



Department
for Education

School

Output Specification

Annex 3: Fittings, Furniture and Equipment

November 2021

Document Control

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Summary

Technical Annex 3 provides the minimum requirements for fittings, furniture and equipment. It is to be read in conjunction with the Generic Design Brief (GDB) the School Specific Brief (SSB).

Review Date

Review dates for this document shall be at 6-month intervals.

Who is this publication for?

This document is for technical professionals involved in the design and construction of school premises, as part of the Employer's Requirements of the DfE Construction Frameworks (the DfE Construction Framework 2021 and the Offsite Schools Framework (incorporating Modular and MMC delivery) (MMC)). It may also be used as the basis of similar documentation for other procurement routes using the Output Specification

Uniclass Codes

This document captures Uniclass codes for the management of exchange of information. To access all codes and associated titles reference should be made to [Uniclass 2015 | NBS \(thenbs.com\)](https://www.thenbs.com/uniclass-2015)

1 Introduction

1.1 Overview

1.1.1 This document is one of the Technical Annexes that forms part of the Generic Design Brief (GDB). [PM_10_20]

1.1.2 The definitions listed in GDB shall apply to this Technical Annex and all other parts of the Output Specification. [PM_10_20]

1.1.3 This document shall be read in conjunction with the GDB and all other Technical Annexes as well as the School-specific Brief (SSB), including the School-specific Annexes. [PM_10_20]

1.1.4 This document sets out the required technical standards and performance criteria for Fittings, Furniture and Equipment (FF&E). [PM_10_20]

1.1.5 The information exchange required at each stage of the design, build and completion process is detailed in the DFE's Exchange Information Requirements (EIR). [PM_10_20_28]

1.1.6 The requirements in this Technical Annex shall apply to all parts of the works; New or Refurbished. [PM_10_20]

1.1.7 This document sets out the required minimum standards to ensure inclusivity and accessibility with fitted and loose furniture provisions. [PM_10_20]

2 General Requirements

2.1 FF&E Definitions

2.1.1 In this specification, FF&E comprises:

- a) Fittings, including worktops, sinks etc. [EF_40]
- b) Fitted furniture, which is fitted to the fabric of the Building, including under-bench cupboards and noticeboards. [EF_40]
- c) Fixed furniture and equipment (F&E) which is fixed to a structure for stability or rigidly serviced, including tall library shelving units or workshop machinery. [EF_40]
- d) Loose F&E which is a moveable item, including a chair or table. [EF_40]

2.1.2 FF&E does not include services such as electrical outlets, public address and alarm systems, passive ICT Infrastructure such as cabling, built-in air extraction systems, or sanitaryware including cubicle partitioning. [PM_10]

2.2 Definition of Responsibilities

2.2.1 Each item of FF&E shall be in one of four groups, which identify the responsibility for procurement, fixing and placing:

- a) Group 1: FF&E, Fittings, Furniture and Equipment supplied new and fitted by the Contractor, including all fittings and fitted furniture. [EF_40]
- b) Group 2: F&E, Furniture and Equipment as identified in Annex SS1 or the SSB, provided either by the Contractor (purchased new) or School/others (from Legacy or purchased new). When items are Legacy, it is the responsibility of the Contractor to ensure Group 2 items are working and safe prior to and after installation. The Contractor shall carry out an assessment of each working Legacy item to determine if it shall be re-used, upgraded or Replaced with new. [EF_40]
- c) Group 3: F&E, Furniture and Equipment, generally loose and provided either by the School/others (from Legacy or purchased new) or, where appropriate, the Contractor (purchased new). Group 3 items shall be positioned by the Contractor. [EF_40]

- d) Group 4: Small items of loose equipment provided by the School/others which shall be boxed by the School/others and decanted by the Contractor. [EF_40]

2.3 Refurbishment

2.3.1 As described in the GDB, any work required to Refurbished Buildings shall be as defined in the Refurbishment Scope of Works (RSoW). FF&E elements are captured, under the headings of architectural elements. [Ac_10_70_70]

2.3.2 Unless specified otherwise in this Technical Annex, where a fitting or item of fitted furniture is required in the RSoW, under the headings of architectural elements, it shall be categorised as Renewed, Replaced, Repaired, Retained or have 'No Work':

- a) Renewed FF&E shall be designed to satisfy the relevant outputs of the GDB as well as this Technical Annex (and by the code in the ADS where relevant). [Ac_10_70_70]
- b) Replaced FF&E shall satisfy the relevant outputs of the GDB as well as this Technical Annex (and by the code in the ADS where relevant), as far as possible within the constraints of the location, the adjacent elements and the sub-structure. [Ac_10_70_70]
- c) Repaired FF&E shall comply with the specifications in any project-specific drawing issued as part of the SSB, and the overall performance after repair shall be at least as good as that of the existing provision. [Ac_10_70_70]
- d) Retained FF&E shall be left as existing, with minimal work required unless needed in order to complete other Works that form part of the Project, and the overall performance shall be no worse than the existing performance. [Ac_10_70_70]
- e) Elements requiring 'No work' shall be left as existing. [Ac_10_70_70]

2.3.3 In respect of Refurbished Works, the required level of compliance with this Technical Annex is set out in the RSoW. [PM_10_20_90]

2.3.4 The requirements in this Technical Annex refer to all parts of the Works except any Building Elements or services that are designated Repaired, Retained or 'No Work' in the RSoW, or spaces designated 'Untouched' in Annex SS1. [PM_10_20_90]

3 The FF&E Process

3.1 Overview

3.1.1 This section sets out the process for the delivery of FF&E, including development of the room layouts, purchasing, delivery and, where applicable, the decant protocol. [PM_10]

3.2 Room Layouts

3.2.1 The Contractor shall initially produce notional FF&E layouts of key spaces, as listed in the Schedule of Accommodation (SoA), showing the FF&E listed in the generic ADS, alongside coordinated elevations, views and FF&E schedules. These shall be developed into school specific layouts for inclusion in the Contractor's Proposals. [PM_10_20_82]

3.2.2 Where Legacy F&E is being provided by the School or others, the School assisted by the Technical Advisor, with the agreement of the Employer, shall list on a proforma (Annex SS3 and Annex SS4) all new or Legacy Group 2 and 3 items to be provided and where they are proposed to be placed. [PM_10_20_90]

3.2.3 During the pre-contract design process, all Group 1 and Group 2 items shall be shown on layouts for every space identified in Annex SS1. These items shall be listed on the Contractor's School-specific ADS. [PM_10_20_90]

3.2.4 If the FF&E is different from the generic items shown on the ADS a layout shall be provided detailing the adjustments, with the agreement of the Employer. [PM_10_80_10]

3.2.5 When the proposed area or shape of a space significantly differs (e.g., in a Remodelled Area or Refurbished Building) from the dimensions and shape recommendations in the GDB and Annex SS1, the Contractor shall illustrate an example layout showing all FF&E in that space, including the loose FF&E items. [PM_10_80_10]

3.2.6 Where the Contractor is fixing or installing Group 2 Legacy F&E, all FF&E layouts shall address the following points:

- a) Legacy FF&E (both internal and external) shall be located in accordance with the requirements in the SSB, the GDB as well as this Technical Annex. [EF_40]
- b) Legacy FF&E shall be integrated with any new FF&E. [EF_40]
- c) Where Legacy FF&E is additional to that listed in the generic ADS or does not match the size and dimensions of the items listed in the generic ADS, a layout shall be provided detailing the adjustments, with the agreement of the Employer. [PM_10_80_10]

3.2.7 Once agreed by the Employer, the list of Legacy or new items in Annex SS3 and SS4 schedules and the Group 1 items as defined in the DfE's EIR shall form the basis of the final Contractor's Proposal for FF&E. [PM_10_20_90]

3.3 Purchasing and Delivery

3.3.1 The Contractor shall:

- a) ensure the provision of Group 1 FF&E (and, where the Contractor is purchasing, other F&E) is in accordance with the required specifications as set out in this Technical Annex [PM_10_20_82]
- b) ensure that delivery of Group 1 FF&E (and, where the Contractor is purchasing, other F&E) is only installed once the Building is ready to receive it [PM_10_20_82]
- c) agree with the Employer the delivery location for new Group 3 F&E. The space(s) should enable the assembly of flat packed items [PM_10_20_82]
- d) liaise with the Employer to ensure Legacy items are securely stored unless the School has agreed to take responsibility for the serviceability and temporary storage of any item, as specified in the SSB [PM_10_20_82]
- e) be responsible for managing the programming and delivery of any additional items of Group 3 F&E to meet the project delivery programme. [PM_10_20_82]

3.4 FF&E Decant Protocol

3.4.1 General decant requirements are set out in the Decant Protocol, with a section on the Relocation of Legacy Furniture and Specialist Equipment. An overview of FF&E requirements is given below:

- a) The Contractor shall develop, and agree with the Employer, a decant process and programme. [PM_60_20_26]
- b) The programme shall consider any health and safety management plan applicable to the School and any requirements set out in the SSB. [PM_80_60_50]
- c) The Contractor shall develop and agree with the Employer, a detailed Decant Programme that considers the coordination of FF&E, ICT and M&E provision. [PM_60_20_24]

- d) The Decant Programme shall be agreed by the Employer at least six months prior to decant when the layout position of all FF&E is determined. [PM_60_20_24]
- e) The Contractor shall nominate a named decant manager who shall actively manage the process and liaise with the Employer. [PM_60_20_26]
- f) The Decant Programme shall describe the Contractor's timings of deliveries up to and around Handover to allow coordination of on-site trades, FF&E installations, ICT networking, ICT equipment installation and testing. [PM_60_20_24]
- g) The Contractor shall schedule sufficient time to assess the School's resource materials to be moved, and to carry out any necessary risk assessments involved with the removal of specialist items e.g., chemicals in the science department. [PM_60_30_22]
- h) Boxes and crates shall be delivered to the School, as in line with the Decant Programme, over an agreed number of weeks (to be defined and agreed in early project planning), prior to the move with particular consideration given to Group 4 items. [PM_60_20_26]
- i) A collection point for crates or boxes shall be agreed with the School, and the Contractor shall confirm how long crates can be kept following the move and the contra charges incurred after that time. [PM_60_20_26]
- j) Once packed, arrangements shall be made for the packed boxes/crates to be stored and labelled. [PM_60_20_26]
- k) The Contractor shall agree with the Employer and School whether some packed boxes/crates could be moved across to the new accommodation in advance of the move date and placed in the correct rooms, thus reducing the pressure on the move period. [PM_60_20_26]
- l) The Contractor shall ensure that networking and power services are integrated closely with FF&E at decant and the timing of availability needs to concur with system testing at handover. [PM_60_20_26]
- m) It should be possible for IT equipment to be placed on the relevant furniture before system testing. [PM_60_20_26]

3.4.2 The expectations being placed on the School by the Contractor shall be explicitly set out in the Decant Protocol and Decant Programme. [PM_60_20_26]

3.4.3 If additional days of closure of the School is required or input required by the School over holiday periods, this shall be pre-agreed with the Employer and School.
[PM_60_20_26]

4 Specialist Space FF&E Layout Requirements

4.1 Overview

4.1.1 All layout requirements listed in the GDB, the SSB as well as this Technical Annex shall be submitted for approval. [PM_10_20_90]

4.1.2 Annex SS3 and Annex SS4 shall be referred to when identifying F&E which needs to be positioned and/or installed. [PM_10_20_90]

4.1.3 A definition of the spaces outlined below are given in Technical Annex 1A and Technical Annex 1B. [PM_10_20_90]

4.2 Design & Technology workshops

4.2.1 Space around any machinery shall allow safe use of the machine and prevent the operator from being accidentally pushed into by passers-by. [PM_10_80_85]

4.2.2 The space allocation shown on Table 1 gives a guide to the working areas required around machines. [PM_10_80_85]

4.2.3 When planning workshop spaces consideration shall be given to Legacy Equipment to be installed and the impact on the space size (including ergonomic and H&S impact). [PM_10_80_85]

4.2.4 The dimensions shown on Table 1 represent clear working space around listed machinery requirements. [PM_10_80_85]

4.2.5 Where machines are next to one another, the working space can overlap by 250mm for both machines. [PM_10_80_85]

4.2.6 A 150mm space shall be allowed at the back of the machine for cleaning and maintenance purposes, unless otherwise stated. [PM_10_80_85]

4.2.7 The front of machines are assumed to run alongside circulation routes. Alternative arrangements to this must be approved. [PM_10_80_85]

4.2.8 Working space in front of the machines are additional to circulation space. [PM_10_80_85]

4.2.9 The users working position shall not be against a wall or fixed structure. [PM_10_80_85]

4.2.10 The dimensions around the preparation machines are assumed to overlap as it is unlikely that more than one machine in the preparation area shall be in use at any one time. [PM_10_80_85]

4.2.11 Machinery should be securely and safely bolted to the floor. [PM_35_50]

Machine	Side 1 (to the left of the operator directly facing the machine) (mm)	Front (operator position) (mm)	Side 2 (mm)	Back (mm)
Bandsaw	1000	1500	300	1000
Brazing hearth ²	750	1000	750	150
Chip forge ²	750	1000	750	150
Circular saw ¹	2200	1250/2800 ³	1400	1650/2400
Crucible furnace	1000	1200	200	200
Drill ²	750	1000	750	150
Grinder	600	1000	600	150
Hacksaw ¹	2700	1000	1550	350
H'zal Grindstone	600	1000	600	150
Linisher ²	600	1000	600	150
Metal lathe	750	1000	600	400
Milling machine	750	1000	750	400
Moulding bench	50	1000	50	50
Planer/thicknesser	2400	1000	2300	350
Polisher ²	600	1000	600	150
Welding bench ²	750	1000	750	150
Wood lathe	1000	1000	600	350

Table 1 Workshop Machinery

¹ Measurements to the blade.

² Machines which can share a 250mm overlap if placed side by side.

³ Larger dimension applies if there is a cut-off table.

4.3 Food Rooms

4.3.1 Space between items of furniture and equipment in food rooms shall enable pupils and staff (including those in wheelchairs) to move around safely, particularly during practical sessions. [PM_10_80_85]

4.3.2 Table 2 shows recommended safe working area ranges around sinks and cookers in food-preparation areas. [PM_10_80_85]

4.3.3 Where cookers and worktop run back-to-back (e.g., in a peninsular arrangement), a 250mm overlap is allowable, resulting in a total clearance of 1750mm (1000mm+1000mm-250mm). [PM_10_80_85]

4.3.4 It is assumed that the cooker and sink are set in a continuous work surface. Alternative arrangements to this must be approved by the Employer. [PM_10_20_82]

Food preparation area	Clear dimension (mm)
Space required in front of cooker	1000
Space between sink and cooker	750-1000
Space between 2 cookers	750-1050
Space between cooker and wall	450-750
Space between cooker and end of worktop run	600-750

Table 2 Food Preparation

4.4 Science Laboratories

4.4.1 Space between items of furniture and equipment in laboratories shall enable pupils and staff (including those in wheelchairs) to move around safely, particularly during practical sessions. [PM_10_80_85]

4.4.2 Table 3 shows recommended safe working area ranges around laboratory furniture and is based on the requirements of BS EN 14056: 2003: 'Laboratory furniture. Recommendations for design and installation' with additional dimensions given for space around doors etc. [PM_10_80_85]

4.4.3 The fume cupboard shall be positioned away from the fire exit or main circulation routes with clear access for groups of pupils during demonstrations. [PM_35_50]

4.4.4 Fume cupboards shall be located away from benches, windows, walls and doors, to prevent affecting performance. [PM_10_20_82]

Science laboratory tables	Clear Dimension (mm)
Tables back to back ¹	1400-1650
Tables side to side (circulation route) ¹	900-1050
Back of table to front to table ¹	900-1200
Back of table to wall or outer edge of door	850-1050
Back of tables to side of table ¹	1050-1400
Back of fume cupboard to wall (when in use)	1400
Side of fume cupboard to wall, column etc	300

Table 3 Science Laboratory Tables

¹ Use upper limit where there is a run of more than 2 tables.

4.5 Classrooms

4.5.1 Space between items of furniture in classrooms shall allow pupils and staff (including those in wheelchairs) to move around safely. [PM_10_80_85]

4.5.2 Table 4 shows the recommended distance ranges.

General classroom tables	Clear Dimension (mm)
Tables back to back ¹	1200-1350
Table side to side (circulation route)	1000-1200

Back of table to front to desk	750-1050
Back of table to wall ¹	850-1000

Table 4 General Classroom Tables

¹ Use upper limit where there is a run of more than 2 tables or ICT benching.

4.6 Locker areas

4.6.1 Space between lockers shall allow pupils and staff (including those in wheelchairs) to access their belongings and move around safely. [PM_10_80_85]

4.6.2 Lockers shall be manufactured using fully welded 16-gauge sheet steel for the carcass and 14-gauge sheet steel doors. [PM_10_20_82]

4.6.3 Locker components shall be powder coated prior to assembly to ensure all surfaces are protected. [PM_10_20_82]

4.6.4 Lockers placed in corridors shall meet the BS Class '0' fire rating. [PM_35_30]

4.6.5 Table 5 shows recommended ranges for safe circulation and access to lockers. [PM_10_80_85]

4.6.6 Lockers over 1400mm high shall be fixed back to the wall for stability and safety. [Pr_40_30_87_48]

4.6.7 The locking mechanism used shall be listed in the SSB. [PM_10_20_90]

4.6.8 A sloping top shall be provided on banks of tall lockers to avoid items being placed and left on the top and, for ease of maintenance, to reduce dust and other debris. [Pr_40_30_87_48]

4.6.9 To prevent rusting, lockers shall be placed off the floor surface if floors are mopped rather than vacuumed. [Pr_40_30_87_48]

Recommendation	Clear Dimension (mm)
Clear space in front of lockers	750
Distance between front of locker and wall	900-1050

Space between 2 sets of lockers (front to front), no main circulation between	1500-2000
Distance between lockers and changing bench	1200-1500

Table 5 Lockers

4.7 School Kitchen

4.7.1 Design Requirements

4.7.1.1 The size of the kitchen and the ancillary spaces (as given in Annex SS1) depends on the number of pupils having school meals and the type of meals cooked (as detailed in the SSB). [PM_10]

4.7.1.2 The kitchen layout shall provide clearly identified zones of activity, which include:

- a) 'dry' storage for raw materials [SL_90_50_29]
- b) 'cold' storage [SL_90_50_15]
- c) storage for frozen products [Pr_40_70_31_31]
- d) food preparation space [SL_35_60_30]
- e) storage for equipment, utensils, crockery and cutlery [Pr_40_30_87]
- f) efficient circulation space for staff to work in (see Table 6) [PM_10_80_85]
- g) an area for checking in stock for receiving and unpacking of goods [PM_10_80_85]
- h) space for waste and recyclable materials [SL_50_35_60]
- i) separate storage for cleaning equipment and chemicals [SL_30_60]
- j) a WC and changing area with storage for clothing and personal belongings of staff [SL_35_80_89]
- k) a designated space for administrative work in schools with 210 pupils or more. [SL_20_15_59]

4.7.2 Planning

4.7.2.1 Kitchens shall allow a continuous progression of activities from delivery of goods through to preparation, serving of food through to washing up with no crossover to avoid contamination. [SL_35_60_14]

4.7.2.2 The kitchen shall meet the following requirements:

- a) an office, where appropriate, shall be sited close to the loading area but within the preparation area to provide sight of all the activities [PM_10_80_85]
- b) stores shall be located close to the delivery and unloading area [PM_10_80_85]
- c) separate storage for edible foodstuffs (i.e., fish to be kept separate from meat, dairy products to be kept separate from vegetables etc.) to prevent cross contamination [PM_10_80_85]
- d) dry food store is in a cool area away from a boiler room, plant space or kitchen appliances where there may be heat transfer through the walls and pipes [PM_10_80_85]
- e) vegetable preparation area shall be near the delivery point, allowing only clean, prepared vegetables to enter the main preparation kitchen [PM_10_80_85]
- f) work surface allocation shall allow for the preparation of different food types in designated areas (e.g., to prepare for special diets) [PM_10_80_85]
- g) there shall be no acute corners or areas inaccessible to cleaners or cleaning machines [PM_80_10_50]
- h) all equipment shall be easily moveable for cleaning [PM_80_10_50]
- i) equipment, where appropriate, to be on lockable castors. Where gas supplies exist, hoses shall not inhibit equipment to be moved for easy cleaning and servicing [PM_10_20_82]
- j) wash-hand basins (not set in worktops) shall be placed at all entrances to the kitchen with soap dispensers, paper towel dispensers and covered waste bins (for paper towels) [PM_10_80_85]
- k) the main cooking equipment shall be located, wherever possible, in an island with sufficient worktop space adjacent to allow 'put-down' space [PM_10_80_85]
- l) processes such as frying etc. shall be grouped together, preferably in a central cooking suite rather than against a wall [PM_10_80_85]

- m) disposal of waste food and washing dirty crockery shall be allocated space near the entrance to the dining room [PM_10_80_85]
- n) direct access to the external waste food storage/treatment area (to prevent cross contamination) shall be provided from the kitchen [PM_10_80_85]
- o) direct access from the dining area to the crockery wash area in the kitchen without passing through the servery area [PM_10_80_85]
- p) the crockery wash area shall have a space for loaded trolleys. [PM_10_80_85]

4.7.2.3 There shall be distances between catering equipment to allow staff to work safely and effectively. [PM_10_80_85]

4.7.2.4 Table 6 shows recommended safe working area/area ranges in commercial kitchens.

Clearances	Clear Dimension (mm)
Clearance in front of storage units and alongside circulation routes	1200
Front of cooking equipment to wall or door	1200
Front of servery units to wall/obstruction behind	1200
Between cooking equipment (facing each other)	1800-2000

Table 6 Clearances for Catering Kitchen

4.7.2.5 High efficiency kitchen equipment shall be used to achieve the good practice benchmarks for energy usage for schools given in CIBSE TM50 'Energy Efficiency in Commercial Kitchens', 2009. [PM_10_20_90]

5 Performance and Quality

5.1 Ergonomic Requirements

5.1.1 Inappropriately sized and designed furniture can affect the comfort and concentration of pupils and lead to accidents and/or back pain in later life. [PM_10]

5.1.2 Furniture shall be selected for the size and age of the pupil, as identified in the SSB, and for the activities being carried out in each space. [PM_10_20_82]

5.2 Materials and construction

5.2.1 General Requirements

5.2.1.1 Certificates of compliance shall be made available to the Employer certifying that the furniture being supplied conforms to and has been tested to the appropriate standard(s) EN/EN BS/ISO or other recognised equivalents. [PM_35_10_60]

5.2.1.2 FF&E shall comply with ISO 9001:2015 and BS EN ISO 14001. [PM_35_10_60]

5.2.1.3 Samples of items of Group 1 furniture shall be made available to the Employer for approval. [PM_10_20_82]

5.2.1.4 Materials used in furniture shall be selected to suit the required activity and needs of the pupils as identified in the SSB and shall also meet the relevant standards, as listed in the following sections. [PM_10_20_82]

5.2.2 Metal

5.2.2.1 304 or 430 grade stainless steel shall be used in sinks and fabricated commercial kitchen furniture which is corrosion and heat resisting. [PM_10_20_82]

5.2.2.2 430 grade stainless steel shall be used for frames and legs of tables in commercial kitchens. [PM_10_20_82]

5.2.2.3 316 stainless steel grade acid resistant sinks shall be used in laboratories and science preparation rooms. [PM_10_20_82]

5.2.2.4 Alternative materials for sinks shall be laboratory grade epoxy resin, polypropylene or acrylic. [PM_10_20_82]

5.2.2.5 Worktops shall be supported on steel leg frames constructed from square section fully welded tube at a minimum of 32mm square section or equivalent. [PM_10_20_82]

5.2.2.6 The legs of worktops shall be fitted with adjustable levelling feet. [PM_10_20_82]

5.2.2.7 Metal coating on frames for fitted benching and tables shall be epoxy powder coated to the pre-agreed RAL colour and meet the requirements set out in BS 6496:1984: 'Specification for powder organic coatings for application'. [PM_10_20_90]

5.2.2.8 Where ICT is used, frames shall be capable of supporting cable management systems. [PM_10_20_82]

5.2.2.9 Lockers shall be manufactured using fully welded 16-gauge sheet steel for the carcass and 14-gauge sheet steel doors. [PM_10_20_82]

5.2.2.10 Locker components shall be powder coated prior to assembly to ensure all surfaces are protected. [PM_10_20_82]

5.2.2.11 Lockers placed in corridors shall meet the BS Class '0' fire rating. [PM_10_20_82]

5.2.3 Manufactured Board

5.2.3.1 Laminated manufactured board shelving shall be provided in storerooms a minimum of 18mm thick. [PM_10_20_82]

5.2.3.2 Carcasses of storage units shall be manufactured from laminated manufactured board, a minimum of 18mm thickness and edged in pressure applied PVC or an alternative material with the same attributes. [PM_10_20_82]

5.2.4 Timber

5.2.4.1 Timber shall be sound, well-conditioned, properly seasoned to suit internal joinery use, and free from defects. [PM_10_20_82]

5.2.4.2 Timber shall be purchased in accordance with the UK Government's timber procurement policy. [PM_10_20_82]

5.2.4.3 Only timber and timber products originating either from independently verified legal and sustainable sources or from a licensed Forest Law Enforcement Governance and Trade (FLEGT) partner shall be used. [PM_10_20_82]

5.2.4.4 Where timber tops are used for worktops and tables, they should have a minimum thickness of 25mm. [PM_10_20_82]

5.2.5 Laminate and core material

5.2.5.1 Laminated worktops shall have high pressure applied PVC edges or similar, finished flush and smooth with the core of the laminate concealed behind the lipping. [PM_10_20_82]

5.2.5.2 If the core material is MDF, the edges shall be bull nosed, polished or lacquered MDF. [PM_10_20_82]

5.2.5.3 Laminate worktops shall be no less than 25mm thick and edged with an impact and water-resistant material. [PM_10_20_82]

5.2.5.4 Laminated tabletops shall be no less than 18mm thick. [PM_10_20_82]

5.2.5.5 Vertical edges of doors and drawer fronts shall be post-formed or edged with high pressure applied PVC or similar. [PM_10_20_82]

5.2.5.6 Worktops used in food rooms shall be heat-resistant to 180°C. [PM_35_10_32]

5.2.5.7 Solid work surfaces shall be provided in DT spaces, art rooms, science teaching spaces and science preparation spaces and shall be no less than 16mm thick. [PM_10_20_82]

5.2.5.8 Drainage grooves around sink areas shall be machined into the worktop material where solid grade laminate is used. [PM_10_20_82]

5.2.5.9 The tops of science pedestal units shall be firmly secured to the base unit with a minimum of eight fixing points to prevent the tops becoming loose from the base and the potential of the gas pipe fracturing. [PM_10_20_82]

5.2.5.10 The science pedestals shall be firmly fixed to the floor with appropriate fixings to prevent them becoming loose and the potential of the gas pipe fracturing. [PM_10_20_82]

5.2.5.11 Solid laminate used as locker doors, shall be of a fire-resistant standard. [PM_35_30]

5.2.5.12 Laminates shall meet the requirements of BS EN 438-3:2016: 'High pressure decorative laminates (HPL)'. [PM_10_20_90]

5.2.6 Blinds and Curtains

5.2.6.1 All fabric used for blinds and curtains shall be fire retardant and, if located behind or near to sinks, shall be water resistant. [PM_35_10]

5.2.6.2 As a safety precaution cords and chains for blinds in schools shall be contained, particularly in Early Years where children aged up to 42 months are accommodated (see Section 8: References). [PM_10_20_82]

5.2.6.3 Blinds and curtains in halls and other spaces higher than 3.6m shall be remotely operated through either a mains powered system or manually operated cranked rods. [PM_10_20_82]

5.2.6.4 Blinds in one in three science laboratories (or science studios) shall allow for black out for experiments, see Technical Annex 2E 3.2.8. [PM_10_20_82]

5.2.6.5 Drapes shall form a proscenium arch at the front of the performance area in a hall comprising two sections with a 50-100% fabric fullness, suspended from a track and opened via a pulley system and closed from the centre to off-stage. [PM_10_20_82]

5.2.7 Defibrillators

5.2.7.1 Supply of defibrillators shall be applicable in all New, Whole School or Partial School Projects, inclusive of refurbishment and/or block replacements. [Pr_40_70_51_22]

5.2.7.2 Automated external defibrillator (AED) shall be provide as follows:

- a) In Secondary Schools two shall be provided. One shall be located in the sports hall and the other in a cabinet in a chosen location. [Pr_40_70_51_22]
- b) In Primary schools one will be provided. [Pr_40_70_51_22]

5.2.7.3 The AEDs shall be purchased by the Contractor from the National Health Service (NHS) Supply Chain Framework. [Pr_40_70_51_22]

6 Minimum Requirements of Fittings, Fitted Furniture and Equipment

6.1.1 The Contractor shall supply all Group 1 fittings and fitted furniture and equipment items required in Section 7 or listed in the SSB or Annex SS1, to the specifications in Table 7 below. [PM_10_20_90]

6.1.2 Additional FF&E listed in the SSB or Annex SS1 shall also meet these specifications. [PM_10_20_90]

Codes ¹	Item	Nominal dimension (mm)	Construction
BAR001	Barres	42-48mm dia. Varied length.	Solid timber. Steel brackets.
BOA001	Noticeboard	1500x20x1500	Fabric covered. Unframed.
CHA401	Bleacher seating units (seats/benching with handrails)	Number of seats required.	Powder coated mild steel. Rubber wheels. Wooden deck. Handheld control unit.
FFE912	Library desk	As ADS.	Desk height suitable for wheelchair user. 40mm top laminated manufactured board core with ABS edging or similar.
FFE980	Reception desk (visitors)	To meet Building Regs 2010: 'Access to and use of Buildings': Volume 2 Part M.	Desk height suitable for wheelchair user. 40mm top laminated manufactured board core with ABS edging or similar.
FFE981	Reception desk (pupils/finance)		
FFE987	Curtains to shower cubicles	As ADS.	Waterproof nylon. Rustproof fittings for rings.
LIG001	Lighting rig	Sufficient length for no. of LED lights required in SSB.	Suitable for lighting load.

LIG004	Stage lanterns (LED)		
LIG002	Stage curtains	As ADS.	Fire resistant (FR) fabric.
LIG003	Stage curtain tracking		Corded tracking.
FFE989	Blinds	As ADS.	Contained cord mechanism. FR fabric for roller blind.
FFE990	Staging	As ADS.	Demountable. Modular.
MIR001	Full height mirror (music practice)	600x1800	Safety backed.
SIN001	Belfast sink (large)	915x610x305	Enamelled fireclay, with silt trap.
SIN002	Belfast sink (medium)	480x380x190	Enamelled fireclay.
SIN003	Belfast sink (small)	430x330x190	Enamelled fireclay.
SIN006	Belfast sink (cleaners)	455x380x355	Enamelled fireclay. Integral splashback. Hinged stainless steel grating.
SIN004	SS single sink (right hand drainer)		Brushed stainless steel.
SIN005	SS single sink (left hand drainer)	1000x500x170	18-gauge steel. Acid resistant grade 316 in science spaces.
SIN007	Hand-wash sink	380x250x200	Grade 304 quality stainless steel.
SIN009	Screen-wash sink	1155x1140x1500	Stainless steel construction.
WKTH60VS	Worktop	600xvaried heights	Solid laminate min 16mm thick.
WKTH75VS	600/750/1200 deep	750xvaried heights	Min. 16mm thick end panel.
WKTH12VS			

	(solid laminate)	1200xvaried heights	
WKT600V WKT750V WKT120V	Worktop 600/750/1200 deep	600xvaried heights 750xvaried heights 1200xvaried heights	Laminated top min. 25mm thick manufactured board core. Min. 18mm thick end panel.
APP011	Cooker Hob Electric (inset)	600x600	Various.
APP013	Oven (inset)	595x550x595	Various.
APP022	Mini oven	600x550x450	Various.
APP004	Wall mounted water boiler	Various.	Various.
BEN02	Single bench with integral hook rails	400mm length per pupil.	Solid timber lacquered bench. Frame EPC.
BOD01	Pupil serviced bollard (dry)	600x600x850	16mm min. solid laminate top. Top mounted 4no. two way gas outlets, 4no. twin gang 13-amp sockets. 1 no. access panel.
BOWD01	Pupil serviced bollard (wet and dry)	600x600xvar	16mm min. solid laminate top. Top/side mounted 4no. two way gas outlets, 4no. twin gang 13-amp sockets. 1no. cast epoxy sink, vulcathene waste and bottle trap. 1no. single fixed swan neck tap. 1no. access panel.
DEM01 or BOWD02	Teacher 'L' shaped serviced demo desk (wet and dry) or	1800x1800x850 or 600x600xvar	16mm min. solid laminate top. Top/side mounted 1no. two way gas outlets, 2no. twin

	Teacher serviced bollard (wet and dry)		gang 13-amp sockets, 1no. data socket. 1no. cast epoxy sink, vulcathene waste and bottle trap. 1no. single fixed swan neck tap. 1no. access panel.
BOW01	Whiteboard	1500x20x1500	Enamel. Non-magnetic.
CAR001	Carpet	3000x3000	Impervious, soft textured, heavy duty, tufted pile. Bound edges and anti-slip backing. Refer to Technical Annex 2D.
CHA024	Practical stool (science)	430x350x size mark 5	Plastic/timber moulded seat. Minimal leg splay.
CUB009	Under bench cupboard (1 door)	415x465xvaried heights	18mm manufactured board laminated carcass with ABS edging. Top 18mm min. thickness.
CUB004	Under bench cupboard (2 door)	415x1020xvaried heights	18mm doors with high pressure laminate ABS edging. Anti-finger trap hinges.
CUB012	Under bench paper unit	1020x465xvaried heights	18mm manufactured board laminated core carcass with ABS edging or similar.
CUP014	Oven housing unit	600x600x550	18mm manufactured board laminated core carcass with ABS edging or similar.
CUP013	Wall cupboard unit (2 doors)	1020x300X720	18mm manufactured board laminated carcass with ABS edging or similar. 18mm manufactured board laminated doors with high

			pressure laminate with ABS edging or similar.
EXT001 EXT002	Dust extraction unit (central) Dust extraction unit (local)	Refer to Technical Annex 2F.	Refer to Technical Annex 2F.
FFE932	Rebound screens	2400x30x1200	Scratch resistant laminate 0.9mm thick with high impact composite core and integral wheels.
FUM01Ft FUM002Ft	Fume cupboard (ducted) Fume cupboard (semi-mobile, ducted)	1000x700x1850 1100x600x1950	Refer to CLEAPSS G9 Fume Cupboards in Schools.
LOC015	Locker (4 high)	300x300x1800	Steel/solid laminate with vents. Antibacterial coating. Double-skinned welded doors. Sloping tops.
RAC001	Tray racking (57)	1050x430x1830	Heavy-duty, fully welded steel with cross brace, runners and 57 trays.
SHE010 SHE020 SHE040	Stockroom shelving (set of 5) timber/metal frame Stockroom shelving (set of 5) timber/metal frame Stockroom shelving (set of 5) timber/metal frame	Varied widthx380x2000 Varied widthx455x2000 Varied widthx600x2000	Min. 18mm timber/manufactured board shelves. Adjustable shelves.
SHE030	Stockroom shelving (set of	Varied widthx455x2000	Reinforced metal adjustable shelves. Metal frame.

	5) metal/metal frame		
SHE100	Shelving (set of 3)	1200x300x900	Min. 18mm timber/manufactured board with timber/ABS edging or similar. Wall mounted steel uprights. Adjustable shelves
STO001 STO002	Coat hooks (6/12)	750/1500x50	Min. 18mm timber/manufactured board panel with timber/ABS edging or similar. Single row of double hooks at 130mm centres. Safety design hooks.
TAB001S	Adjustable table (practical)	1200x600xvaried heights	16mm min. solid laminate top. Fully welded frame. Simple adjustment mechanism.
TAB100S TAB101S	Adjustable table (hob) Adjustable table (sink)	1200x750xvaried heights 1200x750xvaried heights	16mm min. solid laminate top. Fully welded metal frame. Simple adjustment mechanism.
TAB200S	Practical table (science)	1200x600x850	16mm min. solid laminate top. Fully welded metal frame.
TRU001 TRU002 TRU004	Under bench tray unit (24 trays) Under bench tray unit (18 trays) Under bench tray unit (12 trays)	1020x465xvaried heights	18mm min. manufactured board laminated carcass with ABS edging or similar. 18mm doors with ABS edging or similar. Shatter proof tray.

TRU005	Under bench portfolio unit	1020x465x770	18mm min. manufactured board laminated carcass with ABS edging or similar.
BED01	Bed, bedhead and mattress	825x1990xvaried heights	Metal frame fully welded or 18mm min. thick manufactured board base with ABS lipping or similar. Solid construction. Contract mattress. To meet anti ligature requirements.
BED02	Bedside cabinet	450x450x600	18mm manufactured board laminated carcass with ABS edging or similar. 18mm doors with ABS edging or similar. 16mm min. solid laminate top. Solid construction. To meet anti ligature requirements. Anti-finger trap hinges.
BED03	Study desk	900x600xvaried heights	Solid laminated top. Metal frame fully welded or 18mm thick manufactured board frame with ABS lipping. Solid construction. To meet anti ligature requirements.
BED04	Wardrobe (double with open shelves)	720x760x1720	18mm manufactured board laminated carcass with ABS edging or similar. 18mm doors with ABS edging or similar. Anti-finger trap hinges. To meet anti ligature requirements.

Table 7 Specification for Group 1 FF&E (Fittings, fitted furniture and Equipment)

¹ Codes for fittings and fitted furniture and equipment may be found on Annex SS1.

7 Group 1 FF&E - specific requirements for each space type

7.1.1 Group 1 FF&E items are listed, for each room, in the tables below with more specialised or additional School-specific FF&E listed in Annex SS1. [PM_10]

7.1.2 FF&E for residential accommodation is assumed to be Group 1. [EF_40]

7.1.3 The specification of all Group 1 FF&E shall be as set out in Table 7 above. [EF_40]

7.1.4 For each teaching space, the Contractor shall provide a whiteboard (BOW01), see Table 7 above. [Pr_40_30_25_96]

7.1.5 The Contractor shall provide 1 noticeboard (BOA001) for large spaces (halls, studios, social or dining areas). [Pr_40_30_25_58]

7.1.6 The Contractor shall provide 1 noticeboard for heavy practical spaces and arts & DT learning resources. [Pr_40_30_25_58]

7.1.7 The Contractor shall provide 2 noticeboards for all other basic teaching spaces and occupied learning resource spaces. [Pr_40_30_25_58]

7.1.8 The Contractor shall provide 3 noticeboards for art rooms. [Pr_40_30_25_58]

7.1.9 For all staff and admin spaces, a noticeboard and set of shelves shall be provided for each workstation. [PM_10_20_82]

7.1.10 A whiteboard and noticeboard are required for each preparation space and staff workroom. [PM_10_20_82]

7.1.11 In residential accommodation a noticeboard shall be provided for each bedroom occupant. [Pr_40_30_25_58]

7.1.12 Noticeboard provision in living spaces shall be determined with the School. [Pr_40_30_25_58]

7.1.13 Noticeboards in all circulation spaces shall be fitted with a cover, preferably top hung. [Pr_40_30_25_58]

7.1.14 Noticeboards in rooms shall not extend more than 2.5m in width without having a break between them of at least 0.4m. [Pr_40_30_25_58]

7.1.15 The total area of noticeboards shall not exceed 20% of the total wall area in any one room (or 50% of the wall area if sprinklers are provided) or shall be no more than 60m² in total in any one room. [Pr_40_30_25_58]

7.1.16 All noticeboards and display boards used in schools (except individual signs/notices required under the Health and Safety (Safety Signs and Signals) Regulations 1996, and small noticeboards/graphic displays up to 1m²), shall be tested as a complete item to pass 'smouldering ignition source 0 (cigarette test)' and 'flaming source 1 (match test)' in accordance with the fire testing procedures in BS 5852 Clause 12: Methods of test for the ignitability of complete items of furniture. [PM_35_30]

7.1.17 Where side-benching is required, and unless otherwise stated, it shall run along the full length of a wall. [Pr_40_30_30]

7.1.18 Where a sink is positioned at the end of a run of worktop there shall be a minimum of 100mm adjacent to prevent items falling on the floor from the sink. [PM_10_80_85]

7.1.19 Adjustable height storeroom shelving shall be provided to the full length of 3 walls with shelf heights no greater than 1800mm. [Pr_40_30_78_77]

7.1.20 In an existing school, where storage systems are attached to the walls for stability these may be re-used, Contractors shall be assured they are of an appropriate quality. [Pr_40_30_78_77]

7.1.21 All furniture in science spaces and ICT-rich rooms shall be provided by the Contractor - loose furniture is therefore listed in tables 10 and 11. [EF_40]

7.1.22 Where machines for D&T workshops are identified as Group 2, they shall be based on the existing provision listed in Annex SS3 of the SSB. [PM_10_20_90]

7.1.23 Legacy machines shall be installed or, if necessary, Repaired or Replaced by the Contractor depending on condition and safety. [PM_10]

7.1.24 The basic condition of the machines shall be recorded by the School on their Annex SS3. [PM_30_10_15]

FF&E Fittings	Code	Item	Nursery 55m²	Reception 62m²	KS1 Classroom 55m²	KS2 Classroom 55m²
Fittings	SIN004	SS single bowl sink (RH drainer)	1	1	1	1
Fittings	WKT600V	Worktop 600 deep	3.6m	7.2m	5.4m	5.4m
Fitted F&E	CUB004	Under bench 2 door cupboard	3	3	3	3
Fitted F&E	CUB013	Wall cupboard (2 doors)	2	2	2	2
Fitted F&E	SHE100	Shelving (set of 3)	2	2	1	1
Fitted F&E	CUB012	Under bench paper unit	1	1	1	1
Fitted F&E	TRU004	Under bench 18 tray unit	2	2	1	1

Table 8 Group 1 FF&E quantities to be provided by the Contractor in Primary Classrooms and Studio

FF&E category	Code	Item	Food bay/ practical resources 13m²	Food/ science/ DT area 62m²	Food/ science/ DT area 69m²	Music/ drama spaces, studio 55m²
Fittings	SIN004	SS single bowl sink (right hand drainer)	1	2	2	N/A
Fittings	SIN001	Belfast sink (large)	N/A	1	1	N/A
Fittings	WKT60V S	Worktop 600 deep (solid laminate)	6m	18m	19m	7.2m
Fitted F&E	CUB004	Under bench 2 door cupboard	3	7	8	4
Fitted F&E	CUB009	Under bench 1 door cupboard	2	5	1	N/A
Fitted F&E	SHE100	Shelving (set of 3)	N/A	7	7	4
Fitted F&E	CUB012	Under bench paper unit	N/A	1	1	N/A
Fitted F&E	TRU004	Under bench 18 tray unit	N/A	1	1	2
Fitted F&E	CUP014	Oven housing unit	1	2	2	N/A
Fitted F&E	STO002	Coat hooks (12)	N/A	1	1	N/A
Fitted F&E	APP011	Cooker hob electric (inset)	1	2	2	N/A
Fitted F&E	APP022	Mini/standard oven (inset)	1	2	2	N/A

Table 9 Group 1 FF&E quantities to be provided by the Contractor in Primary specialist space

FF&E category	Code	Item	ICT rich classroom 62m²	ICT rich Classroom 69m²
Fittings	WKT12V	Worktop 1500 deep	N/A	20m
Fittings	WKT12V	Worktop 1200 deep	7	N/A
Fittings	WKT600V	Worktop 750 deep	N/A	7.5
Fittings	WKT600V	Worktop 600 deep	14	N/A
Loose F&E	TAB001S	Adjustable table (practical)	1 in 3 spaces ¹	1 in 3 spaces ¹
Loose F&E	TAB502	Table, ICT/Admin	1	N/A

Table 10 Group 1 FF&E quantities to be provided by the Contractor in ICT-rich space

FF&E category	Code	Item	Science studio 69m²	General laboratory 83m²	Specialist laboratory 90m²	Specialist laboratory 97m²
Fittings	SIN002	Belfast sink (medium)	1	1	1	1
Fittings	SIN003	Belfast sink (small)	1	2	2	N/A
Fittings	WKT60V S	Worktop 600 deep (solid lam)	9m	11m	12m	16m
Fitted F&E	DEM01	Teacher serviced demo desk	1	1	1	1

Fitted F&E	BOD01	Pupil serviced bollard (dry)	N/A	5	N/A	N/A
Fitted F&E	BOWD01	Pupil serviced bollard (wet and dry)	N/A	N/A	5	5
Fitted F&E	SHE100	Shelving (set of 3)	6	N/A	N/A	N/A
Fitted F&E	CUB004	Under bench unit (2 door)	6	9	10	10
Fitted F&E	FUM002 Ft	Fume cupboard (semi-mobile, ducted)	1 in 3 spaces ¹	1 in 3 spaces ¹	1 in 3 spaces ¹	1 in 3 spaces ¹
N/A	STO05X	Coats and bags unit	N/A	N/A	2	2
Loose F&E	TAB001S	Adjustable table (practical)	1 in 3 spaces ¹	1 in 3 spaces ¹	1 in 3 spaces ¹	1 in 3 spaces ¹
Loose F&E	TAB200S	Practical table (science)	15	15	15	15
Loose F&E	CHA024	Practical stool (science)	31	31	31	31
Loose F&E	RAC001	Tray racking (57)	2	2	2	2

Table 11 Group 1 FF&E quantities to be provided by the Contractor in science teaching spaces

¹ Contractor to identify which 1 in 3 science laboratories or studios to have fume cupboards and adjustable tables.

FF&E Category	Code	Item	Art room 83m²	Art room 90m²	Art room (ceramics) 97m²	Art room (textiles) 97m²
Fittings	SIN001	Belfast sink (large)	2	2	2	2
Fittings	SIN009	Screen wash sink	N/A	N/A	N/A	1
Fittings	WKT60VS	Worktop 600 deep (solid laminate)	16m	18m	17m	18m
Fitted F&E	CUB004	Under bench 2 door cupboard	4	4	4	5
Fitted F&E	SHE100	Shelving (set of 3)	6	6	6	4
Fitted F&E	TRU100	Under bench 24 tray unit	2	2	2	2
Fitted F&E	TRU005	Under bench portfolio unit	2	2	2	2

Table 12 Group 1 FF&E quantities to be provided by the Contractor in art spaces

FF&E Category	Code	Item	Workshop (multi- purpose) 111m²	Workshop (eng'g) 97m²	Studio (graphics) 83m²	Studio (textiles) 83m²
Fittings	SIN004	SS single bowl sink (right hand drainer)	1	1	1	1
Fittings	WKT60VS	Worktop 600 deep (solid laminate)	8m	6m	5m	8m
Fittings	WKT75VS	Worktop 750 deep (solid laminate)	N/A	N/A	7m	N/A

Fittings	WKT12VS	Worktop 1200 deep (solid laminate)	N/A	N/A	6m	N/A
Fitted F&E	CUB004	Under bench 2 door cupboard	5	4	3	3
Fitted F&E	SHE100	Shelving (set of 3)	N/A	N/A	4	6
Fitted F&E	TRU100	Under bench 24 tray unit	N/A	N/A	1	3

Table 13 Group 1 FF&E quantities to be provided by the Contractor in D&T spaces

FF&E Category	Code	Item	Food room 97 m ²	Food room (demo) 69m ²
Fittings	SIN004	SS single bowl sink (right hand drainer)	6	1
Fittings	SIN005	SS single bowl sink (left hand drainer)	6	N/A
Fittings	SIN007	Hand wash basin	1	1
Fittings	WKT12V	Worktop 1200 deep	9.6m	N/A
Fittings	WKT600V	Worktop 600 deep	30m	15m
Fitted F&E	CUB004	Under bench 2 door cupboard	21	9
Fitted F&E	CUB009	Under bench 1 door cupboard	16	N/A
Fitted F&E	CUP014	Oven housing unit	1	1
Fitted F&E	SHE100	Shelving (set of 3)	N/A	2
Fitted F&E	TAB100	Practical adjustable table (hob)	1	N/A
Fitted F&E	TAB101	Practical adjustable table (sink)	1	N/A
Fitted F&E	APP011	Cooker hob (electric inset)	1	1
Fitted F&E	APP0013	Oven (inset)	1	1

Table 14 Group 1 FF&E quantities to be provided by the Contractor in Food spaces

FF&E Category	Code	Item	Science prep 62m ²	Food prep 10m ²	DT prep 34m ²
Fittings	SIN004	SS single bowl sink (right hand drainer)	N/A	1	1
Fittings	SIN002	Belfast sink (medium)	2	N/A	N/A
Fittings	WKT60VS	Worktop 600 deep (solid lam)	9.5m	N/A	3.5m
Fittings	WKT600V	Worktop 600 deep	N/A	2.5m ¹	N/A
Fittings	WKT75V	Worktop 750 deep	N/A	N/A	N/A
Fittings	WKT12VS	Worktop 1200 deep (solid lam)	2.4m ¹	N/A	N/A
Fitted F&E	CUB001	Under bench 2 door cupboard	5 ¹	1	3
Fitted F&E	SHE100	Shelving (set of 3)	1	2	1
Fitted F&E	STO001	Coat hooks (6)	1	1	1
Fitted F&E	EXT001	Dust extraction unit	N/A	N/A	1
Fitted F&E	FUM001Ft	Fume cupboard (ducted)	1	N/A	N/A

Table 15 Group 1 FF&E quantities to be provided by the Contractor in Preparation spaces

FF&E category	Code	Item	LRC ¹ 180m ²	Control room 8m ²	Dark room 9m ²
Fittings	SIN001	Belfast sink (large)	N/A	N/A	1
Fittings	WKT60VS	Worktop 600 deep (solid lam)	N/A	N/A	4m ²
Fittings	WKT600V	Worktop 600 deep	13m ²	4m ²	N/A
Fittings	FFE912	Library desk	1	N/A	N/A
Fittings	SHE100	Shelving (set of 3)	1	2	2
Fittings	TRU100	Under bench 24 Tray unit	N/A	N/A	1

Table 16 Group 1 FF&E to be provided by the Contractor in Resource spaces

¹A formula within the ADS will generate the amount of worktop and shelving units based on the number of pupils.

FF&E category	Code	Item¹	Quantity (per person)
Fitted F&E	BED01	Bed, bedhead and mattress	1
Fitted F&E	BED02	Bedside cabinet	1
Fitted F&E	BED03	Study desk	1
Fitted F&E	BED04	Wardrobe (double with open shelves)	1

Table 17 FF&E to be provided by the Contractor in Residential Accommodation in a mainstream school

¹ with anti-ligature design if for Special Schools or AP.

8 Demonstrating Compliance

8.1 Overview

8.1.1 The Contractor shall demonstrate compliance with the Employer's Requirements by use of protocols detailed in the Contractor's Quality Assurance procedures capturing evidence of both coordinated design and its implementation into the construction of the School Building(s) with photographic evidence and/or third-party accreditation. [PM_70_15]

9 Reference Standards

9.1 Overview

9.1.1 The design installation, commissioning of the Fittings, Furniture and Equipment and handover documentation shall comply with all relevant deliverables contained within the DfE's EIR, as well as the following (or updated documents if relevant). [PM_10_20_28]

9.2 Chairs and Tables

9.2.1 Reference Standards for Chairs and Tables:

- a) BS EN 16139:2013: 'Furniture. Strength, durability and safety'. [FI_70_85]
- b) BS EN 1729: 1:2012+A1:2015: 'Furniture. Chairs and Tables for educational institutions. Functional dimensions'. [FI_70_85]
- c) BS EN 1729: 1:2012+A1:2015: 'Furniture. Chairs and Tables for educational institutions. Safety requirements'. [FI_70_85]

9.3 Upholstery

9.3.1 Reference Standards for Upholstery:

- a) BS EN 7176: 2007+A1:2011: 'Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites'. [FI_70_85]
- b) BS EN 16139:2013: 'Furniture. Strength, durability and safety. Requirements for non-domestic seating'. [FI_70_85]
- c) BS 7176:2007+A1:2011: 'Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites'. [FI_70_85]
- d) BS 7177:2008+A1:2011: 'Specification for resistance to ignition of mattresses, mattress pads, divans and bed bases'. [FI_70_85]
- e) BS EN 597:1:2015: 'Furniture. Assessment of the ignitability of mattresses and upholstered bed bases. Ignition source smouldering cigarette 'Chairs and Tables'. [FI_70_85]
- f) BS EN 1729-1:2012+A1:2015: 'Furniture. Chairs and tables for educational institutions. Functional dimensions'. [FI_70_85]

- g) BS EN 1729-2:2012+A1:2015: 'Furniture. Chairs and tables for educational institutions. Safety requirements and test methods'. [FI_70_85]

9.4 Storage

9.4.1 Reference Standards for Storage:

- a) BS EN 16121:2013+A1:2017 'Non-domestic storage furniture. Requirements for safety, strength, durability and stability'. [FI_70_85]
- b) BS EN 14749: 'Furniture. Domestic and kitchen storage units and kitchen-worktops. Safety requirements and test methods'. [FI_70_85]
- c) BS 4680:1996: 'Specification for clothes lockers'. [FI_70_85]
- d) BS EN 14073-2: 2004: 'Office furniture. Storage furniture. Safety requirements'. [FI_70_85]
- e) BS EN 14073-3:2004: 'Office furniture. Storage furniture. Test methods for the determination 'of stability and strength of the structure'. [FI_70_85]
- f) BS 6222-3:1999: Domestic kitchen equipment. Performance requirements for durability of surface finish and adhesion of surfacing and edging materials. Specification'. [FI_70_85]

9.5 Sinks

9.5.1 Reference Standards for Sinks:

- a) BS EN 13310:2015: 'Kitchen sinks. Functional requirements and test methods'. [FI_70_85]
- b) BS 1206:1974: 'Specification for fireclay sinks: dimensions and workmanship'. [FI_70_85]

9.6 Laboratories

Reference Standards for Laboratories:

- a) BS EN 14056:2003: 'Laboratory furniture. Recommendations for design and installation'. [FI_70_85]

- b) BS EN 13150: 2001: 'Workbenches for laboratories. Dimensions, safety requirements and test methods'. [FI_70_85]
- c) BS EN 14175-2:2003: 'Fume cupboards. Safety and performance requirements'. [FI_70_85]
- d) G9 'Fume Cupboards in Schools' 2014. CLEAPSS. [FI_70_85]

9.7 Retractable bleacher seating

9.7.1 Reference Standards for Retractable bleacher seating:

- a) NFPA 102 National Fire Protection Association. Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures - Effective Date: 2015. [FI_70_85]
- b) BS EN 13200- Parts 1-5: 2012: 'Spectator facilities. General characteristics for spectator viewing area'. [FI_70_85]
- c) BS EN 12727:2000: 'Furniture. Ranked seating. Test methods and requirements for strength and durability Test Level 4, Severe Category Use'. [FI_70_85]

9.8 Curtains and blinds

9.8.1 Reference Standards for Curtains and blinds:

- a) BS 5867: Part 2: 2008: 'Fabrics for curtains, drapes and window blinds. Flammability requirements. Specification'. [FI_70_85]
- b) EN13120:2009+A1:2014: 'Internal blinds. Performance requirements including safety.' [FI_70_85]

9.9 Equipment

9.9.1 Reference Standards for Equipment:

- a) BS EN 14434:2010: 'Writing boards for educational institutions. Ergonomic, technical and safety requirements and their test methods'. [FI_70_85]
- b) BS 5852 Clause 12: Methods of test for the ignitability of complete items of furniture. Noticeboards. [FI_70_85]

- c) BS EN 1176-11:2014: 'Playground Equipment Standard parts 1-11'.d.BS EN 12346:1999: 'Gymnastic equipment. Wall bars, lattice ladders and climbing frames. Safety requirements and test methods'. [FI_70_85]
- d) BS EN 1270: 2005: 'Playing field equipment - Basketball equipment - Functional and safety requirements, test methods'. [FI_70_85]
- e) CEN/TC 136 3/2021, Revision of EN 914:2020. [FI_70_85]
- f) BS 4163 Health and safety for design and technology in educational and similar establishments – Code of practice. [FI_70_85]



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