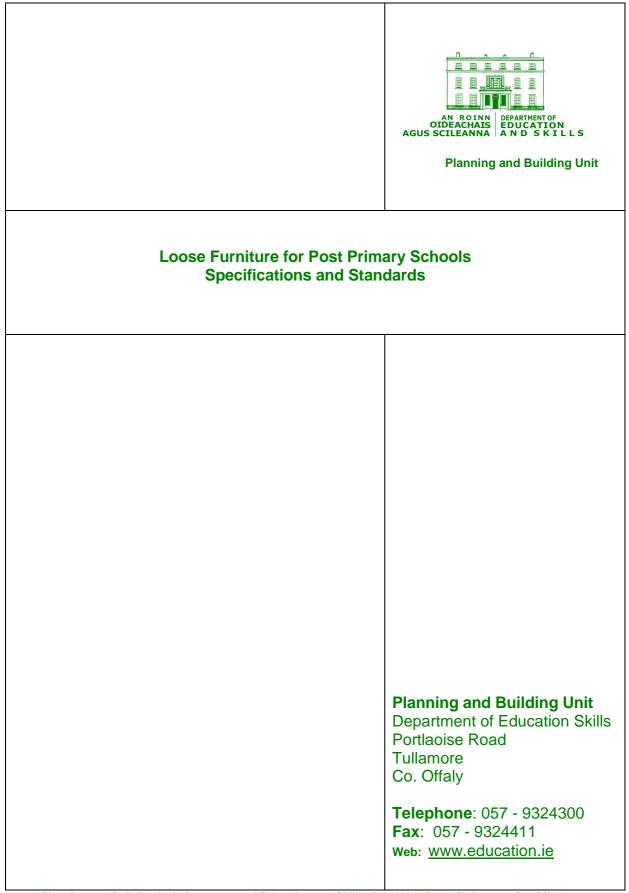
### An Roinn Oideachais agus Scileanna Department of Education and Skills



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### **Standards and Specifications**

All Furniture shall be Durable and Safe for School Use It is essential that tenders and tenderers for equipment for school use shall:

- Comply fully with the specifications and be durable and safe for school use.
- Comply fully with the Standards as detailed and shall comply fully with European Standards (EN), both established and developing, and that Certificates of successful *independent testing* to the relevant Standard(s) by a recognised body are available on request.
- Comply with European Electrical Standards and CE marking as appropriate.
- Fully comply with requirements in the Request for Tenders (RFT) document.
- Be accompanied by documentation of sufficient detail for full evaluation.
- Include a completed and signed certificate of compliance.

### Award of a contract is conditional on the production of a current tax clearance <u>certificate.</u>

### Failure to comply with the above may result in the tender being deemed null and void.

The documentation contained in this booklet should be read in the context of all relevant EU directives governing Public Supply Contracts and the requirements of the most recent National or Departmental Circular Letters and/or Directives.

### **Definition of Certain Technical Specifications**

For the purpose of this Directive:

- 1. *'technical specification'* means the totality of the technical requirements contained in particular in the tender documents defining the characteristics required of a product such as the level of quality, performance, safety or dimensions including the requirements applicable to the product in respect of terminology, symbols, tests and testing methods, packaging, marking and labelling which permit a material, a product or a supply to be described objectively in a manner such that it fulfils the use for which it is intended by the contracting authority;
- 2. *'Standard'* means a technical specification approved by a recognised standardising body for repeated and continuous application, compliance with which is in principle not compulsory.
- 3. *'European standard'* means the standard approved by the European Committee for Standardisation (CEN) or by the European Committee for Electro-technical Standardisation (CENELEC) as 'European Standards (EN)' or 'Harmonisation Documents (HD)' according to the Common Rules of these organisations.
- 4. *'Common technical specification'* means a technical specification drawn up with a view to uniform application in all Member States of the Union.

### **Descriptions, Specifications and Drawings**

### Introduction

#### **Standard Specifications**

The following standard specifications, including any amendments, shall be strictly adhered to in all respects, unless otherwise specified or agreed with the contracting authority:

#### **General Furniture Standards**

#### All furniture shall comply with:

I.S. EN 1729 Functional Sizes Educational Furniture (Tables and Chairs) and testing. I.S. 140 Irish Standard School Furniture (largely superseded by I.S. EN 1729) I.S. 170 Irish Standard Furniture

#### **Specific Standards**

#### **Ergonomics:**

I.S. EN 29241 Ergonomics standards for visual display terminals (VDTs). I.S. EN ISO 9241 Ergonomic demands for office works with screens

#### **Office Furniture:**

I.S. EN 527 Office Furniture – tables and desks
I.S. EN 1335 Office Furniture – office chairs
EN 14073 Office Furniture – storage furniture
EN 14074 Office Furniture – tables and desks and storage furniture – moving parts.
BS 6396 Specifications for electrical systems on office furniture and office screens.
I.S. EN 1023 – Office Furniture: Screens
BS 4680 Locker Units

#### Materials:

EN 622 Dry Process Fibreboard (MDF) (including furniture) for use in dry conditions EN 438 Decorative High Pressure Laminates Sheets based on thermosetting resins BS 6250 / FIRA Standard 6250 – Lacquer application. I.S. EN 12720, 12721 and 12722 – Methods of test for finishes of wooden furniture. BS 1186 Part 2 Timber for and workmanship in joinery I.S. EN 942 Timber in joinery – General requirements

#### Writing Boards:

I.S. EN 14434: 2010 Writing boards for educational institutions – Ergonomic, technical and safety requirements and their test methods.

#### **Fire Safety**

The Code of Practice for Fire Safety of Furnishing and Fittings in Places of Assembly (Department for the Environment, 1989) is applicable to Post Primary Schools. See specifically, Section 2: Seating which refers to I.S. 419 and I.S. 254. All relevant furniture to comply to the Latest Code of Practice.

Copies of these standards may be obtained from National Standards Authority of Ireland, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland or NSAI/SAI GLOBAL <u>www.standards.ie</u>

Where a Standard mentioned in this document has been updated or superseded then the latest or replacement Standard shall apply.

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Before placing of Contracts, prototypes or samples of items tendered may require to be submitted to the National Standards Authority of Ireland or other competent body for performance testing. During the manufacturing period the contracting authority may choose items at random for submission to the National Standards Authority or other competent body for testing, the contractors to be responsible for delivery of items to the Authority.

Where alternative Standards from non-EU countries are offered, the onus is on the supplier to prove equivalence.

#### Workmanship, Finish, etc.

The workmanship, finish, etc., must in all cases be equal to the standard of the prototypes, samples or details accepted by the contracting authority.

Any furniture not manufactured strictly in accordance with this condition will be rejected.

All materials and workmanship throughout must be of the highest quality. Any inferior materials or practice will not be accepted.

All items and components shall be soundly constructed in accordance with the best manufacturing process and practice.

All the dimensions, details, fixings etc shown on drawings must be strictly observed.

All proprietary materials must be used strictly in accordance with the manufacturer's instructions or recommendations.

All veneered panels to have all edges hardwood lipped prior to veneering and the selected veneers are to be applied over lippings.

All metal and timber shall be neatly bored and countersunk to take the required screws. Tops are to be securely fixed and screws to be inserted in correct alignment to ensure that no screws heads are projecting above finished layer.

#### Materials

#### Timber

To I.S. EN 942. Timber shall be sound, well conditioned, properly seasoned to suit internal joinery use, and free from defects, or a combination of defects rendering it unsuitable for purpose intended. All timber to be from forests managed under principals of sustainability in accordance with international guidelines. Manufacturer to demonstrate that timber derived from well managed sources.

Softwood shall be Scots Pine Pinus sylvestris (or Red Deal), to Class J2 of I.S. EN 942.

Average density to be more than 500 kg/m<sup>2</sup> and to be suitable for internal joinery – see I.S. EN 942.

Average moisture content of timber on delivery: 9 % to 13 %. Adhesive: to I.S. EN 204

#### Particle board:

Dry Fibre Board (MDF) to I.S. EN 622-5, tested to I.S. EN 120 to have less than 1 mg/100 g free formaldehyde (ethanal) content. Moisture resistant board to I.S. EN 622-5 MDF.H, class E1 formaldehyde content.

#### Lacquer:

Lacquer to BS 6250/ FIRA 6250 severe rating: to all work surfaces. Lacquer to be factory applied by ultra violet cured method or other method guaranteed to meet the specification. Lacquer to BS 6250/ FIRA general rating: to all other surfaces, factory applied.

#### **Plastic Laminate Materials**

In accordance with BS 4965 and I.S. EN 438 grade HGS/HGP. Balancing laminate to be used in all cases (including vertical panels). VGS allowed for balancing laminate on underside of worktops or tables only. All laminated panels to have either solid colour laminate or PVC edges to seal all lippings, with the lipping fitted after laminating. All edges to be finished flush and smooth with the black core of the laminate concealed behind the lipping. Vertical edges of doors and drawer fronts shall be post-formed. Worktops used in kitchens and home economics rooms to be heat-resistant to 180°C.

#### Ironmongery

Assemble and fix carefully and accurately using fastenings with matching finish supplied by ironmongery manufacturer. Prevent damage to ironmongery and adjacent surfaces. At

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completion check, adjust and lubricate as necessary to ensure correct functioning.

Locks and Master keying:

Locks to be provided to all storage units – high level and base units.

Locks to all units in teachers desks to be keyed alike.

Locks to all other student units to be master keyed.

Locks to all office storage units to be mastered. In admin office main filing units to be keyed alike. Principal's office all units to be keyed alike.

Handles should either be D-shape stainless steel with reverse fixing through back of door or

recessed stainless steel – as specified on drawings.

Hinges should be high quality stainless steel, 180 degree type.

#### Metalwork

Quality of Work: Fabricate metalwork carefully and accurately to ensure compliance with design and performance requirements using types and grades of metal appropriate for the purpose. Finished work must be free from distortion and cracks. Use proprietary products to manufacturer's instructions. Corners: Unless otherwise specified, mitre junctions of identical sections.

Welding/ Brazing Generally:

- 1. Thoroughly clean surfaces to be welded.
- 2. Ensure accurate fit using clamps and jigs where practicable.
- 3. Make joints with parent and filler metal fully bonded throughout.
- 4. Completely remove all traces of flue residue and slag.

Butt Welds: Where visible in completed works, butt welds to be finished smooth flush with adjacent surfaces.

Welding: Metal welding to I.S. EN 1011-1 and I.S. EN 1011-2 or other method subject to approval.

Cleaning: Remove all burns and sharp arises, which would be visible after fixing or a hazard to the user.

Worktops: Worktops shall be fitted so as to allow for shrinkage movement etc. and also to facilitate easy replacement.

Joints in Worktops: Where worktops are not continuous between adjacent units, joints shall be sealed with a cover strip or other approved method.

#### Metal Coating:

Epoxy powder coated to selected RAL colour to BS 6496/I.S. EN 13438. Stove enamelled black where specified.

#### Metal Fastenings:

Unless otherwise specified fastenings to be of the same metals the item being fixed, with matching coating or finish.

Metal components to be constructed in accordance with the British and Irish Standard Specification quoted above. All metal parts shall be finished with epoxy powder coated.

#### Upholstery:

Upholstery Foam must be of the quality recommended by the manufacturer for its location and be in compliance with the Code of Practice for Fire Safety of Furnishings and Fittings in Places of Assembly 1989 (The Stationery Office, Dublin).

#### Variation in Quantities

Slight variations in quantities may be required. This will be calculated at unit rates quoted in tender.

#### Alternatives

Where manufacturers are in a position to offer alternative methods of construction, materials, fittings, etc., they should submit tenders for each.

Tenderers should include sufficient supporting documentation (test certificates, catalogues, photographs, drawings, etc.) to assist in evaluating the quality etc., of the items offered.

All items are intended for use in post-primary schools and must be of construction, materials and finish which are suitable for this use and which will combine long life with ease of cleaning and low maintenance.

#### **Universal Access**

School buildings are designed to meet the Building Regulations with regard to access for people with disabilities. "People with disabilities' means people who have an impairment of hearing or sight, or an impairment which limits their ability to walk or restricts them to using a wheelchair". In the context of this specification all loose furniture materials are required to be selected from ranges of suitably contrasting colours and textures to facilitate those with visual impairment.

In finalising schedules of loose furniture each school should assess its requirements for special access furniture and modify the schedule accordingly. In particular the need for special sized desks and chairs with arms for general classrooms should be considered.

#### Additional Notes for Contracting Authorities Purchasing Loose Furniture

Certificates of compliance should be made available by the supplier certifying that the articles of furniture being supplied conform to and have been tested to the appropriate Standard(s) - I.S./I.S. EN/EN/BS/ISO or recognised equivalents. Samples of items of furniture should be made available to the purchaser/school authority for inspection, where requested.

I.S. EN 1729 (Parts 1 & 2): 2006 "Furniture and Tables for Educational Institutions" is the appropriate Standard for post-primary student furniture and articles. This Standard supersedes I.S. 140, BS 5873 and ISO 5790 in relation to group sizes and testing. Any information/advice given below given is not deemed to be a legal interpretation of the Standard.

Section 7 of the Introduction to the Standard I.S. EN 1729 gives detailed requirements in relation to the marking of items of furniture. The markings include size mark or colour code or both, and the name and/or trade name and/or mark and address of the manufacturer or his or her authorised representative.

Other school furniture should be certified as meeting the appropriate Standard, e.g., furniture for staff and office use.

Manufacturers will be required to submit samples, photographs of components and complete units on request to allow the contracting authority to select colour finishes and to evaluate the quality of the items in question.

Careful consideration needs to be given, at the time of ordering, to the size range of furniture required by the school. With regard to chairs and tables there are eight different size marks, 0-7, which are colour coded, as defined in I.S. EN 1729. Broadly speaking the furniture size required by a student is related to stature with perhaps the most appropriate parameter being the "popliteal height" i.e. for someone seated, the distance from the underside of the foot to the underside of the thigh at the knees. In general it is suggested that size 6 (colour code blue) is the most appropriate size for the general population of post-primary students. However, size 5 (colour code green) may be required for a number of students of younger students or older students of smaller stature and, occasionally, size 7 may be more appropriate. So schools should consider procuring, within the approved quantities, a number of larger or smaller sized tables and chairs in order to provide for student needs. The deployment will be dependent on the school organisation. In some instances it may be more effective to deploy a small number of adjustable tables and chairs within the school.

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The table below summarises the height/size range for chairs and tables for sizes 5 to 7 according to I.S. EN 1729 compared with I.S. 140.

	Size 5 /mm	Size 6/mm	Size 7/mm	I.S. 140 (general)/mm
1. Chair height	430	460	510	450
2. Table height	710	760	820	700

With regard to stools, because of the variety of worktop heights in use in schools, e.g. in Science, Engineering Technology, Home Economics, where students may work in a standing position carrying out a wide variety of task , it is recommended that 600 mm height is the most appropriate size for general use. But schools may elect to procure some stools of different heights. Traditionally, stools without backs are used in most schools and they have the advantage of fitting under work surfaces when not in use. There are conflicting views in relation to the ergonomics of stools with and without backs.

#### WARRANTIES

In general, warranty requirements are 6 years on student tables and chairs and 10 years on all other items, subject to normal wear and tear in school usage.

<sup>&</sup>lt;sup>1</sup> This relates to chairs with seat slopes in the range of  $-5^{\circ}$  to  $+5^{\circ}$ 

<sup>&</sup>lt;sup>2</sup> This relates to use with chairs with seat slope in range of  $-5^{\circ}$  to  $+5^{\circ}$ .

In certain circumstances, 'ordinary' height stools may be chosen instead of chairs.

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Group 1: Student Desks and Tables			
Code	Descriptions & Specifications		
T1	Double Desk (Students): 1200 mm wide; 600 mm deep; 760 mm high.		
	Top shall be 15 mm formaldehyde free dry process fibre board (MDF) with minimum 10 mm radius corners. Surface shall be finished with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edge surface shall be sealed with lacquer to specification or PVC edging to match top. Plastic laminate to be finished with top and bottom arrises rounded off to prevent splintering and/or chipping. Top shall extend 5 mm over steel frame. Framing 25 x 25 mm hollow square section steel and shall be made rigid by provision of cross rails at ends and one centrally located tie rail, all 100 mm below the top. All exposed ends of tubes shall be closed with approved high density plastic caps. Top shall have No. 10 fixing plates welded to steel frame. All framing to be degreased, washed, treated with a bonding agent and finished with epoxy powder baked on to selected RAL colour. All metal framing to be a minimum of 1.2mm wall thickness. <b>Manufactured as above and tested to I.S. 140 or alternatively to I.S. EN 1729-1 and I.S. EN 1729-2.</b>		
	1200		
T2	Single Desk (Students – flat top)		
	600 mm wide; 600 mm deep; 760 mm high. <b>Specification, construction and Standards as for T1</b> , but top to have eight fixing points.		
	plan		
T2S	Single Desk (Students – Sloped top)		
123	Single Desk (Students – Sloped top) 600 mm wide; 600 mm deep; 760 mm high (size 6) and with a slope upwards from this point of 10 degrees. Specification, construction and Standards as for T2.		
	600		

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Т6	Drawing desk (Student)
	650 mm wide; 600 mm deep; 790 mm high at the front and sloped upwards to a height of 880 mm at the back with adjustable feet of 25 mm. Adjustable type steel and nylon glide to be fitted to each leg. Instrument shelf 575 x 300. Pocket for A2 size folder, 75 mm wide. General specification, construction and Standards as for T1.

Group 2: Chairs and Stools			
Code	Descriptions & Specifications		
SIEO	Polypropylene Chair (Stackable), Size 6 (600 mm hight)		
	Chair shall consist of one piece polypropylene shell with tubular steel legs and insert plastic feet. Steel frame to be finished with epoxy powder. Seat height 460 mm. Tubular steel frame to be of a minimum of 19 mm diameter, x 1.2mm wall thickness with leg reinforcement. To comply with <i>The Code of Practice for Fire Safety of Furnishing and Fittings in Places of Assembly (Department for the Environment, 1989)</i> As an alternative other <i>stackable</i> chairs which are certified to meet the Standard may be considered. <b>Manufactured as above and tested to I.S. 140 or alternatively to I.S. EN 1729-1 and I.S. EN 1729-2.</b>		
SIEI	Polypropylene Upholstered Chair Size 525 mm high with footrest. As specified for SIEO but with separately fixed tweed upholstered pads to seat and back. Legs to be finished in chrome or epoxy powder and be fitted with steel and nylon glides.		
S2H	<ul> <li>Stool (stackable)</li> <li>12 mm plywood seat; frame to be made from tubular steel with epoxy powder coated finish; stool to have footrest and plastic insert feet; stool height 600 mm (default). Seat 300 x 300 minimum. Tubular steel frame to be a minimum 19 mm diameter. x 1.2mm wall thickness. To comply with The Code of Practice for Fire Safety of Furnishing and Fittings in Places of Assembly (Department for the Environment, 1989)</li> <li>Manufactured as above and tested to I.S. 140 or alternatively to I.S. EN 1729-1 and I.S. EN 1729-2.</li> </ul>		
SCC	Student Polypropylene Computer Chair		
	Chair shall consist of one piece polypropylene shell with swivel five-star base on glides, adjustable height approx. c.350-490mm. Finish to steel to be epoxy powder or chrome. Screw lift ( <i>i.e.</i> adjustable non-pneumatic). Not to be upholstered. To comply with <i>The Code of Practice for Fire Safety of Furnishing and Fittings in Places of Assembly (Department for the Environment, 1989).</i> Manufactured as above and tested to I.S. 140 or alternatively to I.S. EN 1729-1 and I.S. EN 1729-2 / I.S. EN 1335,		

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Group 2: Chairs and Stools		
Code	Descriptions & Specifications	
тсс	<b>Teacher Polypropylene Computer Chair with Upholstered Pads</b> As specified for SCC but with separately fixed tweed upholstered pads to seat and back To comply with The Code of Practice for Fire Safety of Furnishing and Fittings in Places of Assembly (Department for the Environment, 1989)	

Group 3: Office			
Code	Descriptions & Specifications		
S3	Executive Swivel Chair		
	Chair to have a swivel five-star base on castors, adjustable height with single tilt and spring assisted support. Seat, arms and high level back to be fully upholstered in tweed. Finish to base to be in polished alloy or chrome. To comply with <i>The Code of Practice for Fire Safety of Furnishing and Fittings in Places of Assembly (Department for the Environment, 1989</i> I.S. EN 1335		
S8	Typist/ Operator Swivel Chair		
	Chair to have a swivel five-star base on castors, adjustable height and tilting back. Seat and back to be upholstered in tweed or vinyl. Finish to steel to be epoxy powder or chrome. To comply with <i>The Code of Practice for Fire Safety of Furnishing and Fittings in Places</i> <i>of Assembly (Department for the Environment, 1989</i> <b>I.S. EN 1335, I.S. 419</b>		
05			
S5	Upholstered Chair Frame to be tubular steel with epoxy powder or chrome finish, or timber with lacquer finish. Tubular steel legs shall be fitted with steel and nylon glides. Back and seat to be upholstered in tweed. Seat height 460 mm. To comply with <i>The Code of Practice for Fire Safety of Furnishing and Fittings in Places</i> <i>of Assembly (Department for the Environment, 1989</i> I.S. EN 1335		

Т4			
	Classroom Desk (Teacher)		
	<ul> <li>1200 mm wide; 600 mm deep; 760 mm high (size 6).</li> <li>Desk to have single pedestal containing three drawers each 150 mm deep. Top to be 15 mm thick formaldehyde free dry process fibre board (MDF) with minimum 10mm radius corners and with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edges to be finished with PVC edging strip in matching colour. Top and bottom arrises to be rounded to prevent splintering and/or chipping. Sides and back panels and pedestal to have similar high pressure laminate of balancing construction.</li> <li>Drawer front 15mm MDF, sides and back 10mm MDF all with laminate similar to worktop and with oil tempered hardboard bottom. Metal drawer runners. Framing to be 25 x 25 mm hollow square section steel. Frame to be made rigid by provision of cross rails at ends and front in line, with bottom of pedestal. Two intermediate cross rails to be provided under top to support pedestals and top. All exposed ends of tubes to be closed with high density caps.</li> <li>To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527</li> </ul>		
T10	Staffroom Tables 700 x 1200 x 760 mm high Top 25 mm thick formaldehyde free dry process fibre board (MDF) with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edges to be finished with hardwood edge or PVC/solid colour core laminate to match fitted furniture. Framing and legs to be hollow rectangular section steel epoxy powder coated to selected RAL colour. Adjustable type steel and nylon glide to be fitted to each leg. Top shall have 10 no. fixing plates welded to steel frame. Other suitable alternative support system may be used and proposal to be submitted with tender.		
DT	To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527 Circular Discussion Tables 900 mm diam. x 760mm high – DT/900; 1200 mm diam. x 760 mm high – DT/1200		
	Top 30 mm thick formaldehyde free dry process fibre board (MDF) with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edges to be finished with hardwood edge or PVC/solid colour core laminate to match other furniture. Legs: proprietary pedestal 5-point pedestal leg with chrome finish and feet with nylon glides. Submit proposal with tender. <b>To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527</b>		
SDT 1 Sot	Meeting Room Tables		
1 Set	3 no. 1500 x 1500 x 760 mm high;		
	Top 25 mm thick formaldehyde free dry process fibre board (MDF) with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edges to be finished with hardwood edge or PVC/solid colour core laminate to match fitted furniture. Robust 50 mm steel legs with bearers and glides, or alternative means of support. To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527		

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PWS	Workstation (desk) 1800L x 1800/1200 x760 high, radial         Top 30 mm thick formaldehyde free dry process fibre board (MDF) with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edges to be finished with hardwood edge or PVC/solid colour core laminate to match other furniture. Legs cantilever or other.         To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527	
PED	Pedestal Unit 40x800x760 high To match PWS To be manufactured as above and tested to US 170 or alternatively to US EN 527	
WSE	To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527Workstation Extension 800x600x760 highTo match PWSTo be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527	
PWR	Wardrobe Unit 420x600x1800 high To match PWS To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527	
OSP	Storage Press 600 x 600 x 1800 high with adjustable shelving. To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527	
PBS	Bookshelf Unit with glass doors with storage cupboards in base (400 deep) 1000 x 1800 high To match PWS To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527	

S4	Low Easy Chair Fully upholstered easy chair, with minimum 100mm thickness high density foam. Seat height of 400 mm. Details to be submitted by supplier with the tender. To comply with The Code of Practice for Fire Safety of Furnishing and Fittings in Places
	of Assembly (Department for the Environment, 1989) I.S. EN 527

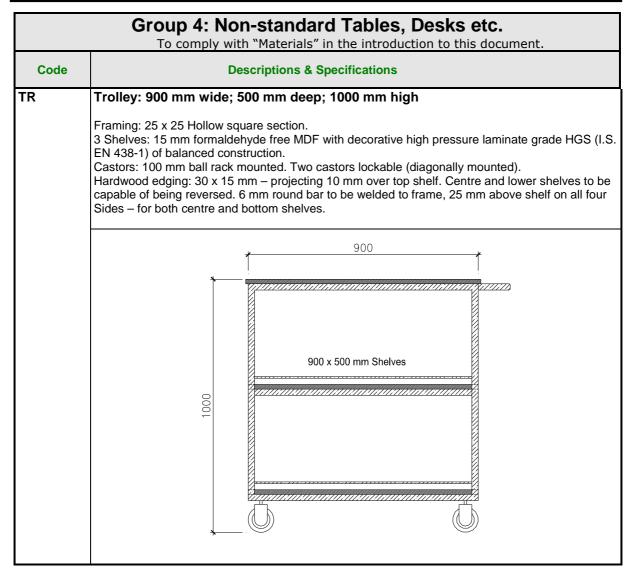


Т9	Coffee Table: 900 mm wide; 450 mm deep; 420 mm high		
	Top 15 mm formaldehyde free dry process fibre board (MDF) with edges increased to 30 mm with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edges to be sealed with PVC strip or hardwood to suit detail selected for fitted furniture and to extend a minimum of 75 mm beyond outer edge of frame. Framing and legs to be 50 x 25 hollow rectangular section steel epoxy powder coated to selected RAL colour. Adjustable type steel and nylon glide to be fitted to each leg. Top to have No. 6 fixing points. <b>To be manufactured as above and tested to I.S. 170 or alternatively to I.S. EN 527.</b>		

Group 4: Non-standard Tables, Desks etc. To comply with "Materials" in the introduction to this document.			
Code	Descriptions & Specifications		
W3	Home Economics Table with 2 Drawers and Low Shelf		
	<ul> <li>1200 mm wide; 760 mm deep; 850 mm high.</li> <li>25 mm square section steel framework. Top 15 mm formaldehyde free dry process fibre board (MDF) with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edge surface shall be sealed with lacquer to specification or with PVC edge strip. Plastic laminate to finish with top and bottom arrises rounded to prevent splintering and/or chipping. Table top to have minimum 10mm radius corners.</li> <li>Two drawers on proprietary guides and with shelf between suspended underneath (Size of drawers 300 x 500 x 100 mm internally) with stainless steel flush handles.</li> <li>Basin shelf 375 mm wide x 15 mm thick, (finish as top) to be screwed to bottom rails as indicated.</li> <li>Bottom H bar 150 mm from floor level.</li> <li>General specification and construction as for T1and to comply with I.S. EN 1729-2</li> </ul>		
	1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 Elevation		
W3A	Dress Design Table with Low Level Shelf		
	<ul> <li>1200 mm wide; 760 mm deep; 850 mm high. 25 mm square section steel framework. Top 15 mm formaldehyde free dry process fibre board (MDF) with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edge surface shall be sealed with lacquer to specification or with PVC edge strip. Plastic laminate to finish with top and bottom arrises rounded to prevent splintering and/or chipping. Table top to have minimum 10mm radius corners. Full width and depth Shelf enclosed sides and back, material as for top, Supported on H Bar – 150 mm from top.</li> <li>Low level Shelf: Full width and 375 mm deep screwed to H bar; 150 mm from floor level. 15 mm MDF with laminate as for top.</li> <li>General Specification and construction as for T1 and comply with I.S. EN 1729-2</li> </ul>		
	1200		

### **Department of Education and Skills**

**Loose Furniture Specifications** 



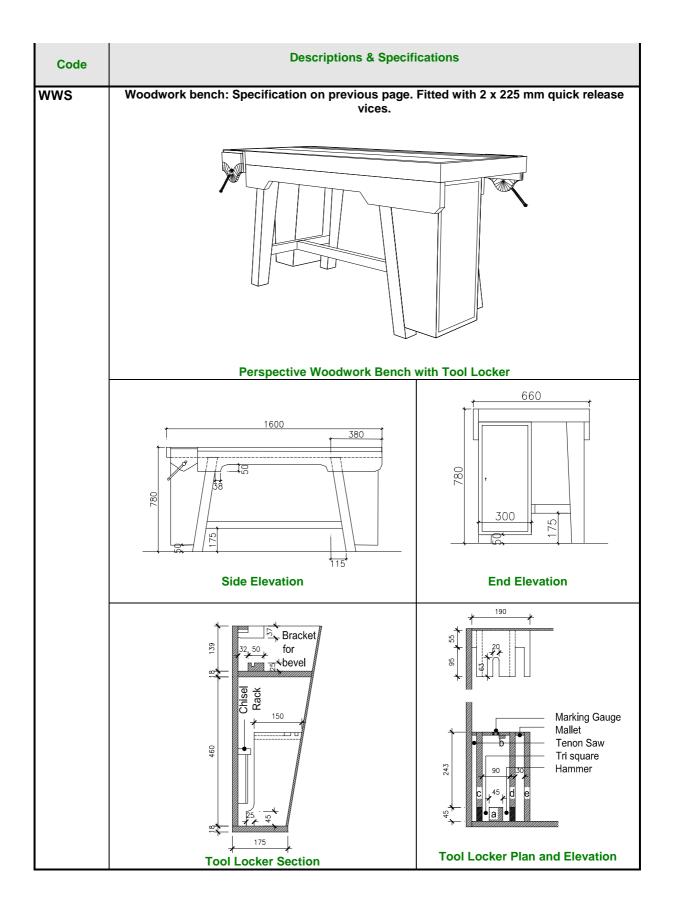
	Group 5: White (Black) Boards		
Code	Descriptions & Specifications		
CB/CB2	Chalkboard 1200 mm x 1200mm. CB2 size 1200 mm high x 2400 mm wide.		
	Board to be 15 mm formaldehyde free dry process fibre board (MDF) with "Danafol" or other approved working surface and be backed with a balancing material having similar properties to Danafol. (The board must be of balanced construction to ensure a <u>plane</u> working surface). The top and side edges of the board to be 70 mm wide hardwood, or aluminium frame fixed flush with working surface and projection back over hanging rails and softwood spacers. Chalk rail to be 130 mm x 18 mm aluminium, fixed in line with edge pieces at back and projecting in front approximately 60 mm beyond working surface; chalk rail to be fitted with 22 mm x 8 mm edge slip to form dust tray. All edges to board to be fixed with cups and screws and be supported at back with softwood angle or rectangular blocks and spacers. (Joints are not allowed in the MDF panel). Fixing brackets to be supplied with each board. <b>I.S. EN 1023, I.S. EN 14434</b>		
WB/WB2	'Magnetic' White Board 1200 mm x 1200mm. WB2 size 1200 mm high x 2400 mm wide.		
	As generally specified for CB but with vitreous enamelled steel board surface suitable for 'pen work' and magnet accessories. Surface should also be suitable for projection. Note: plastic laminate finish not acceptable. Minimum guarantee 20 years. EN 14864, I.S. EN 14434		
СТU	Chalkboard T Square Unit 1200 mm high x 2400 mm wide.		
	Unit to be similar in construction to CB and be manufactured as a separate attachment suitable for fixing to the top of any CB. The stock of the T Square to be 300 mm long and be fitted with patent adjustable track gear; the gear to operate in tracks which provide top and bottom contact, blade of T Square to be plastic or hardwood. To comply with <b>I.S. EN 1023, I.S. EN 14434</b>		
СТU/М	<ul> <li>'Magnetic' Whiteboard, 1200 mm x 2400 mm wide, as specified for CTU, but with vitreous enamel steel board surface suitable for 'pen work' and magnetic drawing instruments. Minimum 20 years guarantee. Surface should also be suitable for projection.#</li> <li>Minimum guarantee 20 years. Plastic laminate finish not acceptable.</li> <li>I.S. EN 14864, I.S. EN 14434.</li> </ul>		
CBG/M	As specified for CB. Two (2) additional Panels to have geographical outlines.		
CBS/M	As for CBG but additional (2) panels to have graph lines.		
МС	Mobile Chalkboard (Black or Green Surface).		
	Frame to be hardwood or rectangular section steel tubing with lockable castors. Both faces of chalkboard to be capable of being tilted on friction pivots. Hardwood to have a lacquered finish and steel to be finished with epoxy powder. Overall height 2100. Duster tray to be provided. <b>I.S. EN 1023, I.S. EN 14434</b>		
MW	Mobile Whiteboard. As specified for MC but with vitreous enamelled steel working surface suitable for 'pen work' and magnet accessories. Surface should be suitable for projection. I.S. EN 14864, I.S. EN 14434		
РВ	Pinboard 1200 mm x 1200mm.		
	As specified for CB but with a 6 mm thick sheet cork surface or compressed recycled newspaper in selected colour and without chalk dust tray. <b>BS 476.</b>		
WBM	As specified for WB2 but with Music Staves; 4 staves, 25 mm between lines; top stave 50 mm from the top of whiteboard; 100 mm between staves. Size 2400 x 1200 mm.		

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WMU1	<ul> <li>Wall Mounted Display Unit for Trophies 1200 mm high x 1200mm wide x 250 mm</li> <li>Top, sides and base to be 25 mm hardwood, secret mitre dovetail joint.</li> <li>Back to be 12 mm hardwood veneered formaldehyde free MDF, housed, glued and pinned on top, sides and base.</li> <li>Doors to be hardwood framed and glazed with 4mm laminated glass and fitted with approved hinges, bolts, locks and handles. Two Adjustable 8mm toughened glass shelves to be provided in each unit.</li> <li>BS 476.</li> </ul>
WMU2	Wall Mounted Display Unit for Notices: Carcase as specified for WMU1 but without shelves. Back to be fitted with 6 mm (green) cork pinboard finish or compressed recycled newspaper and covered in felt – colour selected by school authority. Doors to be 4 mm laminated glass and fitted in patent tracks with sliding grips and locks. BS 476.

	Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction		
Code		Descriptions & Specifications	
wws	Detail Specification for Woodwork Bench (See Drawings on next page)		
	Material:	Scots Pine (Red Deal) throughout. Beech as an alternative may be considered. Timber to be fully seasoned, free from large or loose knots, Shakes or other defects.	
	Construction:	The framing to be mortised and tenoned as shown on the drawing. The top to be constructed from $100 \times 75$ mm Scots Pine (red deal) with adjoining lengths having the end grain in reverse order and to be glue jointed, the joints to be strengthened by hardwood cross-grained tongues $10 \times 40$ mm. The trestles to be fixed to the top plates and screws as shown in plan. The apron piece to be housed, glued and screwed to the trestles and glued and screwed to the top. (13-15 mm No. 14 screws with cups), in position as shown.	
	Bench Stops:	The bench stops (hardwood), provided with wing nut, to be fitted as shown.	
	Vice:	Supply and fit two 225 mm quick release vices to each bench. Vices to be bolted in position, bolts to be countersunk 20 mm and pelleted. Vice facings to be of well seasons Oak, (end grain upwards) and bolted to vices. (See detail) <u>Position</u> . Seat plate of vice to be kept as close as possible to the bench stop.	
	Finish:	All parts to be sealed and varnished.	
	Tool Lockers		
	Materials:	<u>Carcase</u> : Red Deal or other approved timber, fully seasoned, free from large or loose knots, shakes or other defects.	
	Door:	To be 18 mm formaldehyde free MDF with hardwood edges and hardwood veneered both sides. <u>Back and Apron Piece</u> : 6 mm Plywood, (resin bonded), 6 mm Hardboard.	
	Construction:	The top shelf to be stop-housed to sides and bottom glued and pinned to back. The chisel rack to be glued and screwed to door stiles.	
		The division pieces A and B and the brackets C, D and E to be screwed in position. The tiling pieces to be fitted as shown.	
		The door frame to be morticed and wedged and hung on one pair of 60 mm stainless steel hinges and to be fitted with good quality nickel plated lock complete with escutcheon.	
	Fixing:	The locker to be screwed to bench apron pieces and to leg and to cross rails.	
	Finish:	To be sealed and varnished.	
	The bench should I	be fitted with 2 x 225 mm quick release vices	

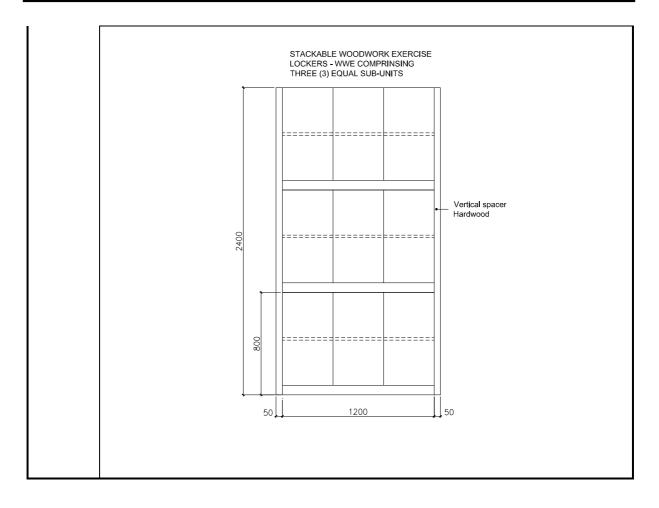
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Code		Descriptions & Specification	ons
WW2	Base - Internal Depth Base Unit: Carcase to grade HGS and of bal- laminate in matching of nylon angle blocks to of rails) top and bottom. I colour. Doors to be 18 HGP post-formed and 18 mm formaldehyde f Edges to be finished in x 19 mm 180° stainless mounted doors. Doors Top Unit: Carcase as f pressure laminate to g	handles as for base. es to be Provided.	<b>m 4 doors – Top 2 Glazed.</b> decorative high pressure laminate shed with PVC or coloured core glued and strengthened with No. 3 ed as carcass fixed to gables, (cross d stained and sealed in selected rative high pressure laminate grade etailed to be provided and to be of laminate grade HGS all sides. lour. Hinges No. 3 per door to be 50 eturn strap to be used for face ss steel handles. de free MDF with decorative high o top, sides and bottom. Doors to be
		92 92 92 92 92 92 92 92 92 92	
	Section	Front Elevation	Perspective

	Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction		
Code	Descriptions & Specifications		
WWE	Stackable Woodwork Exercise Storage Units – WWE Construction Studies/Wood Technology Room: 3 Equal Units – Stacked. Internal depth – 450 mm		
	Carcase to be 18 mm formaldehyde free MDF with decorative high pressure laminate grade HGS and to be of balanced construction throughout. All edges to be finished in PVC or coloured core laminate in matching colour and all corner joints to be housed glued and strengthened with No. 3 nylon angle blocks to each joint. Back to be 12 mm formaldehyde free MDF with decorative high pressure laminate grade HGS of balanced construction and to be fixed to gables, fixed shelves and cross rails top and bottom. Plinths to be 75 x 35 mm hardwood with joints housed and comb-jointed (lap combed at front) and fixed to carcase by fixing plates. Doors to be 18 mm formaldehyde free MDF with decorative high pressure laminate grade HGS of balanced construction. No. 2 180° stainless steel angle hing es with L crank and return strap to be used for doors. Doors to be fitted with name insert plates, locks and stainless steel handles. Plinths to be stained to selected colour and then finished with a high quality durable matt transparent finish. Each unit to comprise six equal compartments (three compartments in width and two compartments in height).No. 3 doors to be provided on each unit, i.e. one door per two compartments in height. Overall unit dimensions to be 1200 wide x 450 deep x 800 high. Units to be assembled in stacks of three units with 50 x 25 mm vertical spacers, front spacer to be set back in line with face of plinth and finished to match same.		



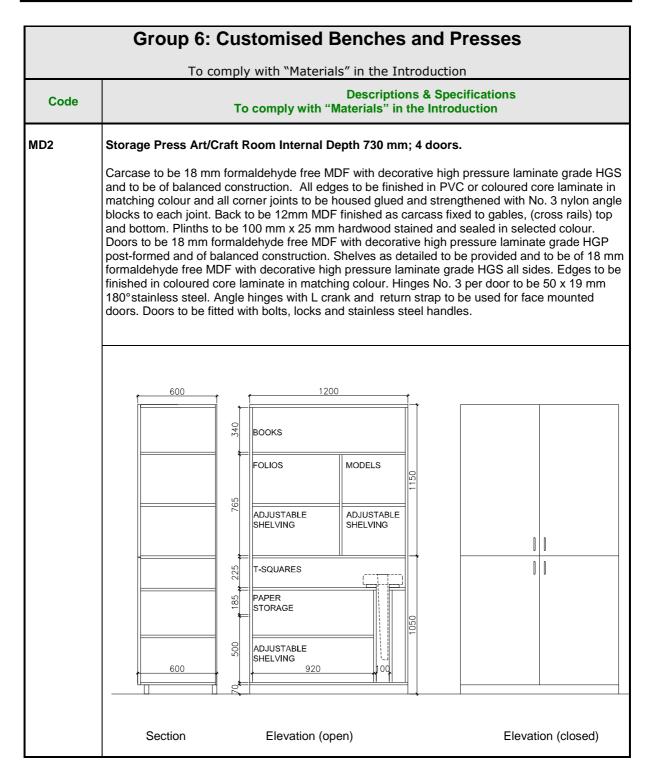
Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction		
Code	Descriptions & Specifications	
L1	Metalwork Tool Rack – L1 – Mounted on Metalwork Benches Softwood, at ends and centre. Marine Plywood – 12 mm sides and ends.	
	150 x 40 softwood blocks 1 each end, 1 centre. Surfaces sealed and varnished.	
	L2 mm Hardwood Softwood, at ends and centre Marine Plywood - 12 mm Sides and Back 150 x 40 Softwood blocks 1 each end, 1 in centre 150 mm Metalwork Bench	
MUB	<ul> <li>Metalwork Under Bench Unit fitted with drawers.</li> <li>950 mm wide x 500 mm deep x 670 mm high made frame made from 18mm formaldehyde free MDF with high pressure decorative laminate grade HGS (I.S. EN 438-1) of balanced construction. All edges to be finished in coloured core laminate in matching colour.</li> <li>Plinth 75 mm x 25 mm thick hardwood, stained and sealed in selected colour.</li> <li>Each drawer to be fitted with a cylindrical lock. Locks for corresponding drawers on all units for each individual school to have the same combination. Each drawer to have ferruled finger hole.</li> <li>Note: This is to be a 12 drawer unit for the storage of student exercise pieces. (Particularly robust construction required). The height of the unit is critical – to fit below workbench.</li> </ul>	
	950 500 02 02	

	Group 6: Customised Benches To comply with "Materials" in the Int	
Code	Descriptions & Specificat	
MW2	Tool Press Engineering & Metalwork Base - Internal Depth 560 mm; Top - Internal Depth 35 4 doors – Top 2 Glazed. Base Unit: Carcase to be 18 mm formaldehyde free MDF grade HGS and of balanced construction. All edges to be matching colour and all corner joints to be housed, glued blocks to each joint. Back to be 12mm MDF finished as ca and bottom. Plinths to be 100 mm x 25 mm hardwood, sta Doors to be 18 mm formaldehyde free MDF with decorativ post-formed and of balanced construction. Shelves as def formaldehyde free MDF with decorative high pressure lam No. 3 per door to be 50 x 19 mm 180° stainless stee I. Ang to be used for face mounted doors. Doors to be fitted with Top Unit: Carcase as for base. Back to be 12 mm formalde pressure laminate to grade HGS with backing laminate fix hardwood framed, sealed/painted to match laminate colou glass (BS 6206 CLASS C)) Bolts, locks, hinge and handles as for base. Four adjustable shelves to be Provided.	with decorative high pressure laminate e finished in coloured core laminate in and strengthened with No. 3 nylon angle arcass fixed to gables, (cross rails) top ained and sealed in selected colour. ve high pressure laminate grade HGP tailed to be provided and to be of 18 mm ninate to grade HGS all sides. Hinges gle hinges with L crank and return strap bolts, locks and stainless steel handles.
	350 120 120 120 120 100LS AJUSTABLE SHELVING 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS 100LS	

		Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction		
Code	Descriptions & Specification	S		
MD1	Storage Press –MD1– Technical Graphics/Cad Room Technical Graphics/Cad Room & Art/Craft Room: Internal Depth 560 mm; 4 doors. Carcase to be 18 mm formaldehyde free MDF with deca and of balanced construction. All edges to be finished it colour and all corner joints to be housed, glued and stree to each joint. Back to be 12 mm MDF finished as carcase bottom. Plinths to be 100 mm x 25 mm hardwood stained be 18 mm formaldehyde free MDF with decorative high formed and of balanced construction. Shelves as detail formaldehyde free MDF with decorative high pressure is finished with PVC or coloured core laminate in matching 19 mm 180° stainless steel180° stainless steel. Ang le h used for face mounted doors. Doors to be fitted with bo	orative high pressure laminate grade HGS in coloured core laminate in matching engthened with No. 3 nylon angle blocks ss fixed to gables, (cross rails) top and ed and sealed in selected colour. Doors to pressure laminate grade HGP post- ed to be provided and to be of 18 mm aminate grade HGS all sides. Edges to be g colour. Hinges No. 3 per door to be 50 x hinges with L crank and return strap to be		
	600       1200         90       BOOKS         FOLIOS       MODELS         91       FOLIOS       ADJUSTABLE         92       T-SQUARES       ADJUSTABLE         93       FOLIOS       MODELS         94       ADJUSTABLE       ADJUSTABLE         95       FOLIOS       MODELS         96       00       00         91       FOLIOS       MODELS         92       FOLIOS       MODELS         93       FOLIOS       MODELS         94       FOLIOS       MODELS         95       FOLIOS       MODELS         96       FOLIOS       MODELS         96       FOLIOS       MODELS         97       FOLIOS       MODELS         98       FOLIOS       MODELS         99       FOLIOS       ADJUSTABLE         90       FOLIOS       ADJUSTABLE         90       FOLIOS       ADJUSTABLE         91       FOLIOS       ADJUSTABLE         92       FOLIOS       ADJUSTABLE         93       FOLIOS       ADJUSTABLE         94       FOLIOS       ADJUSTABLE	0001       0001         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         0001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         001       0         002       0         003     <		

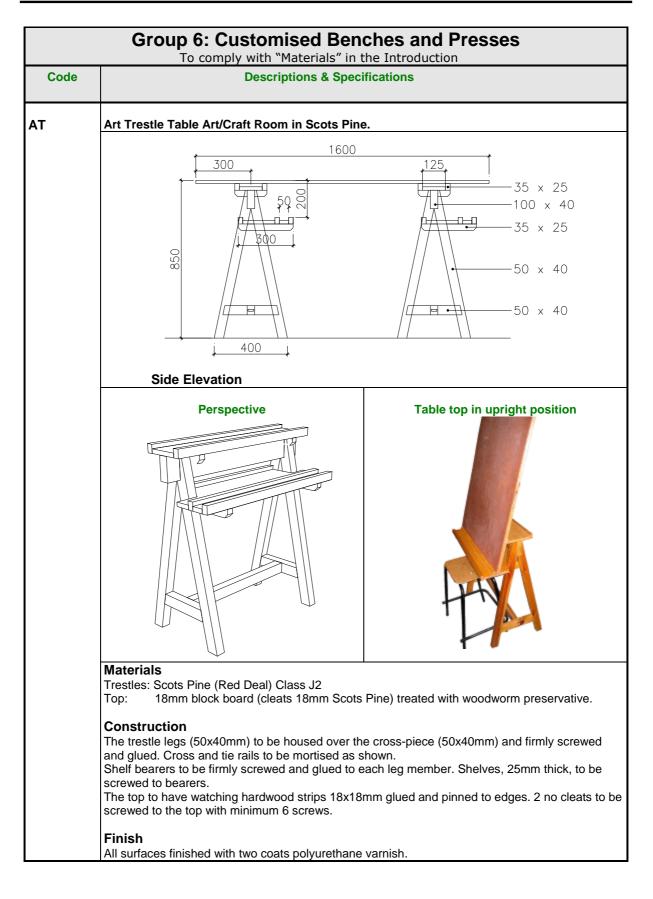
### **Department of Education and Skills**

**Loose Furniture Specifications** 



### **Department of Education and Skills**

Loose Furniture Specifications

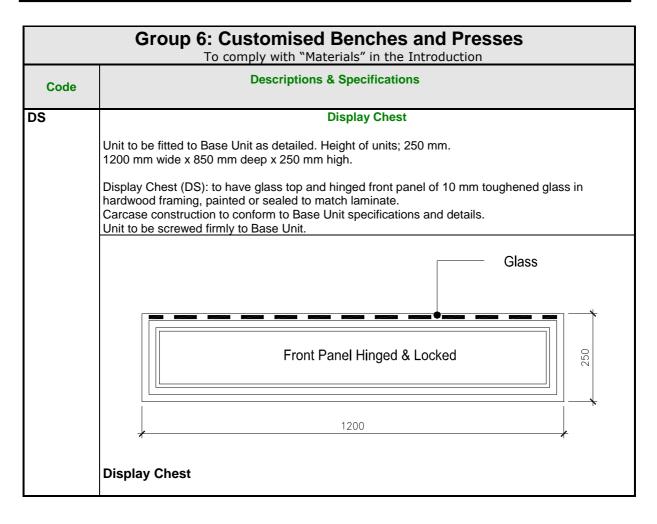


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Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction		
Code	Descriptions & Specifications	
supply with DS/TT or ST on next page	Specifications & Construction of All Units.         Materials:         Carcase & Doors: 18 mm formaldehyde free MDF with decorative high pressure laminate in grade HGS, all panels of balanced construction. Doors to be post-formed in grade HGP. All edges to be finished with PVC or coloured core laminate.         Back: 12 mm MDF specification as for carcass.         Plinth: 75 x 25 mm hardwood, stained and sealed in selected colour.         Construction:         Carcase joints to be housed, glued and reinforced with 3 No. angle blocks to each joint. Doors to be hinge on 3 No. approx. hinges opening through 180° and fitted with bolts, locks and handles. Plinth corners to be screwed to carcase and to be reinforced with 6 no. angle blocks.	
	850       1200         Image: Constrained state       Image: Constrained state	
	Image: Constrained on the system         Image	

### **Department of Education and Skills**

Loose Furniture Specifications



	Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction	
Code	Descriptions & Specifications	
ST	Sand TrayUnit to be fitted to Base Unit as detailed. Height of units; 250 mm.1200 mm wide x 850 mm deep x 250 mm high.Sand Tray (ST): tray to be constructed in aluminium and to be waterproof. Lift off covers (2 panels)to be 15 mm thick.Carcase construction to conform to Base Unit specifications and details.Unit to be screwed firmly to Base Unit.	
	Lift off Covers	
	Sand Tray	

	Group 6: Customised Benches and Presses To comply with "Materials" in the Introduction	
Code	Descriptions & Specifications	
TT	Tracing TableUnit to be fitted to Base Unit as detailed. Height of units; 250 mm.1200 mm wide x 850 mm deep x 250 mm high.Tracing Table (TT): four 800 mm fluorescent tubes to be fitted to battens and connected to switch on front. Provide 4 vents (2 top and 2 bottom) in front and back panels.Carcass construction to conform to Base Unit specifications and details. Unit to be screwed firmly to Base Unit.	
	Two glass panels	
	Tracing Table	

## Department of Education and Skills Library Shelving:

Group 7: Lockers		
Code	Descriptions & Specifications	
TLK	Teacher Locker Units – 2 compartment	
	Locker Units and Fittings: Generally: All units to be visually matched and designed and manufactured to international metric standards and must meet the requirements of BS 4680 performance test for Locker Units.	
	Specification:	
	Sides, Back and Shelves: To be manufactured from <b>1.2 mm</b> thick cold rolled mild steel, folded, reinforced and fabricated to give adequate rigidity.	
	Doors: To be manufactured from <b>1.5 mm</b> cold rolled mild steel, folded, reinforced and fabricated to give adequate rigidity. Each door to be fitted with two hinges; <u>hinges must not be fitted to front of door</u> . Three point lockable catch to be fitted on each door.	
	Finish/Colour: Supplier must state range of colours available for two colour schemes and indicate the colour available for doors and frames separately. Antibacterial paint to be used.	
	Size: The overall size of a locker unit (2 compartments) to be 1900 mm high x 300 mm wide x 450 mm deep. BS 4680. NOTE: Steel of lighter gauge than specified is NOT acceptable and will invalidate tender.	
SLK	STUDENT LOCKER UNITS – 3 COMPARTMENT	
	Locker Units and Fittings Generally: All units to be visually matched and designed and manufactured to international metric standards and must be the requirements of <b>BS 4680</b> performance test for Locker Units.	
	Specification Sides, Back and Shelves: To be manufactured from <b>1.2 mm</b> cold rolled mild steel, folded, reinforced and fabricated to give adequate rigidity.	
	Doors To be manufactured from <b>1.5 mm</b> cold rolled mild steel, folded, reinforced and fabricated to give adequate rigidity. Each door to be fitted with two hinges; <u>hinges must not be fitted to front of door</u> . Single point lockable catch to be fitted on each door. (Padlock will be supplied by school authorities).	
	Finish/Colour: Supplied must state range of colours available for two colour schemes and indicate the colour available for doors and frames separately. Antibacterial paint to be used. Size:	
	The overall size of a locker unit (3 compartments) to be 1900 mm high x 300 mm wide x 450 mm deep. BS 4680. NOTE: Steel of lighter gauge than specified is NOT acceptable and will invalidate tender.	

Group 8: Steel Cabinets etc.	
Code	Descriptions & Specifications
FC1	Filing Cabinet – 4 drawer, Standard type all steel construction. Size: Foolscap/A4. I.S. 227.
FC2	Filing Cabinet – 2 drawer. Standard type all steel construction. Size: Foolscap/A4 I.S. 227.
FC3	Filing Cabinet – reinforced fire-resistant type. Cabinet must be reinforced to enable it to withstand severe impact at high temperatures. Cabinet to be insulated with solid and stable material. Size: 4 drawers, Foolscap/A4, c. 500 x 675 x 1500 mm, 90 minutes. To LPCB specifications or equal. I.S. 227.
FC/B	Suspension Files for above Filing Cabinets. Foolscap A/4 size with tabs and labels. Box of 50 files.
SA	Safes – Internal dimensions 470 mm high x 320 mm wide x 280 mm deep approximately.Complete with one drawer 110 mm high approximately. Outer and inner bodies to be of open hearth steel plates with total thickness 14 mm with space between the bodies filled with solid fire- resisting material, min. 30 minutes. Door to be 130 mm thick controlled by 7-lever double bitted key lock. Safe to be secured to concrete floor.For schools with enrolments > 600 a larger safe c.620 x 370 x 320 mm may be required.I.S. EN 1143-1.
HC	Hat and Coat Stand: Stand shall be constructed of tubular steel with stove enamel finish and be fitted with four hat and coat hooks, umbrella rail and drip tray.
WPB	Waste Paper Bin: Bin to be sheet steel with stove enamel finish.
SC1	Steel Presses – with 4 adjustable shelves
	Generally: All presses to be visually matched and designed and manufactured to international metric standards and must meet the requirements of <b>I.S. EN 14073</b> performance test for storage units.
	Specification:
	Sides, Back and Shelves: To be manufactured from cold rolled mild steel, folded, reinforced and fabricated to give adequate rigidity. Four adjustable shelves to be supplied with each type SC1 press, and one adjustable shelf, one full width coat rail and fifteen hanging rings in type SC2.
	Doors: To be manufactured from cold rolled mild steel, folded, reinforced, and fabricated to give adequate rigidity. Three point lockable catch to be fitted on each door. Two keys to be supplied.
	Finish/Colour: Supplier must state range of colours available for two colour schemes and indicate the colour available for doors and frames separately.
	Supply and Delivery: Supplier to quote for supply, delivery and placing as directed by the School.
SC2	Steel Presses – with 1 adjustable shelf and full width coat rail.
	Specification as SC1 above, but with one adjustable shelf and full width coat rail.

Library Shelving:

### **Group 9: Library Shelving**

#### **General Specification**

<u>General</u>: All units to be visually matched and shelving to be adjustable, designed and manufactured to international metric standards and must meet the requirements of I.S. EN 527 & I.S. EN 14073 for shelving.

<u>Dimensions</u>: To conform to international metric standards. Each bay to be 900 mm wide and 1800 mm high and be complete with 5 book/magazine shelves and one canopy shelf.

**<u>Finish</u>**: All metal components – uprights, horizontal and diagonal ties, shelves, canopies and shelf brackets to be epoxy powder coated. Book supports – chrome finish.

<u>Standard Uprights</u>: To be hollow steel square and/or rectangular section tubes, double slotted to allow all components to be individually adjustable and interchangeable and to have a low base for maximum capacity. Cross members to be of adequate width to give lateral and transverse stability. Fitted with adjustable feet.

<u>Wall Upright Floor Supported Uprights</u>: To be hollow steel square and/or rectangular section tubes, double slotted to allow all components to be individually adjustable and interchangeable and to have a low base for maximum capacity and cross member to be of adequate width to give lateral and transverse stability. Adjustable type steel and nylon glide to be fitted to all uprights. All bays to be fixed to wall near top.

Horizontal Ties: To be hollow steel and/or rectangular section tubes fitted with suitable connectors to give rigid fixings.

**Diagonal Ties**: To be steel, fixed to uprights to ensure lateral stability. One diagonal tie to be provided for each bay (both single and double sided – book and magazine units).

**Book Shelves:** Book shelves to be steel, free from sharp edges and burrs, with a back stop. All shelves to be fitted with runners on the underside for sliding book supports.

<u>Magazine Shelf (Display and Storage)</u>: To be an adjustable shelf, suspended and pivoted from brackets above with provision for storage behind by steel shelf. All shelves in each bay to have display and storage facility.

Canopies: Canopy shelves all as for book shelves but without back stop (flat shelf).

**Shelf Brackets:** The contractor to provide all necessary shelf brackets and other accessories to shelving. All shelf brackets to be clipped firmly onto shelves to allow shelf adjustment without removal of brackets from shelves.

#### Book Supports

To be spring sliding book holder to slide along tracks on the underside of shelves and to remain fixed in place when positioned. Provide 5 no. per 900 mm bay of full height shelving. Chrome finish.

<u>Wooden End Panels</u>: The library stacks (exposed ends) to be clad in laminated panels as described for various combinations. The panels to be of 18 mm formaldehyde free MDF finished with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Hardwood edges or PVC edges to match fitted furniture details specified for the particular project.

#### **Combinations**

The Library Shelving to be arranged in the combinations as described for each type of library. LS100 Library shelving – Shelving for 100 m2 Library. LS136 Library shelving – Shelving for 136 m2 Library. LSST Library shelving - Shelving for (1) Guidance room and (2) Learning support room.

**Delivery, Placing and Fixing:** The quotation to include for supply, delivery, placing and fixing in position and including all fixtures and fixing as required.

	Group 9: Library Shelving
Code	Description and Specifications
LSSB.5	Library Shelving 4500 mm long, 5 bay – single sided – wall upright, floor supported – book stack. Each bay containing five 200 mm shelves and one canopy shelf. Overall height of unit 1800 mm. Complete with 25 sliding book supports and two (2) laminated end panels. Units to be fixed to wall near top.
LSDB.4	Library Shelving 1800 mm long – 4 bay – double sided (2 bays per side) – island type, floor mounted – book stack. Each bay containing five 200 mm shelves and one canopy shelf. Overall height of unit 1800 mm. Complete with 20 sliding book supports and one (1) laminated end panel.
LSDB.8	Library Shelving 3600 mm long – 8 bay – double sided (2 bays per side) – island type, floor mounted – book stack. Each bay containing five 200 mm shelves and one canopy shelf. Overall height of unit 1800 mm. Complete with 50 sliding book supports and two (2) laminated end panels.
LSDM.3	Library Shelving 2700 mm long – 3 bay – single sided – wall upright, floor supported – magazine rack. Each bay containing five 300 mm shelves – five display / storage shelves – and one canopy shelf. Complete with two (2) laminated end panels. Units to be fixed to wall near top.
LSDM.8	Library Shelving 3600 mm long – 8 bay – double sided (2 bays per side) – island type, floor mounted – magazine stack. Each bay containing five 300 mm shelves – five display / storage shelves – and one canopy shelf. Complete with two (2) laminated end panels.
BTR	Book Trolley. Double sided with 3 shelves each side. Shelves 300 mm deep, complete with brackets. Shelves and brackets to be the same as used in book stacks, with slotted uprights. Four 100 mm ball race castors with two lockable castors. Overall size: 900 w x 500 d x 1000 h.

Code	Library She	Iving: Combinations
LS100	Library – 100 m <sup>2</sup>	Combinations:
	Single sided book stack – 5 bays. Double sided book stacks – 16 bays. Single sided magazine stack – 3 bays. Book Trolley.	1 No. LSSB.5 2 No. LSDB.8 1 No. LSDM.3 1 No. BTR
LS136	Library – 136 m <sup>2</sup>	Combinations:
	Double sided book stacks – 28 bays. Double sided magazine stack – 8 bays. Book Trolley.	2 No. LSDB.8 + 3 No. LSDB.4 1 No. LSDM.8 1 No. BTR
LSST	Learning Support Room & Guidance Ro	le sided – wall upright, floor supported – Magazine ge all height of unit 1800 mm.

	Group 10: Science Tray Storage System	
Code	Descriptions & Specifications	
	Science Storage system consisting of powder coated 25 mm square mild steel hollow section, 18 gauge, with slots and tray runners at 25 mm intervals to take plastic storage trays. Colour coded storage trays to slide on tray runners, made of moulded chemical resistant polypropylene. Polypropylene to be 20% talc filled, anti-static additive and fire retardant. Nylon coated adjustable steel tray runners – full width of tray, with lugs to keep runners in position. Powder coated steel shelves fixed with steel shelf clips and steel top. Adjustable feet and diagonal bars to rear. Supplied in sizes described below. Shelving: <b>I.S. EN 14073-3</b> . Trays: <b>BS 5873</b> .	
STS 1	<b>3 Bays</b> : 1055 wide x 420 deep x 1850 mm high, supplied with 27 no pairs of tray runners and 312 x 427 mm trays of the following heights in assorted colours (to be selected by school): 300 mm high: 3 no 150 mm high: 6 no 75 mm high: 18 no	
STS 2	<b>2 Bays:</b> 710 mm wide x 420 mm deep x 1850 mm high (2 bays) supplied with 18 no pairs of tray runners and 312 x 427 mm trays of the following heights: 300 mm high: 2 no 150 mm high: 4 no 75 mm high: 12 no	
STS T	<b>Trolley</b> : 1055 mm long x 420 mm wide x 850 mm high. 75 mm heavy duty castors fitted to solid steel connection. Fitted with solid steel top, powder coated.	
STS W	Underbench frame with timber top 710 wide x 420 mm deep x 825 mm high, supplied with 21 no pairs of tray runners and 21 no 312 x 427 mm trays, 150 mm high in assorted colours – to be selected by school. Set of 4 no frames as described above to be joined together with brackets and fitted with 40 mm thick hardwood timber top 900 mm wide x 1500 mm long, finger jointed with severe rating lacquer to BS 6250/FIRA 6250	
	Example of storage unit Example of trolley	

	Group 11: Staging	
Code	Descriptions & Specifications	
SS	Stage System	
	<ul> <li>Specification:</li> <li>Proprietary height adjustable stage system supplied in 2 m x 1 units, adjustable to a minimum of three heights from 200 to 800 mm. 28 no. units to be supplied to create a stage of 8 m wide x 7 m deep. Units normally to be constructed of aluminium, and to be supplied with linking clamps. 12 m safety rails and two sets of steps to be provided as part of the system. Sealed timber top with R10 slip resistance.</li> <li>BS 6399-1: 1996, I.S. EN 153272: 2008 test level 3.</li> </ul>	
	Note: Staging may be supplied in units of 1x1 m, if requested by client.	
	List of items required:	
	<ul> <li>28 no. height adjustable stage units 2 m x 1 m, complete with linking clamps</li> <li>12 m safety rail</li> <li>2 no step units, adjustable to suit stage height.</li> </ul>	

	Group 12: DINING TABLES	
Code	Descriptions & Specifications	
S9	Table and bench units: General Purpose/Dining Area	
	Folding wheeled table and bench unit with minimum 25 mm formaldehyde free MDF with decorative high pressure laminate of balanced construction. Rounded and sealed MDF or PVC covered edges. Benches attached to table, convertible to bench with back rest. Unit to be foldable for space saving purposes. High quality wheels with brakes to be provided. Metal connectors to connect units to be provided. Length of bench and table: 1825 mm, min. seat height 425 mm and table height 735 mm. <b>I.S. EN 15372</b> .	
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	Group 13: SEATING – Tiered and Bench	
Code	Descriptions & Specifications	
TS	Demonstration Room Tiered Seating.         Supply, deliver and fix in position tip-up type seats in Lecture Room/s complete with writing shelves and front rail. (Note: writing shelf omitted on back row).         Seats to be tested for (i) Performance and (ii) fire rating and to conform to BS 5588-6 Code of Practice for Places of Assembly, fire rating of seats as specified for closely seated audience. Seats to be 375 mm deep contoured plywood, 12mm thickness.         Back to be 300 mm deep contoured plywood, 12mm thickness. 350 x 30 mm approximately.         Writing shelf. Post-formed formaldehyde free MDF with decorative high pressure laminate grade HGS (I.S. EN 438-1) of balanced construction. Edge surface shall be sealed with lacquer to specification or PVC edge strip in matching colour. Plastic laminate to finish with top and bottom arrises rounded off to prevent splintering and/or chipping.         All frames shall be in mild steel, epoxy powder coated in selected RAL colour to give a durable abrasion-free finish. Pivot plates to provide a silent self-tipping action to the seat. Seats to be protected by a continuous metal section.         Front rail to have writing shelf and to have courtesy panel 600 x 15 mm MDF post-formed laminated back and front, with edges sealed or solid colour laminate or PVC strips.         The number of seats in the Demonstration room is 48. Installation to be in accordance with the	
	Department of the Environment and Local Government Code of Practice for Fire Safety of Furnishings and Fittings in Places of Assembly 1989.	
S7	Bench Seating (Twin Seat)         This unit is intended for social areas, entrance halls etc. Polypropylene shells as for SIEO or plywood as for tiered seating. Framing to 25 x 25 hollow square section – epoxy powder baked on. Twin seats with powder coated metal frame in selected colour size 30x60mm hollow section with plastic end caps and fitted with glides.         To comply with Department of the Environment and Local Government Code of Practice for Fire Safety of Furnishings and Fittings in Places of Assembly 1989         Stability tested to I.S. EN 1729	

	Group 14: MISCELLANEOUS	
Code	Descriptions & Specifications	
sc	Mobile Folding Screen. Minimum range 1750x1830 high <b>I.S. EN 1023</b> .	
EC	<ul> <li>Static First Aid Examination Couch</li> <li>Fully adjustable back support</li> <li>50 mm thick high density fire resist upholstery</li> <li>Steel frame with protective epoxy finish for easy cleaning</li> <li>c. W 600 mm , L 1830 mm, Height 760 mm</li> <li>To comply with <i>Department of the Environment and Local Government Code of Practice for Fire Safety of Furnishings and Fittings in Places of Assembly 1989</i></li> <li>I.S. EN ISO 5999.</li> </ul>	

Standards, Specifications and Conditions	
All equipment shall be durable and safe for school use. Equipment wholly or partly funded from public funds is subject to inspection by officers from the Department of Education and Skills.	
It is essential that tenders for equipment for school use shall:	
<ul> <li>Comply fully with the specifications and be durable and safe for school use.</li> <li>Comply fully with the Standards as detailed and shall comply fully with European Standards (EN), both established and developing, and that Certificates of successful <i>independent testing</i> to the relevant Standard(s) by a recognised body are available on request.</li> <li>Comply with European Electrical Standards and CE marking as appropriate.</li> <li>Be accompanied by documentation of sufficient detail for full evaluation.</li> <li>Include the completed and signed certificate of compliance.</li> </ul>	
Failure to comply with the above may result in the tender being deemed null and void.	
<sup>3</sup> Certificate of Compliance with Standards, Specifications and Conditions	
I/We certify that the equipment tendered complies in all respects with the Standards, Specifications and other requirements/conditions specified in this tender document. I/We hold a current tax clearance certificate.	
Company:	
Signed: Date:	
Position:	

<sup>&</sup>lt;sup>3</sup> This Certificate must be accompany all tenders and quotations *Planning and Building Unit, Department of Education and Skills, Portlaoise Road, Tullamore, Co. Offaly. Telephone: 057-9324300 Fax: 057-9351119* Page 44, of 4