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# GENERAL PRODUCT SPECIFICATIONS

## Vitrex System 2000 Educational Boards and Screens

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(E&OE - Document and content subject to change without prior notice)

The System 2000 range of chalk boards, white boards, pin boards and projection screens has been developed to suit the educational requirements of schools, training centers, colleges, technicians and universities. From simple wall mounted boards to complex multi-surface combinations, this system will cater for almost any requirement.

Please note that the use of *italics* in the text indicates the need for an appropriate selection to be made by the Specifier:

“Standard Vitrex System 2000 vitreous enamel steel educational range boards and screens:

### ***Chalk Boards and White Boards:***

Vitrex System 2000 Chalk Boards to be manufactured in accordance with SABS Standard CKS 36/2004 Edition 4 and suitable for Class 1: Heavy Duty applications, as defined therein. Enamel steel chalk board surfaces to be matt and finely structured, olive green in colour (Vitrex Colour Reference - Chalk Board Green LM1797/2).

Vitrex System 2000 White Boards with enamel steel surface suitable for use with fibre tipped white board marker pens, semi-gloss and white in colour (Vitrex Colour Reference - Normal White LM2045/1).

The enamel steel surface to be laminated to a core, consisting of particle board having a suitable balancing backer to the rear, the unit beaded all around with a natural anodised aluminium channel surround mitered at the corners.

Chalk Boards and White Boards supplied complete with integral, natural anodised aluminium chalk / pen rail and necessary fixing components.



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Swing Leaves to consist of vitreous enamel steel surfaces, laminated to both sides of the core and beaded as per the wall mounted board detail. Swing leaves are to be factory fitted to the central wall mounted board by means of 200 mm galvanised mild steel heavy duty parallel strap hinges (top and bottom) and are to be supplied with one pair of rubber buffers to each side.

Where specified, all screening <sup>(1)</sup> is to be *white (chalk boards)* / *black (white boards)* and permanent in nature, forming an integral part of the enamel surface.

All boards are to be fixed in position strictly in accordance with the manufacturer's instructions.

The vitreous enamel steel writing surfaces are to be guaranteed to perform specifically to the functions for which they were intended, and to remain functionally unchanged for a period of twenty (20) years, under the terms of the general Vitrex System 2000 Guarantee.

### ***Pin Boards:***

Vitrex System 2000 Pin Boards to consist of *Flortime Premier pinning material* / *Belgotex Colour-Rib carpet surface* laminated to a soft board core, the unit to be beaded all around with a natural anodised aluminium channel surround mitered at the corners.

Colour of the *pinning material* / *carpet surface* <sup>(2)</sup> to be *[colour name]* <sup>(3)</sup> as selected by the Architect from the relevant standard colour range.

Pin Boards supplied complete with necessary fixing components and fixed in position strictly in accordance with the manufacturer's instructions.

### ***Projection Screens:***

Vitrex System 2000 Projection Screens to consist of cross lenticular matt white satin screen material stretched over a mild steel tubular frame.

Tiltable type screens to be wall mounted on a friction tilting mechanism, with inclination up to 20°.

Projection Screens fixed in position strictly in accordance with the manufacturer's instructions.

### ***Overhead Projector Screens:***

Vitrex System 2000 Overhead Projection Screens to consist of matt white melamine board fitted within a mild steel tubular frame.

Screens to be wall mounted on a robust, combination swivel and tilt mechanism allowing for a 60° swivel (handed) towards the centre of the room and an inclination of up to 30°.

Overhead Projection Screens to be fixed in position strictly in accordance with the manufacturer's instructions.

## (A) Specification Notes:

*Refer to the numbered references in the specification text.*

- (1) A variety of teaching aids can be permanently screened into the enamel surface as part of the manufacturing process of the boards: lines, graph squares, music lines, ledger, journals and cash books. Refer to Item (C.4) hereunder for further details.
- (2) Flortime Premier pinning material is the standard surface for the System 2000 pin boards. A more economical alternative however has also been introduced where Belgotex Colour-Rib carpet surface is utilised. In terms of overall performance, particularly in high use areas such as schools and teaching institutions, Flortime Premier would be the recommended option.
- (3) Flortime Premier pinning material is available only in the following colours: Stone (Beige / Light Brown), Misty (Light Grey) and Fern (Green).

Belgotex Colour-Rib carpet material is available in the following standard colours: Bleach (Light Grey), Ebony (Dark Grey), Dapple (Brown / Beige), Crystal (Light Blue) and Atlantic (Dark Blue). Other colours are available on request and subject to minimum quantities.

## (B) Typical Specifications:

### **Example 1:**

Vitrex Model 2100 standard vitreous enamel steel wall mounted educational range **chalk board**, overall size 1200 mm high x 2400 mm wide, reference (2109), supplied complete with integral anodised aluminium chalk rail, fixing components and secured in position to brickwork.

Unit of Measure = No.

### **Example 2:**

Vitrex Model 2100 standard vitreous enamel steel wall mounted educational range **chalk board**, overall size 1000 mm high x 1500 mm wide, reference (2104), with white 50 x 50 mm squares, reference (2905), permanently screened on, supplied complete with integral anodised aluminium chalk rail, fixing components and secured in position to brickwork.

Unit of Measure = No.

### **Example 3:**

Vitrex Model 2200 standard vitreous enamel steel wall mounted educational range **white board**, overall size 1200 mm high x 3600 mm wide, consisting of two (2) standard boards size 1200 mm high x 1800 mm wide, reference (2208), complete with integral anodised aluminium pen rail, fixing components and secured in position to brickwork.

Unit of Measure = No.

**Example 4:**

Vitrex Model 2300 standard wall mounted educational range **pin board**, size 1000 mm high x 1500 mm wide, reference (2304). Pinning surface to be Flortime Premier, colour Stone. Pin boards supplied complete with fixing components and secured to brickwork.

Unit of Measure = No.

**Example 5:**

Vitrex Model 2300-D standard wall mounted educational range **pin board**, size 1200 mm high x 2400 mm wide, reference (2309B). Pinning surface to be Belgotex Colour-Rib, colour Bleach. Pin boards supplied complete with fixing components and secured to brickwork. .

Unit of Measure = No.

**Example 6:**

Vitrex Model 2400 **folding type** vitreous enamel steel wall mounted educational range white board, overall size 1200 mm high x 4000 mm wide, reference (2404), consisting of one fixed centre board size 1200 mm high x 2000 mm wide, two fixed side boards each size 1200 mm high x 1000 mm wide and two swing leaves each size 1200 mm high x 1000 mm wide. Right hand swing leaf to have black lines spaced at 50 mm centres, reference (2902), permanently screened on to the rear face. Board supplied with anodised aluminium pen rail, fixing components and secured in position to brickwork.

Unit of Measure = No.

**Example 7:**

Vitrex Model 2400 **folding type** vitreous enamel steel wall mounted educational range combination chalk - white board, overall size 1000 mm high x 4000 mm wide, reference (2403), consisting of one fixed centre chalk board size 1200 mm high x 2000 mm wide, two fixed white side boards each size 1200 mm high x 1000 mm wide and two swing leaves each size 1200 mm high x 1000 mm wide. Both swing leaves to have chalk board surface to front face and white boards surface to rear face. Board supplied with anodised aluminium chalk / pen rail, fixing components and secured in position to brickwork.

Unit of Measure = No.

**Example 8:**

Vitrex Model 2500 educational range **column mounted vertical sliding unit**, reference (2508), consisting of two independent vitreous enamel steel white boards, each size 1200 mm high x 3000 mm wide, fitted with integral anodised aluminium chalk rail. The unit to be supplied complete with one pair of aluminium columns, 3200 mm high, reference (2520), having an epoxy coated finish and including all necessary sliding gear and fixing components. The assembled unit is to be fixed in position to brickwork and to the finished floor.

Unit of Measure = No.

**Example 9:**

Vitrex Model 2600 educational range wall mounted **overhead projector screen**, reference (2601), comprising white semi-matt melamine screen size 1200 mm high x 1300 mm wide, fitted within an epoxy coated mild steel tubular frame and mounted on swivel-tilt mechanism with right hand pivot. The screen is to be fixed in position to brickwork on the left of the Vitrex Model 2200 white board (measured elsewhere).

Unit of Measure = No.

**Example 10:**

Vitrex Model 2700 educational range wall mounted **projection screen**, reference (2706), comprising cross lenticular matt white satin screen material stretched over an epoxy coated mild steel tubular frame, size 1800 mm high x 1800 mm wide, fitted on a friction tilting mechanism and secured in position to brickwork.

Unit of Measure = No.

**Example 11:**

Vitrex Model 2800 educational range **freestanding mobile partition board**, reference (2812), consisting of a double sided vitreous enamel steel writing board, size 1000 mm high x 2000 mm wide, with vitreous enamel steel chalk board surface one side and vitreous enamel steel white board surface the other side, fitted to an epoxy coated mild steel frame and legs, the latter fitted with castors, reference (2832), and including anodised aluminium chalk / pen rails where applicable.

Unit of Measure = No.

**Example 12:**

Vitrex Model 2800 educational range **freestanding mobile swivel board**, reference (2829), consisting of a double sided vitreous enamel steel writing board, size 1200 mm high x 1500 mm wide, with vitreous enamel steel white board surface to both sides, fitted to an epoxy coated mild steel frame and legs, the latter fitted with castors, reference (2832), and including anodised aluminium chalk / pen rail to one side, as applicable.

Unit of Measure = No.

## (C) Schedule of System 2000 Boards and Screening:

### (C.1) Standard Wall Mounted Boards (Models 2100, 2200, 2300, 2300-D):

Chalk Board Code	White Board Code	Pin Board Code (Premier)	Pin Board Code (Color-Rib)	Height (mm)	Width (mm)
2102	2202	2302	2302-D	900	600
2103	2203	2303	2303-D	900	1200
2114	2214	2314	2314-D	1000	1000
2104	2204	2304	2304-D	1000	1500
2118	2218	2318	2318-D	1000	1800
2105	2205	2305	2305-D	1000	2000
2119	2219	2319	2319-D	1000	2400
2106	2206	2306	2306-D	1000	3000
2115	2215	2315	2315-D	1200	1000
2116	2216	2316	2316-D	1200	1200
2107	2207	2307	2307-D	1200	1500
2108	2208	2308	2308-D	1200	1800
2117	2217	2317	2317-D	1200	2000
2109	2209	2309	2309-D	1200	2400
2110	2210	2310	2310-D	1200	3000

**Standard Pin Board Colours:**

- *Flortime Premier* = Stone (Beige / Light Brown), Misty (Light Grey) and Fern (Green);
- *Belgotex Color-Rib* = Bleach (Light Grey), Ebony (Dark Grey), Dapple (Brown / Beige), Crystal (Light Blue) and Atlantic (Dark Blue).

### (C.2) Enamel Screening (Permanent):

Code	Screen Type	Size (mm)
<i>On Boards up to 1200 mm wide and on Swing Leaves:</i>		
2901	Squares	50 x 50
2902	Lines	50
2903	Music Staves	100
2904	Lines for Ledger, Journal, Cash Book	
<i>On Boards over 1200 mm wide:</i>		
2905	Squares	50 x 50
2906	Lines	50
2907	Music Staves	100
2908	Lines for Ledger, Journal, Cash Book	

**(C.3) Folding Type Wall Mounted Chalk Boards and White Boards (Model 2400):**

<b>Code</b>	<b>Board Composition</b>	<b>Height (mm)</b>	<b>Width (mm)</b>
2401	<i>Overall Size</i> Consisting of: 1 x Centre Board 2 x Swing Leaves	1000 1000 1000	4000 2000 1000
2403	<i>Overall Size</i> Consisting of: 1 x Centre Board 2 x Side Boards 2 x Swing Leaves	1000 1000 1000	4000 2000 1000 1000
2402	<i>Overall Size</i> Consisting of: 1 x Centre Board 2 x Swing Leaves	1200 1200 1200	4000 2000 1000
2404	<i>Overall Size</i> Consisting of: 1 x Centre Board 2 x Side Boards 2 x Swing Leaves	1200 1200 1200	4000 2000 1000 1000
<ul style="list-style-type: none"> <li>- Wall Space Factor = 1.5 (for 2401 and 2402) and 2.0 for (2403 and 2404).</li> <li>- Alternate size hinged boards available as specials using combinations of sizes shown under Standard Wall Mounted Boards.</li> <li>- When specifying please state writing surface required (i.e. chalk board or white board).</li> </ul>			

**(C.4) Column Mounted Vertical Sliding Chalk and White Boards (Model 2500):**

<b>Code</b>	<b>Board Composition</b>	<b>Height (mm)</b>	<b>Width (mm)</b>
2501	2 x Sliding Boards	1000	2000
2502	2 x Sliding Boards	1000	2500
2503	2 x Sliding Boards	1000	3000
2506	2 x Sliding Boards	1200	2000
2507	2 x Sliding Boards	1200	2500
2508	2 x Sliding Boards	1200	3000
2520	Columns	2900	
2521	Columns	3200	
<ul style="list-style-type: none"> <li>- When specifying please state column height required.</li> <li>- When specifying please state writing surface required (i.e. chalk board or white board).</li> </ul>			

**(C.5) Freestanding Mobile Boards (Model 2800):**

<b>Freestanding Mobile Board Type</b>	<b>Board Height (mm)</b>	<b>Board Width (mm)</b>	<b>Code</b>	<b>Surface Front</b>	<b>Surface Back</b>	
Partition Board	900	1200	2818	Chalk	Chalk	
			2819	Chalk	White	
			2820	White	White	
			2840	Chalk	Pin	
			2841	White	Pin	
			2842	Pin	Pin	
	1000	1500	2801	Chalk	Chalk	
			2802	Chalk	White	
			2803	White	White	
			2804	Chalk	Pin	
			2805	White	Pin	
			2806	Pin	Pin	
	1000	2000	2811	Chalk	Chalk	
			2812	Chalk	White	
			2813	White	White	
			2814	Chalk	Pin	
			2815	White	Pin	
			2816	Pin	Pin	
	Swivel Board	1200	1200	2824	Chalk	Chalk
				2825	Chalk	White
				2826	White	White
				2843	Chalk	Pin
				2844	White	Pin
				2845	Pin	Pin
1200		1500	2827	Chalk	Chalk	
			2828	Chalk	White	
			2829	White	White	
			2846	Chalk	Pin	
			2847	White	Pin	
			2848	Pin	Pin	
1200	2000	2849	Chalk	Chalk		
		2850	Chalk	White		
		2851	White	White		
		2852	Chalk	Pin		
		2853	White	Pin		
		2854	Pin	Pin		
- Feet supplied with castors (two of which are lockable) (Code 2832).						



**(C.6) Wall Mounted Projection Screens (Model 2700):**

Screen Height (mm)	Screen Width (mm)	Type	Code
1200	1300	Fixed	2701
		Tiltable	2702
1500	1500	Fixed	2703
		Tiltable	2704
1800	1800	Fixed	2705
		Tiltable	2706
2000	2000	Fixed	2711
		Tiltable	2712
- Models 2701 to 2704 also available with a LPDL Melamine projection surface.			

**(C.7) Wall Mounted Swivel Tilt Overhead Projection Screens (Model 2600):**

Screen Height (mm)	Screen Width (mm)	Pivot Position	Code
1200	1300	Right Hand Pivot	2601
		Left Hand Pivot	2602
1200	1500	Right Hand Pivot	2605
		Left Hand Pivot	2606
- Right Hand (RH) Pivot required for screen on left of a writing board. - Left Hand (LH) Pivot required for screen on right of a writing board.			

**(D) Technical Notes:**

- a. Alternative painted steel writing surfaces, often categorized alongside vitreous enamel steel by a number of other manufacturers under the generic name of "*magnetic surfaces*", and the high pressure density laminate (HPDL Formica) writing surfaces, also referred to as a "*non-magnetic*", although more economical in the short term, cannot match vitreous enamel steel, in terms of material construction, properties and ultimate performance.
- b. Furthermore, the use of these alternative surfaces is not to be recommended, particularly in high use areas (such as teaching institutions), as the chalk board surfaces are susceptible to "Loss of Texture" (the surfaces become smooth, with consequent reduced writing ability) and white board surfaces become susceptible to "Ghosting" (where the porous nature of the surfaces allows the ink to be partially absorbed, with consequent reduced ability to clean the board), leading to the necessity to replace the boards in a relatively short period of time.

- c. Please refer to the Vitrex Document Ref. CC/TN/SURF/01 "Technical Notes: Vitreous Enamel (VE) Steel Surface - vs - HPDL Formica (Non-magnetic) and Painted Steel (Magnetic) Surfaces" for further details.
- d. Fixings suitable for masonry walls are supplied as a standard. Should special fixings be required (e.g. drywall), this should be noted at time of specification or requested at time of order.
- e. Hinged Boards allow for the logical separation of subjects, as well as a combination of different writing surfaces (e.g. chalk and white board).
- f. Column Mounted Boards are widely used in technical colleges, universities and science rooms in schools. Consisting of two (2) writing boards sliding independently and operating on a perfectly smooth sliding system. The space between the columns allows for installation of a projection screen, if required.
- g. Freestanding Mobile Boards with Swivel Boards or with Partition Boards (no swivel action) can be used as functional partitions or mobile training and information aids. The boards are double-sided units which can be supplied in any combination of chalk, white and pin boards surfaces.
- h. Our staff and Agents remain available to address any queries, provide project specific recommendations as well as to assist with selecting the appropriate System 2000 boards and projection screens to suit your application.