



Planning & Designing Mobility Solutions

By CHS Healthcare



ndis approved

We've worked with planners, architects & builders and understand their process, and how we can support them with tools that make their life easier.

Choosing the optimum solution when designing a ceiling hoist system can be a complex procedure. CHS are here to help guide you through the whole process from the early planning stages right through to training and support once the system is installed and ready to use.

Rail designs may vary from simple straight rails to complex multi-room systems. Long term benefits are best achieved through a co-ordinated approach involving planners, management and care staff along with your CHS representative.



Guidance on how to combine the right equipment with the space

Who will use the system?

Understanding the needs of the patient

Patients will have different levels of functional mobility – from completely mobile and independent to those who are entirely bedridden. Understanding this will assist in formulating the appropriate choice of equipment.

Understanding the needs of the carer

It is important to consider what manual / physical lifting will be required of carers and the potential for injury. This has become an increasingly important workplace safety consideration.

Which lifting method should be chosen?

There are three options;

Manual / physical lifting

1



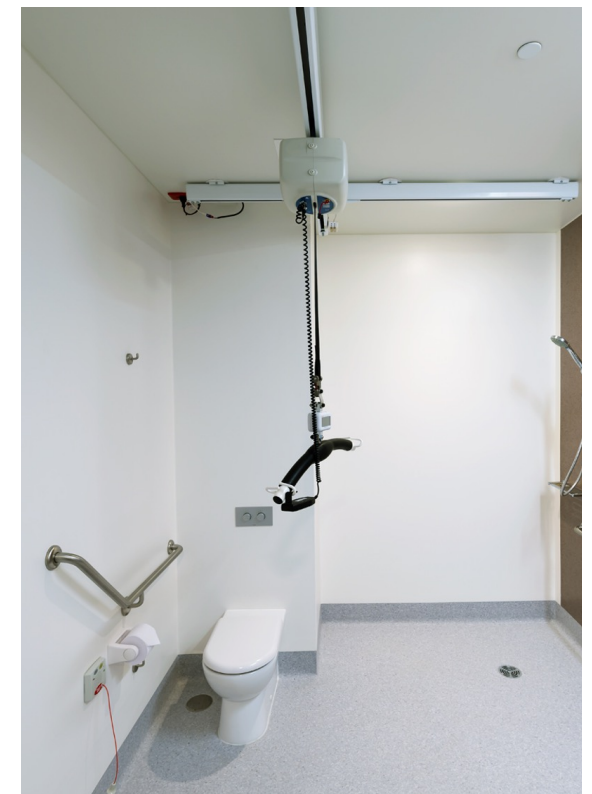
Use of a mobile floor hoist

2



Use of a ceiling hoist system

3



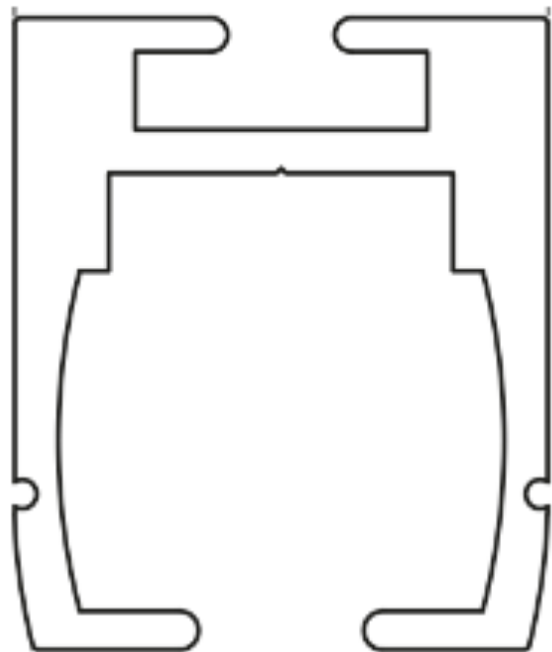
Unquestionably the most efficient and cost effective way to transfer patients is with overhead lifting systems. Depending on the circumstances, one method may be more suited than the other. In the unlikely event of a ceiling hoist not being suitable, CHS also carries a complete range of mobile floor hoists.

Guidance on how to combine the right equipment with the space

Which type of rail system should be chosen?

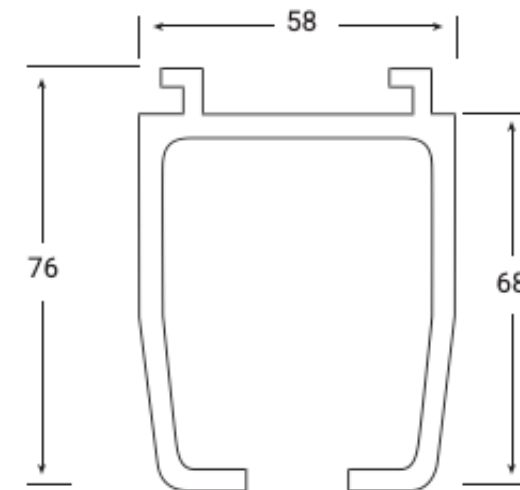
The choice depends on your requirements. Here is some of the options available;

Standard Rail Profile



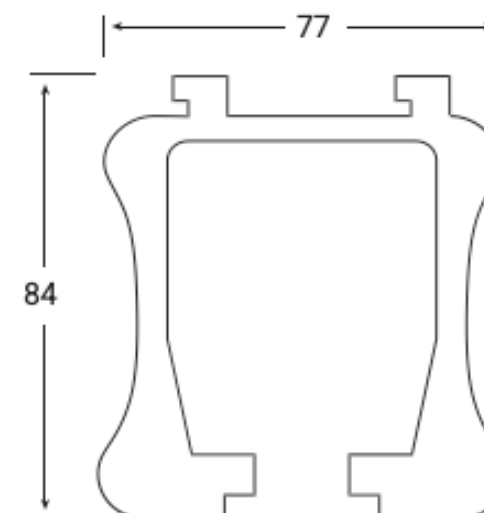
SLIMLINE RAIL

CHS Slimline rails are used in both linear & XY applications. Lightweight & aesthetically pleasing this rail is suitable for systems up to 450kg SWL and may be recessed into the ceiling if required.



SUPER RAIL

The thicker profile of the Super Rail [allows for extended spans between supports](#) making it suitable for XY traverse rails and wall mount situations. Reduced depth provides a more aesthetically pleasing finish without loss of lift height.



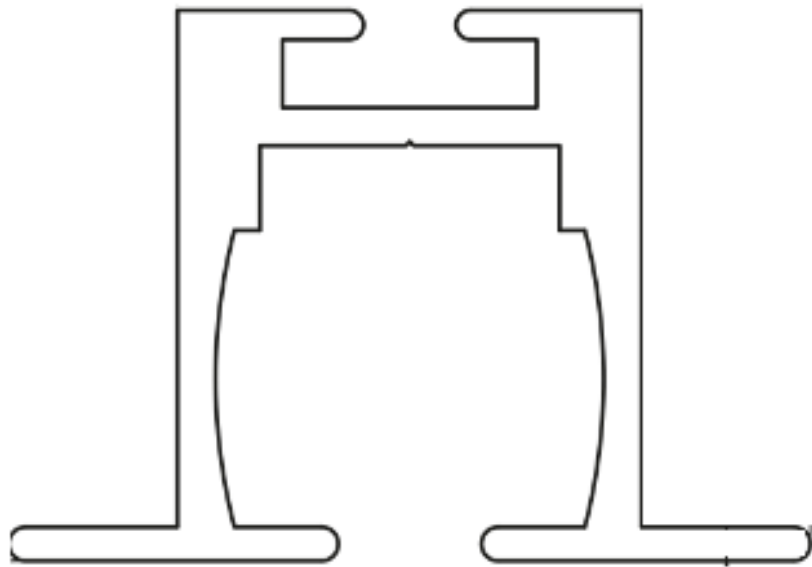
You can access CAD files of our products [here](#)

Guidance on how to combine the right equipment with the space

Which type of rail system should be chosen?

There are many different options. The choice depends on your requirements;

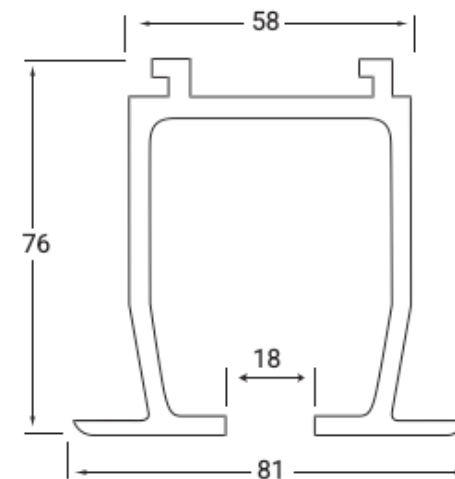
Embedded Ceiling Profile



Allows hoist track to be embedded into the ceiling.

FINELINE RAIL

CHS Fineline rails are designed to be built into closed ceilings, giving a beautiful integral appearance. This concealed lightweight rail is suitable for systems up to 450kg SWL and suits CHS's full range of fixed and portable hoist units.



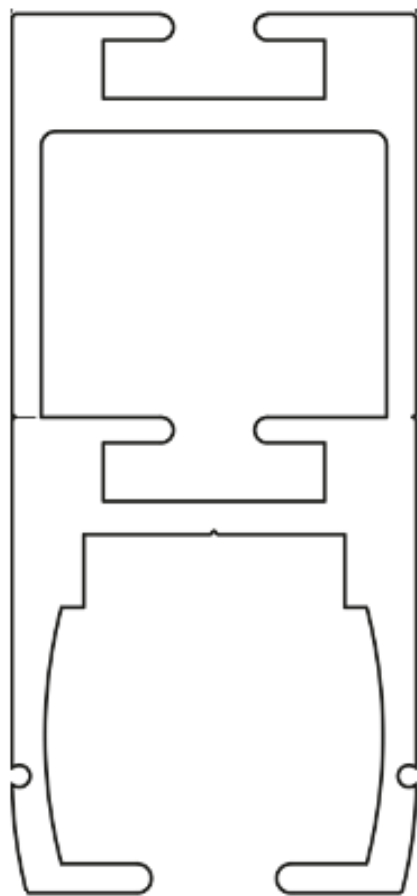
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Guidance on how to combine the right equipment with the space

Which type of rail system should be chosen?

There are many different options. The choice depends on your requirements;

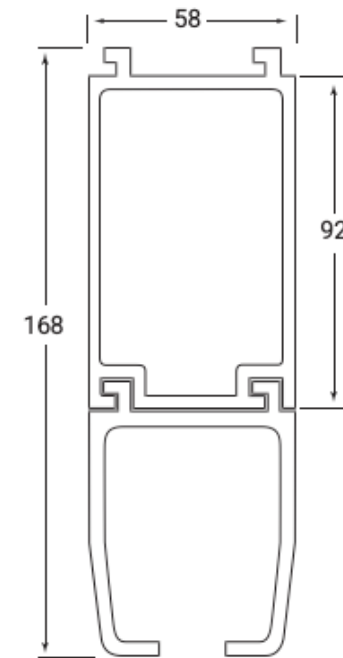
Piggyback Profile



Provide additional strength for increased spans

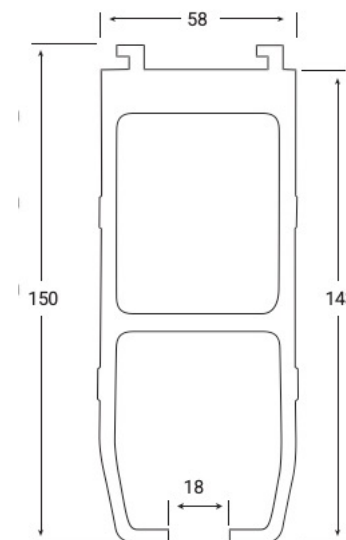
SLIMLINE PIGGYBACK RAIL

CHS Piggyback rail is combined with Slimline rail to **provide additional strength for increased spans and SWL**. Depending on the requirements it can be fitted as single or double Piggyback. It may also be fitted between XY parallel rails thus saving lift height and improving overall appearance.



RAIL PLUS

Single section Rail Plus may be used to accommodate longer unsupported spans for XY or wall mount situations.



You can access CAD files of our products [here](#)

Guidance on how to combine the right equipment with the space

Which type of hoist should be chosen?

There are two types of ceiling hoists;

Fixed Hoist

Portable Hoist

1

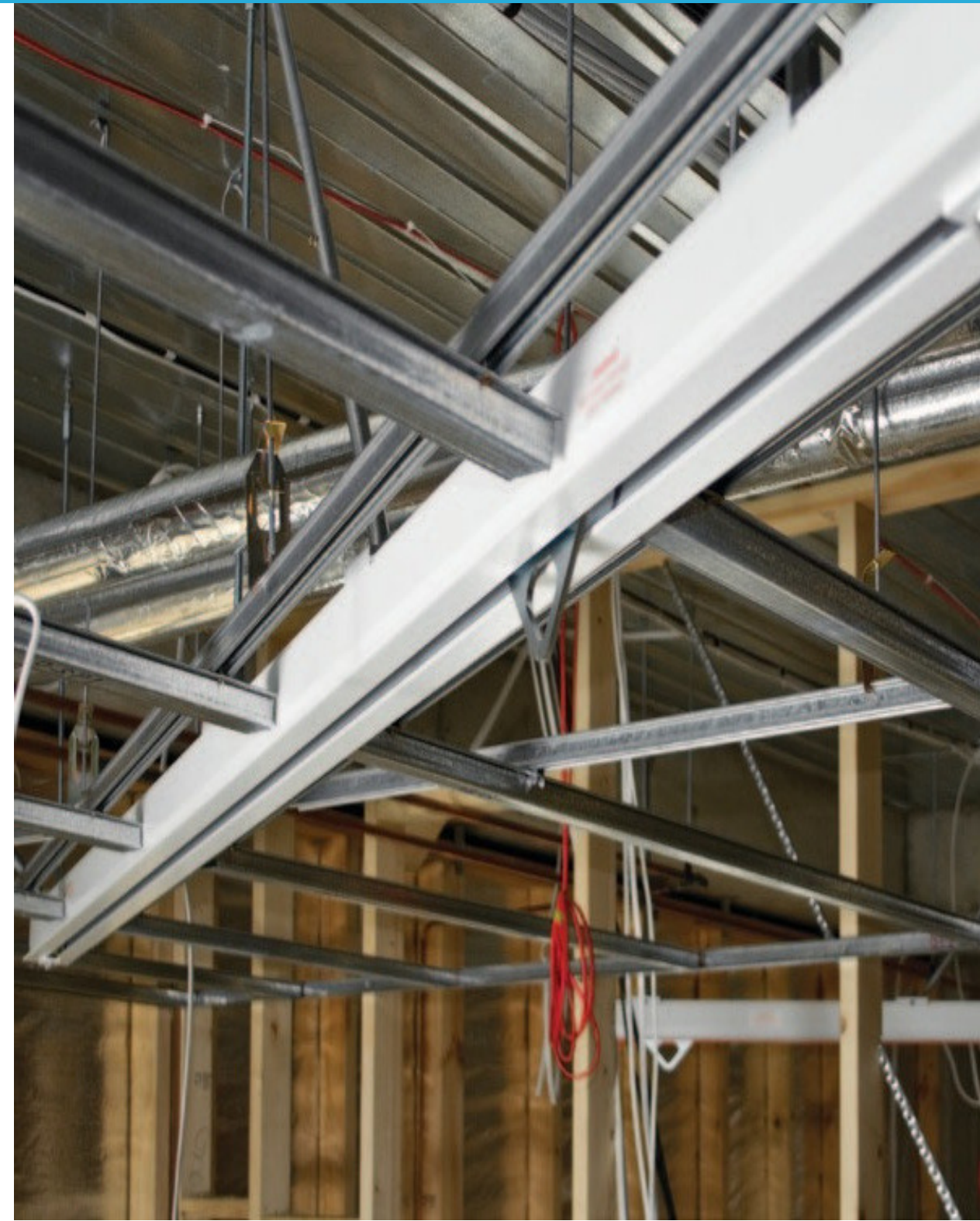


2



A fixed hoist is a permanent fixture within the ceiling system. Higher safe working loads can be achieved with a fixed ceiling hoist.

A portable hoist can be used to service a number of systems giving it greater flexibility and cost effectiveness.



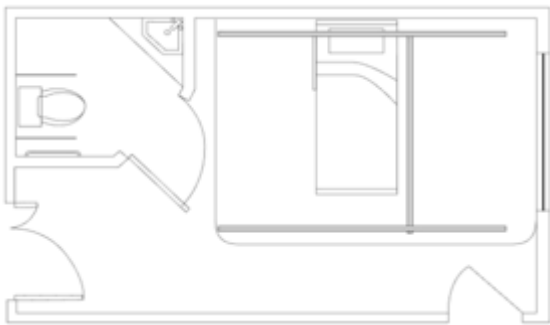
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Installation Considerations

BEDROOM

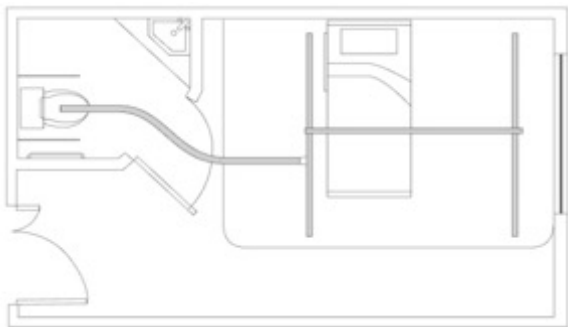
It is important to understand whether you want full room coverage or just a certain area. Eg an XY (H-Track) system as illustrated here provides full room coverage.

Please note: You cannot do a room transfer with a wall mounted system. If you want this now or as an option in the future, you must install a ceiling mounted XY system.



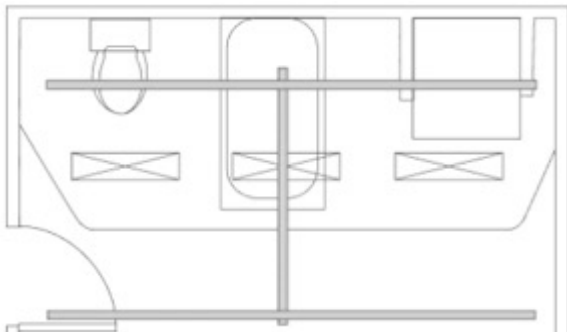
ROOM TRANSFERS

You cannot do a room transfer with a wall mounted system. If you want this now or as an option in the future, you must install a ceiling mounted XY system.



BATHROOM

An XY system is preferable in the bathroom from a safety perspective as it provides for multiple client lift points.



Type Of Building Considerations

SINGLE STOREY TIMBER FRAME

With a single storey and a man hole you can do the droppers after construction as you have access to the ceiling cavity. Considerations are;

- Load bearing structure mounted in ceiling capable of holding 250kg safe working load
- Consideration of a charge point with safe access. Specifics determined by room layout.



DOUBLE STOREY TIMBER FRAME

With a double storey the first-floor mounting system must be pre-installed prior to plaster as you will have limited access after completion.

- . Considerations are;
- Load bearing structure mounted in ceiling capable of holding 250kg safe working load
- Consideration of a charge point with safe access. Specifics determined by room layout.



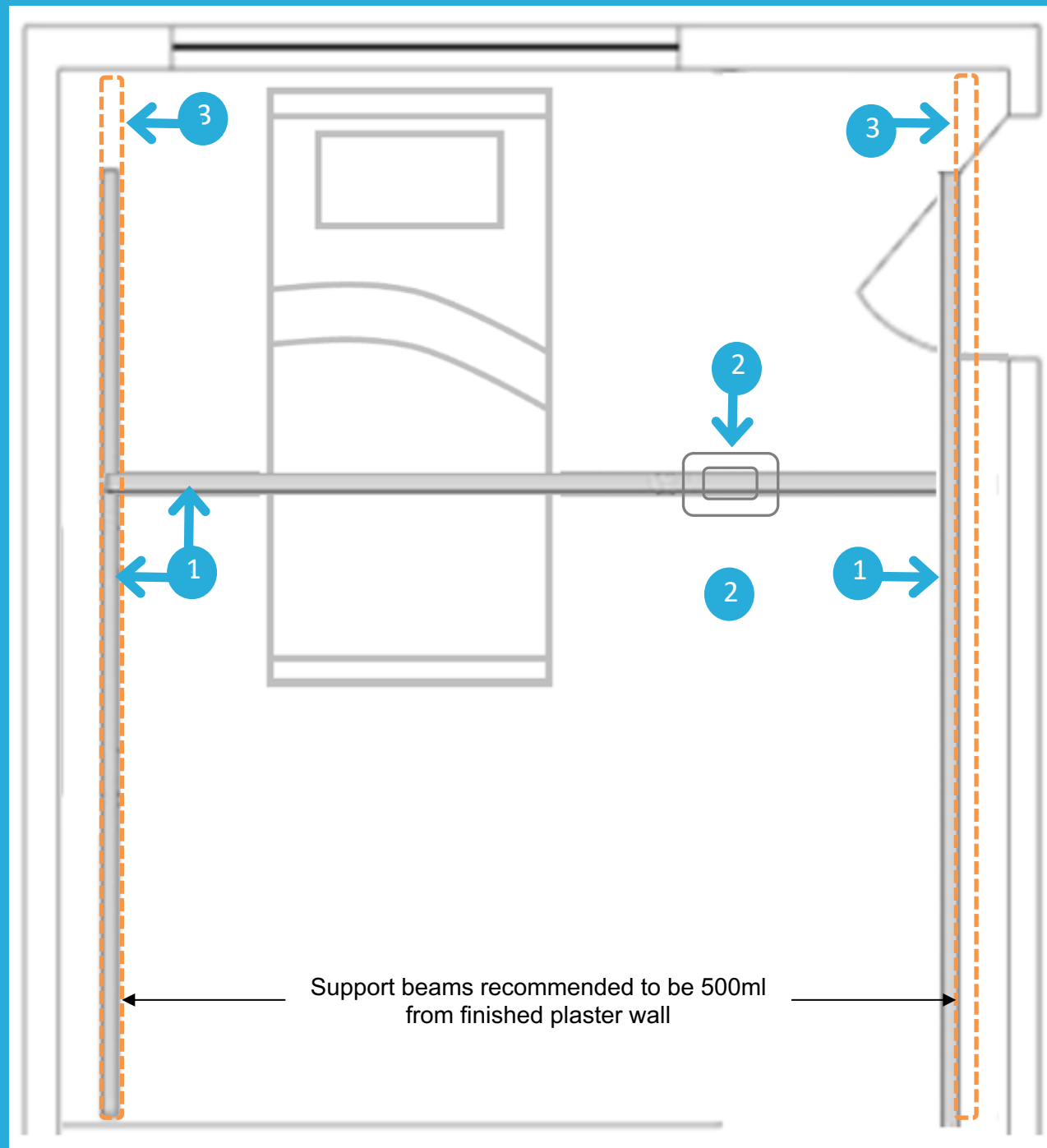
MULTIPLE LEVEL CONCRETE SLAB

Where there is a concrete slab above each room the process is as follows;

- We produce shop drawings initially,
- Pre-plaster we install our proprietary support system and set it just above the finished ceiling line.
- CHS then tests the installation to AS/NZS ISO10535:2011 standards and produce a set of as built drawings.
- The builder is then able to close the ceilings and if or when a participant moves into the apartment and requires a ceiling hoist, we can locate the specific supports and fit a ceiling hoist system to them.



Building considerations – beam support positioning



Single or double storey timber frame

1

XY Ceiling Hoist Rail System providing full room coverage

2

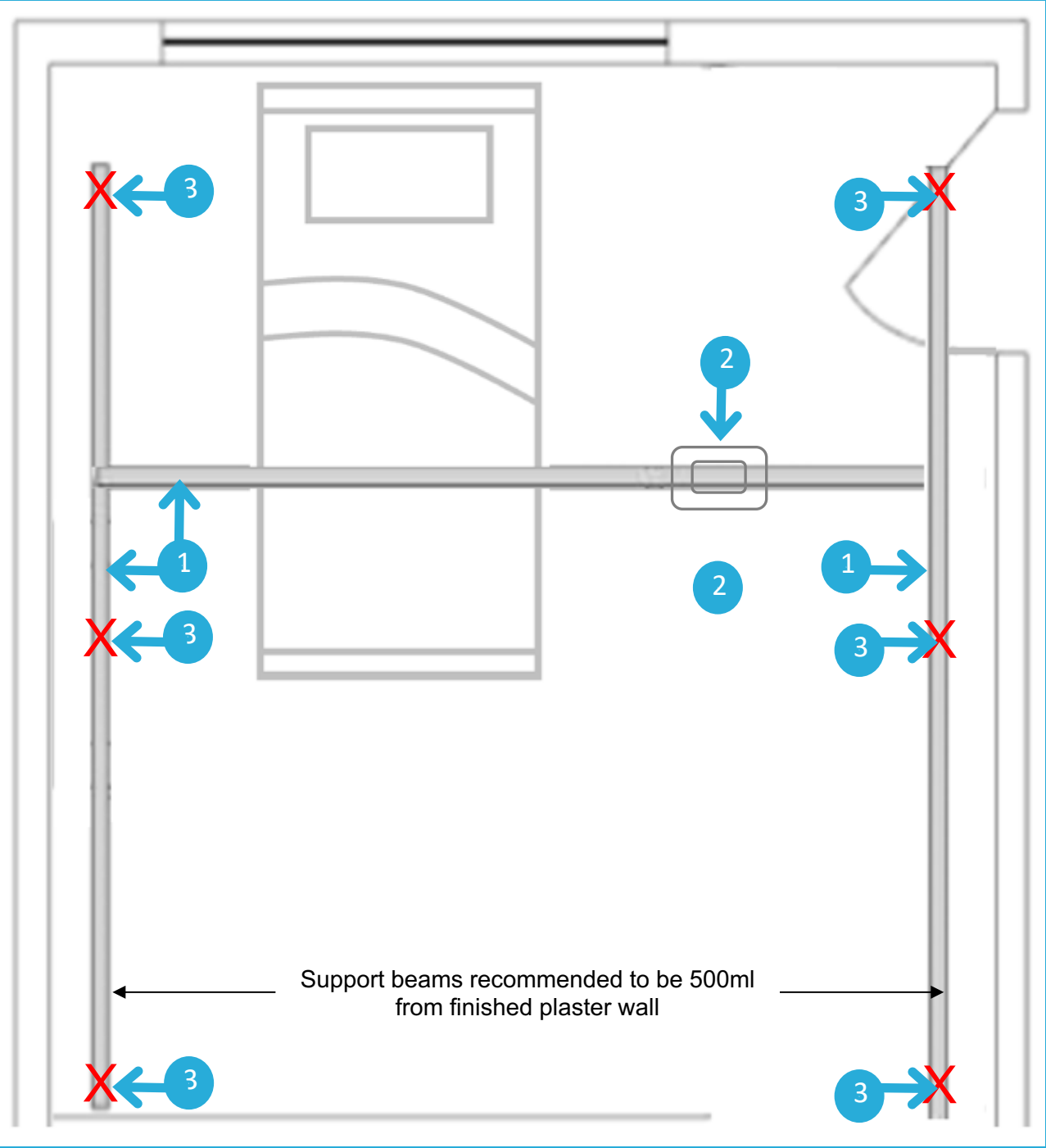
Fixed hoist located on the Transverse rail

3

To support XY rail system installation 2 beams are required. We suggest placement of 500mm on each side from finished plaster wall.

Please note: One beam in the middle of the room is not enough to support the installation of an XY system.

Building considerations – support system positioning



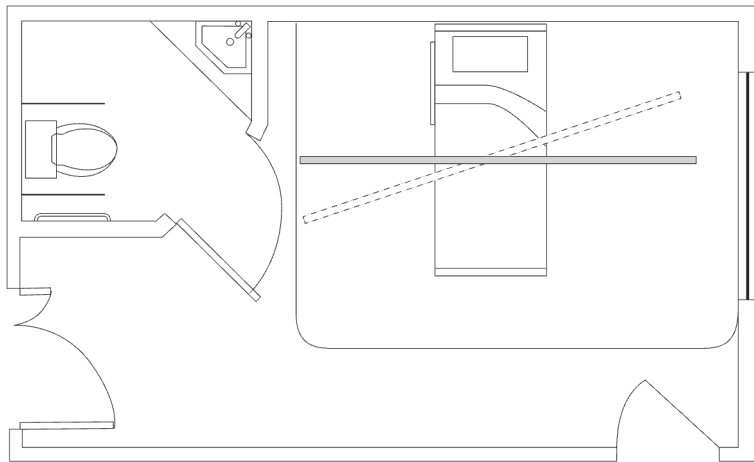
Concrete Slab

- 1 XY Ceiling Hoist Rail System providing full room coverage
 - 2 Fixed hoist located on the Transverse rail
 - 3 To support XY rail system installation - pre-plaster we install our proprietary support system and set it just above the finished ceiling line.
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Room Layout Examples

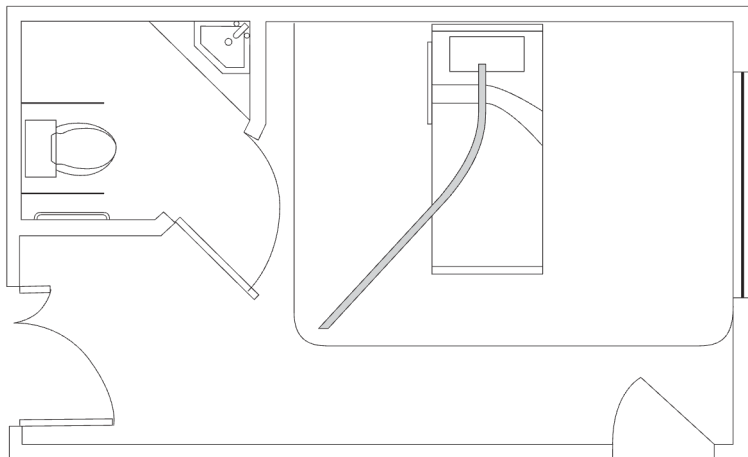
Straight Monorail

A single rail, typically running perpendicular to the bed, provides coverage from bed to chair.



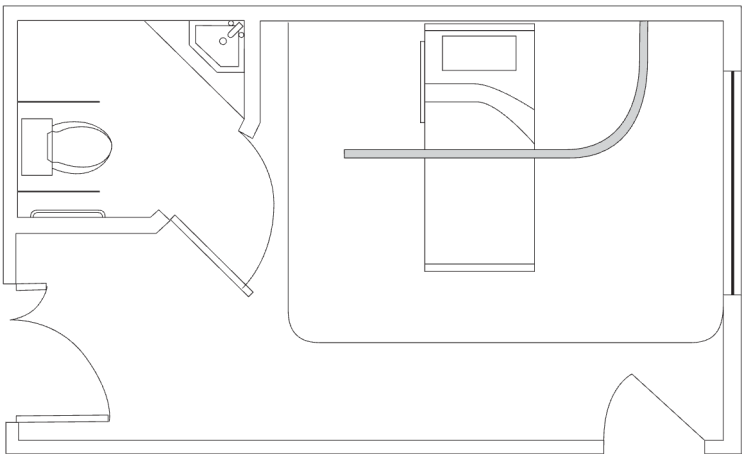
J-Rail (Option A)

A single straight rail and curved rail in the shape of a J. Provides coverage from bed to chair or stretcher, and aids in repositioning.



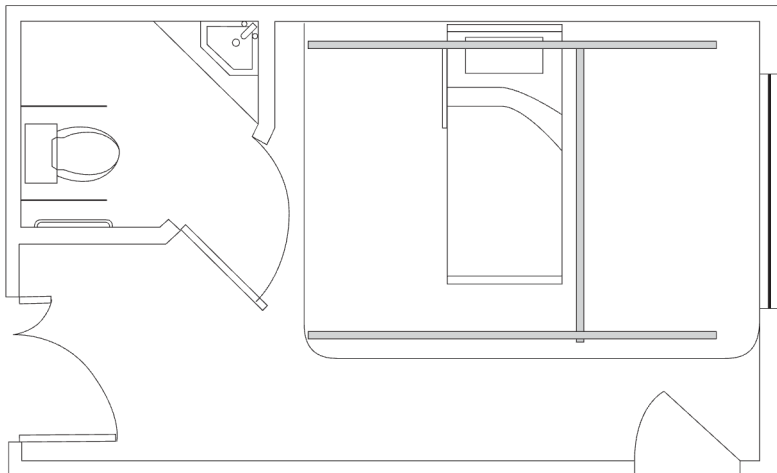
J-Rail (Option B)

This version provides the same clinical effectiveness as a Straight Monorail with the curved portion offering a more suitable charging/docking station in many cases.



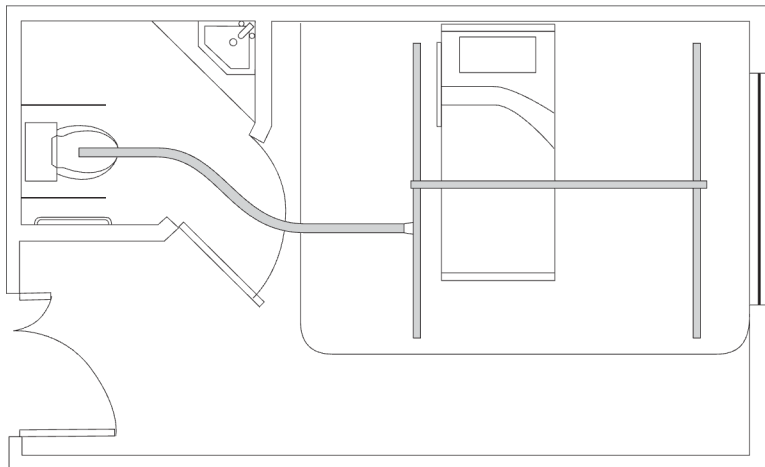
XY Gantry Ceiling Rail

A three-piece system with two parallel fixed rails and a perpendicular moving “boom” permitting coverage under the entire XY rail system.



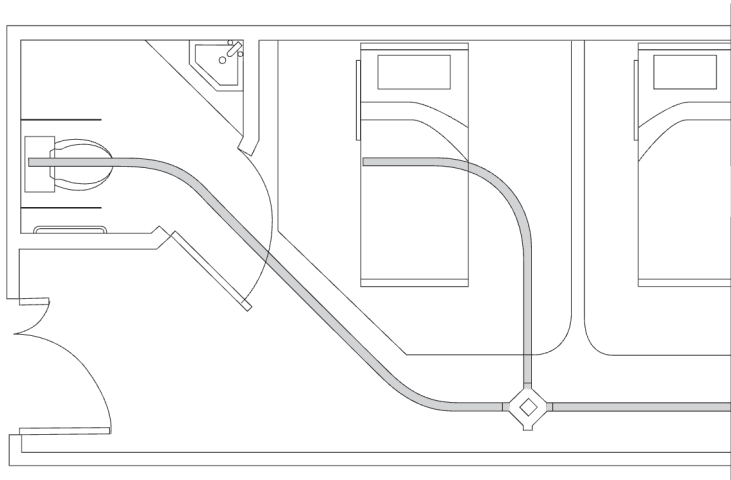
XY Gantry Ceiling Rail With Access To Toilet

The room covering XY gantry system allows for complete coverage beneath the XY rail system. Access can be gained to an adjacent room with the use of a Gate Assembly



Linear Rail With Turntable

A linear rail with curved rail and turntable(s) enables mobility along the line of the rail. The turntable allows the user to change the direction of the ceiling hoist.



More About CHS Healthcare

Leading manufacturer and supplier of patient lifting and handling solutions.

01

DESIGN

CHS is experienced in the complex process of designing a ceiling hoist system that will be beneficial for both the disabled and their carers.

02

SUPPLY

CHS specializes in the supply of patient lifting rail systems, portable & fixed hoists, floor lifters, change tables, therapy baths, privacy screens and bariatric solutions.

03

INSTALLATION

CHS has a trusted network of fully qualified & insured installation technicians which ensures your rail system is installed to safety requirements & will perform to optimum efficiency every time.

04

TRAINING

We will work with you to ensure your staff are fully trained in the use of our equipment. We have enabled our business to provide training in a live streaming format and / or pre-recorded videos on yours our platform.

05

MAINTENANCE

CHS healthcare supports, educates and adheres to Australian and International Standards for your safety and peace of mind, and we offer exclusive CHS Care Plans for preventative maintenance.

Australian Owned & Operated



An Australian family owned and operated company providing patient lifting and handling solutions since 1997.





How We Can Help You

We understand the market and have a proven ability to help designers, planners and the construction industry navigate the integration of patient lifting and handling solutions.



1. Consultation

We'll talk through all of your requirements, timelines, and arrange site visit if needed.



2. Plan & Design Assistance

We will provide all of the tools required (CAD & BIM files) to assist with your drawings and layouts.



3. Installation

We specify all the equipment and our experienced team install on a date that suits you.



4. Education

How the equipment works.



5. Maintenance

As part of our service contract, our engineers will perform regular tests.



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