# Healthcare Premises Cost Guides (HPCGs)

Second edition

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# Healthcare Premises Cost Guides (HPCGs)

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# Glossary of terms

**Circulation space:** Corridors, stairs, internal walls, partitions and integrated panelling systems within the confines of a department.

**Communication space:** Main hospital streets, corridors between departments, lifts and main/shared stairs.

**Elemental cost models:** Detailed cost plans drawn up for the example schedules of accommodation and on which the HPCGs are based. Format of the cost plans reflects that used by the BCIS.

**Example schedules of accommodation:** Schedules of accommodation published by the Department of Health to accompany the Health Building Note series.

**Engineering space:** Space to house mechanical and electrical services including plant rooms, IT hub rooms, switch rooms, service risers and lift machine rooms.

**Gross internal area (GIA):** Departmental floor area including allowances for circulation space, communication space and engineering space.

**Healthcare Premises Cost Guides (HPCGs):** Cost per square metre to cover building and engineering services costs of healthcare premises.

**HPCG rate:** Four rates of HPCGs have been identified: low, medium, high and super. These have been applied to the example schedules of accommodation that have not been costed in detail.

**Net internal area (NIA):** Departmental floor area excluding allowances for circulation space, communication space and engineering space.

# Acronyms

ADB = Activity DataBase

BCIS = Building Cost Information Service

BIS = Department for Business Innovation and Skills

BREEAM = BRE environmental assessment method

CHP = combined heat and power

CT = computed tomography

DH = Department of Health

GIA = gross internal area

HV/LV = high voltage/low voltage

ICT = information and communications technology

IPS = isolated power supply

MIPS = median index of public sector

MRI = magnetic resonance imaging

NIA = net internal area

OBC = outline business case

SOC = strategic outline case

UPS = uninterruptible power supply

# Changes since the previous edition of this guidance

The following changes have been made to the HPCG guidance since it was first issued in July 2010:

- The guidance no longer provides details of the circulation, communication and engineering space allowances for primary and community care buildings but refers to Health Building Note 11-01 instead.
- The worked example in Appendix 4 has been replaced with a new worked example.
- The elemental cost models have been inserted at Appendix 6.

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# 1 Introduction

## Overview

1.1 The Healthcare Premises Cost Guides (HPCGs) are to be used to carry out cost estimates of healthcare buildings at SOC and OBC stages.

1.2 As schemes develop beyond OBC stage the HPCGs should be replaced by more detailed cost estimates.

1.3 The HPCGs provide a cost per square metre for building and engineering services costs for different hospital departments. They are based on Health Building Notes and associated example schedules of accommodation published by the Department of Health (DH).

1.4 The HPCGs have been calculated by costing a cross-section of the example schedules of accommodation in detail. From this information, four HPCG rates have been produced (low, medium, high and super) and have been allocated to the remaining example schedules of accommodation. See Appendix 1 for a full list of the HPCGs.

1.5 For each example schedule of accommodation that has been costed in detail, an elemental cost model has been produced. See Chapter 4 for details.

1.6 Cost estimates should be based on the most up to date and detailed information available. Should it become apparent from project specific drawings or specifications that the areas or percentage allowances on which the HPCGs are based are not reflective of a particular project then reasonable adjustments should be made to the HPCGs or the underlying elemental cost models.

1.7 The HPCGS are based on departments located in a new build 2-storey building and constructed as part of a general acute (multi-purpose) hospital with no abnormal works or planning conditions.

1.8 Please note that there are some exceptions to this assumption. For instance, the HPCGs for the example schedules of accommodation associated with Health Building Note 11-01 – 'Facilities for primary and community care services' are based on standalone buildings. It is therefore advisable that all Health Building Notes are consulted to understand the cost basis before any changes are made to the HPCGs or elemental cost models.

1.9 The HPCGs will need to be amended for refurbishments.

1.10 The HPCGs replace the Departmental Cost Allowance Guides (DCAGs) with effect from April 2010.

## Scope of this document

1.11 The purpose of this document is to explain:

- how the HPCGs have been calculated;
- how they can be used for costing healthcare buildings at SOC and OBC stages;
- how costing information should be inserted into the appropriate SOC and OBC cost forms.

## Benefits of the HPCGs

1.12 The HPCGs meet the following criteria:

- they have been validated using real schemes;
- the elemental cost models from which the HPCGs have been derived are presented in accordance with the Building Cost Information Services (BCIS) elemental cost plans (see Chapter 4 for details);
- they are easy to use and understand;
- they enable a robust initial cost budget to be established at SOC stage;
- they enable more detailed cost estimates to be established at OBC stage;
- they reduce the reliance of adding a large percentage allowance for on-costs.

1.13 The cost rates reflect:

- modern forms of construction;

- BREEAM and other energy, environment and sustainability issues (see Chapter 4 for further details);
- the guidance in current Health Technical Memoranda;
- control of infection and decontamination risks;
- clinical risks around service resilience requirements;
- current technology and statutory requirements.

## Exclusions from the HPCGs

**1.14** The HPCGs do not cover the following costs:

- supply of group 2 equipment;
- group 3 and 4 equipment;
- commercial operational costs for example bespoke shop fittings;
- site-specific costs, for example asbestos removal and demolition;
- external works;
- non-works costs, for example land purchase costs, statutory and local authority charges, building regulations and planning fees, decanting costs, commissioning and decommissioning;
- professional fees;
- VAT.

**1.15** Site-specific costs will be largely determined by site location/characteristics (such as an inner-city location or poor ground conditions) and by the condition/type of any building to be refurbished.

**1.16** Individual elements within the elemental cost models can be adjusted to suit refurbishment projects and site-specific costs added accordingly.

**1.17** Project teams should assess all likely site, building and engineering specific costs (including external works) at the earliest opportunity and ensure that appropriate allowances are included for these.

## Applying the HPCGs

**1.18** The HPCGs can be used to:

- cost a department(s) based on its overall gross internal area (GIA);
- cost a department(s) based on each room within that department, categorised according to whether they are public, clinical or staff spaces;
- cost a whole hospital on a multi-department basis.

**1.19** Three worked examples have been provided to illustrate these applications:

- Appendix 2: Costing a multi-department unit based on departmental GIAs;
- Appendix 3: Costing a multi-department unit on a room by room basis;
- Appendix 4: Costing a whole hospital on a multi-department basis.

# 2 Changes to DH example schedules of accommodation

## Overview

2.1 The example schedules of accommodation published by DH from 2010 onwards differ from previous schedules of accommodation in a couple of ways:

2.2 The old allowances (3% engineering zone, 5% planning allowance plus variable circulation space allowance) have been replaced with separate allowances for engineering space, communication space and circulation space.

2.3 The new example schedules differentiate between public, clinical and staff spaces.

## Differentiating between public, clinical and staff spaces

2.4 Each space within the new example schedules of accommodation is categorised according to its location (or zone) in the department. The three space types correspond to three zones, which are defined as follows:

- Public zone: The zone within the department that contains the reception and waiting area and is accessible to the public.
- Clinical zone: The zone from which the delivery of the departmental function occurs. Most patient/client contact spaces will be located here as will any clinical and staff support spaces required in the immediate vicinity.
- Staff zone: This zone contains staff support spaces that do not need to be in the immediate vicinity of the patient/public spaces.

## Engineering space, circulation space and communication space allowances

2.5 The new example schedules of accommodation include allowances for engineering space, circulation space and communication space.

2.6 Each allowance is expressed as a percentage of the net internal area (NIA) and when added to the NIA produces the GIA.

2.7 The allowances are based on the following definitions:

- Engineering space: This includes all mechanical and electrical spaces such as plant rooms, ICT hub rooms, switch rooms, service risers, lift machine rooms etc. For further details see Chapter 3.
- Circulation space: This includes all corridors, stairs, internal walls, partitions and integrated panelling systems within the confines of a department.
- Communication space: This includes main hospital streets, corridors between departments, lifts and main/shared stairs. A figure of 10% has been used in the example schedules of accommodation. However, this should be adjusted to suit project layouts as more detailed information becomes available.

2.8 Appendix 5 provides a list of the allowances for engineering space, circulation space and communication space that should be applied to example schedules of accommodation presented in the old format.

# 3 Engineering space allowance

## Overview

3.1 This chapter describes the method used to estimate the engineering space allowances in the new example schedules of accommodation. It also explains how to adjust these allowances for real project schedules of accommodation.

3.2 The engineering space allowances cover the space required to house mechanical and electrical engineering equipment for individual clinical departments. They are expressed as a percentage of the NIA of the department.

3.3 The allowances should be sufficient to enable current DH engineering guidance and best practice standards to be met. They take into account present technology and the most likely functional and physical location for the department in question.

3.4 It has generally been assumed that each department (example schedule of accommodation) is located in a general acute (multi-purpose) hospital with an NIA of approximately 15,000 $m^2$ and a range of departments.

3.5 For information on the engineering space allowances for primary and community care buildings, see Health Building Note 11-01.

3.6 The engineering space allowances are meant to be used as a guide before plan drawings are available.

## Engineering space allowances for different engineering services

3.7 Table 3.1 shows the engineering space allowances for different engineering services. This data was

**Table 3.1 Engineering space allowances for different engineering services**

| Engineering service | Engineering space allowance (% of NIA) | | | Space includes |
|---|---|---|---|---|
| Heat source | 1.5% | – | 2.9% | Boilers, pumps, heat exchangers, utility service equipment |
| CHP plant | 0.6% | – | 1.7% | Electrical generator, waste heat boiler, control equipment |
| Domestic hot water plant | 0.8% | – | 5.5% | Heat exchanger, pumps, storage |
| Cold water storage | 1.2% | – | 2.4% | Storage tank, booster set |
| Ventilation plant | 4.4% | – | 23.8% | Mechanical supply and extract air handling equipment, pipework and ductwork connections |
| Air cooling plant | 0.2% | – | 1.0% | Air-cooled chiller units, condensing units, not cooling tower |
| Piped medical gases | 0.0% | – | 0.6% | Gas manifolds, vacuum-insulated evaporator (VIE) units, medical air and vacuum compressors |
| Electrical switchrooms | 1.0% | – | 1.5% | Utility supply equipment, metering, main HV/LV switchgear |
| Secondary power source plant | 1.2% | – | 5.5% | Emergency generators, UPS, IPS units |
| Fuel storage | 0.1% | – | 0.3% | Emergency generator fuel storage and boiler fuel-oil standby |
| Local electrical switch cupboards | 0.3% | – | 0.5% | Local distribution boards, nurse call/miscellaneous power supplies, communication junction boxes |
| Communication/ICT equipment | 0.5% | – | 0.9% | ICT hub room, telephone main distribution frame room |
| Lift motor rooms | 0.0% | – | 0.7% | Electric or hydraulic lifts |
| Service risers | 0.2% | – | 0.9% | Vertical route for ventilation ductwork, pipework and cable risers |
| **Total** | **12%** | | **48%** | |

collated as part of the process of producing the engineering space allowances for the new example schedules of accommodation.

## Inclusions and exclusions to the engineering space allowances

**3.8** The engineering space allowances in the new example schedules of accommodation include space to access equipment within plant rooms for maintenance purposes.

**3.9** Space within walls and ceiling voids used to distribute engineering services throughout the department are excluded (except for service risers) as this is covered by the circulation space allowance.

**3.10** No allowance has been made for additional space for the future expansion of engineering services.

**3.11** In the case of the example schedules of accommodation for individual clinical departments, the overall engineering space allowances include space for dedicated engineering equipment that provides services exclusively for the department in question. They also include space requirements for central plant, apportioned to reflect the engineering demand or NIA, as appropriate, of the department in question.

**3.12** The following engineering services and equipment have been included and assumed to be provided centrally to serve the department in question and other departments:

- heat source (for example boiler plant);
- CHP facilities;
- mains HV/LV electrical distribution;
- emergency standby generators together with associated fuel storage;
- piped medical gas distribution (for example gas manifolds, VIE units, medical air and vacuum compressors);
- cold water storage;
- domestic hot water services;
- lift machine rooms.

**3.13** The following engineering services and equipment have been included and assumed to be dedicated to the department in question:

- ventilation;
- air cooling;
- department ICT hub/communication distribution equipment;
- UPS and IPS secondary power sources;
- local electrical switch cupboards;
- service risers.

## Adjusting the published engineering space allowances

**3.14** The engineering space requirements of healthcare departments are affected by the following factors:

- the degree of technical complexity of engineering service requirements;
- the proportion of clinical, public and staff spaces;
- the ability to provide engineering services from central plant;
- the potential for engineering service equipment to share plant rooms.
- the NIA of the department;
- the NIA of the building complex in which the department sits and its relationship to other departments;
- the number of floors of the department/ building complex.

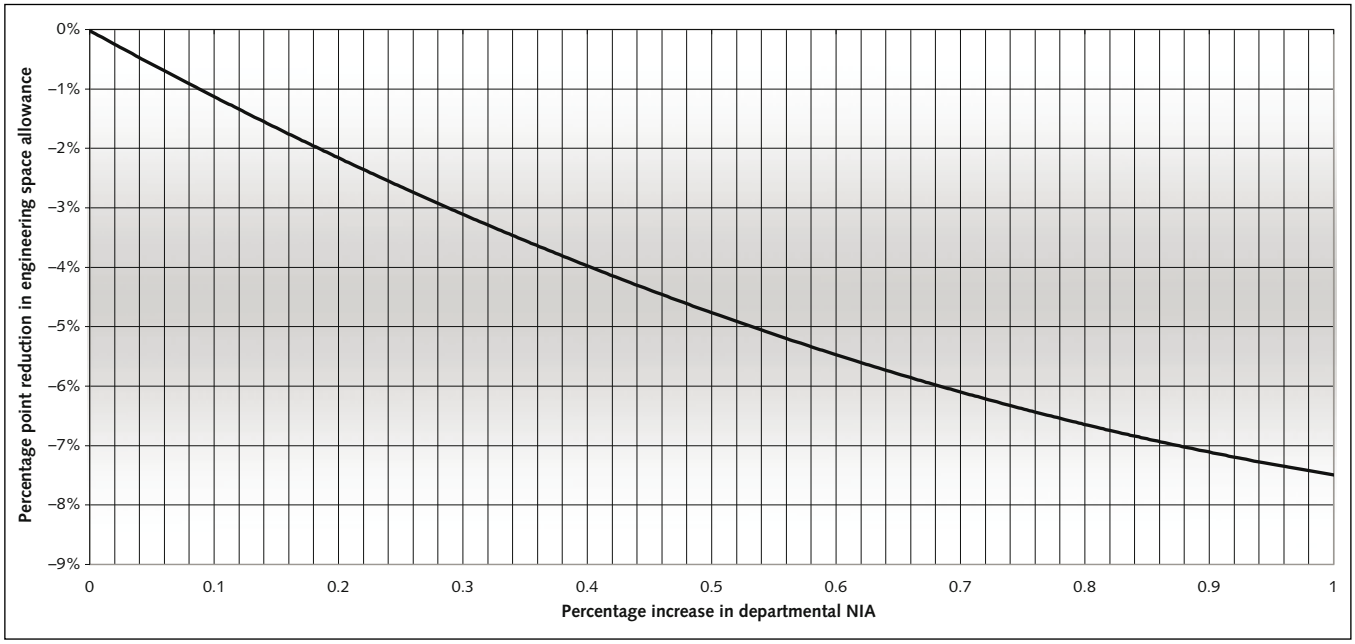
**3.15** As scheme specific information becomes available during the procurement process, the published engineering space allowances should be continually reviewed and adjusted to correlate more closely with actual project needs.

**3.16** It is important that each factor leading to an adjustment of the engineering space allowance is considered separately for some may necessitate an increase in engineering space requirements, others a decrease.

**3.17** Table 3.1 may be used to assess the amount by which the published engineering space allowance figure might require adjustment.

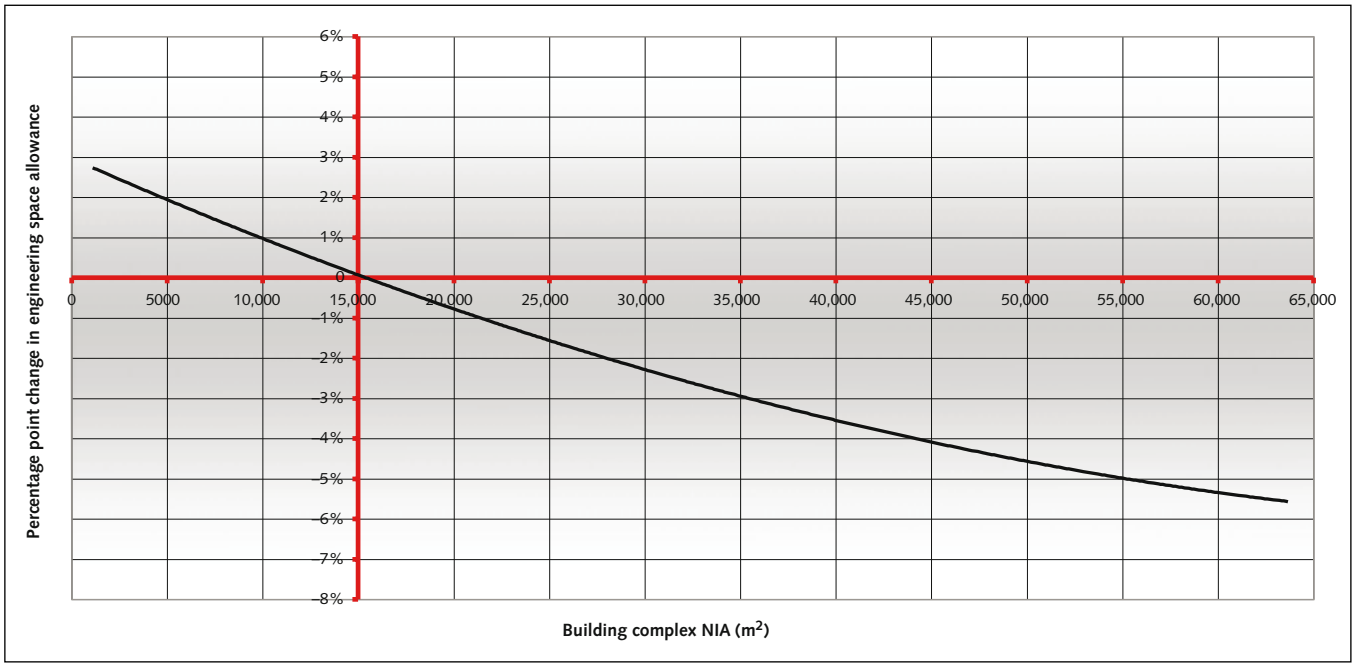
**3.18** Figure 3.1 may be used to provide a reasonable adjustment of the engineering space allowances to allow for variations in individual departmental NIA; for example, if a real scheme departmental NIA is 40% higher than the published example schedule of accommodation value, then from the chart the overall engineering space allowance should be able to be reduced by 4 percentage points.

**Figure 3.1 Adjusting overall engineering space allowance to reflect increases in departmental NIA**




3.19 Figure 3.2 may be used to provide a reasonable adjustment of the engineering space allowances to allow for variations in the NIA of the overall building complex for example if a real scheme building NIA is 35,000 $m^2$ (that is, 20,000 $m^2$ larger than the total building value of 15,000 $m^2$ used to calculate the published engineering space allowances), then from the chart the overall engineering space allowance for the building complex should be able to be reduced by 3 percentage points.

**Figure 3.2 Adjusting overall engineering space allowance to reflect variations in building complex NIA (against base of 15,000 $m^2$)**



## Methodology used to calculate the engineering space allowances

**3.20** This section describes the method used to ascertain the engineering space allowances shown in the new example schedules of accommodation.

**3.21** The contribution for services provided by central plant were calculated by first determining the area required for the central plant, inclusive of associated equipment (for example pumps, tanks, distribution pipework/cable connections) and then apportioning this according to the engineering capacity demands or NIA of the department, whichever was appropriate.

**3.22** Using representative energy consumption data and industry norms the space requirements for central plant were derived by summating the estimated loads and service demands of each department to establish the total capacity and equipment numbers necessary to meet Health Technical Memorandum requirements for the base building complex used (that is, 15,000 $m^2$ NIA). The relevant areas were then established from real schemes and manufacturers' product information.

**3.23** The space allowance for dedicated engineering equipment serving the entire department was calculated in same way as for central plant but was apportioned only between public, clinical and staff spaces within the department.

**3.24** Capacity and space requirements for services governed by departmental travel distances and NIAs (for example service risers, switch cupboards, ICT hub rooms, lifts) were determined by applying general rules of thumb and typical ratios obtained from real schemes.

**3.25** In the case of central plant (for example lift machine rooms), the resultant engineering space was apportioned in relation to the department NIA. For dedicated plant serving the entire department (for example switchcupboards), the relevant engineering space was apportioned only between public, clinical and staff spaces .

**3.26** It has been assumed that lifts have an associated machine room for which a space allowance was made based on British Standards. Where machine-room-less lifts are installed, the engineering space allowance will require adjustment.

# 4 Understanding the HPCGs

## Overview

4.1 This chapter outlines the method used to cost the example schedules of accommodation from which the HPCGs have been derived.

4.2 For each example schedule of accommodation that has been costed in detail, four elemental cost models have been produced (showing overall costs as well as the breakdown of costs for public, clinical and staff space). The elemental cost models are provided in Appendix 6.

4.3 The format of the elemental cost model reflects the industry standard produced by the Building Cost Information Service (BCIS) of the Royal Institution of Chartered Surveyors (RICS).

4.4 Average cost data from completed schemes was used to complete the elemental cost models. The building and engineering elements were both priced using a MIPS index level of 480. See Appendix 7 (BCIS specification) for details.

4.5 Each elemental cost model provides a cost per square metre for each building element.

4.6 Each overall elemental cost model provides the overall cost per square metre for the department.

4.7 The example schedules of accommodation provide the departmental NIA. Allowances were added for engineering space, circulation space and communication space, to arrive at the GIA. See Appendix 5 for details of the allowances.

## Quantifying building elements for the example schedules

4.8 The quantity factors (QFs) in Table 4.1 were used to quantify six of the building elements. The QFs were multiplied by the GIA of the example schedules of accommodation to produce the elemental quantity areas.

4.9 The QFs are based on earlier studies of the area relationships between GIA and these elements in hospital buildings.

## Costing the example schedules of accommodation

4.10 The following steps explain how costs were built up for each element of the example schedules of accommodation costed using the new methodology. See Chapter 5 for further information on engineering services costs.

1. **Substructure:** A cost per square metre was applied to the elemental quantity area to allow for standard strip foundations (no more than 1.5 m deep to top of footing) and 750 mm wide by 350 mm thick concrete. The cost rate allows for ground floor slab and construction up to damp-proof membrane (DPM) level.

2A. **Frame:** A cost per square metre was applied to the elemental quantity area to allow for frame and structural works.

2B. **Upper floors:** A cost per square metre was applied to the elemental quantity area to allow for structural floors and openings.

2C. **Roof:** A cost per square metre was applied to the elemental quantity area to allow for roof structure, coverings, rainwater goods and mansafe system. The cost rate allows for 10% glazing/roof lights.

2D. **Stairs:** An allowance of one staircase per department was included. For multi-department schedules of accommodation, the cost allowance provided a contribution towards main staircases and fire escape stairs.

2E. **External walls:** A cost per square metre was applied to the elemental quantity area to allow for 70% solid and 30% glazed external walls.

2F. **Windows and external doors:** A cost per square metre was applied to the elemental quantity area to allow for opening lights, main entrance doors, fire escape doors and external plant room doors.

2G. **Internal walls and partitions:** The area of internal walls was calculated using the linear dimensions of each room contained within the example schedule. The area of corridor walls was

**Table 4.1 Quantity factors for building elements**

| Element | Quantity factor of GIA | Notes |
|---|---|---|
| Substructure | 49% | Based on a 2-storey construction |
| Frame | 100% | |
| Upper floors | 48% | Based on a 2-storey construction |
| Roof | 60% | Allows for a 5-degree roof pitch |
| External walls | 52% | Based on a 2-storey construction |
| Windows and external doors | 10% | Based on a 2-storey construction and all external doors being at ground floor level |

calculated based on 1.8 m wide corridors and 3.0 m wide hospital streets. Structural internal walls were calculated around core areas. The cost rate applied varied according to the location and type of wall.

**2H. Internal doors:** The number of internal doors was calculated using the Activity DataBase (ADB) sheets for each room listed in the example schedules of accommodation. The cost rate applied was based on the type of door construction noted on the ADB sheets.

**3A. Wall finishes:** The internal wall area plus the internal face of solid external walls were calculated. Wall finishes were costed using a variety of costs depending on the specification deemed necessary. The cost rates allow for wall protection to corridors.

**3B. Floor finishes:** The floor area of the rooms listed in the example schedules of accommodation were calculated with additions for circulation space and communication space. Floor finishes were costed using a variety of costs depending on the specification deemed necessary.

**3C. Ceiling finishes:** The ceiling areas of the rooms listed in the schedules of accommodation were calculated with additions for circulation space and communication space. Ceiling finishes were costed using a variety of costs depending on the specification deemed necessary.

**4. Fittings and furnishings:** Costed using the ADB sheets for each room listed in the example schedules of accommodation. No contingencies, costs for lifting heavy equipment into place or equipment specialist fees were added.

**5A. Sanitary appliances:** Costed using the ADB sheets for each room listed in the example schedules. No contingencies were added.

**5C. Disposal installations:** Costed by applying a cost per square metre to the GIA of the example schedule.

**5N. Builders' work in connection (BWIC):** Costed at 5% of the costs for mechanical and electrical services, sanitary appliances and disposal installations.

**5O. Profit and attendance:** Costed at 7% of the costs for sanitary appliances, disposal installations and BWIC. (Costs for mechanical and electrical services allow for profit and attendance on services.)

**5B. Services equipment:** Costed using equipment manufacturers' cost data and applying a cost per square metre to the GIA of the example schedule of accommodation.

**5D. Water installations:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation with specific costs added for specialist dedicated equipment, such as reverse osmosis water treatment for dialysis equipment, as appropriate.

**5E. Heat source (inc. in 5F):** Costed using the cost of the centralised boiler and control installation apportioned in accordance with the estimated specific heat load demands of the example schedule of accommodation.

**5F. Space heating/air treatment:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation to allow for general distribution systems with specific costs added for specialist dedicated equipment, such as local air-cooler units or under-floor heating, as appropriate.

**5G. Ventilation system:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation to allow for general ventilation distribution systems with specific costs added for

specialist dedicated equipment, such as ultra-clean theatre ventilation plant, CT suites, as appropriate. (Any abnormal ventilation requirements due to site-specific issues will need to be included as a site-specific cost.)

**5H. Electrical installations:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation to allow for general electrical power and lighting distribution systems with specific costs added for centralised items such as utility services, main switchboards, generators and CHP equipment apportioned in accordance with the estimated total electrical load of the example schedule of accommodation. Costs were added for specialist dedicated equipment such as theatre operating lights, UPS units, IPS units and docking stations, as appropriate.

**5I. Gas installations:** Costed using the total cost of the fuel oil and gas installation for centralised equipment apportioned in accordance with the estimated specific heat load demands of the example schedule of accommodation.

**5J. Lifts and conveyors:** Costed using total cost for lifts and conveyors apportioned in accordance with the GIA of the example schedule of accommodation.

**5K. Protective installations:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation with specific costs added for specialist equipment, such as local smoke extract systems, as appropriate.

**5L. Communications installations:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation for distribution systems with specific costs added for specialist equipment, such as bedhead services equipment, as appropriate. The costs allow for data cabling to bedhead services but exclude any patient entertainment systems.

**5M. Special installations:** Costed by applying a cost per square metre to the GIA of the example schedule of accommodation to allow for common distribution systems with specific costs for specialist dedicated equipment/systems, as appropriate. The following were included as special installations: pre-installation work for imaging equipment, piped medical gas manifolds, pneumatic tube systems and building management systems.

**6A. Site works:** Not costed. (Costs relating to external works vary significantly from project to project due to site size, site topography and the availability of utility services. Project teams therefore need to adjust the external works cost allowances to suit.)

**6B. Drainage:** Not costed.

**6C. External services:** Not costed.

**7. Preliminaries:** Costed at 15% of building and engineering costs.

**8A. Design risk:** Costed at 5% of building and engineering costs.

**8B. Employers variation risk:** Not costed.

**8C. BREEAM allowance:** Included to achieve a BREEAM rating of excellent. This allows for implementing requirements arising from the Simplified Building Energy Model (SBEM) calculations necessary to satisfy the Energy Performance of Buildings Directive (EPBD) and Building Regulations. Allowance does not include for sustainable power and energy generation due to the varying methods and costs incurred for site-specific costs. Allowance included at 3% of building and engineering costs.

Costs for specialist services such as carrying out SBEM calculations, thermal modelling and surveys are not included in the building and engineering costs. Costs for these should be included in the professional fees section.

# 5 Engineering service costs

## Overview

5.1 The HPCGs include an allowance for engineering service costs to allow for the supply, installation, testing and commissioning of relevant engineering services. See Appendix 7 for full details.

5.2 Base engineering costs have been established using values derived from existing schemes and industry reference guides. These have been adjusted, in accordance with the criteria described below, to reflect the specific engineering requirements of the accommodation listed in the published example schedules of accommodation.

5.3 The following general rules have been applied to the establishment of engineering services costs:

1. For centralised engineering services delivered fairly uniformly across the building, such as water, heating and electrical distribution systems, an average cost/m2 relevant to each engineering system has been applied based on the size of the department. This cost covers primary engineering equipment and associated distribution systems.
2. Specific cost allowances have then been allocated to the relevant public, clinical or staff spaces to cover the cost of supplying and installing dedicated engineering equipment or services to particular rooms or areas (for example uninterruptible power supply (UPS) units and isolated power supply (IPS) units for operating theatres, ultra-clean theatre ventilation equipment, pre-installation requirements for imaging equipment etc).

## Adjustment to engineering service costs relating to central equipment

5.4 In circumstances where items of centralised engineering plant is not required or existing equipment is available of sufficient capacity to serve the new department, it will be necessary for users to make suitable adjustments to the relevant engineering service costs.

5.5 This may be achieved by omitting or reducing the relevant service cost from the elemental cost model taking into consideration project specific requirements and any costs to provide modifications to local sub-distribution equipment.

## Engineering service cost assumptions

5.6 The engineering service costs were calculated based on the following general assumptions:

- Engineering services meet relevant statutory requirements, guidance in Health Building Notes and Health Technical Memoranda, and best practice industry standards.
- Engineering services are contained within ceiling voids, equipment rooms, wall cavities, floors, trunking or boxed-in assemblies or buried below ground level.
- Central boiler plant is a minimum of two high efficiency units rated at 100% of demand capacity and gas fired with duel fuel oil standby facilities in accordance with Health Technical Memoranda.
- Best practice energy conservation techniques and equipment is installed, inclusive of gas fuelled CHP equipment complete with waste heat boiler.
- Emergency standby generators meet N+1 resilience requirements and are of the diesel fuelled turbo-charged type. Synchronising control units are fitted.
- Primary electrical supplies are taken at HV or LV according to estimated maximum demands and distributed in accordance with the most appropriate Health Technical Memorandum 06-01 distribution strategy. Suitable surge suppression, metering and power factor correction equipment are provided.
- Engineering services terminal outlets are surface fixed in equipment rooms and electrical switch cupboards but generally flush fixed elsewhere,

including outlets fitted within surface mounted specialised trunking (for example bedhead services).

- Engineering services are distributed using galvanised steel conduit, cable ladder racks and cable trays, trunking, pipework and ventilation ducting to enhance durability, strength, electromagnetic compatibility (EMC) and fire resistance.
- Electrical cables and wiring are of the zero halogen and low smoke (OHLS) type with suitable fire rated cables for fire alarm systems.
- ICT and voice over internet protocol (VOIP) telephone networks use structured wiring systems based on shielded twisted pair/ unshielded twisted pair (Stp/Utp), coaxial and/or fibre optic cable.
- Engineering services required for the pre-installation of specialised equipment such as imaging, ICT and dental services are installed in accordance with the specialist equipment manufacturer's requirements.
- Primary utility and sub mains distribution services are metered in support of sustainability and Display Energy Certificate (DEC) requirements.
- Electricity, water and gas services to commercial tenanted areas are sub-metered.
- External connections to water and electricity are provided where docking stations are required.
- Operating theatres are served from individual dedicated ventilation and air conditioning equipment. Additional ventilation systems for ultra-clean theatres are included where specified in the example schedules of accommodation.
- Engineering services associated with multifunctional rooms have the capacity to cope with the maximum engineering demand requirements of each room.
- Engineering services are designed and installed to comply with control of infection requirements for example air filtration requirements.

## Mechanical services (including services serving group 1 and 2 equipment)

**5.7** The following mechanical services are included, where relevant, in the engineering services costs:

- heating systems;
- mechanical ventilation systems;
- chilled water and cooling systems;
- building management control systems;
- hot and cold water supply, storage, distribution and treatment systems;
- fuel storage and distribution systems (for example oil, gas);
- piped medical gas equipment and distribution systems, including pendants, bed head trunking, compressors and vacuum equipment;
- pneumatic air tube transport systems.

## Electrical services (including services serving group 1 and 2 equipment)

**5.8** The following electrical services are included, where relevant, in the engineering services costs:

- mains electricity supply and distribution systems, including secondary power sources such as generators and/or UPS systems where required for resilience purposes;
- departmental distribution board and final wiring systems;
- IPS systems;
- general and emergency lighting systems;
- external lighting control systems;
- call and attack alarm systems;
- small power installation systems;
- fire detection and alarm systems;
- security alarm and monitoring systems, including CCTV and controlled drug cupboard alarms;
- piped medical gas alarm systems;
- TV/radio aerial and distribution systems;
- structured cable distribution systems for telephones and data, inclusive of containment system, wiring and termination;
- door access control, intercom and visual systems;
- fixed induction loop systems;
- building management electrical systems;
- electrical services to lifts;

- lightning protection systems.

## Equipment

**5.9** The following equipment is included, where relevant, in the engineering services costs:

- group 1 primary engineering equipment and equipment such as generators, switchboards, ventilation equipment etc;
- group 1 equipment associated with general engineering services, based upon scheduled ADB requirements, including operating theatre and medical examination lights;
- engineering service accessories for example electrical socket outlets, light switches, data outlets, heat emitters etc.

## Exclusions

**5.10** The following items are specifically excluded from engineering services costs:

- building works associated with engineering services (these are included under building costs);
- specialist group 1 equipment that has been designated to be included within the building costs (for example microscopes, controlled drugs cabinets, sanitary fittings);
- group 2 equipment (except for installation);
- groups 3 and 4 equipment;
- mobile clinical and emergency units;
- telecommunications and ICT equipment including telephone exchangers, telephones, routers, patch panels, PCs and ICT hub units;
- fire fighting equipment other than sprinkler systems and dry risers;
- dental chairs and associated examination lights (except pre-installation work);
- imaging equipment including radio-diagnostic, MRI, CT and ultrasound equipment (except pre-installation work);
- north lights and natural ventilation grilles (these are included under building costs);
- fixed and portable medical devices;
- picture archiving and communications system (PACS) equipment.

**5.11** Other exclusions may apply dependent upon each project.

## Emergency preparedness and resilience

**5.12** For the purpose of calculating engineering services costs it is assumed that clinical risks due to activity within the premises will not exceed the relevant categories as defined in Health Technical Memorandum 06-01 and ADB sheets for the rooms advocated on the schedules of accommodation.

**5.13** The provision of units such as standby emergency generators, UPS, IPS systems, duplicate supplies, water storage etc to enhance service resilience have been included in accordance with relevant Health Technical Memoranda.

# 6 Cost adjustments

## Overview

6.1 The HPCGs are intended to be used for early cost estimates at SOC and OBC stages of project developments. Estimates should be based upon the most up to date and detailed information available to the project team at the time of completion of the cost forms. This should involve adjusting the HPCGs or elemental cost models and finally moving away from HPCGs to a more detailed cost estimate as the project progresses so as to ensure a greater level of accuracy.

6.2 It is also expected that as a scheme is developed from SOC through to OBC and FBC that the level of planning contingencies will substantially reduce as further detail eliminates the need for contingency sum cost allowances.

6.3 This chapter of the document is to be used as a guide as to what type of adjustments can be made to the HPCGs. This is not meant to be an exhaustive list or as mandatory practice but merely a guide to assist in adjusting costs to project specifics.

6.4 Where a specific HPCG appears to be inappropriate or not at the correct cost basis for a particular project then adjustments to reflect the level of project cost should always be applied.

## Communication space allowance

6.5 The HPCGs are based on a space allowance of 10% for communication spaces such as main hospital streets, corridors, lifts and stairs. It is important that this addition is amended as the scheme progresses to reflect specific project requirements for example when a project does not necessitate additional main hospital streets or lifts.

## BREEAM

6.6 The HPCGs include a cost allowance to achieve an excellent BREEAM rating. It is likely that for some projects this allowance may not be adequate. The allowance should be adjusted to suit the particular project as the full implications of BREEAM are developed. Allowance included at 3% of building and engineering costs.

## Refurbishment/extensions

6.7 The HPCGs are based on a 2-storey new build on an acute hospital site. Therefore when the project involves works of a refurbishment nature or small extensions to an existing building some adjustment should be made to the HPCG. The elemental costs models provide suitable cost information for adjustments to be made to reflect this type of work.

## Specification changes

6.8 The elemental costs models provide suitable cost information for adjustments to be made to reflect differing types of building, mechanical and electrical specifications.

## Costs for centralised engineering infrastructures

6.9 The HPCGs include a cost allowance for centralised engineering infrastructure element such as boiler plant and CHP. If a project does not require any additional centralised engineering infrastructure then it may be necessary to adjust Δthe HPCGs.

## Storey adjustment

6.10 The HPCGs are generally based on a two-storey building; there are several exceptions to this so it is advisable to check each particular example schedule of accommodation. Any variation from two storeys will require a reasonable adjustment to the HPCGs. BCIS produces an index called the building height index, which will allow a reasonable adjustment to be made to the HPCGs.

6.11 The BCIS index is not mandatory and other ways of adjusting the HPCGs can always be used but it is advisable in these instances to record the back-up calculations and assumptions made to substantiate the level of adjustment.

## Economies of scale

**6.12** The BCIS produces an index table that allows for any potential economies of scale as the value of the contract sum increase and gives potential benefit to the contract sum.

# 7 Completing the OBC cost forms

## Overview

7.1 This chapter provides a brief guide on how to populate the OBC cost forms using the HPCGs. This chapter should be read in conjunction with the worked examples in Appendices 2, 3 and 4.

7.2 The steps below explain the impact of using the HPCGs on the OB1 form:

1. OB1, line 1 (departmental costs): These have been replaced by the HPCGs. See the worked examples.
2. OB1, line 2 (on-costs): The HPCGs include all previous "on-costs" with the exception of site-specific costs, which should be assessed on a project specific basis. See below for details.
3. OB1, line 3 (works cost total): This is the sum of 1 and 2.
4. OB1, line 4 (provisional location adjustment): See below for details.
5. OB1, line 5 (sub-total): This is the sum of 3 and 4.
6. OB1, line 6 (fees): See below for details.
7. OB1, line 7 (non-works cost): See below for details.
8. OB1, line 8 (equipment cost): To be completed.
9. OB1, line 9 (planning contingency): See below for details.
10. OB1, line 10 (total for approval purposes): This is the sum of 5, 6, 7, 8 and 9.
11. OB1, line 11 (optimum bias): See below for details.
12. OB1, line 12 (sub-total): This is the sum of 10 and 11.
13. OB1, line 13 (inflation adjustments): See below for details.
14. OB1, line 14 (forecast outturn business case): This is the sum of 12 and 13.

## Site-specific costs

7.3 Table 7.1 overleaf provides a list of potential site-specific costs. These are intended to replace line 5 of OBC cost form OB3 ("other on-costs and abnormals"). The list is not intended to be exhaustive and each project should be assessed on an individual basis.

7.4 All other sections of OBC cost form OB3 are now included within the HPCGs.

## External works

7.5 External works are excluded from the HPCGs due to the wide and varying nature and level of costs from site to site. Table 7.2 overleaf provides a list of suggested items that need to be considered for external works. This is not meant to be an exhaustive list but a guide to ensure that appropriate works are included.

7.6 As the project develops and further information becomes available these external works should be estimated in more detail.

## Adjusting costs to reflect location differences

7.7 Local market conditions can have a significant impact on tender prices. Factors affecting local market conditions include local construction output, the prosperity of an area, ease of transportation in and around the area, availability of local skilled and unskilled labour, and anticipated patterns in local adverse weather conditions.

7.8 To reflect differences in tender prices between locations, an adjustment factor is applied to the anticipated costs of a project based on its locality. This factor is called the "location factor". The appropriate location factor should be inserted on line 4 of OBC cost form OB1.

7.9 Location factors are published in the construction information section of Quarterly Briefing (DH).

These are based on geographical boundaries and not on the NHS boundaries used from 2002. Quarterly Briefing does not include location factors for Northern Ireland or Scotland.

7.10 The use of the location factors in Quarterly Briefing is not mandatory. Alternative sources of location indices can be used such as the BCIS location factors, which are more specific as they are based on smaller regions and town specific information.

### Worked example

7.11 A project with an estimated contract value of £3,000,000 due to be constructed in Yorkshire can be adjusted to account for location differences as follows:

Contract value = £3,000,000

Location factor for Yorkshire = 0.94 (as quoted in Volume 18 Number 1 of Quarterly Briefing)

The location factor of 0.94 shows that costs in Yorkshire are 6% below the national average. (The national average is set at 1.00.)

£3,000,000 × 6% = £180,000

Locally adjusted cost = £3,000,000 – £180,000 = £2,820,000

The same figure can be arrived at by simply multiplying the contract value by the location factor, that is, 0.94 × £3,000,000.

## Professional fees

7.12 Professional fees are fees paid to both internal and external professional services for ensuring the smooth and correct progression of a project, including its planning, design, structural suitability and cost control.

7.13 Professional fees should be added to the works costs when compiling an SOC or OBC. The fees should include services provided by the following professionals:

- architects;
- structural engineers;
- mechanical engineers;
- electrical engineers;
- quantity surveyors;
- project management;
- project sponsorship;
- legal fees;
- site supervisions;
  - others:
  - planning officers;
  - healthcare planners;
  - building control officers;
  - project directors;
  - construction, design and management (CDM) co-ordinators;
  - BREEAM assessors;
  - environmental impact assessors;
  - traffic impact assessors;
  - equipment scheduling and associated consultants fees;
  - thermal modelling surveys and assessments.

7.14 Fees are generally calculated as a percentage of works costs; the percentage varies depending on the nature of professional services provided.

7.15 Line 1 of OBC cost form OB4 lists most of the commonly-used professionals and includes space for inserting other professionals not listed. This form should be used to build up the overall professional fees, which are then carried over to line 6 of OBC cost form OB1.

## Non-works costs

7.16 Non-works costs should be inserted into line 7 of the OBC cost form OB1.

7.17 The size of non-works costs should not be underestimated. In many projects they can become a substantial part of the overall costs and therefore full consideration should be given to them.

7.18 Non-works costs tend to be either specific quotes or stand-alone costs and are not covered by the HPCGs. It is important that these costs are attached to a known baseline for the purpose of updating them for inflation at a future date.

7.19 Examples of non-works costs include:

- land purchase costs and associated legal fees;
- sectional agreements;
- statutory and local authority charges;

## Table 7.1

| Site-specific costs excluded from the HPCGs |
|---|
| Abnormal building control requirements |
| Abnormal contractual requirements |
| Abnormal drainage works and capacity enhancement |
| Abnormal ground conditions |
| Abnormal incoming utilities costs |
| Abnormal party wall requirements |
| Abnormal planning requirements |
| Abnormal security requirements |
| Alternative designs to improve capital costs |
| Arboriculture surveys and costs |
| Asbestos removal |
| Basements |
| Bridges and other structures |
| Compliance with British Waterways and NRA flood defence/river works |
| Conservation area requirements |
| Demolition costs |
| Disturbance payments |
| Dock levellers and sectional overhead doors |
| Drainage diversions: off-site drainage works |
| Enhanced elevation treatments |
| Environmental assessment |
| Escalators and conveyors |
| Flood protection works |
| Flood risk assessment |
| Japanese knotweed survey/removal |
| Linkage to metro stations |
| Listed building requirements |
| Ministry of Defence requirements |
| Network Rail requirements |
| Off-site highways works |
| Off-site utilities reinforcement |
| Phased construction |
| Piled foundations |
| Raised access floor |
| Removal/treatment/testing of contaminated material |
| Restrictive site conditions (preliminaries) |
| Road and drain adoption requirements |
| Section 278 Agreement Works and costs |
| Section 38 Agreements and costs |
| Tenant/purchaser fit out |
| Timber frame and new modern methods of construction |
| Traffic impact analysis |
| Underpinning existing structures |
| Utilities diversions |
| Water pressure adequacy for sprinklers and general use on high rise |

## Table 7.2

| List of items to include as external works |
|---|
| **Site preparation:** |
| Site clearance |
| Disposal of topsoil |
| **Impermeable surfaces:** |
| Access roads including footpath, drainage, lighting |
| Pedestrian paving and hard landscaping |
| Car parking including drainage and lighting columns |
| Steps |
| Soft landscaping including trees and shrubs |
| **Perimeter and boundary treatments:** |
| Retaining walls |
| Railings |
| Walls |
| Fencing |
| Gates |
| **Features, furniture and signage:** |
| Litter bins |
| Street signs and signposts |
| External balustrades |
| External planters |
| Tree protection (grilles and guards) |
| Flagpoles |
| Banners |
| Furniture: street/garden/park furniture |
| External clocks |
| Bollards |
| Meter cabinets |
| Gazebos |
| Walkways |
| Fire escape plinths |
| Columns for CCTV cameras |
| Security barriers and car park barriers |
| Car park pay machines |
| **Auxiliary buildings:** |
| Bin stores |
| Smoking shelters |
| Substations |
| Coal storage |
| Medical gas storage |
| Overhead gantries |
| Chimneys |
| Energy centres |
| Meter housings |
| Other miscellaneous engineering structures |
| **Drainage:** |
| Foul water drainage |
| Surface water drainage |
| Connections to mains |
| EXTERNAL SERVICES |
| Feature lighting |
| External lighting |
| Fire hydrants |
| ICT network supply |
| Telecommunication supply |
| CCTV cameras and security barrier power supply |
| Utility electricity supply |
| Utility water supply |
| Utility gas supply |
| Builders work in connection with external services |
| Power supply and provision for ICT to car park payment machines |

- building regulations and planning fees;
- decanting costs;
- commissioning costs;
- decommissioning costs.

7.20 Decanting costs should be checked to ensure that both building and engineering elements are included. Costs for using an external removal company, together with any associated management fees, should be covered by this cost.

7.21 Costs for decommissioning engineering services such as medical gases may be significant particularly if the decommissioning is only a temporary position.

## Equipment costs

7.22 Equipment costs need to be added to the SOC/ OBC forms so as to provide an overall project estimate. These costs should allow for the supply of group 2 equipment and for all the costs associated with group 3 and 4 equipment.

7.23 Please note that Equipment Cost Allowance Guides (ECAGs) are no longer extant and should not be used.

7.24 Analysis of past schemes indicates that at SOC stage an approximate percentage allowance of 15% should be included for equipment. However as the project progresses to OBC this allowance should replaced with a more detailed cost estimate relating to actual equipment requirements.

7.25 MIPS indices are not appropriate for the updating of equipment costs as the project progresses through SOC to OBC and FBC.

7.26 Allowance for re-use of equipment in departments should also be considered and annotated where adjusted.

## Planning contingency

7.27 A cost allowance for planning contingency should be inserted into line 9 of the OBC cost form OB1.

7.28 The planning contingency aims to cover the most likely risks associated with the project, such as cost overruns in the building contract, claims for disruption and loss, and expenses and claims for additional professional fees.

7.29 The cost allowances applied will generally show only a modest fall between SOC and OBC stages and a significant fall between OBC and FBC stages.

## Optimism bias

7.30 HMT Green Book states that an adjustment should be made to the capital cost of all NHS capital schemes to cover optimism bias.

7.31 A cost allowance for optimism bias should be inserted into line 11 of the OBC cost form OB1.

7.32 Optimism bias is the upward adjustment to estimated costs to counteract the known tendency for project costs to be underestimated, particularly at SOC and OBC stages.

7.33 Optimism bias relates mainly to changes to the scope of the project, as defined in the output specification.

7.34 Complete mitigation of optimism bias is not possible at SOC and OBC stages. However, as a business case develops, the level of optimism bias should diminish as the scope for change is gradually reduced and by the FBC stage the level of optimism bias should be very low.

## Managing risk

7.35 Optimism bias, project contingencies and planning contingency are all types of risk analysis. They should differ in the type of risk they cover and the extent to what is included against these at SOC and OBC stages.

7.36 It is important that in the development of the various risk allowances some overview is maintained to ensure that risks are not double or treble counted or missed completely.

7.37 The inclusion of cost allowances for risk does not remove the need for justification; it is important that a record be maintained that explains the specific reasons for the cost allowance included and any reasons as to why increases in costs are applied from SOC to OBC and FBC stages.

## Risk related allowances

7.38 All risk related costs and allowances should be based, wherever possible, on a detailed risk assessment and should have supporting information to the level of costing. As the amount of information and level of detail increases through progression of the project the risks should be seen to reduce in line with the level of detail available.

7.39 The inclusion of cost allowances for risk does not remove the need for justification; it is important that a record be maintained that explains the specific reasons for the cost allowance included and any reasons as to why increases in costs are applied from SOC to OBC and FBC stages.

## Inflation and the use of indices

7.40 Project cost estimates must be capable of being adjusted to take account of future forecasted inflation and/or deflation, especially since many projects will take several years to complete

7.41 Inflation indices are used to update project estimates.

7.42 Inflation indices reflect the rate of inflation in a numerical format. Most inflation indices are measured against a base value 100.

Current dates predict an index of 105 to the project

which means 105 – 100/100

which equals a 5% increase in costs.

One further example –

Current dates predict an index of 95 to the project

which means 95 – 100/100

which equals a 5% decrease to cost.

For example if a project was estimated to be £3,000,000 at a current indexation of 105 and the project was due out to tender with a forecasted 190 index, the forecasted project costs at tender due date is:

= £3,000,000/105 * 190

= a forecasted project cost of £5,428,571.

7.43 There are various indices published within the construction industry and sound professional advice and judgement is required to ensure that the most appropriate index is used and that any changes to costs by forecasts/provisional indices are as robust as possible.

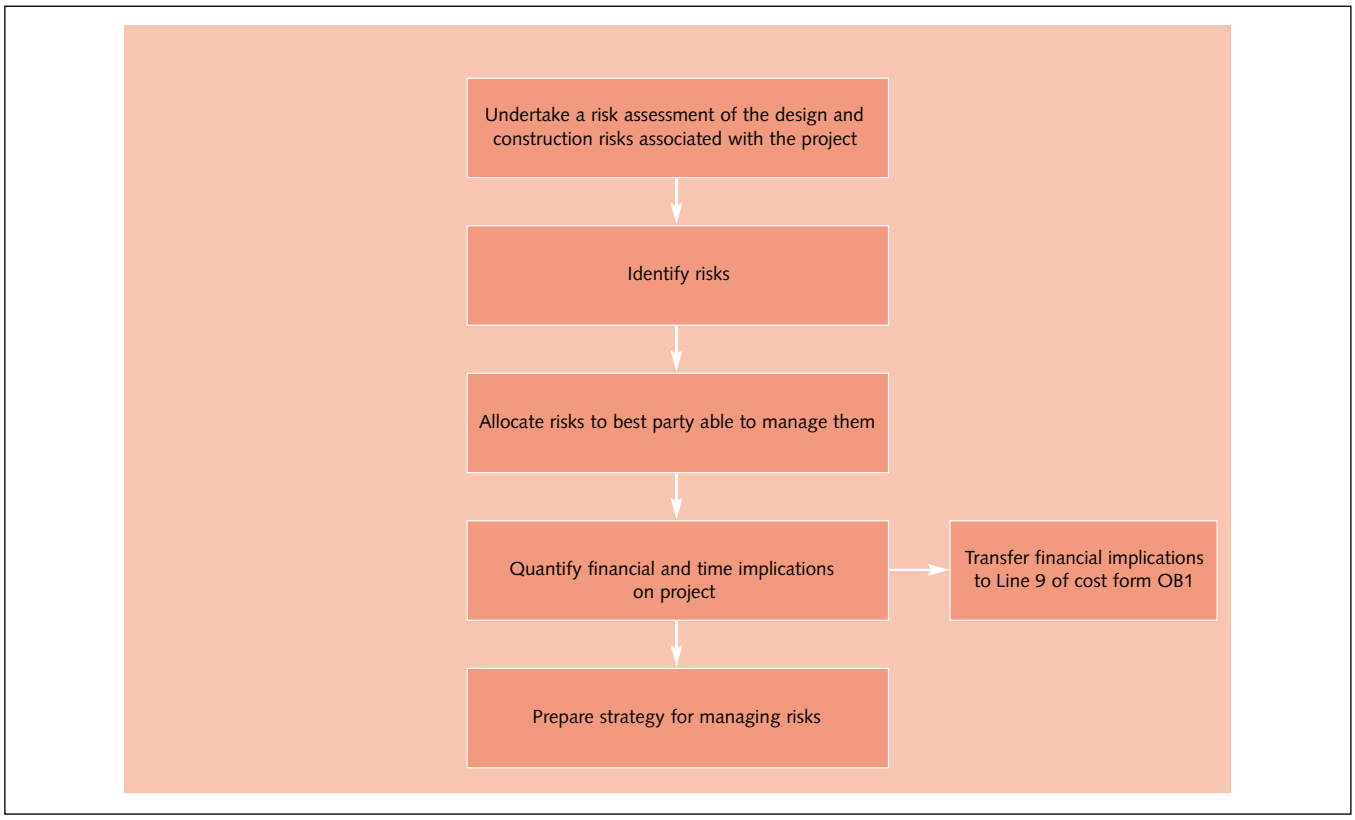
7.44 Quarterly Briefing includes the following indices:

**Median index of public sector (MIPS) building tender prices**

The MIPS indices highlight the effects of inflation on "tender process" of capital works projects within the public sector.

MIPS is DH's acronym for the public sector un-weighted index series produced by BIS (the Department for Business Innovation and Skills). It is derived from an analysis of public sector building

**Figure 7.1 Process for assigning a cost allowance for planning contingency**



schemes including healthcare schemes and should not be confused with the indices produced by BCIS for private sector schemes.

MIPS is published quarterly and calculated from rates for measured work contained in bills of quantities for accepted tenders. The index is smoothed to reduce any erratic changes in the index level from one quarter to the next thus giving a better indication of the underlying trend. As a result, the indices will remain "provisional" for two quarters to enable this smoothing to take effect.

The MIPS indices are further sub-divided into tenders let on a firm price (FP), for projects with a contract period not exceeding two years, and variation of price (VOP) tenders, for projects where increased costs are reimbursed separately, usually by means of a formula applied to a breakdown of the original tender. The VOP index is generally used for projects with a contract period of over two years.

An "all tenders" index series is a combination of all FP and VOP projects. However as there are few, if any, VOP projects then this index tends to be the same index as the FP series.

**Forecasting**

The forecasting of provisional indices and the subsequent firming up of these to a firm index is also based upon information supplied by BIS. This information is based on a sample of healthcare schemes and is then firmed up when a larger sample of schemes is received. The forecast index is not based on scheme analysis but on trends and therefore it is not an exact science. Changes in the prices of raw materials, such as oil, which are totally unpredictable, have a high impact on forecasting the movement of the MIPS future indices.

**Cost allowances for healthcare buildings**

The cost allowances index for healthcare buildings are split into two indices, one at firm price and one at variation of price, both of which are related to the MIPS series. These indices are used when completing the relevant business case forms to ensure that all project costs are brought to a similar cost level.

DH is responsible for promulgating any changes or uplifts to the cost allowance index and these are published in Quarterly Briefing.

**Building Cost Index – NOCOS (previously APSAB/FORVOP indices)**

These indices give a measure of the notional trend of costs to a contractor of increases in the cost of labour, materials and plant by application of the Price Adjustment Formulae for Building and Specialist Engineering Works to a Public Sector Average Building.

These indices are calculated from nationally agreed wage rates and manufactures' recommended prices for materials.

FORVOP (projected formula variation of price) is the forward projection of how the NOCOS index is forecasted to move over the next eight years.

## Cash-flow

7.45 Cost form OB1 includes a cash expenditure table in which the estimated cash-flow of the project should be scheduled out. It is suggested that all figures entered into this table should be net of VAT. This will allow for easier transition of the figures to economic appraisal.

# Appendix 1 – HPCGs for example schedules of accommodation

This appendix provides the HPCGs for all the example schedules of accommodation published by DH. This includes an overall HPCG as well as an HPCG for public, clinical and staff space.

The tables below shows the HPCGs for the example schedules of accommodation that have been costed using the detailed method outlined in Chapter 4.

The HPCGs for Health Building Note 11-01 are based on standalone buildings. The HPCGs for the other schedules of accommodation costed in detail are based on departments located in acute hospitals.

| Example schedules of accommodation for delivery of acute care | HPCG (based on a MIPS index of 480) | | | |
|---|---|---|---|---|
| | Public space | Staff space | Clinical space | Overall space |
| Health Building Note 04-01 – 'Adult in-patient facilities' | £2,230 | £2,040 | £2,290 | £2,280 |
| Health Building Note 6 Volume 1 – 'Facilities for diagnostic imaging and interventional radiology' | £2,050 | £1,810 | £2,320 | £2,200 |
| Health Building Note 07-01 – 'Satellite dialysis unit' | £ 1,610 | £2,230 | £3,020 | £2,600 |
| Health Building Note 09-02 – 'Maternity care facilities' | £2,370 | £2,110 | £2,520 | £2,470 |
| Health Building Note 10-02 – 'Day surgery facilities' | £1,870 | £1,710 | £2,790 | £2,670 |
| Health Building Note 12 – 'Out-patients department' | £1,690 | £2,110 | £2,200 | £2,040 |
| Health Building Note 22 – 'Accident and emergency facilities for adults and children' | £1,780 | £1,750 | £2,410 | £2,140 |
| Health Building Note 26 Volume 1 – 'Facilities for surgical procedures' | N/A | £1,630 | £3,180 | £2,840 |

| Example schedules of accommodation for delivery of primary and community care | HPCG (based on a MIPS index of 480) | | | |
|---|---|---|---|---|
| | Public space | Staff space | Clinical space | Overall space |
| HBN 11-01 – 'Facilities for primary and community care' (primary care centre) | £2,060 | £1,820 | £2,160 | £2,040 |
| HBN 11-01 – 'Facilities for primary and community care' (extended primary care centre) | £1,870 | £1,650 | £2,210 | £1,990 |
| HBN 11-01 – 'Facilities for primary and community care' (community hospital) | £1,840 | £1,620 | £2,440 | £2,200 |

All other example schedules of accommodation have been categorised according to their level of engineering complexity and building specification and may be subject to change as more detailed costings are undertaken.

| HPCG categorisation for example schedules of accommodation for delivery of acute care | | | |
|---|---|---|---|
| **Low cost** | **Medium cost** | **High cost** | **Super cost** |
| Health Building Note 8 – 'Facilities for rehabilitation services'<br><br>Health Building Note 12-01 Supplement A – 'Sexual and reproductive health clinics'<br><br>Health Building Note 12 Supplement 4 – 'Ophthalmology'<br><br>Health Building Note 37 – 'In-patient facilities for older people' | Health Building Note 6 Volume 2 – 'PACS and specialist imaging'<br><br>Health Building Note 23 – 'Hospital accommodation for children and young people' | Health Building Note 07-02 – 'Main renal unit'<br><br>Health Building Note 12 Supplement 2 – 'Oral surgery, orthodontics, restorative dentistry'<br><br>Health Building Note 14-01 – 'Pharmacy and radiopharmacy facilities'<br><br>Health Building Note 15 – 'Facilities for pathology services'<br><br>Health Building Note 20 – 'Facilities for mortuary and post-mortem room services'<br><br>Health Building Note 28 – 'Facilities for cardiac services'<br><br>Health Building Note 52 Volume 2 – 'Endoscopy unit'<br><br>Health Building Note 52 Volume 3 – 'Medical investigation and treatment unit'<br><br>Health Building Note 54 – 'Facilities for cancer services' | Health Building Note 12 Supplement 3 – 'ENT and audiology clinics, hearing aid centre'<br><br>Health Building Note 6 Volume 3 – 'Extremity and open MRI, magnetic shielding and construction for radiation protection'<br><br>Health Building Note 13 – 'Sterile services department'<br><br>Health Building Note 57 – 'Facilities for critical care'<br><br>Health Building Note 13 Supplement 1 – 'Ethylene oxide sterilization section'<br><br>Health Building Note 35 Part 1 – 'Accommodation for people with mental illness: The acute unit' |

| **KEY** | | Low cost (£) | Medium cost (£) | High cost (£) | Super cost (£) |
|---|---|---|---|---|---|
| PUBLIC | range | <1,700 | 1,700–1,900 | 1,900–2,100 | >2,100 |
| | average | 1,650 | 1,830 | 2,050 | 2,300 |
| STAFF | range | <1,700 | 1,700–1,900 | 1,900–2,100 | >2,100 |
| | average | 1,650 | 1,830 | 2,050 | 2,300 |
| CLINICAL | range | <2,500 | 2,500–2,800 | 2,800–3,100 | >3,100 |
| | average | 2,300 | 2,650 | 3,020 | 3,180 |
| OVERALL | range | <2,300 | 2,300–2,500 | 2,500–2,700 | >2,700 |
| | average | 2,050 | 2,340 | 2,680 | 2,840 |

| HPCG categorisation for example schedules of accommodation for delivery of care from independent locations | | | |
|---|---|---|---|
| **Low cost** | **Medium cost** | **High cost** | **Super cost** |
| | Health Building Note 35 Part 2 – 'Accommodation for people with mental illness: Treatment and care in the community'<br><br>Health Building Note 44 – 'Accommodation for Ambulance services' | | |

| **KEY** | | Low cost (£) | Medium cost (£) | High cost (£) | Super cost (£) |
|---|---|---|---|---|---|
| OVERALL | range | <2,300 | 2,300–2,500 | 2,500–2,700 | >2,700 |
| | average | 2,050 | 2,440 | 2,680 | 2,840 |

# Appendix 2 – Costing a multi-department unit at SOC/OBC stage

To begin the process of costing a multi-department unit at SOC/OBC stage, a schedule of departments must be established.

The GIA of each department should be calculated.

The published example schedules of accommodation will provide an estimate of the NIA of each department. Appendix 2 provides an estimate of the overall allowances for circulation space, communication space and engineering space that should be applied to each departmental NIA to arrive at a departmental GIA.

The relevant overall HPCG should then be applied to each departmental GIA to arrive at a cost for each department and then for the unit as a whole.

The table below shows how costs may be calculated using this method. The HPCGs are based on the figures in Appendix 1. Where an HPCG category of low cost, medium cost etc is given, this means the HPCG is an estimate only.

All figures in this table are for demonstration purposes only and should not be applied to real schemes. All costs are exclusive of VAT and are based on a MIPS index of 480.

| KEY to table | |
|---|---|
| super cost | 2,840 |
| high cost | 2,680 |
| medium cost | 2,340 |
| low cost | 2,050 |

**Costs for multi-department unit based on example schedules of accommodation**

| Example schedules of accommodation | Departmental GIA ($m^2$) | HPCG category | HPCG (£/m2) | Departmental cost (£) |
|---|---|---|---|---|
| **HBN 04-01 - 'Adult in-patient facilities'** Department 1: 2 no. 24-bed wards (83% single-bed rooms) including associated facilities | 2,789 | HPCG | 2,280 | 6,358,920 |
| **HBN 26 Volume 1 - 'Facilities for surgical procedures'** Department 2: 8 theatres (4 general and 4 ultra clean) including associated facilities | 3,974 | HPCG | 2,840 | 11,286,160 |
| **HBN 10-02 - 'Day surgery facilities'** Department 3: Dedicated DSU within an acute hospital (serving a population of 3,000) including associated facilities | 2,653 | HPCG | 2,670 | 7,083,510 |
| **HBN 23 – 'Hospital accommodation for children and young people'** Department 4: 2 no. 24-bed wards (83% single-bed rooms) including associated facilities | 2,500 | medium cost | 2,340 | 5,850,000 |
| **HBN 22 - 'Accident and emergency facilities for adults and children'** Department 5: 5000 attendances, 8 assessment and 8 treatment rooms | 1,903 | HPCG | 2,140 | 4,072,420 |
| **HBN 8 – 'Facilities for rehabilitation services'** Department 6: Rehab department | 1,800 | low cost | 2,050 | 3,690,000 |
| **HBN 15 – 'Facilities for pathology services'** Department 7: Path lab | 2,000 | high cost | 2,680 | 5,360,000 |
| **Total for unit** | **17,619** | | | **43,701,010** |

| £/m2 | 2,480.33 |
|---|---|

The total cost should be carried forward to the OBC cost form OB2 (capital costs).

The following populated OBC forms show how the OB2 form, and other OB forms, should be completed.

**OUTLINE BUSINESS CASE FOR PREFERRED OPTION - ALL COSTS INCLUDED ARE FOR DEMONSTRATION PURP** **COST FORM OB1**

| | | | |
|---|---|---|---|
| TRUST/ORGANISATION: | | ORGANISATIONAL CODE: | |
| SCHEME: | Multi-department unit | | |
| STRATEGIC HA: | | | |
| PHASE: | One | | |
| PROJECT DIRECTOR: | | | |

**CAPITAL COSTS SUMMARY**

| | | Cost excluding VAT (£) | VAT (£) | Cost including VAT (£) |
|---|---|---|---|---|
| 1 | Departmental costs (from form OB2) | 43,701,010 | 7,647,677 | 51,348,687 |
| 2 | On costs (from form OB3) (18.43% of departmental costs) | 8,055,152 | 1,409,652 | 9,464,803 |
| 3 | Works cost total (1+2) at 480 MIPS FP/VOP* (Tender price index level 1975 = 100 base) | 51,756,162 | 9,057,328 | 60,813,490 |
| 4 | Provisional location adjustment (if applicable) (12.00 % of works costs) (b) Outer London | 6,210,739 | 1,086,879 | 7,297,619 |
| 5 | Sub total (3+4) | 57,966,901 | 10,144,208 | 68,111,109 |
| 6 | Fees (c) (15.00% of sub-total 5) | 8,695,035 | (d) N/A | 8,695,035 |
| 7 | Non-works costs (from form FB4) (e) LAND / OTHER | 850,000 | 148,750 | 998,750 |
| 8 | Equipment costs (from form OB2) (15.00% of departmental costs) | 6,555,152 | 1,147,152 | 7,702,303 |
| 9 | Planning contingency 0.05 | 2,898,345 | 507,210 | 3,405,555 |
| 10 | TOTAL (for approval purposes) (5+6+7+8+9) | 76,965,433 | 11,947,320 | 88,912,752 |
| 11 | Optimism bias 10% | 7,696,543 | 1,346,895 | 9,043,438 |
| 12 | Sub total (10+11) | 84,661,976 | 13,294,215 | 97,956,190 |
| 13 | Inflation adjustments (f) | N/A | | |
| 14 | FORECAST OUTTURN BUSINESS CASE TOTAL (12+13) | 84,661,976 | 13,294,215 | 97,956,190 |

Proposed start on site (g) Proposed completion date (g)

| Cash Flow: Year yy/yy | SOURCE EFL | SOURCE OTHER GOVERNMENT | SOURCE PRIVATE | £ TOTAL |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total cost (as 10 above) | | | | |

**Total (for approval purposes) match against cashflow**

Notes:

* Delete as appropriate

(a) On-costs should be supported by a breakdown of the percentage or a brief description of their scope (form OB3 may be used if appropriate)

(b) Adjustments of national average DCA price levels and on-costs for local market conditions

(c) Fees include all resource costs associated with the scheme e.g. project sponsorship, clerk of works, building regulation and planning fees etc

(d) Not applicable to professional fees - VAT reclaimable EL (90 ) P64 refers

(e) Non-works costs should be supported by a breakdown and include such items as contributions to statutory and local authorities, land costs and associated legal fees

(f) Estimate of tender price inflation up to proposed tender date (plus construction cost for VOP contracts only)

(g) Overall timescale including any preliminary works

Name (capitals)
Position
Address
Telephone

Authorised for issue
Project Director
Date

**COST FORM OB2**

**OUTLINE BUSINESS CASE FOR PREFERRED OPTION**

**ALL COSTS INCLUDED ARE FOR DEMONSTRATION PURPOSES ONLY**

TRUST/ORGANISATION:

SCHEME: Multi-department unit

PHASE:

PROJECT DIRECTOR:

**CAPITAL COSTS: DEPARTMENTAL COSTS AND EQUIPMENT COSTS**

| Functional content | Functional units/space requirements (1) | N/A/C (2) | Cost allowance version | Equipment cost version |
|---|---|---|---|---|
| | | | | |
| **HBN 04-01 - 'Adult in-patient facilities'** | | | | |
| Department 1: 2 no. 24-bed wards (83% single-bed rooms) including associated facilities | 2,789 $m^2$ | | 6,358,920 | 953,838 |
| **HBN 26 Volume 1 - 'Facilities for surgical procedures'** | | | | |
| Department 2: 8 theatres (4 general and 4 ultra clean) including associated facilities | 3,974 $m^2$ | | 11,286,160 | 1,692,924 |
| **HBN 10-02 - 'Day surgery facilities'** | | | | |
| Department 3: Dedicated DSU within an acute hospital (serving a population of 3,000) including associated facilities | 2,653 $m^2$ | | 7,083,510 | 1,062,527 |
| **HBN 23 – 'Hospital accommodation for children and young people'** | | | | |
| Department 4: 2 no. 24-bed wards (83% single-bed rooms) including associated facilities | 2,500 $m^2$ | | 5,850,000 | 877,500 |
| **HBN 22 - 'Accident and emergency facilities for adults and children'** | | | | |
| Department 5: 5000 attendances, 8 assessment and 8 treatment rooms | 1,903 $m^2$ | | 4,072,420 | 610,863 |
| **HBN 8 – 'Facilities for rehabilitation services'** | 1,800 $m^2$ | | 3,690,000 | 553,500 |
| **HBN 15 – 'Facilities for pathology services'** | 2,000 $m^2$ | | 5,360,000 | 804,000 |
| **Departmental costs and equipment costs to summary £** | | | 43,701,010 | 6,555,152 |

**COST FORM OB2 (CONT)**

Cost allowances should be based on departmental cost allowances where appropriate and include allowances for essential complementary accommodation and optional accommodation and services where details not available.
Identify separately any proposed adjustment (over or under cost allowances) justifiable in value for money terms (details to be provided).

* Delete as appropriate

1. State area and rate if departmental cost allowance not available.
2. Insert:
   N for new build.
   A for adaptions for alternative use or
   C for upgrading existing building retaining current use.
3. Insert relevant version number of HCI listing of departmental cost allowances and Equipment cost allowances.
4. Provide details where appropriate.

| **Completed by** | | | |
|---|---|---|---|
| Name (capitals) | | Authorised for issue | |
| Position | | | Project director |
| Address | | | |
| | | | |
| | | | |
| | | Date | |
| Telephone | | | |

**OUTLINE BUSINESS CASE FOR PREFERRED OPTION** **COST FORM OFB3**

**ALL COSTS INCLUDED ARE FOR DEMONSTRATION PURPOSES ONLY**

TRUST/ORGANISATION:

SCHEME: Multi-department unit

PHASE:

**CAPITAL COSTS: ON COSTS**

| | | | Estimated cost (exc. VAT) | Percentage of departmental cost |
|---|---|---|---|---|
| 1 | Communications | £ | £ | % |
| | a. Space | | Incl | |
| | b. Lifts | | Incl | |
| 2 | 'External" building works (1) | | | |
| | a. Drainage | | Incl | |
| | b. Roads, paths, parking | | Incl | |
| | c. Site layout, walls, fencing, gates | | Incl | |
| | d. Builders work for engineering | | Incl | |
| | services outside buildings | | Incl | |
| | | | £6,555,151.50 | 15.00 |
| 3 | 'External" engineering works (1) | | | |
| | a. Steam, condensate, heating, hot | | Incl | |
| | water and gas supply mains | | Incl | |
| | b. Cold water mains and storage | | Incl | |
| | c. Electricity mains, sub-stations, | | Incl | |
| | stand-by generating plant | | Incl | |
| | d. Calorifiers and associated plant | | Incl | |
| | e. Miscellaneous services | | Incl | |
| 4 | Auxiliary buildings | | 750,000.00 | 1.72 |
| 5 | Other on-costs and abnormals (2) | | | |
| | a. Building | | £500,000.00 | 1.14 |
| | b. Engineering | | £250,000.00 | 0.57 |
| Total On-Costs to Summary FB1 | | | £ 8,055,152 | 18.43 |

Notes:

Must be based on scheme specific assessments/measurements; attach details to define scope of works as appropriate.

Identify separately any proposed additional capital expenditure justifiable in value for money terms (details to be provided).

* Delete as appropriate.

(1) 'External" to departments

(2) Identify any enabling or preliminary works to prepare the site in advance e.g. demolitions; service diversions; decanting costs; site investigation and other exploratory works.

| | | | |
|---|---|---|---|
| **Completed by** | | | |
| Name (capitals) | | Authorised for issue | |
| Position | | | Project director |
| Address | | | |
| | | | |
| | | | |
| | | Date | |
| Telephone | | | |

**OUTLINE BUSINESS CASE FOR PREFERRED OPTION** **COST FORM OB4**

**ALL COSTS INCLUDED ARE FOR DEMONSTRATION PURPOSES ONLY**

TRUST/ORGANISATION:

SCHEME: Multi-department unit

PHASE: One

**CAPITAL COSTS: FEES AND NON-WORKS COSTS**

| | | £ | Percentage of works costs % |
|---|---|---|---|
| 1 | Fees (including "in-house" resource costs) | | |
| | a. Architects | 2,318,676 | 4.00 |
| | b. Structural engineers | 869,504 | 1.50 |
| | c. Mechanical engineers | 1,159,338 | 2.00 |
| | d. Electrical engineers | | Included above |
| | e. Quantity surveyors | 1,159,338 | 2.00 |
| | f. Project management | 579,669 | 1.00 |
| | g. Project sponsorship | 579,669 | 1.00 |
| | h. Legal fees | | - |
| | i. Site supervision | 869,504 | 1.50 |
| | j. Building Regulations and Planning Fees | 579,669 | 1.00 |
| | k. Other | | |
| | CDM co-ordinator | 289,835 | 0.50 |
| | Party wall surveyor | 289,835 | 0.50 |
| | Total fees to summary (OB1) | £ 8,695,035 | 15.00 |

| | | £ |
|---|---|---|
| 2 | Non-works costs | |
| | a. Land purchase costs and associated legal fees | |
| | b. Statutory and Local Authority charges | 750,000 |
| | c. Other (specify) | |
| | decanting costs | 100,000 |
| | Non-works costs to summary (OB1) | £ 850,000 |

Notes:

* Delete as appropriate.

| **Completed by** | | | |
|---|---|---|---|
| Name (capitals) | | Authorised for issue | |
| Position | | | Project director |
| Address | | | |
| | | | |
| | | | |
| | | Date | |
| Telephone | | | |

# Appendix 3 – Costing a multi-department unit on a room by room basis

To begin the process of costing a multi-department unit on a room by room basis, a schedule of accommodation for each department must be established and sorted into public, clinical and staff spaces in accordance with Chapter 2 of this guidance.

Appendix 2 provides an estimate of the allowances for circulation space, communication space and engineering space that should be applied to each room (the latter not only varies across departments but also across room types). However, if any design information is available these percentages should be adjusted accordingly.

The relevant HPCG should then be applied to each room (on the basis of room type and department) to arrive at a cost for each room, for each department and then for the unit as a whole.

The table below shows how costs may be calculated using this method. The HPCGs are based on the figures in Appendix 1.

All figures in this table are for demonstration purposes only and should not be applied to real schemes. All costs are exclusive of VAT and are based on a MIPS index of 480.

The total cost should be carried forward to the OBC cost form OB2 (capital costs).

**Costs for multi-department unit based on real schedules of accommodation**

| Rooms | Quantity | Room area (m²) | Room NIA (m²) | Circulation space and communication space (m²) | Engineering space (m²) | Room GIA (m²) | HPCG category | HPCG (£/m2) | Room cost (£) |
|---|---|---|---|---|---|---|---|---|---|
| **Adult in-patient facilities** | | | | | | | | | |
| **Public space** | | | | | | | | | |
| Reception: 2 staff | 2 | 11.00 | 22.00 | 8.14 | 5.28 | 35.42 | HPCG | 2,230 | 78,987 |
| Waiting area (size based on number of places) | 12 | 1.70 | 20.40 | 7.55 | 7.55 | 35.50 | HPCG | 2,230 | 79,165 |
| WC: semi-ambulant | 2 | 2.50 | 5.00 | 1.85 | 1.85 | 8.70 | HPCG | 2,230 | 19,401 |
| **Clinical space** | | | | | | | | | |
| Single-bed room: adult | 40 | 19.00 | 760.00 | 281.20 | 174.80 | 1,216.00 | HPCG | 2,290 | 2,784,640 |
| Shower room: en-suite: chamfered | 40 | 4.50 | 180.00 | 66.60 | 41.40 | 288.00 | HPCG | 2,290 | 659,520 |
| Multi bed room: adult: 4 beds | 2 | 64.00 | 128.00 | 47.36 | 29.44 | 204.80 | HPCG | 2,290 | 468,992 |
| WC: semi-ambulant: in-patient | 2 | 2.00 | 4.00 | 1.48 | 0.92 | 6.40 | HPCG | 2,290 | 14,656 |
| Shower room: assisted: in patient | 2 | 6.50 | 13.00 | 4.81 | 2.99 | 20.80 | HPCG | 2,290 | 47,632 |
| Bathroom: assisted | 2 | 15.00 | 30.00 | 11.10 | 6.90 | 48.00 | HPCG | 2,290 | 109,920 |
| **Staff space** | | | | - | - | - | | | |
| Touchdown base | 12 | 2.00 | 24.00 | 8.88 | 5.52 | 38.40 | HPCG | 2,040 | 78,336 |
| Office/meeting room: 10 places (incl. 2 workstations) | 2 | 16.00 | 32.00 | 11.84 | 7.36 | 51.20 | HPCG | 2,040 | 104,448 |
| Pantry: ward | 2 | 12.00 | 24.00 | 8.88 | 5.52 | 38.40 | HPCG | 2,040 | 78,336 |
| Clean supply room | 16 | 1.00 | 16.00 | 5.92 | 3.68 | 25.60 | HPCG | 2,040 | 52,224 |
| Parking bay: mobile hoist | 2 | 2.00 | 4.00 | 1.48 | 0.92 | 6.40 | HPCG | 2,040 | 13,056 |
| Store: clinical equipment | 24 | 1.00 | 24.00 | 8.88 | 5.52 | 38.40 | HPCG | 2,040 | 78,336 |
| Medical store/preparation room | 2 | 8.00 | 16.00 | 5.92 | 3.68 | 25.60 | HPCG | 2,040 | 52,224 |
| Dirty utility room: bedpan processing | 4 | 12.00 | 48.00 | 17.76 | 11.04 | 76.80 | HPCG | 2,040 | 156,672 |
| Parking bay: resuscitation equipment | 2 | 2.00 | 4.00 | 1.48 | 0.92 | 6.40 | HPCG | 2,040 | 13,056 |
| Parking bay: food trolley | 2 | 2.00 | 4.00 | 1.48 | 0.92 | 6.40 | HPCG | 2,040 | 13,056 |
| Store: linen | 2 | 6.00 | 12.00 | 4.44 | 2.76 | 19.20 | HPCG | 2,040 | 39,168 |
| Cleaners' room | 2 | 8.00 | 16.00 | 5.92 | 3.68 | 25.60 | HPCG | 2,040 | 52,224 |
| **Total for adult in-patient facilities** | | | 1,386.40 | 512.97 | 322.65 | 2,222.02 | | | 4,994,049 |
| **Surgical procedures facilities** | | | | | | | | | |
| **Public space** | | | | | | | | | |
| None | | | | | | | | | |
| **Clinical space** | | | | | | | | | |
| Consulting, examination & changing room | 16.5 | 2.00 | 33.00 | 11.55 | 15.84 | 60.39 | HPCG | 3,180 | 192,040 |
| Operating theatre: general | 4 | 55.00 | 220.00 | 77.00 | 105.60 | 402.60 | HPCG | 3,180 | 1,280,268 |
| Operating theatre: ultra clean | 4 | 55.00 | 220.00 | 77.00 | 105.60 | 402.60 | HPCG | 3,180 | 1,280,268 |
| Anaesthetic room: bed space | 4 | 19.00 | 76.00 | 26.60 | 36.48 | 139.08 | HPCG | 3,180 | 442,274 |
| Recovery bay: post anaesthetic, 1 place | 12 | 13.50 | 162.00 | 56.70 | 77.76 | 296.46 | HPCG | 3,180 | 942,743 |
| Recovery room: post anaesthetic, 1 place | 4 | 26.00 | 104.00 | 36.40 | 49.92 | 190.32 | HPCG | 3,180 | 605,218 |
| Staff & communication base, enclosed: 3 staff | 1 | 15.00 | 15.00 | 5.25 | 7.20 | 27.45 | HPCG | 3,180 | 87,291 |
| Clean utility | 1 | 14.00 | 14.00 | 4.90 | 6.72 | 25.62 | HPCG | 3,180 | 81,472 |
| Dirty utility: bedpan disposal & urine test | 1 | 12.00 | 12.00 | 4.20 | 5.76 | 21.96 | HPCG | 3,180 | 69,833 |
| Office: medical reporting, 1 staff | 1 | 10.50 | 10.50 | 3.68 | 5.04 | 19.22 | HPCG | 3,180 | 61,120 |
| Blood bank refrigerator bay | 1 | 3.00 | 3.00 | 1.05 | 1.44 | 5.49 | HPCG | 3,180 | 17,458 |
| Near patient testing/status laboratory | 1 | 8.50 | 8.50 | 2.98 | 4.08 | 15.56 | HPCG | 3,180 | 49,481 |
| Utility: cleaning & store room, flexible endoscope | 1 | 14.00 | 14.00 | 4.90 | 6.72 | 25.62 | HPCG | 3,180 | 81,472 |
| Service room: equipment | 1 | 21.00 | 21.00 | 7.35 | 10.08 | 38.43 | HPCG | 3,180 | 122,207 |
| Parking bay: mobile x-ray & ultrasound unit | 1 | 5.00 | 5.00 | 1.75 | 2.40 | 9.15 | HPCG | 3,180 | 29,097 |
| Shower: ambulant (non patient) | 6 | 2.50 | 15.00 | 5.25 | 7.20 | 27.45 | HPCG | 3,180 | 87,291 |
| Staff changing room including boot change: 30 places | 1 | 25.00 | 25.00 | 8.75 | 12.00 | 45.75 | HPCG | 3,180 | 145,485 |
| Staff changing room including boot change: 30 places | 2 | 25.00 | 50.00 | 17.50 | 24.00 | 91.50 | HPCG | 3,180 | 290,970 |
| Utility: footwear washing | 1 | 4.00 | 4.00 | 1.40 | 1.92 | 7.32 | HPCG | 3,180 | 23,278 |
| Scrub-up & gowning room: 3 places | 8 | 11.00 | 88.00 | 30.80 | 42.24 | 161.04 | HPCG | 3,180 | 512,107 |
| Preparation room | 8 | 12.00 | 96.00 | 33.60 | 46.08 | 175.68 | HPCG | 3,180 | 558,662 |
| Exit/parking bay: theatre, 1 bed/trolley | 8 | 12.00 | 96.00 | 33.60 | 46.08 | 175.68 | HPCG | 3,180 | 558,662 |
| **Staff space** | | | | | | | | | |
| Office: 2 staff | 1 | 13.00 | 13.00 | 4.55 | 2.34 | 19.89 | HPCG | 1,630 | 32,421 |
| Office: 3 staff | 1 | 18.00 | 18.00 | 6.30 | 3.24 | 27.54 | HPCG | 1,630 | 44,890 |
| Office: 1 staff | 1 | 10.50 | 10.50 | 3.68 | 1.89 | 16.07 | HPCG | 1,630 | 26,194 |
| Interview & counselling room: 5 persons (non-patient) | 1 | 9.00 | 9.00 | 3.15 | 1.62 | 13.77 | HPCG | 1,630 | 22,445 |
| Interview/meeting room: 6 persons | 1 | 14.00 | 14.00 | 4.90 | 2.52 | 21.42 | HPCG | 1,630 | 34,915 |
| Rest room with beverage & snack preparation bay: 20 staff | 1 | 28.00 | 28.00 | 9.80 | 5.04 | 42.84 | HPCG | 1,630 | 69,829 |
| WC & wash: ambulant | 4 | 2.00 | 8.00 | 2.80 | 1.44 | 12.24 | HPCG | 1,630 | 19,951 |
| Shower: ambulant (non patient) | 2 | 2.50 | 5.00 | 1.75 | 0.90 | 7.65 | HPCG | 1,630 | 12,470 |
| WC & handwash: accessible, wheelchair assisted | 1 | 4.50 | 4.50 | 1.58 | 0.81 | 6.89 | HPCG | 1,630 | 11,231 |
| Staff changing room including boot change: 10 places | 1 | 8.00 | 8.00 | 2.80 | 1.44 | 12.24 | HPCG | 1,630 | 19,951 |
| **Total for surgical procedures facilities** | | | 1,410.00 | 493.52 | 641.40 | 2,544.92 | | | 7,812,994 |
| **Out-patients facilities** | | | | | | | | | |
| **Public space** | | | | | | | | | |
| Reception 2 staff | 2 | 10.00 | 20.00 | 8.40 | 2.60 | 31.00 | HPCG | 1,690 | 52,390 |
| Enquiry/information desk: 2 staff | 1 | 6.00 | 6.00 | 2.52 | 0.78 | 9.30 | HPCG | 1,690 | 15,717 |
| Waiting play area: 5 children | 1 | 13.00 | 13.00 | 5.46 | 1.69 | 20.15 | HPCG | 1,690 | 34,054 |
| Public telephone: single booth | 1 | 1.50 | 1.50 | 0.63 | 0.20 | 2.33 | HPCG | 1,690 | 3,938 |
| Public telephone: single booth, accessible | 1 | 2.00 | 2.00 | 0.84 | 0.26 | 3.10 | HPCG | 1,690 | 5,239 |
| Nappy change room with handwash | 1 | 4.00 | 4.00 | 1.68 | 0.52 | 6.20 | HPCG | 1,690 | 10,478 |
| Refreshment: vending machine | 1 | 3.00 | 3.00 | 1.26 | 0.39 | 4.65 | HPCG | 1,690 | 7,859 |
| Infant feeding room | 1 | 5.50 | 5.50 | 2.31 | 0.72 | 8.53 | HPCG | 1,690 | 14,416 |
| **Clinical space** | | | | | | | | | |
| Consulting & examination room: both sides couch access | 12 | 16.50 | 198.00 | 83.16 | 55.44 | 336.60 | HPCG | 2,200 | 740,520 |
| Physical measurement bay | 2 | 3.50 | 7.00 | 2.94 | 1.96 | 11.90 | HPCG | 2,200 | 26,180 |
| Interview & counselling room: 5 persons | 1 | 9.00 | 9.00 | 3.78 | 2.52 | 15.30 | HPCG | 2,200 | 33,660 |
| Venepuncture room: 2 places | 1 | 16.00 | 16.00 | 6.72 | 4.48 | 27.20 | HPCG | 2,200 | 59,840 |
| Treatment room: 1 patient | 2 | 12.00 | 24.00 | 10.08 | 6.72 | 40.80 | HPCG | 2,200 | 89,760 |
| Treatment room: chiropody/podiatry, 1 patient | 1 | 15.00 | 15.00 | 6.30 | 4.20 | 25.50 | HPCG | 2,200 | 56,100 |
| Store: general, sterilie supplies & linen | 1 | 9.00 | 9.00 | 3.78 | 2.52 | 15.30 | HPCG | 2,200 | 33,660 |
| Store: equipment | 1 | 12.00 | 12.00 | 5.04 | 3.36 | 20.40 | HPCG | 2,200 | 44,880 |
| Store: clinic sundries | 1 | 9.00 | 9.00 | 3.78 | 2.52 | 15.30 | HPCG | 2,200 | 33,660 |
| Store: surgical appliances | 1 | 3.00 | 3.00 | 1.26 | 0.84 | 5.10 | HPCG | 2,200 | 11,220 |
| Store: stationery | 1 | 3.00 | 3.00 | 1.26 | 0.84 | 5.10 | HPCG | 2,200 | 11,220 |
| **Staff space** | | | | | | | | | |
| Rest room with beverage & snack preparation bay: 10 staff | 1 | 18.00 | 18.00 | 7.56 | 5.76 | 31.32 | HPCG | 2,110 | 66,085 |
| Office: 1 staff | 1 | 10.50 | 10.50 | 4.41 | 3.36 | 18.27 | HPCG | 2,110 | 38,550 |
| Office: 1 staff | 1 | 10.50 | 10.50 | 4.41 | 3.36 | 18.27 | HPCG | 2,110 | 38,550 |
| Office: 1 staff | 1 | 10.50 | 10.50 | 4.41 | 3.36 | 18.27 | HPCG | 2,110 | 38,550 |
| Office: 1 staff | 1 | 9.00 | 9.00 | 3.78 | 2.88 | 15.66 | HPCG | 2,110 | 33,043 |
| Staff changing room with cubicle & handwash, 5 places | 1 | 8.50 | 8.50 | 3.57 | 2.72 | 14.79 | HPCG | 2,110 | 31,207 |
| Staff changing room with cubicle & handwash, 10 places | 1 | 14.00 | 14.00 | 5.88 | 4.48 | 24.36 | HPCG | 2,110 | 51,400 |
| Shower: ambulant (non patient) | 2 | 2.50 | 5.00 | 2.10 | 1.60 | 8.70 | HPCG | 2,110 | 18,357 |
| WC & wash: ambulant | 2 | 2.00 | 4.00 | 1.68 | 1.28 | 6.96 | HPCG | 2,110 | 14,686 |
| Cleaners (Housekeeping) room | 1 | 7.00 | 7.00 | 2.94 | 2.24 | 12.18 | HPCG | 2,110 | 25,700 |
| Hold: disposal | 1 | 6.00 | 6.00 | 2.52 | 1.92 | 10.44 | HPCG | 2,110 | 22,028 |
| **Total for out-patient facilities** | | | 463.00 | 194.46 | 125.52 | 782.98 | | | 1,662,947 |
| **Total for unit** | | | **3,259** | **1,201** | **1,090** | **5,550** | | **2,607** | **14,469,990** |
| | | | | | | | | £/m2 | £2,607.21 |

# Appendix 4 – Costing a whole hospital

To begin the process of costing a whole hospital, a schedule of departments/groups of rooms must be established.

The GIA of each department/group of rooms should be calculated.

The published example schedules of accommodation should be used, where relevant, to provide an estimate of the NIA of each department/group of rooms.

Appendix 2 provides an estimate of the overall allowances for circulation space, communication space and engineering space that should be applied to the NIAs to arrive at the GIAs. However, if any design information is available these percentages should be adjusted accordingly.

The relevant overall HPCG should then be applied to each GIA to arrive at a cost for each department/group of rooms and then for the hospital as a whole.

It may be necessary, as part of a whole hospital, to include areas such as main entrances, commercial spaces, central kitchens or loading bay areas etc. If any of these areas are required, they should be assessed on a project specific basis and an appropriate £/$m^2$ applied to an estimated area ($m^2$) to arrive at a capital cost.

The table below shows how costs may be calculated using this method. The HPCGs are based on the figures in Appendix 1. Where an HPCG category of low cost, medium cost etc is given, this means the HPCG is an estimate only.

| * project specific costing level | |
|---|---|
| **Standardised HPCG categories for acute care (£/m2)** | |
| super cost | 2,840 |
| high cost | 2,680 |
| medium cost | 2,340 |
| low cost | 2,050 |

*Key to table on page 35*

All figures in this table are for demonstration purposes only and should not be applied to real schemes. All costs are exclusive of VAT and are based on a MIPS index of 480.

The total cost should be carried forward to the OBC cost form OB2 (capital costs).

**Costs for whole hospital based on example schedules of accommodation and real data**

| Department/room | | | Total (GIA) | HPCG category | HPCG £/m² | Departmental cost (£) |
|---|---|---|---|---|---|---|
| **In-patient services** | | | | | | |
| General wards, 83% single rooms | 192 | beds | 11,156 | HPCG | 2,280 | 25,435,680 |
| Children | | | | | | |
| Department | 1 | dept | 158 | medium cost | 2,340 | 369,720 |
| In-patient ward | 20 | beds | 993 | medium cost | 2,340 | 2,323,620 |
| Day care unit | 8 | beds | 329 | medium cost | 2,340 | 769,860 |
| Elderly | | | | | | |
| Nursing section type A | 96 | beds | 3,508 | low cost | 2,050 | 7,191,400 |
| Day hospital | 40 | places | 721 | low cost | 2,050 | 1,478,050 |
| Administrative centre | 200,000 | population | 135 | low cost | 2,050 | 276,750 |
| Maternity | | | | | | |
| LDRP standard | 18 | nr | 702 | HPCG | 2,470 | 1,733,940 |
| LDRP disabled | 1 | nr | 45 | HPCG | 2,470 | 111,150 |
| 4 bed multi room | 2 | nr | 110 | HPCG | 2,470 | 271,700 |
| Single rooms | 11 | nr | 176 | HPCG | 2,470 | 434,720 |
| In-patient accommodation | Option | 1 | 2,445 | HPCG | 2,470 | 6,039,150 |
| Neonatal | 10 | cots | 424 | high cost | 2,680 | 1,136,320 |
| Intensive therapy | 6 | beds | 733 | super cost | 2,840 | 2,081,720 |
| Cardiology | 1 | dept | 733 | super cost | 2,840 | 2,081,720 |
| **Main operating facilities** | | | | | | |
| Operating suites | | | | | | |
| Theatres | 8 | theatres | 3,974 | HPCG | 2,840 | 11,286,160 |
| **Diagnostic and treatment facilities** | | | | | | |
| Radiology | 1 | dept | 4,384 | HPCG | 2,200 | 9,644,800 |
| Pathology | | | | | | |
| Haematology | 1 | dept | 375 | high cost | 2,680 | 1,005,000 |
| Chemical pathology | 1 | dept | 335 | high cost | 2,680 | 897,800 |
| Histopathology | 1 | dept | 315 | high cost | 2,680 | 844,200 |
| Microbiology | 1 | dept | 445 | high cost | 2,680 | 1,192,600 |
| Shared accommodation | 1 | dept | 585 | high cost | 2,680 | 1,567,800 |
| Pharmacy | | | | | | |
| Assembly | 1 | dept | 218 | high cost | 2,680 | 584,240 |
| Quality control | 1 | dept | 220 | high cost | 2,680 | 589,600 |
| Purchase & distribution | 1 | dept | 627 | high cost | 2,680 | 1,680,360 |
| Out-patients | | Remote | 65 | high cost | 2,680 | 174,200 |
| Radiopharmaceuticals | 1 | dept | 80 | high cost | 2,680 | 214,400 |
| Medium sized hospital | 1 | dept | 494 | high cost | 2,680 | 1,323,920 |
| Aseptic suite | 1 | dept | 80 | high cost | 2,680 | 214,400 |
| Mortuary & post mortem | | | | | | |
| Body viewing | 1 | suite | 40 | high cost | 2,680 | 107,200 |
| Body store | 30 | nr | 160 | high cost | 2,680 | 428,800 |
| Deep freeze | 5 | stores | 12 | high cost | 2,680 | 32,160 |
| PM suite | 1 | nr | 155 | high cost | 2,680 | 415,400 |
| Medical photography | 1 | dept | 130 | * | 2,340 | 304,200 |
| Anaesthetics | 1 | dept | 160 | * | 2,840 | 454,400 |
| Satellite dialysis unit | 19 | stations | 1,035 | HPCG | 2,700 | 2,794,500 |
| Rehabilitation | | | | | | |
| Departmental accommodation | 1 | large unit | 2,549 | low cost | 2,050 | 5,225,450 |
| Physiotherapy | 60 | patients | 2,549 | low cost | 2,050 | 5,225,450 |
| Day surgery | 4 | theatres | 2,653 | HPCG | 2,670 | 7,083,510 |
| Endoscopy | 2 | rooms | 792 | high cost | 2,680 | 2,122,560 |
| **Out-patient services** | | | | | | |
| Out-patients | | | | | | |
| C/E rooms | 36 | nr | 2,204 | HPCG | 2,040 | 4,496,160 |
| Plaster | 1 | room | 59 | HPCG | 2,040 | 120,360 |
| Colposcopy C/E | 1 | room | 31 | HPCG | 2,040 | 63,240 |
| Primary analysis facility | 3 | workstations | 20 | HPCG | 2,040 | 40,800 |
| Oral surgery | 4 | dental chairs | 560 | high cost | 2,680 | 1,500,800 |
| Ophthalmic clinic | 10 | rooms/bays | 581 | low cost | 2,050 | 1,191,050 |
| Dermatology | 1 | dept | 55 | low cost | 2,050 | 112,750 |
| ENT | 3 | consultants | 373 | super cost | 2,840 | 1,059,320 |
| Audiology | 1 | booth | 234 | super cost | 2,840 | 664,560 |
| Maternity clinic | 1 | clinic | | | | |
| Entrance | 1 | nr | 71 | HPCG | 2,470 | 175,370 |
| Ante/post natal clinic | 8 | C/E rooms | 480 | HPCG | 2,470 | 1,185,600 |
| Scanning rooms | 2 | nr | 198 | HPCG | 2,470 | 489,060 |
| Day assessment unit | 1 | C/E rooms | 246 | HPCG | 2,470 | 607,620 |
| Early pregnancy unit | 1 | day unit | 301 | HPCG | 2,470 | 743,470 |
| Children's resource centre | 1 | nr | 322 | HPCG | 2,470 | 795,340 |
| A&E | 50,000 | attendances | 1,903 | HPCG | 2,140 | 4,072,420 |
| Obs ward | 10 | places | 450 | HPCG | 2,470 | 1,111,500 |
| **Administration services** | | | | | | |
| Administration | | | | | | |
| Offices | 225 | workstations | 3,076 | * | 2,050 | 6,305,800 |
| Health records | 15 | workstations | 235 | * | 2,050 | 481,750 |
| Health records library | 750,000 | case notes | 895 | * | 2,050 | 1,834,750 |
| Main entrance | 1 | nr | 353 | * | 2,050 | 723,650 |
| Snack bar | 1 | nr | 90 | * | 2,050 | 184,500 |
| Departmental entrances | 4 | nr | 500 | * | 2,050 | 1,025,000 |
| **Staff facilities** | | | | | | |
| Catering/dining rooms | 300 | meals | 335 | * | 2,340 | 783,900 |
| Servery | 300 | meals | 120 | * | 2,340 | 280,800 |
| Occupational health centre | 1 | centre | 160 | * | 2,050 | 328,000 |
| Staff changing - semi auto | 1,000 | places | 767 | * | 2,050 | 1,572,350 |
| On call accommodation | 7 | rooms | 147 | * | 2,050 | 301,350 |
| **Service facilities** | | | | | | |
| CSSD | 2 | sterilisers | 1,320 | super cost | 2,840 | 3,748,800 |
| Telephone service | | | | | | - |
| Operators suites | 3 | cabinets | 80 | * | 2,050 | 164,000 |
| | | | | | | - |
| Catering | | | | | | |
| CFPU | 1 | dept | 1,600 | * | 2,340 | 3,744,000 |
| End kitchen | 600 | meals | 685 | * | 2,340 | 1,602,900 |
| **Hospital engineering and works services** | | | | | | - |
| Boiler house | 8,800 | KW | Incl | | | |
| Estates department | 400 | beds | Excl | | | |
| External storage | 400 | beds | Excl | | | |
| EMI workshop | 2 | workspaces | Excl | | | |
| | | | | | | - |
| **TOTAL** | | | **63,251** | | | **148,659,580** |

Areas used for illustration purposes and should not be used to cost live schemes; project specific areas should be referred to

| | | |
|---|---|---|
| HPCG cost OB1 line 1 | | 148,659,580 |
| External works - OB3 | 15% | 22,298,937 |
| Equipment - OB1 line 8 | 15% | 22,298,937 |
| | £ | **193,257,454** |
| | £/m2 | 3055.41 |

# Appendix 5 – Circulation space, communication space and engineering space allowances

This appendix provides an estimate of the circulation space, communication space and engineering space allowances that should be applied to the example schedules of accommodation published by DH. Note: example schedules of accommodation published from 2010 onwards will include these allowances.

The circulation space allowances are based on current published figures.

The communication space allowance has been standardised at 10% of NIA. However, this percentage may fluctuate depending on building size, number of storeys etc. The percentage included for communication space must be adjusted accordingly when compiling real schedules of accommodation.

The engineering space allowances for those schedules of accommodation highlighted in red have been calculated using the detailed method outlined in section 3 of this guidance.

As an interim measure, the overall engineering space allowances for all other example schedules of accommodation are based on the nearest match in terms of the properly calculated figures, adjusted to take account of differences in the size of the department and level of engineering complexity. The breakdown for public, clinical and staff space are based on the averages of the properly calculated figures, adjusted to take account of the estimated overall engineering space allowance.

Note: The engineering space allowances in black are estimates only and should be used with caution, particularly those for public, clinical and staff space. In future, as example schedules of accommodation are updated the engineering space allowances for the different types of spaces will be calculated using the detailed method outlined in Chapter 3 of this guidance.

All engineering space allowances should be assessed in the context of specific requirements and adjusted accordingly.

| Example schedules of accommodation for delivery of acute care | Public space | | Staff space | | Clinical space | | Overall space | |
|---|---|---|---|---|---|---|---|---|
| | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance |
| Health Building Note 04-01 – 'Adult in-patient facilities' (48 beds, 83% single rooms) | 37% | 24% | 37% | 14% | 37% | 23% | 37% | 23% |
| Health Building Note 6 Volume 1 – 'Facilities for diagnostic imaging and interventional radiology' (example 2) | 42% | 37% | 42% | 25% | 42% | 36% | 42% | 34% |
| Health Building Note 6 Volume 2 – 'PACS and specialist imaging' | 42% | 30% | 42% | 24% | 42% | 41% | 42% | 37% |
| Health Building Note 6 Volume 3 – 'Extremity and open MRI, magnetic shielding and construction for radiation protection' | 42% | 28% | 42% | 22% | 42% | 37% | 42% | 34% |
| Health Building Note 07-01 – 'Satellite dialysis unit' (18 stations) | 35% | 15% | 35% | 27% | 35% | 34% | 35% | 30.5% |
| Health Building Note 07-02 – 'Main renal unit' | 35% | 26% | 35% | 21% | 35% | 35% | 35% | 32% |

| Example schedules of accommodation for delivery of acute care | Public space | | Staff space | | Clinical space | | Overall space | |
|---|---|---|---|---|---|---|---|---|
| | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance |
| Health Building Note 8 – 'Facilities for rehabilitation services' | 35% | 17% | 35% | 14% | 35% | 23% | 35% | 21% |
| Health Building Note 09-02 – 'Maternity care facilities' (midwife-led unit: 500 births per annum) | 40% | 26% | 40% | 19% | 40% | 34% | 40% | 32% |
| Health Building Note 10-02 – 'Day surgery facilities' (4 operating theatres) | 37% | 25% | 37% | 13% | 37% | 37% | 37% | 35% |
| Health Building Note 12 – 'Out-patients department' (6, 8 and 12 consulting/examination rooms) | 42% | 13% | 42% | 28% | 42% | 32% | 42% | 26% |
| Health Building Note 12-01 Supplement B – 'Oral surgery, orthodontics, restorative dentistry' (5,000 attendances per annum) | 42% | 34% | 42% | 38% | 42% | 40% | 42% | 39% |
| Health Building Note 12 Supplement 3 – 'ENT and audiology clinics, hearing aid centre' | 42% | 22% | 42% | 17% | 42% | 30% | 42% | 27% |
| Health Building Note 12 Supplement 4 – 'Ophthalmology' | 42% | 21% | 42% | 17% | 42% | 29% | 42% | 26% |
| Health Building Note 12-01 Supplement A – 'Sexual and reproductive health clinics' (30,000 attendances per annum) | 42% | 17% | 42% | 41% | 42% | 34% | 28% | 25% |
| Health Building Note 13 – 'Sterile services department' | 35% | 0% | 35% | 21% | 35% | 36% | 35% | 33% |
| Health Building Note 14-01 – 'Pharmacy and radiopharmacy facilities' | 35% | 28% | 35% | 23% | 35% | 38% | 35% | 35% |
| Health Building Note 20 – 'Facilities for mortuary and post-mortem room services' | 35% | 23% | 35% | 18% | 35% | 31% | 35% | 28% |
| Health Building Note 22 – 'Accident and emergency facilities for adults and children' (example 2) | 42% | 18% | 42% | 20% | 42% | 29% | 42% | 25% |
| Health Building Note 23 – 'Hospital accommodation for children and young people' | 35% | 19% | 35% | 15% | 35% | 25% | 35% | 23% |
| Health Building Note 26 Volume 1 – 'Facilities for surgical procedures' (example 1, 8 operating theatres) | N/A | N/A | 35% | 18% | 35% | 48% | 35% | 40% |
| Health Building Note 28 – 'Facilities for cardiac services' | 35% | 24% | 35% | 19% | 35% | 33% | 35% | 30% |
| Health Building Note 35 Part 1 – 'Accommodation for people with mental illness: The acute unit' | 35% | 19% | 35% | 15% | 35% | 25% | 35% | 23% |
| Health Building Note 37 – 'In-patient facilities for older people' | 35% | 19% | 35% | 15% | 35% | 25% | 35% | 23% |
| Health Building Note 52 Volume 2 – 'Endoscopy unit' | 35% | 23% | 35% | 21% | 35% | 35% | 35% | 32% |
| Health Building Note 52 Volume 3 – 'Medical investigation and treatment unit' | 35% | 18% | 35% | 17% | 35% | 29% | 35% | 26% |
| Health Building Note 54 – 'Facilities for cancer services' | 35% | 25% | 35% | 23% | 35% | 38% | 35% | 35% |
| Health Building Note 57 – 'Facilities for critical care' | 35% | 23% | 35% | 21% | 35% | 35% | 35% | 32% |

| Example schedules of accommodation for delivery of care from independent locations | Public space | | Staff space | | Clinical space | | Overall space | |
|---|---|---|---|---|---|---|---|---|
| | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance | Circulation + communication space allowance | Engineering space allowance |
| Health Building Note 35 Part 2 – 'Accommodation for people with mental illness: Treatment and care in the community' | 35% | 21% | 35% | 17% | 35% | 29% | 35% | 26% |
| Health Building Note 44 – 'Accommodation for ambulance services' | 35% | 18% | 35% | 16% | 35% | 27% | 35% | 25% |

The table below shows the average engineering space allowances for the example schedules of accommodation highlighted in red:

| Example schedules of accommodation highlighted in red | Public space | Clinical space | Staff space | Overall space |
|---|---|---|---|---|
| Average engineering space allowance | 21% | 28.3% | 16.7% | 25.8% |

The engineering space allowances for the different types of space can be expressed as a percentage of the overall engineering space allowance. For public spaces this would be: 21/25.8 ×100 = 81.2%.

This calculation provides the following figures:

| Public space | Clinical space | Staff space |
|---|---|---|
| 81.2% | 109.7% | 64.5% |

## Note

For information on the allowances for primary and community care buildings, see Health Building Note 11-01.

These figures have been used to estimate the engineering space allowances for the different types of space where the current published example schedule of accommodation does not show the split between public, clinical and staff space and only an estimation of the overall engineering space allowance is possible.

If an overall engineering space allowance of 30 had been estimated, the engineering space allowance for public space would be calculated as follows: 81.2/100 × 30. This would produce the following figures for the three types of space:

| Spaces | Engineering space allowance |
|---|---|
| Public space | 24.3% |
| Clinical space | 32.9% |
| Staff space | 19.3% |
| Overall space | 30% |

# Appendix 6 – Elemental cost plans

## HBN 04-01 – 'Adult in-patient facilities' (public space)

**HBN 04-01 - 'Adult in-patient facilities' (48 beds, 83% single rooms)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area : **83** m²

| ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **7,200** | **86.46** | **41** | **175.74** | **0.490** | **4.77** |
| 2A Frame | 9,500 | 114.08 | 83 | 115.00 | 1.000 | 6.30 |
| 2B Upper floors | 2,600 | 31.22 | 40 | 65.00 | 0.480 | 1.72 |
| 2C Roof | 8,500 | 102.07 | 50 | 170.00 | 0.600 | 5.63 |
| 2D Stairs | 800 | 10.00 | - | - | - | 0.53 |
| 2E External walls | 11,800 | 141.70 | 43 | 275.00 | 0.520 | 7.82 |
| 2F Windows and external doors | 4,400 | 52.84 | 8 | 550.00 | 0.100 | 2.92 |
| 2G Internal walls and partitions | 12,900 | 154.91 | 237 | 54.30 | - | 8.55 |
| 2H Internal doors | 4,200 | 50.43 | 7 | 651.87 | | 2.78 |
| **2 SUPERSTRUCTURE** | **54,700** | **657.25** | | | | **36.25** |
| 3A Wall finishes | 8,600 | 103.27 | 347 | 24.73 | | 5.70 |
| 3B Floor finishes | 4,600 | 55.24 | 80 | 57.06 | | 3.05 |
| 3C Ceiling finishes | 2,900 | 34.82 | 80 | 36.24 | | 1.92 |
| **3 INTERNAL FINISHES** | **16,100** | **193.33** | | | | **10.67** |
| **4 FITTINGS & FURNISHINGS** | **7,700** | **92.46** | | | | **5.10** |
| 5A Sanitary appliances | **10,200** | **122.48** | - | - | - | 6.76 |
| 5C Disposal installations | **1,200** | **15.00** | - | - | - | 0.80 |
| 5N BWIC | **3,000** | **36.02** | - | - | - | 1.99 |
| 5O Profit and attendances | **1,500** | **18.01** | - | - | - | 0.99 |
| **BUILDING SERVICES** | **15,900** | **191.51** | | | | **10.54** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **7,400** | **89.12** | | | | 4.90 |
| 5E Heat source | **500** | **5.42** | | | | 0.33 |
| 5F Space heating/air treatment | **3,700** | **43.88** | | | | 2.45 |
| 5G Ventilation system | **7,500** | **89.96** | | | | 4.97 |
| 5H Electrical installations | **14,400** | **172.41** | | | | 9.54 |
| 5I Gas installations | **700** | **8.90** | | | | 0.46 |
| 5J Lifts and conveyors | **3,300** | **40.08** | | | | 2.19 |
| 5K Protective installations | **2,100** | **24.82** | | | | 1.39 |
| 5L Communication installations | **5,300** | **64.20** | | | | 3.51 |
| 5M Special installations | **4,400** | **52.31** | | | | 2.92 |
| **M&E SERVICES** | **49,300** | **591.10** | | | | **32.66** |
| **BUILDING & ENGINEERING** | **150,900** | **1,812.11** | | | | **100.00** |
| 7 Preliminaries | **22,600** | **271.39** | | | | 15.00 |
| 8A Design risk | **7,600** | **91.26** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **4,500** | **54.04** | | | | 3.00 |
| **TOTAL** | **34,700** | **416.68** | | | | |
| **TOTAL COST** | **£ 185,600** | **£ 2,228.72 /m²** | | | | |
| Building | £ **124,900** | **£ 1,499.82 /m²** | | | | |
| Engineering | £ **60,700** | **£ 728.90 /m²** | | | | |

## HBN 04-01 – 'Adult in-patient facilities' (clinical space)

**HBN 04-01 - 'Adult in-patient facilities' (48 beds, 83% single rooms)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **2571** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **221,400** | **86.12** | **1260** | **175.74** | **0.490** | **4.63** |
| | 2A Frame | 295,700 | 115.02 | 2,571 | 115.00 | 1.000 | 6.18 |
| | 2B Upper floors | 80,200 | 31.19 | 1,234 | 65.00 | 0.480 | 1.68 |
| | 2C Roof | 262,300 | 102.02 | 1,543 | 170.00 | 0.600 | 5.48 |
| | 2D Stairs | 25,700 | 10.00 | - | - | - | 0.54 |
| | 2E External walls | 367,700 | 143.02 | 1,337 | 275.00 | 0.520 | 7.68 |
| | 2F Windows and external doors | 141,400 | 55.00 | 257 | 550.00 | 0.100 | 2.95 |
| | 2G Internal walls and partitions | 215,600 | 83.86 | 3,414 | 63.13 | - | 4.50 |
| | 2H Internal doors | 141,900 | 55.19 | 206 | 687.22 | | 2.96 |
| **2** | **SUPERSTRUCTURE** | **1,530,500** | **595.30** | | | | **31.97** |
| | 3A Wall finishes | 250,000 | 97.24 | 5,889 | 42.44 | | 5.22 |
| | 3B Floor finishes | 135,100 | 52.55 | 2,474 | 54.61 | | 2.82 |
| | 3C Ceiling finishes | 89,700 | 34.89 | 2,474 | 36.24 | | 1.87 |
| **3** | **INTERNAL FINISHES** | **474,800** | **184.68** | | | | **9.91** |
| **4** | **FITTINGS & FURNISHINGS** | **161,300** | **62.74** | | | | **3.37** |
| | 5A Sanitary appliances | **421,600** | **163.99** | - | - | - | 8.81 |
| | 5C Disposal installations | **38,600** | **15.00** | - | - | - | 0.81 |
| | 5N BWIC | **111,500** | **43.37** | - | - | - | 2.33 |
| | 5O Profit and attendances | **55,800** | **21.70** | - | - | - | 1.17 |
| | **BUILDING SERVICES** | **627,500** | **244.06** | | | | **13.12** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **229,600** | **89.29** | | | | 4.80 |
| | 5E Heat source | **16,700** | **6.49** | | | | 0.35 |
| | 5F Space heating/air treatment | **116,100** | **45.17** | | | | 2.43 |
| | 5G Ventilation system | **210,100** | **81.72** | | | | 4.39 |
| | 5H Electrical installations | **494,200** | **192.22** | | | | 10.33 |
| | 5I Gas installations | **24,100** | **9.38** | | | | 0.50 |
| | 5J Lifts and conveyors | **103,000** | **40.08** | | | | 2.15 |
| | 5K Protective installations | **63,800** | **24.82** | | | | 1.33 |
| | 5L Communication installations | **319,500** | **124.26** | | | | 6.68 |
| | 5M Special installations | **193,600** | **75.31** | | | | 4.04 |
| | **M&E SERVICES** | **1,770,700** | **688.73** | | | | **37.00** |
| | **BUILDING & ENGINEERING** | **4,786,200** | **1,861.63** | | | | **100.00** |
| | 7 Preliminaries | **717,900** | **279.24** | | | | 15.00 |
| | 8A Design risk | **239,300** | **93.08** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **143,600** | **55.86** | | | | 3.00 |
| | **TOTAL** | **1,100,800** | **428.17** | | | | |
| | **TOTAL COST** | **£ 5,887,000** | **£ 2,289.82 /$m^2$** | | | | |
| | Building | £ **3,709,100** | **£ 1,442.70 /$m^2$** | | | | |
| | Engineering | £ **2,177,900** | **£ 847.12 /$m^2$** | | | | |

## HBN 04-01 – 'Adult in-patient facilities' (staff space)

**HBN 04-01 - 'Adult in-patient facilities' (48 beds, 83% single rooms)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area: **135** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **11,600** | **85.88** | **66** | **175.74** | **0.490** | **5.18** |
| 2A Frame | 15,500 | 114.76 | 135 | 115.00 | 1.000 | 6.92 |
| 2B Upper floors | 4,200 | 31.10 | 65 | 65.00 | 0.480 | 1.87 |
| 2C Roof | 13,800 | 102.17 | 81 | 170.00 | 0.600 | 6.16 |
| 2D Stairs | 1,400 | 10.00 | - | - | - | 0.62 |
| 2E External walls | 19,300 | 142.89 | 70 | 275.00 | 0.520 | 8.61 |
| 2F Windows and external doors | 7,700 | 57.01 | 14 | 550.00 | 0.100 | 3.44 |
| 2G Internal walls and partitions | 8,100 | 59.97 | 149 | 54.26 | - | 3.61 |
| 2H Internal doors | 6,600 | 48.86 | 10 | 631.10 | | 2.95 |
| **2 SUPERSTRUCTURE** | **76,600** | **566.76** | | | | **34.18** |
| 3A Wall finishes | 5,700 | 42.20 | 291 | 19.72 | | 2.54 |
| 3B Floor finishes | 6,800 | 50.35 | 130 | 51.99 | | 3.03 |
| 3C Ceiling finishes | 4,700 | 34.80 | 130 | 36.24 | | 2.10 |
| **3 INTERNAL FINISHES** | **17,200** | **127.35** | | | | **7.67** |
| **4 FITTINGS & FURNISHINGS** | **16,400** | **121.42** | | | | **7.32** |
| 5A Sanitary appliances | **27,900** | **206.56** | - | - | - | 12.45 |
| 5C Disposal installations | **2,000** | **15.00** | - | - | - | 0.89 |
| 5N BWIC | **4,800** | **35.54** | - | - | - | 2.14 |
| 5O Profit and attendances | **2,400** | **17.77** | - | - | - | 1.07 |
| **BUILDING SERVICES** | **37,100** | **274.87** | | | | **16.55** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **6,700** | **49.42** | | | | 2.99 |
| 5E Heat source | **500** | **3.81** | | | | 0.22 |
| 5F Space heating/air treatment | **3,400** | **24.84** | | | | 1.52 |
| 5G Ventilation system | **5,600** | **41.41** | | | | 2.50 |
| 5H Electrical installations | **23,300** | **172.41** | | | | 10.40 |
| 5I Gas installations | **1,100** | **8.18** | | | | 0.49 |
| 5J Lifts and conveyors | **5,400** | **40.08** | | | | 2.41 |
| 5K Protective installations | **3,400** | **24.82** | | | | 1.52 |
| 5L Communication installations | **8,700** | **64.20** | | | | 3.88 |
| 5M Special installations | **7,100** | **52.31** | | | | 3.17 |
| **M&E SERVICES** | **65,200** | **481.47** | | | | **29.10** |
| **BUILDING & ENGINEERING** | **224,100** | **1,657.75** | | | | **100.00** |
| 7 Preliminaries | **33,600** | **248.76** | | | | 15.00 |
| 8A Design risk | **11,200** | **82.92** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **6,800** | **50.35** | | | | 3.00 |
| **TOTAL** | **275,700** | **2,041.19** | | | | |

| | | | | |
|---|---|---|---|---|
| **TOTAL COST** | **£** | **275,700** | **£ 2,041.20** | **/$m^2$** |
| Building | £ | **195,400** | **£ 1,446.68** | **/$m^2$** |
| Engineering | £ | **80,300** | **£ 594.52** | **/$m^2$** |

## HBN 04-01 – 'Adult in-patient facilities' (overall space)

**HBN 04-01 - 'Adult in-patient facilities' (48 beds, 83% single rooms)** **Jul-10**

Index level : 480 MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **2789** m²

| ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **240,200** | **86.12** | **1367** | **175.74** | **0.490** | **4.66** |
| 2A Frame | 320,700 | 114.98 | 2,789 | 115.00 | 1.000 | 6.22 |
| 2B Upper floors | 87,000 | 31.19 | 1,339 | 65.00 | 0.480 | 1.69 |
| 2C Roof | 284,600 | 102.03 | 1,674 | 170.00 | 0.600 | 5.52 |
| 2D Stairs | 27,900 | 10.00 | - | - | - | 0.54 |
| 2E External walls | 398,800 | 142.98 | 1,450 | 275.00 | 0.520 | 7.73 |
| 2F Windows and external doors | 153,500 | 55.03 | 279 | 550.00 | 0.100 | 2.98 |
| 2G Internal walls and partitions | 236,500 | 84.79 | 3,799 | 62.27 | - | 4.58 |
| 2H Internal doors | 152,700 | 54.75 | 223 | 683.56 | | 2.96 |
| **2 SUPERSTRUCTURE** | **1,661,700** | **595.75** | | | | **32.22** |
| 3A Wall finishes | 264,400 | 94.79 | 6,528 | 40.50 | | 5.12 |
| 3B Floor finishes | 146,500 | 52.52 | 2,685 | 54.56 | | 2.84 |
| 3C Ceiling finishes | 97,300 | 34.88 | 2,685 | 36.24 | | 1.89 |
| **3 INTERNAL FINISHES** | **508,200** | **182.19** | | | | **9.85** |
| **4 FITTINGS & FURNISHINGS** | **185,400** | **66.47** | | | | **3.59** |
| 5A Sanitary appliances | **459,700** | **164.81** | - | - | | 8.91 |
| 5C Disposal installations | **41,800** | **15.00** | - | - | | 0.81 |
| 5N BWIC | **119,300** | **42.77** | - | - | | 2.31 |
| 5O Profit and attendances | **59,700** | **21.40** | - | - | | 1.16 |
| **Building Services** | **680,500** | **243.98** | | | | **13.19** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **243,400** | **87.25** | | | | 4.72 |
| 5E Heat source | **17,600** | **6.32** | | | | 0.34 |
| 5F Space heating/air treatment | **123,000** | **44.09** | | | | 2.38 |
| 5G Ventilation system | **222,900** | **79.90** | | | | 4.32 |
| 5H Electrical installations | **531,700** | **190.62** | | | | 10.31 |
| 5I Gas installations | **25,900** | **9.30** | | | | 0.50 |
| 5J Lifts and conveyors | **111,800** | **40.08** | | | | 2.17 |
| 5K Protective installations | **69,200** | **24.82** | | | | 1.34 |
| 5L Communication installations | **333,100** | **119.41** | | | | 6.46 |
| 5M Special installations | **204,900** | **73.45** | | | | 3.97 |
| **5 M&E SERVICES** | **1,883,500** | **675.23** | | | | **36.51** |
| **BUILDING & ENGINEERING** | **5,159,500** | **1,849.74** | | | | **100.00** |
| 7 Preliminaries | **773,900** | **277.45** | | | | 15.00 |
| 8A Design risk | **258,000** | **92.50** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **154,800** | **55.50** | | | | 3.00 |
| **TOTAL** | **1,186,700** | **425.45** | | | | |
| **TOTAL COST** | **£ 6,346,200** | **£ 2,275.21 /m²** | | | | |
| Building | £ **4,029,500** | **£ 1,444.64 /m²** | | | | |
| Engineering | £ **2,316,700** | **£ 830.57 /m²** | | | | |

## HBN 6 Volume 1 – 'Facilities for diagnostic imaging and interventional radiology' (public space)

**HBN 6 Volume 1 - 'Facilities for diagnostic imaging and interventional radiology' (example 2)** **Aug-10**

Index level : **480** MIPS(FP) **ELEMENTAL COST MODEL (Public space)** Gross internal area : **375** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **32,300** | **86.14** | **184** | **175.74** | **0.490** | **5.17** |
| 2A Frame | 43,100 | 114.94 | 375 | 115.00 | 1.000 | 6.90 |
| 2B Upper floors | 11,700 | 31.20 | 180 | 65.00 | 0.480 | 1.87 |
| 2C Roof | 38,300 | 102.14 | 225 | 170.00 | 0.600 | 6.13 |
| 2D Stairs | 3,000 | 8.00 | 0 | 152.48 | | 0.48 |
| 2E External walls | 53,600 | 142.94 | 195 | 275.00 | 0.520 | 8.58 |
| 2F Windows and external doors | 20,400 | 54.40 | 37 | 550.00 | 0.100 | 3.27 |
| 2G Internal walls and partitions | 32,300 | 86.14 | 594 | 54.37 | | 5.17 |
| 2H Internal doors | 23,100 | 61.60 | 36 | 646.81 | | 3.70 |
| **2 SUPERSTRUCTURE** | **225,500** | **601.36** | | | | **36.10** |
| 3A Wall finishes | 31,000 | 82.67 | 1,123 | 27.63 | | 4.96 |
| 3B Floor finishes | 16,300 | 43.47 | 358 | 45.55 | | 2.61 |
| 3C Ceiling finishes | 13,000 | 34.67 | 358 | 36.24 | | 2.08 |
| **3 INTERNAL FINISHES** | **60,300** | **160.81** | | | | **9.65** |
| **4 FITTINGS & FURNISHINGS** | **7,900** | **21.07** | | | | **1.26** |
| 5A Sanitary appliances | **12,700** | **33.87** | - | - | - | 2.03 |
| 5C Disposal installations | **5,600** | **15.00** | - | - | - | 0.90 |
| 5N BWIC | **4,400** | **11.73** | - | - | - | 0.70 |
| 5O Profit and attendances | **2,200** | **5.87** | - | - | - | 0.35 |
| **BUILDING SERVICES** | **24,900** | **66.47** | | | | **3.98** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **32,700** | **87.28** | | | | 5.24 |
| 5E Heat source | **3,300** | **8.93** | | | | 0.53 |
| 5F Space heating/air treatment | **24,800** | **66.03** | | | | 3.97 |
| 5G Ventilation system | **79,600** | **212.23** | | | | 12.74 |
| 5H Electrical installations | **62,400** | **166.42** | | | | 9.99 |
| 5I Gas installations | **3,800** | **10.05** | | | | 0.61 |
| 5J Lifts and conveyors | **14,100** | **37.51** | | | | 2.26 |
| 5K Protective installations | **9,300** | **24.82** | | | | 1.49 |
| 5L Communication installations | **24,100** | **64.20** | | | | 3.86 |
| 5M Special installations | **19,600** | **52.31** | | | | 3.14 |
| **M&E SERVICES** | **273,700** | **729.79** | | | | **43.83** |
| **BUILDING & ENGINEERING** | **624,600** | **1,665.64** | | | | **100.00** |
| 7 Preliminaries | **93,700** | **249.89** | | | | 15.00 |
| 8A Design risk | **31,200** | **83.21** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **18,700** | **49.87** | | | | 3.00 |
| **TOTAL** | **143,600** | **382.96** | | | | |
| **TOTAL COST** | **£ 768,200** | **£ 2,048.69 /$m^2$** | | | | |
| Building | £ **431,500** | **£ 1,150.76 /$m^2$** | | | | |
| Engineering | £ **336,700** | **£ 897.94 /$m^2$** | | | | |

## HBN 6 Volume 1 – 'Facilities for diagnostic imaging and interventional radiology' (clinical space)

**HBN 6 Volume 1 - 'Facilities for diagnostic imaging and interventional radiology' (example 2)** **Aug-10**

Index level : 480 MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : 3293 m²

| ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **283,600** | **86.12** | **1614** | **175.74** | **0.490** | **4.57** |
| 2A Frame | 378,700 | 115.00 | 3,293 | 115.00 | 1.000 | 6.10 |
| 2B Upper floors | 102,800 | 31.22 | 1,581 | 65.00 | 0.480 | 1.66 |
| 2C Roof | 335,900 | 102.00 | 1,976 | 170.00 | 0.600 | 5.41 |
| 2D Stairs | 26,300 | 8.00 | 0 | 152.48 | | 0.42 |
| 2E External walls | 470,800 | 142.96 | 1,712 | 275.00 | 0.520 | 7.58 |
| 2F Windows and external doors | 181,000 | 54.96 | 329 | 550.00 | 0.100 | 2.92 |
| 2G Internal walls and partitions | 220,800 | 67.05 | 3,948 | 55.92 | | 3.56 |
| 2H Internal doors | 132,800 | 40.33 | 202 | 658.84 | | 2.14 |
| **2 SUPERSTRUCTURE** | **1,849,100** | **561.52** | | | | **29.79** |
| 3A Wall finishes | 130,100 | 39.51 | 3,607 | 36.07 | | 2.10 |
| 3B Floor finishes | 180,500 | 54.81 | 3,148 | 57.34 | | 2.91 |
| 3C Ceiling finishes | 114,100 | 34.65 | 3,148 | 36.24 | | 1.84 |
| **3 INTERNAL FINISHES** | **424,700** | **128.97** | | | | **6.85** |
| **4 FITTINGS & FURNISHINGS** | **157,900** | **47.95** | | | | **2.54** |
| 5A Sanitary appliances | **7,200** | **2.19** | - | - | - | 0.12 |
| 5C Disposal installations | **49,400** | **15.00** | - | - | - | 0.80 |
| 5N BWIC | **51,200** | **15.55** | - | - | - | 0.82 |
| 5O Profit and attendances | **25,600** | **7.77** | - | - | - | 0.41 |
| **BUILDING SERVICES** | **133,400** | **40.51** | | | | **2.15** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **113,700** | **34.53** | | | | 1.83 |
| 5E Heat source | **25,400** | **7.72** | | | | 0.41 |
| 5F Space heating/air treatment | **210,600** | **63.94** | | | | 3.39 |
| 5G Ventilation system | **745,600** | **226.43** | | | | 12.01 |
| 5H Electrical installations | **865,700** | **262.87** | | | | 13.94 |
| 5I Gas installations | **31,300** | **9.51** | | | | 0.50 |
| 5J Lifts and conveyors | **123,500** | **37.51** | | | | 1.99 |
| 5K Protective installations | **81,700** | **24.82** | | | | 1.32 |
| 5L Communication installations | **211,400** | **64.20** | | | | 3.41 |
| 5M Special installations | **950,800** | **288.74** | | | | 15.31 |
| **M&E SERVICES** | **3,359,700** | **1,020.25** | | | | **54.11** |
| **BUILDING & ENGINEERING** | **6,208,400** | **1,885.32** | | | | **100.00** |
| 7 Preliminaries | **931,300** | **282.80** | | | | 15.00 |
| 8A Design risk | **310,400** | **94.26** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **186,300** | **56.57** | | | | 3.00 |
| **TOTAL** | **1,428,000** | **433.63** | | | | |
| **TOTAL COST** | **£ 7,636,400** | **£ 2,318.90 /m²** | | | | |
| Building | £ **3,503,900** | **£ 1,064.01 /m²** | | | | |
| Engineering | £ **4,132,500** | **£ 1,254.89 /m²** | | | | |

## HBN 6 Volume 1 – 'Facilities for diagnostic imaging and interventional radiology' (staff space)

**HBN 6 Volume 1 - 'Facilities for diagnostic imaging and interventional radiology' (example 2)** **Aug-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : **845** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **72,800** | **86.18** | **414** | **175.74** | **0.490** | **5.87** |
| | 2A Frame | 97,200 | 115.06 | 845 | 115.00 | 1.000 | 7.83 |
| | 2B Upper floors | 26,300 | 31.13 | 405 | 65.00 | 0.480 | 2.12 |
| | 2C Roof | 86,200 | 102.04 | 507 | 170.00 | 0.600 | 6.94 |
| | 2D Stairs | 6,800 | 8.00 | 0 | 152.48 | | 0.55 |
| | 2E External walls | 120,700 | 142.88 | 439 | 275.00 | 0.520 | 9.72 |
| | 2F Windows and external doors | 46,200 | 54.69 | 84 | 550.00 | 0.100 | 3.72 |
| | 2G Internal walls and partitions | 64,500 | 76.35 | 1,186 | 54.33 | | 5.20 |
| | 2H Internal doors | 36,100 | 42.73 | 55 | 650.97 | | 2.91 |
| **2** | **SUPERSTRUCTURE** | **484,000** | **572.88** | | | | **38.99** |
| | 3A Wall finishes | 67,100 | 79.43 | 2,487 | 26.98 | | 5.41 |
| | 3B Floor finishes | 35,600 | 42.14 | 811 | 43.94 | | 2.87 |
| | 3C Ceiling finishes | 29,400 | 34.80 | 811 | 36.24 | | 2.37 |
| **3** | **INTERNAL FINISHES** | **132,100** | **156.37** | | | | **10.65** |
| **4** | **FITTINGS & FURNISHINGS** | **32,400** | **38.35** | | | | **2.61** |
| | 5A Sanitary appliances | - | - | - | - | - | 0.00 |
| | 5C Disposal installations | **12,700** | **15.00** | - | - | - | 1.02 |
| | 5N BWIC | **7,600** | **9.00** | - | - | - | 0.61 |
| | 5O Profit and attendances | **3,800** | **4.50** | - | - | - | 0.31 |
| | **BUILDING SERVICES** | **24,100** | **28.50** | | | | **1.94** |
| | 5B Services equipment | - | - | | | | 0.00 |
| | 5D Water installations | **42,700** | **50.60** | | | | 3.44 |
| | 5E Heat source | **5,400** | **6.39** | | | | 0.44 |
| | 5F Space heating/air treatment | **39,700** | **46.97** | | | | 3.20 |
| | 5G Ventilation system | **108,800** | **128.76** | | | | 8.77 |
| | 5H Electrical installations | **140,600** | **166.42** | | | | 11.33 |
| | 5I Gas installations | **7,500** | **8.91** | | | | 0.60 |
| | 5J Lifts and conveyors | **31,700** | **37.51** | | | | 2.55 |
| | 5K Protective installations | **21,000** | **24.82** | | | | 1.69 |
| | 5L Communication installations | **54,200** | **64.20** | | | | 4.37 |
| | 5M Special installations | **44,200** | **52.31** | | | | 3.56 |
| | **M&E SERVICES** | **495,800** | **586.90** | | | | **39.95** |
| | **BUILDING & ENGINEERING** | **1,241,200** | **1,469.18** | | | | **100.00** |
| | 7 Preliminaries | **186,200** | **220.42** | | | | 15.00 |
| | 8A Design risk | **62,100** | **73.51** | | | | 5.00 |
| | 8B Employers variation risk | - | - | | | | 0.00 |
| | 8C BREEAM allowance | **37,300** | **44.15** | | | | 3.00 |
| | **TOTAL** | **285,600** | **338.08** | | | | |
| | **TOTAL COST** | **£ 1,526,800** | **£ 1,807.38** /$m^2$ | | | | |
| | Building | £ **916,900** | **£ 1,085.40** /$m^2$ | | | | |
| | Engineering | £ **609,900** | **£ 721.98** /$m^2$ | | | | |

## HBN 6 Volume 1 – 'Facilities for diagnostic imaging and interventional radiology' (overall space)

**HBN 6 Volume 1 - 'Facilities for diagnostic imaging and interventional radiology' (example 2)** **Aug-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **4519** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **389,100** | **86.11** | **2214** | **175.74** | **0.490** | **4.82** |
| | 2A Frame | 519,700 | 115.01 | 4,519 | 115.00 | 1.000 | 6.44 |
| | 2B Upper floors | 141,000 | 31.20 | 2,169 | 65.00 | 0.480 | 1.75 |
| | 2C Roof | 460,900 | 102.00 | 2,711 | 170.00 | 0.600 | 5.71 |
| | 2D Stairs | 36,200 | 8.00 | 0 | 152.48 | | 0.45 |
| | 2E External walls | 646,300 | 143.02 | 2,350 | 275.00 | 0.520 | 8.01 |
| | 2F Windows and external doors | 248,600 | 55.01 | 452 | 550.00 | 0.100 | 3.08 |
| | 2G Internal walls and partitions | 319,000 | 70.59 | 5,755 | 55.44 | | 3.95 |
| | 2H Internal doors | 193,300 | 42.78 | 295 | 655.75 | | 2.40 |
| **2** | **SUPERSTRUCTURE** | **2,565,000** | **567.61** | | | | **31.79** |
| | 3A Wall finishes | 230,200 | 50.94 | 7,254 | 31.74 | | 2.85 |
| | 3B Floor finishes | 232,400 | 51.43 | 4,324 | 53.75 | | 2.88 |
| | 3C Ceiling finishes | 156,700 | 34.68 | 4,324 | 36.24 | | 1.94 |
| **3** | **INTERNAL FINISHES** | **619,300** | **137.05** | | | | **7.67** |
| **4** | **FITTINGS & FURNISHINGS** | **198,400** | **43.91** | | | | **2.46** |
| | 5A Sanitary appliances | **19,800** | **4.38** | - | - | - | 0.25 |
| | 5C Disposal installations | **67,800** | **15.00** | - | - | - | 0.84 |
| | 5N BWIC | **63,100** | **13.96** | - | - | - | 0.78 |
| | 5O Profit and attendances | **31,600** | **6.99** | - | - | - | 0.39 |
| | **BUILDING SERVICES** | **182,300** | **40.33** | | | | **2.26** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **189,800** | **42.01** | | | | 2.35 |
| | 5E Heat source | **34,100** | **7.55** | | | | 0.42 |
| | 5F Space heating/air treatment | **274,600** | **60.76** | | | | 3.40 |
| | 5G Ventilation system | **930,900** | **206.00** | | | | 11.53 |
| | 5H Electrical installations | **1,066,200** | **235.95** | | | | 13.21 |
| | 5I Gas installations | **42,600** | **9.44** | | | | 0.53 |
| | 5J Lifts and conveyors | **169,500** | **37.51** | | | | 2.10 |
| | 5K Protective installations | **112,100** | **24.82** | | | | 1.39 |
| | 5L Communication installations | **290,100** | **64.20** | | | | 3.59 |
| | 5M Special installations | **1,006,600** | **222.76** | | | | 12.47 |
| | **M&E SERVICES** | **4,116,500** | **911.01** | | | | **50.99** |
| | **BUILDING & ENGINEERING** | **8,070,600** | **1,786.02** | | | | **100.00** |
| | 7 Preliminaries | **1,210,600** | **267.90** | | | | 15.00 |
| | 8A Design risk | **403,500** | **89.29** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **242,100** | **53.58** | | | | 3.00 |
| | **TOTAL** | **1,856,200** | **410.77** | | | | |
| | **TOTAL COST** | **£ 9,926,800** | **£ 2,196.78 /$m^2$** | | | | |
| | Building | £ **4,863,500** | **£ 1,076.28 /$m^2$** | | | | |
| | Engineering | £ **5,063,300** | **£ 1,120.50 /$m^2$** | | | | |

## HBN 07-01 – 'Satellite dialysis unit' (public space)

**HBN 07-01 - 'Satellite dialysis unit' (18 stations)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area : **139** m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **12,000** | **86.56** | **68** | **175.74** | **0.490** | **6.6** |
| | 2A Frame | 16,000 | 115.41 | 139 | 115.00 | 1.000 | 8.80 |
| | 2B Upper floors | 4,400 | 31.74 | 67 | 65.00 | 0.480 | 2.42 |
| | 2C Roof | 14,100 | 101.71 | 83 | 170.00 | 0.600 | 7.75 |
| ### | 2D Stairs | 2,800 | 20.00 | - | - | - | 1.54 |
| | 2E External walls | 19,800 | 142.82 | 72 | 275.00 | 0.520 | 10.89 |
| | 2F Windows and external doors | 7,700 | 55.54 | 14 | 550.00 | 0.100 | 4.23 |
| | 2G Internal walls and partitions | 8,700 | 62.75 | 145 | 60.27 | - | 4.78 |
| | 2H Internal doors | 5,500 | 39.67 | 9 | 633.59 | | 3.02 |
| **2** | **SUPERSTRUCTURE** | **79,000** | **569.64** | | | | **43.43** |
| | 3A Wall finishes | 7,500 | 54.10 | 281 | 26.77 | | 4.12 |
| | 3B Floor finishes | 4,800 | 34.62 | 126 | 38.25 | | 2.64 |
| | 3C Ceiling finishes | 4,600 | 33.18 | 126 | 36.24 | | 2.53 |
| **3** | **INTERNAL FINISHES** | **16,900** | **121.90** | | | | **9.29** |
| **4** | **FITTINGS & FURNISHINGS** | **2,500** | **18.03** | | | | **1.37** |
| | 5A Sanitary appliances | **-** | **-** | - | - | - | 0.00 |
| | 5C Disposal installations | **2,100** | **15.00** | - | - | - | 1.15 |
| | 5N BWIC | **3,300** | **23.80** | - | - | - | 1.81 |
| | 5O Profit and attendances | **1,700** | **12.26** | - | - | - | 0.93 |
| | **BUILDING SERVICES** | **7,100** | **51.06** | | | | **3.89** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **2,000** | **14.50** | | | | 1.10 |
| | 5E Heat source | **500** | **3.50** | | | | 0.27 |
| | 5F Space heating/air treatment | **4,300** | **30.72** | | | | 2.36 |
| | 5G Ventilation system | **7,600** | **55.07** | | | | 4.18 |
| | 5H Electrical installations | **23,900** | **172.07** | | | | 13.14 |
| | 5I Gas Installations | **1,100** | **7.82** | | | | 0.60 |
| | 5J Lifts and conveyors | **5,400** | **38.76** | | | | 2.97 |
| | 5K Protective installations | **3,400** | **24.82** | | | | 1.87 |
| | 5L Communication installations | **8,900** | **64.20** | | | | 4.89 |
| | 5M Special installations | **7,300** | **52.31** | | | | 4.01 |
| | **M&E SERVICES** | **64,400** | **463.76** | | | | **35.39** |
| | **BUILDING & ENGINEERING** | **181,900** | **1,310.95** | | | | **100.00** |
| | 7 Preliminaries | **27,300** | **196.92** | | | | 15.00 |
| | 8A Design risk | **9,100** | **65.64** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **5,400** | **38.95** | | | | 3.00 |
| | **TOTAL** | **41,800** | **301.51** | | | | |
| | **TOTAL COST** | **£ 223,700** | **£ 1,613.60** /m² | | | | |
| | Building | £ **144,500** | **£ 1,042.31** /m² | | | | |
| | Engineering | £ **79,200** | **£ 571.29** /m² | | | | |

## HBN 07-01 – 'Satellite dialysis unit' (clinical space)

**HBN 07-01 - 'Satellite dialysis unit' (18 stations)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **720** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| 1 | **SUBSTRUCTURE** | **62,000** | **86.08** | **353** | **175.74** | **0.490** | **3.51** |
| | 2A Frame | 82,800 | 114.96 | 720 | 115.00 | 1.000 | 4.69 |
| | 2B Upper floors | 22,500 | 31.24 | 346 | 65.00 | 0.480 | 1.27 |
| | 2C Roof | 73,400 | 101.91 | 432 | 170.00 | 0.600 | 4.15 |
| ### | 2D Stairs | 14,400 | 20.00 | - | - | - | 0.81 |
| | 2E External walls | 103,100 | 143.14 | 375 | 275.00 | 0.520 | 5.83 |
| | 2F Windows and external doors | 39,600 | 54.98 | 72 | 550.00 | 0.100 | 2.24 |
| | 2G Internal walls and partitions | 145,100 | 201.45 | 1,724 | 84.17 | - | 8.21 |
| | 2H Internal doors | 49,500 | 68.72 | 78 | 634.54 | | 2.80 |
| 2 | **SUPERSTRUCTURE** | **530,400** | **736.40** | | | | **30.00** |
| | 3A Wall finishes | 81,100 | 112.60 | 2,220 | 36.54 | | 4.59 |
| | 3B Floor finishes | 47,900 | 66.50 | 931 | 51.44 | | 2.71 |
| | 3C Ceiling finishes | 33,700 | 46.79 | 931 | 36.24 | | 1.91 |
| 3 | **INTERNAL FINISHES** | **162,700** | **225.89** | | | | **9.21** |
| 4 | **FITTINGS & FURNISHINGS** | **44,500** | **61.78** | | | | **2.52** |
| | 5A Sanitary appliances | **122,000** | **169.38** | - | - | - | 6.90 |
| | 5C Disposal installations | **10,800** | **15.00** | - | - | - | 0.61 |
| | 5N BWIC | **45,000** | **62.48** | - | - | - | 2.55 |
| | 5O Profit and attendances | **22,500** | **31.24** | - | - | - | 1.27 |
| | **BUILDING SERVICES** | **200,300** | **278.10** | | | | **11.33** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **306,700** | **425.84** | | | | 17.36 |
| | 5E Heat source | **4,200** | **5.87** | | | | 0.24 |
| | 5F Space heating/air treatment | **35,300** | **49.07** | | | | 2.00 |
| | 5G Ventilation system | **81,600** | **113.34** | | | | 4.62 |
| | 5H Electrical installations | **186,800** | **259.40** | | | | 10.57 |
| | 5I Gas installations | **6,400** | **8.88** | | | | 0.36 |
| | 5J Lifts and conveyors | **27,900** | **38.76** | | | | 1.58 |
| | 5K Protective installations | **17,900** | **24.82** | | | | 1.01 |
| | 5L Communication installations | **46,200** | **64.20** | | | | 2.61 |
| | 5M Special installations | **54,200** | **75.20** | | | | 3.07 |
| | **M&E SERVICES** | **767,200** | **1,065.38** | | | | **43.42** |
| | **BUILDING & ENGINEERING** | **1,767,100** | **2,453.63** | | | | **100.00** |
| | 7 Preliminaries | **265,100** | **368.06** | | | | 15.00 |
| | 8A Design risk | **88,400** | **122.73** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **53,000** | **73.58** | | | | 3.00 |
| | **TOTAL** | **406,500** | **564.38** | | | | |
| | **TOTAL COST** | **£ 2,173,600** | **£ 3,017.79** /$m^2$ | | | | |
| | Building | £ **1,229,900** | £ **1,707.57** /$m^2$ | | | | |
| | Engineering | £ **943,700** | £ **1,310.22** /$m^2$ | | | | |

## HBN 07-01 – 'Satellite dialysis unit' (staff space)

**HBN 07-01 - 'Satellite dialysis unit' (18 stations)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : **176** m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| 1 | **SUBSTRUCTURE** | **15,100** | **85.76** | **86** | **175.74** | **0.490** | **4.72** |
| | 2A Frame | 20,200 | 114.72 | 176 | 115.00 | 1.000 | 6.31 |
| | 2B Upper floors | 5,500 | 31.24 | 85 | 65.00 | 0.480 | 1.72 |
| | 2C Roof | 18,000 | 102.23 | 106 | 170.00 | 0.600 | 5.63 |
| ### | 2D Stairs | 3,500 | 20.00 | - | - | - | 1.09 |
| | 2E External walls | 25,300 | 143.68 | 92 | 275.00 | 0.520 | 7.91 |
| | 2F Windows and external doors | 9,900 | 56.22 | 18 | 550.00 | 0.100 | 3.09 |
| | 2G Internal walls and partitions | 15,300 | 86.89 | 281 | 54.31 | - | 4.78 |
| | 2H Internal doors | 9,700 | 55.09 | 15 | 644.73 | | 3.03 |
| 2 | **SUPERSTRUCTURE** | **107,400** | **610.07** | | | | **33.56** |
| | 3A Wall finishes | 9,100 | 51.68 | 477 | 19.10 | | 2.84 |
| | 3B Floor finishes | 8,000 | 45.43 | 172 | 46.50 | | 2.50 |
| | 3C Ceiling finishes | 6,200 | 35.21 | 172 | 36.24 | | 1.94 |
| 3 | **INTERNAL FINISHES** | **23,300** | **132.32** | | | | **7.28** |
| 4 | **FITTINGS & FURNISHINGS** | **11,200** | **63.61** | | | | **3.50** |
| | 5A Sanitary appliances | **35,000** | **198.77** | - | - | - | 10.94 |
| | 5C Disposal installations | **2,600** | **15.00** | - | - | - | 0.81 |
| | 5N BWIC | **7,600** | **43.16** | - | - | - | 2.38 |
| | 5O Profit and attendances | **3,800** | **21.58** | - | - | - | 1.19 |
| | **BUILDING SERVICES** | **49,000** | **278.51** | | | | **15.32** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **29,500** | **167.29** | | | | 9.22 |
| | 5E Heat source | **1,000** | **5.72** | | | | 0.31 |
| | 5F Space heating/air treatment | **8,000** | **45.54** | | | | 2.50 |
| | 5G Ventilation system | **11,800** | **67.01** | | | | 3.69 |
| | 5H Electrical installations | **30,300** | **172.07** | | | | 9.47 |
| | 5I Gas installations | **1,600** | **8.82** | | | | 0.50 |
| | 5J Lifts and conveyors | **6,800** | **38.76** | | | | 2.13 |
| | 5K Protective installations | **4,400** | **24.82** | | | | 1.38 |
| | 5L Communication installations | **11,300** | **64.20** | | | | 3.53 |
| | 5M Special installations | **9,200** | **52.31** | | | | 2.88 |
| | **M&E SERVICES** | **113,900** | **646.53** | | | | **35.61** |
| | **BUILDING & ENGINEERING** | **319,900** | **1,816.80** | | | | **100.00** |
| | 7 Preliminaries | **48,000** | **272.60** | | | | 15.00 |
| | 8A Design risk | **16,000** | **90.87** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **9,600** | **54.52** | | | | 3.00 |
| | **TOTAL** | **73,600** | **417.99** | | | | |
| | **TOTAL COST** | **£ 393,500** | **£ 2,234.75 /m²** | | | | |
| | Building | £ **253,400** | **£ 1,439.10 /m²** | | | | |
| | Engineering | £ **140,100** | **£ 795.65 /m²** | | | | |

## HBN 07-01 – 'Satellite dialysis unit' (overall space)

**HBN 07-01 - 'Satellite dialysis unit' (18 stations)** **Jul-10**

Index level : **480** MIPS(FP) **ELEMENTAL COST MODEL (Overall space)** Gross internal area : **1035** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **89,100** | **86.09** | **507** | **175.74** | **0.490** | **4.15** |
| 2A Frame | 119,000 | 114.98 | 1,035 | 115.00 | 1.000 | 5.54 |
| 2B Upper floors | 32,300 | 31.21 | 497 | 65.00 | 0.480 | 1.50 |
| 2C Roof | 105,600 | 102.03 | 621 | 170.00 | 0.600 | 4.92 |
| 2D Stairs | 20,700 | 20.00 | - | - | - | 0.96 |
| 2E External walls | 148,000 | 143.00 | 538 | 275.00 | 0.520 | 6.89 |
| 2F Windows and external doors | 56,700 | 54.78 | 103 | 550.00 | 0.100 | 2.64 |
| 2G Internal walls and partitions | 135,900 | 131.31 | 1,603 | 84.80 | - | 6.33 |
| 2H Internal doors | 51,100 | 49.37 | 80 | 640.06 | | 2.38 |
| **2 SUPERSTRUCTURE** | **669,300** | **646.68** | | | | **31.16** |
| 3A Wall finishes | 89,400 | 86.38 | 2,430 | 36.77 | | 4.16 |
| 3B Floor finishes | 53,100 | 51.31 | 1,031 | 51.49 | | 2.47 |
| 3C Ceiling finishes | 37,400 | 36.14 | 1,031 | 36.24 | | 1.74 |
| **3 INTERNAL FINISHES** | **179,900** | **173.83** | | | | **8.37** |
| **4 FITTINGS & FURNISHINGS** | **44,500** | **43.00** | | | | **2.07** |
| 5A Sanitary appliances | **122,000** | **117.88** | - | - | - | 5.68 |
| 5C Disposal installations | **15,500** | **15.00** | - | - | - | 0.72 |
| 5N BWIC | **54,100** | **52.27** | - | - | - | 2.52 |
| 5O Profit and attendances | **27,100** | **26.18** | - | - | - | 1.26 |
| **BUILDING SERVICES** | **218,700** | **211.33** | | | | **10.18** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **338,200** | **326.76** | | | | 15.75 |
| 5E Heat source | **5,700** | **5.53** | | | | 0.27 |
| 5F Space heating/air treatment | **47,600** | **46.01** | | | | 2.22 |
| 5G Ventilation system | **101,100** | **97.65** | | | | 4.71 |
| 5H Electrical installations | **241,000** | **232.84** | | | | 11.23 |
| 5I Gas installations | **9,000** | **8.73** | | | | 0.42 |
| 5J Lifts and conveyors | **40,100** | **38.76** | | | | 1.87 |
| 5K Protective installations | **25,700** | **24.82** | | | | 1.20 |
| 5L Communication installations | **66,400** | **64.20** | | | | 3.09 |
| 5M Special installations | **70,600** | **68.24** | | | | 3.29 |
| **M&E SERVICES** | **945,400** | **913.53** | | | | **44.05** |
| **BUILDING & ENGINEERING** | **2,146,900** | **2,074.46** | | | | **100.00** |
| 7 Preliminaries | **322,000** | **311.12** | | | | 15.00 |
| 8A Design risk | **107,400** | **103.77** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **64,400** | **62.22** | | | | 3.00 |
| **TOTAL** | **493,800** | **477.11** | | | | |

| | | | | |
|---|---|---|---|---|
| **TOTAL COST** | **£** | **2,640,700** | **£ 2,551.46** | **/$m^2$** |
| Building | £ | **1,477,800** | **£ 1,427.86** | **/$m^2$** |
| Engineering | £ | **1,162,900** | **£ 1,123.60** | **/$m^2$** |

## HBN 09-02 – 'Maternity care facilities' (public space)

**HBN 09-02 - 'Maternity care facilities' (midwife-led unit, 500 births)** **Jul-10**

Index level : 480 MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area : 75 m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| 1 | **SUBSTRUCTURE** | **6,500** | **86.94** | **37** | **175.74** | **0.490** | **4.5** |
| | 2A Frame | 8,600 | 115.03 | 75 | 115.00 | 1.000 | 5.96 |
| | 2B Upper floors | 2,300 | 30.76 | 36 | 65.00 | 0.480 | 1.59 |
| | 2C Roof | 7,700 | 102.99 | 45 | 170.00 | 0.600 | 5.33 |
| ### | 2D Stairs | 2,200 | 30.00 | - | - | - | 1.52 |
| | 2E External walls | 10,700 | 143.12 | 39 | 275.00 | 0.520 | 7.41 |
| | 2F Windows and external doors | 3,900 | 52.17 | 7 | 550.00 | 0.100 | 2.70 |
| | 2G Internal walls and partitions | 9,200 | 123.06 | 157 | 58.44 | - | 6.37 |
| | 2H Internal doors | 5,900 | 78.92 | 9 | 625.78 | | 4.09 |
| 2 | **SUPERSTRUCTURE** | **50,500** | **676.05** | | | | **34.97** |
| | 3A Wall finishes | 6,000 | 80.25 | 232 | 25.88 | | 4.16 |
| | 3B Floor finishes | 3,700 | 49.49 | 72 | 51.14 | | 2.56 |
| | 3C Ceiling finishes | 2,600 | 34.78 | 72 | 36.24 | | 1.80 |
| 3 | **INTERNAL FINISHES** | **12,300** | **164.52** | | | | **8.52** |
| 4 | **FITTINGS & FURNISHINGS** | **4,700** | **62.87** | | | | **3.25** |
| | 5A Sanitary appliances | **19,500** | **260.83** | - | - | - | 13.50 |
| | 5C Disposal installations | **1,100** | **15.00** | - | - | - | 0.76 |
| | 5N BWIC | **3,300** | **44.14** | - | - | - | 2.29 |
| | 5O Profit and attendances | **1,700** | **22.74** | - | - | - | 1.18 |
| | **BUILDING SERVICES** | **25,600** | **342.71** | | | | **17.73** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **8,200** | **109.05** | | | | 5.68 |
| | 5E Heat source | **300** | **4.33** | | | | 0.21 |
| | 5F Space heating/air treatment | **2,100** | **28.25** | | | | 1.45 |
| | 5G Ventilation system | **7,400** | **98.40** | | | | 5.12 |
| | 5H Electrical installations | **12,800** | **171.72** | | | | 8.86 |
| | 5I Gas installations | **600** | **7.95** | | | | 0.42 |
| | 5J Lifts and conveyors | **2,800** | **37.26** | | | | 1.94 |
| | 5K Protective installations | **1,900** | **24.82** | | | | 1.32 |
| | 5L Communication installations | **4,800** | **64.20** | | | | 3.32 |
| | 5M Special installations | **3,900** | **52.31** | | | | 2.70 |
| | **M&E SERVICES** | **44,800** | **598.29** | | | | **31.02** |
| | **BUILDING & ENGINEERING** | **144,400** | **1,931.38** | | | | **100.00** |
| 7 | Preliminaries | **21,600** | **288.92** | | | | 15.00 |
| | 8A Design risk | **7,200** | **96.31** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **4,300** | **57.52** | | | | 3.00 |
| | **TOTAL** | **33,100** | **442.74** | | | | |
| | **TOTAL COST** | **£ 177,500** | **£ 2,374.19** /m² | | | | |
| | Building | £ **122,500** | **£ 1,638.53** /m² | | | | |
| | Engineering | £ **55,000** | **£ 735.67** /m² | | | | |

## HBN 09-02 – 'Maternity care facilities' (clinical space)

**HBN 09-02 - 'Maternity care facilities' (midwife-led unit, 500 births)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **502** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **43,200** | **86.04** | **246** | **175.74** | **0.490** | **4.2** |
| 2A Frame | 57,700 | 114.92 | 502 | 115.00 | 1.000 | 5.62 |
| 2B Upper floors | 15,700 | 31.27 | 241 | 65.00 | 0.480 | 1.53 |
| 2C Roof | 51,200 | 101.98 | 301 | 170.00 | 0.600 | 4.98 |
| 2D Stairs | 15,100 | 30.00 | - | - | - | 1.47 |
| 2E External walls | 71,800 | 143.00 | 261 | 275.00 | 0.520 | 6.99 |
| 2F Windows and external doors | 27,500 | 54.77 | 50 | 550.00 | 0.100 | 2.68 |
| 2G Internal walls and partitions | 35,300 | 70.31 | 649 | 54.36 | - | 3.44 |
| 2H Internal doors | 19,600 | 39.04 | 30 | 642.57 | | 1.91 |
| **2 SUPERSTRUCTURE** | **293,900** | **585.29** | | | | **28.62** |
| 3A Wall finishes | 48,500 | 96.60 | 1,189 | 40.81 | | 4.72 |
| 3B Floor finishes | 27,400 | 54.57 | 481 | 57.06 | | 2.67 |
| 3C Ceiling finishes | 17,400 | 34.66 | 481 | 36.24 | | 1.69 |
| **3 INTERNAL FINISHES** | **93,300** | **185.83** | | | | **9.08** |
| **4 FITTINGS & FURNISHINGS** | **26,400** | **52.58** | | | | **2.57** |
| 5A Sanitary appliances | **119,200** | **237.41** | - | - | - | 11.60 |
| 5C Disposal installations | **7,500** | **15.00** | - | - | - | 0.73 |
| 5N BWIC | **26,500** | **52.78** | - | - | - | 2.58 |
| 5O Profit and attendances | **13,300** | **26.49** | - | - | - | 1.29 |
| **BUILDING SERVICES** | **166,500** | **331.68** | | | | **16.20** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **64,100** | **127.65** | | | | 6.24 |
| 5E Heat source | **3,100** | **6.20** | | | | 0.30 |
| 5F Space heating/air treatment | **20,900** | **41.56** | | | | 2.03 |
| 5G Ventilation system | **79,700** | **158.75** | | | | 7.76 |
| 5H Electrical installations | **111,900** | **222.81** | | | | 10.89 |
| 5I Gas installations | **4,400** | **8.79** | | | | 0.43 |
| 5J Lifts and conveyors | **18,700** | **37.26** | | | | 1.82 |
| 5K Protective installations | **12,500** | **24.82** | | | | 1.22 |
| 5L Communication installations | **32,200** | **64.20** | | | | 3.13 |
| 5M Special installations | **56,600** | **112.65** | | | | 5.51 |
| **M&E SERVICES** | **404,100** | **804.68** | | | | **39.33** |
| **BUILDING & ENGINEERING** | **1,027,400** | **2,046.10** | | | | **100.00** |
| 7 Preliminaries | **154,100** | **306.92** | | | | 15.00 |
| 8A Design risk | **51,400** | **102.37** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **30,800** | **61.34** | | | | 3.00 |
| **TOTAL** | **236,300** | **470.64** | | | | |

| | | | | |
|---|---|---|---|---|
| **TOTAL COST** | **£** | **1,263,700** | **£** | **2,516.91** /$m^2$ |
| Building | £ | **766,700** | **£** | **1,527.04** /$m^2$ |
| Engineering | £ | **497,000** | **£** | **989.87** /$m^2$ |

## HBN 09-02 – 'Maternity care facilities' (staff space)

**HBN 09-02 - 'Maternity care facilities' (midwife-led unit, 500 births)** **Jul-10**

Index level : 480 MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : 52 m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| 1 | **SUBSTRUCTURE** | **4,600** | **88.26** | **26** | **175.74** | **0.490** | **5.15** |
| | 2A Frame | 6,000 | 115.12 | 52 | 115.00 | 1.000 | 6.71 |
| | 2B Upper floors | 1,600 | 30.70 | 25 | 65.00 | 0.480 | 1.79 |
| | 2C Roof | 5,300 | 101.69 | 31 | 170.00 | 0.600 | 5.93 |
| ### | 2D Stairs | 1,600 | 30.00 | - | - | - | 1.79 |
| | 2E External walls | 7,400 | 141.98 | 27 | 275.00 | 0.520 | 8.28 |
| | 2F Windows and external doors | 2,800 | 53.72 | 5 | 550.00 | 0.100 | 3.13 |
| | 2G Internal walls and partitions | 4,300 | 82.50 | 78 | 54.30 | - | 4.81 |
| | 2H Internal doors | 2,700 | 51.80 | 4 | 631.57 | | 3.02 |
| 2 | **SUPERSTRUCTURE** | **31,700** | **607.51** | | | | **35.46** |
| | 3A Wall finishes | 2,600 | 49.88 | 136 | 19.04 | | 2.91 |
| | 3B Floor finishes | 2,600 | 49.88 | 50 | 52.01 | | 2.91 |
| | 3C Ceiling finishes | 1,800 | 34.54 | 50 | 36.24 | | 2.01 |
| 3 | **INTERNAL FINISHES** | **7,000** | **134.30** | | | | **7.83** |
| 4 | **FITTINGS & FURNISHINGS** | **4,400** | **84.42** | | | | **4.92** |
| | 5A Sanitary appliances | **11,400** | **218.72** | - | - | - | 12.75 |
| | 5C Disposal installations | **800** | **15.00** | - | - | - | 0.89 |
| | 5N BWIC | **1,900** | **36.45** | - | - | - | 2.13 |
| | 5O Profit and attendances | **1,000** | **19.19** | - | - | - | 1.12 |
| | **BUILDING SERVICES** | **15,100** | **289.36** | | | | **16.89** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **2,600** | **49.95** | | | | 2.91 |
| | 5E Heat source | **200** | **3.68** | | | | 0.22 |
| | 5F Space heating/air treatment | **1,300** | **24.03** | | | | 1.45 |
| | 5G Ventilation system | **3,900** | **74.25** | | | | 4.36 |
| | 5H Electrical installations | **9,000** | **171.72** | | | | 10.07 |
| | 5I Gas installations | **400** | **7.66** | | | | 0.45 |
| | 5J Lifts and conveyors | **1,900** | **37.26** | | | | 2.13 |
| | 5K Protective installations | **1,300** | **24.82** | | | | 1.45 |
| | 5L Communication installations | **3,300** | **64.20** | | | | 3.69 |
| | 5M Special installations | **2,700** | **52.31** | | | | 3.02 |
| | **M&E SERVICES** | **26,600** | **509.88** | | | | **29.75** |
| | **BUILDING & ENGINEERING** | **89,400** | **1,713.73** | | | | **100.00** |
| | 7 Preliminaries | **13,400** | **257.10** | | | | 15.00 |
| | 8A Design risk | **4,400** | **84.42** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **2,700** | **51.80** | | | | 3.00 |
| | **TOTAL** | **20,500** | **393.32** | | | | |
| | **TOTAL COST** | **£ 109,900** | **£ 2,108.57 /m²** | | | | |
| | Building | £ **77,200** | £ **1,481.18 /m²** | | | | |
| | Engineering | £ **32,700** | £ **627.39 /m²** | | | | |

## HBN 09-02 – 'Maternity care facilities' (overall space)

**HBN 09-02 - 'Maternity care facilities' (midwife-led unit, 500 births)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **629** m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **54,100** | **86.01** | **308** | **175.74** | **0.490** | **4.3** |
| | 2A Frame | 72,300 | 114.95 | 629 | 115.00 | 1.000 | 5.74 |
| | 2B Upper floors | 19,600 | 31.16 | 302 | 65.00 | 0.480 | 1.56 |
| | 2C Roof | 64,100 | 101.91 | 377 | 170.00 | 0.600 | 5.09 |
| | 2D Stairs | 18,900 | 30.00 | - | - | - | 1.50 |
| | 2E External walls | 89,900 | 142.93 | 327 | 275.00 | 0.520 | 7.14 |
| | 2F Windows and external doors | 34,700 | 55.17 | 63 | 550.00 | 0.100 | 2.76 |
| | 2G Internal walls and partitions | 48,800 | 77.59 | 887 | 55.04 | - | 3.88 |
| | 2H Internal doors | 28,200 | 44.84 | 44 | 637.90 | | 2.24 |
| **2** | **SUPERSTRUCTURE** | **376,500** | **598.55** | | | | **29.91** |
| | 3A Wall finishes | 57,100 | 90.78 | 1,556 | 36.71 | | 4.53 |
| | 3B Floor finishes | 33,700 | 53.58 | 603 | 55.88 | | 2.68 |
| | 3C Ceiling finishes | 21,800 | 34.66 | 603 | 36.24 | | 1.73 |
| **3** | **INTERNAL FINISHES** | **112,600** | **179.02** | | | | **8.94** |
| **4** | **FITTINGS & FURNISHINGS** | **35,500** | **56.44** | | | | **2.82** |
| | 5A Sanitary appliances | **150,100** | **238.65** | - | - | - | 11.92 |
| | 5C Disposal installations | **9,400** | **15.00** | - | - | - | 0.75 |
| | 5N BWIC | **31,700** | **50.40** | - | - | - | 2.52 |
| | 5O Profit and attendances | **15,900** | **25.28** | - | - | - | 1.26 |
| | **BUILDING SERVICES** | **207,100** | **329.33** | | | | **16.45** |
| | 5B Services equipment | **74,500** | **118.40** | | | | 5.92 |
| | 5D Water installations | **3,600** | **5.74** | | | | 0.29 |
| | 5E Heat source | **24,100** | **38.35** | | | | 1.91 |
| | 5F Space heating/air treatment | **90,400** | **143.75** | | | | 7.18 |
| | 5G Ventilation system | **133,300** | **211.94** | | | | 10.59 |
| | 5H Electrical installations | **5,400** | **8.58** | | | | 0.43 |
| | 5I Gas installations | **23,400** | **37.26** | | | | 1.86 |
| | 5J Lifts and conveyors | **15,600** | **24.82** | | | | 1.24 |
| | 5K Protective installations | **40,400** | **64.20** | | | | 3.21 |
| | 5L Communication installations | **62,800** | **99.82** | | | | 4.99 |
| | 5M Special installations | **-** | **-** | | | | 0.00 |
| | **M&E SERVICES** | **473,500** | **752.86** | | | | **37.62** |
| | **BUILDING & ENGINEERING** | **1,259,300** | **2,002.21** | | | | **100.00** |
| | 7 Preliminaries | **188,900** | **300.33** | | | | 15.00 |
| | 8A Design risk | **63,000** | **100.16** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **37,800** | **60.10** | | | | 3.00 |
| | **TOTAL** | **289,700** | **460.60** | | | | |
| | **TOTAL COST** | **£ 1,549,000** | **£ 2,462.77** /m² | | | | |
| | Building | £ **966,600** | **£ 1,536.81** /m² | | | | |
| | Engineering | £ **582,400** | **£ 925.96** /m² | | | | |

## HBN 10-02 – 'Day surgery facilities' (public space)

**HBN 10-02 - 'Day surgery facilities' (4 operating theatres)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area : **162** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/m2 | ELEMENTAL DATA Quantity | Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **13,900** | **85.82** | **79** | **175.74** | **0.490** | **5.65** |
| | 2A Frame | 18,600 | 114.83 | 162 | 115.00 | 1.000 | 7.56 |
| | 2B Upper floors | 5,100 | 31.49 | 78 | 65.00 | 0.480 | 2.07 |
| | 2C Roof | 16,500 | 101.87 | 97 | 170.00 | 0.600 | 6.71 |
| | 2D Stairs | 1,500 | 9.00 | 0 | 152.48 | | 0.61 |
| | 2E External walls | 23,100 | 142.61 | 84 | 275.00 | 0.520 | 9.39 |
| | 2F Windows and external doors | 8,800 | 54.33 | 16 | 550.00 | 0.100 | 3.58 |
| | 2G Internal walls and partitions | 13,500 | 83.35 | 237 | 56.90 | | 5.49 |
| | 2H Internal doors | 8,800 | 54.33 | 14 | 631.33 | | 3.58 |
| **2** | **SUPERSTRUCTURE** | **95,900** | **591.81** | | | | **38.99** |
| | 3A Wall finishes | 12,000 | 74.09 | 408 | 29.51 | | 4.88 |
| | 3B Floor finishes | 6,800 | 41.98 | 156 | 43.97 | | 2.76 |
| | 3C Ceiling finishes | 5,600 | 34.57 | 156 | 36.24 | | 2.28 |
| **3** | **INTERNAL FINISHES** | **24,400** | **150.64** | | | | **9.92** |
| **4** | **FITTINGS & FURNISHINGS** | **1,900** | **11.73** | | | | **0.77** |
| | 5A Sanitary appliances | **6,400** | **39.51** | - | - | - | 2.60 |
| | 5C Disposal installations | **2,400** | **15.00** | - | - | - | 0.98 |
| | 5N BWIC | **5,100** | **31.49** | - | - | - | 2.07 |
| | 5O Profit and attendances | **2,600** | **16.05** | - | - | - | 1.06 |
| | **BUILDING SERVICES** | **16,500** | **102.05** | | | | **6.71** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **13,200** | **81.62** | | | | 5.37 |
| | 5E Heat source | **700** | **4.44** | | | | 0.28 |
| | 5F Space heating/air treatment | **6,300** | **38.87** | | | | 2.56 |
| | 5G Ventilation system | **16,200** | **100.30** | | | | 6.59 |
| | 5H Electrical installations | **26,800** | **165.44** | | | | 10.89 |
| | 5I Gas installations | **1,300** | **8.01** | | | | 0.53 |
| | 5J Lifts and conveyors | **6,000** | **37.29** | | | | 2.44 |
| | 5K Protective installations | **4,000** | **24.82** | | | | 1.63 |
| | 5L Communication installations | **10,400** | **64.20** | | | | 4.23 |
| | 5M Special installations | **8,500** | **52.31** | | | | 3.46 |
| | **M&E SERVICES** | **93,400** | **577.28** | | | | **37.98** |
| | **BUILDING & ENGINEERING** | **246,000** | **1,519.33** | | | | **100.00** |
| | 7 Preliminaries | **36,900** | **227.81** | | | | 15.00 |
| | 8A Design risk | **12,300** | **75.94** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **7,400** | **45.69** | | | | 3.00 |
| | **TOTAL** | **56,600** | **349.44** | | | | |
| | **TOTAL COST** | **£ 302,600** | **£ 1,868.18** | **/m²** | | | |
| | Building | £ **187,700** | **£ 1,158.82** | **/m²** | | | |
| | Engineering | £ **114,900** | **£ 709.37** | **/m²** | | | |

## HBN 10-02 – 'Day surgery facilities' (clinical space)

**HBN 10-02 - 'Day surgery facilities' (4 operating theatres)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **2330** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **200,700** | **86.14** | **1142** | **175.74** | **0.490** | **3.79** |
| | 2A Frame | 268,000 | 115.02 | 2,330 | 115.00 | 1.000 | 5.06 |
| | 2B Upper floors | 72,700 | 31.20 | 1,118 | 65.00 | 0.480 | 1.37 |
| | 2C Roof | 237,700 | 102.02 | 1,398 | 170.00 | 0.600 | 4.49 |
| | 2D Stairs | 21,000 | 9.00 | 0 | 152.48 | | 0.40 |
| | 2E External walls | 333,300 | 143.05 | 1,212 | 275.00 | 0.520 | 6.30 |
| | 2F Windows and external doors | 128,200 | 55.02 | 233 | 550.00 | 0.100 | 2.42 |
| | 2G Internal walls and partitions | 151,800 | 65.15 | 2,793 | 54.36 | | 2.87 |
| | 2H Internal doors | 85,000 | 36.48 | 132 | 644.69 | | 1.61 |
| **2** | **SUPERSTRUCTURE** | **1,297,700** | **556.94** | | | | **24.52** |
| | 3A Wall finishes | 241,800 | 103.78 | 5,337 | 45.31 | | 4.57 |
| | 3B Floor finishes | 124,000 | 53.22 | 2,182 | 56.82 | | 2.34 |
| | 3C Ceiling finishes | 89,300 | 38.33 | 2,182 | 40.93 | | 1.69 |
| **3** | **INTERNAL FINISHES** | **455,100** | **195.33** | | | | **8.60** |
| **4** | **FITTINGS & FURNISHINGS** | **94,700** | **40.64** | | | | **1.79** |
| | 5A Sanitary appliances | **43,100** | **18.50** | - | - | - | 0.81 |
| | 5C Disposal installations | **34,900** | **15.00** | - | - | - | 0.66 |
| | 5N BWIC | **150,900** | **64.76** | - | - | - | 2.85 |
| | 5O Profit and attendances | **75,500** | **32.40** | - | - | - | 1.43 |
| | **BUILDING SERVICES** | **304,400** | **130.66** | | | | **5.75** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **127,700** | **54.83** | | | | 2.41 |
| | 5E Heat source | **15,500** | **6.64** | | | | 0.29 |
| | 5F Space heating/air treatment | **125,900** | **54.04** | | | | 2.38 |
| | 5G Ventilation system | **1,231,100** | **528.36** | | | | 23.26 |
| | 5H Electrical installations | **751,700** | **322.62** | | | | 14.20 |
| | 5I Gas installations | **20,900** | **8.99** | | | | 0.39 |
| | 5J Lifts and conveyors | **86,900** | **37.29** | | | | 1.64 |
| | 5K Protective installations | **57,800** | **24.82** | | | | 1.09 |
| | 5L Communication installations | **149,600** | **64.20** | | | | 2.83 |
| | 5M Special installations | **372,800** | **160.01** | | | | 7.04 |
| | **M&E SERVICES** | **2,939,900** | **1,261.79** | | | | **55.53** |
| | **BUILDING & ENGINEERING** | **5,292,500** | **2,271.50** | | | | **100.00** |
| | 7 Preliminaries | **793,900** | **340.73** | | | | 15.00 |
| | 8A Design risk | **264,600** | **113.56** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **158,800** | **68.15** | | | | 3.00 |
| | **TOTAL** | **1,217,300** | **522.45** | | | | |
| | **TOTAL COST** | **£ 6,509,800** | **£ 2,793.91 /$m^2$** | | | | |
| | Building | £ **2,893,700** | **£ 1,241.93 /$m^2$** | | | | |
| | Engineering | £ **3,616,100** | **£ 1,551.98 /$m^2$** | | | | |

## HBN 10-02 – 'Day surgery facilities' (staff space)

**HBN 10-02 - 'Day surgery facilities' (4 operating theatres)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : **161** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **13,900** | **86.54** | **79** | **175.74** | **0.490** | **6.22** |
| | 2A Frame | 18,500 | 115.18 | 161 | 115.00 | 1.000 | 8.28 |
| | 2B Upper floors | 5,000 | 31.13 | 77 | 65.00 | 0.480 | 2.24 |
| | 2C Roof | 16,300 | 101.48 | 96 | 170.00 | 0.600 | 7.30 |
| | 2D Stairs | 1,400 | 9.00 | 0 | 152.48 | | 0.63 |
| | 2E External walls | 23,100 | 143.82 | 84 | 275.00 | 0.520 | 10.34 |
| | 2F Windows and external doors | 8,800 | 54.79 | 16 | 550.00 | 0.100 | 3.94 |
| | 2G Internal walls and partitions | 17,300 | 107.71 | 319 | 54.25 | | 7.75 |
| | 2H Internal doors | 8,700 | 54.17 | 14 | 628.92 | | 3.90 |
| **2** | **SUPERSTRUCTURE** | **99,100** | **617.28** | | | | **44.38** |
| | 3A Wall finishes | 7,600 | 47.32 | 520 | 14.58 | | 3.40 |
| | 3B Floor finishes | 9,200 | 57.28 | 204 | 45.24 | | 4.12 |
| | 3C Ceiling finishes | 7,400 | 46.07 | 204 | 36.24 | | 3.31 |
| **3** | **INTERNAL FINISHES** | **24,200** | **150.67** | | | | **10.83** |
| **4** | **FITTINGS & FURNISHINGS** | **4,400** | **27.39** | | | | **1.97** |
| | 5A Sanitary appliances | **3,300** | **20.55** | - | - | - | 1.48 |
| | 5C Disposal installations | **2,400** | **15.00** | - | - | - | 1.07 |
| | 5N BWIC | **3,800** | **23.66** | - | - | - | 1.70 |
| | 5O Profit and attendances | **1,900** | **11.83** | - | - | - | 0.85 |
| | **BUILDING SERVICES** | **11,400** | **71.04** | | | | **5.10** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **1,000** | **6.52** | | | | 0.45 |
| | 5E Heat source | **500** | **2.89** | | | | 0.22 |
| | 5F Space heating/air treatment | **3,900** | **24.50** | | | | 1.75 |
| | 5G Ventilation system | **8,400** | **52.54** | | | | 3.76 |
| | 5H Electrical installations | **26,600** | **165.44** | | | | 11.91 |
| | 5I Gas installations | **1,200** | **7.32** | | | | 0.54 |
| | 5J Lifts and conveyors | **6,000** | **37.29** | | | | 2.69 |
| | 5K Protective installations | **4,000** | **24.82** | | | | 1.79 |
| | 5L Communication installations | **10,300** | **64.20** | | | | 4.61 |
| | 5M Special installations | **8,400** | **52.31** | | | | 3.76 |
| | **M&E SERVICES** | **70,300** | **437.82** | | | | **31.48** |
| | **BUILDING & ENGINEERING** | **223,300** | **1,390.74** | | | | **100.00** |
| | 7 Preliminaries | **33,500** | **208.57** | | | | 15.00 |
| | 8A Design risk | **11,200** | **69.73** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **6,700** | **41.71** | | | | 3.00 |
| | **TOTAL** | **51,400** | **320.01** | | | | |
| | **TOTAL COST** | **£ 274,700** | **£ 1,710.27 /$m^2$** | | | | |
| | Building | £ **188,300** | **£ 1,172.35 /$m^2$** | | | | |
| | Engineering | £ **86,400** | **£ 537.92 /$m^2$** | | | | |

## HBN 10-02 – 'Day surgery facilities' (overall space)

**HBN 10-02 - 'Day surgery facilities' (4 operating theatres)** **Jul-10**

Index level : 480 MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **2653** m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **228,500** | **86.14** | **1300** | **175.74** | **0.490** | **3.98** |
| | 2A Frame | 305,100 | 115.02 | 2,653 | 115.00 | 1.000 | 5.32 |
| | 2B Upper floors | 82,700 | 31.18 | 1,273 | 65.00 | 0.480 | 1.44 |
| | 2C Roof | 270,600 | 102.01 | 1,592 | 170.00 | 0.600 | 4.72 |
| ### | 2D Stairs | 23,900 | 9.00 | 0 | 152.48 | | 0.42 |
| | 2E External walls | 379,200 | 142.95 | 1,379 | 275.00 | 0.520 | 6.61 |
| | 2F Windows and external doors | 145,800 | 54.97 | 265 | 550.00 | 0.100 | 2.54 |
| | 2G Internal walls and partitions | 183,800 | 69.29 | 3,371 | 54.53 | | 3.21 |
| | 2H Internal doors | 102,600 | 38.68 | 160 | 642.15 | | 1.79 |
| **2** | **SUPERSTRUCTURE** | **1,493,700** | **563.10** | | | | **26.05** |
| | 3A Wall finishes | 261,600 | 98.62 | 6,265 | 41.76 | 2.362 | 4.56 |
| | 3B Floor finishes | 139,300 | 52.51 | 2,542 | 54.81 | 0.958 | 2.43 |
| | 3C Ceiling finishes | 102,000 | 38.45 | 2,542 | 40.15 | 0.958 | 1.78 |
| **3** | **INTERNAL FINISHES** | **502,900** | **189.58** | | | | **8.77** |
| **4** | **FITTINGS & FURNISHINGS** | **101,000** | **38.08** | | | | **1.76** |
| | 5A Sanitary appliances | **52,800** | **19.91** | - | - | - | 0.92 |
| | 5C Disposal installations | **39,800** | **15.00** | - | - | - | 0.69 |
| | 5N BWIC | **158,500** | **59.75** | - | - | - | 2.76 |
| | 5O Profit and attendances | **79,300** | **29.90** | - | - | - | 1.38 |
| | **BUILDING SERVICES** | **330,400** | **124.56** | | | | **5.75** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **141,200** | **53.21** | | | | 2.46 |
| | 5E Heat source | **16,500** | **6.24** | | | | 0.29 |
| | 5F Space heating/air treatment | **135,300** | **51.01** | | | | 2.36 |
| | 5G Ventilation system | **1,240,500** | **467.66** | | | | 21.63 |
| | 5H Electrical installations | **799,900** | **301.54** | | | | 13.95 |
| | 5I Gas installations | **23,400** | **8.81** | | | | 0.41 |
| | 5J Lifts and conveyors | **98,900** | **37.29** | | | | 1.72 |
| | 5K Protective installations | **65,800** | **24.82** | | | | 1.15 |
| | 5L Communication installations | **170,300** | **64.20** | | | | 2.97 |
| | 5M Special installations | **386,100** | **145.57** | | | | 6.73 |
| | **M&E SERVICES** | **3,077,900** | **1,160.35** | | | | **53.67** |
| | **BUILDING & ENGINEERING** | **5,734,400** | **2,161.81** | | | | **100.00** |
| | 7 Preliminaries | **860,200** | **324.29** | | | | 15.00 |
| | 8A Design risk | **286,700** | **108.08** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **172,000** | **64.84** | | | | 3.00 |
| | **TOTAL** | **1,318,900** | **497.21** | | | | |
| | **TOTAL COST** | **£ 7,053,300** | **£ 2,659.03** /m² | | | | |
| | Building | £ **3,267,500** | £ **1,231.82** /m² | | | | |
| | Engineering | £ **3,785,800** | £ **1,427.21** /m² | | | | |

## HBN 12 – 'Out-patients department' (public space)

**HBN 12 - 'Out-patients department' (6, 8 and 12 consulting/examination rooms)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area : **318** m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| 1 | **SUBSTRUCTURE** | **27,400** | **86.22** | **156** | **175.74** | **0.490** | **6.26** |
| | 2A Frame | 36,600 | 115.17 | 318 | 115.00 | 1.000 | 8.36 |
| | 2B Upper floors | 9,900 | 31.15 | 153 | 65.00 | 0.480 | 2.26 |
| | 2C Roof | 32,500 | 102.27 | 191 | 170.00 | 0.600 | 7.43 |
| ### | 2D Stairs | 7,600 | 24.00 | 0 | 152.48 | | 1.74 |
| | 2E External walls | 45,400 | 142.86 | 165 | 275.00 | 0.520 | 10.37 |
| | 2F Windows and external doors | 17,600 | 55.38 | 32 | 550.00 | 0.100 | 4.02 |
| | 2G Internal walls and partitions | 22,300 | 70.17 | 369 | 60.31 | | 5.09 |
| | 2H Internal doors | 13,300 | 41.85 | 21 | 640.41 | | 3.04 |
| 2 | **SUPERSTRUCTURE** | **185,200** | **582.85** | | | | **42.31** |
| | 3A Wall finishes | 19,800 | 62.30 | 720 | 27.46 | | 4.52 |
| | 3B Floor finishes | 14,800 | 46.57 | 286 | 51.83 | | 3.38 |
| | 3C Ceiling finishes | 10,400 | 32.73 | 286 | 36.24 | | 2.38 |
| 3 | **INTERNAL FINISHES** | **45,000** | **141.60** | | | | **10.28** |
| 4 | **FITTINGS & FURNISHINGS** | **10,800** | **33.98** | | | | **2.47** |
| | 5A Sanitary appliances | **5,300** | **16.68** | - | - | - | 1.21 |
| | 5C Disposal installations | **4,800** | **15.00** | - | - | - | 1.10 |
| | 5N BWIC | **7,900** | **24.86** | - | - | - | 1.80 |
| | 5O Profit and attendances | **4,000** | **12.59** | - | - | - | 0.91 |
| | **BUILDING SERVICES** | **22,000** | **69.13** | | | | **5.02** |
| | 5B Services equipment | **-** | | | | | 0.00 |
| | 5D Water installations | **17,700** | **55.57** | | | | 4.04 |
| | 5E Heat source | **900** | **2.96** | | | | 0.21 |
| | 5F Space heating/air treatment | **6,100** | **19.30** | | | | 1.39 |
| | 5G Ventilation system | **9,000** | **28.20** | | | | 2.06 |
| | 5H Electrical installations | **54,200** | **170.55** | | | | 12.38 |
| | 5I Gas installations | **2,400** | **7.49** | | | | 0.55 |
| | 5J Lifts and conveyors | **12,100** | **38.21** | | | | 2.76 |
| | 5K Protective installations | **7,900** | **24.82** | | | | 1.80 |
| | 5L Communication installations | **20,400** | **64.20** | | | | 4.66 |
| | 5M Special installations | **16,600** | **52.31** | | | | 3.79 |
| | **M&E SERVICES** | **147,300** | **463.60** | | | | **33.64** |
| | **BUILDING & ENGINEERING** | **437,700** | **1,377.38** | | | | **100.00** |
| | 7 Preliminaries | **65,700** | **206.74** | | | | 15.00 |
| | 8A Design risk | **21,900** | **68.91** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **13,100** | **41.22** | | | | 3.00 |
| | **TOTAL** | **100,700** | **316.87** | | | | |
| | **TOTAL COST** | **£ 538,400** | **£ 1,694.18** /m² | | | | |
| | Building | £ **357,200** | **£ 1,518.52** /m² | | | | |
| | Engineering | £ **181,200** | **£ 765.69** /m² | | | | |

## HBN 12 – 'Out-patients department' (clinical space)

**HBN 12 - 'Out-patients department' (6, 8 and 12 consulting/examination rooms)** **Jul-10**

Index level : **480** MIPS(FP) **ELEMENTAL COST MODEL (Clinical space)** Gross internal area : **631** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **54,300** | **86.03** | **309** | **175.74** | **0.490** | **4.82** |
| | 2A Frame | 72,600 | 115.03 | 631 | 115.00 | 1.000 | 6.44 |
| | 2B Upper floors | 19,700 | 31.21 | 303 | 65.00 | 0.480 | 1.75 |
| | 2C Roof | 64,400 | 102.03 | 379 | 170.00 | 0.600 | 5.71 |
| ### | 2D Stairs | 15,100 | 24.00 | 0 | 152.48 | | 1.34 |
| | 2E External walls | 90,200 | 142.91 | 328 | 275.00 | 0.520 | 8.00 |
| | 2F Windows and external doors | 34,700 | 54.98 | 63 | 550.00 | 0.100 | 3.08 |
| | 2G Internal walls and partitions | 45,200 | 71.61 | 850 | 53.17 | | 4.01 |
| | 2H Internal doors | 23,400 | 37.07 | 36 | 645.49 | | 2.08 |
| **2** | **SUPERSTRUCTURE** | **365,300** | **578.84** | | | | **32.41** |
| | 3A Wall finishes | 72,200 | 114.39 | 1,790 | 40.37 | | 6.41 |
| | 3B Floor finishes | 35,300 | 55.93 | 604 | 58.37 | | 3.13 |
| | 3C Ceiling finishes | 21,900 | 34.70 | 604 | 36.24 | | 1.94 |
| **3** | **INTERNAL FINISHES** | **129,400** | **205.02** | | | | **11.48** |
| **4** | **FITTINGS & FURNISHINGS** | **17,400** | **27.57** | | | | **1.54** |
| | 5A Sanitary appliances | **12,600** | **19.96** | - | - | - | 1.12 |
| | 5C Disposal installations | **9,500** | **15.00** | - | - | - | 0.84 |
| | 5N BWIC | **26,100** | **41.35** | - | - | - | 2.32 |
| | 5O Profit and attendances | **13,100** | **20.76** | - | - | - | 1.16 |
| | **BUILDING SERVICES** | **61,300** | **97.07** | | | | **5.44** |
| | 5B Services equipment | **-** | | | | | 0.00 |
| | 5D Water installations | **45,600** | **72.27** | | | | 4.05 |
| | 5E Heat source | **3,300** | **5.23** | | | | 0.29 |
| | 5F Space heating/air treatment | **24,400** | **38.59** | | | | 2.17 |
| | 5G Ventilation system | **77,400** | **122.61** | | | | 6.87 |
| | 5H Electrical installations | **208,000** | **329.62** | | | | 18.46 |
| | 5I Gas installations | **5,400** | **8.51** | | | | 0.48 |
| | 5J Lifts and conveyors | **24,100** | **38.21** | | | | 2.14 |
| | 5K Protective installations | **15,700** | **24.82** | | | | 1.39 |
| | 5L Communication installations | **40,500** | **64.20** | | | | 3.59 |
| | 5M Special installations | **54,800** | **86.87** | | | | 4.86 |
| | **M&E SERVICES** | **499,200** | **790.92** | | | | **44.30** |
| | **BUILDING & ENGINEERING** | **1,126,900** | **1,785.45** | | | | **100.00** |
| | 7 Preliminaries | **169,100** | **267.92** | | | | 15.00 |
| | 8A Design risk | **56,400** | **89.36** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **33,800** | **53.55** | | | | 3.00 |
| | **TOTAL** | **259,300** | **410.83** | | | | |
| | **TOTAL COST** | **£ 1,386,200** | **£ 2,196.28** /$m^2$ | | | | |
| | Building | £ **772,100** | **£ 1,518.52** /$m^2$ | | | | |
| | Engineering | £ **614,100** | **£ 765.69** /$m^2$ | | | | |

## HBN 12 – 'Out-patients department' (staff space)

**HBN 12 - 'Out-patients department' (6, 8 and 12 consulting/examination rooms)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : **153** m²

| | ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **13,200** | **86.48** | **75** | **175.74** | **0.490** | **5.04** |
| | 2A Frame | 17,600 | 115.31 | 153 | 115.00 | 1.000 | 6.71 |
| | 2B Upper floors | 4,700 | 30.79 | 73 | 65.00 | 0.480 | 1.79 |
| | 2C Roof | 15,600 | 102.21 | 92 | 170.00 | 0.600 | 5.95 |
| ### | 2D Stairs | 3,700 | 24.00 | 0 | 152.48 | | 1.41 |
| | 2E External walls | 21,700 | 142.17 | 79 | 275.00 | 0.520 | 8.28 |
| | 2F Windows and external doors | 8,300 | 54.38 | 15 | 550.00 | 0.100 | 3.17 |
| | 2G Internal walls and partitions | 16,200 | 106.14 | 237 | 68.23 | | 6.18 |
| | 2H Internal doors | 10,700 | 70.10 | 14 | 765.28 | | 4.08 |
| **2** | **SUPERSTRUCTURE** | **98,500** | **645.10** | | | | **37.57** |
| | 3A Wall finishes | 13,200 | 86.48 | 491 | 26.82 | | 5.04 |
| | 3B Floor finishes | 7,900 | 51.76 | 146 | 54.03 | | 3.01 |
| | 3C Ceiling finishes | 5,300 | 34.72 | 146 | 36.24 | | 2.02 |
| **3** | **INTERNAL FINISHES** | **26,400** | **172.96** | | | | **10.07** |
| **4** | **FITTINGS & FURNISHINGS** | **3,600** | **23.59** | | | | **1.37** |
| | 5A Sanitary appliances | **5,800** | **38.00** | - | - | - | 2.21 |
| | 5C Disposal installations | **2,300** | **15.00** | - | - | - | 0.88 |
| | 5N BWIC | **5,600** | **36.69** | - | - | - | 2.14 |
| | 5O Profit and attendances | **2,800** | **18.34** | - | - | - | 1.07 |
| | **BUILDING SERVICES** | **16,500** | **108.03** | | | | **6.30** |
| | 5B Services equipment | **-** | | | | | 0.00 |
| | 5D Water installations | **31,300** | **204.75** | | | | 11.94 |
| | 5E Heat source | **900** | **5.77** | | | | 0.34 |
| | 5F Space heating/air treatment | **5,700** | **37.66** | | | | 2.17 |
| | 5G Ventilation system | **11,300** | **73.81** | | | | 4.31 |
| | 5H Electrical installations | **26,000** | **170.55** | | | | 9.92 |
| | 5I Gas installations | **1,300** | **8.75** | | | | 0.50 |
| | 5J Lifts and conveyors | **5,800** | **38.21** | | | | 2.21 |
| | 5K Protective installations | **3,800** | **24.82** | | | | 1.45 |
| | 5L Communication installations | **9,800** | **64.20** | | | | 3.74 |
| | 5M Special installations | **8,000** | **52.31** | | | | 3.05 |
| | **M&E SERVICES** | **103,900** | **680.82** | | | | **39.63** |
| | **BUILDING & ENGINEERING** | **262,100** | **1,716.98** | | | | **100.00** |
| | 7 Preliminaries | **39,300** | **257.48** | | | | 15.00 |
| | 8A Design risk | **13,100** | **85.83** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **7,800** | **51.10** | | | | 3.00 |
| | **TOTAL** | **60,200** | **394.41** | | | | |
| | **TOTAL COST** | **£ 322,300** | **£ 2,111.63** /m² | | | | |
| | Building | £ **194,500** | **£ 1,518.52** /m² | | | | |
| | Engineering | £ **127,800** | **£ 765.69** /m² | | | | |

## HBN 12 – 'Out-patients department' (overall space)

**HBN 12 - 'Out-patients department' (6, 8 and 12 consulting/examination rooms)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **1102** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **94,900** | **86.15** | **540** | **175.74** | **0.490** | **5.22** |
| 2A Frame | 126,700 | 115.02 | 1,102 | 115.00 | 1.000 | 6.97 |
| 2B Upper floors | 34,400 | 31.23 | 529 | 65.00 | 0.480 | 1.89 |
| 2C Roof | 112,400 | 102.03 | 661 | 170.00 | 0.600 | 6.19 |
| 2D Stairs | 26,400 | 24.00 | 0 | 152.48 | | 1.45 |
| 2E External walls | 157,600 | 143.07 | 573 | 275.00 | 0.520 | 8.67 |
| 2F Windows and external doors | 60,500 | 54.92 | 110 | 550.00 | 0.100 | 3.33 |
| 2G Internal walls and partitions | 83,300 | 75.62 | 1,451 | 57.42 | | 4.58 |
| 2H Internal doors | 47,500 | 43.12 | 71 | 667.59 | | 2.61 |
| **2 SUPERSTRUCTURE** | **648,800** | **589.01** | | | | **35.69** |
| 3A Wall finishes | 104,900 | 95.23 | 2,991 | 35.07 | | 5.77 |
| 3B Floor finishes | 57,900 | 52.56 | 1,037 | 55.86 | | 3.19 |
| 3C Ceiling finishes | 37,600 | 34.13 | 1,037 | 36.24 | | 2.07 |
| **3 INTERNAL FINISHES** | **200,400** | **181.92** | | | | **11.03** |
| **4 FITTINGS & FURNISHINGS** | **31,700** | **28.78** | | | | **1.74** |
| 5A Sanitary appliances | **23,700** | **21.51** | - | - | - | 1.30 |
| 5C Disposal installations | **16,500** | **15.00** | - | - | - | 0.91 |
| 5N BWIC | **39,100** | **35.49** | - | - | - | 2.15 |
| 5O Profit and attendances | **19,600** | **17.79** | - | - | - | 1.08 |
| **BUILDING SERVICES** | **98,900** | **89.79** | | | | **5.44** |
| 5B Services equipment | **-** | | | | | 0.00 |
| 5D Water installations | **93,900** | **85.22** | | | | 5.17 |
| 5E Heat source | **5,100** | **4.60** | | | | 0.28 |
| 5F Space heating/air treatment | **35,800** | **32.46** | | | | 1.97 |
| 5G Ventilation system | **95,300** | **86.54** | | | | 5.24 |
| 5H Electrical installations | **284,600** | **258.32** | | | | 15.66 |
| 5I Gas installations | **9,100** | **8.23** | | | | 0.50 |
| 5J Lifts and conveyors | **42,100** | **38.21** | | | | 2.32 |
| 5K Protective installations | **27,300** | **24.82** | | | | 1.50 |
| 5L Communication installations | **70,700** | **64.20** | | | | 3.89 |
| 5M Special installations | **78,600** | **71.38** | | | | 4.33 |
| **M&E SERVICES** | **742,500** | **673.96** | | | | **40.86** |
| **BUILDING & ENGINEERING** | **1,817,200** | **1,649.61** | | | | **100.00** |
| 7 Preliminaries | **272,600** | **247.46** | | | | 15.00 |
| 8A Design risk | **90,800** | **82.43** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **54,500** | **49.47** | | | | 3.00 |
| **TOTAL** | **417,900** | **379.36** | | | | |

**TOTAL COST** £ **2,235,100** £ **2,028.99** /$m^2$

Building £ **1,321,800** £ **1,518.52** /$m^2$

Engineering £ **913,300** £ **765.69** /$m^2$

## HBN 22 – 'Accident and emergency facilities for adults and children' (public space)

**HBN 22 - 'Accident and emergency facilities for adults and children' (example 2)** **Jul-10**

Index level : 480 MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area : 271 m²

| ELEMENT | COST OF ELEMENT £ | RATE £/m² | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **23,400** | **86.28** | **133** | **175.74** | **0.490** | **5.97** |
| 2A Frame | 31,200 | 115.04 | 271 | 115.00 | 1.000 | 7.96 |
| 2B Upper floors | 8,500 | 31.34 | 130 | 65.00 | 0.480 | 2.17 |
| 2C Roof | 27,700 | 102.13 | 163 | 170.00 | 0.600 | 7.06 |
| 2D Stairs | 3,900 | 14.50 | 0 | 152.48 | | 0.99 |
| 2E External walls | 38,800 | 143.06 | 141 | 275.00 | 0.520 | 9.90 |
| 2F Windows and external doors | 14,900 | 54.94 | 27 | 550.00 | 0.100 | 3.80 |
| 2G Internal walls and partitions | 22,800 | 84.07 | 419 | 54.30 | | 5.81 |
| 2H Internal doors | 15,000 | 55.31 | 23 | 661.21 | | 3.83 |
| **2 SUPERSTRUCTURE** | **162,800** | **600.39** | | | | **41.52** |
| 3A Wall finishes | 23,800 | 87.75 | 869 | 27.45 | | 6.07 |
| 3B Floor finishes | 15,400 | 56.78 | 261 | 59.03 | | 3.93 |
| 3C Ceiling finishes | 9,500 | 35.03 | 261 | 36.24 | | 2.42 |
| **3 INTERNAL FINISHES** | **48,700** | **179.56** | | | | **12.42** |
| **4 FITTINGS & FURNISHINGS** | **5,100** | **18.80** | | | | **1.30** |
| 5A Sanitary appliances | **6,300** | **23.23** | - | - | - | 1.61 |
| 5C Disposal installations | **4,100** | **15.00** | - | - | - | 1.05 |
| 5N BWIC | **2,200** | **8.11** | - | - | - | 0.56 |
| 5O Profit and attendances | **1,100** | **4.06** | - | - | - | 0.28 |
| **BUILDING SERVICES** | **13,700** | **50.40** | | | | **3.50** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **17,300** | **63.74** | | | | 4.41 |
| 5E Heat source | **1,200** | **4.44** | | | | 0.31 |
| 5F Space heating/air treatment | **9,900** | **36.37** | | | | 2.52 |
| 5G Ventilation system | **13,400** | **49.32** | | | | 3.42 |
| 5H Electrical installations | **45,700** | **168.43** | | | | 11.66 |
| 5I Gas installations | **2,200** | **8.15** | | | | 0.56 |
| 5J Lifts and conveyors | **10,400** | **38.16** | | | | 2.65 |
| 5K Protective installations | **6,700** | **24.82** | | | | 1.71 |
| 5L Communication installations | **17,400** | **64.20** | | | | 4.44 |
| 5M Special installations | **14,200** | **52.31** | | | | 3.62 |
| **M&E SERVICES** | **138,400** | **509.94** | | | | **35.30** |
| **BUILDING & ENGINEERING** | **392,100** | **1,445.37** | | | | **100.00** |
| 7 Preliminaries | **58,900** | **217.17** | | | | 15.00 |
| 8A Design risk | **19,600** | **72.27** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **11,800** | **43.51** | | | | 3.00 |
| **TOTAL** | **90,300** | **332.94** | | | | |
| **TOTAL COST** | **£ 482,400** | **£ 1,778.65 /m²** | | | | |
| Building | £ **312,100** | **£ 1,150.74 /m²** | | | | |
| Engineering | £ **170,300** | **£ 627.91 /m²** | | | | |

## HBN 22 – 'Accident and emergency facilities for adults and children' (clinical space)

**HBN 22 - 'Accident and emergency facilities for adults and children' (example 2)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **1122** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **96,700** | **86.20** | **550** | **175.74** | **0.490** | **4.4** |
| 2A Frame | 129,000 | 114.99 | 1,122 | 115.00 | 1.000 | 5.87 |
| 2B Upper floors | 35,000 | 31.20 | 538 | 65.00 | 0.480 | 1.59 |
| 2C Roof | 114,400 | 101.97 | 673 | 170.00 | 0.600 | 5.21 |
| 2D Stairs | 16,300 | 14.50 | 0 | 152.48 | | 0.74 |
| 2E External walls | 160,300 | 142.89 | 583 | 275.00 | 0.520 | 7.29 |
| 2F Windows and external doors | 61,600 | 54.91 | 112 | 550.00 | 0.100 | 2.80 |
| 2G Internal walls and partitions | 66,200 | 59.01 | 1,218 | 54.35 | | 3.01 |
| 2H Internal doors | 35,200 | 31.38 | 52 | 682.89 | | 1.60 |
| **2 SUPERSTRUCTURE** | **618,000** | **550.85** | | | | **28.11** |
| 3A Wall finishes | 103,100 | 91.90 | 2,647 | 38.96 | | 4.69 |
| 3B Floor finishes | 61,400 | 54.73 | 1,075 | 57.17 | | 2.79 |
| 3C Ceiling finishes | 38,900 | 34.67 | 1,075 | 36.24 | | 1.77 |
| **3 INTERNAL FINISHES** | **203,400** | **181.30** | | | | **9.25** |
| **4 FITTINGS & FURNISHINGS** | **111,600** | **99.48** | | | | **5.08** |
| 5A Sanitary appliances | **19,900** | **17.74** | - | - | - | 0.91 |
| 5C Disposal installations | **16,800** | **15.00** | - | - | - | 0.76 |
| 5N BWIC | **17,100** | **15.24** | - | - | - | 0.78 |
| 5O Profit and attendances | **8,600** | **7.67** | - | - | - | 0.39 |
| **BUILDING SERVICES** | **62,400** | **55.65** | | | | **2.84** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **70,500** | **62.85** | | | | 3.21 |
| 5E Heat source | **7,300** | **6.51** | | | | 0.33 |
| 5F Space heating/air treatment | **61,100** | **54.50** | | | | 2.78 |
| 5G Ventilation system | **101,300** | **90.31** | | | | 4.61 |
| 5H Electrical installations | **452,500** | **403.32** | | | | 20.59 |
| 5I Gas installations | **10,200** | **9.07** | | | | 0.46 |
| 5J Lifts and conveyors | **42,800** | **38.16** | | | | 1.95 |
| 5K Protective Installations | **27,800** | **24.82** | | | | 1.26 |
| 5L Communication installations | **72,000** | **64.20** | | | | 3.28 |
| 5M Special installations | **260,100** | **231.85** | | | | 11.84 |
| **M&E SERVICES** | **1,105,600** | **985.58** | | | | **50.31** |
| **BUILDING & ENGINEERING** | **2,197,700** | **1,959.06** | | | | **100.00** |
| 7 Preliminaries | **329,600** | **293.80** | | | | 15.00 |
| 8A Design risk | **109,900** | **97.96** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **66,000** | **58.83** | | | | 3.00 |
| **TOTAL** | **505,500** | **450.59** | | | | |
| **TOTAL COST** | **£ 2,703,200** | **£ 2,409.59 /$m^2$** | | | | |
| Building | £ **1,343,300** | £ **1,197.40 /$m^2$** | | | | |
| Engineering | £ **1,359,900** | £ **1,212.19 /$m^2$** | | | | |

## HBN 22 – 'Accident and emergency facilities for adults and children' (staff space)

**HBN 22 - 'Accident and emergency facilities for adults and children' (example 2)** **Jul-10**

Index level : **480** MIPS(FP)

**ELEMENTAL COST MODEL (Staff space)**

Gross internal area : **510** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **43,900** | **86.13** | **250** | **175.74** | **0.490** | **6.04** |
| 2A Frame | 58,700 | 115.17 | 510 | 115.00 | 1.000 | 8.08 |
| 2B Upper floors | 15,900 | 31.20 | 245 | 65.00 | 0.480 | 2.19 |
| 2C Roof | 52,000 | 102.02 | 306 | 170.00 | 0.600 | 7.16 |
| 2D Stairs | 7,400 | 14.50 | 0 | 152.48 | | 1.02 |
| 2E External walls | 72,900 | 143.03 | 265 | 275.00 | 0.520 | 10.03 |
| 2F Windows and external doors | 28,100 | 55.13 | 51 | 550.00 | 0.100 | 3.87 |
| 2G Internal walls and partitions | 32,900 | 64.55 | 606 | 54.31 | | 4.53 |
| 2H Internal doors | 20,200 | 39.63 | 30 | 671.64 | | 2.78 |
| **2 SUPERSTRUCTURE** | **288,100** | **565.23** | | | | **39.66** |
| 3A Wall finishes | 35,500 | 69.65 | 1,300 | 27.30 | | 4.89 |
| 3B Floor finishes | 21,400 | 41.99 | 490 | 43.75 | | 2.94 |
| 3C Ceiling finishes | 17,800 | 34.92 | 490 | 36.24 | | 2.45 |
| **3 INTERNAL FINISHES** | **74,700** | **146.56** | | | | **10.28** |
| **4 FITTINGS & FURNISHINGS** | **13,400** | **26.29** | | | | **1.84** |
| 5A Sanitary appliances | **15,600** | **30.61** | - | - | - | 2.15 |
| 5C Disposal installations | **7,600** | **15.00** | - | - | - | 1.05 |
| 5N BWIC | **4,500** | **8.83** | - | - | - | 0.62 |
| 5O Profit and attendances | **2,300** | **4.51** | - | - | - | 0.32 |
| **BUILDING SERVICES** | **30,000** | **58.95** | | | | **4.14** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **42,000** | **82.37** | | | | 5.78 |
| 5E Heat source | **2,700** | **5.21** | | | | 0.37 |
| 5F Space heating/air treatment | **21,100** | **41.38** | | | | 2.90 |
| 5G Ventilation system | **29,200** | **57.20** | | | | 4.02 |
| 5H Electrical installations | **85,800** | **168.43** | | | | 11.81 |
| 5I Gas installations | **4,300** | **8.49** | | | | 0.59 |
| 5J Lifts and conveyors | **19,500** | **38.16** | | | | 2.68 |
| 5K Protective Installations | **12,600** | **24.82** | | | | 1.73 |
| 5L Communication installations | **32,700** | **64.20** | | | | 4.50 |
| 5M Special installations | **26,700** | **52.31** | | | | 3.67 |
| **M&E SERVICES** | **276,600** | **542.57** | | | | **38.05** |
| **BUILDING & ENGINEERING** | **726,700** | **1,425.73** | | | | **100.00** |
| 7 Preliminaries | **109,000** | **213.86** | | | | 15.00 |
| 8A Design risk | **36,300** | **71.22** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **21,800** | **42.77** | | | | 3.00 |
| **TOTAL** | **167,100** | **327.85** | | | | |
| **TOTAL COST** | **£ 893,800** | **£ 1,753.61 /$m^2$** | | | | |
| Building | £ **553,600** | **£ 1,086.15 /$m^2$** | | | | |
| Engineering | £ **340,200** | **£ 667.46 /$m^2$** | | | | |

## HBN 22 – 'Accident and emergency facilities for adults and children' (overall space)

**HBN 22 - 'Accident and emergency facilities for adults and children' (example 2)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **1903** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **163,800** | **86.09** | **932** | **175.74** | **0.490** | **4.96** |
| 2A Frame | 218,800 | 114.99 | 1,903 | 115.00 | 1.000 | 6.62 |
| 2B Upper floors | 59,300 | 31.17 | 913 | 65.00 | 0.480 | 1.80 |
| 2C Roof | 194,100 | 102.01 | 1,142 | 170.00 | 0.600 | 5.88 |
| 2D Stairs | 27,600 | 14.50 | 0 | 152.48 | | 0.84 |
| 2E External walls | 272,000 | 142.95 | 989 | 275.00 | 0.520 | 8.23 |
| 2F Windows and external doors | 104,500 | 54.92 | 190 | 550.00 | 0.100 | 3.16 |
| 2G Internal walls and partitions | 122,300 | 64.28 | 2,251 | 54.33 | | 3.70 |
| 2H Internal doors | 70,400 | 37.00 | 104 | 674.94 | | 2.13 |
| **2 SUPERSTRUCTURE** | **1,069,000** | **561.82** | | | | **32.36** |
| 3A Wall finishes | 162,900 | 85.61 | 4,830 | 33.73 | | 4.93 |
| 3B Floor finishes | 98,100 | 51.56 | 1,826 | 53.72 | | 2.97 |
| 3C Ceiling finishes | 66,200 | 34.79 | 1,826 | 36.24 | | 2.00 |
| **3 INTERNAL FINISHES** | **327,200** | **171.96** | | | | **9.90** |
| **4 FITTINGS & FURNISHINGS** | **130,100** | **68.37** | | | | **3.94** |
| 5A Sanitary appliances | **41,900** | **22.02** | - | - | - | 1.27 |
| 5C Disposal installations | **28,500** | **15.00** | - | - | - | 0.86 |
| 5N BWIC | **23,700** | **12.46** | - | - | - | 0.72 |
| 5O Profit and attendances | **11,900** | **6.25** | - | - | - | 0.36 |
| **BUILDING SERVICES** | **106,000** | **55.73** | | | | **3.21** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **130,100** | **68.38** | | | | 3.94 |
| 5E Heat source | **11,100** | **5.84** | | | | 0.34 |
| 5F Space heating/air treatment | **91,700** | **48.17** | | | | 2.78 |
| 5G Ventilation system | **142,800** | **75.04** | | | | 4.32 |
| 5H Electrical installations | **577,200** | **303.34** | | | | 17.47 |
| 5I Gas installations | **16,700** | **8.77** | | | | 0.51 |
| 5J Lifts and conveyors | **72,600** | **38.16** | | | | 2.20 |
| 5K Protective installations | **47,200** | **24.82** | | | | 1.43 |
| 5L Communication installations | **122,100** | **64.20** | | | | 3.70 |
| 5M Special installations | **295,700** | **155.43** | | | | 8.95 |
| **M&E SERVICES** | **1,507,200** | **792.14** | | | | **45.64** |
| **BUILDING & ENGINEERING** | **3,303,300** | **1,736.11** | | | | **100.00** |
| 7 Preliminaries | **495,500** | **260.41** | | | | 15.00 |
| 8A Design risk | **165,200** | **86.82** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **99,100** | **52.08** | | | | 3.00 |
| **TOTAL** | **759,800** | **399.31** | | | | |

| | | | |
|---|---|---|---|
| **TOTAL COST** | **£ 4,063,100** | **£ 2,135.37** | **/$m^2$** |
| Building | £ **2,209,200** | £ **1,161.05** | **/$m^2$** |
| Engineering | £ **1,853,900** | £ **974.32** | **/$m^2$** |

## HBN 26 Volume 1 – 'Facilities for surgical procedures' (clinical space)

**HBN 26 Volume 1 - 'Facilities for surgical procedures' (example 1, 8 operating theatres)** **Aug-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **3092** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **266,200** | **86.09** | **1515** | **175.74** | **0.490** | **3.27** |
| | 2A Frame | 355,600 | 115.00 | 3,092 | 115.00 | 1.000 | 4.36 |
| | 2B Upper floors | 96,500 | 31.21 | 1,484 | 65.00 | 0.480 | 1.18 |
| | 2C Roof | 315,400 | 102.00 | 1,855 | 170.00 | 0.600 | 3.87 |
| | 2D Stairs | 17,800 | 5.75 | 0 | 152.48 | | 0.22 |
| | 2E External walls | 442,200 | 143.00 | 1,608 | 275.00 | 0.520 | 5.43 |
| | 2F Windows and external doors | 170,000 | 54.98 | 309 | 550.00 | 0.100 | 2.09 |
| | 2G Internal walls and partitions | 179,000 | 57.89 | 3,251 | 55.06 | | 2.20 |
| | 2H Internal doors | 97,100 | 31.40 | 141 | 686.65 | | 1.19 |
| **2** | **SUPERSTRUCTURE** | **1,673,600** | **541.23** | | | | **20.54** |
| | 3A Wall finishes | 287,100 | 92.84 | 7,083 | 40.53 | | 3.52 |
| | 3B Floor finishes | 168,700 | 54.56 | 2,952 | 57.15 | | 2.07 |
| | 3C Ceiling finishes | 128,500 | 41.56 | 2,952 | 43.53 | | 1.58 |
| **3** | **INTERNAL FINISHES** | **584,300** | **188.96** | | | | **7.17** |
| **4** | **FITTINGS & FURNISHINGS** | **263,700** | **85.28** | | | | **3.24** |
| | 5A Sanitary appliances | **61,300** | **19.82** | - | - | - | 0.75 |
| | 5C Disposal installations | **46,400** | **15.00** | - | - | - | 0.57 |
| | 5N BWIC | **78,700** | **25.45** | - | - | - | 0.97 |
| | 5O Profit and attendances | **39,400** | **12.74** | - | - | - | 0.48 |
| | **BUILDING SERVICES** | **225,800** | **73.01** | | | | **2.77** |
| | 5B Services equipment | **-** | | | | | 0.00 |
| | 5D Water installations | **150,800** | **48.77** | | | | 1.85 |
| | 5E Heat source | **23,600** | **7.62** | | | | 0.29 |
| | 5F Space heating/air treatment | **190,100** | **61.48** | | | | 2.33 |
| | 5G Ventilation system | **2,549,000** | **824.32** | | | | 31.28 |
| | 5H Electrical installations | **1,209,200** | **391.04** | | | | 14.84 |
| | 5I Gas installations | **28,800** | **9.31** | | | | 0.35 |
| | 5J Lifts and conveyors | **113,100** | **36.57** | | | | 1.39 |
| | 5K Protective installations | **76,700** | **24.82** | | | | 0.94 |
| | 5L Communication installations | **198,500** | **64.20** | | | | 2.44 |
| | 5M Special installations | **596,500** | **192.89** | | | | 7.32 |
| | **M&E SERVICES** | **5,136,300** | **1,661.01** | | | | **63.03** |
| | **BUILDING & ENGINEERING** | **8,149,900** | **2,635.58** | | | | **100.00** |
| | 7 Preliminaries | **1,222,400** | **395.31** | | | | 15.00 |
| | 8A Design risk | **407,500** | **131.78** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **244,500** | **79.07** | | | | 3.00 |
| | **TOTAL** | **1,874,400** | **606.16** | | | | |
| | **TOTAL COST** | **£ 10,024,300** | **£ 3,241.73** /$m^2$ | | | | |
| | Building | £ **3,706,700** | **£ 1,198.70** /$m^2$ | | | | |
| | Engineering | £ **6,317,600** | **£ 2,043.03** /$m^2$ | | | | |

## HBN 26 Volume 1 – 'Facilities for surgical procedures' (staff space)

**HBN 26 Volume 1 - 'Facilities for surgical procedures' (example 1, 8 operating theatres)** **Aug-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : **882** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **75,900** | **86.09** | **432** | **175.74** | **0.490** | **6.44** |
| 2A Frame | 101,400 | 115.02 | 882 | 115.00 | 1.000 | 8.60 |
| 2B Upper floors | 27,500 | 31.19 | 423 | 65.00 | 0.480 | 2.33 |
| 2C Roof | 89,900 | 101.97 | 529 | 170.00 | 0.600 | 7.62 |
| 2D Stairs | 5,100 | 5.75 | 0 | 152.48 | | 0.43 |
| 2E External walls | 126,000 | 142.92 | 458 | 275.00 | 0.520 | 10.69 |
| 2F Windows and external doors | 48,400 | 54.90 | 88 | 550.00 | 0.100 | 4.10 |
| 2G Internal walls and partitions | 60,800 | 68.96 | 1,100 | 55.29 | | 5.16 |
| 2H Internal doors | 36,000 | 40.83 | 54 | 668.82 | | 3.05 |
| **2 SUPERSTRUCTURE** | **495,100** | **561.54** | | | | **41.98** |
| 3A Wall finishes | 47,500 | 53.88 | 2,342 | 20.29 | | 4.03 |
| 3B Floor finishes | 34,300 | 38.91 | 851 | 40.25 | | 2.91 |
| 3C Ceiling finishes | 30,900 | 35.05 | 851 | 36.36 | | 2.62 |
| **3 INTERNAL FINISHES** | **112,700** | **127.84** | | | | **9.56** |
| **4 FITTINGS & FURNISHINGS** | **25,100** | **28.47** | | | | **2.13** |
| 5A Sanitary appliances | **12,400** | **14.07** | - | - | - | 1.05 |
| 5C Disposal installations | **13,200** | **15.00** | - | - | - | 1.12 |
| 5N BWIC | **6,900** | **7.83** | - | - | - | 0.59 |
| 5O Profit and attendances | **3,500** | **3.97** | - | - | - | 0.30 |
| **BUILDING SERVICES** | **36,000** | **40.87** | | | | **3.06** |
| 5B Services equipment | **-** | | | | | 0.00 |
| 5D Water installations | **28,000** | **31.73** | | | | 2.37 |
| 5E Heat source | **3,300** | **3.79** | | | | 0.28 |
| 5F Space heating/air treatment | **22,800** | **25.90** | | | | 1.93 |
| 5G Ventilation system | **73,000** | **82.76** | | | | 6.19 |
| 5H Electrical installations | **143,700** | **162.96** | | | | 12.19 |
| 5I Gas installations | **6,700** | **7.60** | | | | 0.57 |
| 5J Lifts and conveyors | **32,200** | **36.57** | | | | 2.73 |
| 5K Protective installations | **21,900** | **24.82** | | | | 1.86 |
| 5L Communication installations | **56,600** | **64.20** | | | | 4.80 |
| 5M Special installations | **46,100** | **52.31** | | | | 3.91 |
| **M&E SERVICES** | **434,300** | **492.64** | | | | **36.83** |
| **BUILDING & ENGINEERING** | **1,179,100** | **1,337.45** | | | | **100.00** |
| 7 Preliminaries | **176,800** | **200.54** | | | | 15.00 |
| 8A Design risk | **58,900** | **66.81** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **35,300** | **40.04** | | | | 3.00 |
| **TOTAL** | **271,000** | **307.39** | | | | |
| **TOTAL COST** | **£ 1,450,100** | **£ 1,644.82** /$m^2$ | | | | |
| Building | £ **916,000** | **£ 1,039.00** /$m^2$ | | | | |
| Engineering | £ **534,100** | **£ 605.82** /$m^2$ | | | | |

## HBN 26 Volume 1 – 'Facilities for surgical procedures' (overall space)

**HBN 26 Volume 1 - 'Facilities for surgical procedures' (example 1, 8 operating theatres)** **Aug-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **3974** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **342,200** | **86.11** | **1947** | **175.74** | **0.490** | **3.73** |
| | 2A Frame | 457,000 | 115.00 | 3,974 | 115.00 | 1.000 | 4.98 |
| | 2B Upper floors | 124,000 | 31.20 | 1,907 | 65.00 | 0.480 | 1.35 |
| | 2C Roof | 405,300 | 101.99 | 2,384 | 170.00 | 0.600 | 4.42 |
| | 2D Stairs | 22,800 | 5.75 | 0 | 152.48 | | 0.25 |
| | 2E External walls | 568,200 | 142.98 | 2,066 | 275.00 | 0.520 | 6.19 |
| | 2F Windows and external doors | 218,400 | 54.96 | 397 | 550.00 | 0.100 | 2.38 |
| | 2G Internal walls and partitions | 241,200 | 60.70 | 4,376 | 55.12 | | 2.63 |
| | 2H Internal doors | 133,100 | 33.49 | 195 | 681.73 | | 1.45 |
| **2** | **SUPERSTRUCTURE** | **2,170,000** | **546.07** | | | | **23.65** |
| | 3A Wall finishes | 336,000 | 84.55 | 9,472 | 35.48 | | 3.66 |
| | 3B Floor finishes | 201,000 | 50.58 | 3,803 | 52.84 | | 2.19 |
| | 3C Ceiling finishes | 158,600 | 39.91 | 3,803 | 41.70 | | 1.73 |
| **3** | **INTERNAL FINISHES** | **695,600** | **175.04** | | | | **7.58** |
| **4** | **FITTINGS & FURNISHINGS** | **288,800** | **72.67** | | | | **3.15** |
| | 5A Sanitary appliances | **73,600** | **18.52** | - | - | - | 0.80 |
| | 5C Disposal installations | **59,600** | **15.00** | - | - | - | 0.65 |
| | 5N BWIC | **83,300** | **20.96** | - | - | - | 0.91 |
| | 5O Profit and attendances | **41,700** | **10.49** | - | - | - | 0.45 |
| | **BUILDING SERVICES** | **258,200** | **64.97** | | | | **2.81** |
| | 5B Services equipment | **-** | | | | | 0.00 |
| | 5D Water installations | **176,500** | **44.42** | | | | 1.92 |
| | 5E Heat source | **26,400** | **6.65** | | | | 0.29 |
| | 5F Space heating/air treatment | **208,300** | **52.41** | | | | 2.27 |
| | 5G Ventilation system | **2,524,900** | **635.37** | | | | 27.53 |
| | 5H Electrical installations | **1,323,000** | **332.92** | | | | 14.42 |
| | 5I Gas installations | **35,300** | **8.88** | | | | 0.38 |
| | 5J Lifts and conveyors | **145,300** | **36.57** | | | | 1.58 |
| | 5K Protective installations | **98,600** | **24.82** | | | | 1.07 |
| | 5L Communication installations | **255,100** | **64.20** | | | | 2.78 |
| | 5M Special installations | **624,200** | **157.07** | | | | 6.81 |
| | **M&E SERVICES** | **5,417,600** | **1,363.32** | | | | **59.05** |
| | **BUILDING & ENGINEERING** | **9,172,400** | **2,308.18** | | | | **100.00** |
| | 7 Preliminaries | **1,375,800** | **346.21** | | | | 15.00 |
| | 8A Design risk | **458,600** | **115.40** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **275,100** | **69.23** | | | | 3.00 |
| | **TOTAL** | **2,109,500** | **530.84** | | | | |
| | **TOTAL COST** | **£ 11,281,900** | **£ 2,839.01** /$m^2$ | | | | |
| | Building | £ **4,618,300** | **£ 1,162.16** /$m^2$ | | | | |
| | Engineering | £ **6,663,600** | **£ 1,676.85** /$m^2$ | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (primary care centre) (public space)

**HBN 11-01 - 'Facilities for primary and community care services' (primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Public space) Gross internal area: **294** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **25,300** | **86.19** | **144** | **175.74** | **0.490** | **5.14** |
| | 2A Frame | 33,800 | 115.15 | 294 | 115.00 | 1.000 | 6.87 |
| | 2B Upper floors | 9,200 | 31.34 | 141 | 65.00 | 0.480 | 1.87 |
| | 2C Roof | 29,900 | 101.86 | 176 | 170.00 | 0.600 | 6.08 |
| | 2D Stairs | 2,500 | 8.37 | 0 | 152.48 | | 0.51 |
| | 2E External walls | 42,100 | 143.42 | 153 | 275.00 | 0.520 | 8.56 |
| | 2F Windows and external doors | 16,000 | 54.51 | 29 | 550.00 | 0.100 | 3.25 |
| | 2G Internal walls and partitions | 13,800 | 47.01 | 217 | 63.67 | | 2.80 |
| | 2H Internal doors | 7,600 | 25.89 | 11 | 685.17 | 0.038 | 1.54 |
| **2** | **SUPERSTRUCTURE** | **154,900** | **527.55** | | | | **31.48** |
| | 3A Wall finishes | 15,100 | 51.44 | 498 | 30.37 | | 3.07 |
| | 3B Floor finishes | 12,500 | 42.58 | 281 | 44.40 | | 2.54 |
| | 3C Ceiling finishes | 10,200 | 34.75 | 281 | 36.24 | | 2.07 |
| **3** | **INTERNAL FINISHES** | **37,800** | **128.77** | | | | **7.68** |
| **4** | **FITTINGS & FURNISHINGS** | **5,700** | **19.42** | | | | **1.16** |
| | 5A Sanitary appliances | **22,600** | **76.99** | - | - | - | 4.59 |
| | 5C Disposal installations | **4,400** | **15.00** | - | - | - | 0.89 |
| | 5N BWIC | **12,500** | **42.58** | - | - | - | 2.54 |
| | 5O Profit and attendances | **6,300** | **21.46** | - | - | - | 1.28 |
| | **BUILDING SERVICES** | **45,800** | **156.03** | | | | **9.30** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **32,600** | **111.17** | | | | 6.63 |
| | 5E Heat source | **5,000** | **16.95** | | | | 1.02 |
| | 5F Space heating/air treatment | **12,400** | **42.41** | | | | 2.52 |
| | 5G Ventilation system | **48,600** | **165.59** | | | | 9.88 |
| | 5H Electrical installations | **62,700** | **213.65** | | | | 12.74 |
| | 5I Gas installations | **2,500** | **8.40** | | | | 0.51 |
| | 5J Lifts and conveyors | **24,800** | **84.34** | | | | 5.04 |
| | 5K Protective installations | **6,800** | **23.19** | | | | 1.38 |
| | 5L Communication installations | **14,000** | **47.59** | | | | 2.85 |
| | 5M Special installations | **13,100** | **44.73** | | | | 2.66 |
| | **M&E SERVICES** | **222,500** | **758.01** | | | | **45.23** |
| | **BUILDING & ENGINEERING** | **492,000** | **1,675.97** | | | | **100.00** |
| | 7 Preliminaries | **73,800** | **251.42** | | | | 15.00 |
| | 8A Design risk | **24,600** | **83.81** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **14,800** | **50.42** | | | | 3.00 |
| | **TOTAL** | **113,200** | **385.64** | | | | |
| | **TOTAL COST** | **£ 605,200** | **£ 2,061.77 /$m^2$** | | | | |
| | Building | £ **331,500** | **£ 1,129.34 /$m^2$** | | | | |
| | Engineering | £ **273,700** | **£ 932.43 /$m^2$** | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (primary care centre) (clinical space)

**HBN 11-01 - 'Facilities for primary and community care services' (primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **1800** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **155,000** | **86.09** | **882** | **175.74** | **0.490** | **5.18** |
| | 2A Frame | 207,000 | 114.98 | 1,800 | 115.00 | 1.000 | 6.92 |
| | 2B Upper floors | 56,200 | 31.22 | 864 | 65.00 | 0.480 | 1.88 |
| | 2C Roof | 183,600 | 101.98 | 1,080 | 170.00 | 0.600 | 6.14 |
| | 2D Stairs | 15,100 | 8.37 | 0 | 152.48 | | 0.50 |
| | 2E External walls | 257,400 | 142.97 | 936 | 275.00 | 0.520 | 8.60 |
| | 2F Windows and external doors | 99,000 | 54.99 | 180 | 550.00 | 0.100 | 3.31 |
| | 2G Internal walls and partitions | 108,200 | 60.10 | 1,940 | 55.79 | | 3.62 |
| | 2H Internal doors | 55,100 | 30.61 | 83 | 661.94 | | 1.84 |
| **2** | **SUPERSTRUCTURE** | **981,600** | **545.22** | | | | **32.81** |
| | 3A Wall finishes | 140,500 | 78.04 | 4,208 | 33.40 | | 4.70 |
| | 3B Floor finishes | 86,500 | 48.05 | 1,725 | 50.13 | | 2.89 |
| | 3C Ceiling finishes | 62,500 | 34.72 | 1,725 | 36.24 | | 2.09 |
| **3** | **INTERNAL FINISHES** | **289,500** | **160.81** | | | | **9.68** |
| **4** | **FITTINGS & FURNISHINGS** | **82,800** | **45.99** | | | | **2.77** |
| | 5A Sanitary appliances | **94,900** | **52.71** | - | - | - | 3.17 |
| | 5C Disposal installations | **27,000** | **15.00** | - | - | - | 0.90 |
| | 5N BWIC | **69,000** | **38.33** | - | - | - | 2.31 |
| | 5O Profit and attendances | **34,500** | **19.16** | - | - | - | 1.15 |
| | **BUILDING SERVICES** | **225,400** | **125.20** | | | | **7.53** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **100,800** | **56.02** | | | | 3.37 |
| | 5E Heat source | **27,100** | **15.07** | | | | 0.91 |
| | 5F Space heating/air treatment | **70,700** | **39.26** | | | | 2.36 |
| | 5G Ventilation system | **238,500** | **132.46** | | | | 7.97 |
| | 5H Electrical installations | **419,500** | **233.02** | | | | 14.02 |
| | 5I Gas installations | **14,500** | **8.07** | | | | 0.48 |
| | 5J Lifts and conveyors | **151,800** | **84.34** | | | | 5.07 |
| | 5K Protective installations | **41,800** | **23.19** | | | | 1.40 |
| | 5L Communication installations | **85,700** | **47.59** | | | | 2.86 |
| | 5M Special installations | **106,900** | **59.38** | | | | 3.57 |
| | **M&E SERVICES** | **1,257,300** | **698.40** | | | | **42.01** |
| | **BUILDING & ENGINEERING** | **2,991,600** | **1,661.71** | | | | **100.00** |
| | 7 Preliminaries | **448,700** | **249.23** | | | | 15.00 |
| | 8A Design risk | **149,600** | **83.09** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **89,700** | **49.82** | | | | 3.00 |
| | **TOTAL** | **688,000** | **382.15** | | | | |
| | **TOTAL COST** | **£ 3,679,600** | **£ 2,043.82** /$m^2$ | | | | |
| | Building | £ **2,133,100** | **£ 1,184.82** /$m^2$ | | | | |
| | Engineering | £ **1,546,500** | **£ 859.00** /$m^2$ | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (primary care centre) (staff space)

**HBN 11-01 - 'Facilities for primary and community care services' (primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) **ELEMENTAL COST MODEL (Staff space)** Gross internal area : **511** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **44,100** | **86.22** | **251** | **175.74** | **0.490** | **5.81** |
| | 2A Frame | 58,800 | 114.96 | 511 | 115.00 | 1.000 | 7.75 |
| | 2B Upper floors | 16,000 | 31.28 | 246 | 65.00 | 0.480 | 2.11 |
| | 2C Roof | 52,200 | 102.05 | 307 | 170.00 | 0.600 | 6.88 |
| | 2D Stairs | 4,300 | 8.37 | 0 | 152.48 | | 0.57 |
| | 2E External walls | 73,200 | 143.11 | 266 | 275.00 | 0.520 | 9.65 |
| | 2F Windows and external doors | 28,100 | 54.94 | 51 | 550.00 | 0.100 | 3.71 |
| | 2G Internal walls and partitions | 27,300 | 53.37 | 502 | 54.32 | | 3.60 |
| | 2H Internal doors | 14,800 | 28.93 | 22 | 664.00 | | 1.95 |
| **2** | **SUPERSTRUCTURE** | **274,700** | **537.01** | | | | **36.22** |
| | 3A Wall finishes | 24,100 | 47.12 | 1,111 | 21.71 | | 3.18 |
| | 3B Floor finishes | 21,700 | 42.42 | 492 | 44.14 | | 2.86 |
| | 3C Ceiling finishes | 17,800 | 34.80 | 492 | 36.24 | | 2.35 |
| **3** | **INTERNAL FINISHES** | **63,600** | **124.34** | | | | **8.39** |
| **4** | **FITTINGS & FURNISHINGS** | **12,200** | **23.85** | | | | **1.61** |
| | 5A Sanitary appliances | **18,900** | **36.95** | - | - | - | 2.49 |
| | 5C Disposal installations | **7,700** | **15.00** | - | - | - | 1.02 |
| | 5N BWIC | **16,900** | **33.04** | - | - | - | 2.23 |
| | 5O Profit and attendances | **8,500** | **16.62** | - | - | - | 1.12 |
| | **BUILDING SERVICES** | **52,000** | **101.61** | | | | **6.86** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **19,200** | **37.53** | | | | 2.53 |
| | 5E Heat source | **5,700** | **11.20** | | | | 0.75 |
| | 5F Space heating/air treatment | **14,300** | **28.04** | | | | 1.89 |
| | 5G Ventilation system | **44,800** | **87.63** | | | | 5.91 |
| | 5H Electrical installations | **121,800** | **238.10** | | | | 16.06 |
| | 5I Gas installations | **3,800** | **7.41** | | | | 0.50 |
| | 5J Lifts and conveyors | **43,100** | **84.34** | | | | 5.68 |
| | 5K Protective installations | **11,900** | **23.19** | | | | 1.57 |
| | 5L Communication installations | **24,300** | **47.59** | | | | 3.20 |
| | 5M Special installations | **22,900** | **44.73** | | | | 3.02 |
| | **M&E SERVICES** | **311,800** | **609.76** | | | | **41.11** |
| | **BUILDING & ENGINEERING** | **758,400** | **1,482.79** | | | | **100.00** |
| | 7 Preliminaries | **113,800** | **222.49** | | | | 15.00 |
| | 8A Design risk | **37,900** | **74.10** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **22,800** | **44.58** | | | | 3.00 |
| | **TOTAL** | **174,500** | **341.16** | | | | |
| | **TOTAL COST** | **£ 932,900** | **£ 1,823.87 /$m^2$** | | | | |
| | Building | £ **549,300** | **£ 1,073.91 /$m^2$** | | | | |
| | Engineering | £ **383,600** | **£ 749.96 /$m^2$** | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (primary care centre) (overall space)

**HBN 11-01 - 'Facilities for primary and community care services' (primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **1800** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **155,000** | **86.09** | **882** | **175.74** | **0.490** | **5.18** |
| | 2A Frame | 207,000 | 114.98 | 1,800 | 115.00 | 1.000 | 6.92 |
| | 2B Upper floors | 56,200 | 31.22 | 864 | 65.00 | 0.480 | 1.88 |
| | 2C Roof | 183,600 | 101.98 | 1,080 | 170.00 | 0.600 | 6.14 |
| | 2D Stairs | 15,100 | 8.37 | 0 | 152.48 | | 0.50 |
| | 2E External walls | 257,400 | 142.97 | 936 | 275.00 | 0.520 | 8.60 |
| | 2F Windows and external doors | 99,000 | 54.99 | 180 | 550.00 | 0.100 | 3.31 |
| | 2G Internal walls and partitions | 108,200 | 60.10 | 1,940 | 55.79 | | 3.62 |
| | 2H Internal doors | 55,100 | 30.61 | 83 | 661.94 | | 1.84 |
| **2** | **SUPERSTRUCTURE** | **981,600** | **545.22** | | | | **32.81** |
| | 3A Wall finishes | 140,500 | 78.04 | 4,208 | 33.40 | | 4.70 |
| | 3B Floor finishes | 86,500 | 48.05 | 1,725 | 50.13 | | 2.89 |
| | 3C Ceiling finishes | 62,500 | 34.72 | 1,725 | 36.24 | | 2.09 |
| **3** | **INTERNAL FINISHES** | **289,500** | **160.81** | | | | **9.68** |
| **4** | **FITTINGS & FURNISHINGS** | **82,800** | **45.99** | | | | **2.77** |
| | 5A Sanitary appliances | **94,900** | **52.71** | - | - | - | 3.17 |
| | 5C Disposal installations | **27,000** | **15.00** | - | - | - | 0.90 |
| | 5N BWIC | **69,000** | **38.33** | - | - | - | 2.31 |
| | 5O Profit and attendances | **34,500** | **19.16** | - | - | - | 1.15 |
| | **BUILDING SERVICES** | **225,400** | **125.20** | | | | **7.53** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **100,800** | **56.02** | | | | 3.37 |
| | 5E Heat source | **27,100** | **15.07** | | | | 0.91 |
| | 5F Space heating/air treatment | **70,700** | **39.26** | | | | 2.36 |
| | 5G Ventilation system | **238,500** | **132.46** | | | | 7.97 |
| | 5H Electrical installations | **419,500** | **233.02** | | | | 14.02 |
| | 5I Gas installations | **14,500** | **8.07** | | | | 0.48 |
| | 5J Lifts and conveyors | **151,800** | **84.34** | | | | 5.07 |
| | 5K Protective installations | **41,800** | **23.19** | | | | 1.40 |
| | 5L Communication installations | **85,700** | **47.59** | | | | 2.86 |
| | 5M Special installations | **106,900** | **59.38** | | | | 3.57 |
| | **M&E SERVICES** | **1,257,300** | **698.40** | | | | **42.01** |
| | **BUILDING & ENGINEERING** | **2,991,600** | **1,661.71** | | | | **100.00** |
| | 7 Preliminaries | **448,700** | **249.23** | | | | 15.00 |
| | 8A Design risk | **149,600** | **83.09** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **89,700** | **49.82** | | | | 3.00 |
| | **TOTAL** | **688,000** | **382.15** | | | | |
| | **TOTAL COST** | **£ 3,679,600** | **£ 2,043.82** /$m^2$ | | | | |
| | Building | £ **2,133,100** | **£ 1,184.82** /$m^2$ | | | | |
| | Engineering | £ **1,546,500** | **£ 859.00** /$m^2$ | | | | |

# HBN 11-01 – 'Facilities for primary and community care services' (extended primary care centre) (public space)

**HBN 11-01 - 'Facilities for primary and community care services' (extended primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) **ELEMENTAL COST MODEL (Public space)** Gross internal area : **967** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **83,300** | **86.11** | **474** | **175.74** | **0.490** | **5.66** |
| | 2A Frame | 111,200 | 114.95 | 967 | 115.00 | 1.000 | 7.56 |
| | 2B Upper floors | 30,200 | 31.22 | 464 | 65.00 | 0.480 | 2.05 |
| | 2C Roof | 98,600 | 101.92 | 580 | 170.00 | 0.600 | 6.70 |
| | 2D Stairs | 8,100 | 8.37 | 0 | 152.48 | | 0.55 |
| | 2E External walls | 138,300 | 142.96 | 503 | 275.00 | 0.520 | 9.40 |
| | 2F Windows and external doors | 53,400 | 55.20 | 97 | 550.00 | 0.100 | 3.63 |
| | 2G Internal walls and partitions | 30,100 | 31.11 | 472 | 63.76 | | 2.05 |
| | 2H Internal doors | 18,100 | 18.71 | 26 | 694.24 | | 1.23 |
| **2** | **SUPERSTRUCTURE** | **488,000** | **504.44** | | | | **33.17** |
| | 3A Wall finishes | 37,300 | 38.56 | 1,202 | 31.07 | | 2.54 |
| | 3B Floor finishes | 43,100 | 44.55 | 930 | 46.39 | | 2.93 |
| | 3C Ceiling finishes | 33,700 | 34.84 | 930 | 36.24 | | 2.29 |
| **3** | **INTERNAL FINISHES** | **114,100** | **117.95** | | | | **7.76** |
| **4** | **FITTINGS & FURNISHINGS** | **16,900** | **17.47** | | | | **1.15** |
| | 5A Sanitary appliances | **50,000** | **51.69** | - | - | - | 3.40 |
| | 5C Disposal Installations | **14,500** | **15.00** | - | - | - | 0.99 |
| | 5N BWIC | **35,800** | **37.01** | - | - | - | 2.43 |
| | 5O Profit and attendances | **17,900** | **18.50** | - | - | - | 1.22 |
| | **BUILDING SERVICES** | **118,200** | **122.20** | | | | **8.04** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **91,600** | **94.71** | | | | 6.23 |
| | 5E Heat source | **9,800** | **10.08** | | | | 0.67 |
| | 5F Space heating/air treatment | **39,000** | **40.30** | | | | 2.65 |
| | 5G Ventilation system | **148,200** | **153.22** | | | | 10.07 |
| | 5H Electrical installations | **177,400** | **183.34** | | | | 12.06 |
| | 5I Gas Installations | **8,000** | **8.25** | | | | 0.54 |
| | 5J Lifts and conveyors | **51,700** | **53.48** | | | | 3.51 |
| | 5K Protective installations | **22,400** | **23.19** | | | | 1.52 |
| | 5L Communication installations | **54,800** | **56.65** | | | | 3.72 |
| | 5M Special installations | **48,000** | **49.58** | | | | 3.26 |
| | **M&E SERVICES** | **650,900** | **672.80** | | | | **44.23** |
| | **BUILDING & ENGINEERING** | **1,471,400** | **1,520.97** | | | | **100.00** |
| | 7 Preliminaries | **220,700** | **228.14** | | | | 15.00 |
| | 8A Design risk | **73,500** | **75.98** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **44,100** | **45.59** | | | | 3.00 |
| | **TOTAL** | **338,300** | **349.70** | | | | |
| | **TOTAL COST** | **£ 1,809,700** | **£ 1,870.69** /$m^2$ | | | | |
| | Building | £ **1,009,200** | **£ 1,043.21** /$m^2$ | | | | |
| | Engineering | £ **800,500** | **£ 827.48** /$m^2$ | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (extended primary care centre) (clinical space)

**HBN 11-01 - 'Facilities for primary and community care services' (extended primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **2727** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **234,800** | **86.09** | **1336** | **175.74** | **0.490** | **4.79** |
| | 2A Frame | 313,600 | 114.99 | 2,727 | 115.00 | 1.000 | 6.40 |
| | 2B Upper floors | 85,100 | 31.20 | 1,309 | 65.00 | 0.480 | 1.74 |
| | 2C Roof | 278,100 | 101.97 | 1,636 | 170.00 | 0.600 | 5.67 |
| | 2D Stairs | 22,800 | 8.37 | 0 | 152.48 | | 0.47 |
| | 2E External walls | 390,000 | 143.00 | 1,418 | 275.00 | 0.520 | 7.96 |
| | 2F Windows and external doors | 150,200 | 55.07 | 273 | 550.00 | 0.100 | 3.06 |
| | 2G Internal walls and partitions | 179,500 | 65.82 | 3,253 | 55.18 | | 3.66 |
| | 2H Internal doors | 96,600 | 35.42 | 147 | 657.22 | | 1.97 |
| **2** | **SUPERSTRUCTURE** | **1,515,900** | **555.84** | | | | **30.93** |
| | 3A Wall finishes | 286,800 | 105.16 | 7,087 | 40.47 | | 5.85 |
| | 3B Floor finishes | 146,500 | 53.72 | 2,611 | 56.11 | | 2.99 |
| | 3C Ceiling finishes | 96,100 | 35.24 | 2,611 | 36.79 | | 1.96 |
| **3** | **INTERNAL FINISHES** | **529,400** | **194.12** | | | | **10.80** |
| **4** | **FITTINGS & FURNISHINGS** | **186,500** | **68.38** | | | | **3.81** |
| | 5A Sanitary appliances | **160,100** | **58.70** | - | - | - | 3.27 |
| | 5C Disposal installations | **40,900** | **15.00** | - | - | - | 0.83 |
| | 5N BWIC | **113,200** | **41.51** | - | - | - | 2.31 |
| | 5O Profit and attendances | **56,600** | **20.75** | - | - | - | 1.15 |
| | **BUILDING SERVICES** | **370,800** | **135.96** | | | | **7.56** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **178,200** | **65.34** | | | | 3.64 |
| | 5E Heat source | **29,100** | **10.68** | | | | 0.59 |
| | 5F Space heating/air treatment | **126,900** | **46.53** | | | | 2.59 |
| | 5G Ventilation system | **398,700** | **146.20** | | | | 8.13 |
| | 5H Electrical installations | **689,400** | **252.79** | | | | 14.07 |
| | 5I Gas installations | **23,000** | **8.42** | | | | 0.47 |
| | 5J Lifts and conveyors | **145,800** | **53.48** | | | | 2.97 |
| | 5K Protective installations | **63,300** | **23.19** | | | | 1.29 |
| | 5L Communication installations | **154,500** | **56.65** | | | | 3.15 |
| | 5M Special installations | **254,800** | **93.43** | | | | 5.20 |
| | **M&E SERVICES** | **2,063,700** | **756.69** | | | | **42.10** |
| | **BUILDING & ENGINEERING** | **4,901,100** | **1,797.08** | | | | **100.00** |
| | 7 Preliminaries | **735,200** | **269.57** | | | | 15.00 |
| | 8A Design risk | **245,100** | **89.87** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **147,000** | **53.90** | | | | 3.00 |
| | **TOTAL** | **1,127,300** | **413.34** | | | | |
| | **TOTAL COST** | **£ 6,028,400** | **£ 2,210.39** /$m^2$ | | | | |
| | Building | £ **3,490,000** | **£ 1,279.65** /$m^2$ | | | | |
| | Engineering | £ **2,538,400** | **£ 930.74** /$m^2$ | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (extended primary care centre) (staff space)

**HBN 11-01 - 'Facilities for primary and community care services' (extended primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Staff space) Gross internal area : **1348** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **116,200** | **86.18** | **661** | **175.74** | **0.490** | **6.44** |
| 2A Frame | 155,000 | 114.96 | 1,348 | 115.00 | 1.000 | 8.59 |
| 2B Upper floors | 42,100 | 31.22 | 647 | 65.00 | 0.480 | 2.33 |
| 2C Roof | 137,500 | 101.98 | 809 | 170.00 | 0.600 | 7.62 |
| 2D Stairs | 11,300 | 8.37 | 0 | 152.48 | | 0.63 |
| 2E External walls | 192,800 | 142.99 | 701 | 275.00 | 0.520 | 10.68 |
| 2F Windows and external doors | 74,300 | 55.11 | 135 | 550.00 | 0.100 | 4.12 |
| 2G Internal walls and partitions | 45,700 | 33.89 | 841 | 54.29 | | 2.53 |
| 2H Internal doors | 28,100 | 20.84 | 42 | 669.63 | | 1.56 |
| **2 SUPERSTRUCTURE** | **686,800** | **509.36** | | | | **38.06** |
| 3A Wall finishes | 46,500 | 34.49 | 2,045 | 22.75 | | 2.58 |
| 3B Floor finishes | 54,900 | 40.72 | 1,299 | 42.23 | | 3.04 |
| 3C Ceiling finishes | 47,100 | 34.93 | 1,299 | 36.24 | | 2.61 |
| **3 INTERNAL FINISHES** | **148,500** | **110.14** | | | | **8.23** |
| **4 FITTINGS & FURNISHINGS** | **16,700** | **12.39** | | | | **0.93** |
| 5A Sanitary appliances | **38,300** | **28.41** | - | - | - | 2.12 |
| 5C Disposal installations | **20,200** | **15.00** | - | - | - | 1.12 |
| 5N BWIC | **38,900** | **28.85** | - | - | - | 2.16 |
| 5O Profit and attendances | **19,500** | **14.46** | - | - | - | 1.08 |
| **BUILDING SERVICES** | **116,900** | **86.72** | | | | **6.48** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **58,700** | **43.51** | | | | 3.25 |
| 5E Heat source | **9,400** | **6.99** | | | | 0.52 |
| 5F Space heating/air treatment | **37,700** | **27.94** | | | | 2.09 |
| 5G Ventilation system | **110,200** | **81.72** | | | | 6.11 |
| 5H Electrical installations | **247,200** | **183.34** | | | | 13.70 |
| 5I Gas installations | **10,000** | **7.41** | | | | 0.55 |
| 5J Lifts and conveyors | **72,100** | **53.48** | | | | 3.99 |
| 5K Protective installations | **31,300** | **23.19** | | | | 1.73 |
| 5L Communication installations | **76,400** | **56.65** | | | | 4.23 |
| 5M Special installations | **66,800** | **49.58** | | | | 3.70 |
| **M&E SERVICES** | **719,800** | **533.80** | | | | **39.87** |
| **BUILDING & ENGINEERING** | **1,804,900** | **1,338.59** | | | | **100.00** |
| 7 Preliminaries | **270,800** | **200.84** | | | | 15.00 |
| 8A Design risk | **90,300** | **66.97** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **54,200** | **40.20** | | | | 3.00 |
| **TOTAL** | **415,300** | **308.02** | | | | |
| **TOTAL COST** | **£ 2,220,200** | **£ 1,646.66 /$m^2$** | | | | |
| Building | £ **1,334,800** | £ **989.98 /$m^2$** | | | | |
| Engineering | £ **885,400** | £ **656.68 /$m^2$** | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (extended primary care centre) (overall space)

**HBN 11-01 - 'Facilities for primary and community care services' (extended primary care centre)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **5043** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **434,300** | **86.12** | **2471** | **175.74** | **0.490** | **5.31** |
| | 2A Frame | 579,900 | 114.99 | 5,043 | 115.00 | 1.000 | 7.09 |
| | 2B Upper floors | 157,400 | 31.21 | 2,421 | 65.00 | 0.480 | 1.92 |
| | 2C Roof | 514,400 | 102.00 | 3,026 | 170.00 | 0.600 | 6.29 |
| | 2D Stairs | 42,200 | 8.37 | 0 | 152.48 | | 0.52 |
| | 2E External walls | 721,100 | 142.99 | 2,622 | 275.00 | 0.520 | 8.82 |
| | 2F Windows and external doors | 277,200 | 54.97 | 504 | 550.00 | 0.100 | 3.39 |
| | 2G Internal walls and partitions | 280,600 | 55.64 | 4,528 | 61.96 | | 3.43 |
| | 2H Internal doors | 140,600 | 27.88 | 212 | 663.62 | | 1.72 |
| **2** | **SUPERSTRUCTURE** | **2,713,400** | **538.05** | | | | **33.18** |
| | 3A Wall finishes | 368,700 | 73.11 | 10,269 | 35.91 | 2.036 | 4.51 |
| | 3B Floor finishes | 243,500 | 48.28 | 4,845 | 50.26 | 0.961 | 2.98 |
| | 3C Ceiling finishes | 176,300 | 34.96 | 4,845 | 36.38 | 0.961 | 2.16 |
| **3** | **INTERNAL FINISHES** | **788,500** | **156.35** | | | | **9.65** |
| **4** | **FITTINGS & FURNISHINGS** | **220,100** | **43.64** | | | | **2.69** |
| | 5A Sanitary appliances | **248,400** | **49.26** | - | - | - | 3.04 |
| | 5C Disposal installations | **75,600** | **15.00** | - | - | - | 0.92 |
| | 5N BWIC | **187,200** | **37.12** | - | - | - | 2.29 |
| | 5O Profit and attendances | **93,600** | **18.56** | - | - | - | 1.14 |
| | **BUILDING SERVICES** | **604,800** | **119.94** | | | | **7.39** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **327,200** | **64.87** | | | | 4.00 |
| | 5E Heat source | **48,000** | **9.53** | | | | 0.59 |
| | 5F Space heating/air treatment | **202,300** | **40.11** | | | | 2.47 |
| | 5G Ventilation system | **652,800** | **129.45** | | | | 7.98 |
| | 5H Electrical installations | **1,109,000** | **219.91** | | | | 13.56 |
| | 5I Gas installations | **40,900** | **8.10** | | | | 0.50 |
| | 5J Lifts and conveyors | **269,700** | **53.48** | | | | 3.30 |
| | 5K Protective installations | **117,000** | **23.19** | | | | 1.43 |
| | 5L Communication installations | **285,700** | **56.65** | | | | 3.49 |
| | 5M Special installations | **366,400** | **72.66** | | | | 4.48 |
| | **M&E SERVICES** | **3,419,000** | **677.96** | | | | **41.80** |
| | **BUILDING & ENGINEERING** | **8,180,100** | **1,622.06** | | | | **100.00** |
| | 7 Preliminaries | **1,227,100** | **243.33** | | | | 15.00 |
| | 8A Design risk | **409,100** | **81.12** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **245,400** | **48.66** | | | | 3.00 |
| | **TOTAL** | **1,881,600** | **373.11** | | | | |
| | **TOTAL COST** | **£ 10,061,700** | **£ 1,995.18 /$m^2$** | | | | |
| | Building | £ **5,856,200** | £ **1,161.25 /$m^2$** | | | | |
| | Engineering | £ **4,205,500** | £ **833.93 /$m^2$** | | | | |

# HBN 11-01 – 'Facilities for primary and community care services' (community hospital) (public space)

**HBN 11-01 - 'Facilities for primary and community care services' (community hospital)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Public) Gross internal area : **1596** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **137,400** | **86.08** | **782** | **175.74** | **0.490** | **5.74** |
| 2A Frame | 183,500 | 114.97 | 1,596 | 115.00 | 1.000 | 7.67 |
| 2B Upper floors | 49,800 | 31.20 | 766 | 65.00 | 0.480 | 2.08 |
| 2C Roof | 162,900 | 102.06 | 958 | 170.00 | 0.600 | 6.81 |
| 2D Stairs | 13,400 | 8.37 | 0 | 152.48 | | 0.56 |
| 2E External walls | 228,300 | 143.04 | 830 | 275.00 | 0.520 | 9.54 |
| 2F Windows and external doors | 88,000 | 55.13 | 160 | 550.00 | 0.100 | 3.68 |
| 2G Internal walls and partitions | 81,100 | 50.81 | 1,357 | 59.78 | | 3.39 |
| 2H Internal doors | 37,000 | 23.18 | 55 | 672.46 | | 1.55 |
| **2 SUPERSTRUCTURE** | **844,000** | **528.76** | | | | **35.28** |
| 3A Wall finishes | 79,500 | 49.81 | 2,768 | 28.73 | | 3.32 |
| 3B Floor finishes | 78,500 | 49.18 | 1,538 | 51.03 | | 3.28 |
| 3C Ceiling finishes | 55,000 | 34.46 | 1,538 | 35.80 | | 2.30 |
| **3 INTERNAL FINISHES** | **213,000** | **133.45** | | | | **8.90** |
| **4 FITTINGS & FURNISHINGS** | **34,300** | **21.49** | | | | **1.43** |
| 5A Sanitary appliances | **93,000** | **58.27** | - | - | - | 3.89 |
| 5C Disposal installations | **23,900** | **15.00** | - | - | - | 1.00 |
| 5N BWIC | **54,100** | **33.89** | - | - | - | 2.26 |
| 5O Profit and attendances | **27,100** | **16.98** | - | - | - | 1.13 |
| **BUILDING SERVICES** | **198,100** | **124.14** | | | | **8.28** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **60,100** | **37.65** | | | | 2.51 |
| 5E Heat source | **17,000** | **10.68** | | | | 0.71 |
| 5F Space heating/air treatment | **168,200** | **105.41** | | | | 7.03 |
| 5G Ventilation system | **148,800** | **93.25** | | | | 6.22 |
| 5H Electrical installations | **278,800** | **174.70** | | | | 11.65 |
| 5I Gas installations | **12,300** | **7.68** | | | | 0.51 |
| 5J Lifts and conveyors | **64,300** | **40.31** | | | | 2.69 |
| 5K Protective installations | **37,000** | **23.19** | | | | 1.55 |
| 5L Communication installations | **90,400** | **56.65** | | | | 3.78 |
| 5M Special installations | **89,100** | **55.82** | | | | 3.72 |
| **M&E SERVICES** | **966,000** | **605.34** | | | | **40.37** |
| **BUILDING & ENGINEERING** | **2,392,800** | **1,499.26** | | | | **100.00** |
| 7 Preliminaries | **358,900** | **224.86** | | | | 15.00 |
| 8A Design risk | **119,600** | **74.93** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **71,800** | **44.98** | | | | 3.00 |
| **TOTAL** | **550,300** | **344.78** | | | | |

| | | | | |
|---|---|---|---|---|
| **TOTAL COST** | **£** | **2,943,100** | **£ 1,843.92** | **/$m^2$** |
| Building | £ | **1,754,900** | **£ 1,099.49** | **/$m^2$** |
| Engineering | £ | **1,188,200** | **£ 744.44** | **/$m^2$** |

# HBN 11-01 – 'Facilities for primary and community care services' (community hospital) (clinical space)

**HBN 11-01 - 'Facilities for primary and community care services' (community hospital)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Clinical space) Gross internal area : **9267** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **798,000** | **86.11** | **4541** | **175.74** | **0.490** | **4.33** |
| | 2A Frame | 1,065,700 | 115.00 | 9,267 | 115.00 | 1.000 | 5.79 |
| | 2B Upper floors | 289,100 | 31.20 | 4,448 | 65.00 | 0.480 | 1.57 |
| | 2C Roof | 945,200 | 102.00 | 5,560 | 170.00 | 0.600 | 5.13 |
| | 2D Stairs | 77,600 | 8.37 | 0 | 152.48 | | 0.42 |
| | 2E External walls | 1,325,200 | 143.00 | 4,819 | 275.00 | 0.520 | 7.20 |
| | 2F Windows and external doors | 509,900 | 55.02 | 927 | 550.00 | 0.100 | 2.77 |
| | 2G Internal walls and partitions | 732,800 | 79.08 | 12,148 | 60.32 | | 3.98 |
| | 2H Internal doors | 318,100 | 34.33 | 472 | 674.62 | | 1.73 |
| **2** | **SUPERSTRUCTURE** | **5,263,600** | **568.00** | | | | **28.59** |
| | 3A Wall finishes | 924,000 | 99.71 | 22,348 | 41.35 | | 5.02 |
| | 3B Floor finishes | 495,700 | 53.49 | 8,899 | 55.70 | | 2.69 |
| | 3C Ceiling finishes | 334,000 | 36.04 | 8,899 | 37.53 | | 1.81 |
| **3** | **INTERNAL FINISHES** | **1,753,700** | **189.24** | | | | **9.52** |
| **4** | **FITTINGS & FURNISHINGS** | **524,900** | **56.64** | | | | **2.85** |
| | 5A Sanitary appliances | **838,700** | **90.51** | - | - | - | 4.56 |
| | 5C Disposal installations | **139,000** | **15.00** | - | - | - | 0.76 |
| | 5N BWIC | **468,400** | **50.55** | - | - | - | 2.54 |
| | 5O Profit and attendances | **234,200** | **25.27** | - | - | - | 1.27 |
| | **BUILDING SERVICES** | **1,680,300** | **181.33** | | | | **9.13** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **788,600** | **85.10** | | | | 4.28 |
| | 5E Heat source | **128,700** | **13.89** | | | | 0.70 |
| | 5F Space heating/air treatment | **722,000** | **77.91** | | | | 3.92 |
| | 5G Ventilation system | **2,163,000** | **233.41** | | | | 11.75 |
| | 5H Electrical installations | **2,396,800** | **258.65** | | | | 13.02 |
| | 5I Gas installations | **76,700** | **8.27** | | | | 0.42 |
| | 5J Lifts and conveyors | **369,800** | **39.91** | | | | 2.01 |
| | 5K Protective installations | **214,900** | **23.19** | | | | 1.17 |
| | 5L Communication installations | **654,300** | **70.61** | | | | 3.55 |
| | 5M Special installations | **875,000** | **94.43** | | | | 4.75 |
| | **M&E SERVICES** | **8,389,800** | **905.37** | | | | **45.57** |
| | **BUILDING & ENGINEERING** | **18,410,300** | **1,986.69** | | | | **100.00** |
| | 7 Preliminaries | **2,761,600** | **298.01** | | | | 15.00 |
| | 8A Design risk | **920,500** | **99.33** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **552,300** | **59.60** | | | | 3.00 |
| | **TOTAL** | **4,234,400** | **456.94** | | | | |
| | **TOTAL COST** | **£ 22,644,700** | **£ 2,443.63 /$m^2$** | | | | |
| | Building | £ **12,325,200** | **£ 1,330.04 /$m^2$** | | | | |
| | Engineering | £ **10,319,500** | **£ 1,113.60 /$m^2$** | | | | |

# HBN 11-01 – 'Facilities for primary and community care services' (community hospital) (staff space)

**HBN 11-01 - 'Facilities for primary and community care services' (community hospital)** **Jul-10**

Index level : **480** MIPS(FP)

## ELEMENTAL COST MODEL (Staff space)

Gross internal area : **2824** $m^2$

| ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|
| **1 SUBSTRUCTURE** | **243,200** | **86.11** | **1384** | **175.74** | **0.490** | **6.54** |
| 2A Frame | 324,800 | 115.01 | 2,824 | 115.00 | 1.000 | 8.73 |
| 2B Upper floors | 88,100 | 31.20 | 1,356 | 65.00 | 0.480 | 2.37 |
| 2C Roof | 288,200 | 102.05 | 1,695 | 170.00 | 0.600 | 7.75 |
| 2D Stairs | 23,600 | 8.37 | 0 | 152.48 | | 0.63 |
| 2E External walls | 404,000 | 143.05 | 1,469 | 275.00 | 0.520 | 10.86 |
| 2F Windows and external doors | 155,100 | 54.92 | 282 | 550.00 | 0.100 | 4.17 |
| 2G Internal walls and partitions | 98,700 | 34.95 | 1,819 | 54.28 | | 2.65 |
| 2H Internal doors | 59,700 | 21.14 | 89 | 667.78 | | 1.60 |
| **2 SUPERSTRUCTURE** | **1,442,200** | **510.69** | | | | **38.76** |
| 3A Wall finishes | 95,800 | 33.92 | 4,297 | 22.29 | | 2.57 |
| 3B Floor finishes | 111,700 | 39.55 | 2,678 | 41.69 | | 3.00 |
| 3C Ceiling finishes | 97,100 | 34.38 | 2,678 | 36.24 | | 2.61 |
| **3 INTERNAL FINISHES** | **304,600** | **107.85** | | | | **8.18** |
| **4 FITTINGS & FURNISHINGS** | **47,800** | **16.93** | | | | **1.28** |
| 5A Sanitary appliances | **116,400** | **41.22** | - | - | - | 3.13 |
| 5C Disposal installations | **42,400** | **15.00** | - | - | - | 1.14 |
| 5N BWIC | **78,300** | **27.72** | - | - | - | 2.10 |
| 5O Profit and attendances | **39,200** | **13.88** | - | - | - | 1.05 |
| **BUILDING SERVICES** | **276,300** | **97.82** | | | | **7.42** |
| 5B Services equipment | **-** | **-** | | | | 0.00 |
| 5D Water installations | **70,900** | **25.12** | | | | 1.91 |
| 5E Heat source | **27,000** | **9.56** | | | | 0.73 |
| 5F Space heating/air treatment | **96,300** | **34.09** | | | | 2.59 |
| 5G Ventilation system | **200,000** | **70.83** | | | | 5.38 |
| 5H Electrical installations | **493,400** | **174.70** | | | | 13.26 |
| 5I Gas installations | **21,100** | **7.49** | | | | 0.57 |
| 5J Lifts and conveyors | **114,500** | **40.55** | | | | 3.08 |
| 5K Protective installations | **65,500** | **23.19** | | | | 1.76 |
| 5L Communication installations | **160,000** | **56.65** | | | | 4.30 |
| 5M Special installations | **157,600** | **55.82** | | | | 4.24 |
| **M&E SERVICES** | **1,406,300** | **498.00** | | | | **37.82** |
| **BUILDING & ENGINEERING** | **3,720,400** | **1,317.40** | | | | **100.00** |
| 7 Preliminaries | **558,000** | **197.58** | | | | 15.00 |
| 8A Design risk | **186,000** | **65.86** | | | | 5.00 |
| 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| 8C BREEAM allowance | **111,600** | **39.52** | | | | 3.00 |
| **TOTAL** | **855,600** | **302.96** | | | | |
| **TOTAL COST** | **£ 4,576,000** | **£ 1,620.30 /$m^2$** | | | | |
| Building | £ **2,846,300** | £ **1,007.84 /$m^2$** | | | | |
| Engineering | £ **1,729,700** | £ **612.46 /$m^2$** | | | | |

## HBN 11-01 – 'Facilities for primary and community care services' (community hospital) (overall space)

**HBN 11-01 - 'Facilities for primary and community care services' (community hospital)** **Jul-10**

Index level : **480** MIPS(FP) ELEMENTAL COST MODEL (Overall space) Gross internal area : **13783** $m^2$

| | ELEMENT | COST OF ELEMENT £ | RATE £/$m^2$ | ELEMENTAL DATA Quantity | ELEMENTAL DATA Rate £ | QUANTITY FACTOR | ELEMENTAL PERCENTAGE % |
|---|---|---|---|---|---|---|---|
| **1** | **SUBSTRUCTURE** | **1,186,900** | **86.12** | **6754** | **175.74** | **0.490** | **4.82** |
| | 2A Frame | 1,585,000 | 115.00 | 13,783 | 115.00 | 1.000 | 6.43 |
| | 2B Upper floors | 430,000 | 31.20 | 6,616 | 65.00 | 0.480 | 1.75 |
| | 2C Roof | 1,405,900 | 102.01 | 8,270 | 170.00 | 0.600 | 5.71 |
| | 2D Stairs | 115,400 | 8.37 | 0 | 152.48 | | 0.47 |
| | 2E External walls | 1,970,900 | 143.00 | 7,167 | 275.00 | 0.520 | 8.00 |
| | 2F Windows and external doors | 757,900 | 54.99 | 1,378 | 550.00 | 0.100 | 3.08 |
| | 2G Internal walls and partitions | 910,600 | 66.07 | 15,309 | 59.48 | | 3.70 |
| | 2H Internal doors | 415,400 | 30.14 | 617 | 673.68 | | 1.69 |
| **2** | **SUPERSTRUCTURE** | **7,591,100** | **550.78** | | | | **30.83** |
| | 3A Wall finishes | 1,097,500 | 79.63 | 29,372 | 37.37 | | 4.45 |
| | 3B Floor finishes | 687,100 | 49.85 | 13,201 | 52.05 | | 2.79 |
| | 3C Ceiling finishes | 489,000 | 35.48 | 13,201 | 37.05 | | 1.98 |
| **3** | **INTERNAL FINISHES** | **2,273,600** | **164.96** | | | | **9.22** |
| **4** | **FITTINGS & FURNISHINGS** | **607,000** | **44.04** | | | | **2.46** |
| | 5A Sanitary appliances | **1,065,700** | **77.32** | - | - | - | 4.33 |
| | 5C Disposal installations | **206,700** | **15.00** | - | - | - | 0.84 |
| | 5N BWIC | **603,600** | **43.79** | - | - | - | 2.45 |
| | 5O Profit and attendances | **301,800** | **21.90** | - | - | - | 1.23 |
| | **BUILDING SERVICES** | **2,177,800** | **158.01** | | | | **8.85** |
| | 5B Services equipment | **-** | **-** | | | | 0.00 |
| | 5D Water installations | **917,500** | **66.57** | | | | 3.72 |
| | 5E Heat source | **173,400** | **12.58** | | | | 0.70 |
| | 5F Space heating/air treatment | **989,200** | **71.77** | | | | 4.02 |
| | 5G Ventilation system | **2,505,600** | **181.79** | | | | 10.17 |
| | 5H Electrical installations | **3,178,500** | **230.62** | | | | 12.90 |
| | 5I Gas installations | **110,700** | **8.03** | | | | 0.45 |
| | 5J Lifts and conveyors | **552,600** | **40.09** | | | | 2.24 |
| | 5K Protective installations | **319,600** | **23.19** | | | | 1.30 |
| | 5L Communication installations | **929,000** | **67.40** | | | | 3.77 |
| | 5M Special installations | **1,123,800** | **81.53** | | | | 4.56 |
| | **M&E SERVICES** | **10,799,900** | **783.58** | | | | **43.83** |
| | **BUILDING & ENGINEERING** | **24,636,300** | **1,787.49** | | | | **100.00** |
| | 7 Preliminaries | **3,695,500** | **268.13** | | | | 15.00 |
| | 8A Design risk | **1,231,800** | **89.37** | | | | 5.00 |
| | 8B Employers variation risk | **-** | **-** | | | | 0.00 |
| | 8C BREEAM allowance | **739,100** | **53.63** | | | | 3.00 |
| | **TOTAL** | **5,666,400** | **411.13** | | | | |
| | **TOTAL COST** | **£ 30,302,700** | **£ 2,198.61 /$m^2$** | | | | |
| | Building | £ **17,018,800** | **£ 1,234.80 /$m^2$** | | | | |
| | Engineering | £ **13,283,900** | **£ 963.81 /$m^2$** | | | | |

# Appendix 7 – Outline specification and design notes

| | ELEMENT AND DESIGN CRITERIA | | | | SPECIFICATION NOTES | |
|---|---|---|---|---|---|---|
| 1 | SUBSTRUCTURE | | | | | |
| 1A | **Substructure** | | | 1A1 | Standard foundations | Foundations are of reinforced concrete construction. |
| ♦ | Nature of soil | | | 1A2 | Special foundations | |
| ♦ | Permissible soil loading | **British Standards (BS)** | kN/m$^2$ | 1A3 | Lowest floor bed/ slab | Ground floor slab is a minimum 150 mm thick reinforced concrete with a light tamp finish and colour tinted PVA spray on damp proof membrane on a minimum 150 mm thick hardcore bed. All necessary expansion and contraction joints should be incorporated. |
| ♦ | Bearing strata depth | **Excluded** | m | 1A4 | Basement excavation | **Excluded (to be included in site-specific works)** |
| ♦ | Site levels: main gradients | **Excluded** | m | 1A5 | Basement retaining walls | **Excluded (to be included in site-specific works)** |
| ♦ | Water table depth | **Excluded** | m | | | **Excluded (to be included in site-specific works)** |
| ♦ | Average pile loading | **Excluded** | kN | | | **Excluded (to be included in site-specific works)** |
| ♦ | Volume of basement | **Excluded** | m$^3$ | | | **Excluded (to be included in site-specific works)** |
| 2 | SUPERSTRUCTURE | | | | | |
| 2A | **Frame** | | | 2A1 | Structural frame | The structural steel frame is based on clear span across the building without intermediate support utilising beams to support the first floor and steel portal rafters to support the roof. Secondary steel is included for supports around a central courtyard area. |
| ♦ | Grid pattern of main columns | **British Standards (BS)** | | | | **To British Standards (BS)** |
| 2B | **Upper floors** | | | 2B1 | Upper floors | Upper floors are constructed of composite metal deck and reinforced concrete construction with a light tamp finish and colour tinted PVA spray. |
| ♦ | Design loads | | 4 kN/m$^2$ | | | 4 kN/m$^2$ + 1 kN/m$^2$ for partitions. 7.5 kN/m$^2$ for plantrooms, birthing pools and equipment with excessive loads. |
| ♦ | Spans | | ≤ 9 m | | | |
| ♦ | Sound insulation | **British Standards (BS)** | dB | | | **To British Standards (BS)** |

| | ELEMENT AND DESIGN CRITERIA | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **2C** | **Roof** | | | 2C1 | Roof structure | The roof will be "SpeedDeck Building Systems Limited" or equal standing seam insulated aluminium roofing fixed to galvanised steel purlin complete with vapour barrier and insulated with mineral wool fibre insulation to achieve a maximum "U" value of 0.25 $W/m^2K$. |
| ♦ | Design loads | **British Standards (BS)** | $kN/m^2$ | 2C2 | Roof coverings | |
| ♦ | Spans | **British Standards (BS)** | m | 2C3 | Roof drainage | Gutters to the standing seam roof should be metal, compatible with the roofing system and insulated to the same standard as the general roof areas. Gutters should be provided with weir overflows. The rainwater installation is based on a conventional system with PVC rainwater pipes located internally. |
| ♦ | Angle of pitch of sloping roofs | | ≤ 5 deg | 2C4 | Rooflights and openings | Approximately 10% of roof area. |
| ♦ | Area of roof surface | | $m^2$ | 2C5 | Roof features | **Excluded (to be included in site-specific works)** |
| **2D** | **Stairs** | | | 2D1 | Stair structure | Main staircase construction is based on an in-situ or precast reinforced concrete. |
| ♦ | Total vertical height of each staircase and width between strings | | | 2D2 | Stair finishes | Treads to receive carpeted finish with non-slip nosings. The main staircase is to include features to ensure it is in keeping with the quality of the reception area. |
| | | | 3.5 m | 2D3 | Stair balustrades and handrails | The handrail to be stainless steel with painted mild steel balustrades. |
| **2E** | **External walls** | | | 2E1 | External enclosing walls | External walls to comprise a palette of materials including proprietary rain screen cladding on either masonry construction or metal stud walling system, double-glazed curtain walling, composite flat panel cladding systems and facing brickwork. |
| ♦ | Design loads of load bearing walls | **British Standards (BS)** | $kN/m^2$ | 2E2 | External wall finishes | |
| ♦ | Thermal conductivity – "U" value | **British Standards (BS)** | $W/m^2K$ | 2E3 | Solar/rain screening | The external walls comprise a palette of materials with a solid to glazed ratio of 70:30. |
| ♦ | Approximate area of external walls above ground | **Site-specific works** | $m^2$ | 2E4 | Basement walls | **Excluded (to be included in site-specific works)** |
| ♦ | Area of basement walls | **N/A** | $m^2$ | 2E5 | Façade access | Included |

| | ELEMENT AND DESIGN CRITERIA | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **2F** | **External windows and doors** | | | 2F1 | External windows | Curtain walling should comprise a "Technal", "Kawneer" or similar double glazed and fully drained polyester powder coated thermally broken installation with no opening lights. Windows are double glazed aluminium powder coated windows. |
| ♦ | Approximate total window area | **Solid to glazed ratio of 70:30** | | 2F2 | External doors | External escape doors should be solid core metal faced doors. Colour to match the panel cladding system. |
| ♦ | Approximate area of opening lights to windows | **50% of window area** | | | | The main entrance door should be a circular bi-parting door finished as the curtain walling system operated by proximity sensors with internal manual override.<br>System adjustments may be required to specialist units e.g. mental health. |
| **2G** | **Internal walls and partitions** | | | 2G1 | Internal walls/ partitions | Lift shafts are constructed from 215 mm thick blockwork. Internal walls generally constructed from 140 mm blockwork or dry lined construction. All exposed walls are in fair face paint quality blockwork. |
| ♦ | Sound insulation | **British Standards (BS)** | dB | 2G2 | Balustrades and handrails | Included |
| ♦ | Number of WC cubicles | **N/A** | nr | 2G3 | Moveable room dividers | Glazed screens to be "Komfort" glazed office partitions or similar. |
| | | | | 2G4 | Cubicles | **Site-specific** |
| **2H** | **Internal doors** | | | 2H1 | Internal doors | Internal doors, fire resistant as appropriate, to be generally of flush hardwood veneered (beech) construction in hardwood frames with hardwood architraves including good quality brushed stainless steel ironmongery. |
| ♦ | Approximate number of doors by type and size | **Site-specific** | nr | | | Main entrance doors into each office from common areas to have feature glazing panels glazed with "Pyran" or similar clear fire resistant glass. |
| ♦ | Fire rating | **British Standards (BS)** | | | | Doors to plant rooms to be plywood veneered solid core doors in softwood frames. All painted.<br>All doors to offices, service riser cupboards, cleaners' cupboard and plant room should be fitted with 5 lever mortice dead locks. |
| **3** | **FINISHES** | | | | | |
| **3A** | **Wall finishes** | | | 3A1 | Wall finishes | Offices and meeting room areas: plaster/skim and emulsion paint; 1 base coat, two finishing coats.<br>Clinical and clinical support areas; "Altro Whiterock" hygienic wall finish.<br>Circulation and communication areas: "Superhard" gypsum wallboard, eggshell paint to wall surfaces; 1 base coat and two finishing coats. Perimeter/impact protection to corridor walls.<br>FM and plantroom areas: eggshell paint to wall surfaces; 1 base coat and two finishing coats. |

| | ELEMENT AND DESIGN CRITERIA | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **3B** | **Floor finishes** | | | 3B1 | Finishes to floors | Offices and meeting room areas: broadloom carpet.<br><br>Clinical and clinical support areas: vinyl/PVCu flooring ("Altro" or similar) with coved vinyl/PVCu skirting; all joints to be welded and sealed.<br><br>Circulation and communication areas: vinyl/PVCu flooring ("Altro" or similar) with coved vinyl/PVCu skirting; all joints to be welded and sealed.<br><br>FM and plantroom areas: epoxy floor paint to plantroom areas. |
| | | | | 3B2 | Raised access floors | **Excluded (to be included in site-specific works)** |
| **3C** | **Ceiling finishes** | | | 3C1 | Finishes to ceilings | Generally; suspended ceilings throughout. |
| | | | | 3C2 | Suspended ceilings | "Armstrong Cortega" or similar approved; exposed 24 wide XL/TL grid; 600 × 600 "Cortega Tegular" tiles; "Prelude XL/TL" perimeter trim with 25 × 38 mm shadow batten.<br><br>Some clinical areas to receive specialist finishes. |
| **4** | **FITTINGS** | | | | | |
| **4A** | **Fittings and furnishings** | | | 4A1 | Fittings, fixtures and furniture | All Group 1 equipment (all fixtures, fittings and equipment wall, floor or ceiling mounted that are supplied and fixed under the terms of the building contract). Examples of which include fixed storage, kitchenette, wall-mounted clocks, notice boards, cabinets, floor-mounted surgical, clinical and treatment chairs. All to be in accordance with the relevant HBN, HTM and ADB documentation. Group 2 equipment (all loose fixtures, fittings and equipment and secondary fixed fixtures fittings and equipment). Examples of which include dispensers, wall-mounted magazine racks, floor standing lockers. All to be in accordance with the relevant HBN, HTM and ADB documentation. Group 3 and 4 equipment is to be excluded and to be included in equipment. |
| | | | | 4A2 | Soft furnishing | **Excluded (to be included in site-specific works)** |
| | | | | 4A3 | Works of art | **Excluded (to be included in site-specific works)** |
| | | | | 4A4 | Equipment | See 4A1 |
| **5** | **SERVICES** | | | | | |
| **5A** | **Sanitary appliances** | | | 5A1 | Sanitaryware | Sanitaryware to be "Armitage Shanks" or similar approved and must meet the standards set out in the HTM documentation. |
| | | | | 5A2 | Pods | **Excluded (to be included in site-specific works)** |

| ELEMENT AND DESIGN CRITERIA | | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **5B** | **Services equipment** | | | 5B1 | Services equipment | Mechanical and electrical services equipment to be installed in accordance with manufacturers' recommendations, inclusive of testing and making operational. Group 1 mechanical and electrical equipment (to be supplied and installed as part of the building contract). Group 1 mechanical and electrical equipment includes all equipment required in order for the building and each department to fulfil its functional requirements. Group 2 equipment (to be supplied by others and installed, as appropriate, by the mechanical & electrical/main contractor under the terms of the building contract) Examples of Group 2 equipment include items such as X-ray film viewers. Groups 3 and 4 equipment is excluded and is to be included in equipment costs. |
| **5C** | **Disposal installations** | | | 5C1 | Internal drainage | PVCu internal drainage pipework. |
| | | | | 5C2 | Refuse disposal | **To British Standards (BS)** |
| | | | | 5C3 | Chemical and industrial waste disposal | **To British Standards (BS)** |
| **5D** | **Water installations** | | | 5D1 | Mains supply | Single mains cold water intake supply to be derived from the utility water main supply and be complete with isolation valves, meter and by-pass facilities for when fire hydrants are being used. |
| | | | | 5D2 | Cold water services | Potable cold water from the incoming utility main supply to feed a storage header tank having capacity for at least 12 hours supply. Cold water to be distributed and circulated throughout the building via insulated table X copper pipe at a temperature no greater than 20°C to reduce the risk of legionella. The cold water installation to comply with HTM 07-04 and HTM 04-01. Grey water and rainwater are not to be utilised. Temperature equilibrium to be achieved within 2 minutes at draw off points. Water services to tenanted areas to be sub-metered. |
| | | | | 5D3 | Hot water services | The domestic hot water (DHW) system to be compliant with HTM 04-01 and HTM 07-04 taking into account the requirements for safe hot water in patient areas and the prevention of legionella. The domestic hot water to be stored centrally with a minimum of 2 hour capacity and circulated to draw off points within a temperature range of 55°C to 60°C. Temperature equilibrium to be achieved at draw off points within 2 minutes. Type 3 mixing valves to be used to ensure safe hot water temperatures to patient sanitary facilities. |
| | | | | 5D4 | Steam and condensate | Not applicable |

| ELEMENT AND DESIGN CRITERIA | | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **5E** | **Heat source** | | | 5E1 | Heat source | Low pressure gas-fired high efficiency condensing boilers, each with the capability to serve the anticipated maximum heating, ventilation and domestic hot water system loads taking into account diversity and outside temperature factors. A minimum of two boilers to be provided to aid resilience and provisions to include 35 sec. light fuel oil standby facilities enabling up to 3 days continuity of service during loss of incoming gas supplies. Single incoming utility natural gas supply, inclusive of isolation values and meter house with sub-metering to tenanted areas. |
| **5F** | **Space heating and air-conditioning** | | | 5F1 | Central heating | Low pressure hot water system utilising insulated steel and copper distribution pipework serving under floor heating, ceiling mounted radiant panels and wall mounted heat emitters, as appropriate. The system to be capable of achieving room temperatures stipulated on ADB sheets at an outside temperature of –5°C and be compliant with low surface temperature requirements to HTM 04-01. The system should be designed to optimise energy efficiency. |
| | | | | 5F2 | Local heating | Not applicable. |
| | | | | 5F3 | Central cooling | Compressor/air cooled evaporator/condensing refrigeration plant serving chilled water to relevant ventilation cooler batteries sufficient to ensure that the maximum temperature within patient areas does not reach 28°C for more than 50 hours per year, or as designated on ADB sheets, to control the highest temperature to within 25°C for clinical purposes (eg. operating theatres). Includes refrigeration plant, distribution pipework, air handling units, supply and control equipment as required. |
| | | | | 5F4 | Local cooling | **Excluded (to be included in site-specific works)** |
| | | | | 5F5 | Central heating and cooling | **Excluded (to be included in site-specific works)** |
| | | | | 5F6 | Local heating and cooling | **Excluded (to be included in site-specific works)** |
| | | | | 5F7 | Central air-conditioning | **Excluded (to be included in site-specific works)** |
| | | | | 5F8 | Local air-conditioning | **Excluded (to be included in site-specific works)** |
| | | | | 5F9 | Instrumentation and controls for more than one system | Building Management System (BMS) to provide automatic/manual monitoring and control of heating, ventilation and air-conditioning systems together with local thermostatic radiator valves (TRV) fitted to heat emitters. |

| ELEMENT AND DESIGN CRITERIA | | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **5G** | **Ventilating system** | | | 5G1 | Central ventilation | Mechanical ventilation systems to be designed to comply with HTM 03-01 Part A and achieve ADB environmental requirements for each room or area. Filtered supply air to be derived from centralised plant with grouped or local extraction to provide the required air change rates and pressure differentials. Rooms located against external walls to be naturally ventilated where possible. Acoustic emissions to comply with HTM 08-01. |
| | | | | 5G2 | Smoke ventilation | Ventilation systems to facilitate smoke extraction in the event of fire to be installed in accordance with Firecode and HTM 05 series of documents as applicable. |
| | | | | 5G3 | Local and special ventilation | Local dedicated ventilation systems to be provided for each operating theatre and where necessary in clinical locations to meet the required aseptic conditions. |
| **5H** | **Electrical installations** | | | 5H1 | Electric source and mains | A separate neutral and earth TN-S low voltage (400v) three phase metered intake supply to be derived from the local distribution network operator (DNO) low voltage or high voltage network, whichever is of adequate capacity to meet the necessary demand. Dry-type power transformers to be used where possible. Moulded-case circuit breakers (MCCB) and high rupturing capacity (HRC) fuses used to protect main LV electrical switchboards and sub-main distribution circuits. Local distribution boards to be fitted with miniture circuit breaker (MCB) and residual current breaker operated (RCBO) protection devices as appropriate. Segregated and unified mains distribution system strategies to be designed and installed sufficient to ensure resilience risks are low to moderate as defined in HTM 06-01 Part A and that systems can be maintained with minimal disruption to electrical services. Halogen free, low smoke (OHLS) cables with copper conductors to be used wherever possible.<br><br>Power factor correction equipment to be incorporated to achieve at least 0.9 lagging or better along with surge protection equipment at relevant main and sub-main distribution switchboards. System resilience provisions to be designed to take account of clinical and business continuity risks and include an N+1 standby generator installation together with local uninterruptible power supply (UPS) and other secondary sources of supply, as necessary. Provision for combined heat and power to be included. The whole of the electrical installation to comply with HTM 06-01, Part A and BS 7671:2008. Tenanted areas to be sub-metered. |

| | ELEMENT AND DESIGN CRITERIA | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **5H** | **Electrical installations** *(continued)* | | | | | |
| ♦ | Total electric load | | kVA | 5H2 | Electric power supplies | Local isolated power supplies and medical ICT outlets to be provided in accordance with Medical Electrical Installation Guidance Notes (MEIGaN) requirements. Power circuits to be wired in OHLS cable, installed concealed wherever practical, with 30 mA RCBO protected final circuits in compliance with BS 7671:2008. Sub-main electrical circuits to be HRC protected. Accessories and terminal outlets within rooms/areas to be as defined in the relevant HBN/HTM and ADB sheets. |
| ♦ | Illumination levels | **British Standards (BS)** | lux | 5H3 | Electric lighting | High frequency fluorescent luminaires and low energy lamps to be used with lighting levels in accordance with ADB requirements and Chartered Institute of Building Services Engineers (CIBSE) LG2:2008 guide. CIBSE LG3 and LG7 guide to be applied for areas in which display screen equipment is installed. The lighting design and luminaires to be fit for purpose for the environment in which they are to operate taking into account Disability Discrimination Act (DDA) requirements. Where practical, presence detectors to be installed to automatically switch lighting to reduce levels when areas such as circulation corridors and WCs are not in use. |
| ♦ | Capacity of local electricity generation | **British Standards (BS)** | % | 5H4 | Electric light fittings | Fluorescent luminaires of appropriate type and design and fitted with suitable light control diffuser to be used generally throughout the healthcare premises. Tungsten lamps not to be used unless for specific purposes. Luminaires to be sealed and recessed as necessary to meet aseptic condition and aesthetic requirements. External lighting to consist of high pressure sodium discharge luminaires mounted on suitable lamp columns. Infrared night lighting to be provided for CCTV where appropriate. |
| ♦ | Capacity for emergency generation | **British Standards (BS)** | % | 5H5 | Specialist lighting | Emergency lighting to be provided in compliance with BS 5266, BS EN 50172 and BS EN 1838, and comprise self-contained maintained and non-maintained luminaires. Surgical and medical examination lamps to be installed where designated on ADB sheets. Overbed lighting for reading purposes to comply with HTM 08-03. External lighting to be installed to provide adequate illumination for roadways, car parking, pedestrian walkways, security CCTV, signage, specialist equipment (e.g. pay and display machines) and entrances to the building in compliance with manufacturers' recommendations and CIBSE LG2 guidance. |
| ♦ | Capacity for uninterruptible power supply | **British Standards (BS)** | % | 5H6 | Local electric supply | UPS systems to be provided as necessary to ensure continuity of local electrical circuits during loss of normal mains supplies and prior to central secondary sources of supply (e.g. emergency standby generators) becoming available. This will include support to systems such as fire alarms, medical gas alarms, telecommunication private branch exchange (PBX), essential ICT equipment, theatre operating lamps, emergency lighting, nurse call systems, security alarm systems etc. |

| | ELEMENT AND DESIGN CRITERIA | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **5H** | **Electrical installations** *(continued)* | | | | | |
| ♦ | Period for uninterruptible power supply | **British Standards (BS)** | min | 5H7 | Earthing systems | Earth electrodes and equipotential bonding requirements to be provided in accordance with DNO requirements to meet the Electrical Safety, Quality and Continuity Regulations and Electrical at Work Regulations. Main and supplementary equipotential bonding to be compliant with BS 7671:2008. Lightning protection earthing to comply with BS EN 62305. |
| **5I** | **Fuel installations** | | | 5I1 | Fuel installations | Steel tank contained within bund wall to be installed to store boiler and generator fuel oil. |
| **5L** | **Lift and conveyor installations** | | | 5J1 | Lifts and enclosed hoists | Lifts to comply with HTM 08-02 and relevant British Standards. Bed passenger and service delivery lifts to be provided sufficient to provide adequate transportation of passengers, food and equipment between 2 floors within acceptable time periods. Machine room-less to be considered, where appropriate, installed with control and access provisions taking into account DDA requirements and need for reliable operation. Emergency call facilities to be provided within the lift car linked to a manned staff base. Fire fighting and escape lifts not included. |
| ♦ | Lifts – number of passengers | | | 5J2 | Escalators | Not applicable |
| ♦ | Lifts – designed waiting times | | | 5J3 | Conveyors | Not applicable |
| ♦ | Lifts – number, capacity, speed, number of doors and height served | | | 5J4 | Dock levellers and scissor lifts | Not applicable |
| ♦ | Escalators – rise and travel | | | 5J5 | Cranes and unenclosed hoists | Hoists within workshops and plant rooms to be provided to raise/lower equipment as required (2 tonne SWL per room). Mobile hoists to be provided where stipulated on ADB sheets to facilitate the lifting of patients into/from baths or for other defined purposes. |
| ♦ | Conveyors – rise and travel | | | 5J6 | Car lifts, turntables and the like | Not applicable |
| ♦ | Goods lifts, hoists, cranes, dock levellers, scissor lifts, etc – designed load | | kN | | | Not applicable |

| ELEMENT AND DESIGN CRITERIA | | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **5K** | **Fire and lightning protection** | | | 5K1 | Automatic fire suppression systems | Sprinkler systems or Carbon dioxide ($CO_2$) flooding systems to be provided as necessary to meet HTM 05-03 Part J and Firecode requirements. |
| | | | | 5K2 | Fire-fighting installations | Dry risers and external fire hydrants to be interconnected to the main water supply system with meter by-pass installed below ground to provide fire hose connection for fire brigade tenders. Local fire hose reels within departments not to be installed unless otherwise specified. Fire detection and alarms signalling equipment to be of the analogue addressable type complying with HTM 05-03 Part B and BS 5839. Suitable interface units to be provided to enable control of ventilation systems, lifts and door hold opening devices along busy communication corridors together with other miscellaneous service plant that needs to be controlled during fire situations. Fire fighting extinguishers to be installed in accordance with HTM 05-03/Firecode requirements. Fire stops and fusible link and/or motorised fire dampers to be installed across fire compartment walls. Firemen's ventilation control panel to be provided. |
| | | | | 5K3 | Lightning protection | Lightning protection system to comply with BS EN 62305 Parts 1 to 4 and include 25 mm PVC sheathed copper roof tape terminations together with down conductors and earth rod positions approximately every 10 m along the sides of the building. Equipotential earth bonding to be included to TV aerials, metal ducting, down pipes, ventilation grilles, utility services as necessary. |
| **5L** | **Communications and security installations** | | | 5L1 | Warning installations | Nurse call system, including patient to nurse, staff assistance emergency call, attack alarm, Controlled Drugs cupboard (CDC) alarm and cardiac arrest alarm, to be installed in compliance with HTM 08-03. Medical gas alarm systems to comply with HTM 02-01 Part A. |
| | | | | 5L2 | Visual, audio and data installations | ICT and telephone voice over internet protocol (VOIP) system with structured wiring (eg Cat 6/fibre optic) and RJ45 and RJ11 terminal outlets installed in locations identified on the ADB sheets. Standard twisted pair telephone cable to be used for standby provisions. ICT and telecommunication equipment such as routers, hub units, telephone instruments, PCs, modems to be supplied and installed by others. |
| | | | | 5L3 | Security installations | Central security alarm monitoring system to be provided meeting 'Secure by Design' principles and police advice to cover areas where there is a security risk or where persons may be at risk of harm. This to include recorded colour CCTV coverage of internal areas such as reception/waiting and external areas such as car parking, pedestrian walkways, courtyards, roadways etc. Door access control systems to be fitted to all external entry points and to internal doors where access to departments or rooms are restricted. External door entry systems to comprise swipe card or fob unit for staff entry and intercom/visual unit for patient/visitor entry linked to the nearest reception/ manned staff base. Internal doors to be fitted with swipe card or fob control for staff use and/or door bell push with intercom for patients, as appropriate. |

| ELEMENT AND DESIGN CRITERIA | | | | SPECIFICATION NOTES | | |
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| **5M** | **Special installations** | | | 5M1 | Mechanical and electrical systems | Special mechanical and electrical installations, such as piped medical gas installations, "bleep" paging systems, docking stations for mobile units, bedhead entertainment systems and pneumatic air tube systems, to be installed in accordance with the relevant British Standard, HTM and best practice guidance. Piped medical gas installations to comply with HTM 02-01 complete with local and central display alarm panels and all plant, equipment, piped distribution, and terminal outlets to provide oxygen, nitrous oxide, medical air (400 kPa), surgical air (700 kPa), medical vacuum and anaesthetic gas scavenging plant as necessary to meet ADB requirements. Portable gas facilities provided as Group 3 equipment.<br><br>Water and electrical connection for the docking of mobile clinical units to be provided where necessary. Bedhead entertainment systems to be in accordance with HTM 08-03 and include digital TV and radio/music amplification and distribution to bed spaces and key areas such as patient waiting/reception areas where masking of confidential conversations and/or background entertainment is required. Satellite TV and interfacing with the healthcare premises ICT system to be included. Pneumatic air tube systems to comply with HTM 2009. Visual display panels (eg "Jayex" or similar) to provide 'next patient call' messages in conjunction with patient call announcements to be installed in main reception/waiting areas as stipulated on ADB sheets. |
| | | | | 5M2 | Building Management Control installations | A building management system to be provided inclusive of electrical wiring and terminal units to interconnect HVAC and other service plant controlled by the system. |
| **5N** | **Builders' Work in Connection** | | | 5N1 | Builders' Work in Connection | Holes chasings and penetrations provided by main contractor to allow for services to run through the building. |
| **5O** | **Commissioning of services** | | | 5O1 | Management of the commissioning of services | **To British Standards (BS)** |
| **6** | **EXTERNAL WORKS** | | | | | |
| **6A** | **Site works** | | | 6A1 | Site preparation | General site preparation; clearing and disposal of top 300 mm of soil ready for construction. |
| | | | | 6A2 | Site remediation and decontamination | **Excluded (to be included in site-specific works)** |
| | | | | 6A3 | Surface treatments | Tarmacadam roads; PCC paving slabs; PCC kerbs and edgings; seeding landscape areas; shrubs and planting works. |
| | | | | 6A4 | Site enclosure and division | Close boarded timber fencing, gates to service areas. |
| | | | | 6A5 | Fittings and furniture | External furniture including heavy-duty benches, bins, bollards, cycle stands, smoking shelters etc. |

| | ELEMENT AND DESIGN CRITERIA | | | SPECIFICATION NOTES | | |
|---|---|---|---|---|---|---|
| **6B** | **Drainage** | | | 6B1 | Drainage under the building | **To British Standards (BS)** |
| | | | | 6B2 | Drainage outside the building | **To British Standards (BS)** |
| | | | | 6B3 | Ancillary works to drainage | **To British Standards (BS)** |
| **6C** | **External services** | | | 6C1 | Service mains | See 5D1, 5E1, 5H1 |
| | | | | 6C2 | Site lighting | See 5H5 |
| | | | | 6C3 | Other site services | See 5K2, 5M1 |
| | | | | 6C4 | Ancillary works to services | **To British Standards (BS)** |
| | | | | 6C5 | BWIC with external services | **To British Standards (BS)** |
| **6D** | **Minor building works** | | | 6D1 | Ancillary buildings and structures | Bin store. |
| | | | | 6D2 | Alterations to existing buildings | **Excluded (to be included in site-specific works)** |
| | | | | 6D3 | Other buildings and works included in the contract | **Excluded (to be included in site-specific works)** |
| **6E** | **Demolition and work outside the site** | | | 6E1 | Demolition | **Excluded (to be included in site-specific works)** |
| | | | | 6E2 | Work outside the site | **Excluded (to be included in site-specific works)** |
| **7** | **PRELIMINARIES** | | | | | |
| | | | | 7A1 | Contractor's direct costs | 18% |
| | | | | 7A2 | Fees paid by the contractor | |
| | | | | 7A3 | Client's specific requirements | |
| **8** | **CONTINGENCIES** | | | | | |
| | | | | 8A1 | Employer's contingencies | 5% for design risk |
| **9** | **DESIGN FEES** | | | | | |
| | | | | 9A1 | Design fees | Excluded |

# References

**Energy Performance of Buildings Directive**

**Building Regulations 2000** including amendments and associated approved documents

**HMT Green Book** (2003 edition)
www.hm-treasury.gov.uk/data_greenbook_index.htm

**Capital Investment Manual** (DH, 1994)
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4119896

**Health Building Note 11-01 – 'Facilities for primary and community care services'** (DH, 2009)