

**ADDENBROOKE'S NHS TRUST
ESTATES & FACILITIES MANAGEMENT**

"Committed to Providing a Safe and Effective High Quality
Environment for the Delivery of Healthcare"

ESTATES DOCUMENT

"STANDARDS FOR CONTRACTORS"

GENERAL INFORMATION

TABLE OF CONTENTS – GENERAL INFORMATION

Paragraph	Page
1. INTRODUCTION	3
2. QUALITY CONTROL	5
3. THE MODEL ENGINEERING SPECIFICATION	5
4. BUILDING STANDARDS	7
5. FIRE PROCAUTIONS	7

1. Introduction to the document

1.1 Purpose

This document "Addenbrooke's NHS Trust Standards for Contractors" has been prepared in order to serve as the minimum standards for methods of working, materials to be used or behaviour on site. It is suitable for use by all type of contractors working on the site, be they undertaking maintenance, term-contract or specific project work.

It is also intended to guide and assist external design consultants in understanding the Trust's basic requirements. All contractors and consultants must adhere to these standards when designing, planning and managing day-to-day work on any of the Trust's sites.

1.2 Scope

The document covers a broad range of topics and includes:

Health & Safety

Staff appearance and behaviour

Site Rules

Disposal of waste materials

Basic technical standards for installations

An aid to on-site staff is included at the end of this section as Appendix 1.

1.3 Distribution

This document will be distributed to:

- Design Consultants invited to undertake work on the site
- Contractors invited to undertake specific project work on the site
- Contractors undertaking the Trust's measured-term contact for maintenance
- Maintenance contractors

1.4 Limitations

This document provides a minimum standard, which must be met wherever the Trust has not provided a more detailed standard. Where the Trust has provided more detailed information, as part of a quotation or tendering process, these basic standards will underpin that specification. Where contradictions occur, the standards set out in this document will take precedence.

1.5 Updates

Regular updates will be distributed when necessary.

1.6 Drawings required by the Contractor

The Trust (as Employer under CDM regulations) has a duty to supply all available and relevant information to a contractor, from scanned paper prints or as FastCAD.FCW or as AutoCAD.DXG or.DXF

1.7 Drawings and manuals required by the Employer

On completion of the work the contractor shall provide on set of "as-fitted" drawings and one set of maintenance manuals to the Trust. Until such time as a complete and accurate set of drawings and manuals are received, a project will not be deemed to have reached Practical Completion. Where required by CDM Regulations, health and safety information shall be submitted via the Planning Supervisor who will update any existing file or produce a new file for that part of the site. Again, if health and safety information is not provided to the Planning Supervisor for inclusion in the file, the works will be deemed not to have reached Practical Completion.

1.8 Maintenance Manuals

Maintenance manuals shall consist of one copy of all plant operation instructions, maintenance instructions and manufacturer's part lists necessary for the safe and efficient operation and maintenance of the plant installed. This information must be made available for inspection and checking by the Supervising Officer at least four weeks before handover.

The maintenance manuals should be supplied as plastic covered ring binder files.

1.9 "As fitted" drawings

"As fitted" drawings shall be provided to the Trust both as (a) a printed paper drawing and (b) as a CAD file in an acceptable format (.DWG or .FCW), showing clearly and in full details, at an acceptable scale, the whole building, the installation and ancillary services, **as installed**, and will be expected to show all differences from any original design drawing produced at tender stage.

The drawings shall be complete with walls, windows and doors, main and sub-circuit distribution diagrams and show the sizes and positions of all plant, equipment, ducts, pipework, radiators, valves, stopcocks, electrical wiring, cables, switchgear and fittings as appropriate to the contract and give a clear, accurate and detailed record of the position of each item or run.

Each service or item, whether exposed or covered, shall be clearly indicated and identified on the drawings by an appropriate description giving number, size and location. The drawing will also show any connections made to public mains, existing services, pipework, cables or other electrical or mechanical installations.

1.10 "As fitted" drawings from CAD on CD-Rom

CAD drawings supplied to the Trust are to be constructed making proper use of layers to separate different items such as walls, doors, electrical services, etc., to current British Standard. Layers containing only construction lines, etc., are not to be included. Where drawings are constructed using FastCAD or AutoCad library symbols, etc., they should be 'ungrouped' or 'exploded' before generating the .DXF file. CAD files supplied must be on CD-Rom.

If it is necessary to compress, zip or pack files in order to fit them on a CD Rom, the contractor must supply a runtime copy of the de-compression, unzip or unpack software with these disks with suitable instructions. All CD Rom disks must be checked and confirmed as virus-free before handover.

2. Quality Control

Contractors are required to contact the Supervising Officer of Clerk-of-Works to arrange quality control visits to site at suitable times during any contract and, in particular, to verify the quality of installations prior to covering up.

3. The Model Engineering Specification

3.1 General

All mechanical and electrical works to be undertaken on the Trust sites are to be carried out to the standards detailed in the NHS Estates Model Engineering Specification **unless this document says otherwise**. The Contractor is expected to be fully conversant with the requirements of the NHS Estates Model Engineering Specification and any Tender price submitted by the Contractor must include all work necessary to comply with it.

3.2 Introduction

The NHS Estates Model Engineering Specification sets standards for mechanical, electrical and public health engineering in the NHS. The basic concept of the model specification is the provision of a set of documents which can be used to specify particular engineering applications found in NHS properties. The documents are intended to be quoted in contract documents in the same way that BS and EN Standards are quoted.

All contractors receiving documents for tender, manufacture or installation are expected to have their own licensed parts B and C. The NHS Estates Model Engineering Specification is protected by Crown Copyright.

The NHS Estates Model Engineering Specification is issued by and available from;

File: FA001; Addenbrooke's NHS Trust
Standards for Contractors
General information

g/users/northfir/standards for contractors/general information / March 2004

this document is subject to monitoring and review and thus will be updated on a regular basis

The Stationery Office
Publications Centre
PO Box 276
London
SW8 5DT

Tel: 0870 600 5522
Fax: 0870 600 5533

A copy of the NHS Estates Model Engineering Specification can be inspected during normal working hours at the Trust's Estates & Facilities Management Offices.

The NHS Estates Model Engineering Specification Schedule of Contents.

Ref.	Title	Volume
B01	General Clauses common to building services, plant & equipment))
C01	Common services – mechanical)
C02	Thermal insulation)
C04	Mechanical ventilation & air conditioning system)Mechanical Vol. 1
C07	Heating, hot & cold water systems equipment)
C09	Central heating and LTHW boilers)
C10	Refrigeration)
C10A	Cold rooms & body stores)
C11	Medical Gases)
C12	Sterilises)
C15	Clinical Waste incineration systems)
C16	Boilers and firing appliances)
C17	Oil and duct fuel firing equipment, handling & storage)Mechanical Vol. 2)
C22	Steel chimneys)
C24	Fire extinguishing installations)
C81	Above ground sanitation)
C82	Colour coding for identification of building services))

B01	General Clauses common to building services, plant & equipment)
C41	Common services - electrical (low.extra low voltage))
C42A	Electric traction lifts)
C42B	Hydraulic lifts) Electrical Vol. 1
C42C	Service lifts)
C43	External lighting)
C44	Diesel engine driven automatic standby generator sets)
C45	Electric sub-station equipment (high voltage))
C46	Fire detection and alarm systems)
C47	Telephone exchanges of more than 150 extensions)
C48	Radio paging systems)
C49	Nurse call systems)
C50	Cordless telephone systems) Electrical Vol. 2
C51	Electrical requirements for specified equipment)
C53	Lightening protection systems)
C54	Building Management Systems)
C55	SPC telephone systems (small))
C82	Colour coding for identification of building services)

4. Building Standards BS8000

Where not otherwise stated, the minimum standard of workmanship on building sites shall be BS8000. In the event of contradictions or conflict in the documentation, the job specific reference takes precedence.

5. Fire Precautions (for refurbishments or extensions to existing or new buildings)

The Contractor is to take all reasonable precautions to avoid the outbreak of fire, particularly in work involving the use of naked flames and operate a hot works permit system. Before any work using naked flame is carried out, the Contractor is required to discuss the proposed work with the Trust's Supervising Officer or Clerk-of-Works who, being satisfied with the method of the proposed work, will issue a hot works permit authorising the work. Work carried out under a hot work permit, must always be examined at short intervals immediately following its completion.

The Contractor is required, as part of their induction, to draw to the attention of all his directly employed and sub-contract staff working on his construction site or work area, the special vulnerability of hospital patients in the event of fire. The contractor's staff should also be reminded of the dangers of careless disposal of matches, hot welding rod, etc., adjacent to combustible materials, and the need to eliminate the accumulation of rubbish and other potential sources of ignition from the site area. **Smoking within construction sites or work areas is strictly forbidden.**

Within a construction site or work area, existing fire protection compartments and fire alarm system are to be maintained and fire escape routes kept unobstructed and, where necessary, illuminated at all times. The Contractor is to provide and maintain suitable portable fire extinguishers within his site area, which are readily available, particularly when work necessitates the use of naked flames in roof spaces, service voids and other locations where there is a high probability of fire.

The Contractor must be aware of HTM 81, HTM 85 and BS5588.