NHS National Services Scotland

Scottish Health Technical Memorandum 69

SHTM Building Component Series

Protection

Health Facilities Scotland

Property and Capital Planning

December 2006

Contents

Disclaimer

The contents of this document are provided by way of general guidance only at the time of its publication. Any party making any use thereof or placing any reliance thereon shall do so only upon exercise of that party's own judgement as to the adequacy of the contents in the particular circumstances of its use and application. No warranty is given as to the accuracy, relevance or completeness of the contents of this document and Health Facilities Scotland shall have no responsibility for any errors in or omissions therefrom, or any use made of, or reliance placed upon, any of the contents of this document.

1. Introduction

Background

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

A Reference Section is provided at the end of this document, including Acts, Regulations and British Standards.

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

- 54 User manual;
- 55 Windows;
- 56 Partitions;
- 57 Internal glazing;
- 58 Internal doorsets;
- 59 Ironmongery;
- 60 Ceilings;
- 62 Demountable storage system;
- 63 Fitted storage system;
- 64 Sanitary assemblies;
- 66 Cubicle curtain track;
- 67 Laboratory fitting out systems;
- 69 Protection.

1.3 This SHTM is intended to be read in conjunction with HBN 40: 'Common activity spaces' and SHTM 56: 'Partitions'; SHTM 57: 'Internal glazing'; SHTM 58: 'Internal doorsets'; SHTM 59: 'Ironmongery'; SHTM 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 SHTM 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 SHTM, and proposals are made which can reduce the incidence and severity of this damage.

1.6 The content of this SHTM 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 SHTM 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 SHTM are listed in the References section.

1.9 This SHTM was prepared for publication in December 2006. 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 Paragraphs 3.37–3.98 on the description of user components provide outline descriptions of components which (together with the mobile support units) are open to manufacturing and supply competition.

1.11 First preference should be given to products and services from sources which have been registered under current 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.

1.12 This guidance should be used in conjunction with sections of the National Building Specification (NBS) relevant to fitted storage. NBS is a library of standard specification clauses covering most kinds of building work and comprising a wide range of clauses with accompanying guidance notes. All clauses are optional, and their combination into a job specification is left to the specifier. NBS has great flexibility, and it can be adapted to suit the technical needs and preferences of different projects, organisations and specifiers. Specifications go out of date as a result of technical innovation or major review of a key BSI document. As NBS sections become affected by such major changes, they are reissued to members of the subscription service. Users are advised to ensure that they refer to the current edition. Refer to the NBS website at www.thenbs.com

1.13 Any enquiries regarding the technical content of this SHTM should be e-mailed to enquiries@hfs.scot.nhs.uk

Damage reduction strategy

1.14 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.

1.15 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

1.16 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.

1.17 The proposed strategy should be agreed by the NHS Board and designers in consultation with the FM provider and in line with the guidance given.

Quality of the environment

1.18 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, there is growing evidence to support this. 'Enhancing the Healing Environment' (Waller and Finn 2004) is a relevant reference.

1.19 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 SHTM, and complement those used for the finishes to walls, ceilings and floors in SHTM 56: 'Partitions', SHTM 60: 'Ceilings' and HTM 61: 'Flooring' (or Scottish equivalent), 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).

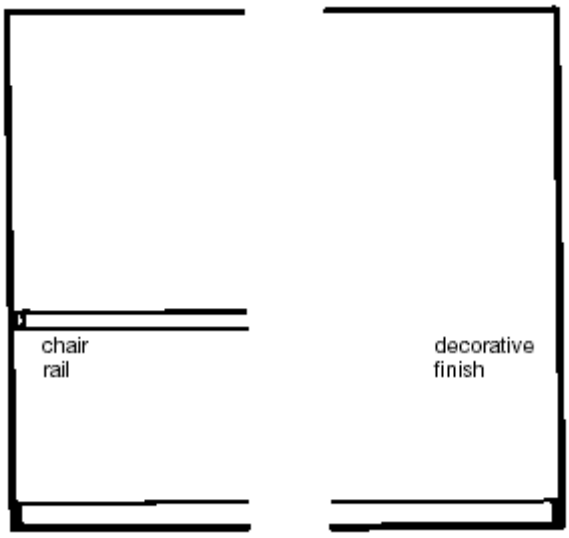

Figure 1 Light duty

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).

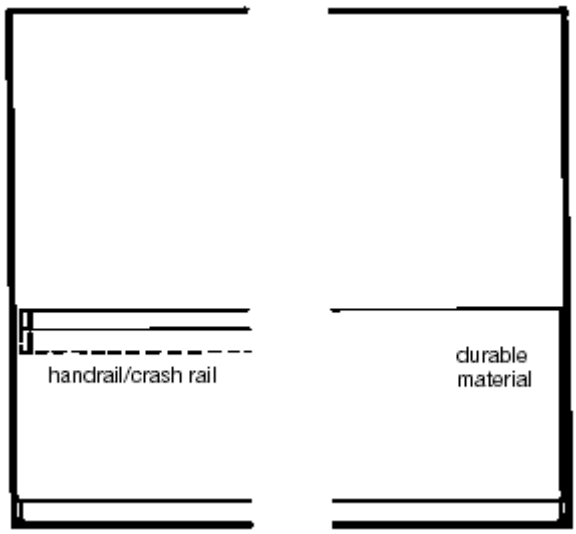

Figure 2 Medium duty

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).

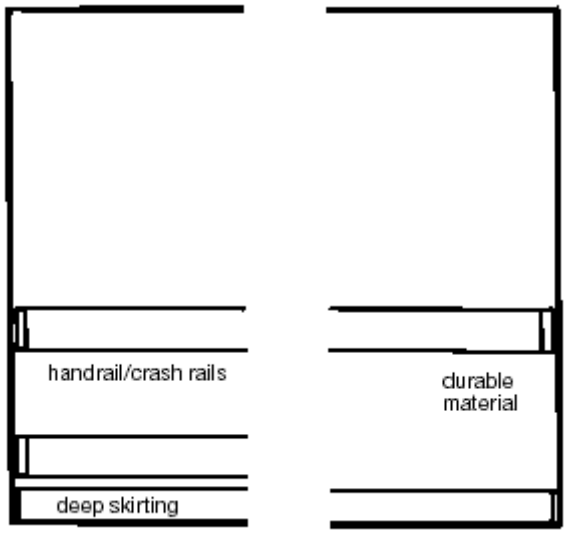

Figure 3 Heavy duty

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).

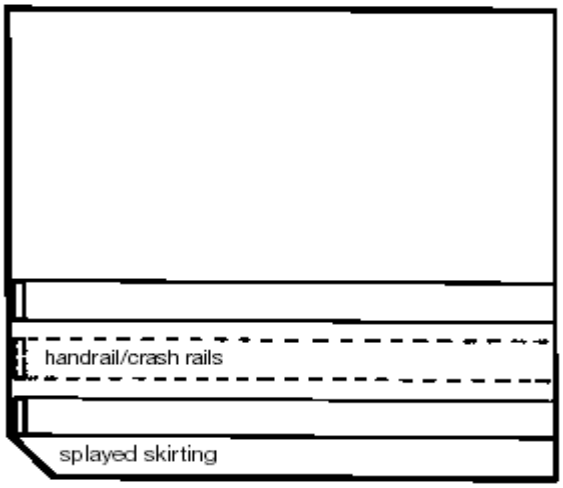

Figure 4 Severe duty and heavy duty, main corridors

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, blockwork 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).

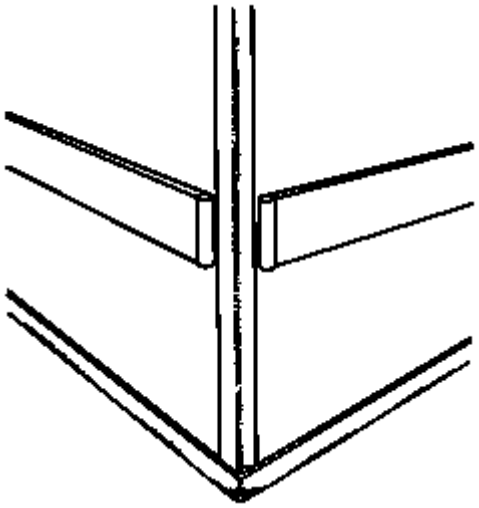

Figure 5 Corner protection

Wall finishes relating to categories of damage risk

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

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	●	●		
1mm plastics sheet with sealed joints		●	●	
2mm plastics sheets with sealed joints			●	●
Hard pre-formed coverings				
2mm plastics rigid sheet			●	●

Table 1 Wall finishes relating to categories of damage risk

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 SHTM 56: 'Partitions', SHTM 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 SHTM.

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. SHTM 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 suppliers 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. Any masonry construction should be in accordance with relevant manufacturers and suppliers specifications, with appropriate input from a structural engineer as required.

4.3 Similarly, hollow plasterboard partitions designed in accordance with SHTM 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 9.5mm gypsum board or high impact resistant 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' (or Scottish equivalent) 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 SHTM 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 300mm (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).

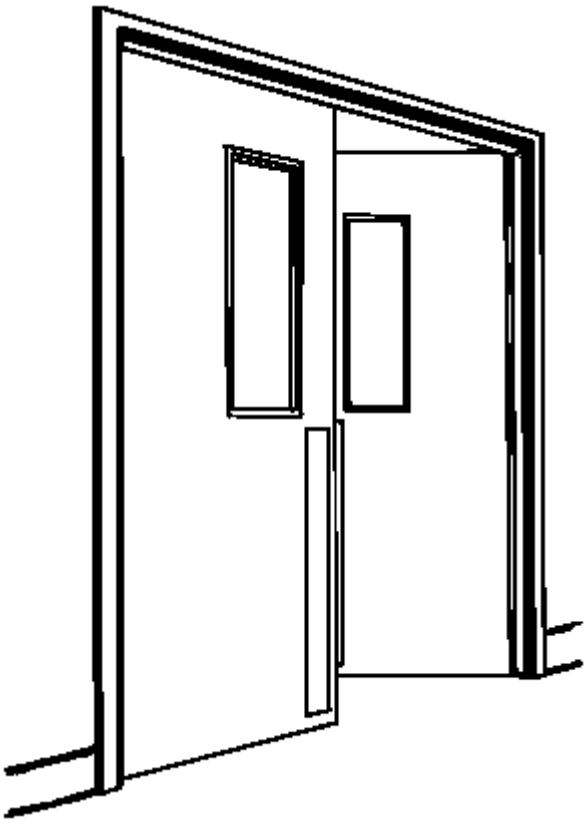

Figure 6: Vertical buffer rails fitted to protect door edges

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; SHTM 58: 'Internal doorsets' gives advice on this.

4.19 Ironmongery should be selected in accordance with the guidance given in SHTM 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).

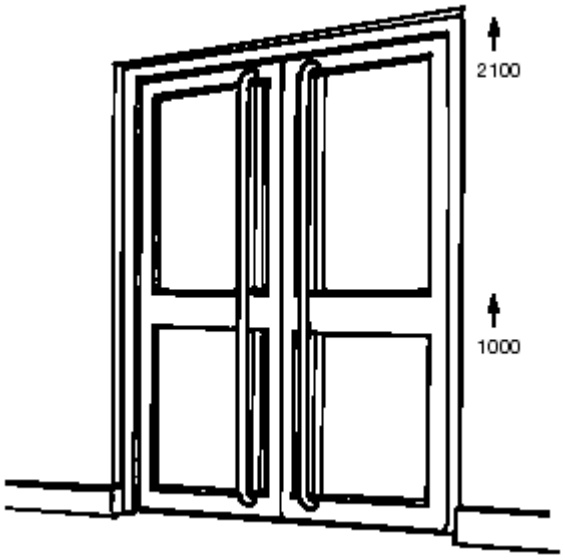

Figure 7: Doors with full-height pulls

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 SHTM 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 in SHTM 57: 'Internal glazing'. In particular, fire-resisting glazing can be vulnerable, as the glass in fire-resisting units is mostly 6mm 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 SHTM 58: 'Internal doorsets', and to provide protective rails to prevent direct impact. SHTM 57: 'Internal glazing' and BS 6262 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 SHTM 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 1600mm 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 1000mm.

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.

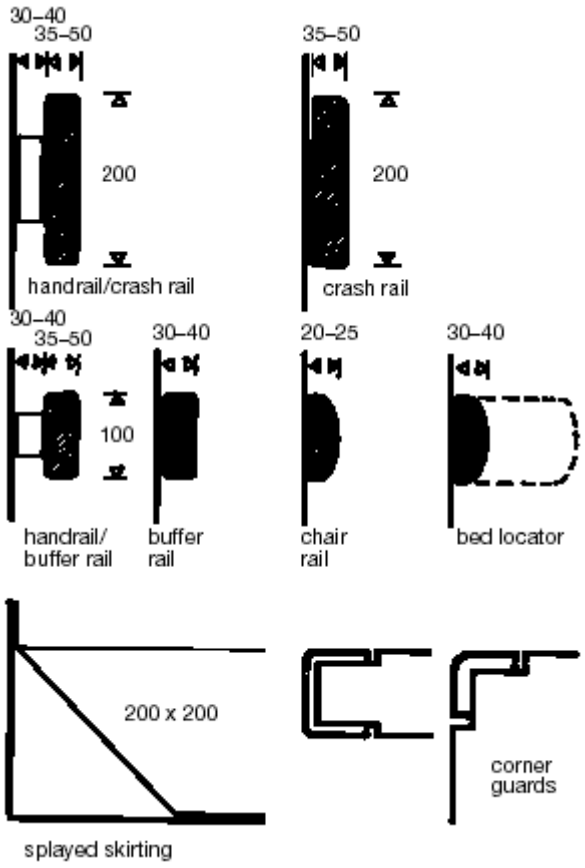

Figure 8: Types of protective device

6.3 Protective devices include the following:

- **Handrails:** mid-height rails, 100mm to 200mm deep, usually mounted about 1000mm 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, 200mm to 250mm deep, usually mounted from 200mm to 1000mm 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, 75mm to 100mm deep, usually mounted from 200mm to 1000mm 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**: 50mm to 100mm in each dimension, usually fixed from the top of the skirting to about 1000 mm, but sometimes up to 2100mm above floor level. They may be of the energy- absorbing type;
- **Large splayed skirtings**: 200mm x 200mm, 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 200mm by 200mm.

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 NHSScotland Firecode suite of documentation).

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

These schedules should be read in conjunction with the requirements of relevant SHPN and associated HBN guidance. Should any discrepancies be identified then please refer to the contact for this documentation for further guidance as required.

A full schedule of activity spaces showing categories of performance relating to damage risk/protection and with wall, ceiling and floor finishes, taken from SHTMs 56, 60 and HTM 61 (or Scottish equivalent) 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 and 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
Staff Base	3	5	4	MD
Store	5	5	6	MD
Treatment	3	5	3	MD
WC	2	5	5	LD (V)

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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	HD
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	HD
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Adult Acute – Day Care and Treatment (continued)				
Treatment	3	5	3	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Adult Acute – Nursing Section				
Bathroom	4	4	2	LD
Circulation Space	5/6	5	4	HD
Cleaners' Room	2	5	5	HD
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	-
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Boiler House				
Boiler House	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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Children – Day-Patient Accommodation (continued)				
WC	4	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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	6	LD
Office Interview	5/6	6	6	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Children - Shared Accommodation (continued)				
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
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Dining Room (continued)				
Servery	2	4	2	MD
Staff Changing Room	5	5	6	LD
Store	5	5	6	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Fracture Clinic				
Appliance Fitting Room	4	4	2	LD
Clean Supplies and Preparation	5/6	5	4	HD
Cleaners' Room	2	5	5	HD
Consulting, Examination Room	3	3	5	LD
Circulation Space	5	6	6	LD
Dirty Utility	5/6	5	5	MD
Disposal Holding	5/6	5	5	MD
Plaster Room	2	3	5	MD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Fracture Clinic (continued)				
Reception, Sub-Waiting Area and Wheelchair Park	2	3	5	MD
Store	5/6	5	4	MD
WC	5/6	5	4	MD

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	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Geriatric Care – Day Hospital (continued)				
Switchroom	5	5	6	LD
Treatment Room	3	5	3	MD
Utility and Laundry	4	4	2	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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
Single-Bed Room	3/6	5	5	MD
Staff Base	3/6	5	4	HD
Store	5	5	6	MD
Switchroom	5	5	6	MD
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
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Intensive Therapy Unit				
Circulation Space	3	5	4	HD
Cleaners' Room	3	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	3	3	MD
Day-to-Day Store	2	3	3	MD
Diet Preparation	4	2	3	HD
Disposables Store	5	4	5	HD
Equipment Store	5	4	6	HD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Kitchen (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Laundry				
Assembling, Packing and Dispatch	5	6	5	HD
Barrier Room				
Colandering				
Calorifier				
Central Disinfection Area				
Classification				
Cleaners' Room				
Drying				
Machine Cloth Store				
Mess Room				
Office				

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Laundry (continued)				
Plantroom				
Pressing				
Reception				
Rest Room				
Solution Preparation, Storage Area				
Store				
Switchroom				
Washing				
Washing Materials Store				
WC				

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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
Maternal 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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Maternal Central Delivery Suite (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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 Room	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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Maternity – Nursing Section (continued)				
Staff Changing	5	6	6	LD
Switchroom	5	5	6	LD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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	5	MD
Cleaners' Room	2	5	4	LD
Darkroom	2	2	5	LD
Display	3	5	4	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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Mental Illness				
Art Room	3	5	6	LD
Beauty, Hairdressing	3	5	6	LD
Behavioural Therapy	3/6	5	6	LD
Circulation Space	2	5	5	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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Mental Illness (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Mortuary and Post-Mortem				
Circulation Space	2/4	5	4	HD
Cleaners' Room	3	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	5	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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Operating (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Out-Patient Audiology				
Reception				
Waiting Area				
Children's Play Space				
Toilet Facilities				
Audiometric Testing Area				
Vestibular Testing Area				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Out-Patient Children (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Out-Patient General (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Pathology				
Blood Bank	3	Special	Special	-
Centrifuge Space	3	3	5	MD
Circulation Space	3/5	5	4	MD
Cleaners' Room	2	5	5	MD
Cloakroom	5	6	6	MD
Disposal Rom	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	MD
Office	5/6	6	6	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Pathology (continued)				
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	1	MD
Changing Room, Robing/Interchange Area	2	1	5	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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Pharmacy (continued)				
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
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	3	5	4	HD
Cleaners' Room	2	5	5	MD
Clean Utility	5	6	6	LD
Darkroom	2	5	5	MD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Radiodiagnostic (continued)				
Dirty Utility	3	5	5	MD
Disposal	3	3	3	HD
Dressing Cubicle	3	5	3	MD
Lavage Room	5/6	5	6	LD
Linen Store	5	6	6	MD
Mobile X-Ray	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
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Radiodiagnostic (continued)				
Ward Service Area	3	5	5	MD
WC	2	5	5	LD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Rehabilitation				
Apparatus Bay	5	5	6	MD
Apparatus Bay - Hydrotherapy	4	4	2	MD
Apparatus Store	5	5	6	MD
Bathroom	4	4	2	MD
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Rehabilitation (continued)				
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Sterilization 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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Sterilization and Disinfecting Unit (continued)				
Materials Holding Store	5	5	6	MD
Medical Equipment Test Area, Service, Work Area	3	5	6	MD
Office	5	6	6	HD
Reception – Clean Supply	3	5	5	LD
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Main Entrance (continued)				
Store	5	5	6	MD
Office	5/6	6	4	LD
Duty Room	5/6	6	6	HD

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
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

Department/Activity Space	Categories			
	Floor	Wall	Ceiling	Protection
Younger Disabled Unit (continued)				
Visitors' Room	6	6	6	LD
WC	2	5	5	LD

References

Acts and regulations

(The) Building (Scotland) Regulations 2004
ISBN 0 9546292 3 x Ref: Scottish Building Standards Agency

Disability Discrimination Act 1995. HMSO, 1995
http://www.opsi.gov.uk/acts/acts1995/1995050.htm

Construction (Design and Management) Regulations 1994, SI 1994 No. 3140: HMSO, 2000.
http://www.opsi.gov.uk/si/si1994/Uksi_19943140_en_1.htm

Construction (Design and Management) (Amendment) Regulations 2000, SI 2000 No. 2380: HMSO, 2000.
http://www.opsi.gov.uk/si/si2000/20002380.htm

Activity DataBase http://adb.dh.gov.uk/

NHSScotland Publications

NHSScotland Firecode edition 3

SHTM 56: 'Partitions'. Health Facilities Scotland, 2006

SHTM 57: 'Internal glazing'. Health Facilities Scotland, 2006

SHTM 58: 'Internal doorsets'. Health Facilities Scotland, 2006

SHTM 59: 'Ironmongery'. Health Facilities Scotland, 2006

SHTM 60: 'Ceilings'. Health Facilities Scotland, 2006

HBN 40: Common activity spaces. Volumes 1–4. HMSO, 1995.

HTM 61: Flooring HMSO, 2006

British standards and codes of practice

BS 4322:1968 Recommendations for buffering on hospital vehicles such as trolleys. British Standards Institution, 1968.

BS 5234-1:1992 Partitions (including matching linings). Code of practice for design and installation. British Standards Institution, 1992.

BS 5234-2:1992 Partitions (including matching linings). Specification for performance requirements for strength and robustness including methods of test. British Standards Institution, 1992.

BS 5628-1:2005 Code of practice for use of masonry. Structural use of unreinforced masonry. British Standards Institution, 1992.

BS 5628-2:2005 Code of practice for use of masonry. Structural use of reinforced and prestressed masonry. British Standards Institution, 2000.

BS 5628-3:2005 Code of practice for use of masonry. Materials and components, design and workmanship. British Standards Institution, 2001.

BS 6262:1982 Code of practice for glazing for buildings. British Standards Institution, 1982.

BS 6262-7:2005 Glazing for buildings. Code of practice for the provision of information.

BS 6262-1:2005 Glazing for buildings. General methodology for the selection of glazing.

BS 6262-4:2005 Glazing for buildings. Code of practice for safety related to human impact.

BS 6262:1982 Code of practice for glazing for buildings.

BS 6262-6:2005 Glazing for buildings. Code of practice for special applications.

BS 6262-3:2005 Glazing for buildings. Code of practice for fire, security and wind loading.

BS 6262-2:2005 Glazing for buildings. Code of practice forenergy, light and sound.

BS 6262-4:1994 Glazing for buildings. Safety related to human impact.

BS 8212:1995 Code of practice for dry lining and partitioning using gypsum plasterboard. British Standards Institution, 1995.

BS EN 1154:1997 Building hardware. Controlled door closing devices. Requirements and test methods. British Standards Institution, 1997.

BS EN 1935:2002 Building hardware. Single-axis hinges. Requirements and test methods. British Standards Institution, 2002.

Other publications

Waller, S and Finn, H (2004), Enhancing the healing environment. A guide for NHS trusts. King's Fund, London.