L.N. 40 of 1995

MALTA BOARD OF STANDARDS ACT (CAP. 187)

Exercise Books for Schools Standard Order, 1995 (Standard Order No. 31 of 1995)

IN exercise of the powers conferred by section 4 of the Malta Board of Standards Act, the Malta Board of Standards has made the following standard order:—

Citation and commencement.

1.1 This standard order may be cited as the Exercise Books for Schools Standard Order, 1995 and may be referred to as Standard Order No. 31 of 1995.

1.2 This standard order shall become operative on a date after the lapse of 20 days from the day on which it is laid on the Table of the House of Representatives, which date shall be notified by the Board in the Gazette.

Scope.

2.1 This standard order specifies requirements for the qualities, sizes and rulings, including infant rulings, of exercise books, both wire-stitched and quarter-bound. It does not apply to books of paper suitable only for pencil and rough work or to rulings for special purposes, e.g. logarithm or isometric rulings.

Definitions.

3.1 For the purpose of this standard order, the following definitions apply.

3.1.1 **Alternate note-and-sketch book.** A book made up of sheets of paper, ruled on one side only, so arranged that a ruled page faces a blank page, except at the centre opening, where both pages are blank.

3.1.2 **Bursting strength.** The maximum uniformly distributed pressure applied at right angles to its surface, that a piece of paper or board will stand, under specified test conditions.

3.1.3 **Cut flush.** A style of binding in which covering material is guillotine-trimmed flush with the body of the book.

3.1.4 **Drawing cartridge paper.** A wood-free machine finish (MF) paper suitable for drawing purposes.

3.1.5 **Furnish.** Nature and proportions of the fibrous and non-fibrous component constituents of the stock, other than water, from which the paper is formed.

3.1.6 **Grammage.** The mass of unit area of paper or board, determined by the specified method of test and expressed in grams per square metre.

3.1.7 **ISO opacity (paper backing).** The ratio, expressed as a percentage, of the amount of light reflected from a single sheet of paper with a black backing to the amount of light reflected from the same sheet of paper backed by an effectively opaque pile of sheets of the same paper; the measurements are made under specified conditions.

3.1.8 **Infant drawing book.** Book of mechanical MF paper suitable for sketching, drawing, crayoning and painting, for infant and junior use.

3.1.9 **Junior drawing book.** Book of cartridge paper suitable for water colour, crayon, pencil etc., for junior use.

3.1.10 **Machine-glazed (MG) pressings.** A cover paper for exercise books, glazed on one side of the sheet.

3.1.11 **Manilla.** A cover paper for exercise books of greater strength than MG pressings. A Manilla may be "solid" or "pasted", i.e. made of thin sheets pasted together to give extra rigidity.

3.1.12 **Mechanical MF paper.** A sized paper with a machine finish made mainly from ground wood pulp.

3.1.13 **Page.** one side of leaf of a book.

3.1.14 **Quarter-bound book.** A square-backed book, thread sewn in sections, with stiff sides and material on the spine separate from that on the front and back covers.

3.1.15 **Sizing.** The addition of material to the surface of the sheet (surface sizing), generally in order to increase its resistance to the spontaneous penetration of aqueous liquids, particularly writing ink, and its resistance to the surface spreading of such liquids.

3.1.16 **Spine.** The binding edge of a book.

3.1.17 **Thread-sewn (of a book).** Sewn with thread before the book is bound.

3.1.18 **Turned in.** A style of binding in which covering material is carried over to the inside of the cover to protect the edge.

3.1.19 **Wire-stitching.** The process of machine-stitching the spine of a folded section with one or more staples.

3.1.20 **Wood-free paper.** Paper having in principle only chemical pulp in its fibre composition. In practice, however, it may accidentally contain a small amount of other fibres or pulps.

3.1.21 **Wove paper.** A paper not showing laid lines.

Materials.

4.1 Paper

4.1.1 Furnish and grammage. According to designation, the material and grammage of papers shall be in accordance with Table 1. Grammage shall be determined by the method described in ISO 536. The conditioning atmosphere for test pieces shall be 23±1°C and 50±2% relative humidity. The grammage shall be subject to a tolerance of ±5%.

4.1.2 ISO opacity (paper backing). The ISO opacity of the wood-free papers shown in Table 1 (grammage 75gm^2) shall be not less than 84%, with a minimum mean value of 86%, when measured by the method given in ISO 2471.

4.1.3 Type and colour. Papers for books shall be wove, and shall be white or light cream in colour. Brilliant white shall not be used.

4.1.4 Writing surface. Wood-free paper shall be surface sized. Its water absorption (Cobb value) shall be 19±2 g/m^2 when determined by the 60s test at 20±1°C described in ISO 535.

NOTE 1. The resistance of the writing surface to ink penetration or feathering may be checked by drawing a series of lines with steel pens or ball-point writing instruments using blue, blue-black or red ink, and inspecting the lines to see the extent to which their definition is impaired.

NOTE 2. The papers given in Table 1 are designed for use with water-based inks, and are not necessarily suitable for use with spirit-based inks such as are often used in felt-tipped pens.

4.2 Covers

4.2.1 Paper. Covers for wire-stitched exercise books shall be made from MG pressings or from solid manilla or pasted manilla. Covers for junior drawing books and for infant drawing books shall be made from MG pressings.

The grammage and bursting strength of these materials shall be in accordance with Table 2. The conditioning atmosphere for test pieces shall be as specified in 4.1.1 Grammage shall be determined by the method described in ISO 536. Bursting strength shall be determined by the method described in BS 3137.

NOTE. Appendix A lists recommended colours for covers.

4.2.2 Board. Covers for quarter-bound books (see clause 7) shall be made from board of the following nominal thicknesses:

books of 160 pages 1330μm;

books of 192 pages 2300μm.

Thickness shall be determined by the method described in ISO 534.

4.3 Stitching wire

4.3.1 The stitching wire shall be coated with a rust-resistant finish, e.g. tinned, and shall have a minimum thickness of 0.56mm.

5.1 The dimensions of exercise books shall be as given in Table 3; the spine dimension is given first. Dimensions.

5.2 The tolerance on dimensions of books shall be as follows:

length	±3mm;
width, up to and including 64 pages	±4mm;
width, more than 64 pages	±6mm.

6.1 Measurement. To check the spacing of rulings, a measurement taken over 10 spaces, i.e. from the top of the first line to the top of the eleventh line, shall be divided by 10. The dimensions given in Table 4 are nominal. Rulings.

6.2 Spacing and colour. Writing, infant, graph and squared rulings shall be as given in Table 4. They shall be grey or blue except for graph rulings which shall be blue.

6.3 Music rulings. Music rulings shall be black, with an even number of staves to the page.

7.1 Binding, covers and number of pages. Exercise books shall be either wire-stitched or quarter-bound. The type of binding, covers and number of pages shall be as given in Table 5. Style and construction of exercise books.

7.2 Wire-stitching. Wire-stitched exercise books shall be fastened with at least two stitches; each stitch shall have at least 5mm turnover, and the ends shall be pressed down flat. If two stitches are used, the spaces shall be nominally in the ratio 1:2:1. If more than two stitches are used, the spaces shall be nominally equal.

7.3 Quarter-bound books. Quarter-bound books shall be thread-sewn, glued up, quarter-bound with cloth spine and paper sides, cut flush and with covers pasted down and pressed.

8.1 Every exercise book shall have the following information shown in clear and easily readable print in letters of a height of not less than 2mm. Labelling.

8.1.1 The brand name or trade mark; or

8.1.2 The name and address of the manufacturer.

8.1.3 Where the brand name is not entered in a list kept by the Director of Industry, nor is the trade mark registered with the Comptroller of Industrial Property, the inclusion of the name and address of the manufacturer shall be compulsory.

8.1.4 The size of the exercise book or the size reference as given in Table 3.

8.1.5 The ruling description or the ruling reference as given in Table 4.

8.1.6 The number of pages.

Table 1. Properties of paper

Designation	Material	Nominal grammage
		g/m^2
Exercise books	Wood-free writing papers	75
Drawing books (Infant)	Mechanical (MF) papers	60
Drawing books (Junior)	Cartridge paper	100

Table 2. Properties of paper cover materials

Material	Grammage (see ISO 536)	Bursting strength (see BS 3137)
	g/m^2 minimum	kPa minimum
MG Pressings	125	170
Pasted manilla	225	550
Solid manilla	270	550

Note: The choice of solid or pasted manilla is at the manufacturers' discretion, provided the material is in accordance with Table 2.

Table 3. Books		
Book	Reference	Size
		mm
Exercise	EB/1 (A4)	297 x 210
	EB/2	229 x 178
	EB/3	203 x 165
	EB/4	133 x 165L*
	EB/5	165 x 102
	EB/6	203 x 102
Drawing		
Infant		178 x 229L
		190 x 254L
	A4 portrait (EB/1)	297 x 210
Junior	A4 portrait (EB/1)	297 x 210
	A4 landscape	210 x 297L

* 'L' denotes landscape format.

Table 4. Rulings		
Rulings	Reference	Description
Writing	R6	feint, 6mm apart
	MR6	feint, 6mm apart with margin
	R8	feint, 8mm apart
	MR8	feint, 8mm apart with margin
Infant	DR6/10	narrow double-line, 6mm with 10mm spacing
Writing EB/4	DR6/7i	narrow double-line, 6mm with bold guide line of 7mm spacing
	R10	single-line, 10mm spacing
	R15	single-line, 15mm spacing
	R20	single-line, 20mm spacing
Picture-and-story EB/3	HR8	half ruled, with upper half of page blank and lower half ruled in 8mm spacing
	HR10	half-ruled, with upper half of page blank and lower half ruled in 10mm spacing
	HR15	half-ruled, with upper half of page blank and lower half ruled in 15mm spacing
Note-and-sktech book alternate EB/3	AR8	ruled page in 8mm spacing

Graph	GR1 GR2 GR5	1mm, 5mm and 10mm squares 2mm, 10mm and 20mm squares 5mm and 25mm squares
Kwadrat	SR5 SR7 SR10	5mm squares 7mm squares 10mm squares

Table 5. Binding, covers and number of pages

Binding	Covers	Pages	EB/6	EB/5	EB/4	EB/3	EB/2	EB/1	Junior drawing	Infant drawing
Wire-stitched	Pressings	24			X				X	X
		32	X	X		X				
		48		X		X	X	X		
	Manilla	64				X				
		80		X		X	X	X		
Quarter-bound	Board	160*					X	X		
		192*					X			

* In quarter-bound books the end pages are normally pasted to the inside covers leaving 158 and 190 writing pages respectively.

Appendix A

Colours for Covers

A.1 It is recommended that exercise books be supplied in the following seven colours:

light blue;
dark blue;
light green;
dark green;
red;
orange;
yellow.

Note. Other colours may be available by agreement between purchaser and vendor.

Appendix B

Units for packaging

B.1. Packaging requirements will vary according to the size of thickness of the exercise books. For normal use, multiples of 10, 25 or 100 are recommended.

Ippubblikat mid-Dipartiment ta' l-Informazzjoni – Kastilja — *Published by the Department of Information – Kastilja*
Mitbugħ fl-Istamperija tal-Gvern — *Printed at the Government Printing Press*

Prezz 7c — *Price 7c*