



## **Technical data sheet**

Suggestions and recommendations for the installation of assisted bathroom environments for hygiene and assistance in professional contexts.



Founded over 40 years ago, Ponte Giulio specialises in the private and public bathroom sector, offering a vast range of products and solutions to meet this demand. Over the years Ponte Giulio has grown to become synonymous with bathroom safety.

The knowledge acquired over many years of working with healthcare professionals has allowed the technicians at Ponte Giulio to develop a range of practical, safe and efficient solutions.

Currently, the firm exports its products to major markets across the globe and is committed to providing reliable and quality solutions. Significant investments have been made in research and development programmes, which will help us guarantee ongoing product improvement and develop new ideas in the years ahead. This is typical of Italian manufacturing.



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## Technical features and Solutions

Affinity with its customers, in particular for healthcare structures such as hospitals and nursing homes, is an approach that is a part of the Ponte Giulio culture. The willingness of our technical staff to assist project managers, installers and healthcare professionals is our company's added value.

On the basis of information and details acquired during the analysis phase, the design guidelines are defined, which will allow the project to be completed. Once the installation phase is over, the executive drawings will be stored and cared for by Ponte Giulio.

In order to implement these procedures we need to draft operating solutions, represented and defined by the generic term "Areas"; each proposal aims to satisfy situations that arise out of everyday life and work, within the context of both hospitals and nursing homes.

To offer a solution to every need, from the simplest to the most complex, is part of our commitment at Ponte Giulio.



## The Ponte Giulio model



Analysis of requirements to identify the best solutions.



Cost/benefit analysis.



Feasibility study and project development.



Sharing, approval and archiving of the design.



Supply and installation of solutions.



Testing and staff training.



Efficiency management and after-sales assistance.

## PRELIMINARY OBSERVATIONS ON ASSISTED HYGIENE.

The skin serves as a protective layer for the human body, protecting internal organs from germs as well as freeing the organism from impurities, expelled via perspiration; it provides the sense of touch and regulates the body temperature. It is fundamentally important to keep it clean and dry in order for it to remain healthy. In the case of a person that is not self-sufficient, one or more people are required to maintain their hygiene.

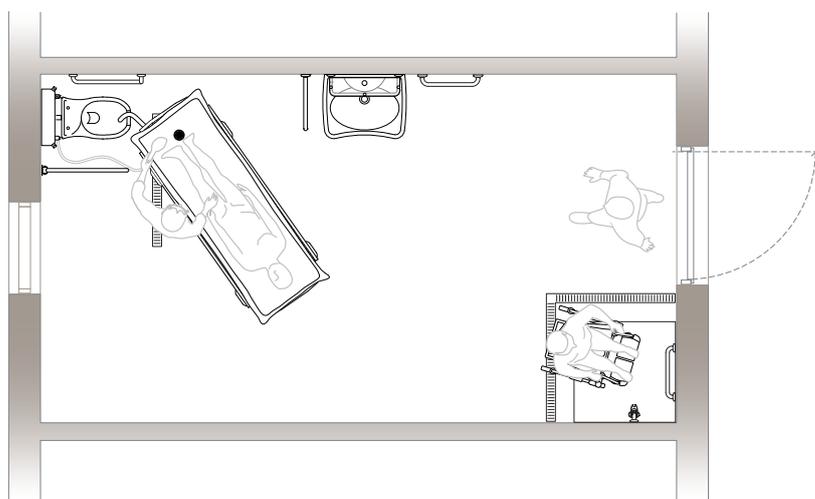
The most frequent operation in terms of assisted hygiene is that which takes place in bed. The reliance on other systems varies according to the degree of autonomy and self-control exercised by the patient and the structural nature of the room and professional customs of staff; they may be resistant to the idea of technological innovation, but once they have tried it, they often realise they cannot manage without. There is therefore no solution that is right for every circumstance, based on studies into individual requirements and problems, it is therefore necessary to customise every assistance solution.

From this point of view it is useful to pay particular attention to the position of bathroom fittings, because both the patient and assistant risk knocking against corners of furniture during moving operations. In terms of design, it should be remembered that an assisted bathroom must in any case have some general common features independently of the type of equipment required:

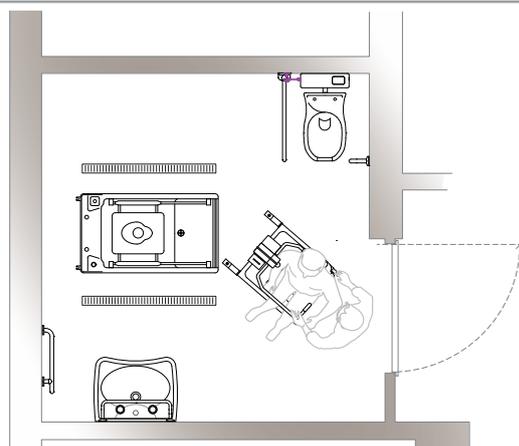
- **Suitable room temperature;**
- **The presence of all sanitary fittings and associated aids;**
- **The presence of an additional drainage trap on the floor to collect water spills;**
- **Manoeuvring space of at least 100cm around each side of the chosen equipment;**
- **An access door with a useful width of at least 120cm.**



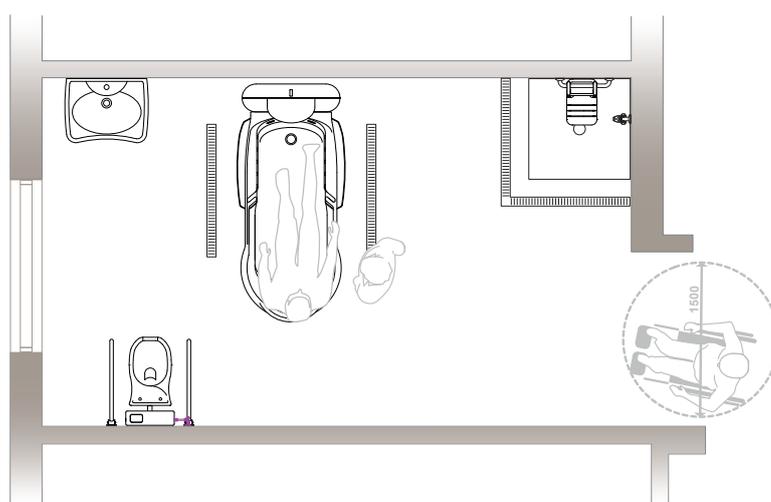
*Configuration example of an assisted bathroom with a shower stretcher*



*Configuration example of an assisted bathroom with a shower-tub*



*Configuration example of an assisted bathroom with an electric high-low bathtub. These rooms can be fitted with track-based lifting systems. These products are listed on pages 34 and 37 of this document*

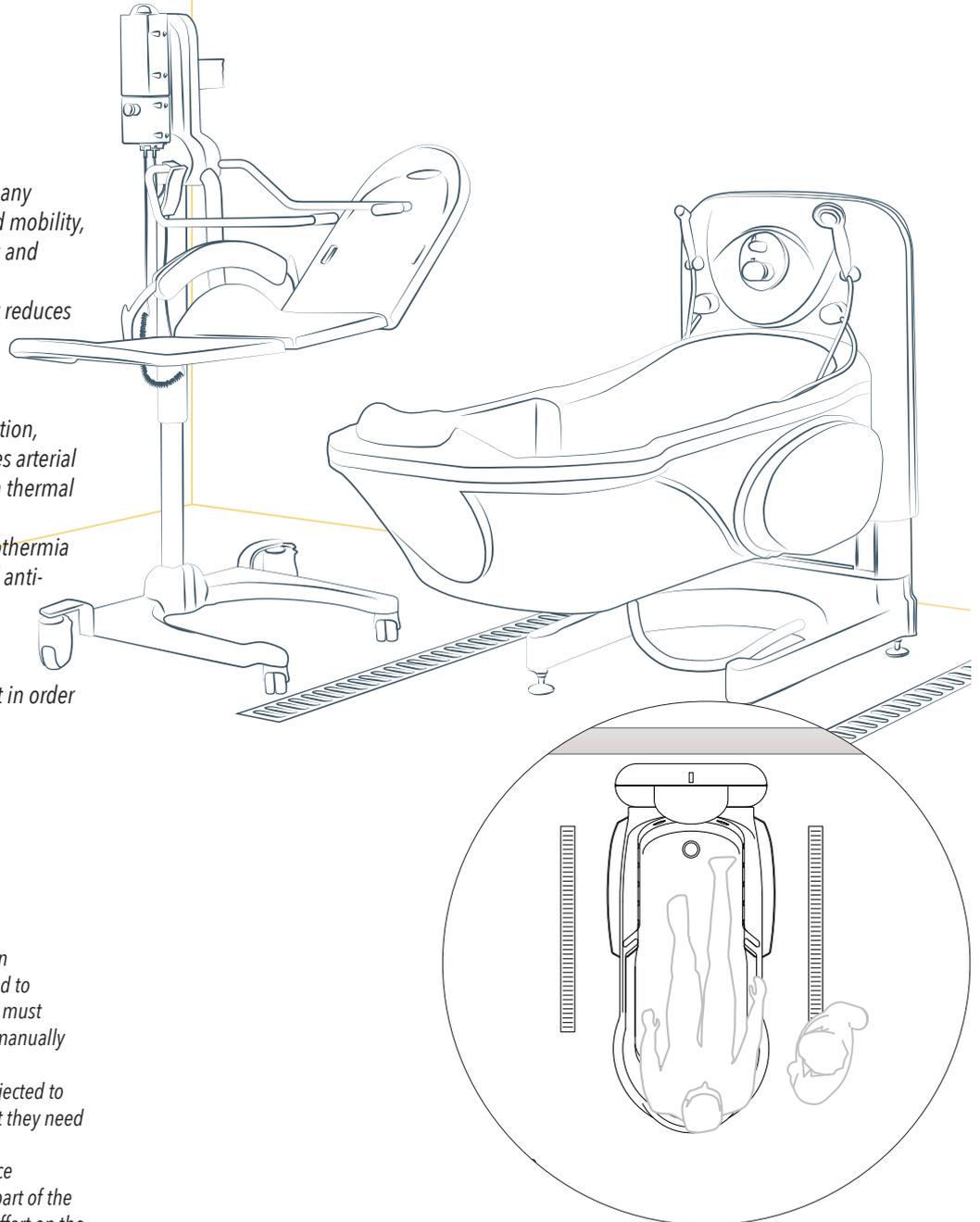


## Assisted washing area

Patient hygiene using a high-low bathtub.

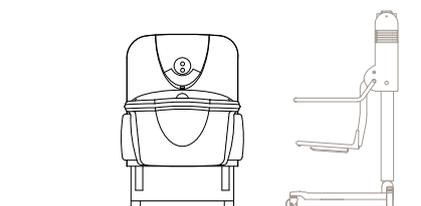
0001

Being immersed in warm water has many benefits, such as: pain relief, increased mobility, reduced symptoms for skin conditions and improved psychological well-being. In patients suffering from dementia, it reduces agitation; in addition a warm bath helps the skin to absorb medications applied to the skin afterwards. Thermal stimulation causes vasodilatation, improves blood circulation and reduces arterial pressure; this explains how short-term thermal shock can alleviate pain. The application of heat to induce hypothermia can have an immuno-suppressive and anti-inflammatory effect, also, following immersion in warm water can greatly facilitate minor operations such as softening the skin and nails of the feet in order to treat the lower limbs.



### Observations

- During immersion, due to vasodilatation processes, the patient may be stimulated to evacuate both liquids and solids, which must be managed by healthcare workers by manually removing the waste from the tub.
- During transfer, the patient may be subjected to significant temperature changes, in that they need to be first undressed in their room.
- The combination of tub and lifting device requires significant investment on the part of the management and significant physical effort on the part of health workers during transfer operations.
- The installation of grilles eliminates accidental water spillages on the floor.
- The use of Lyndo Care and Septy Care products for cleaning and sanitising the equipment reduces the spread of viruses and bacteria.





M74MBE03



Tub with electric lifting system,  
equipped with control panel

*Reg. Min. Health Service no.: 1442328*

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M74MBE04



Tub with electric lifting system,  
equipped with control panel  
and hydro-massage function

*Reg. Min. Health Service no.: 1498236*

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M75NCE02



Electric stretcher lifter

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M74MLS01

Lyndocare ready to use  
chlorhexidine gluconate based  
solution for the sanitisation of  
tub and lifting device.

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M74MLS02

Septy care concentrated  
quaternary ammonium salts  
solution for the disinfection of  
internal circuits.

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M74MMS01

Reduced foam skin detergent  
with extract of liquorice.  
To be used for the tub

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*For the supply of sanitary fitting and safety handles, see the products in the hospital bathroom section on pages 18 -*

## Assisted washing area

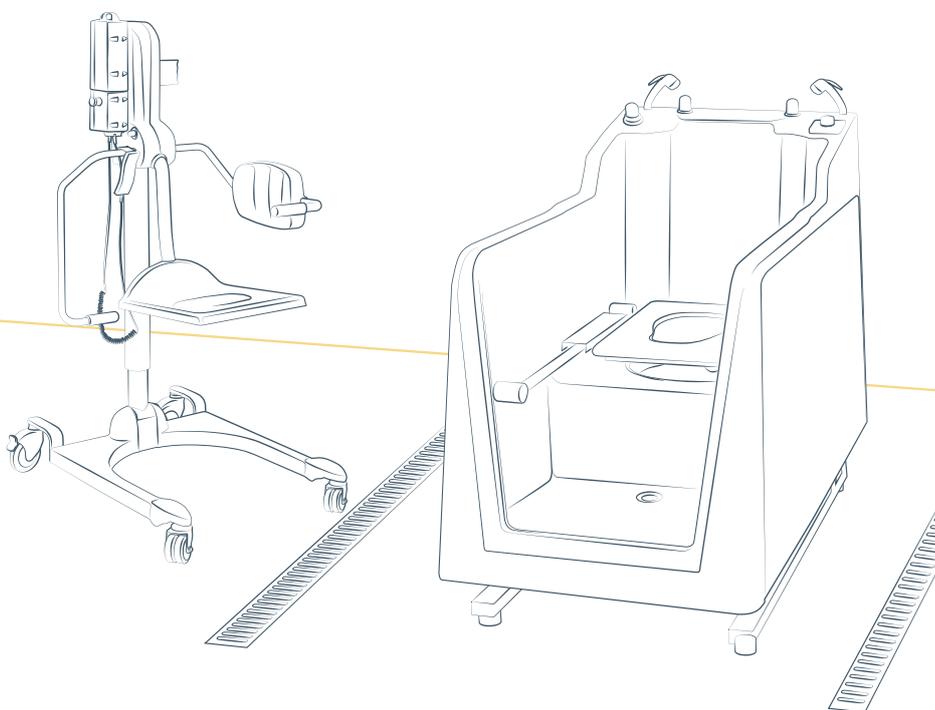
Patient hygiene using a shower cubicle with built-in WC.

0002

The treatment of patients with problems connected with physiological activity is made much easier with the use of a shower cubicle with built-in water control system and WC. In fact, in this case the consequences of vasodilatation can be managed using the built-in WC.

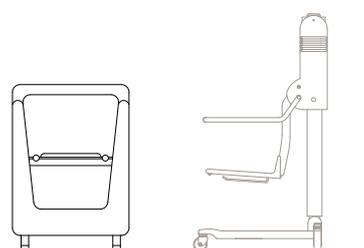
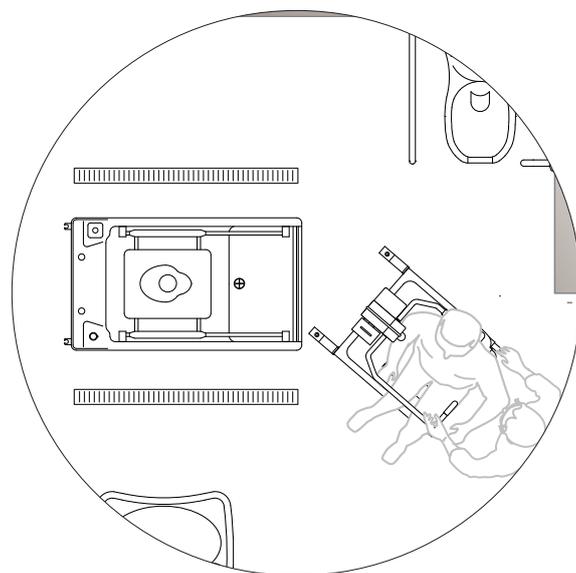
Autonomous patients that are able to walk can be easily guided into the shower cubicle. Partially collaborative patients that are able to use their upper limbs and remain seated autonomously, must be guided into the shower cubicle using a chair-lift.

Also in this instance, lower limbs can be treated but this requires the use of a removable tub.



### Observations

- During transfer, the patient may be subjected to significant temperature changes, in that they need to be first undressed in their room.
- The combination of shower cubicle or sealed tub and lifting device requires significant investment on the part of the management and significant physical effort on the part of health workers during transfer operations.
- The installation of grilles eliminates accidental water spillages on the floor.
- The use of Lyndo Care and Septy Care products for cleaning and sanitising the equipment reduces the spread of viruses and bacteria.





M74MCS03



Shower cubicle with built in control panel and WC

Reg. Min. Health Service no.: 1498237

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M74MDS04



Shower tub with built in control panel and WC

Reg. Min. Health Service no.: 1498238

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M75NCE01



Electric sitting lifter

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M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

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M74MLS02

Septy care concentrated quaternary ammonium salts solution for the disinfection of internal circuits.

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For the supply of sanitary fitting and safety handles, see the products in the hospital bathroom section on pages 18 - 32

## Assisted washing area

Patient hygiene using a shower stretcher with electric adjustment.

0003

The treatment of patients with problems connected with physiological activity is made particularly easy with the use of a shower stretcher.

The use of this device allows you to avoid the use of a separate lifting device as it is a lifting device in itself. It is particularly useful when combined with a WC in the assisted bathroom for the evacuation of water following treatment.

It also allows you to manage all kinds of patient, both collaborative and non-collaborative.

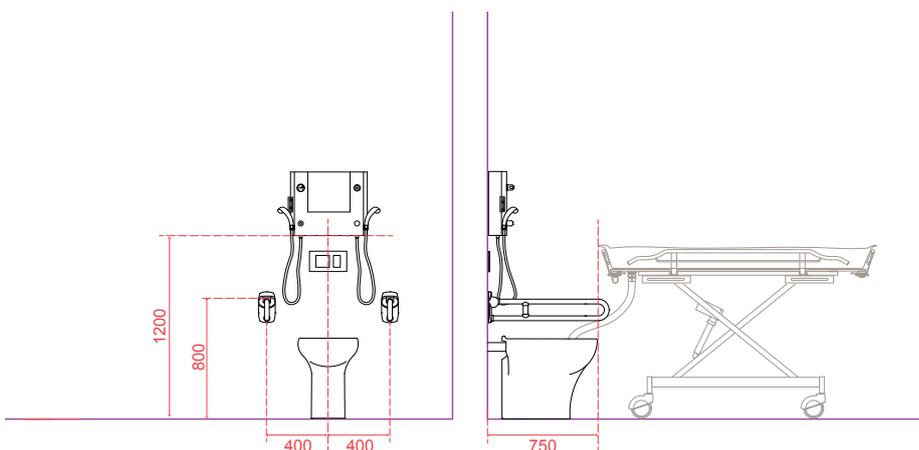
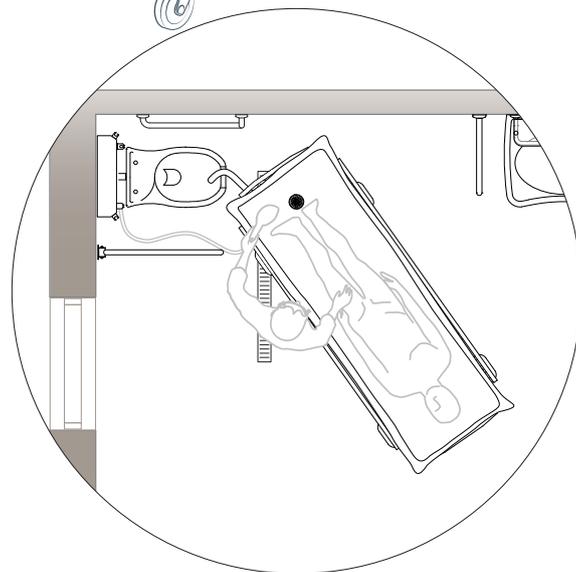
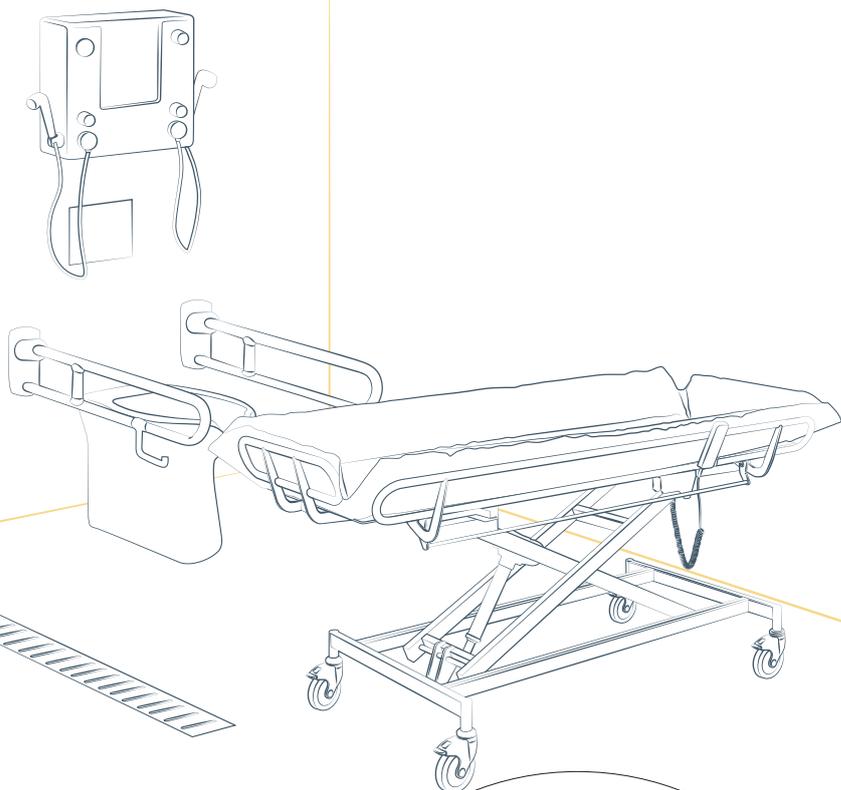
The work surface is height-adjustable using the remote control, allowing for easy transfer manoeuvres between the bed and stretcher, which can be further facilitated by the use of a slide sheet.

The shower stretcher allows you to reduce temperature changes suffered by the patient to a minimum in that transfer between the room/ assisted bathroom can be made with the patient fully or partially clothed.

The relationship between operational advantages and price makes this a favourable solution.

### Observations

- Replacing the headboard and foot board can reduce the footprint of the stretcher by 14cm, improving usability.
- The installation of grilles eliminates accidental water spillages on the floor.
- The use of Lyndo Care and Septy Care products for cleaning and sanitising the equipment reduces the spread of viruses and bacteria.



measurements in millimetres



M75NAE02



Shower stretcher with electrically variable height and angle



M75NAH02



Shower stretcher with hydraulically variable height and angle



B42CBO02



WC with front opening, Rossari range



B41DEO41



Seat cover with soft close hinge, Rossari range



H52HHS01



Recess-fitted flush tank



G27JCS53



Folding handle, with anti-bacterial sleeve equipped with reinforcing joint, Urban People range



F17AGN03



Roll holder, mounts to safety handle



F17AHN01



Wall-mounted WC brush holder with anti-bacterial grip.



M74MHS01



Shower panel



M75NNS02

Handsheet slide sheet 90x190 cm size M.



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.



M74MLS02

Septy care concentrated quaternary ammonium salts solution for the disinfection of internal circuits.

For the supply of sanitary fitting and safety handles, see the products in the hospital bathroom section on pages 18 - 32

### Preface

In order to present a range of aids conceived, designed and built to overcome architectural barriers (OAB), we first need to briefly analyse the problems that make technological solutions that are open to innovation, aesthetics and functionality essential.

### Definition

The definition "architectural barrier" generally indicates a series of conditions that make it impossible for an individual to relate autonomously with the world around them.

This condition may be determined by various factors:

- a condition present from birth;
- a traumatic event;
- an illness;
- the ageing process.

The outcomes of these circumstances may be temporary or permanent but in any case they have a varying impact on the individual's ability to carry out normal everyday tasks autonomously.

It is also important to highlight the emotional consequences connected with such drastic changes, not only for the individual themselves but also for family members.

### Feeling different

In a society oriented around physical efficiency, in a world designed for those that can move around autonomously, the need to provide solutions for disabled people is a clear ethical and social responsibility.

The need to create aids that form the point of connection between needs to be satisfied and the holder of those needs is an opportunity for businesses operating in the sector and also a clear moral obligation for the social context in which these needs arise.

The higher the level of technology and aesthetics, the lower the distress derived from the condition the individual and his family members find themselves in in relation to their surrounding environment.

The effectiveness of the solutions on offer reaches peak level the moment in which the reduction of AB corresponds with an adequate operational level of the bodies responsible for delivering care and assistance.

### Designing solutions.

As mentioned above, industry satisfies these needs to varying degrees and Ponte Giulio S.p.A. responds by focusing its experience on a very specific area: the hospital bathroom sector.



### The shower area (Areas 4, 5, 6 and 7).

Having to deal with the shower area it should be noted that the most complex patients in terms of requirements that need to be considered are those with reduced motor functions that require complete assistance.

Once undressed on their bed, the patient is brought into the bathroom by the health worker using a shower armchair on wheels suitable for contact with water.

For patients with a good level of autonomy, this transfer operation can be facilitated by using a transfer belt. This operation can also be carried out using a dedicated lifting device with electric adjustment fitted with a mesh harness suitable for contact with water. This can be chosen based on the collaborative abilities and body size of the patient and is essential for patients with low collaborative abilities. This also allows the transfer sheet to be left underneath the patient, reducing time and effort expended during hygienic activities.

For bariatric patients, a shower chair suitable for patients weighing up to 225kg can be used.

Normally, before hygienic operations, the health worker will speak to the guest to ascertain if the latter needs to evacuate their bowels to then move them into the shower. For safety and practical reasons, the health worker should not position the patient, especially if non-collaborative, on a fixed or removable seat in that usually the health conditions of the guest prevent them from remaining seated autonomously in safety.

During treatment, the patient comes into contact with warm water and during this stage they may evacuate their bowels. In order to manage this type of requirement as well, the adoption of a shower tray equipped with a drainage trap, preferably installed flush with the floor, can be useful.

Shower trays in "fire-clay" sized 90x90cm are preferable to those in plastic or fibreglass. This is for two main reasons:

- if during the installation stage, the underlying cement is not perfectly flat, the shower tray may have areas without support and may break during use;
- if during cleaning operations cleaning staff use aggressive chemical agents, this could greatly reduce the normal working life of this fitting.

It is useful to remember that any bowel evacuations by the patient should be managed by the health worker, who should stimulate them and carry out targeted cleaning using the shower head. It should be remembered that the use of a chair increases the footprint in excess of a shower tray. This therefore leads to a significant spillage of water outside the shower tray. In order to eliminate this water spillage, we recommend fitting grilles around the perimeter of the tray.



**The washbasin area (Areas 8 and 9).**

Solutions for the washbasin area include those that can be used by patients with varying degrees of autonomy, maintaining a pleasant aesthetic and functional look.

There are solutions that allow patients to draw close even using a wheelchair, allowing them to use the interior area as a support for their elbows. The high level of accessibility is further increased by multi-use handles (fitted to the wall or folding) that can improve patient mobility. These solutions range from the long lever wash basin mixer taps with facilitated activation to the trauma-proof flexible drain siphon.

The wide wall-mounted shelf distributes the weight of the sanitary fitting combined with that of the patient's body, guaranteeing safety, stability and low cost.

The (certified) safety mirror is available in two solutions:

- thick cut for a more domestic environment
- tilting to allow for adjustment.

Both versions allow for orthogonality for both seated and standing patients.

It is advisable to consider the possibility of strangers co-habiting, it is therefore a good idea to allow patients to manage their personal objects with dignity, above all those used for personal hygiene such as toothbrushes and towels etc.

This detail is an important practical way reducing the spread and exchange of bacteria as well as ensuring a decent level of personal dignity. It is facilitated by the presence of a wall-mounted shelf with dual cups and multi-use handle.



### The WC area (Areas 10 and 11).

Due to the technical properties of this area, its use is recommended for fully or partially collaborative patients.

The WC area can give rise to particularly challenging situations for health workers. These are connected with the transfer of patients from wheelchairs or other mobility aids and the hygienic operations following evacuation.

It is advisable to consider that, in many cases, positioning the patient on the WC is carried out using a fixed or mobile lifting device. It is therefore advisable to take this possibility into account during the design phase.

The collaborative management of the patient is carried out based on various factors, such as the dimensions of the WC, its position and the presence of safety handles and supports.

Washing is carried out using a thermostatic burn-prevention mixer tap affixed to the wall with shower head. This is positioned so that it does not interfere with the safety handles and is easy for the health worker to use.

Suitable ergonomic support for the patient is ensured by the pre-fabricated rear wall onto which the WC is installed, or by the external flush tank positioned behind the floor-standing version.

Hygiene and practical management of the WC is improved with the addition of a removable soft toilet seat for the suspended version or in thermo-set plastic with soft closure hinge for the floor-standing version.

Both these elements allow you to reduce maintenance costs over time.



## Shower area

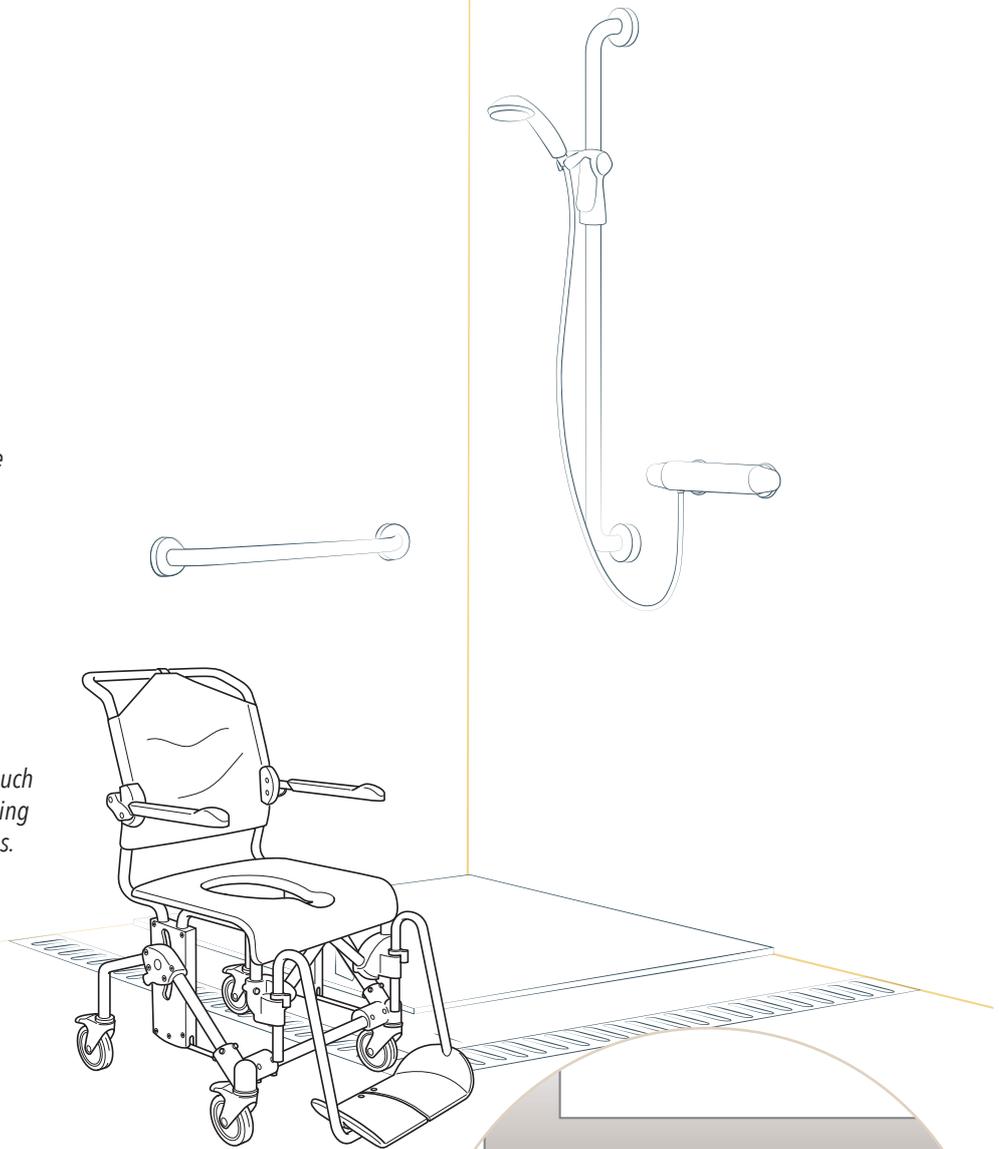
0004

Corner shower for assisted patients or those with reduced motor skills. Please refer to the text on page 15 for shower trays.

For the safety handles we recommend the installation of a large vertical handle 117cm long equipped with a shower head holder, ergonomic handle and linear safety handle 60cm long.

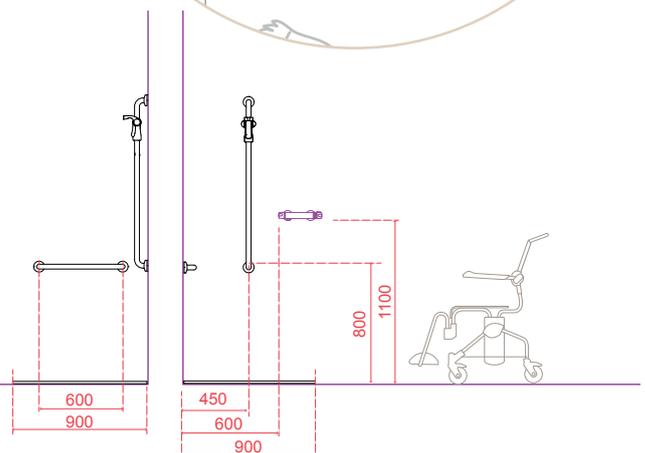
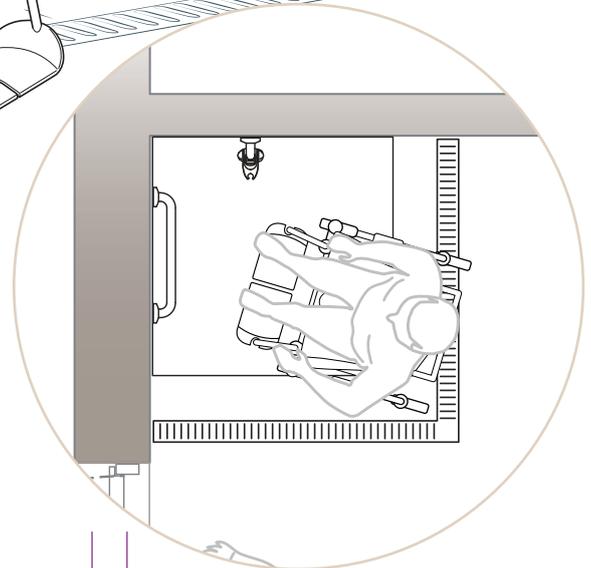
The absence of a removable or folding seat makes it easier to enter with patients on a shower seat.

We recommend installing the mixer tap in such a way that won't obstruct either the positioning of the patient or the health worker's activities.



### Observations

- The positioning of the safety handles and large handles facilitates use of the bathroom, improving the safety of both patients and health workers.
- The health worker can make use of the ergonomic shower head holder with only one hand, maintaining control of the patient.
- The grilles on the floor aid the collection of water after treatment.
- The distance between slats on the seat prevents genitals from becoming trapped.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.



measurements in millimetres



B42CPS02



Shower tray in fire-clay sized 90x90 cm for installation flush with the floor



H52HAS03



Low-profile drainage trap



G27JOS24



Vertical safety handle with anti-bacterial surface.



Y87JOS04



Shower head holder with ergonomic handle



G27JAS60



Linear safety handle coated with anti-bacterial sleeve.



M75NBS02

Shower seat with anodised aluminium structure. Load capacity up to 115 kg.



M75NBS03

Shower seat with anodised aluminium structure, for use with bariatric patients. Load capacity up to 225 kg.



M75NDE01

Electric lifting device with harness



H51GDS05



Thermostatic mixer, external mount



Y91JOS07



Hose for mixer tap



Y91JOS08



Shower head for mixer



F17AKN03



Single clothes hook



M75NMS02

Handybelt ergonomic transfer belt size M.



M75NMS03

Handybelt ergonomic transfer belt size L.



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

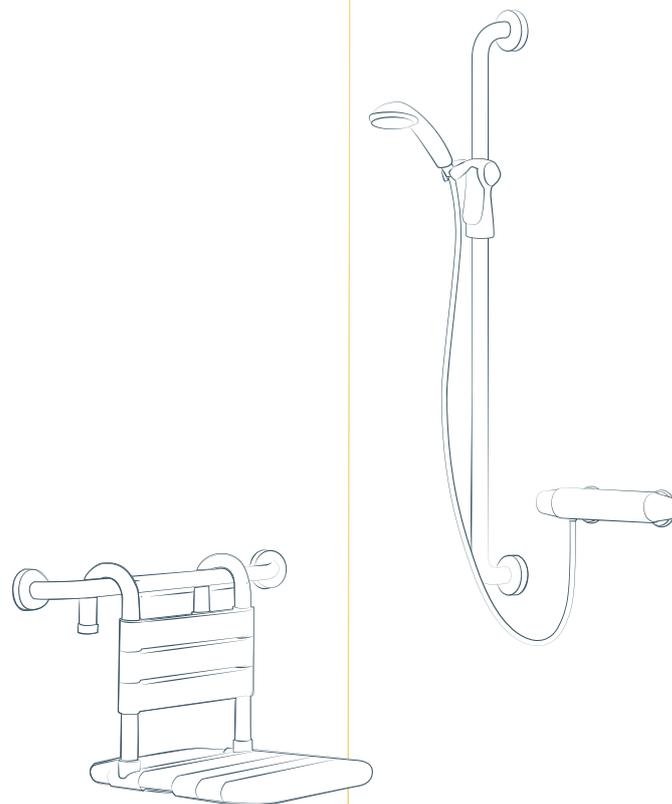
## Shower area

0005

Corner shower for assisted patients with good motor skills. Please refer to the text on page 15 for shower trays.

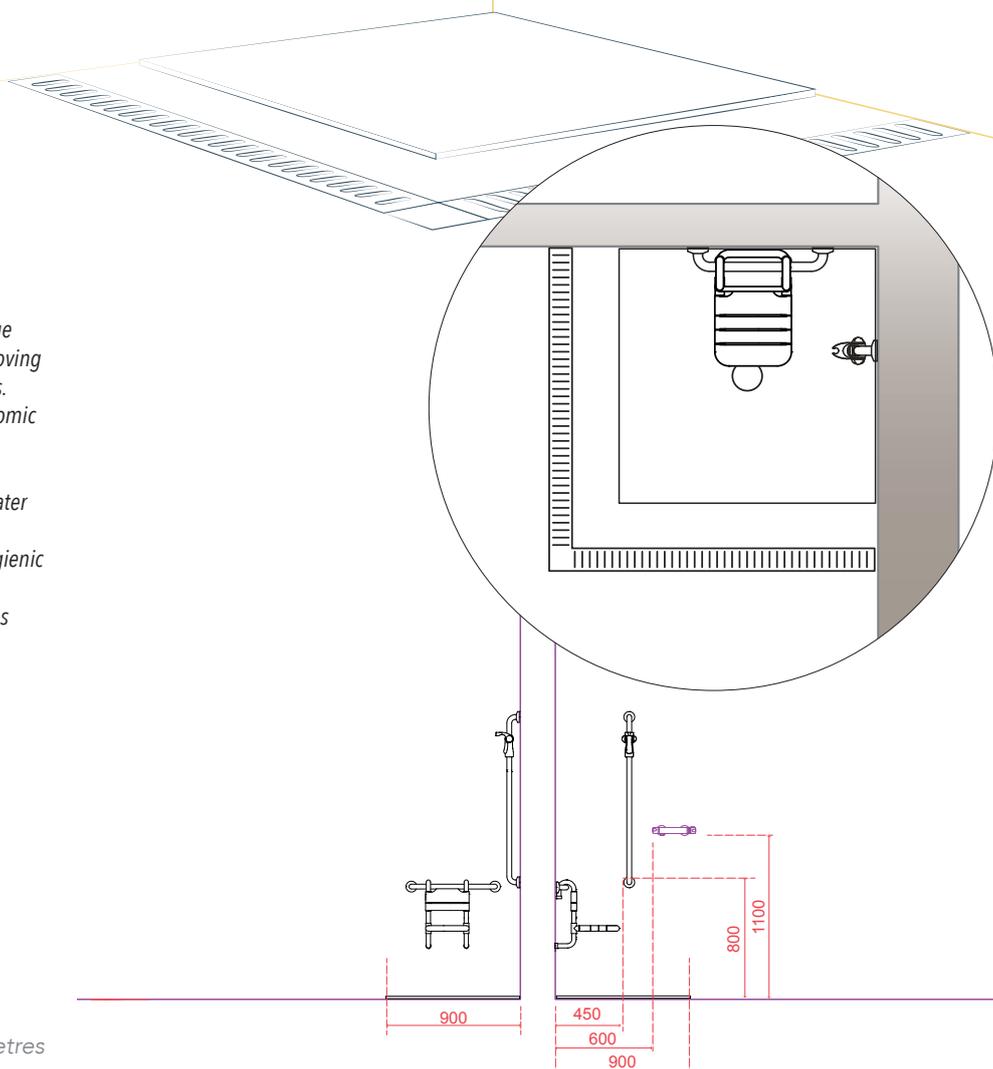
For the safety handles we recommend the installation of a large vertical handle 117cm long equipped with a shower head holder, ergonomic handle and linear safety handle 60cm long and a removable seat with anti-bacterial slats.

We recommend installing the mixer tap in such a way that won't obstruct either the positioning of the patient or the health worker's activities. The installation of the mixer tap behind the patient's back is absolutely unsuitable. The removable seat allows for installation only when needed, rationalising the quantity of space available in terms of usability.



### Observations

- The positioning of the safety handles and large handles facilitates use of the bathroom, improving the safety of both patients and health workers.
- The health worker can make use of the ergonomic shower head holder with only one hand, maintaining control of the patient.
- The grilles on the floor aid the collection of water after treatment.
- The 225kg capacity shower seat facilitates hygienic procedures even on bariatric patients.
- The use of Lyndo Care for cleaning the handles reduces the spread of viruses and bacteria.



measurements in millimetres



B42CPS02



Shower tray in fire-clay sized 90x90 cm for installation flush with the floor



H52HAS03



Low-profile drainage trap



G27JOS24



Vertical safety handle with anti-bacterial surface.



Y87JOS04



Shower head holder with ergonomic handle



G27JAS60



Linear safety handle coated with anti-bacterial sleeve.



G01JDS17



Removable seat equipped with backrest coated with anti-bacterial sleeve and anti-bacterial slats.



H51GDS05



Thermostatic mixer, external mount



Y91JOS07



Hose for mixer tap



Y91JOS08



Shower head for mixer



F17AKN03



Single clothes hook



M75NMS02

Handybelt ergonomic transfer belt size M.



M75NMS03

Handybelt ergonomic transfer belt size L.



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

## Corner shower area

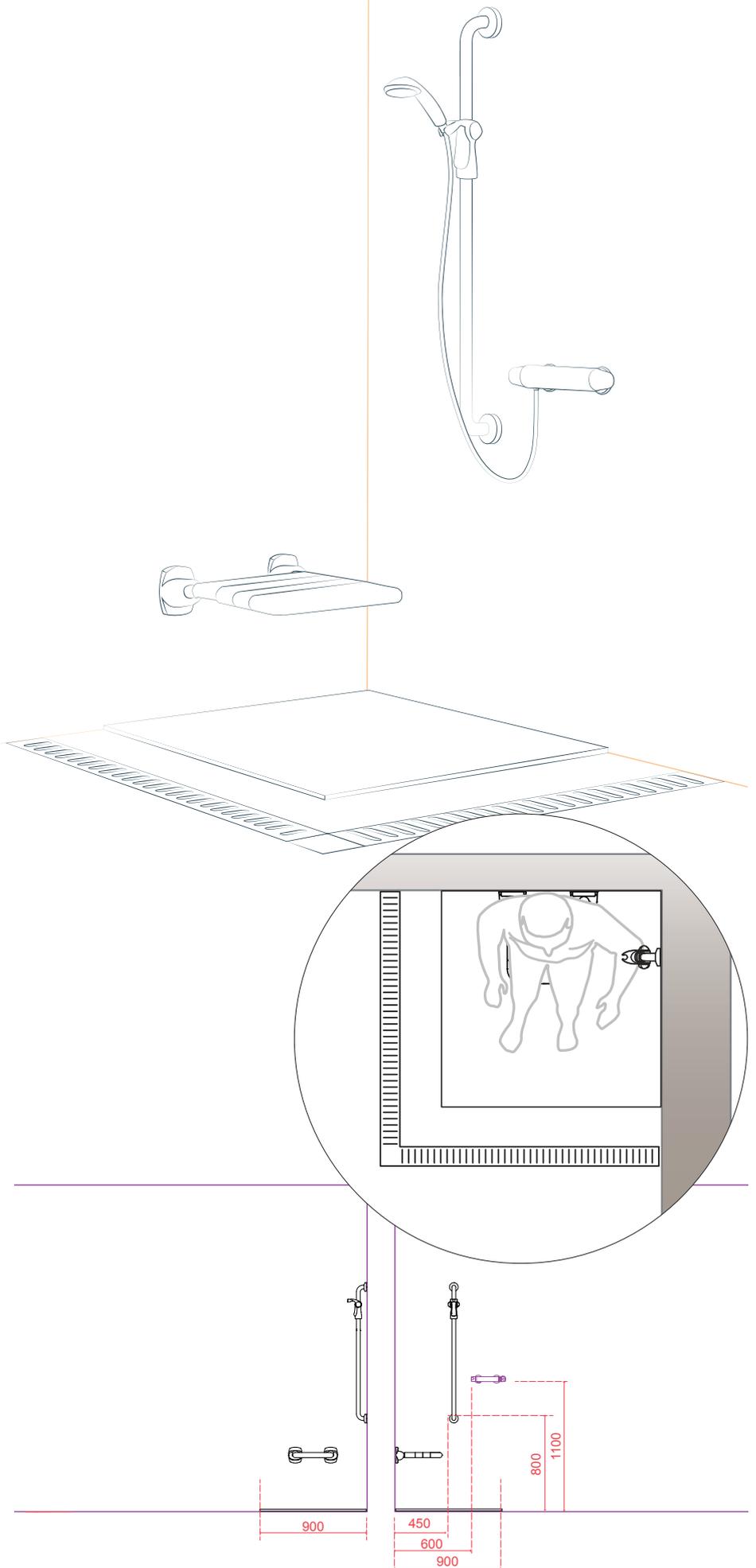
0006

Corner shower for assisted patients with good motor skills. Please refer to the text on page 15 for shower trays.

For the safety handles we recommend the installation of a large vertical handle 117cm long equipped with a shower head holder with ergonomic handle and a folding seat in ABS. We recommend installing the mixer tap in such a way that won't obstruct either the positioning of the patient or the health worker's activities. The installation of the mixer tap behind the patient's back is absolutely unsuitable. The folding seat system allows the seat to be used only when needed during treatment procedures, allowing the health worker to decide whether or not to use it based on the patient's immediate needs.

### Observations

- The positioning of the safety handle and seat facilitates use of the bathroom, improving the safety of both patients and health workers.
- The health worker can make use of the ergonomic shower head holder with only one hand, maintaining control of the patient.
- The grilles on the floor aid the collection of water after treatment.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.



measurements in millimetres



B42CPS02



Shower tray in fire-clay sized 90x90 cm for installation flush with the floor



H52HAS03



Low-profile drainage trap



G27JOS24



Vertical safety handle with anti-bacterial surface.



Y87JOS04



Shower head holder with ergonomic handle



G27JAS60



Linear safety handle coated with anti-bacterial sleeve.



G27JDS42



Folding shower seat



H51GDS05



Thermostatic mixer, external mount



Y91JOS07



Hose for mixer tap



Y91JOS08



Shower head for mixer



F17AKN03



Single clothes hook



M75NMS02

Handybelt ergonomic transfer belt size M.



M75NMS03

Handybelt ergonomic transfer belt size L.



M75NDE01

Electric lifting device with harness



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

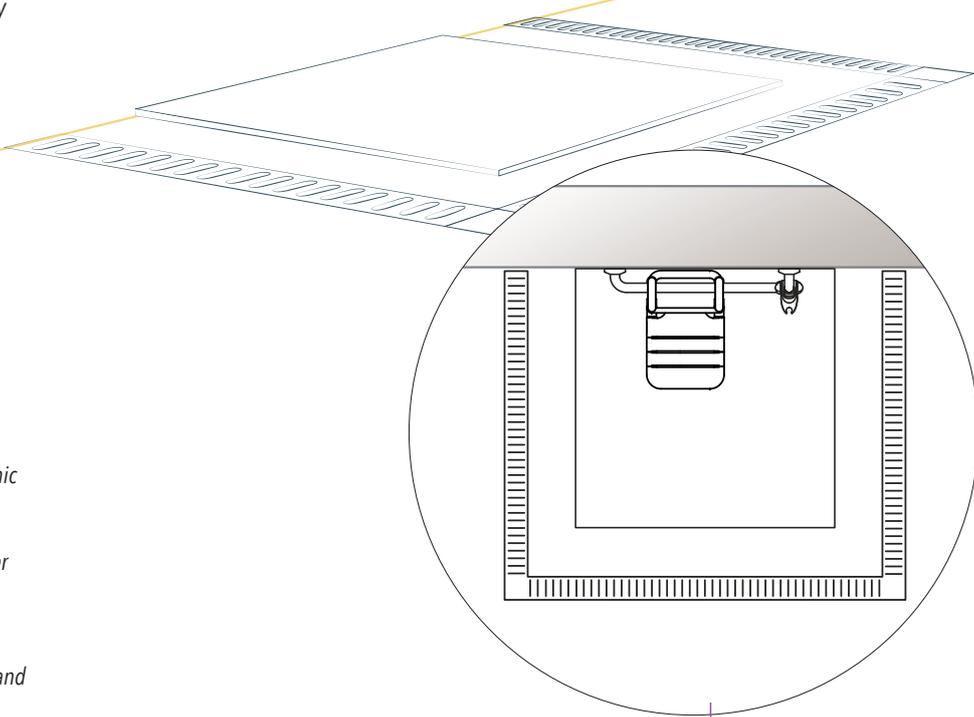
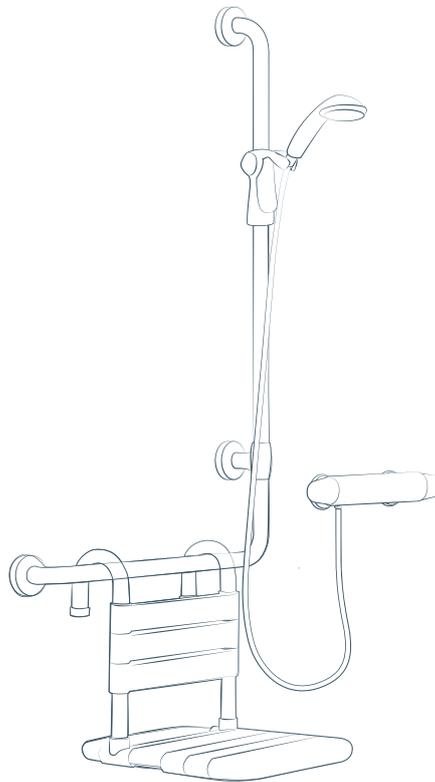
## Shower area

0007

Shower positioned in the centre of the wall for a good level of motor autonomy. Please refer to the text on page 15 for shower trays.

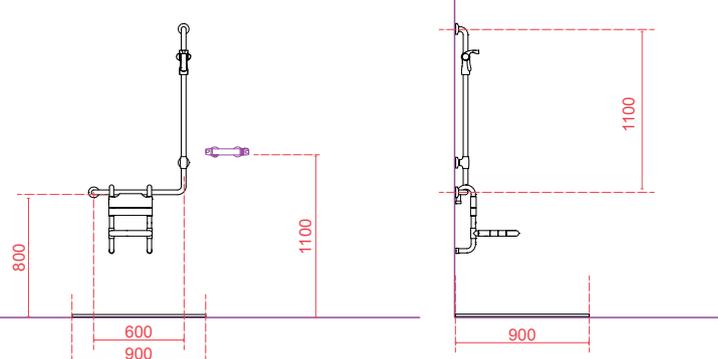
For the safety handles we recommend the installation of a corner handle 67 x 117cm (right or left based on the vertical section) equipped with a shower head holder with ergonomic handle and a removable seat with anti-bacterial slats.

We recommend installing the mixer tap in such a way that won't obstruct either the positioning of the patient or the health worker's activities. The installation of the mixer tap behind the patient's back is absolutely unsuitable. The removable seat allows for installation only when needed, rationalising the quantity of space available in terms of usability.



### Observations

- The positioning of the safety handle and seat facilitates use of the bathroom, improving the safety of both patients and health workers.
- The health worker can make use of the ergonomic shower head holder with only one hand, maintaining control of the patient.
- The grilles on the floor aid the collection of water after treatment.
- The distance between slats on the seat prevents genitals from becoming trapped.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.



measurements in millimetres



B42CPS02



Shower tray in fire-clay sized 90x90 cm for installation flush with the floor



H52HAS03



Low-profile drainage trap



G27JOL21



Corner safety handle with anti-bacterial surface with shower head holder



G27JOR21



Corner safety handle with anti-bacterial surface with shower head holder



Y87JOS04



Shower head holder with ergonomic handle



G40JDS17



Removable seat equipped with backrest coated with anti-bacterial sleeve and anti-bacterial slats



H51GDS05



Thermostatic mixer, external mount



Y91JOS07



Hose for mixer tap



Y91JOS08



Shower head for mixer



F17AKN03



Single clothes hook



M75NMS02

Handybelt ergonomic transfer belt size M.



M75NMS03

Handybelt ergonomic transfer belt size L.



M75NDE01

Electric lifting device with harness



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

## Washbasin area

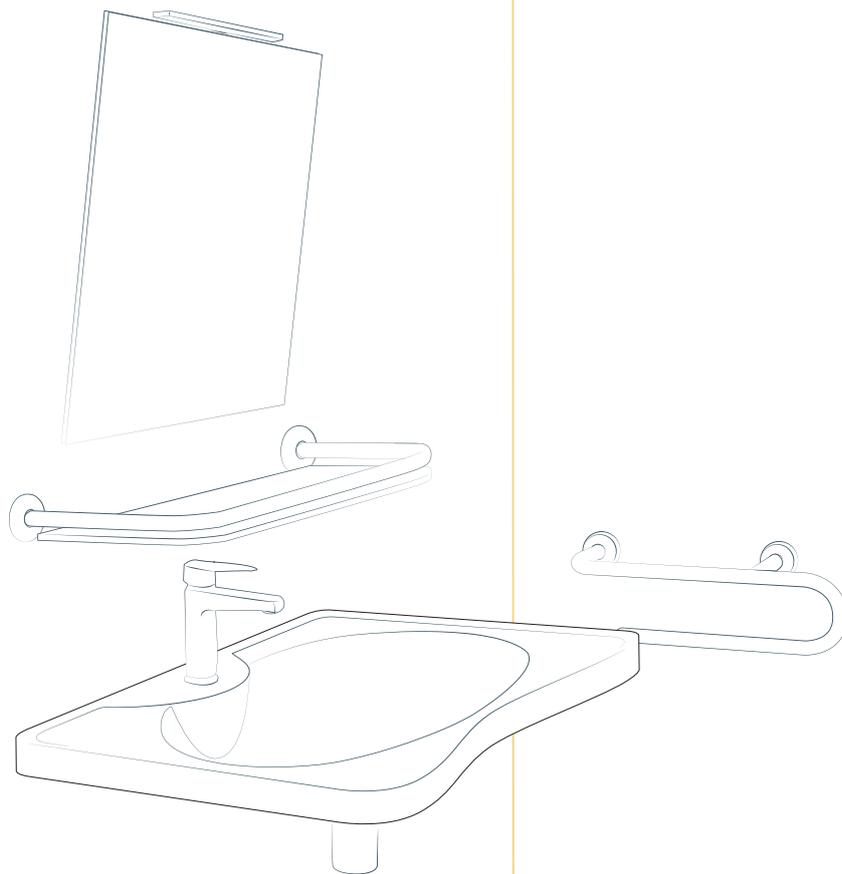
0008

Washbasin with corner installation for assisted patients or those with a good level of motor autonomy. Please refer to the text on page 15 for washbasins.

For the safety handles we recommend the installation of a large safety handle that also functions as a towel rack equipped with toothbrush holders. These are useful in the event of two patients sharing.

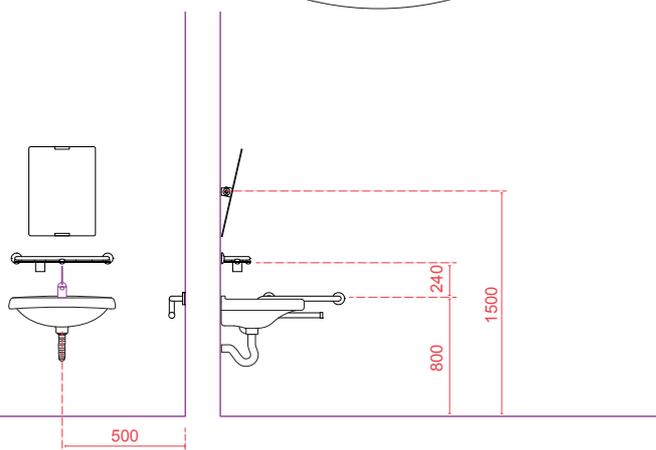
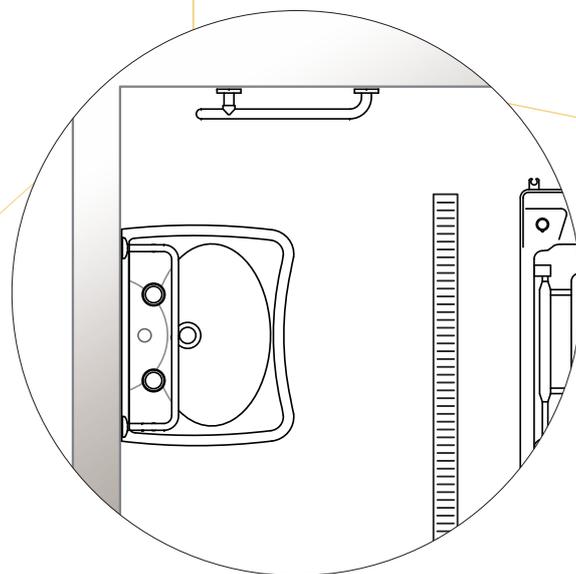
The mixer tap proposed has a long lever with drainage trap and flexible drain siphon, this allows the bathroom to be used by wheelchair users.

The mirror is recommended in the safety version, with tilting adjustment and LED lighting system.



### Observations

- The shelf installation of the washbasin distributes the load over a greater surface area than a conventional installation, ensuring longer working life.
- The lateral position of the large safety handle/ towel rack helps patients get closer to the washbasin.
- The shelf with two cups reduces the chance of contamination between patients due to accidental use of personal possessions.
- The mirror is suitably lit by an LED lighting system that ensures complete visibility.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.



measurements in millimetres



B40CMS02



Ergonomic washbasin in white fire clay



B41DCS02

Shelf for securing washbasin



H51HAS02



Flexible jointed siphon



H50GBS02



Long lever wash basin mixer with extractable spout



F41JPS20



Mirror, tilting, safety glass



Y91ASS08

LED light for tilting mirror



G01JEL02



Safety handle/towel rack coated with anti-bacterial sleeve



G01JER02



Safety handle/towel rack coated with anti-bacterial sleeve



G01JQS37



Shelf with two holes for cups for toothbrushes



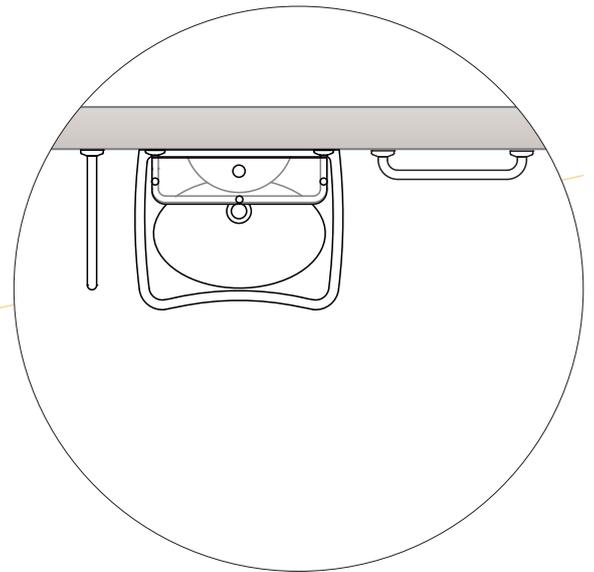
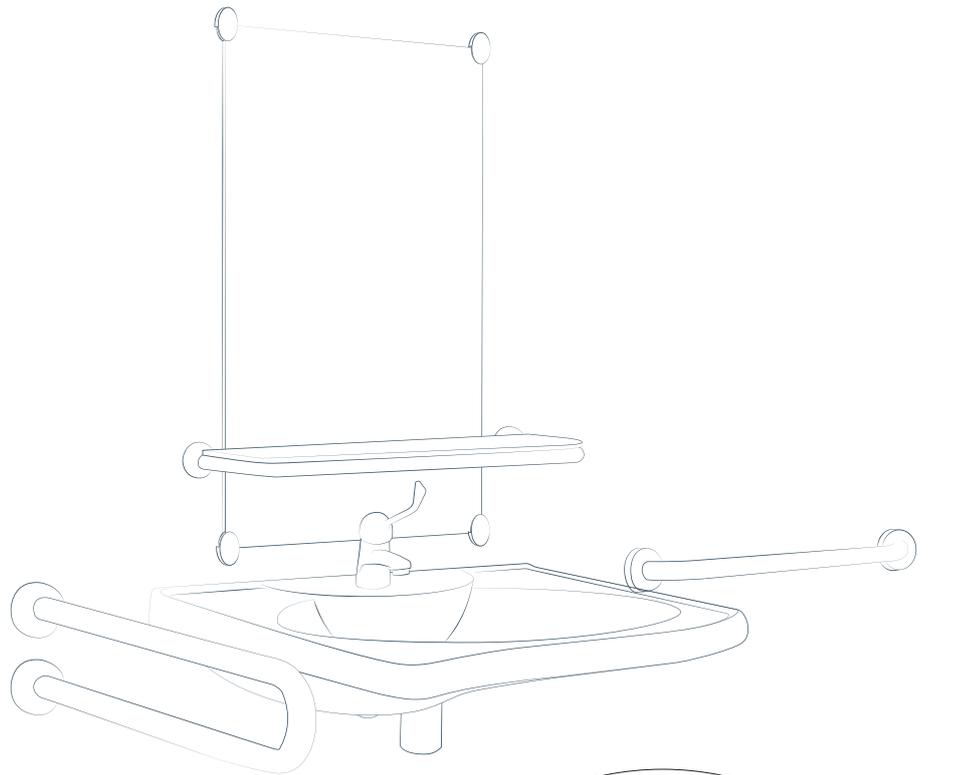
M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

## Washbasin area

0009

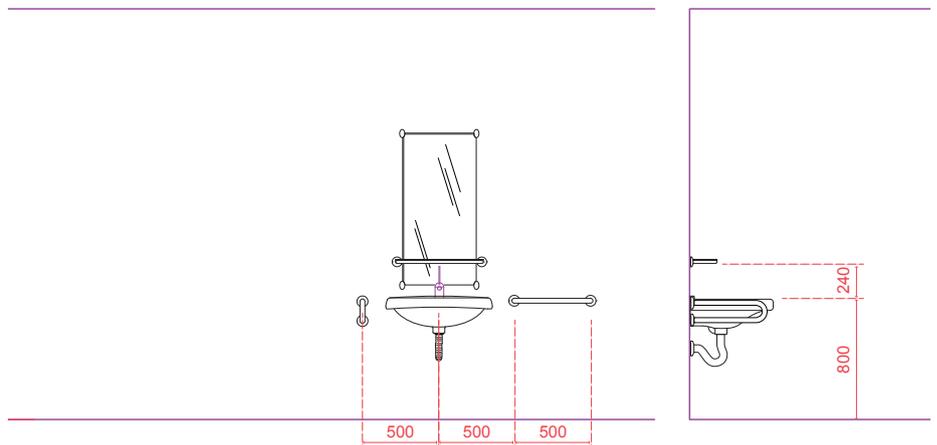
Washbasin with corner or wall-centre installation for assisted patients or those with a good level of motor autonomy. Please refer to the text on page 15 for washbasins. For safety handles, we recommend the installation of a pair of larger safety handles beside the washbasin that also operate as towel holders and a shelf. The mixer tap proposed has a long lever. The flexible drain siphon allows the bathroom to be used by wheelchair users. The mirror is recommended in the safety version, fixed and with LED lighting system.



### Observations

- The shelf installation of the washbasin distributes the load over a greater surface area than a conventional installation, ensuring longer working life.
- The folding position of the large safety handles/ towel racks helps patients get closer to the washbasin.
- The mirror is suitably lit by an LED lighting system that ensures complete visibility.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.

measurements in millimetres





B40CMS02

Ergonomic washbasin in white fire clay



B41DCS02

Shelf for securing washbasin



H51HAS02

Flexible jointed siphon



R39RUS07

Long-lever mixer tap



F41JPS01

Mirror, safety glass, with dimensions to request



F17ATN01

Mirror fastening elements



G01JQS08

Shelf, with plexiglass shelf



G40JQS01

Safety handle/towel rack coated with anti-bacterial sleeve



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.



Y91ASS09

LED light for tilting mirror



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

## WC area

### 0010

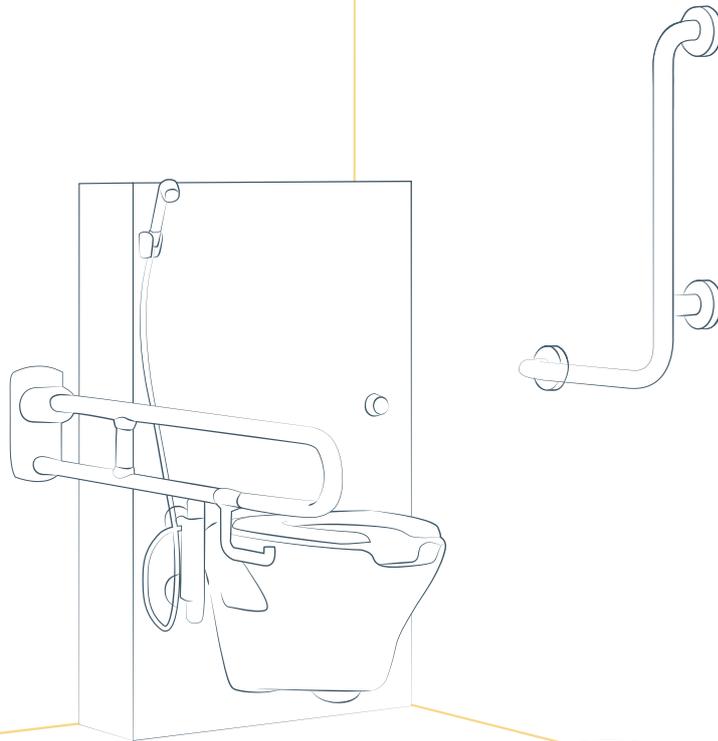
WC with corner or wall-centre installation for assisted patients or those with a good level of motor autonomy. Please refer to the text on page 15 for WCs.

Use of the WC by patients with a reduced level of autonomy can be facilitated by the use of a comfortable chair with WC compatibility.

For patients with a good level of autonomy, the presence of safety handles and the height of the WC ensure safety during the use of the WC.

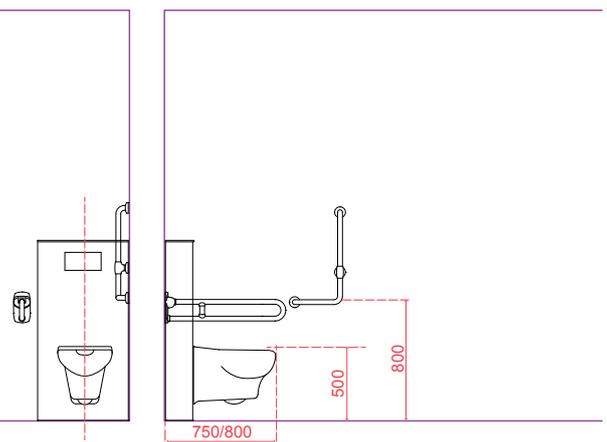
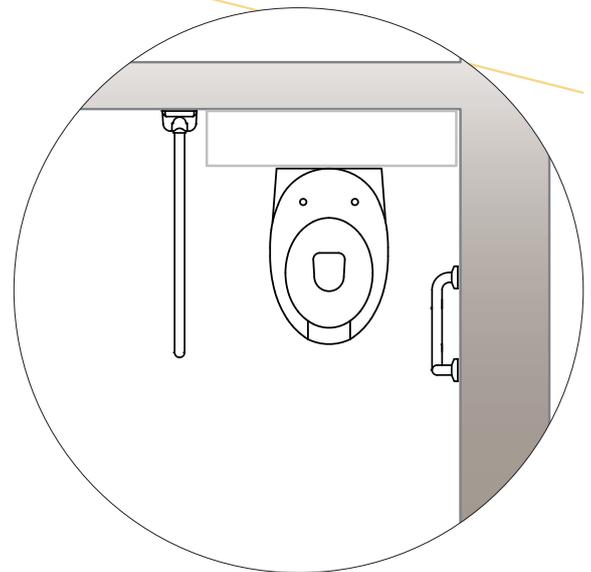
In addition, for these patients the use of a coverable wall ensures they have an ergonomic backrest.

The combination of these elements allows health workers to wash patients safely and easily. The position of the mixer tap with shower head is particularly important for this.



#### Observations

- The positioning of the safety handles and accessories facilitates use of the WC, improving the safety of both patients and health workers.
- The coverable rear wall meets the required standards of the sector in terms of dimensions and makes it easy to inspect the plumbing.
- The thermostatic mixer taps prevents patients from getting scalded.
- The removable soft toilet seat ensures hygiene and ease of use over time.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.



measurements in millimetres



B40CAO02



Suspended WC with front opening, 130 range



B41DEO36



Soft toilet seat



R39PVS21



Coverable wall in cellulose fibre and plaster



B41DDS22



Self-supporting structure with flush tank for suspended WC



H52HGS08

Flush plate



G27JCS53



Folding safety handle with reinforcement joint with anti-bacterial surface



G27JBR19



90° corner safety handle coated with anti-bacterial sleeve



G27JBL19



90° corner safety handle coated with anti-bacterial sleeve



F17AHN01



Wall-mounted WC brush holder with anti-bacterial grip.



H51GHS01



Shower head for mixer tap complete with hose and support.



F17AGN03



Roll holder, mounts to safety handle



H51GDS05



Thermostatic mixer, external mount



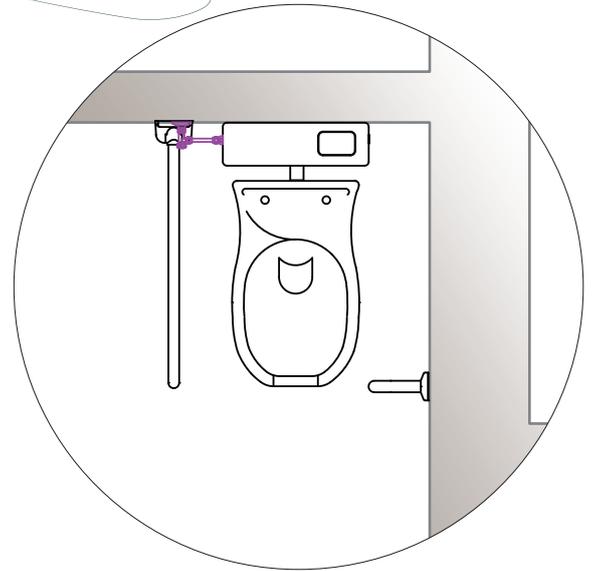
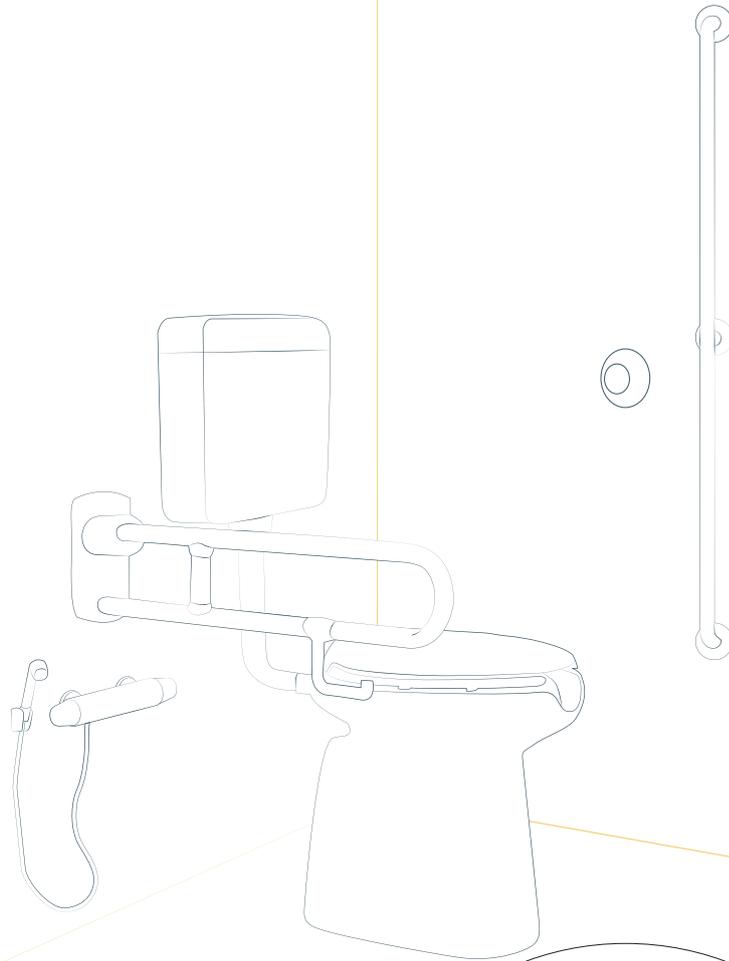
M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

## WC area

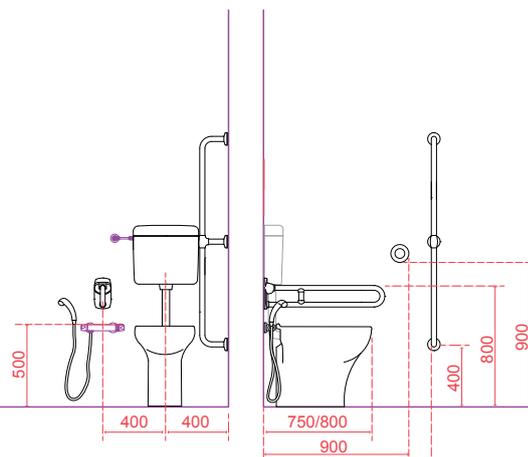
### 0011

WC with corner installation for assisted patients or those with a good level of motor autonomy. Please refer to the text on page 15 for WCs. Use of the WC by patients with a reduced level of autonomy can be facilitated by the use of a comfortable chair with WC compatibility. For patients with a good level of autonomy, the presence of safety handles and the height of the WC ensure safety during the use of the WC. In addition, for these patients the recommended position for the WC and the presence of an external flush tank ensure there is an ergonomic backrest. The combination of these elements allows health workers to wash patients safely and easily. The position of the mixer tap with shower head is particularly important for this.



#### Observations

- The positioning of the safety handles and accessories facilitates use of the WC, improving the safety of both patients and health workers.
- The thermostatic mixer taps prevents patients from getting scalded.
- The WC cover in thermoplastic material with soft-closure system ensures hygiene and reduces management costs over time.
- The use of Lyndo Care for cleaning the handles and seat reduces the spread of viruses and bacteria.



measurements in millimetres



B42CBO02



WC with front opening, Rossari range



B41DEO41



Seat cover with soft close hinge, Rossari range



H52HJS03



external flush tank



H52HGS02W1



Wall flush mounted button, free position



G27JCS53



Folding safety handle with reinforcement joint with anti-bacterial surface



G40JAS09



Vertical wall-mounted safety support/covered wall with anti-bacterial sleeve



F17AHN01



Wall-mounted WC brush holder with anti-bacterial grip.



F17AGN03



Roll holder, mounts to safety handle



H51GDS05



Thermostatic mixer, external mount



H51GHS01



Shower head for mixer tap complete with hose and support.



M74MLS01

Lyndocare ready to use chlorhexidine gluconate based solution for the sanitisation of tub and lifting device.

If until now we have presented solutions aimed at making the environment usable for patients, we can now focus our attention on the safety of health workers, with a rapid review of problems and solutions. The moment a health worker moves a patient, he runs risks that should be tackled and managed by using suitable aids.

Work-based musculoskeletal symptoms are a serious problem for healthcare professionals. The most worrying of these are back injuries and shoulder sprains which can both be seriously debilitating.

The main causes of musculoskeletal injuries are activities connected with moving patients, such as lifting,

transfer and repositioning.

The implementation of correct lifting and repositioning methods and the use of the correct technological resources can considerably reduce these professional injuries as well as professional indemnity costs.

They can also lead to other positive results, such as a reduction in staff reorganisation and lower costs related to training and absenteeism. They can also give rise to increased productivity as well as improved staff morale.

Research into the field of manual patient movement shows that:

- The risk of back injury increases when the weight to be lifted is greater than 20kg.
- Musculoskeletal injuries are the most frequent cause of absence due to illness and early retirement in the healthcare industry.
- Up to 80% of staff suffer from back injuries.
- The cost of musculoskeletal injuries in the healthcare industry is approximately 1% of GDP.
- Scheduled manual transfers (from the bed to a wheelchair and repositioning in bed) are the most frequent cause of injury.
- Training in the use of manual transfer techniques is ineffective.



## WHY TRACK-BASED LIFTING SYSTEMS?

Track-based lifting systems lead to a significant reduction in risk both for patients and health workers, in that the manual handling of loads is completely eliminated.

The aid system is extremely simple and intuitive to use and maximises the effectiveness of operations that are normally carried out by health workers.

### Observations

- Minimum effort when movement is required thanks to the sliding trolley.
- Maximum travel: access to the bathtub, lifting off the ground.
- Access to the entire room or assisted bathroom with a single track.
- Can be used to lift, weigh, make the bed, position on the WC or adjustable tub and for all other daily transfers.
- 5-10 times faster and more agile than a mobile lifting device.
- Transfers can be carried out by a single person, saving time.
- Always ready to use: no need to search for equipment.
- The recharge point is inside the same room and acts as a positioning station for the lifting bar and motor, thus ensuring tidiness and safety in the room.
- Does not require garaging spaces;



increases the usability of the room.

#### BENEFITS FOR PATIENTS.

Integrity and respect are important elements to consider during a lifting operation. Track-based lifting systems offer maximum levels of personal integrity and respect. This is why the lifting motors are aesthetically pleasing and compact and are designed to blend into the

as mobility and/or positioning on the WC.

#### BENEFITS FOR THE HEALTH WORKER.

Experience shows that in health centres that have installed fixed lifting systems, staff are less susceptible to lifting injuries.

have a happier and more continuous working experience.

#### BENEFITS FOR THE HEALTH CENTRE.

It has been widely demonstrated that investing in a track-based lifting system offers not only greater assistance to the patient, but also financial advantages to the employer.

room silently and harmoniously.

#### Observations

- So discrete that you hardly notice them.
- Eliminates attention paid to the equipment, allowing for more attention towards the patient.
- Safer and much less threatening for the patient: no big steel lifting device, no chance of tipping over or injury.
- During transfers, the patient maintains "face to face" contact with the health worker, feeling reassured.
- Maintains dignity: no traction, no juddering, no handling as takes place with mobile systems.
- Allows for participation and increases independence in some operations such

#### Observations

- New studies show that, by avoiding manual lifting and using track-based lifting devices, the risk of injury is reduced to almost zero.
- Easy to use and always available, they allow health workers to save time during transfer operations and dedicate more attention to interpersonal relationships with patients.
- Health workers that don't get injured

#### Observations

- The Prevention and Protection service is obliged to draught a risk assessment document: even with the application of the most restrictive criteria set out by the new MAPO (2011 version), the improved level of aid for moving patients and the accessibility of the room provided by the track-based lifting system allows bodies to achieve the lowest score the index sets out for these items.
- The drastic reduction in indemnity costs in a healthcare structure is characterised by the use of track-based lifting systems.
- No accidents, easy to use, much more time to dedicate to other activities, improving job satisfaction and loyalty.
- The cost of replacing a healthcare worker: newspaper advertisements, training, overtime... this is estimated at 4 to 10 times more than the direct cost of an accident!





Harnesses for the bathtub and shower are made from permeable plastic material. They are available in different models to satisfy the individual requirements of different patients in terms of support and comfort in the best possible way.



The track-based lift can also be used to position patients on a shower stretcher, either in a hospital room or assisted bathroom, starting from a seated position and where this is not possible lying down.



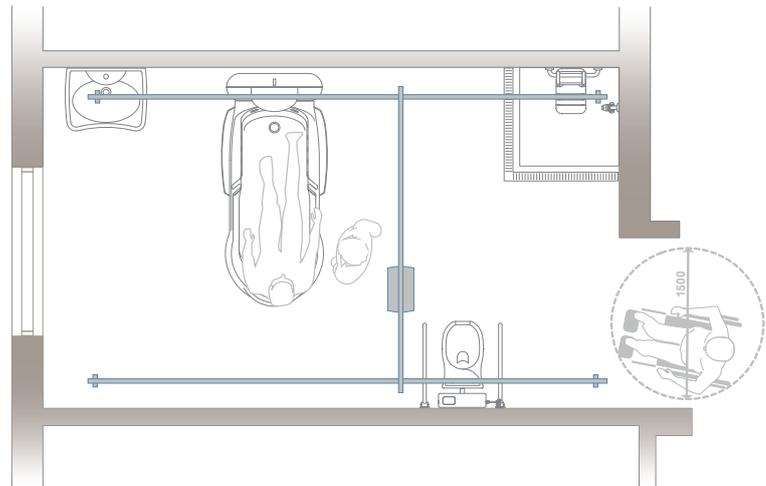
With a track-based lifting system it is possible to lift people that are seriously disabled to and from the bathroom. It is also possible to undress patients very quickly; this is achieved thanks to lifting sheets that offer maximum access around the body without compromising safety.



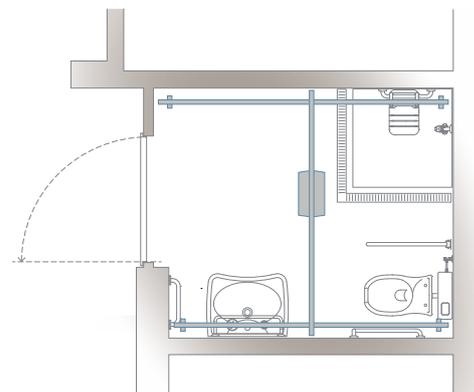
In the event of the accidental fall of the patient, the track-based lift in combination with a full-body harness, allows you to lift the patient from the floor in the safest and most delicate way possible, both for the patient and the health worker.

Integrated design of an assisted bathroom with track-based lift.

Many patient movement operations take place in the assisted bathroom both during hygiene operations and positioning on the WC. In order to reduce the risk of injury to patients and healthcare workers, it is essential to design the spaces and aids well within the assisted bathroom.



"Typical" configuration of a bathroom in an area for assisted bathing



"Typical" configuration of a bathroom in a hospital area



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