wall, fulfil the requirements of DIN 18040 and DIN 13411.</p> <p>CO.40.8100 ...      Ø40 mm                  CO.33.8100 ...      Ø33 mm</p>	 <p>Available in HEWI colours</p>	 <p>W11      G11                  W22      W23      W3</p>
<p><b>ROSE FIXING</b>                  The handrail ends flush on the wall by means of a polyamide rose fixing.</p> <p>CO.40.8100 ...      Ø40 mm                  CO.33.8100 ...      Ø33 mm</p>	 <p>Available in HEWI colours</p>	<p><b>MATCHING SUPPORTS</b>                  More detailed information on the combinable supports is available on page 44.</p>
<p><b>TIMBER VARIATION</b>                  System colour is also available with timber elements. In this variant timber rails and polyamide components are connected by threaded bolts.</p> <p>CO.40.8700 ...      Ø40 mm</p>	 <p>● ● ● ●</p>	 <p>W11      G11</p>

# Accessible Handrail System Solutions

## System colour

A handrail makes a large contribution to fall prevention – it helps to safeguard movement of people with reduced sense of balance and provides reliable support. Handrails shaped for easy gripping enable secure gripping. Round gripping shapes are especially suitable for this. Coordination and force transfer are improved by handrail diameters, which are adapted to the human hand. Apart from their support function, handrails also act as an orientation and guide system for people with reduced vision. A highly contrasting design and integrated tactile aids enhance the effect.



### ORIENTATION

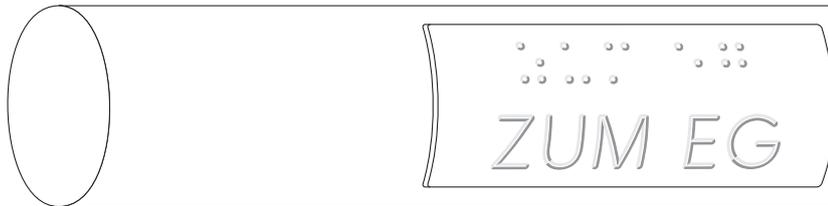
Handrails should contrast highly from their surroundings, so that they can also be perceived by people with restricted vision. A change in material at the beginning and end of the handrail (for example, timber / polyamide) provides additional orientation assistance.

### TACTILE AIDS

Tactile information, for example, storey information, promotes orientation and therefore the independence of the visually impaired. The information should be presented in Braille as well as in profiled lettering.

**INDIVIDUAL  
BRAILLE LETTERING**

Tactile aids can be integrated on the handrail, so that information is also accessible to blind people. Commonly used international Braille is based on the six dot cells of Louis Braille. To achieve good legibility, the individual Braille dots must be positioned precisely on the carrier. The information carriers can be individually lettered and therefore communicate any information required.

**PROFILED LETTERING**

Profiled or even raised lettering can be both tactilely and visually perceived. The letters and symbols are represented as three-dimensional prisms and can therefore be felt and read.

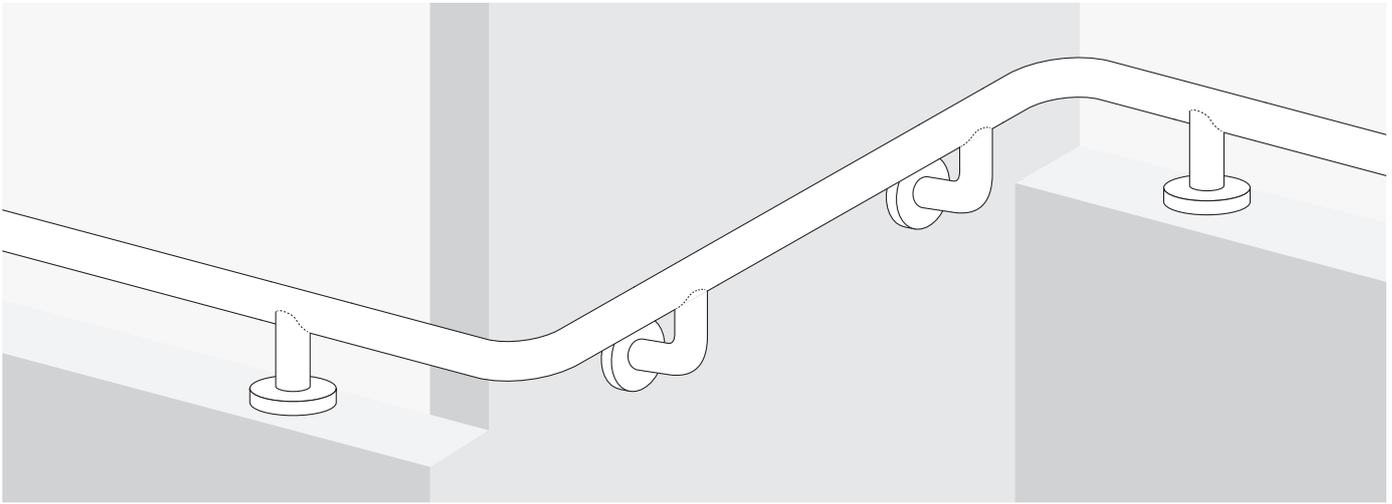
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
1234567890

# Flexible Requirements for Corridors and Stairs

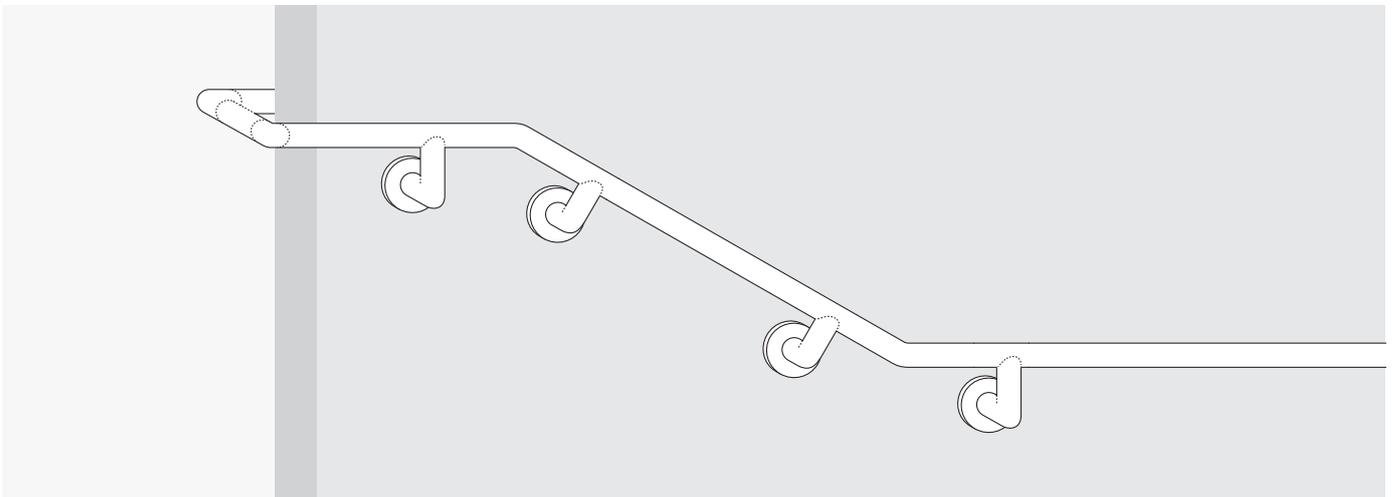
## System colour

ENTRO handrails can be flexibly adjusted to all building circumstances. Each handrail system is exactly designed and built to the individual requirements, taking into account relevant regulations and standards. All elements are made to fit precisely. The standard diameter of 40 mm enables the adult hand to get a secure grip. System colour is available with 33 mm diameter for use in kindergartens, so that children's hands can securely grip them too.

### FIXING SYSTEMS FOR ALL ENTRO HANDRAIL SYSTEMS



The handrails are mounted on the wall by means of supports. Where possible the brackets should be attached to the underside of the handrail, so that the handrail is easy to grip around. This also minimises the risk of injury. In order for handrails to provide secure support, they should be attached at a height of 85 to 90 cm.



By adding special curves and angle supports, ENTRO handrails can be adapted to the layout of the stairs so that they are continuous. This makes the stairs safer to use. To minimise the risk of falling, stair handrails should be available on both sides of the stairs and extend 30 cm horizontally beyond the start and end of the stairs.

# Orientation through Contrasts

## System colour

Handrails must contrast highly from the background, so that they can be used as an orientation aid by people with restricted vision. The coloured design of the handrail clearly shows the movement space. This can increase substantially the mobility and safety of people with impaired vision. The choice of colours available for System colour enable a highly contrasting design, matched to the colour concept of the building.

### COLOUR SELECTION

---



System colour in the polyamide colour apple green



System colour in the polyamide colour orange



System colour in the polyamide colour signal white

System colour has been extended to include three additional colours – apple green, orange and signal white are now also available to choose from and set fresh new trends in corridors and stairs. HEWI sanitary system 800K is available to match the handrails.

---

# Coordinated Hardware Solutions

## System colour

The System colour handrails can be combined with HEWI System 111. System 111 includes, among other things, lever handles, window handles and push handles. Timeless style, a high degree of functionality and modularity characterise the classic architecture System 111. Just like System colour, System 111 is characterised by high-gloss polyamide surfaces.

### SYSTEM 111 HARDWARE

#### COLOUR

Matching the ENTRO handrails, System 111 is also available in anthracite grey, apple green and orange. The deliberate use of colour not only sets trends and accentuates, but also creates contrasts and therefore facilitates orientation.



Standard door lever handles



Window handles

# Consistent Sanitary Solutions from Comfort to Care

## System colour

System colour can be combined particularly well with HEWI sanitary system 800 K. The system's functionality is found right down to the smallest detail. The coloured design of the functional areas facilitates intuitive use. For example, the soap dispenser's pushbutton for metering soap is clearly highlighted by a coloured contrast. Useful aids, such as shower seats or stationary supports, integrate into the overall design concept.

### COMFORT TO CARE

#### SANITARY ACCESSORIES

System 800 K offers functional sanitary accessories, which are designed to the universal design standards.



Toilet roll holder, foldaway



Toilet brush unit



Soap dispenser



Hook (D 50 / 80 mm)

#### STATIONARY SUPPORTS

A stationary support provides additional support for persons with limited strength and mobility.



Hinged support rail Mono (L 600 mm)



Hinged support rail Duo (L 700 / 850 / 900 mm)

#### SHOWER SEATS

Seating in the shower equally increases both comfort and safety.



Hinged seat R380



Hinged seat 350



Hinged seat 450 with backrest



Removable hanging seat

#### WASHBASINS

The wheelchair accessible washbasins have integrated support rails.



Washbasin (W 600 mm)



Washbasin (W 850 mm)

# Handrail Systems Made from Solid Timber

High-quality  
Handrail Solutions  
Made from Natural  
Material

Timber is a natural, renewable resource and is therefore particularly ecological. ENTRO only uses timbers from sustainable forestry. As a natural, organic material, each piece of timber is unique. As are the ENTRO handrails made from solid timber – the colour, texture and timber grain or figure differ depending on the timber species. Hardly any other material can be worked like timber and therefore it opens up limitless design options. Depending on the surface finish, timber communicates natural homeliness or modern elegance.

**SYSTEM LIGNUM**

**SYSTEM LIGNUM PROTECT  
SYSTEM LIGNUM MULTIPLEX**

lignum is a high-quality handrail system. The handrails are made from selected timbers, which originate from ecological cultivation. Lignums convincing features are its clear, reduced design and high degree of functionality. With lignum, lignum protect and lignum multiplex, the handrail system provides the suitable product solution depending on the area of use.

Ø40 mm



System lignum



System lignum protect



System lignum multiplex

**SYSTEM 100**

An expressive overall concept, which enables formal continuity in the building – from the handrail to the lever handle through to sanitary products HEWI System 100 is characterised by a clear, geometric design. One system, which unites design and functionality. The handrail system is optionally available in natural beech, wenge stained beech and in black stained beech.

□35 x 35 mm



System 100 / straight support



System 100 / angled support

## Materials for ENTRO Timber Handrails

ENTRO only uses high-grade quality timbers, which are kiln-dried. The surfaces are multi-sanded and sealed with surface protection and are therefore extremely resistant to cleaning agents and disinfectant. ENTRO only uses UV-cured, solvent-free varnish for the surface seal. ENTRO handrails are optionally available made from solid timbers such as beech, European maple, oak or bamboo as well as the multiplex variation. Other timber species are available on request.



Beech



Wenge  
stained beech



European  
maple



Oak



Steamed bamboo



Beech multiplex



Birch multiplex



# System lignum

## Handrails Made from Solid Timber

A pleasant feel and ergonomic design are the outstanding features of System lignum. The warm surface of the timber and the round profile enable comfortable, safe gripping. The natural material creates a homely atmosphere. A special surface varnish makes the handrail easy-care and extremely resistant to cleaning agents and disinfectant. The handrail system is available in selected timber species. System lignum can be fixed to the wall with different stainless steel supports. Different endpieces are available to choose from. The diverse range of possible combinations create design options.



### LIGNUM HANDRAIL

Wenge stained beech / 90° stainless steel angle / Support W20

### DIAMETER

Ø 40 mm

**MATERIAL AND SURFACES**

System lignum is made from A-grade kiln-dried timbers. The surface is sanded and varnished twice and is therefore easy-care.

- Beech
- Wenge stained beech
- European maple
- Oak
- Steamed bamboo

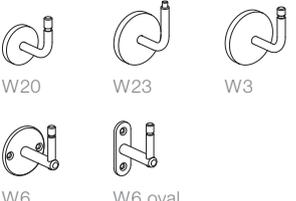
**APPLICATION AREA**

System lignum handrails are suitable for use in corridors and in staircases, not only in public buildings but also in private homes.

**STANDARDS**

- DIN 18040
- DIN 13411
- Tested by MPA NRW
- DIN 4102 normally flammable (building material class B2)
- DIN 53160
- DIN 68861 Part 1 B

**PRODUCT RANGE**

<p><b>STRAIGHT ENDPiece WITH CAP</b> Handrail ends are available as a straight variant with free end. A pushed-on, rounded cap forms a clean end.</p> <p>LI.40.8101 ...      Ø40mm</p>	 	<p><b>SUITABLE SUPPORTS</b> More detailed information on the combinable supports is available on page 44.</p>
<p><b>STRAIGHT ENDPiece WITH CHAMFER</b> The end of the handrail can be optionally straight with chamfer.</p> <p>LI.40.8101 ...      Ø40mm</p>	 	
<p><b>90° BEND MADE FROM TIMBER</b> Handrails, which end with 90° bend towards the wall, fulfil the requirements of DIN 18040 and DIN 13411.</p> <p>LI.40.8100 ...      Ø40mm</p>	 	
<p><b>90° BEND MADE FROM STAINLESS STEEL</b> Curves and bends are available made from stainless steel. If the handrail ends with a 90° bend, the requirements of DIN 18040 and DIN 13411 are fulfilled.</p> <p>LI.40.8800 ...      Ø40mm</p>	 	
<p><b>90° BEND MADE FROM POLYAMIDE</b> Polyamide bends and curves increase impact resistance. The requirements of DIN 18040 and DIN 13411 are fulfilled if the handrail ends with a 90° bend.</p> <p>LI.40.8700 ...      Ø40mm</p>	 	

# Flexible Configuration

## System lignum

The diverse possible combinations and choice of different materials create design options. The perfected connection mechanism allows extremely sturdy connections between the individual components (curves, rails and supports) of the handrail system. End curves and curves made from polyamide or stainless steel absorb impacts and prevent damage. Changes in direction can be made by using curved elements (90° bends, special curves) or by mitred joints.

### OPTIONS

#### HANDRAIL WITH 90° BEND

End curves directed to the wall with a 90° angle prevent involuntary catching of clothing and therefore increase safety.

[DIN 13411]



#### HANDRAIL WITH STRAIGHT END AND END CAP

The handrail with straight end can be optionally installed with chamfer or rounded end cap made from timber.



#### HANDRAIL WITH TIMBER BEND

Timber components have a small chamfer at the butt joints and are connected by a dowel and additional gluing.



#### HANDRAIL WITH CURVE MADE FROM POLYAMIDE AND STAINLESS STEEL

Curved elements optionally made from polyamide, timber or stainless steel can be used for changes in direction.



# Tactile aids

## System lignum

Tactile information, such as details of the storey, help people with vision restrictions to find their way around the building. The information should be presented in Braille and in profiled lettering, as especially people who lose their sight later in life, frequently do not learn to read Braille.



### TACTILE AIDS OF SYSTEM LIGNUM

Tactile information signs are available in aluminium. The signs can be individually designed with Braille and profiled lettering.

# System lignum protect

## Collision Protection for more Impact Resistance

With lignum protect, a handrail system with integrated collision protection is available. A strip of extremely hardwearing HPL (High Pressure Laminate) is integrated in the timber and protects the handrail from damage caused by impact. A strip made from stainless steel and integrated in the timber handrail is also available as collision protection. System lignum protect is optionally combinable with end curves made from polyamide or stainless steel, for even more impact resistance at the ends of the handrails. Lignum protect offers high protection against damage and a homely feel at the same time.



#### LIGNUM PROTECT HANDRAIL

Beech / 90° bend made from stainless steel / Support W20

#### DIAMETER

Ø 40 mm

**MATERIAL AND SURFACES**

System lignum protect is made from A-grade kiln-dried timbers. Integrated collision protection protects the handrails against damage caused by impact.

- Beech
- Wenge stained beech
- European maple
- Oak

**APPLICATION AREA**

System lignum protect is particularly suitable for use in highly frequented corridors.

**STANDARDS**

DIN 18040  
 DIN 13411  
 Tested by MPA NRW  
 DIN 4102 normally flammable (building material class B2)  
 DIN 53160  
 DIN 68861 Part 1 B

**PRODUCT RANGE**

**STRAIGHT ENDPIECE WITH CAP**

Handrail ends are available as a straight variant with free end. A pushed-on, rounded cap forms a clean end.



LP.40.8101 ... Ø40mm



**SUITABLE SUPPORTS**

More detailed information on the combinable supports is available on page 44.

**90° BEND MADE FROM STAINLESS STEEL**

Curves and bends are available made from stainless steel. If the handrail ends with a 90° bend, the requirements of DIN 18040 and DIN 13411 are fulfilled.



LP.40.8800 ... Ø40mm



**90° BEND MADE FROM POLYAMIDE**

Handrails, which end with 90° bend towards the wall, fulfil the requirements of DIN 18040 and DIN 13411.



LP40.8700 ... Ø40mm



**SUITABLE SUPPORTS**

More detailed information on the combinable supports is available on page 44.



**COLLISION PROTECTION MADE  
FROM STAINLESS STEEL**

The timber handrail has an inserted strip made from stainless steel. The integrated collision protection is matched to different stainless steel supports for wall fixing and stainless steel curves and stainless steel bends, which can be combined with the handrail. The timber surface is sealed with cleaning agent and disinfectant resistant varnish and is therefore also extremely robust.



# Integrated Collision Protection System lignum protect

The integrated collision protection of System lignum protect has an extremely high ability to absorb impacts. The protective profile is optionally available made from HPL (High Pressure Laminate) or as a design variant made from stainless steel. Both materials are characterised by high scratch and abrasion resistance and extreme robustness. They withstand the highest stresses and are dimensionally stable. Impacts are absorbed by the collision protection and the handrail made from solid timber is therefore protected against damage.



## APPLICATION AREA

Handrails with integrated collision protection are used above all where large objects are moved by people. For example, in hospitals or care homes, where knocking the handrail with mobile patient beds, food trolleys or cleaning machines in highly frequented corridors and rooms is unavoidable.

The collision protection provides effective protection against damage caused by knocks and impact. The timber surface is sealed with cleaning agent and disinfectant resistant varnish and is therefore also extremely robust.

# System lignum multiplex

## Timber Combination for Design Accentuation

lignum multiplex is a handrail system optionally made from birch or beech. Multiplex is based on a simple design principle: The individual timber layers are glued cross-wise. This produces unique stability. The characteristic striped look also sets design accentuations. The 40 mm diameter is very comfortable to grip. The handrail is easy-care and easy to clean, as it is sanded twice and varnished and therefore has a smooth, sealed surface. The varnish used is UV-cured, solvent-free and conforms to the requirements of exposure group 1B of DIN 68861.



#### LIGNUM MULTIPLEX HANDRAIL

Beech multiplex / 90° bend made from timber / Support W3

#### DIAMETER

Ø 40 mm

**MATERIAL AND SURFACES**

Birch and beech multiplex handrails are available to choose from. Due to the glue content, multiplex has a high strength and resistance against impact.

- Birch multiplex
- Beech multiplex

**APPLICATION AREA**

System lignum multiplex is particularly suitable for use in highly frequented corridors.

**STANDARDS**

DIN 18040  
 DIN 13411  
 Tested by MPA NRW  
 DIN 4102 normally flammable (building material class B2)  
 DIN 53160  
 DIN 68861 Part 1 B

**PRODUCT RANGE**

**STRAIGHT ENDPIECE**

Handrail ends are available as a straight variant with a free end. The end of the handrail is straight with a chamfer.



LM.40.8131 ...      Ø40mm



**SUITABLE SUPPORTS**

More detailed information on the combinable supports is available on page 44.

**90° BEND MADE FROM TIMBER**

Handrails, which end with 90° bend towards the wall, fulfil the requirements of DIN 18040 and DIN 13411.



LM.40.8130 ...      Ø40mm



# System 100

## Expressive Continuity in the Project

System 100 is characterised by a clear, geometric design and a high degree of functionality. The expressive system solution links the handrail, hardware and sanitary areas and therefore enables consistent, continuous, high-quality fit-out. The handrail system is made from high-grade beech. System 100 is optionally available wenge or black stained. Fixing and curved elements and ends made from satin finish stainless steel set architectural accentuations. The surface is varnished twice and is therefore insensitive to cleaning agents and disinfectants.

**HANDRAIL SYSTEM 100**

Black stained beech / 90° stainless steel angle / Support W100

**DIMENSIONS**

□ 35 x 35 mm

**MATERIAL AND SURFACES**

System 100 is made from A-grade kiln-dried timber. The surface is sanded and varnished twice and is therefore easy-care.

- Beech
- Wenge stained beech
- Beech, black stained

**APPLICATION AREA**

As a unique system solution, System 100 can be used not only in highly frequented public buildings but also in a private living environment.

**STANDARDS**

DIN 4102 normally flammable (building material class B2)  
DIN 68861 Part 1 B

**PRODUCT RANGE**

**ANGLE SUPPORT W 100**

W 100 consisting of a square element with 90° angle, side lengths approx. 70 mm / 75 mm with a cross-section of approx. 15 x 35 mm (vertical) and approx. 35 x 35 mm (horizontal). Wall-side end prepared for concealed wall fixing with fixing bolts, material made from stainless steel, 1.4301, ground (polished) surface, grain 320. Clear distance from wall approx. 50 mm.



**MATCHING SUPPORTS**

More detailed information on the combinable supports is available on page 46.



W100

LI.100.8800.W100    □ 35 x 35 mm



**STRAIGHT SUPPORT G 100**

G 100 consisting of a square element, length approx. 50 mm, with a diameter of approx. 30 x 30 mm (horizontal). Wall-side end prepared for concealed wall fixing with fixing bolts. Material made from stainless steel, 1.4301, surface ground, grain 320. Clear distance from wall approx. 50 mm.



**MATCHING SUPPORTS**

More detailed information on the combinable supports is available on page 46



G100

LI.100.8800.G100    □ 35 x 35 mm



# Coordinated Hardware Solutions System 100

System 100 offers handrails, signage systems and push handles, made from high-quality stainless steel. Lever handles and window handles are optionally available as a mirror polished or satin finish variant. The lever handles can also be combined with the eLOCK electronic locking system. With eLOCK, access to the building can be easily and flexibly controlled.

## SYSTEM 100 HARDWARE

### COMBINABILITY

System 100 lever handles and window handles are optionally available in a 15 or 20 mm version. They can be combined with round or angular roses. Lever handles are also available with a short backplate.

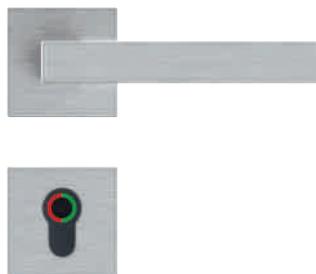


Standard door handles

Window handle

### INTELLIGENCE IN THE LOCK

eLOCK offers the optimum product solution for the different requirements and security levels of vehicle accesses and doors. To this end, lock cylinders, framed door solutions, wall scanners, biometrics modules and the unique Comfort System are available. Further information: [www.opertis.eu](http://www.opertis.eu)



Comfort System

Identifier (key, token, card)

# Coordinated Sanitary Solutions from Comfort to Care System 100

One system, which unites design and functionality. A large number of accessories enables consistent, puristic room design. System 100 includes aesthetically designed, support products which enable safety, convenience and comfort. Useful aids, such as shower seats or support rails, integrate into the overall design concept.

## COMFORT TO CARE

### SANITARY ACCESSORIES

Functional sanitary accessories supplement System 100.



Toilet roll holder



Toilet brush unit



Holder / Soap dispenser



Hook (D 50 / 80 mm)

### STATIONARY SUPPORTS

A stationary support provides additional support for persons with limited strength and mobility.



Hinged support rail Mono (L 600 mm)



Hinged support rail Duo (L 700 / 850 / 900 mm)

### SHOWER SEATS

Seating in the shower equally increases both comfort and safety.



Hinged seat 350



Hinged seat 450



Hinged seat 450 with backrest

### WASHBASINS

The wheelchair accessible washbasins provide plenty of legroom.



Washbasin (W 600 mm)



Washbasin (W 850 mm)



Washbasin (W 600 mm)

# Handrail Systems Made from Stainless Steel Robust Materials for Particular Use

Stainless steel has a pore-free and therefore particularly hygienic surface. Minimum maintenance work is sufficient to prevent dirt, bacteria or micro-organisms from accumulating on the surface. The material is extremely robust and resistant to scratches or other damage and is therefore ideal for use in the public sector. The stainless steel handrail system circum is also non-flammable and therefore fulfils the requirements of building material class A2. ENTRO only uses high quality chromium-nickel steel 1.4301 to DIN EN 10088 to make circum. This material is characterised by mechanical properties such as strength, extension and corrosion resistance.

#### SYSTEM CIRCUM

Made from high-quality stainless steel, with its coordinated system elements, circum offers numerous design options. Due to its diverse combination options, with circum precise-fitting solutions are possible, which are optimally aligned to the circumstances on site. System circum is particularly suitable for use in public spaces.

Ø 40 mm



System circum / straight endpiece



System circum / 90° bend



System circum / mitred angle

## Material

Stainless steel stands for purism and clarity and enables striking design. The surface of the gleaming material can be designed in diverse ways – for example, the ENTRO handrails have a satin finish. Handrails made from stainless steel combine design with well thought through functions and create aesthetic and functional solutions. The durability and robustness of the material make stainless steel an ecologically valuable material in the interests of sustainable building.



Stainless steel 1.4301



# System circum

## Clarity in Stainless Steel

The purist design concept of System circum has a convincing linear shape and high degree of functionality. The system's formally matched products ensure continuous, consistent design of corridors and staircases. The surface has a homogeneous grinding pattern. Due to screwed and push-in connections, the handrails do not have any disrupting welded joints. The round tubular design has a 40 mm diameter and is therefore comfortable to grip. This dimension also fulfils the requirements of DIN 18040 and DIN 13411.



**MATERIAL AND SURFACES**

The circum handrail system is made from high-quality, satin finish stainless steel. The characteristic feature of the material is that it is extremely robust and easy-care.

● Stainless steel 1.4301

**APPLICATION AREA**

Due to their stainless steel material circum handrails are particularly suitable for use in public buildings. Other steel grades are to be used in special areas of use, for example, in coastal areas or in swimming pools.

**STANDARDS**

DIN 18040  
 DIN 13411  
 Tested by MPA NRW  
 DIN 4102 non-flammable (building material class A2)

**PRODUCT RANGE**

**STRAIGHT ENDPIECE**

Handrail ends are available as a straight variant with free end. An impact cover forms a clean end



Cl.40.8101 ... Ø40mm



**MATCHING SUPPORTS**

More detailed information on the combinable supports is available on page 44.

**90° BEND**

Handrails, which end with 90° bend towards the wall, fulfil the requirements of DIN 18040 and DIN 13411



Cl.40.8100 ... Ø40mm



**MITRED ENDPIECE**

Handrails, which end with a mitred endpiece facing the wall prevent involuntary catching of clothing.



Cl.40.8102 ... Ø40mm



# Coordinated Hardware Solutions

## System circum

The System circum handrails can be combined with HEWI System 162. System 162 includes, among other things, lever handles, window handles and push handles made from stainless steel. The purist design concept of System 162 has a convincing linear shape and high degree of functionality. Made from high-quality, robust stainless steel, it is particularly suitable for public areas.

### SYSTEM 162 HARDWARE

#### PROJECT SOLUTIONS

System 162 offers comprehensive products for projects, for example, push handles and signage systems. Product solutions especially for escape routes are available that match System 162.



Standard door handles



Window handle



Panic bar to DIN EN 1125



Push/pull handle set



Handle (Ø25 mm)

# Coordinated Sanitary Solutions

## System circum

System circum can be supplemented with HEWI System 162. The sanitary range includes products for the classic partition wall and products for the washbasin area. A linear design and high-degree of functionality are unified in System 162. Material options create diverse design possibilities: Inserts are available, made of satin-finished glass or high-quality polyamide, in the colours pure white or anthracite grey.

### COMFORT TO CARE

#### SANITARY ACCESSORIES

The sanitary accessories made from high-quality stainless steel are optionally available with a satin or mirror polished finish.



Toilet roll holder



Toilet brush unit



Holder / soap dispenser



Hook (D35 mm)

#### STATIONARY SUPPORTS

A stationary support provides additional support for persons with limited strength and mobility.



Hinged support rail Mono (L 600 mm)



Hinged support rail Duo (L 700 / 850 / 900 mm)

#### SHOWER SEATS

Seating in the shower equally increases both comfort and safety.



Hinged seat 350



Hinged seat 450



Hinged seat 450 with backrest



Removable hanging seat

#### WASHBASINS

The wheelchair accessible washbasins provide plenty of legroom.



Washbasin (W600 mm)



Washbasin (W850 mm)



Washbasin (W600 mm)

# Supports for ENTRO Handrail Systems

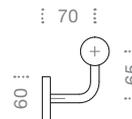
## Curved and Angular Supports

Numerous material and design options create optimum product solutions, which are precisely aligned with the circumstances of site. Polyamide or stainless steel supports are optionally available. The handrail brackets are designed so that they are positioned on the underside. This means that on the one hand, people's hands can slide along the rail and on the other, it minimises the risk of injuries.

### CURVED SUPPORT 90° ROUND

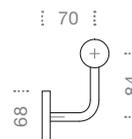
**W20**

90° bend support with stainless steel cap, bend made from stainless steel, ø 12 mm, wall fixing through circular zinc-coated steel blank, ø 60 mm, with 6 drillholes for screwed installation. Stainless steel cap for concealed fixing. Visible surfaces stainless steel, ground, grain 240. Clear distance from wall approx. 50 mm.



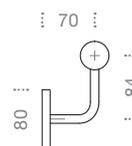
**W22**

90° bend support with stainless steel cap, bend made from stainless steel, ø 12 mm, wall fixing through zinc-coated circular blank, ø 68 mm, with 10 drillholes for screwed installation. Stainless steel cap to clip on for concealed fixing. Visible surfaces stainless steel, ground, grain 240. Clear distance from wall approx. 50 mm.



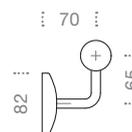
**W23**

90° bend support with polyamide cap, bend made from stainless steel, ø 12 mm, wall fixing through zinc-coated circular blank, ø 80 mm, with 11 drillholes for screwed installation. Polyamide cap to clip on for concealed fixing. Visible surfaces stainless steel, ground, grain 240. Visible surfaces polyamide in a colour chosen from HEWI standard colours. Clear distance from wall approx. 50 mm.



**W3**

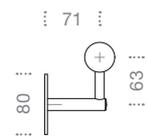
90° bend support with curved stainless steel cap, bend made from stainless steel, ø 12 mm, wall fixing through zinc-coated circular blank, ø 82 mm, with 3 drillholes for screwed installation, stainless steel cap to clip or glue on for concealed fixing. Visible surfaces stainless steel, ground, grain 240. Wall thicknesses can be balanced out by adjustable curves.



**ANGULAR SUPPORT 90°**

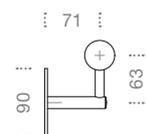
**W6**

90° stainless steel support, two-piece handrail support, consisting of vertical stainless steel tube, ø 12 mm, and horizontal stainless steel tube, ø 16 mm. Wall fixing through stainless steel rose, ø 80 mm, with 2 drillholes for visible screwed installation. Visible surfaces stainless steel, ground, grain 240. Clear distance from wall approx. 50 mm.



**W6 OVAL**

90° stainless steel support, two-piece handrail support, consisting of vertical stainless steel tube, ø 12 mm, and horizontal stainless steel tube, ø 16 mm. Wall fixing through elongated stainless steel rose, height approx. 90 mm, width approx. 30 mm, with 2 drillholes for visible screwed installation. Visible surfaces stainless steel, ground, grain 240. Clear distance from wall approx. 50 mm.

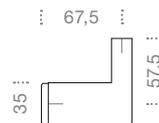


# Supports for ENTRO Handrail Systems Special Solutions

Supports made from high-quality stainless steel are available, matching the architectural design of System 100. Special supports are also available for the material variant of System colour. The handrail made from timber is combined with polyamide supports and bends. The components are connected via threaded bolts.

## SUPPORTS FOR SYSTEM 100 AND SYSTEM COLOUR

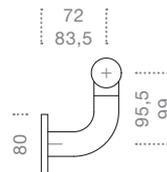
**W 100**  
consisting of a square element with a 90° angle. Side lengths approx. 70 mm / 75 mm, with a cross-section of approx. 15 x 35 mm (vertical) and approx. 35 x 35 mm (horizontal). Wall-side end prepared for concealed wall fixing with fixing bolts. Material made from stainless steel, 1.4301, surface ground, grain 320. Clear distance from wall approx. 50 mm.



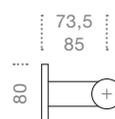
**G 100**  
Consisting of a square element. Length approx. 50 mm, with a cross-section of approx. 35 x 35 mm (horizontal). Wall-side end prepared for concealed wall fixing with fixing bolts. Stainless steel material, 1.4301, ground polished surface. Grain 320. Clear distance from wall approx. 50 mm.



**W 11**  
90° bend support with polyamide cap, bend made from polyamide, ø33 mm, wall fixing through zinc-coated steel rose, ø80 mm, with 11 drillholes for screwed installation. Polyamide cap to clip on for concealed fixing. The visible surface is the colour of the standard HEWI colours. Clear wall spacing approx. 64 mm for handrail ø40 mm, approx. 56 mm for handrail ø33 mm.



**G 11**  
Straight support with polyamide cap, support made from polyamide, ø33 mm, wall fixing through zinc-coated steel rose, ø80 mm, with 11 drillholes for screwed installation. Polyamide cap to clip on for concealed fixing. The visible surface is the colour of the standard HEWI colours. Clear wall spacing approx. 64 mm for handrail ø40 mm, approx. 56 mm for handrail ø33 mm.



# Other ENTRO Product Solutions Wall Protection and Signage

# Wall Protection System gard

## Reliable Protection for your Walls

gard basic reliably protects walls against scratches or damage caused by impact. Especially in highly frequented corridors, for example, in hospitals, care and residential facilities, schools or hotels, it is advisable to use a wall protection system in order to ensure cleanliness and hygiene. Thanks to diverse design options, gard can be integrated in existing room concepts. Gard is made from HPL. The HPL (High Pressure Laminate) material is extremely durable, heat-resistant and easy to clean. The wall protection can be combined with corner protection as well as a handrail.



**MATERIAL AND SURFACES**

Eight decorative finishes are available to choose from. You can choose between two white, grey, beech and maple decorative finishes each. Other decorative finishes are available on request.

**INSTALLATION INSTRUCTIONS**

A vapour barrier should be installed to prevent deformation of the wall protection due to residual moisture emitted from the wall. This is attached between the wall and wall protection.

**SERVICE AND MADE-TO-MEASURE**

Gard basic: Standard heights 210–430 mm, other dimensions are available on request.

**STANDARDS**

DIN 4102 flame-resistant (building material class B 1)

**CORNER PROTECTION**

<p><b>GARD BASIC</b> The solid gard basic wall protection has chamfered edges (2 mm / 45°) and is made from 8 mm thick HPL (High Pressure Laminate) panels. It is fixed with a visible threaded connection.</p>		<p><b>DIMENSIONS</b> The panel blank is approx. 3 metres long. Standard heights 210 mm / 250 mm / 320 mm / 430 mm other dimensions available on request.</p>
<p><b>GARD CIRCUM CORNER PROTECTION</b> Made from high-quality stainless steel, gard circum corner protection is invisibly fastened using glue. The surface property of gard circum is the same as that of circum handrails.</p> <p>GCI.8</p>		<p><b>DIMENSIONS</b> Standard angle: 90°, other angles available on request Side length: 60 mm long, top and bottom rounded with 15 mm radius Material thickness: 2 mm Height: 250–1000 mm, other heights available on request.</p>
<p><b>GARD COLOUR CORNER PROTECTION</b> gard colour corner protection is available made from through-dyed and abrasion-proof polyamide to match the colour handrail. The gard colour corner protection is fixed with a concealed threaded connection.</p> <p>GC0.40.1186</p>		<p><b>DIMENSIONS</b> Angle: 90° or 135° Diameter: 40 mm End: optionally with flat caps or spherical caps Height: 250–1000 mm, other heights available on request.</p>
<p><b>GARD LIGNUM CORNER PROTECTION</b> The gard lignum corner protection is available made from solid timber (maple or beech). Apart from wall-side edges, all edges are rounded to minimise the risk of injuries. It is fixed with visible screws.</p> <p>GLI.8...</p>		<p><b>DIMENSIONS</b> Standard angle: 90°, other angles available on request Side length: inside 50 mm, outside 68 mm Total thickness: 18 mm Height: 250–1000 mm, other heights available on request.</p>

# Range guide

## Signage Systems Made from Stainless Steel

With clear, internationally understandable pictograms, the guide signage range communicates information and therefore facilitates orientation within the building. The guide includes a large choice of pictograms. The signage range therefore has diverse possible uses – whether for labelling rooms or as a decorative element. The picture symbols used were designed by Otl Aicher. The signs are made from satin finish stainless steel.



**MATERIAL AND SURFACES**

The signs are made from satin finish stainless steel. The information symbols are printed on.

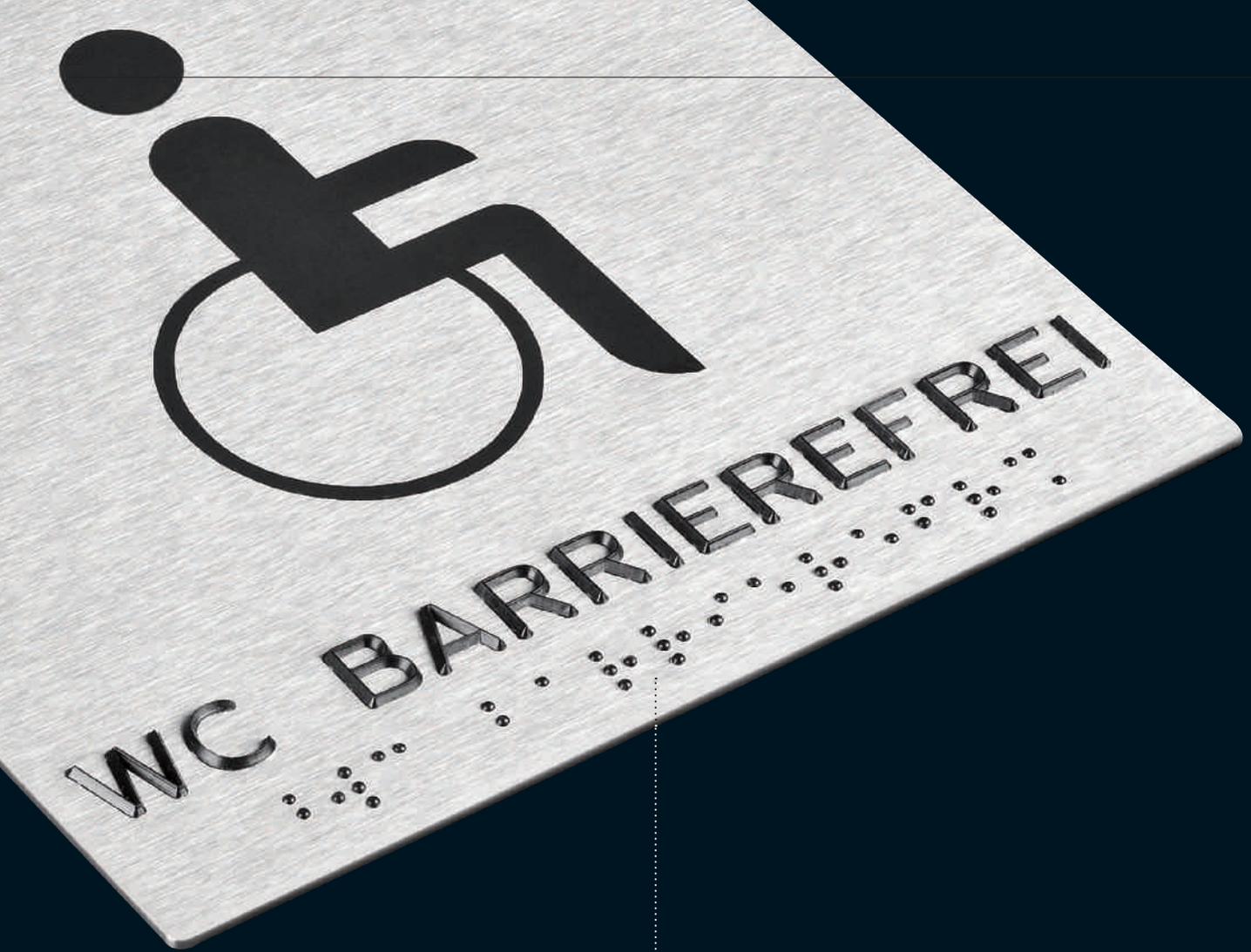
- Stainless steel (satin finish)

**INSTALLATION**

The signage systems can be screwed or glued onto the wall.

**PROFILE**

The signage systems for gluing have an extremely flat profile (1.5 mm).



#### **TACTILE AIDS**

Braille or the Braille alphabet cannot be learned by most people who do not lose their vision until they are old. Raised lettering in block capitals (upper case letters) is legible and tactile for these people. In public buildings, tactile aids should therefore be accessible not only in Braille but also in raised lettering.

# Tactile Aids

## Range guide

The signage symbols are tactile. It is also possible to attach Braille and profiled lettering. Information signs in Braille and profiled lettering make an important contribution to enabling orientation within the building for people with sensory limitations too and therefore to ensure their independence. Profiled lettering can be perceived both tactilely and visually. The letters and symbols are represented as three-dimensional prisms and can therefore be felt and read.

### **APPLICATION AREA**

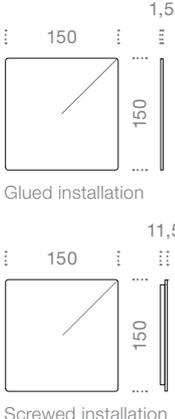
Due to the possibility of using Braille and pyramid lettering, the guide is particularly suitable as a guide system for public buildings. The signage range is designed for use indoors.

# Individual Lettering Options

## Range guide

guide can be used to realise a detailed guide and orientation system. The signage range includes a large selection of pictograms. The range of symbols is continuously developed, so that it is adapted to new circumstances and applications. Guide also offers the option of individually designing the text of signs with size 150x150mm. Software, available online, can be used to easily and quickly create the signs.

### SIGNS OVERVIEW

<p><b>SIGN 150 X 150 mm</b> Information symbols printed on or available as a blank version Sign 1.5 mm thick and made from high-quality stainless steel Satin finish surface</p>		 <p>150 150 1,5</p> <p>Glued installation</p> <p>150 150 11,5</p> <p>Screwed installation</p>
<p><b>SIGN 80 X 80 mm</b> Information symbol printed on Sign 1.5 mm thick and made from high-quality stainless steel Satin finish surface</p>		 <p>80 80 1,5</p>
<p><b>SIGN 55 X 55 mm</b> Information symbol printed on Sign 1.5 mm thick and made from high-quality stainless steel Satin finish surface</p>		 <p>55 55 1,5</p>

GL0901XA... 150 x 150 mm

**SIGN 80 X 80 mm**  
Information symbol printed on  
Sign 1.5 mm thick and made from high-quality stainless steel  
Satin finish surface

GL0601XA... 80 x 80 mm

**SIGN 55 X 55 mm**  
Information symbol printed on  
Sign 1.5 mm thick and made from high-quality stainless steel  
Satin finish surface

GL0501XA... 55 x 55 mm

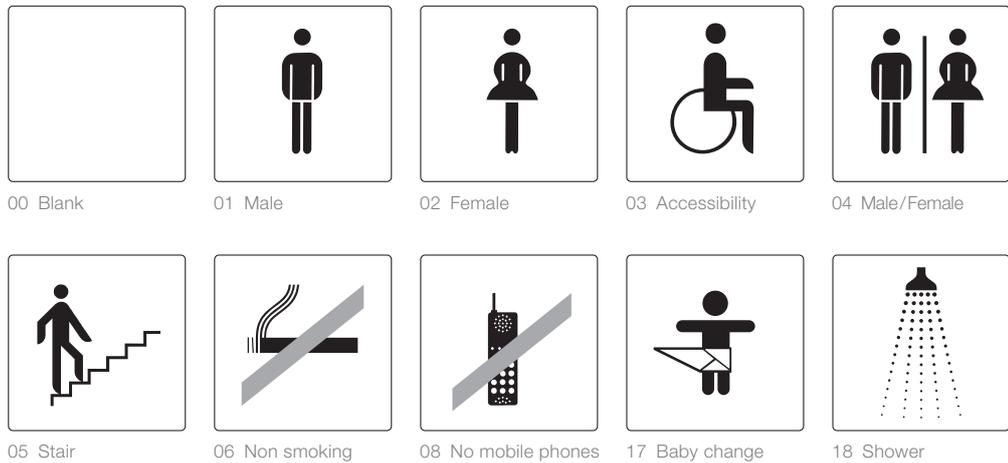
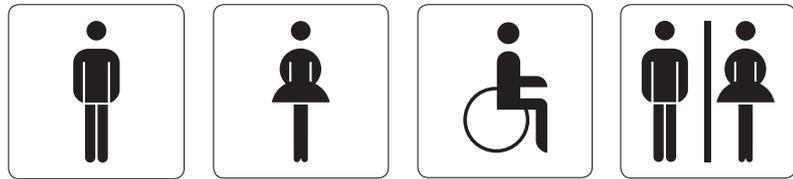
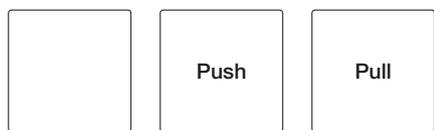
**LETTERING SOFTWARE**

Signs sized 150 x 150 mm can also be individually lettered. Online software is available for this. The software can be used to select the font and positioning of the lettering. The signs are printed to your specifications by means of a film technique.

**INSTALLATION**

Signs sized 150 x 150 mm are optionally available for glued or screwed installation. Signs sizes 80 x 80 mm and 50 x 50 mm are available for glued installation.

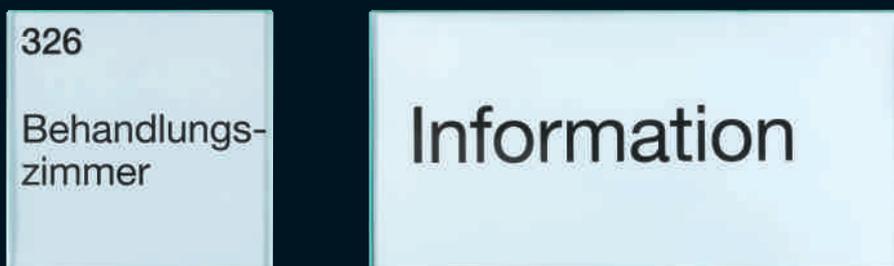
**SYMBOLS OVERVIEW**

 <p>00 Blank      01 Male      02 Female      03 Accessibility      04 Male/Female</p> <p>05 Stair      06 Non smoking      08 No mobile phones      17 Baby change      18 Shower</p>	<p><b>SYMBOLS 150 X 150 mm</b> A large selection of symbols are available for this sign size.</p>
 <p>01 Male      02 Female      03 Accessibility      04 Male/Female</p>	<p><b>SYMBOLS 80 X 80 mm</b> Symbols for the WC area and Push / Pull information signs are available to choose from.</p>
 <p>01 Blank      02 Push      03 Pull</p>	<p><b>SYMBOLS 55 X 55 mm</b> These signs can be printed with Push / Pull information signs.</p>

# Range comment

## Flexible Interior Signage

comment is a flexibly designable signage system for indoors. The individually printable lettering insert and different format sizes enable unlimited possible uses. The lettering inserts can be quickly and easily exchanged. Comment fulfils the requirements of GUV-VS 1 (accident prevention regulation for schools), if the chamfer is all-round on the outside. The cover is made from resistant acrylic glass and is joined with a substructure made from high-quality stainless steel. The signs are highly secure against tampering, as there is no identifiable vulnerable point..



**MATERIAL AND SURFACES**

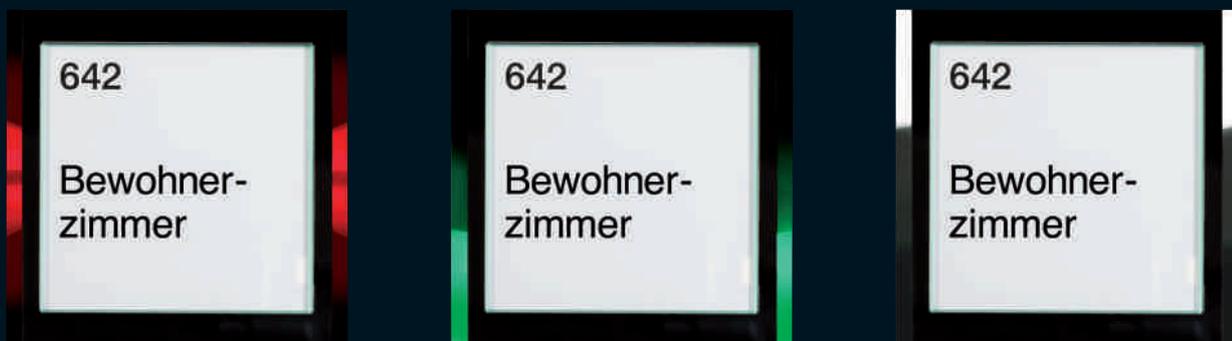
The 6 mm thick acrylic glass cover (clear transparent or with real glass effect) is clamped in a rectangular baseplate made from stainless steel for secure fixing of the lettering insert.

**INSTALLATION**

The signs can be optionally fixed in place by screwing them or sticking them onto the wall.

**INITIAL AND  
SUBSEQUENT LETTERING**

The lettering can be created using a self-printing method or can be ordered separately.

**NEW. LIGHT INDICATOR**

The signage system can be combined with a light indicator.

# Flexible Lettering System

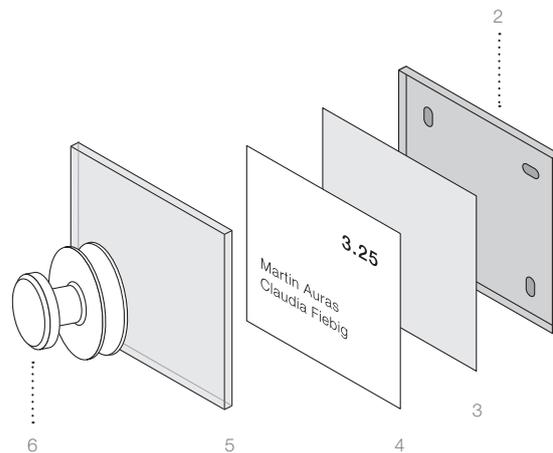
## Range comment

The signs in the range comment consist of a baseplate made from stainless steel and a cover made from acrylic glass. Due to the materials used, the signs are extremely durable and the lettering insert inside the sign is safely protected. The printable paper is fixed by means of a clamping technique, so that there is no fixing element visible from the outside and the sign cannot be manipulated by unauthorised persons. The 6 mm thick cover can only be released using a suction tool.

### RANGE COMMENT STRUCTURE

All modules have the same structure:

1. Baseplate made from stainless steel panels, precisely canted on all sides, edges with matt brushed surface; distance from wall maintained by the spacers clipped into the baseplate
2. Clamping strips for balancing out the tolerances between the baseplate and acrylic glass
3. Basic insert made from synthetic material to protect the paper insert
4. Lettering insert made from 160 g/m<sup>2</sup> paper
5. Fitted cover pane made from easy-care acrylic glass with real glass effect and all-round, inner lying bevel for increasing light refraction
6. Fast and easy opening using a suction tool; unauthorised release without this tool is excluded



Schematic structure of the comment sign



### SUCTION TOOL

- CLSH50 Ø 50 mm, carrying cap. 8 kg  
 CLSH80 Ø 80 mm, carrying cap. 20 kg

Components of the sign: Acrylic glass cover, lettering insert and stainless steel plate

**LETTERING**

Lettering can be created using self-printing method or can be ordered separately.

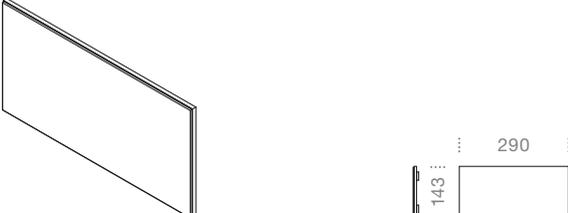
**LETTERING SOFTWARE**

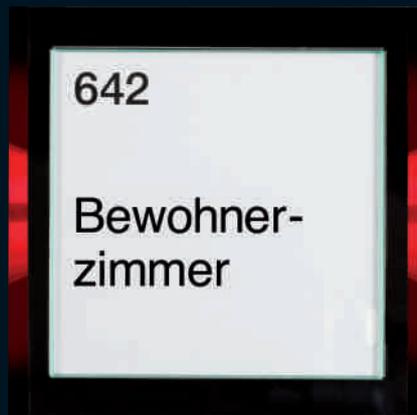
Excel-based lettering program for designing, printing and managing door sign lettering of purely typographic version. Output via all standard laser printers.

**INSTALLATION**

Supplied including installation materials (screws/wall plugs). In addition, installation can be ordered.

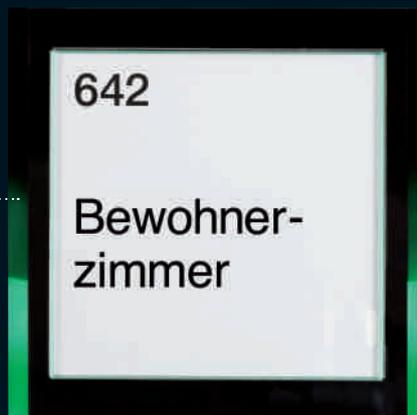
**RANGE COMMENT FORMATS**

<p><b>DOOR SIGN</b> For screwed or glued installation on walls or doors. Lettering insert for self-lettering on blank sheets or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION</b> CL0901S 143 x 143 mm</p> <p><b>GLUED INSTALLATION</b> CL0901K 143 x 143 mm</p>
<p><b>FLAG SIGN</b> For one-sided screwed installation on walls. Can be written on on one side or both sides. Lettering insert for self-lettering on blank sheets or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION, ONE SIDE</b> CL0903-1.1S 143 x 143 mm CL0803-1.1S 290 x 290 mm</p> <p><b>SCREWED INSTALLATION, BOTH SIDES</b> CL0903-1.2S 143 x 143 mm CL0803-1.2S 290 x 290 mm</p>
<p><b>MEETING ROOM SIGN</b> For screwed or glued installation. Sign has integrated slider for Vacant/ Engaged indication. Lettering insert for self-lettering on blank sheets or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION</b> CL0902S 143 x 143 mm</p> <p><b>GLUED INSTALLATION</b> CL0902K 143 x 143 mm</p>
<p><b>WALL SIGN</b> For screwed installation on walls. Lettering insert for self-lettering on blank sheets or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION</b> CL1201S 290 x 143 mm CL1901S EN A4 / 214 x 301 mm CL2901S EN A3 / 301 x 424 mm CL0801S 290 x 290 mm CL1101S 422 x 290 mm CL1001S 584 x 584 mm</p>
<p><b>HANGING SIGN</b> For hanging from the ceiling with two stainless steel ropes, which can be individually shortened. Can be written on one side or both sides, on blank sheets or can be ordered ready printed.</p>		<p><b>ON ONE SIDE</b> CL0801-1.1H 290 x 290 mm CL1101-1.1H 422 x 290 mm</p> <p><b>ON BOTH SIDES</b> CL0801-1.2H 290 x 290 mm CL1101-1.2H 422 x 290 mm</p>



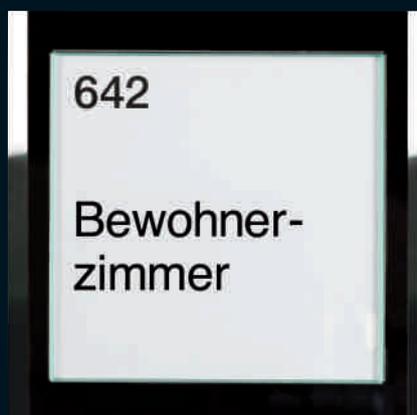
**RED SIGNAL**

The red light is used to indicate that the patient needs help or rather calls over the care personnel.



**GREEN SIGNAL**

The green light indicates that a nurse is present in the room.



**WHITE SIGNAL**

A white light indicates that there is a doctor in the patient's room.

# New. Light Indicator

## Range comment

In retirement homes, light indicators are used so that residents can call for care personnel by means of a light signal. With the comment light indicator it is possible to integrate the system in the signage of the resident's room. The signs have sign inserts, which can be quickly and cost-effectively lettered and easily replaced. LED lights are used for the visual signal. This makes the signs particularly flat. The LED technique used is also energy saving. The LED indicators are also characterised by a long life. The comment light indicator is certified for all standard light indicator systems, based on 24V direct current operation.

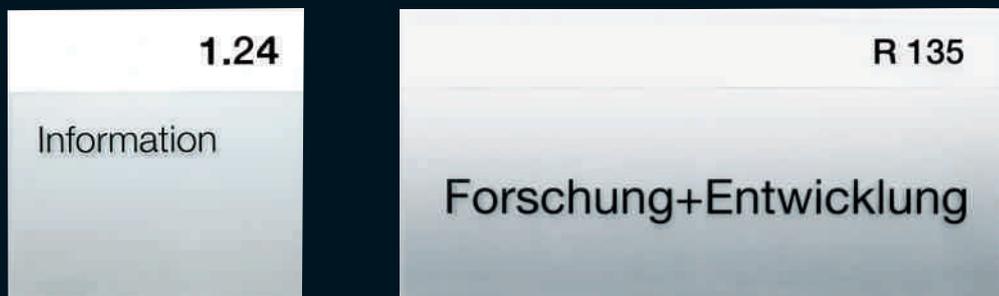
### TECHNICAL DETAILS

The lighting element with integrated LED display for the comment nurse call indicator is available as a two and three coloured variant (red and green or red, green and white). The outer format is 180 x 180 mm, is 10 mm thick and matches the comment door sign (143 x 143 mm).

# Range floatline

## Functional Design

The floatline design is based on a combination of transparent acrylic glass and subtly semi-mirrored surfaces. The range received the red dot award: product design 2002 for outstanding design quality. Individual permanent lettering is attached to the back of the sign using self-adhesive film. The translucent film of the front can be variably lettered. floatline is suitable as a guide and orientation system for indoors. yfloatline is available with a baseplate made from acrylic glass with all-round polished edge.



**MATERIAL AND SURFACES**

The baseplate consists of 10 mm thick, clear acrylic glass, which has a mirror film backing and wall bracket attached to the rear.

**INSTALLATION**

The signs can be optionally glued or screwed onto the wall.

**PROFILE**

10 mm thick acrylic glass enables stable and durable signage.

# Transparent Lettering System

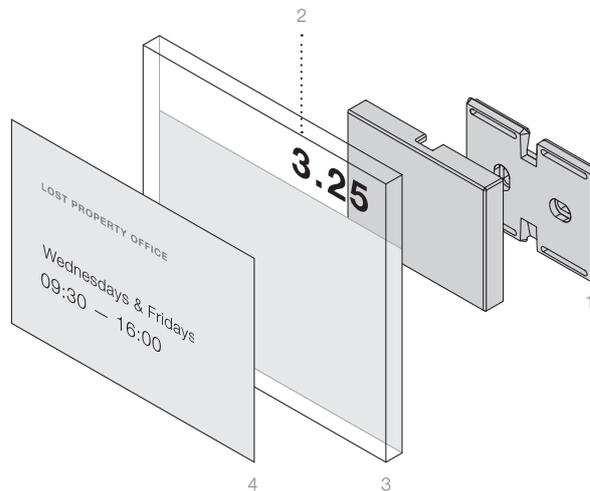
## Range floatline

The Range floatline signs consist of a transparent acrylic glass baseplate with mirror coating applied from the rear and a two-piece wall bracket, attached in the middle, whose fixing cannot be seen. The variable permanent lettering is attached to the back by means of self-adhesive film. The lettering of the translucent film at the front can be individually designed. It can be printed using a standard printer.

### RANGE FLOATLINE STRUCTURE

All modules have the same structure:

1. Two-piece wall holder with clip connection: one part glued onto the back of the acrylic glass plate, the other for wall mounting using screws or glue
2. Permanent rear lettering using self-adhesive film
3. Acrylic glass plate with mirror coating attached to the rear
4. Matt, translucent self-adhesive film for printing yourself with a laser printer



Schematic structure of the floatline sign



Range floatline has permanent lettering using self-adhesive film

**LETTERING**

The permanent lettering at the rear attached as self-adhesive film is included in the scope of supply. The standard is max. 4 typographical characters (letters / numbers). The lettering of the translucent film at the front is not included in the scope of supply. It can be created using a self-printing method or can be ordered separately.

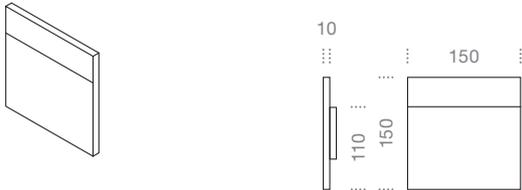
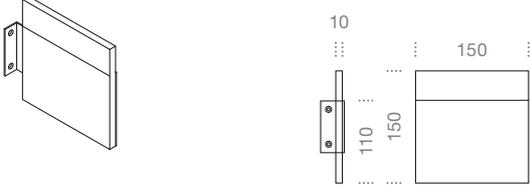
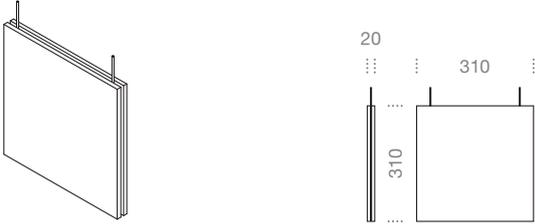
**SOFTWARE**

Excel-based lettering program for designing, printing and managing door sign lettering of purely typographic version. Output via all standard laser printers.

**INSTALLATION**

Supplied including installation materials (screws/wall plugs). In addition, installation can be ordered.

**RANGE FLOATLINE FORMATS**

<p><b>DOOR SIGN</b> For screwed or glued installation on walls or doors. Lettering film for self-lettering or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION</b> FL0901S 150 x 150 mm</p> <p><b>GLUED INSTALLATION</b> FL0901K 150 x 150 mm</p>
<p><b>INFORMATION MODULE</b> A red slider can be used to indicate whether the room is available or occupied. Quick installation due to self-adhesive film.</p>		<p><b>GLUED INSTALLATION</b> FL0902K 28 x 150 mm</p>
<p><b>FLAG SIGN</b> For one-sided screwed installation on walls. Can be written on on one side or both sides. Lettering film for self-lettering or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION, ONE SIDE</b> FL0903-1.1S 150 x 150 mm</p> <p><b>SCREWED INSTALLATION, BOTH SIDES</b> FL0903-1.2S 150 x 150 mm</p>
<p><b>WALL SIGN</b> For screwed installation on walls. Lettering film for self-lettering or can be ordered printed.</p>		<p><b>SCREWED INSTALLATION</b> FL1201S 310 x 150 mm FL1601S 150 x 310 mm FL1801S 420 x 150 mm FL0801S 310 x 310 mm FL1101S 310 x 420 mm FL1701S 420 x 310 mm</p>
<p><b>HANGING SIGN</b> For hanging from the ceiling with two stainless steel ropes, which can be individually shortened. Can be written on on one side or both sides. Lettering film for self-lettering or can be ordered printed.</p>		<p><b>ON ONE SIDE</b> FL0801-1.1H 310 x 310 mm FL1701-1.1H 420 x 310 mm FL1801-1.1H 420 x 150 mm</p> <p><b>ON BOTH SIDES</b> FL0801-1.2H 310 x 310 mm FL1701-1.2H 420 x 310 mm FL1801-1.2H 420 x 150 mm</p>

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