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Protection

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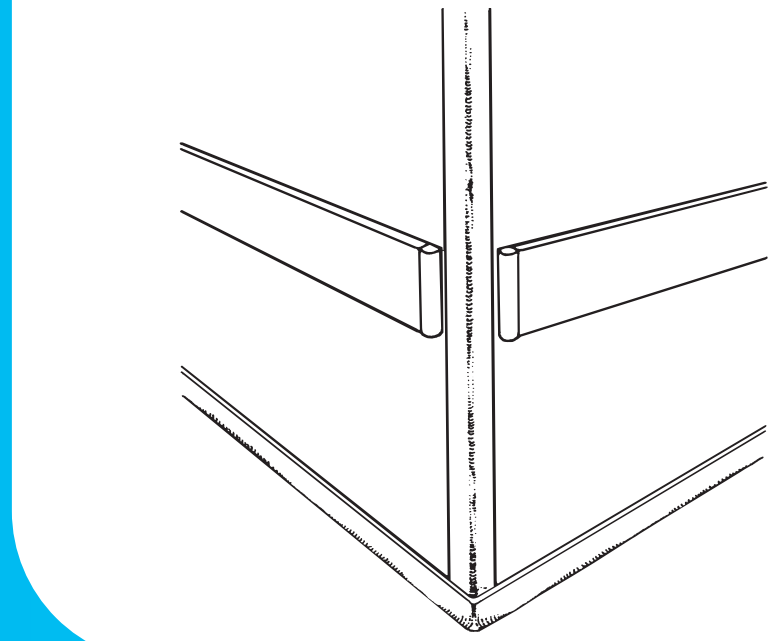

HTM 69
Protection

HTM BUILDING COMPONENTS SERIES

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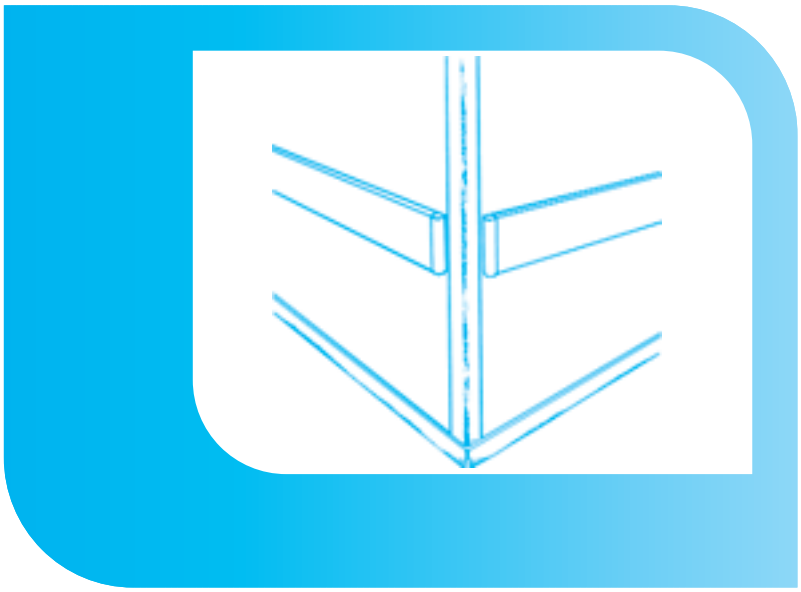

HTM 69
Protection

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Contents

1 Introduction

BACKGROUND

1.1 This is one of a series of Health Technical Memoranda which provides specifications and design guidance on building components for health buildings.

1.2 The numbers and titles of the HTMs in the series are:

- 54 User manual
- 55 Windows
- 56 Partitions
- 57 Internal glazing
- 58 Internal doorsets
- 59 Ironmongery
- 60 Ceilings
- 61 Flooring
- 62 Demountable storage system
- 63 Fitted storage system
- 64 Sanitary assemblies
- Wayfinding (supersedes HTM 65 Signs)
- 66 Cubicle curtain track
- 67 Laboratory fitting out systems
- 68 Duct and panel assemblies
- 69 Protection
- 71 Materials management modular storage.

1.3 This HTM is intended to be read in conjunction with HBN 40 – 'Common activity spaces' and HTM 56 – 'Partitions'; HTM 57 – 'Internal glazing'; HTM 58 – 'Internal doorsets'; HTM 59 – 'Ironmongery'; HTM 60 – 'Ceilings' and HTM 61 – 'Flooring'. See also BS 4322:1968 'Recommendations for buffering on hospital vehicles such as trolleys'.

SCOPE AND STATUS

1.4 This HTM offers guidance on the technical design and output specifications for the avoidance or reduction of damage in health buildings.

1.5 The problems of damage in health buildings are analysed in this HTM, and proposals are made which can reduce the incidence and severity of this damage.

1.6 The content of this HTM does not diminish either the manufacturer's responsibility for fitness for purpose of products or the design team's responsibility for selection and application of products to meet project requirements. Design teams are also reminded of their obligations under the Construction, Design and Management (CDM) Regulations 1994 to ensure safe construction.

1.7 This HTM is concerned mainly with new building work, but much of the information is equally applicable to the replacement of components in existing buildings.

RELATIONSHIP TO OTHER DATA

1.8 The main sources of data used in the preparation of this HTM are listed in the References section.

1.9 This HTM was prepared for publication in January 2005. After this date, readers should ensure that they use the latest or new edition of all building legislation, British Standards etc, which may post-date the publication of this document.

1.10 First preference should be given to products and services from sources which have been registered under BSI Quality Assurance procedures or other certification schemes. Suppliers offering products other than to British Standards should provide evidence to show that their products are at least equal to such Standards.

1.11 Any enquiries regarding the technical content of this HTM should be e-mailed to nhsestates@doh.gsi.gov.uk.

DAMAGE REDUCTION STRATEGY

1.12 Damage is mostly the result of wheeled equipment coming into contact with the walls, doors and floors. The priority should be that of preventing such equipment from reaching the walls in the first place.

1.13 Protection is a balance between the cost of installation and the cost of repairs. Frequently, even though protection is provided, damage will occur; hence the need for a strategic and incremental approach.

A strategic approach to the application of protection

1.14 The strategy should be to provide protection using a “light touch”. This means that, under the building contract, the minimum quantity of protective devices is fitted to cover only the known positions of main damage. Then, at a later stage, possibly after commissioning or at the building contract maintenance period, the mobile equipment actually being used in the building can be inspected, as can any damage which has already taken place, and additional protection or other appropriate corrective measures can be undertaken.

1.15 The proposed strategy should be agreed by the trust and designers in consultation with the FM provider and in line with the guidance given.

Quality of the environment

1.16 It should be borne in mind that good design using cheerful colours and good-quality materials can have a therapeutic effect on the occupants of hospitals and result in an increase in local pride in the building (see Waller and Finn, 2004).

1.17 It has been observed that hospitals with a pleasant environment suffer less damage than those with a drab or harsh décor. A hospital that appears over-protected can feel institutional, and design quality can be degraded.

2 Causes and locations of damage

CAUSES

2.1 The following is a list of possible causes that lead to damage in healthcare buildings:

- reduction in space standards to contain expenditure within cost allowances;
- poor planning and detailing;
- reduction in the quality of building materials and construction standards, often due to inadequately considered cost-cutting;
- ineffective protection of buildings, or protective devices which can be easily damaged;
- use of unprotected or inadequately protected equipment: false economies at the equipping stage resulting in resilient buffering/protective features being omitted from equipment and cheaper, unbuffered items being purchased, often not complying with the relevant British Standards;
- greater movement of patients and goods;
- use of larger, heavier and more complicated mobile equipment, electrically propelled tugs with their trains of trolleys, heavy X-ray machines;
- equipment that does not “steer” properly;
- buffering to equipment which, due to lack of maintenance, has lost its effectiveness;
- lack of staff management and training in handling mobile equipment;
- lack of pride in, and care of, public facilities;
- increase in vandalism.

LOCATIONS

2.2 All areas in a hospital are susceptible to damage. However, the areas that incur more damage than any others are circulation areas, waiting areas and semi-industrial areas.

3 Design guidance

CATEGORIES OF PERFORMANCE RELATING TO DAMAGE RISK/PROTECTION

3.1 Four categories of performance relating to damage risk and protection have been established as a means of relating user requirements to construction and finishes.

3.2 These are shown in the schedule forming the Appendix to this HTM, and complement those used for the finishes to walls, ceilings and floors in HTM 56 – 'Partitions', HTM 60 – 'Ceilings' and HTM 61 – 'Flooring' (also shown in the schedule). They should be used to identify protection requirements.

- Light duty (LD) – Areas used by pedestrians, with occasional light, hand-propelled trolleys. Walls are unlikely to be damaged by mobile equipment. Rooms rather than circulation areas.
- Medium duty (MD) – Areas subject to occasional damage from patients' beds, wheelchairs, light hand-propelled trolleys, light mobile medical equipment, chairs on castors etc. Rooms, lightly trafficked corridors etc.
- Heavy duty (HD) – Areas subject to regular damage from patients' beds, wheelchairs, food or body trolleys, heavy mobile medical equipment. Clinical/ nursing areas, treatment rooms, staff bases and corridors.
- Severe duty (SD) – Areas subject to regular damage from heavily laden hand-propelled trolleys, mechanically propelled tugs and trolleys. Hospital streets, circulation areas, entrances, delivery and works areas, stores and kitchen areas.
- Suffix (v) – Areas designated thus may be subject to vandalism. Public toilets, accident and emergency areas. Vandal-proof fittings and finishes normally required.

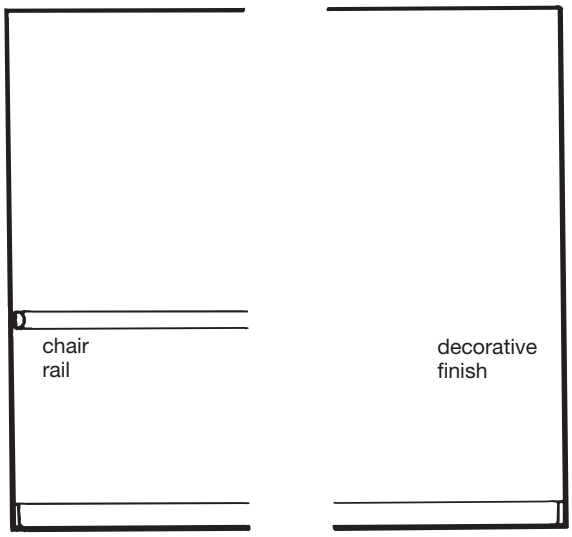
TYPE OF PROTECTION ACCORDING TO CATEGORY OF DAMAGE RISK

3.3 The type of protection needed for walls will vary according to whether the location is in a room or a corridor. Damage is normally more severe in corridors due to the greater movement of mobile equipment.

Light duty

3.4 No additional protection is required; the decorative finish should be selected according to durability and use of room. Chair rails may be required in committee rooms etc (see Figure 1).

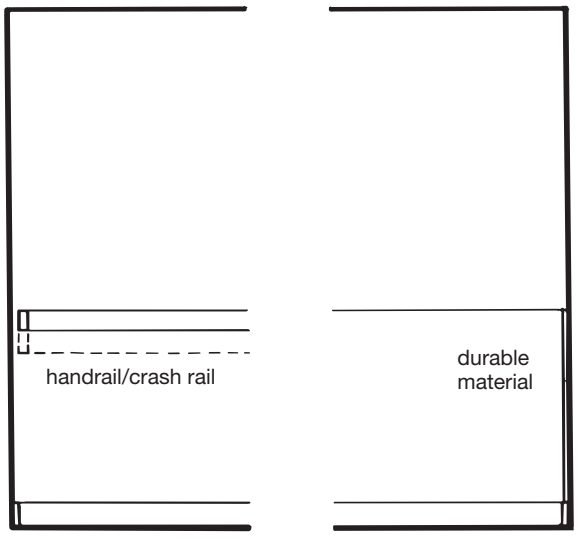
Figure 1 Light duty



Medium duty

3.5 Mid-height buffer rail and/or durable finish on middle or lower part of wall, bed locators in bedrooms (see Figure 2).

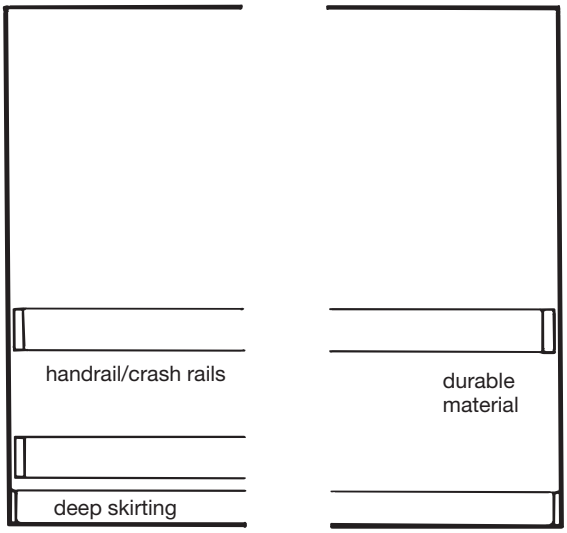
Figure 2 Medium duty



Heavy duty

3.6 Mid-height handrail or crash rail and either durable material on lower part of walls, or lower height crash rail, and with splayed skirtings in main corridors (see Figure 3).

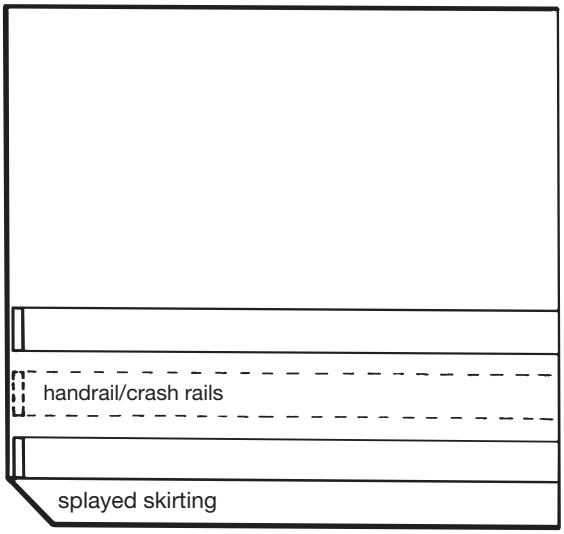
Figure 3 Heavy duty



Severe duty

3.7 Mid-height handrail or crash rail, lower height crash rails and splayed skirtings. Corridors designated as categories MD, HD and SD require some form of corner protection; the type varies according to vehicles expected. External angles in large rooms may also require corner protection (see Figure 4).

Figure 4 Severe duty and heavy duty, main corridors



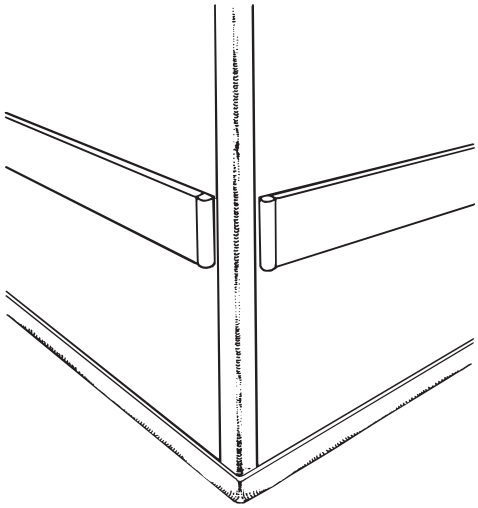
Other areas

3.8 In some special areas, such as operating theatres, considerations of hygiene may take precedence over the protection recommended for areas where beds and trolleys are present. Rails may be omitted in favour of overall durable, washable finishes. In practice the greater care shown by the theatre users appears to compensate for the lower level of protection.

3.9 Areas such as workshops, storerooms and corridors may be constructed of materials which are not necessarily given a decorative finish, or applied protection. These materials include brickwork, block-work and concrete.

3.10 These areas may still require corner protection and handrail/crash rails, splayed skirtings etc if used by mechanically propelled tugs and heavy trolleys (see Figure 5).

Figure 5 Corner protection



WALL FINISHES RELATING TO CATEGORIES OF DAMAGE RISK

3.11 Wall finishes relating to categories of risk are shown in Table 1.

TABLE 1 WALL FINISHES RELATING TO CATEGORIES OF DAMAGE RISK

Categories of damage risk	LD	MD	HD	SD
Liquid coverings/paints				
emulsion paint	•			
semi-gloss, eggshell paint	•	•		
gloss paint	•	•		
multi-colour gloss	•	•	•	
epoxy coating		•	•	•
polyurethane coating		•	•	
elastomeric compound		•	•	
Flexible pre-formed coverings				
wallpaper	•			
wallpaper with spongeable surface	•			
paper-backed vinyl	•			
cloth-backed vinyl	•	•		
1 mm plastics sheet, with sealed joints		•	•	
2 mm plastics sheet, with sealed joints			•	•
Hard pre-formed coverings				
2 mm plastics rigid sheet			•	•

3.12 Sealed joints can be formed by heat or solvent welding or by using suitable sealants such as epoxy resin, polysulphide or acrylic materials.

3.13 Certain rooms designated as light duty will require finishes which can resist abrasion and frequent washing or which are moisture-resistant.

3.14 Protective devices can raise the category of the wall from the values shown for damage risk; for example, committee rooms can have light duty wall finishes, but need a mid-height chair or buffer rail to protect against chair backs etc.

CATEGORIES OF PERFORMANCE FOR WALLS, CEILINGS AND FLOOR FINISHES AND DAMAGE RISK/PROTECTION

3.15 A full schedule of activity spaces from HTM 56 – 'Partitions', HTM 60 – 'Ceilings' and HTM 61 – 'Flooring' showing categories of performance for finishes to walls, ceilings and floors, and categories of performance relating to damage risk/protection, is included as an Appendix at the end of this HTM.

4 Guidance on the selection of components

WALLS AND PARTITIONS

4.1 The strength of partitions will vary according to location and category of duty required. HTM 56 – 'Partitions' and BS 5234-2:1992 give recommendations for grading partitions by performance, together with test requirements; grades should be specified. BS 5234-2: 1992 includes a test for crowd pressure in addition to the usual heavy-body impact tests; these may give useful information on the performance of partitions against the heavy impacts from electric tugs. Manufacturers and sponsors of partition systems should be consulted regarding the performance of their products.

4.2 Masonry walls and partitions designed and constructed in accordance with the relevant guidance given in BS 5628 Parts 1–3 and BS 5234:1992 should be able to withstand the dynamic loads imposed on them by impacts from heavy tugs and trolleys. Sponsors of systems of construction for masonry partitions should be asked to provide test or calculation evidence of the strength of their partitions.

4.3 Similarly, hollow plasterboard partitions designed in accordance with HTM 56 – 'Partitions', BS 8212 and BS 5234:1992 are also capable of resisting the impact forces involved. It is essential that hollow plasterboard partitions are faced with at least two layers of 9.5 mm gypsum board on each side if they are used in areas where damage is expected. Metal studs may need to be of the heavy gauge or I-stud type, or specially reinforced where partitions are in areas of severe duty. Fixings at head and floor must allow for impact forces expected.

4.4 In hollow plasterboard or soft lightweight concrete partitions, it will normally be necessary to reinforce corners.

4.5 Calculations or test certification of impact resistance and crowd pressure resistance should be inspected by the specifier.

FLOORING

4.6 HTM 61 – 'Flooring' gives advice on this subject and on the general problems of flooring in health buildings.

4.7 Structural floor slabs designed in accordance with the relevant structural codes should provide sufficient strength to resist the loads imposed by internal hospital traffic. Deflection should be limited to avoid cracking of the floors and partitions.

4.8 Screeds should be chosen to suit the loading expected. Where tugs, heavy trolleys, operating tables or other heavy equipment are to travel, it may be necessary for heavy duty screeds to be used.

DOORS AND IRONMONGERY

4.9 Doors should be in accordance with the guidance given in HTM 58 – 'Internal doorsets'.

4.10 Grades and widths are recommended to suit the use. Clear openings should be wide enough to allow the widest vehicles and equipment to pass through with plenty of clearance, and depending on circumstances, sometimes to pass another vehicle or pedestrians. Doors, when standing open at right-angles, can reduce clear openings by up to 300 mm (see HBN 40 – 'Common activity spaces', which gives guidance on the additional space which may be required at door openings and junctions to permit turning of wheelchairs and other vehicles, together with advice on general widths of corridors and streets).

4.11 Vision panels in the doors in corridors and heavily-trafficked areas are essential to permit early views of oncoming traffic and pedestrians.

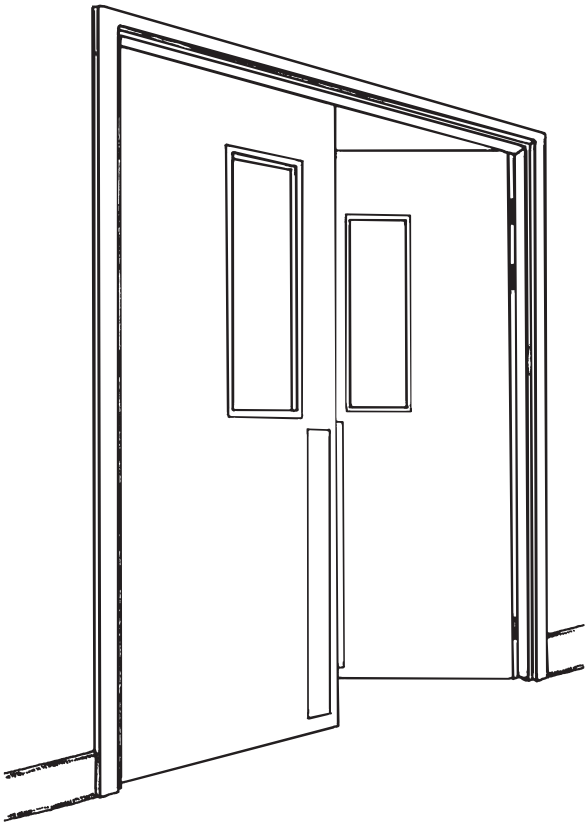
4.12 External doors are often subjected to heavy damage; they should be of robust construction and fitted with protective plates and full-height pull/push handles.

4.13 Automatic doors should be provided in accident and emergency (A&E) and main entrances. In entrances to stores and works areas, heavy plastic, flexible "flap" doors should be fitted.

4.14 Door edges are frequently damaged by sides of trolleys; it is not easy to prevent this. Delayed-action closers, electromagnetic hold-open devices and automatic doors should be considered. Plastic door lippings resist scoring but can sometimes be torn off; hardwood lippings are the easiest to repair. Curved post-formed edges to plastic laminate-faced doors may prevent some damage.

4.15 Resilient plastic buffer rails mounted vertically at door edges and full-height pull handles can often reduce damage. In severe cases, stainless steel channel facings to door edges may be required (see Figure 6).

Figure 6 Vertical buffer rails fitted to protect door edges



4.16 If the doors are of fire-resisting construction, the edges may be fitted with intumescent seals. With the increasing use of smoke seals in edges, it is difficult to provide edges which can survive damage; hold-open devices should therefore be considered.

4.17 When replacing glazing in fire-resisting doors, care must be taken to ensure that replacement glass, beads and intumescent seals comply with the details on the fire certification to avoid the fire resistance of the door being impaired.

4.18 Finishes of doors should be chosen to suit the category of duty of the location; HTM 58 – 'Internal doorsets' gives advice on this.

4.19 Ironmongery should be selected in accordance with the guidance given in HTM 59 – 'Ironmongery'.

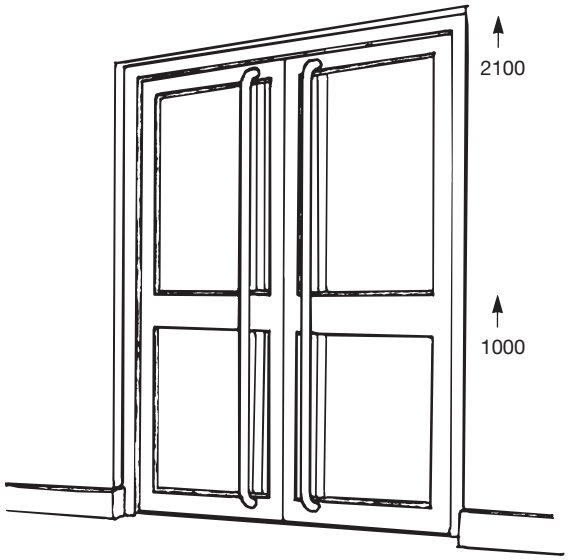
4.20 Closers and floor springs should comply with BS EN 1154:1997 and should be of the appropriate size number. Doors in hospital streets or main circulation routes may open and close between 100,000 and 200,000 times in a year. Delayed-action or stand-open types should be chosen where appropriate (delayed-action is not normally permitted for fire-resisting doors). Closers and floor springs must be properly adjusted and maintained in full working order. It is important that hinges and pivots function properly, and these should comply with BS EN 1935:2002.

4.21 Furniture such as pull handles and lever handles can suffer damage and should be chosen accordingly. Bolt-through fixings are the strongest type of fixing and should be specified.

4.22 Protection plates should be made from materials which are not easily gouged or cut, leaving sharp edges or snags. Easily replaceable, dimpled or textured, resilient plastic sheet may often be the most suitable material. Protection plates may be fixed with adhesive or small screws. The entire lower half of a door may require protection in many instances.

4.23 Full-height tubular pull handles have been found effective in resisting impacts from wheeled traffic, as suggested previously (see Figure 7).

Figure 7 Doors with full-height pulls



CEILINGS

4.24 Ceilings are not normally subjected to impact damage of the kind which occurs on other surfaces within easy reach of traffic. However, it is common to find considerable damage from the actions of maintenance personnel removing and replacing tiles; in some cases the tiles may not be replaced at all or may be broken. It is important that ceilings in circulation routes are selected with this in mind. Tiles should be labelled for use as inspection openings, or special traps fitted (see HTM 60 – 'Ceilings').

INTERNAL GLAZING

4.25 Many internal glazing units will suffer damage. They should be designed and constructed in accordance with

the guidance given HTM 57 – 'Internal glazing'. In particular, fire-resisting glazing can be vulnerable, as the glass in fire-resisting units is mostly 6 mm wired glass, which is less impact-resistant than standard glass. An alternative is to use safety glass which is both fire- and impact-resisting, but this is expensive. An alternative is to limit the sizes of glass panes used as shown for doorsets in HTM 58 – 'Internal doorsets', and to provide protective rails to prevent direct impact. HTM 57 – 'Internal glazing' and BS 6262:1982 give recommendations on this.

4.26 When replacing fire-resisting glazing, care must be taken to ensure that replacement glass, beads and intumescent seals comply with the details on the fire certification so as not to compromise the fire resistance of the unit.

SERVICES

4.27 Radiators, ducts and exposed pipes can be badly damaged if they are positioned where they can be struck by tugs and trolleys, apart from the additional cleaning and painting which is necessary when they are left exposed. They should be concealed behind suitable panels to avoid direct impact from mobile equipment and vandalism.

5 Planning and ergonomics

5.1 HBN 40 – 'Common activity spaces', Volume 2 – 'Corridors' offers guidance on the dimensional requirements for the proper planning of circulation spaces in hospitals. Hospital streets and corridors should be of a width to permit trolleys and tugs to pass with room for pedestrians as well. Projections should be avoided. Junctions should allow easy turning space for tugs and their trains of trolleys without the risk of the trailing trolleys striking the walls. Splaying the corners of junctions helps to avoid this. Short spur corridors should be avoided.

5.2 Clear openings of doors should follow the advice in HTM 58 – 'Internal doorsets', bearing in mind the reduction in width resulting from the thickness of door leaves and any projecting ironmongery, particularly where doors only open to right-angles. This is referred to in paragraphs 4.9–4.23 above.

5.3 Protective devices on walls should be positioned to give the maximum defence against mobile equipment.

5.4 It is not easy to position protection so that all situations are covered. A thorough investigation should be made of the dimensions of equipment which it is proposed to purchase, before final positioning of protection is made. The shapes and sizes of trolleys cover a wide range of dimensions (see HBN 40 – 'Common activity spaces').

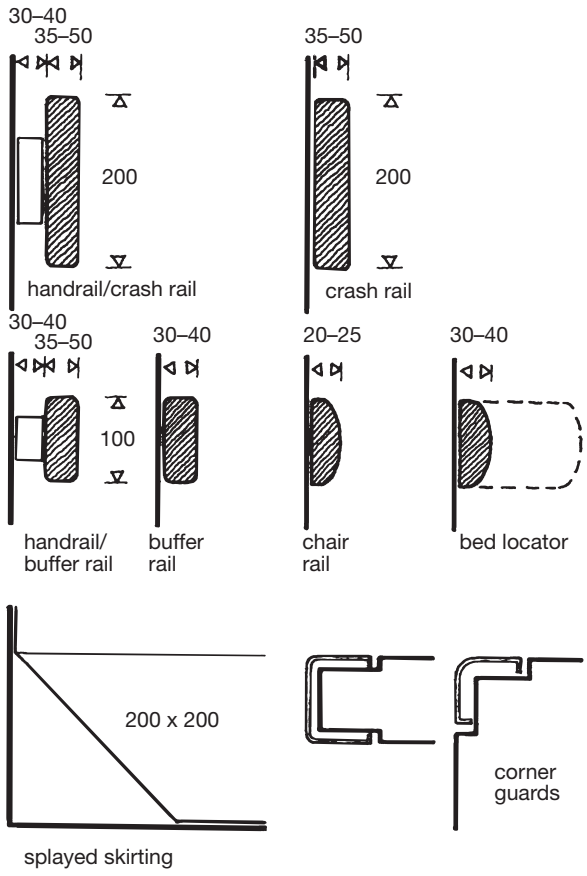
5.5 The vertical range of protection can extend over a wide band from near floor level to about 1600 mm or even higher depending on the types of vehicle and locations. Most, however, will be fitted in the range from finished floor level up to 1000 mm.

6 Protective devices

6.1 There is no commonly agreed terminology for protective devices.

6.2 The descriptions shown in Figure 8 are in general use and are given in an attempt to encourage the use of some common terms for the subject.

Figure 8 Types of protective device



6.3 Protective devices include the following:

- **Handrails**: mid-height rails, 100 mm to 200 mm deep, usually mounted about 1000 mm above floor level, fixed with a gap between rail and wall; they may also serve as crash rails.
- **Crash rails**: mid- or low-height rails, 200 mm to 250 mm deep, usually mounted from 200 mm to 1000 mm above floor level, singly or in banks of two or three; they may be fixed direct to walls or with a gap between rail and wall face. They may be of the energy-absorbing type.
- **Buffer rails**: mid- or low-height rails, 75 mm to 100 mm deep, usually mounted from 200 mm to 1000 mm above floor level, singly or in banks of two or three; they may also be fixed vertically to protect opening edges of doors and as bed locators. They may be of the energy-absorbing type.
- **Chair rails**: the lighter types of buffer rail may be used as chair rails.
- **Corner guards**: 50 mm to 100 mm in each dimension, usually fixed from the top of the skirting to about 1000 mm, but sometimes up to 2100 mm above floor level. They may be of the energy-absorbing type.
- **Large splayed skirtings**: 200 mm x 200 mm, which may be covered with a floor finish.
- **Protective plates and sheeting**: fixed with adhesive and/or screws to faces of doors, walls and partitions.

6.4 Protective devices may be specially designed for individual projects, of traditional construction, or be specialist proprietary devices.

6.5 The principal design criteria for protective devices is, first, to prevent the object likely to cause damage from coming into contact with the surface of the element to be protected and, second, to resist the likely damage if the vehicle does make contact with the partition etc.

6.6 Energy-absorbing devices should be fitted wherever possible, especially where heavy impacts are expected.

6.7 The severe duty areas in health buildings are similar to circulation areas in airports and railway stations. These suffer the same sort of damage as in hospital streets and entrances. Recent examples use crash rails, rubber or plastic buffer rails (in effect mini motorway crash barriers) and large splayed skirtings.

6.8 It is recommended that this should also be carried out in hospitals, at least in entrances, hospital streets and main corridors.

6.9 Trolleys with four wheels can be kept away from walls by splayed skirtings or curbs; this has proved

effective in a number of buildings. Splayed coves should be at least 200 mm by 200 mm.

6.10 Many of the electrically propelled tugs so widely used in hospital streets and corridors – in general, the items responsible for so much of the heavy damage – normally have only three wheels. The single wheel is usually at the front, which permits the overhanging body to strike the wall even if a cove or curb is provided.

6.11 Other trolleys, and certain types of bed, may have overhanging parts which can inflict severe damage. Crash and buffer rails to keep the vehicles away from the vulnerable surfaces appear to be the only practicable answer.

6.12 All materials should be those which are not prone to splinter or produce sharp snags. Traditional materials used for handrails (often serving a dual purpose also as a crash rail) are sometimes of wood; splintering can be a problem, and damage may be easily visible if painted. Aluminium can be gouged by projecting sharp steel parts of badly designed trolleys, as can some plastic rails. Wood- or MDF-based rails faced with high-impact plastic, sometimes with hardwood top and bottom edges, have proved a satisfactory solution for hand/crash rails.

6.13 Proprietary handrails, crash rails and buffer rails of various shapes and sizes can be obtained and can be effective. These are often of high-impact plastic. Energy-absorbing forms should be selected in preference to static rails wherever possible.

6.14 Steel tubes may be suitable for rails in areas such as kitchens, stores and works units.

6.15 In extreme cases, bollards of steel or concrete have been used in hospital streets where very heavy trolley damage has occurred.

6.16 Protective plates and sheeting may be made of metal or plastic. Metal can be dented and sometimes ripped into jagged edges, which can be dangerous to pedestrians. Inexpensive sacrificial plastic or high-impact and/or resilient plastic, frequently with a textured finish, can be used; both can be effective.

6.17 If the damage is likely to be scratching and abrasion rather than heavy impact, an abrasion-resistant surface should be used.

7 Fire-resisting construction

7.1 Many doorsets, partitions and glazed screens in hospital streets and corridors are of fire-resisting construction. It is essential that damage does not impair these qualities. The detailed construction should be designed or selected with a view to resisting or avoiding damage to intumescent or smoke seals, glazing beads, door edges, ironmongery etc which might reduce the effectiveness of the components' fire protection. Applied protective devices should not invalidate fire resistance.

7.2 Certification to cover the design and construction of fire-resisting doorsets with complete glazing details and the full range of ironmongery required for the building should be inspected (see also 'Firecode: Part 1 – functional standards').

8 Mobile equipment

8.1 Mobile equipment is one of the major causes of damage to the building fabric. Therefore, careful selection of suitable mobile equipment is essential. All mobile equipment should comply with BS 4322.

9 Management

9.1 The avoidance of heavy damage to the hospital building is very much affected by the actions and attitude of management.

9.2 Only management can select the proper equipment, recruit and train the staff, help to engender a sense of pride in patients and staff, and persuade them to take care of their building.

10 Maintenance

10.1 Regular inspections of doors and ironmongery should be carried out to ensure proper functioning. Protective devices should also be inspected to ensure that they are in good working order, correctly positioned, and of adequate strength and size to fulfil their purpose. Damaged construction, especially any with splintering or hazardous fractures, should be repaired quickly.

10.2 Ironmongery must be kept in proper working order.

10.3 Mobile equipment must be regularly inspected and serviced. If not kept in proper condition, with free-running wheels, all buffering devices in place and functioning correctly, additional damage could result.

10.4 A maintenance register, which gives advice on maintenance or the need for inspections from product suppliers, should be kept for the maintenance manuals. Keeping on top of damage will encourage care of the accommodation. Badly maintained accommodation always conveys the message of not caring.

Appendix – Schedule of categories of finishes for walls, ceilings and floors and damage risk/protection

A full schedule of activity spaces showing categories of performance relating to damage risk/protection and with wall, ceiling and floor finishes, taken from HTMs 56, 60 and 61, is set out in the following pages.

Where a room is not specifically shown, the most similar room should be used as a basis for selection.

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Accident & Emergency				
Circulation Space	5	5	4	HD
Cleaners' Room	2	5	5	HD
Cleansing Room, Shower	4	4	2	LD
Clean Utility	3	3	5	MD
Consulting	3/6	6	6	LD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	HD
Drugs and Alcohol Recovery	4	3	3	MD
Interview Room	5/6	6	6	LD
Major Treatment	1	1	1	MD
Office	5/6	6	6	LD
Reception, Records	5/6	6	6	LD
Resuscitation	3	5	2	MD
Staff Base	3	5	4	MD
Store	5	5	6	MD
Treatment	3	5	3	MD
WC	2	5	5	LD(v)
Administration				
Circulation Space	5/6	6	4	LD
Cleaners' Room	2	6	5	LD
Committee Room	6	6	6	LD
Common Room	6	6	6	LD
Interview Room	6	6	6	LD
Library	6	6	6	LD
Office	5/6	6	6	LD
Reception	6	6	6	LD
Rest Room	6	6	6	LD
Store	5	5	6	MD
WC	2	5	6	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Adult acute – Day care and treatment				
Bathroom	4	4	2	LD
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Consulting/Examination/ Doctors' Office	3/6	6	6	LD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Major Treatment	1	3	3	MD
Multi-bed Room	3/6	5	5	MD
Office	5/6	6	6	LD
Patient Changing Cubicle	5/6	5	4	LD
Patient Waiting	5/6	5	4	LD
Shower	4	4	2	LD
Single-bed Room	3/6	5	5	MD
Sitting/Recovery	3/6	5	5	MD
Staff Base	5/6	5	4	HD
Staff Changing	5	6	6	LD
Store	5	5	6	MD
Treatment	3	5	3	MD
WC	2	5	5	LD
Adult acute – nursing section				
Bathroom	4	4	2	LD
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	LD
Clean Room	3	3	5	LD
Cloakroom	5	6	6	LD
Day Room	5/6	5	5	MD
Dining Room	5/6	5	5	MD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Flower Bay	5/6	5	4	MD
Linen Bay	5/6	5	4	MD
Multi-bed Room	3/6	5	5	MD
Office	5/6	6	6	LD
Pantry	2	4	3	MD
Relatives' Room	6	5	6	LD
Seminar	5/6	6	6	LD
Shower	4	4	2	LD
Single-bed Room	3/6	5	5	MD
Staff Base	5/6	5	4	HD
Store	5	5	6	MD
Switchroom	5	6	6	LD
Treatment Room	3	5	3	MD
WC	2	5	5	LD
Wheelchair Park	5/6	5	4	HD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Ambulance station				
Circulation Space	5	5	4	MD
Cleaners' Room	2	5	5	MD
Control Room	5/6	3	6	MD
Drying Room	2	2	2	MD
Garage Area	3	2	6	–
Kitchen	2	1	2	MD
Mess Room	5/6	6	5	LD
Office	5/6	6	6	LD
Shower	4	4	2	LD
Sluice Room	4	2	2	MD
Staff Changing	5	6	6	LD
Store	5	5	6	MD
WC	2	5	5	LD
Boiler house				
Boiler Room	3/5	5	6	–
Calorifier Room	3/5	5	6	–
Circulation Space	5	5	4	MD
Fuel Store	5	1	6	–
Staff Accommodation	5	6	6	LD
Staff WC and Washroom	2	5	5	LD
Switchroom	5	6	6	LD
Children – Day-patient accommodation				
Circulation Space	5/6	5	4	HD
Clean Utility	3	3	5	MD
Dirty Utility, Disposal	2	3	5	MD
Multi-bed Room	3/6	5	5	MD
Pantry	2	4	3	MD
Single-bed Room	3/6	5	5	MD
Treatment, Examination	3	5	3	MD
Waiting, Play	5/6	6	4	MD
WC	4	5	5	LD
Children – In-patient accommodation				
Bathroom	4	4	2	LD
Circulation Space	5/6	5	4	HD
Clean Utility	3	3	5	MD
Dirty Utility	2	3	5	MD
Flower Bay	5/6	5	4	MD
Linen Store	5/6	5	6	MD
Multi-bed Room	3/6	5	5	MD
Office	5/6	6	6	LD
Pantry	2	4	3	HD
Play, Dining, Education	5/6	5	5	LD
Shower	4	4	2	LD
Single-bed Room	3/6	5	5	MD
Staff Base	5/6	5	4	MD
Store	5	5	6	MD
WC	2	5	5	LD
Children – Shared accommodation				
Admission, Examination	3/6	5	5	MD
Adolescents' Day Room	5/6	5	5	HD
Baby Feed Store	5	5	6	MD
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	MD
Disposal	2	3	5	MD
Education Space	5/6	5	6	LD
Equipment Bay	5/6	5	4	MD
Office Interview	5/6	6	6	LD
Parents' Bedroom	6	6	5	LD
Parents' Sitting Room	6	6	6	LD
Seminar	5/6	5	6	MD
Shower	4	4	2	LD
Staff Changing	5	5	6	LD
Staff Locker Room	5	5	6	LD
Switchroom	5	5	6	LD
Teachers' Base	5/6	5	6	LD
Treatment	3	5	3	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Dental				
Circulation Space	5/6	5	4	MD
Laboratory and Darkroom	3	3	5	LD
Office	5/6	6	6	LD
Recovery Room	3	5	3	MD
Store	5	5	6	MD
Surgery	3	3	5	MD
Switchroom	5	5	4	LD
Waiting Area	5/6	6	4	LD
WC	2	5	5	LD
Dining room				
Circulation Space	5/6	5	4	MD
Cleaners' Room	2	5	5	MD
Cloakroom	5/6	5	6	LD
Coffee Room	6	5	6	LD
Dining Room	5/6	5	6	LD
Office	5/6	6	6	LD
Sandwich Room	5/6	5	6	LD
Servery	2	4	2	MD
Staff Changing Room	5	5	6	LD
Store	5	5	6	MD
WC	2	5	5	LD
Educational accommodation				
Audio-visual	6	5	6	LD
Classroom	5/6	5	6	LD
Common Room	6	6	6	LD
Demonstration	5/6	5	6	LD
Dining	5/6	5	6	LD
Entrance, Reception and Waiting Area	5/6	5	4	LD
Lecture/Seminar/Discussion	5/6	6	6	LD
Library	6	6	6	LD
Office	5/6	6	6	LD
Servery	2	4	2	MD
Staff Room	6	6	6	LD
Store	5	5	6	MD
WC	2	5	5	LD
Fracture clinic				
Appliance Fitting Room	3	5	5	MD
Clean Supplies and Preparation	3	5	5	MD
Cleaners' Room	2	5	5	MD
Consulting, Examination Room	3/6	5	5	LD
Circulation Space	5/6	5	4	MD
Dirty Utility	2	3	5	MD
Disposal Holding	2	3	5	MD
Plaster Room	3	3	3	MD
Reception, Sub-Waiting Area and Wheelchair Park	5/6	5	4	HD
Store	5	5	6	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Geriatric care – Day hospital				
Bathroom	4	4	2	LD
Bedroom	6	5	6	LD
Circulation Space	3/6	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Clothes Hanging, Waiting and Wheelchair Park	3/6	5	4	HD
Consulting and Examination Room	3	5	5	LD
Dining	3	5	6	LD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
General Sitting Space	3/6	5	6	LD
Interview Room	6	6	6	LD
Kitchen	2	4	3	MD
Occupational Therapy	3/6	5	6	MD
Office	5/6	6	6	LD
Pantry	2	4	3	MD
Physiotherapy	3/6	3	6	MD
Quiet Room	3/6	5	6	LD
Shower	4	4	2	LD
Staff Seminar Room	6	6	6	LD
Speech Therapy/Consultants/ Examination Room	6	6	6	LD
Staff Cloakroom	5	6	6	LD
Store	5	5	6	MD
Switchroom	5	5	6	LD
Treatment Room	3	5	3	MD
Utility and Laundry	4	4	2	MD
WC	2	5	5	LD
Geriatric care – Nursing section				
Bathroom	4	4	2	MD
Bathroom, Treatment	4	4	2	MD
Circulation Space	3/6	5	4	HD
Cleaners' Room	2	4	5	MD
Clean Utility	3	3	5	MD
Cloakroom	5	6	6	LD
Day Room	3/6	5	5	LD
Dining Room	3	5	5	LD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Flower Bay	3/6	5	4	MD
Linen Bay	3/6	5	4	MD
Multi-bed Room	3/6	5	5	MD
Occupational Therapy	3/6	5	6	LD
Office	5/6	6	6	LD
Pantry	2	4	3	MD
Physiotherapy	3/6	5	5	MD
Relatives' Room	6	6	6	LD
Seminar	5/6	5	6	LD
Shower	4	4	2	LD
Single-bed Room	3/6	5	5	MD
Staff Base	3/6	5	4	HD
Store	5	5	6	MD
Switchroom	5	5	6	LD
Waiting Area	3/6	5	4	MD
WC	2	5	5	LD
Wheelchair Park	3/6	5	4	HD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Health centre				
Child Assessment	5/6	6	6	LD
Chiropody	3	5	6	LD
Circulation Space	5/6	5	4	MD
Cleaners' Room	2	5	5	MD
Consulting, Examination Room	3/6	5	5	LD
Consulting Room – Audiology	6	5	5	LD
Dental Surgery	3	3	5	LD
Dispensary	3	3	3	LD
Disposal	2	3	4	MD
Health Education	5/6	5	6	LD
Interview Room	6	6	6	LD
Kitchen/Teabar	3	4	3	MD
Laboratory and Darkroom	3	4	5	LD
Nurses' Service Room	5	3	6	LD
Office	5/6	6	6	LD
Pharmacy	3	3	3	LD
Physiotherapy	3/6	3	5	MD
Physiotherapy (Utility Area)	3	5	5	MD
Playroom	5/6	5	6	LD
Pram Shelter (inside)	3/5	6	4	HD
Recovery Room	3	5	6	MD
Seminar, Library	5/6	6	6	LD
Speech Therapy	6	6	6	LD
Staff Common Room	6	5	6	LD
Store	5	5	6	MD
Switchroom	5	5	6	LD
Treatment	3	5	3	MD
WC	2	5	5	MD
Intensive therapy unit				
Circulation Space	3	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Laboratory	3	3	3	LD
Multi-bed Room	3	5	5	MD
Office	5/6	6	6	LD
Pantry	2	4	3	MD
Relatives' Room, Doctors' Room, Overnight Stay	6	5	6	LD
Single-bed Room	3	5	5	MD
Staff Base	3	5	4	HD
Staff Changing	5	6	6	LD
Staff Rest Room	5/6	6	6	LD
Store	5	5	6	MD
Switchroom	5	5	6	LD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Kitchen				
Bulk Provisions Store	2	4	5	HD
Central Beverage Preparation Space	2/4	2	2	HD
Central Cooking	2/4	2	2	HD
Central Tray Preparation Space	4	2	2	HD
Central Tray Service Space	4	2	2	HD
Central Wash-up	4	2	2	HD
Cleaners' Room	5	5	5	MD
Cooling Room or Larder	2	4	3	MD
Day-to-day Store	2	4	3	MD
Diet Preparation	4	2	3	HD
Disposables Store	5	4	5	HD
Equipment Store	5	4	6	HD
Fish Storage	special	special	special	–
General Preparation	4	2	3	HD
Kitchen Cold Room	special	special	special	–
Kitchen Deep Freeze	special	special	special	–
Meat Cold Store	special	special	special	–
Office	5	5	6	LD
Pan Wash	4	2	2	HD
Pastry and Sweets Preparation	4	2	3	HD
Raw Meat and Fish Preparation	4	2	3	HD
Sandwich Preparation	4	2	3	HD
Staff Changing	5	5	6	LD
Staff Rest Room	5/6	5	6	LD
Trolley Parking Space	2/5	2	3	HD
Trolley Wash	4	2	2	HD
Vegetables, Salad and Fruit Preparation	4	2	3	HD
Vegetable Store	2	4	3	HD
Washing-up Materials Store	5	4	6	HD
WC/Washroom	2	5	5	LD
Laundry				
Assembling, Packing and Despatch	5	6	5	HD
Barrier Room	3	4	2	MD
Colandering	3	4	2	MD
Calorifier	5	4	2	HD
Central Disinfection Area	4	4	2	HD
Classification	3	5	6	MD
Cleaners' Room	2	5	5	MD
Drying	4	4	2	MD
Machine Cloth Store	5	5	6	MD
Mess Room	5/6	5	6	LD
Office	5/6	6	6	LD
Plantroom	5	6	6	LD
Pressing	3	4	2	MD
Reception	3	5	6	MD
Rest Room	5/6	6	6	LD
Solution Preparation, Storage Area	4	4	3	MD
Store	5	5	6	MD
Switchroom	5	5	6	LD
Washing	4	5	2	MD
Washing Materials Store	5	5	6	MD
WC	2	5	5	LD
Maternity – Administration				
Circulation	5/6	5	4	LD
Classroom	5/6	5	6	LD
Disposal	2	3	5	MD
Office	5/6	6	6	LD
Staff Cloaks	5	6	6	LD
Store	5	5	6	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Maternity – Central delivery suite				
Abnormal Delivery Room	1	1	1	MD
Admission Suite	3	1	3	MD
Bathroom	4	4	2	LD
Changing Room	5	5	3	LD
Circulation Space	3	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Day Room	5/6	5	5	LD
Delivery Room	3	1	1	MD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Equipment Store	5	5	6	MD
Linen Room	5	5	5	MD
Office	5/6	6	6	LD
Pantry	2	4	3	MD
Scrub-up and Gowning	4	1	2	LD
Shower	4	4	2	LD
Staff Base	3	5	4	MD
Trolley Space	3	5	4	HD
WC	2	5	5	LD
Maternity – Nursing section				
Assisted Shower, WC, Wash	4	4	2	LD
Baby Feed, Demonstration Room	2	5	5	LD
Bathroom	4	4	2	LD
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Day Room, Dining Room	5/6	6	5	LD
Dirty Utility	2	3	5	MD
Disposal Room	2	3	5	MD
Equipment Store	5	5	6	MD
Flower Bay, Linen Store	5/6	5	4	MD
Multi-bed Room	3/6	5	5	MD
Nursery	3	5	5	MD
Office	5/6	6	6	LD
Pantry	2	4	3	MD
Seminar Room	5/6	5	6	MD
Single-bed Room	3/6	5	5	MD
Staff Base	5/6	5	4	HD
Staff Changing	5	6	6	LD
Switchroom	5	5	6	LD
WC	2	5	5	LD
Maternity – Special care baby unit and central baby feed kitchen				
Bedroom	3/6	5	5	LD
Beverage Point, Baby Feed Demonstration	3	5	5	MD
Blood Gas Analysis Room	3	5	5	LD
Central Milk Kitchen	3	4	3	MD
Circulation Space	3	6	4	HD
Cleaners' Room	2	6	5	MD
Clean Utility	3	3	5	MD
Day Room and Play Room	5/6	5	5	LD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Entrance, Visitors' Gowning	3	3	3	MD
Incubator Nursery	3	3	1	MD
Linen Room	5	5	5	MD
Nursery	3	5	3	MD
Office, Interview, Seminar Room	5/6	5	6	LD
Reception, Breast Milk	3	5	5	MD
Shower	4	4	2	LD
Staff Base	3	5	4	HD
Staff Changing	5	5	6	LD
Store	5	5	6	MD
Switchroom	5	5	6	LD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Medical photography and illustration				
Changing Cubicle	5/6	5	5	LD
Circulation Space	5/6	5	4	MD
Cleaners' Room	2	5	5	LD
Darkroom	3	3	5	LD
Display	3	5	6	LD
Editing	3	5	6	LD
Finishing Room	3	5	6	LD
Office	5/6	6	6	LD
Reproduction and Copying Room	3	5	6	LD
Staff Room	6	6	6	LD
Store	5	5	6	MD
Studio	3	6	6	MD
WC	2	5	5	LD
Mental illness – Day hospital				
Art Room	3	5	6	LD
Beauty, Hairdresssing	3	5	6	LD
Behavioural Therapy	3/6	5	6	LD
Circulation Space	5/6	5	4	MD
Cleaners' Room	2	5	5	MD
Cloakroom	5	6	6	LD
Dining Room	5/6	5	5	LD
Disposal Room	2	3	5	MD
Games Room	5	6	6	LD
Group Therapy, Library, Music, Quiet, Sitting	6	6	6	LD
Heavy Workshop	5	6	6	MD
Hobbies Room	5/6	6	6	LD
Horticulture	3	5	6	LD
Interview Room	6	6	6	LD
Kiln Room	3	5	6	LD
Kitchen	2	2	2	LD
Laundry	4	2	2	LD
Light Workshop	5	5	6	MD
Observation Room	6	5	6	LD
Office	5/6	6	6	LD
Patients' Washroom	2	5	5	LD
Pottery Room	3	5	6	LD
Recreation Store	5	6	6	LD
Servery	2	2	2	LD
Sitting	6	6	6	LD
Staff, Seminar Room	6	6	6	LD
Store	5	5	6	MD
Switchroom	5	5	6	LD
Timber Store	3	6	6	LD
Treatment, Clean Utility	3	3	5	MD
WC	2	5	5	LD
Mental illness – ECT				
Ante-room	5/6	5	6	MD
Circulation Space, Reception	5/6	5	4	MD
Disposal Room	2	3	5	MD
Recovery Room	3	5	5	MD
Store	5	5	6	MD
Treatment Room	3	5	5	MD
Washroom, Assisted WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Mortuary and post-mortem				
Attendants' Room	3/6	5	6	LD
Bier Room	2/4	5	5	LD
Body Store, Trolley Bay	2/4	5	5	HD
Circulation Space	2/4	5	4	HD
Cleaners' Room	2	5	5	LD
Clean Stock	3	5	5	LD
Compressor and Switchroom	5	5	6	LD
Instruments	3	5	6	LD
Linen Room	5	5	5	MD
Medical Observation Room	3	5	6	LD
Office	5/6	6	6	LD
Pathologists' Changing Room	3	5	6	LD
Post-mortem Room	2/4	1	1	MD
Refrigerated Chambers	special	special	special	–
Shower	4	4	2	LD
Sluice	2/4	3	2	MD
Specimen Room	3	5	5	MD
Viewing Cubicle	3	5	6	LD
Viewing Room	5/6	5	6	LD
Visitors' Entrance	3/6	5	4	LD
Waiting Room	3/6	5	6	LD
WC	2	5	5	LD
Operating				
Anaesthetic Room	1	1	1	LD
Beverage Bay	3	5	4	MD
Central Store	3	5	3	MD
Changing Room	3	5	3	LD
Circulation Space	3	3	4	HD
Clean Corridor	3	3	4	HD
Clean Utility	3	3	3	MD
Dirty Utility	2	3	3	MD
Disposal, Holding or Collection	2	3	3	MD
Entrance, Reception, Transfer Area	3	3	4	HD
Equipment Store	3	5	3	MD
Exit Bay	3	3	4	HD
Office	3	5	6	HD
Operating Theatre	1	1	1	LD
Outer Corridor	2	3	4	HD
Plaster Room	2	3	1	MD
Post-operative Recovery Area	2	3	1	MD
Preparation	2	1	1	MD
Scrub-up	4	1	1	LD
Shower	4	3	2	LD
Staff Control Base	3	5	1	HD
Staff Rest Room	3/6	5	6	MD
Switchroom	5	5	6	LD
WC	2	5	5	LD
X-ray Processing	3	5	5	MD
Out-patient – Audiology				
Reception				
Waiting Area				
Children's Play Space				
Toilet Facilities				
Audiometric Testing Area				
Vestibular Test Room				
Audiology Equipment Store				
Principal Audiologist's Office				
Staff Office				

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Out-patient – Children				
Circulation Space	5/6	5	4	MD
Consulting, Examination	3/6	5	5	LD
Dirty Utility	2	3	5	MD
Mother and Baby Room	3/6	5	5	LD
Office	5/6	6	6	LD
Pram, Wheelchair Area	5/6	5	4	HD
Treatment Room	3	5	3	MD
WC	2	5	5	LD
Weighing, Measuring Room	2	5	5	MD
Out-patient – Children's Comprehensive Assessment				
Assessment, Observation, Remedial/ Therapy, Treatment	3	5	5	LD
Circulation Space	5/6	5	4	MD
Consulting, Examination Room	3/6	5	5	LD
Dirty Utility	3	3	5	MD
Office	5/6	6	6	LD
Office, Seminar	5/6	6	6	LD
Pram Store, Wheelchair Park	5/6	5	5	HD
Staff Locker Room	5	6	6	LD
Store	5	6	6	MD
Switchroom	5	6	6	LD
Viewing Room	3/6	5	6	LD
Waiting, Dining Room	5/6	5	6	LD
WC	2	5	5	LD
Out-patient – General				
Consulting, Examination Room	3/6	5	5	LD
Changing Cubicle	5/6	5	4	LD
Circulation Area	5/6	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Office	5/6	6	6	LD
Ophthalmic Room	3/6	5	5	LD
Porters' Room	5/6	6	6	LD
Reception	5/6	5	6	HD
Store	5	6	6	MD
Test Room	3	5	5	LD
Treatment Room	3	5	3	MD
Trolley and Wheelchair Area	5/6	5	4	HD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Out-patient – Mental illness				
Assisted Washroom and WC	4	5	5	LD
Circulation Space	5/6	5	4	MD
Cloakroom, Patients'	5	6	6	LD
Consulting, Examination Room	3/6	5	5	LD
Dirty Utility, Disposal	2	3	5	MD
Interview Room	6	6	6	LD
Medical Records	5/6	6	6	LD
Office	5/6	6	6	LD
Psychological Testing Room	3/6	5	6	LD
Staff Changing	5	6	6	LD
Store	5	6	6	MD
Treatment, Clean Utility	3	3	5	MD
WC	2	5	5	LD
Out-patient – Ophthalmic				
Circulation Space	5/6	5	4	MD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Consulting, Examination Room	5/6	5	5	LD
Darkroom	3	3	5	LD
Dirty Utility	2	3	5	MD
Dispensing Optician	5/6	5	6	LD
Fluorescein, Angiography	5/6	5	5	LD
Office	5/6	6	6	LD
Orthoptist	3/6	5	6	LD
Staff Base	5/6	5	4	MD
Locker Room	5	6	6	LD
Store	5	6	6	MD
Switchroom	5	6	6	LD
Treatment Room	3	5	3	MD
Waiting, Recovery Area	5/6	5	4	MD
Patients' WC	2	5	5	LD
Staff WC	2	5	5	LD
Pathology				
Blood Bank	3	special	special	–
Centrifuge Room	3	3	5	MD
Circulation Space	3/5	5	4	MD
Cleaners' Room	2	5	5	MD
Cloakroom	5	6	6	MD
Disposal Room	2	3	5	MD
Examination Room	3	3	3	MD
Hot or Cold Room	3	special	special	MD
Laboratory	3	3	3	MD
Media Room	3	5	3	MD
Mounting, Preparation	3	5	3	MD
Museum	3	5	6	LD
Office	5/6	6	6	LD
Staff Room	6	6	6	LD
Sterilizing Room	3	3	2	MD
Store	5	6	6	MD
Waiting Area	5/6	5	4	MD
Wash-up	3	5	2	MD
WC	2	5	5	LD
Workshop	5	5	6	MD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Pharmacy				
Advisory Cubicle	5/6	5	6	MD
Aseptic Filling	2	1	1	MD
Aseptic Room	2	1	1	MD
Balance Room	3	1	1	MD
Bottle Preparation	4	1	5	MD
Changing Room, Robing/ Interchange Area	2	1	3	LD
Chemicals Store	3	5	6	MD
Circulation Space	3	5	4	HD
Cleaners' Room	2	5	5	MD
Cloakroom	5	6	6	LD
Container Preparation	2	5	5	MD
Containers – clean	3	5	5	MD
Dispensary	3	3	3	HD
Dressing Store	3	5	3	MD
Drug Information Library	5/6	5	6	LD
Emergency Store	5	6	6	MD
Equipment Cleaning	2	6	6	MD
Finished Products Store	5	5	6	MD
Finished Products Quarantine Store	5	3	6	HD
Flammable Store	special	special	special	HD
Goods Reception	5	5	6	HD
Incubation	3	1	3	MD
Incoming Materials (Quarantine)	5	1	3	MD
Inspection, Label Preparation, Labelling	3	3	5	MD
Laboratory	3	3	5	MD
Laundry Facility	4	4	2	HD
Materials Store	5	5	6	HD
Media Kitchen	3	4	3	MD
Medical Gas Cylinder Store	5	5	special	HD
Microbiological Media Store	3	5	5	MD
Office	5/6	6	6	LD
Packaging and Overwrap	5	5	6	MD
Patient Waiting	5/6	5	6	MD
Porters' Room, Base	5/6	5	6	LD
Preparation, Filling Area	2	1	3	MD
Preparation Room	2	1	3	MD
Reference Samples Store	5	5	6	HD
Repackaging	5	5	6	MD
Re-usable Container Collection	5	5	6	HD
Security Store	5	5	6	HD
Seminar	5/6	6	6	LD
Staff Entrance	5/6	6	4	LD
Sterilization	3	1	2	MD
Still Room	3	1	2	MD
Store	5	5	6	MD
Trolley and Equipment Park	5	5	4	HD
Ward Service Area	3	5	5	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Radiodiagnostic				
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	3	3	5	MD
Darkroom	3	2	5	MD
Dirty Utility	2	3	5	MD
Disposal	2	3	5	MD
Dressing Cubicle	5/6	5	4	LD
Lavage Room	4	4	5	MD
Linen Store	5	5	6	MD
Mobile X-ray Store	5	6	6	HD
Office	5/6	6	6	LD
Radiodiagnostic Room	3	5	5	MD
Radiographer	5/6	6	6	LD
Records	5/6	6	6	LD
Recovery Room	3	5	5	LD
Staff Room	6	6	6	LD
Store	5	6	6	MD
Trolley Space	5/6	5	4	HD
Ultrasound	3	5	5	MD
Viewing and Sorting Room	3	5	5	LD
WC	2	5	5	LD
Rehabilitation				
Apparatus Bay	5	5	6	MD
Apparatus Bay – Hydrotherapy	4	4	2	MD
Apparatus Store	5	5	6	MD
Bathroom	4	4	2	LD
Bedroom	6	6	6	LD
Changing Cubicle – Gymnasium	5/6	5	6	LD
Changing Cubicle – Hydrotherapy	4	4	2	LD
Changing Cubicle – Treatment	5/6	5	5	LD
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	MD
Clinical Room	3	3	5	LD
Consulting, Examination Room	3/6	5	5	LD
Disposal Room	2	3	5	MD
Electronyography Room	3/6	5	5	MD
Gymnasium	2	5	6	LD
Heavy Workshop	3	5	6	MD
Hydrotherapy	4	4	2	MD
Individual Open Exercise Area	5/6	5	6	MD
Interview Room	6	6	6	LD
Kitchen	3	4	2	MD
Laundry	4	4	2	MD
Light Workshop	5	5	6	MD
Main Waiting	5/6	5	4	MD
Patients' Shower	4	4	2	LD
Plaster and Plaster Splints	3	5	5	MD
Porters' Base	5/6	5	6	MD
Preparation Bay	5	5	5	MD
Reception, Records Office	5/6	5	6	LD
Recovery Room	5/6	5	5	MD
Speech Therapy	6	6	6	MD
Staff Changing	5	6	6	LD
Staff Changing Cubicle – Hydrotherapy	4	4	2	MD
Staff Room, Seminar	6	6	6	LD
Store	5	6	6	MD
Switchroom	5	6	6	LD
Timber, Materials Store	3	6	6	LD
Treatment Cubicle	3/6	5	5	LD
Wax Treatment Room	3	5	5	LD
WC	2	5	5	LD
Wheelchair Bay	5/6	5	4	HD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Residential accommodation				
Bathroom	3	4	2	LD
Bedroom	6	6	6	LD
Bed-sitting Room	6	6	6	LD
Circulation Space	6	5	4	LD
Cleaners' Room	2	5	5	LD
Cloakroom	5	6	6	LD
Common Room	6	6	6	LD
Kitchen	3	4	3	LD
Living Room	6	6	6	LD
Office	5/6	6	6	LD
Shower	4	4	2	LD
Sitting Room	6	6	6	LD
Utility Store	5	6	6	LD
WC	2	5	5	LD
Secure unit				
Bathroom	4	4	2	LD
Circulation Space	5/6	5	4	HD
Classroom	3	6	6	LD
Clinical, Examination Room	3	5	5	LD
Cleaners' Room	2	5	5	MD
Communal Area	5/6	6	6	MD
Duty Room	5/6	6	6	LD
Group Therapy Room	6	6	6	MD
Gymnasium	2	6	6	MD
Interview, Conference	6	6	6	LD
Kitchen	2	4	3	MD
Launderette, Utility Room	4	3	2	MD
Library	5/6	6	6	LD
Linen Store	5	5	6	LD
Office	5/6	6	6	LD
OT Hobbies Room	5	6	6	MD
Quiet Room	6	6	6	LD
Secure Room	3	3	special	HD
Shower	4	4	2	LD
Single-bed Room	3/6	6	5	MD
Staff Rest Room	6	6	6	LD
Store	5	6	6	MD
Study Room	5/6	6	6	LD
Training Room	5/6	6	6	MD
Visitors' Room	6	6	6	LD
WC	2	5	5	LD
Sterilizing and disinfecting unit				
Circulation Space	3	5	4	HD
Cleaners' Room	2	5	5	MD
Disposal Collection	2	5	5	MD
Disposal Holding Area	2	5	5	MD
Materials Holding Store	5	5	6	MD
Medical Equipment Test Area, Service, Work Area	3	5	6	HD
Office	5	6	6	LD
Reception – Clean Supply	3	5	5	MD
Reception – Soiled Goods	3	5	5	MD
Staff Changing	5	6	6	LD
Staff Room	5/6	6	6	LD
Sterile Goods Store	3	5	6	MD
Sterilizer Working Area	3/5	1	2	HD
Trolley Unloading, Maintenance Area	3/5	5	6	HD
Trolley Wash	4	4	2	HD
Wash Room	4	5	2	HD
WC	2	5	5	LD
Work Area	3	5	5	HD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Street				
Circulation	5/6	6	5	SD
Sub-waiting	5/6	6	4	HD
Stairs	5/6	6	5	LD
Lift Lobby	5	6	5	SD
Disposal Room	2	3	4	MD
Main entrance				
Entrance Lobby	5/6	5	4	SD
Entrance Foyer/Waiting	5/6	6	4	SD
Quiet Room	5/6	6	6	LD
Reception/Enquiries	5/6	6	4	LD
Shop	4	5	4	LD
Store	5	5	6	MD
Office	5/6	6	6	LD
Admissions	5/6	6	4	LD
Duty Room	5/6	6	6	HD
Works unit				
Circulation Space	5	5	4	HD
Office	5/6	6	6	LD
Staff Accommodation	5/6	6	6	LD
Staff Changing	5	6	6	LD
Store	3	6	6	MD
WC	2	5	6	LD
Workshop	3	5	6	MD
Younger disabled unit				
Bathroom	4	4	2	LD
Bedroom	5/6	6	5	LD
Circulation Space	5/6	5	4	MD
Clean Utility	3	3	5	MD
Cleaners' Room	2	5	5	MD
Clinical, Examination	3	5	5	LD
Day Space	6	5	5	LD
Dining Room	5/6	5	5	LD
Dirty Utility	2	3	5	MD
Hobbies Room	5	5	6	LD
Office	6	6	6	LD
Pantry	2	4	3	MD
Quiet Room	6	6	6	LD
Shower	4	4	2	LD
Store	5	6	6	MD
Visitors' Room	6	6	6	LD
WC	2	5	5	LD

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