# 2053

Specification

Stage F

Title:

M50-PLASTICS/ CARPET TILING/ SHEETING

Medical Research Council

The New LMB Building Project

 RMJM 83 Paul Street London EC2A 4UT

 T 020 7549 8900

 F 020 7250 3131

 E london@rmjm.com

 W www.rmjm.com



ISSUE REVISION -	ISSUE STATUS Draft	ISSUE DATE 23-01-2009	AUTHOR / REVISER DLSS	CHECKED BY	APPROVED BY
А	D1	30-10-2009	DLSS		
В	D2	15-03-2010	DLSS	CF	CF
В	C1	24-03-2010	LSG		
С	C1	29-04-2010	CF		

Note: Rev C Cover amended

Contents M50

Plastics/ Carpet Tiling/ Sheeting

MEO		
M50	PLASTICS/ CARPET TILING/ SHEETING	1
M50.1000	SCOPE, SUBMITTALS AND TESTING	1
M50.1100	SPECIFICATION AND SCOPE	1
M50.1101	Prescriptive Works	1
M50.1102	Scope of Works	1
M50.1200	SYSTEM TYPES	1
	Vinyl Flooring	1
M50.1201	Type SFL-01 Vinyl Flooring	1
M50.1202	Type SFL-04 Vinyl Flooring	1
M50.1203	Type SFL-05 Vinyl Flooring	1
M50.1204	Type SFL-06 Vinyl Sheet Flooring	1
M50.1205	Carpet Tiling Type SFL-03 Carpet Tiling	<b>1</b>
M50.1300	SUBMITTALS	1
ME0 1001	Tender Submittals	1
M50.1301	Tender Response	1
M50.1302	Samples, Mock-ups, Prototypes and Quality Benchmarks Pre-contract Samples	1
M50.1302	Post Contract Samples	1
M50.1304	Mock-ups	1
M50.1305	Prototypes	1
M50.1306	Benchmark Requirements	1
	Testing	2
M50.1307	Slip Resistance Testing	2
M50.2000	SYSTEMS AND MATERIALS	2
M50.2100	SYSTEM DESCRIPTIONS	2
	Vinyl Flooring	2
M50.2101	Type SFL-01 Vinyl Sheet Flooring	2
M50.2102	Type SFL-04 Vinyl Sheet Flooring	2
M50.2103	Type SFL-05 Vinyl Sheet Flooring	2
M50.2104	Type SFL-06 Vinyl Sheet Flooring	3
	Carpet Tiling	3
M50.2105	Type SFL-03 Carpet Tiling	3
M50.2200	MATERIALS	3
	General	3
M50.2201	Pile Reversal	3
	Accessories	3
M50.2202	Edgings/ Cover Strips	3
M50.3000	SITE INSTALLATION	3
M50.3100	WORKMANSHIP	3
M50.3101	General	3
M50.3102	Installation of Textile Floor Coverings	4
M50.3103	Installation of Resilient Floor Coverings	4
M50.3104	Bases	4
M50.3105	Dampness	4
M50.3106	Adhesive	4
M50.3107	Finishing to Vinyl Seams	4 4
M50.3108	Jeans	4

#### M50 PLASTICS/ CARPET TILING/ SHEETING

To be read in conjunction with Section A and other related sections of the Specification, Preliminaries and Contract Conditions.

#### M50.1000 SCOPE, SUBMITTALS AND TESTING

#### M50.1100 SPECIFICATION AND SCOPE

M50.1101 Prescriptive Works

- Supply, deliver, install and warrant the works in strict compliance with the materials and a) workmanship requirements of the Specification.
- b) Where required to prepare drawings these shall be limited to final detailing of components, systems, etc. indicated on the Design Drawings, necessary to demonstrate their safe installation.
- Where alternative products are offered by the Trade Contractor for acceptance by the C) Main Contractor, provide full supporting documentation in respect of the complete system or installation.

#### M50.1102 Scope of Works

This section of the Specification, when read in conjunction with the Design Drawings, provides particular requirements with respect to the following:

- a) Vinyl flooring.
- Carpet tiling. b)

#### M50.1200 SYSTEM TYPES

Vinyl Flooring

- M50.1201 Type SFL-01 Vinyl Flooring Vinyl sheeting.
- M50.1202 Type SFL-04 Vinyl Flooring Vinyl sheet flooring.
- M50.1203 Type SFL-05 Vinyl Flooring
- Vinyl sheet flooring
- M50.1204 Type SFL-06 Vinyl Sheet Flooring
  - Vinyl sheet flooring
  - Carpet Tiling
- M50.1205 Type SFL-03 Carpet Tiling
- Anti-static carpet tiles.

#### SUBMITTALS M50.1300

**Tender Submittals** M50.1301 **Tender Response** Not required. Samples, Mock-ups, Prototypes and Quality Benchmarks M50.1302 **Pre-contract Samples** In accordance with Section A.4000, pre contract samples shall be provided: Product manufacturers printed technical and installation literature. a) Not required. M50.1303 Post Contract Samples In accordance with Section A.4000, post contract samples of the following shall be provided: 300mm x 300mm tiling/ sheeting samples. a) b) All edge trims and covers. M50.1304 Mock-ups Not required. M50.1305 Prototypes Not required. M50.1306 **Benchmark Requirements** The following quality benchmarks shall be provided in locations to be agreed with the Main Contractor, in accordance with Section A.4000:

a) First fully installed and completed area of each type of the works comprising an area of not less than 9m<sup>2</sup> as accepted by the Main Contractor.

### Testing

M50.1307

- Slip Resistance Testing
  - a) Testing for slip resistance shall comply with the following documents:
    - i) 'Assessing the slip resistance of flooring' by The Health and Safety Executive (latest published version).
    - ii) 'The assessment of floor slip resistance, the UK Slip Resistance Group guidelines' by The UK Slip Resistance Group (latest published version).
  - b) Testing shall be performed by an independent UKAS accredited laboratory accredited to perform the specified test methods.
  - c) Pendulum Test: Internal flooring shall be evaluated in both dry and wet conditions using the TRL Pendulum Tester in accordance with BS 7976 and the recommendations of the UK Slip Resistance Group to obtain the pendulum test value (PTV) specified.
  - d) Samples shall be tested at the following stages of the project:
    - i) Post-installation (in situ).
  - e) Test samples must include any surface treatment to be applied to the finished internal flooring.

# M50.2000 SYSTEMS AND MATERIALS

# M50.2100 SYSTEM DESCRIPTIONS

## Vinyl Flooring

M50.2101 Type SFL-01 Vinyl Sheet Flooring

A vinyl sheet flooring system to areas as indicated on the Design Drawings.

- a) Flooring:
  - i) Manufacturer: Gerflor Ltd, Tel: 01926 401500.
  - ii) Reference: 2mm thick Tarasafe Standard.
  - iii) Substrate: Concrete SR2.
  - iv) Colour: Ref: 7618 Edelweiss.
- b) Fixing:
  - i) Adhesive: Gerfix E120 as manufactured by Gerflor Ltd, Tel: 01926 401500.
- c) Other requirements:
  - i) A fine surface levelling screed shall be provided where necessary and as recommended for the purpose by the sheet flooring manufacturer.
- M50.2102 Type SFL-04 Vinyl Sheet Flooring

A vinyl sheet flooring system to areas as indicated on the Design Drawings.

- a) Flooring:
  - i) Manufacturer: Gerflor Ltd, Tel: 01926 401500.
  - ii) Reference: 2mm thick Tarasafe Uni.
  - iii) Substrate: Concrete SR2.
  - iv) Colour: To be confirmed by the Main Contractor.
- b) Fixing:
  - i) Adhesive: Gerfix E120 as manufactured by Gerflor Ltd, Tel: 01926 401500.
- c) Other requirements:
  - i) A fine surface levelling screed shall be provided where necessary and as recommended for the purpose by the sheet flooring manufacturer.
- M50.2103 Type SFL-05 Vinyl Sheet Flooring
  - A vinyl sheet flooring system to areas as indicated on the Design Drawings.
  - a) Flooring:
    - i) Manufacturer: Gerflor Ltd, Tel: 01926 401500.
    - ii) Reference: 2mm thick Tarasafe Uni.
    - iii) Substrate: Concrete SR2.
    - iv) Colour: To be confirmed by the Main Contractor.
  - b) Fixing:
    - i) Adhesive: Gerfix E120 as manufactured by Gerflor Ltd, Tel: 01926 401500.

- C) Other requirements:
  - A fine surface levelling screed shall be provided where necessary and as i) recommended for the purpose by the sheet flooring manufacturer.

M50.2104 Type SFL-06 Vinyl Sheet Flooring

A vinyl sheet flooring system to areas as indicated on the Design Drawings.

- a) Flooring:
  - Manufacturer: Gerflor Ltd, Tel: 01926 401500. i)
  - ii) Reference: 2mm thick Tarasafe Uni.
  - iii) Substrate: Concrete SR2.
  - Colour: Ref: 7618 Edelweiss. iv)
- Fixing: b)
  - Adhesive: Gerfix E120 as manufactured by Gerflor Ltd, Tel: 01926 401500. i)
- Other requirements: C)
  - A fine surface levelling screed shall be provided where necessary and as i) recommended for the purpose by the sheet flooring manufacturer.

#### Carpet Tiling

M50.2105

Type SFL-03 Carpet Tiling

An anti-static carpet tile flooring system to areas as indicated on the Design Drawings.

- a) Flooring:
  - Manufacturer: Shaw Carpets Ltd, Tel: \*\*\*\* i)
  - ii) Reference: Repartee, 600mm x 600mm.
  - iii) Substrate: Concrete SR2.
  - Colour: To be confirmed by the Main Contractor. iv)
- b) Fixing:
  - i) Adhesive: Styccobond F41 as manufactured by F H Ball & Co Ltd, Tel: 01926 401500.
- C) Other requirements:
  - A fine surface levelling screed shall be provided where necessary and as i) recommended for the purpose by the sheet flooring manufacturer.

#### M50.2200 MATERIALS

#### General

M50.2201 **Pile Reversal** 

> Provide information to the Main Contractor detailing the resistance to the effects of pile reversal of each carpet type. Include in the warranty the provision for guarding against pile reversal occurring. If pile reversal occurs before, during or following the installation of the carpet, all areas of carpet affected shall be replaced at no cost to the Client.

#### Accessories

Edgings/ Cover Strips

M50.2202

Provide mill finished aluminium edgings/ cover strips as follows:

Reference: Product code ESA225 as supplied by Genesis APS, Tel: 01642 713000. a)

#### M50.3000 SITE INSTALLATION

#### M50.3100 WORKMANSHIP General

M50.3101

- Bond directly to the substrate, in accordance with the manufacturer's recommendations. a)
- All bases shall be rigid, dry, sound, smooth and free from grease, dirt and other b) contaminants before coverings are applied.
- Finished coverings shall be accurately fitted, tightly jointed, securely bonded, smooth and C) free from air bubbles, rippling, adhesive marks and stains.
- The setting out of the pattern shall be agreed with the Main Contractor before ordering d) the floor finish materials.
- The materials shall be delivered to Site in original packaging, clearly marked with the batch number. Where possible, the use of different batches adjacent to each other shall e) be avoided to ensure consistency of appearance.

	f)	No materials shall be laid until the building is weathertight, wet trades have finished their work, the building has dried out, all paintwork is finished and dry, and floor service outlets, duct covers and other fixtures around which the materials are to be cut have been fixed. The Main Contractor shall be informed not less than 48 hours before commencing laying.
	g)	Before laying commences the materials shall be thoroughly conditioned by unpacking and spreading out in the spaces where they are to be laid. Minimum time and temperature shall be as recommended in writing by the manufacturer.
	h)	Before, during and after laying, the temperature and humidity shall be maintained at the approximate levels that will prevail after the building is occupied.
	i)	Joints shall be made on the centre line of the door leaf unless specified otherwise.
M50.3102	Insta	allation of Textile Floor Coverings
		all in accordance with the Code of Practice for the Installation of Textile Floor Coverings to 5325.
M50.3103	Insta	allation of Resilient Floor Coverings
		all in accordance with the Code of Practice for the Installation of Resilient Floor Coverings S 8203.
M50.3104	Base	es
	The	laying of coverings shall not occur until bases are suitable.
M50.3105	Dam	ipness
	Whe	ere coverings are to be laid on new wet-laid bases it shall be ensured that:
	a)	Drying aids have been turned off for not less than four days.
	b)	Tests for moisture content, using an accurately calibrated hygrometer in accordance with BS 5325 or BS 8203 are taken.
	c)	Readings are taken in all corners, along edges and at various points over the area being tested.
	d)	Coverings are not laid until all readings show 75% relative humidity or less.
M50.3106	Adh	esive
	a)	Adhesive and method of fixing shall conform to Section Z20 of the Specification.
	b)	Primer shall be used where recommended by the adhesive manufacturer and allowed to dry thoroughly before applying adhesive.
	c)	The adhesive shall be spread evenly with floor covering pressed down firmly and rolled (if recommended) to ensure full contact and a good bond overall.
	d)	All surplus adhesive shall be removed from exposed faces of coverings as the work proceeds.
	e)	Ridges and high spots caused by particles on the substrate shall be removed.
M50.3107	Finis	shing to Vinyl
	a)	The flooring shall be washed using mops dampened with water containing neutral detergent. If necessary, heavily soiled areas shall be lightly scrubbed using a brush or synthetic fibre web pad.
	b)	Surfaces shall be thoroughly rinsed with clean water, removing surplus to ensure no damage to adhesive, and allowed to dry.
	C)	Two coats of emulsion polish, of a type recommended by the flooring manufacturer, shall be applied.
M50.3108	Sea	ms
	a)	Patterns shall be accurately matched at seams.
	b)	Seams shall be cut in to ensure a tight joint, without gaps, and be bonded to the manufacturer's instructions.
	c)	Adhesive shall be completely set before commencing welding of coverings.
	d)	Where recommended by the product manufacturer seam welding shall be by hot/ cold welding with matching colour vinyl rod.
	e)	A neat, smooth, strongly bonded seam joint shall be formed flush with finished surface.

# 2053

Specification

Stage F

Title:

M60-PAINTING/ CLEAR FINISHING

Medical Research Council

The New LMB Building Project

 RMJM 83 Paul Street London EC2A 4UT

 T 020 7549 8900

 F 020 7250 3131

 E london@rmjm.com

 W www.rmjm.com



ISSUE	ISSUE	ISSUE	AUTHOR /	CHECKED	APPROVED
REVISION	STATUS	DATE	REVISER	BY	BY
-	Draft	24-02-2009	DLSS		
А	D1	19-02-2010	DLSS		
В	D2	23-02-2010	DLSS	CF	CF
С	D2	05-03-2010	DLSS	CF	CF
D	D2	18-03-2010	CF		
E	C1	20-04-2010	DLSS	CF	CF
F	C1	23-07-2010	DLSS	LsG	LsG
G	C1	15-05-2012	RMJM	LsG	LsG

Note: Rev G

Contents M60

PAINTING/ CLEAR FINISHING

New Laboratory of Molecular Biology Building Project

Specification Stage F Issue Issue 125 23/07/2010

RMJM 83 Paul Street EC2A 4UT London Tel: 020 7549 8900 Fax: 020 7250 3131

# **Table of Contents**

# M60 - Painting/ Clear Finishing

M60	<b>PAINTING/ CLEAR FINISHING</b>	6	1	l
M60.1000	SCOPE, SUBMITTALS, PERFORMANCE	TESTING	AND 1	1
M60.1100	SPECIFICATION AND SCOPE		1	1
M60.1101	Descriptive Works			1
M60.1102	Scope of Works			1
M60.1103	Particular Interfaces			1
M60.1200	SYSTEM TYPES			1
	Masonry Paint			1
M60.1201	Type PT1-01 Floor Paint			1
M60.1202	Type PT1-02 Emulsion Paint			1
M60.1203	Type PT1-03 Protective Steelwork Paint			1
M60.1204	Type PT1-04 Dust Sealer		-	1
M60.1205	Type PT1-05 Eggshell Paint		-	1
M60.1206	Type PT1-06 Satin Paint		-	1
M60.1207	Type PT1-7 Anti Bacterial Paint			1
M60.1208	Type PTI-08 Dust Sealer			1
M60.1209	Type PT1-09 Protective Steelwork Paint			2
M60.1210	Type PT1-10 Gloss Paint			2
M60.1211	Type PT1-11 Masonry Paint			2
M60.1212	Type PT1-12 Intumescent coating			2 2
M60.1213	Type PT1-13 Intumescent coating			
M60.1300	SUBMITTALS AND TESTING			2
M00 4004	Tender Submittals			2
M60.1301	Tender Response	liter Davids mandra		2
Mc0 1000	Samples, Mock-ups, Prototypes and Qua	lity Benchmarks		2
M60.1302 M60.1303	Pre-contract Samples Post Contract Samples			2 2
M60.1304	Mock-ups			2
M60.1304	Prototypes			2
M60.1306	Benchmark Requirements			2
	Testing			2
M60.1307	Evidence of Performance			2
M60.1308	Slip Resistance Testing			2
M60.1400	PERFORMANCE REQUIREMENTS		3	3
	General			3
M60.1401	Visual Requirements			3
M60.1402	Deleterious Materials			3
M60.1403	Gloss Levels		:	3
M60.1404	Scratch Resistance			3
M60.1405	Life Expectancy			3
M60.1406	Slip Resistance			3
M60.2000	SYSTEMS AND MATERIALS		3	3
M60.2100	SYSTEM DESCRIPTIONS		3	3
M60.2101	Type PTI-01 Floor Paint			3
M60.2102	Type PTI-02 Emulsion Paint		4	4
M60.2103	Type PTI-03 Protective Steelwork Paint			4
M60.2104	Type PTI-04 Dust Sealer			4
M60.2105	Type PTI-05 Eggshell Paint			4
M60.2106	Type PTI-06 Satin paint			4
M60.2107	Type PTI-7 Anti Bacterial Paint			5
M60.2108 M60.2109	Type PTI-08 Dust Sealer Type PTI-09 Protective Steelwork Paint			5 5
M60.2109	Type PTI-10 Gloss Paint			5
M60.2111	Type PT1-11 Masonry Paint			6
M60.2112	Type PT1-12 Intumescent coating			6
M60.2112	Type PT1-13 Intumescent coating			6
M60.2200	MATERIALS			6
M60.2201	Source of Materials			6
M60.3000	SITE APPLICATION		e	
M60.3100	GENERAL		ť	6

M60.3101	Compatibility	6
M60.3102	Structure	7
M60.3103	Fixtures	7
M60.3200	PREPARATION	7
M60.3201	General	7
M60.3202	Suitability of Surface	7
M60.3203	Removal of Coatings by Sandblasting	7
M60.3204	Blast Cleaning Steel	7
M60.3300	APPLICATION	7
M60.3301	Painting Generally	7
M60.3400	FINISHES	8
M60.3401	General	8
M60.3500	PROTECTION OF ADJACENT SURFACE	8
M60.3501	General Requirements	8

# M60 PAINTING/ CLEAR FINISHING

**Descriptive Works** 

To be read in conjunction with Section A and other related sections of the Specification, Preliminaries and Contract Conditions.

# M60.1000 SCOPE, SUBMITTALS, TESTING AND PERFORMANCE M60.1100 SPECIFICATION AND SCOPE

M60.1101

- a) For design and general performance requirements, refer to Section A of the Specification. Specific design and performance requirements are as defined in the particular trade sections.
- b) Complete the Detailed Design, supply, apply and warrant the works complying with the visual intent shown on the Design Drawings and criteria stated in the Specification.
- c) Where no product or supplier is indicated in the Specification, propose suitable materials and systems prior to Contract award which comply with the visual intent and performance criteria stated and remain fully responsible for the Detailed Design of the works.
- d) Where a particular material, product or supplier is indicated in the Specification, such material, product or supplier shall be deemed indicative representing the Main Contractor's design intent only. The Trade Contractor may complete the application using that product, or such other confirmed as acceptable by the Main Contractor in writing, but shall remain fully responsible for the Detailed Design and performance of the works.

#### M60.1102 Scope of Works

This section of the Specification, when read in conjunction with the Design Drawings, provides particular requirements with respect to the following:

- a) Emulsion paint.
- b) Eggshell paint.
- c) Satinwood paint.
- d) Gloss paint.
- e) Sealer.
- f) Masonry paint.
- g) Floor paint.
- h) Anti bacterial paint.
- i) Protective steelwork paint.
- j) Protective timber paint.
- M60.1103 Particular Interfaces
  - a) Complete the Detailed Design of all interfaces with adjoining trades prior to commencement of manufacture.
  - b) Ensure that all interfaces are fully co-ordinated prior to commencement.

## M60.1200 SYSTEM TYPES

# Masonry Paint M60.1201 Type PT1-01 Floor Paint

Anti-slip floor paint. M60.1202 Type PT1-02 Emulsion Paint Emulsion paint finish to walls and ceilings. M60.1203 Type PT1-03 Protective Steelwork Paint Micaceous Iron Oxide (MIO) paint. M60.1204 Type PT1-04 Dust Sealer Paint finish dust sealer to masonry. M60.1205 Type PT1-05 Eggshell Paint Eggshell paint finish to walls and ceilings. M60.1206 Type PT1-06 Satin Paint Satin painted woodwork. M60.1207 Type PT1-7 Anti Bacterial Paint Special anti bacterial paint finish. M60.1208 Type PTI-08 Dust Sealer Dust sealer paint finish to masonry and concrete.

M00 4000	Turne DT1 00 Durte stine Ote should Deint
M60.1209	Type PT1-09 Protective Steelwork Paint
M00 1010	Acrylic urethane sheen finish to steelwork.
M60.1210	Type PT1-10 Gloss Paint
	Gloss paint to exposed pipe work.
M60.1211	Type PT1-11 Masonry Paint
	Masonry paint.
M60.1212	Type PT1-12 Intumescent coating
	Intumescent site applied timber coating.
M60.1213	Type PT1-13 Intumescent coating
	Intumescent site applied steel coating.
M60.1300	SUBMITTALS AND TESTING
	Tender Submittals
M60.1301	Tender Response
	<ul> <li>a) Provide tender submittals in accordance with the requirements of Section A.4000 of the Specification.</li> </ul>
	<ul> <li>b) Submit a design response with the Tender proposal, to include all profiles of typical conditions, with dimensions.</li> </ul>
	c) The Tender design response shall include:
	i) Samples where specified.
	ii) List of Tests included.
	iii) QA/ QC programme.
	iv) List of proposed Working Drawings.
	v) Summary of deviations from the Specification.
	vi) Outline technical specifications reflecting proposed materials/ systems.
	vii) A list of proposed suppliers and sub-contractors intended to be used.
	Samples, Mock-ups, Prototypes and Quality Benchmarks
M60.1302	Pre-contract Samples
	In accordance with Section A.4000, pre-contract samples of the following shall be provided:
	a) 300mm x 300mm sample to specified substrate.
M60.1303	Post Contract Samples
	In accordance with Section A.4000, post contract samples of the following shall be provided:
	a) 300mm x 300mm sample to specified substrate.
M60.1304	Mock-ups
	Not required.
M60.1305	Prototypes
	Not required.
M60.1306	Benchmark Requirements
	The following quality benchmarks shall be provided in locations to be agreed with the Main Contractor, in accordance with Section A.4000:
	a) First 9m <sup>2</sup> of each type.
	Testing
M60.1307	Evidence of Performance
	<ul> <li>Provide technical information/ test certificates to demonstrate that materials meet the requirements of the Specification.</li> </ul>
	<ul> <li>Testing and provision of data do not relieve the Trade Contractor of his responsibilities regarding the performance requirements, service life and warranties provided.</li> </ul>
M60.1308	Slip Resistance Testing
	a) Testing for slip resistance shall comply with the following documents:
	<ul> <li>i) 'Assessing the slip resistance of flooring' by The Health and Safety Executive (latest published version).</li> </ul>
	<ul> <li>ii) 'The assessment of floor slip resistance, the UK Slip Resistance Group guidelines' by The UK Slip Resistance Group (latest published version).</li> </ul>

- b) Testing shall be performed at an independent UKAS accredited laboratory accredited to perform the specified test methods.
- c) Pendulum Test: Flooring shall be evaluated in both dry and wet conditions using the TRL Pendulum Tester in accordance with BS 7976 and the recommendations of the UK Slip Resistance Group to obtain the pendulum test value (PTV) specified.
- d) Roughness Test: Flooring shall be evaluated using a surface roughness meter, in accordance with the recommendations of the UK Slip Resistance Group, to obtain the surface roughness (Rz) value specified.
- e) Samples shall be tested at the following stages of the project:
  - i) Approval.
  - ii) Production.
  - iii) Post-installation (in situ).
- f) Submit test results to the Main Contractor for acceptance in due time, prior to each of the project stages or as agreed with the Main Contractor.
- g) Test samples must include any surface treatment to be applied to the finished flooring.

# M60.1400 PERFORMANCE REQUIREMENTS

Comply with the general performance of Section A.5000 and the following specific performance requirements.

#### General

- M60.1401 Visual Requirements
  - a) The definitions contained in BS 2015and BS EN ISO 4618 shall be used to define adhesion, excess fading, non-uniformity of colour, cracking, peeling, pitting or other visual defects. None of the defects shall be acceptable.
  - b) Visual requirements shall be based upon samples submitted and agreed.
  - c) For the purpose of conforming with visual requirements, the work shall be viewed with normal eyesight from a distance of 2m for colour consistency and excessive fading and 1m for cracking, pitting and other defects.

### M60.1402 Deleterious Materials

Paint shall be lead free.

M60.1403 Gloss Levels

Specular gloss levels specified shall be measured in accordance with BS EN ISO 2813.

- M60.1404 Scratch Resistance
  - Paints used shall comply with the minimum requirements of BS EN ISO 1518"Scratch test".
- M60.1405 Life Expectancy

Life expectancy to first maintenance for paint finishes shall be a minimum of 4-5 years. Provide a written specification for inclusion in the operations and maintenance manual for recoating (by others) at the end of the period.

- M60.1406 Slip Resistance
  - a) When tested using the TRL Pendulum Tester, flooring, inclusive of surface treatment, shall achieve the following pendulum test value (PTV):
    - i) Dry: Not less than 40 PTV.
    - ii) Wet: Not less than 40 PTV.
  - b) When tested using the surface roughness meter, flooring shall achieve the following surface roughness (Rz) value:
    - i) Not less than 20 µm Rz.

# M60.2000 SYSTEMS AND MATERIALS

# M60.2100 SYSTEM DESCRIPTIONS

M60.2101

- Type PTI-01 Floor Paint
  - a) Element: Paint coating to floors.
  - b) Location: Plant rooms / Level 1 Plant Rooms / Energy Centre/ Interstitial floor void walkways/ Plant towers/ Welding Workshop.
  - c) Indicative Product:
    - i) Indicative Manufacturer: ICI Glidden or acceptable equivalent.
    - ii) Reference: Glidden Trade Anti-slip floor paint or acceptable equivalent.
  - d) Description: Prepare and paint floors with primer coat, one undercoat and two finish coats in accordance with manufacturers written instructions.

	e)	Colour: light grey (RAL 7046 to be confirmed).			
	f)	Other Requirement:			
		i) Paint prior to plant installation and make good post installation.			
	g)	Notes: Substrate to be as S. Engineers concrete specification.			
M60.2102	Тур	Type PTI-02 Emulsion Paint			
	a)	Element: Emulsion paint finish to walls and ceilings.			
	b)	Location: atrium, circulation corridors, escape routes laboratories, write-up, offices, seminar rooms etc.			
	C)	Indicative Product:			
		i) Manufacturer: ICI Dulux or acceptable equivalent.			
		ii) Reference: Washable/ wipeable vinyl silk emulsion or acceptable equivalent.			
	d)	Description: Prepare and paint walls and ceilings with initial thinned coat and two finish coats in accordance with manufacturers written instructions.			
	e)	Colour: TBC.			
	f)	Other Requirement:			
		i) Fire rated to Class 0 - to atrium, circulation and escape routes.			
		ii) Fire rated to Class 1 - general laboratories, write-up, and all other rooms larger than 30m <sup>2</sup> .			
		iii) Fire rated to Class 3 - rooms smaller than 30m <sup>2</sup> .			
M60.2103	Тур	e PTI-03 Protective Steelwork Paint			
	a)	Element: Protective paint finish to steelwork.			
	b)	Location: All un-galvanised external steelwork.			
	C)	Indicative Product:			
		i) Manufacturer: International Paints or acceptable equivalent.			
		ii) Reference: Micaceous Iron Oxide (MIO) or acceptable equivalent.			
	d)	Description: Prepare and paint all surfaces strictly in accordance with manufacturer's written instructions.			
	e)	Note: Make good post installation.			
M60.2104	Тур	e PTI-04 Dust Sealer			
	a)	Element: Paint finish dust sealer to masonry.			
	b)	Location: Plenum interiors generally.			
	C)	Indicative Product:			
		i) Manufacturer: International Paints or acceptable equivalent.			
		ii) Reference: Micro-porous clear finish or acceptable equivalent.			
	d)	Description: Prepare and paint all surfaces strictly in accordance with manufacturer's written instructions.			
	e)	Colour: Clear.			
M60.2105	Тур	e PTI-05 Eggshell Paint			
	a)	Element: Eggshell paint finish to walls and ceilings.			
	b)	Location: Aquatics Laboratory, Electron Microscope, Tissue Culture Rooms, Protein Expression Laboratory.			
	c)	Indicative Product:			
		i) Manufacturer: ICI Dulux or acceptable equivalent.			
		ii) Reference: Eggshell finish or acceptable equivalent.			
	d)	Description: Prepare and paint walls and ceilings with initial thinned coat, one undercoat and two finish coats in accordance with manufacturers written instructions.			
	e)	Colour: White 00 E55.			
	f) T	Notes: Substrate is generally plaster or plaster board.			
M60.2106		e PTI-06 Satin paint			
	a)	Element: Satin painted woodwork.			
	b)	Location: All unfinished wood doors, door frames architraves miscellaneous woodwork and trim.			
	C)	Indicative Product:			
		<ol> <li>Manufacturer: ICI Dulux or acceptable equivalent.</li> </ol>			

		ii) Reference: Satin wood or acceptable equivalent.
	d)	Description: Prepare and paint woodwork with primer coat, one undercoat and two finish coats in accordance with manufacturers written instructions.
	e)	Colour: White 00 E 55.
	f)	Other Requirement:
		i) Fire rated to Class 0 - to atrium, circulation and escape routes.
		ii) Fire rated to Class 1 - general laboratories, write-up, and all other rooms larger than 30m <sup>2</sup> .
		iii) Fire rated to Class 3 - rooms smaller than 30m <sup>2</sup> .
<del>M60.2107</del>	Тур	pe PTI-7 Anti Bacterial Paint
	<del>a)</del>	Element: Special anti bacterial paint finish.
Refer to Addendum	<del>ן א</del>	Location: Containment Laboratories refer to drawing 2053(40)012.
M60.2107	<del>c)</del>	Indicative Product:
		i) Manufacturer: Construction Specialities(UK) or acceptable equivalent.
		ii) Reference: C/ S Armourglaze or acceptable equivalent.
	<del>d)</del>	Description: Prepare and paint walls and ceilings with solventless, self-sterilising, anti-bacterial, chemical and water resistant paint finish in accordance with manufacturers written instructions.
	<del>e)</del>	Colour: White 00 E 55.
M60.2108	Тур	pe PTI-08 Dust Sealer
	a)	Element: Paint finish dust sealer to masonry and concrete.
	b)	Location: Interstitial Floor Voids - main areas excluding walkways.
	c)	Indicative Product:
	,	i) Manufacturer: Universal Sealants Ltd or acceptable equivalent.
		ii) Reference: Nufins Conseal Acrylic or acceptable equivalent.
	d)	Description: Prepare and paint walls floors and ceilings in accordance with manufacturers written instructions.
	e)	Colour: clear.
	f)	Notes: Clear acrylic water based dustproofer sealer.
M60.2109	Тур	pe PTI-09 Protective Steelwork Paint
	a)	Element: Acrylic urethane sheen finish to steelwork.
	b)	Location: Atrium roof exposed steel beams.
	C)	Indicative Products:
	d)	Manufacturer: Leigh's Paints or acceptable equivalent.
	e)	Reference:
	,	i) Primer: Epigrip C400V3 or acceptable equivalent.
		ii) Undercoat: Resistex C237 or acceptable equivalent.
		iii) Topcoat: Resistex C237 or acceptable equivalent.
	f)	Colour: Dark grey (RAL 7046 to be confirmed).
	g)	Other Requirement:
	9/	i) Preparation blast clean to sa 2.5.
		ii) Primer to be epoxy zinc phosphate primer/ build coat at 100 microns dft.
		iii) Undercoat to be acrylic urethane.
	<b>b</b> )	iv) Top coat to be acrylic urethane (sheen finish) at 50 microns dft.
	h) i)	Preparation shall be in accordance with manufacturers written product data. Notes: Compatibility with protective coating systems specified in the S Engineers specification G10 to be confirmed.
M60.2110	Typ	pe PTI-10 Gloss Paint
	a)	Element: Gloss paint to exposed pipe work.
	b)	Location: Exposed pipe work in habitable rooms.
	C)	Indicative Product:
		i) Manufacturer: ICI Dulux or acceptable equivalent.

		ii) Reference: Aquatec gloss or acceptable equivalent.
	d)	Description: Prepare and paint in accordance with manufacturers written instructions.
	e)	Colour: White 00 E 55.
M60.2111	Тур	e PT1-11 Masonry Paint
	a)	Element: Masonry paint to brick, block and rendered surfaces.
	b)	Location: As indicated on the Design Drawings.
	c)	Indicative Product:
		i) Manufacturer: Indicative Manufacturer: ICI Glidden or acceptable equivalent.
		ii) Reference: Glidden Trade Endurance Pliolite® Based Masonry Paint
	d)	Preparation shall be in accordance with manufacturers written product data.
	e)	Initial coat(s): Glidden Trade Pliolite® Based Masonry Paint.
	f)	Recoat: Glidden Trade Pliolite® Based Masonry Paint.
	g) T	Application: Brush, roller or spray in accordance with manufacturers written instructions.
M60.2112		e PT1-12 Intumescent coating
	a)	Element: Site applied clear natural timber intumescent coating.
	b)	Location: Internal as indicated on the Design Drawings.
	C)	Indicative Product:
		<ul> <li>Manufacturer: Nullifire; (Tel: 024 7685 5000) or acceptable equivalent.</li> <li>Reference: Nullifire System W+ or acceptable equivalent.</li> </ul>
	d)	ii) Reference: Nullifire System W+ or acceptable equivalent. Preparation shall be strictly in accordance with manufacturers written product data.
	u) e)	Basecoat: Applied to measured thickness in accordance with manufacturers
	,	recommendations.
	f)	Wet and dry film thickness, and drying times shall be in strict accordance with manufacturers written instructions.
	g)	Top Seal: 1 coat decorative seal.
	h)	Application: Brush to achieve required loading, roller or spray shall be in strict accordance with manufacturers written instructions.
	i)	Finish: Satin.
M60.2113	Тур	e PT1-13 Intumescent coating
	a)	Element: Site applied structural steel intumescent coating - 60 minute fire rating.
	b)	Location: Internal as indicated on the Design Drawings.
	C)	Indicative Product:
		i) Manufacturer: Nullifire; (Tel: 024 7685 5000) or acceptable equivalent.
	d)	ii) Reference: Nullifire System S708-60 or acceptable equivalent.
	d)	Preparation shall be strictly in accordance with manufacturers written product data.
	e)	Primer: Ensure existing primer is compatible with Nullifire Coatings and primed surface is clean, dry and free from any grease, dust and contaminants. Primer should be a minimum of 50 - 75 microns dft ensuring blast profile is fully covered. Primer should be no more than 250 microns thick.
	f)	Nullifire System S708-60 applied to meet the dft requirement for 60 minute fire-rating.
	g)	Topseal coat: TS816WAC High Build Topseal at 50 microns dft per coat ( 2 coats may be required when brushed or primary colours ).
	h)	Application: Shall be in strict accordance with manufacturers written instructions.
	i)	Finish: Matt.
M60.2200	MA	ATERIALS
M60.2201	Sou	rce of Materials
	a)	Coating materials shall be obtained from one source and the Main Contractor shall be notified of the selected manufacturer before the work commences.
	b)	All materials used shall be as recommended for the intended application and a warranty shall be provided from the manufacturer for the particular surface and the conditions of exposure. They shall be compatible with each other.
M60.3000	SI	TE APPLICATION
M60.3100	GE	NERAL

M60.3101 Compatibility

- a) Where surfaces have been treated with preservatives or fire retardants, the layer coating materials shall be compatible with the treatment and shall not inhibit its performance.
- b) The Main Contractor shall be informed of any discrepancy in the specification of coatings. Instructions shall be obtained before proceeding with the application.
- c) All steelwork shall have received corrosion protection treatment and the finishing coats shall be compatible and maintain the integrity of the protective system.

M60.3102 Structure

The concrete structure may have inherent cracks measuring up to 0.3mm in width, due to the loading of the structure. Decoration and preparation of the concrete surfaces shall therefore not take place until the structure and roof are complete. The cracks within the structure shall be filled as stated below.

M60.3103 Fixtures

Before commencing work, remove fixtures and fittings (not to be coated), set aside and replace on completion.

## M60.3200 PREPARATION

General

M60.3201

- a) Work shall comply with BS 8000: Part 12, BS 6150 and any additional requirements of the Specification.
- b) When removing or partially removing coatings, the methods used shall not damage the substrate or adjacent surfaces nor adversely affect subsequent coatings. Also, any damaged areas of plasterboard/ dry lining shall be made good to the satisfaction of the Main Contractor before commencing new coating finishes.
- c) Materials used in preparation shall be of the types recommended by their manufacturers and by the coating manufacturer for the situation and surfaces being prepared.
- d) Surfaces shall be fully rubbed down and prepared. The primer and corrosion protection coats of any steelwork shall be touched up after removing, or partially removing, existing coatings. The methods used shall not damage the substrate or adjacent surfaces, nor adversely affect subsequent coatings. The preparatory coatings used shall be of the types recommended by the coating manufacturer for the situation and surfaces being prepared to receive new finishes.
- e) Oil based stoppers/ fillers shall be applied after priming; water based stoppers/ fillers shall be used before priming unless otherwise recommended in writing by the manufacturer. Water based stoppers/ fillers shall be patched after priming.
- f) Where doors are delivered to Site in a finished condition, any necessary protection shall be provided to the doors when applying coatings to the frames and the like, allowing sufficient drying times to coatings to ensure that the doors are not marked in any way with the coating material.
- g) Timing/ Making Good:
  - i) There shall be an interval of at least the period recommended in writing by the manufacturer between successive coats of paint.
  - ii) All unsatisfactory paintwork shall be made good with additional coats of material at the Trade Contractor's own expense, to the satisfaction of the Main Contractor.

M60.3202 Suitability of Surface

Application of coatings shall not occur until the surfaces and conditions within any given area to receive the specified coatings are acceptable.

M60.3203 Removal of Coatings by Sandblasting

Removal of existing coatings, by sandblasting, shall be carried out by specialists using abrasives and pressures appropriate to the substrate. Take all necessary precautions to minimise dust and residues.

#### M60.3204 Blast Cleaning Steel

- a) Oil and grease shall be removed by washing with white spirit or steam.
- b) Steel shall be blast cleaned in dry atmospheric conditions using an abrasive of suitable type and size, free from contamination by fire, moisture and oil, removing any existing coatings in the process.
- c) Blasting shall be continued until the finish complies with BS EN ISO 8501: Part 1, preparation grade Sa 2.5.
- d) Abrasive residues shall be removed.
- e) Surfaces shall be primed as soon as possible after blast cleaning, and in any case within four hours.

# M60.3300 APPLICATION

M60.3301

Painting Generally

The works shall comply with BS 8000: Part 12, BS 6150 and any additional requirements of the Specification.

## M60.3400 FINISHES

M60.3401

General

- a) Once applied the finish shall not in any way slump, flow, crack, flake, split, sag, pit, bubble, blister, float, effloresce, craze, shrink, break, wrinkle, crinkle, yellow, chalk, fade, discolour, powder, stain, bleed or lose its finish or gloss in any way. Full account of the extremes of all atmospheric and environmental conditions shall be taken.
- b) All surface finishes shall be dry to handle.
- c) Unless otherwise specified, thinning shall only be carried out in accordance with the manufacturer's recommendations.
- d) There shall be no variation of final surface finish.
- e) All paints shall be anti-mould and stable in humid conditions and suitable to hot climate exposure.

# M60.3500 PROTECTION OF ADJACENT SURFACE

M60.3501

General Requirements

- a) Adequate protection shall be provided to adjacent surfaces which are completely pre-finished or have a fair-faced natural finish as specified.
- b) Splashes resulting from work carried out on Site shall be cleared from all surfaces.
- c) Upon completion of the work, defects to finished surfaces shall be made good or replaced if they cannot be adequately cleaned or repaired to achieve a finish acceptable to the Main Contractor.
- d) Adjacent elements shall be removed and refixed where appropriate, prior to and after applying coatings.

#### **End of Section**

#### **Addendum Revision G**

M60.2107 Paint Type PTI-07 Antibacterial HIGH PERFORMANCE WALL COATING

PTI-07 - Containment (CL2 & CL3) & CBS laboratory (reinforced) Interior Reinforced Coating System – FG Light with Armourglaze Manufacturer: Construction Specialties (UK) Ltd Tel: +44 (0) 1296 652800 Fax: +44 (0) 1296 652888 E-mail: nbs@c-sgroup.co.uk

Surface(s): Plastered blockwork walls and timber doors (doors pre-primed): One coat PENETRATION PRIMER (suitable for use on plaster/plasterboard surfaces @ 8m<sup>2</sup>/kg) or One coat MULTI-SURFACE PRIMER (for ceramic tiles, melamine surfaces etc. @ 10m<sup>2</sup>/kg) or MULTI-SURFACE PRIMER (METAL) @ 10m<sup>2</sup>/kg for metal priming.

Initial coat: One Coat Wallglaze Hygienic mastic at corners etc Intermediate coats: One integral FG BODY COAT @ 2.25 m²/kg, incorporating one layer 50 g/m² fibreglass Tissue. One coat Gelcoat @ 7 m²/kg One coat Armourglaze Satin (White) @ 8.5 m²/kg

Finishing coat: One coat Armourglaze Satin (White) @ 8.5 m<sup>2</sup>/kg

Notes: Initial coat: Primers are available to suit all substrates, including types for special applications. Refer to Construction Specialties for further details.

# PTI-07 – Tissue Culture Laboratories, plate pouring and all other fumigable spaces (Non-reinforced)

Interior Reinforced Coating System – FG Light with Armourglaze Manufacturer: Construction Specialties (UK) Ltd Tel: +44 (0) 1296 652800 Fax: +44 (0) 1296 652888 E-mail: <u>nbs@c-sgroup.co.uk</u>

Surface(s): Plastered blockwork walls and timber doors (doors pre-primed): One coat PENETRATION PRIMER (suitable for use on plaster/plasterboard surfaces @ 8m<sup>2</sup>/kg) or One coat MULTI-SURFACE PRIMER (for ceramic tiles, melamine surfaces etc. @ 10m<sup>2</sup>/kg) or MULTI-SURFACE PRIMER (METAL) @ 10m<sup>2</sup>/kg for metal priming.

Initial coat: One Coat Wallglaze Hygienic mastic at corners etc

Intermediate coats: One coat multi-surface primer  $@6-14 \text{ m}^2//\text{ltr}$ , Universal Undercoat  $@9-11 \text{ m}^2//\text{ltr}$ , One coat Armourglaze Satin (White)  $@8.5 \text{ m}^2//\text{ltr}$ .

Finishing coat: One coat Armourglaze Satin (White) @ 8.5 m<sup>2</sup>//ltr,

Notes: Initial coat: Primers are available to suit all substrates, including types for special applications. Refer to Construction Specialties for further details

## 3911

## Specification

Stage F

Title:

N10 Furniture, Equipment, Fixtures and Fittings

Medical Research Council

The New LMB Building Project

## BAM Design

Centrium Business Park Griffiths Way St Albans Herts AL1 2RD Tel 01727 894200 design@bam.co.uk



#### 3911- NLMBB

# N10 Furniture, Equipment, Fixtures and Fittings 04 February 2010

Rev A – Updated following BAMC & RMJM comments 5<sup>th</sup> Feb 2010

Rev B – Issued 5<sup>th</sup> may 2010

Updated to consolidate RMJM & BAMD N10 elements FLA-062 specified as adjustable shelves, FLA- 013/4 omitted, 130W omitted, RMJM items added Clause 160A Peninsular shelving rear guard requirement noted Clause 130 A &B 130 C -Bench frame 860mm clear dimension noted Worktop specification changed from Top lab + to AthlonF Burdinola Specification added for under bench units and corridor furniture FLA-058 & FLA-66 Added FLA-010 (all types) & FLA-011 Heights reduced to 1100m from 1130mm to allow for worktop Drawing references added Burdinola & RMJM comments incorporated 22/04/10 H & S Items added FLA-016-FLA-019 Items 350D - 350G Good-In Desk added Item 131G Electronic Workshop Items added FLA-008-5 (160Ba), FLA-008-6 (160Bb), and FLA-081/2 (160Ga) Rev C - 18th June 2010 Issued informally for comment FLA-096 width reduced to 900m from 1000mm to match (40) 164-1 Electronic Workshop Item added FLA-096/1 (135Ba) Clause 160 C amended clarifying stainless steel spur allocation

Clause 130Fa added (FLA-003-7) Clause 130Fb added (FLA-003-8) Clause 130Fc added (FLA-003-9) Electronic Workshop item FLA-008-2 (160Bc) added FLA-088 changed to FLA-088/1 & FLA-088/2 added as new type (160 Ra) FLA-081/3 added as new type in computing workshop to show different depths (160 Gb) FLA-081/2 (160 Ga) revised to show epoxy coated spurs Clauses 161F, 161G & 161H amended Clauses 161Ha & 161Ha added FLA-004 type 2 added (clause 130Ga) Clause 1600 amended FLA-061 (161F) removed as duplicated elsewhere RMJM Drawing locations added to: FLA-069, 069A, 066, 068, 068A, 073, 100 071, 048, 048A, 094; FLE-112, 114, 116; FXT-002, 04, 05, 06, 07, 03A, 03B, 03C, 093; IWS-012A, 016; MIR-02B, SFL-02 Clauses 160a & 160 F amended, rear guard note added and omitted Clause 160I (FLA-083) amended as per CRT comments RFI 462 Task lighting (FLE-006) note added to relevant shelving types Finishes revised / expanded to the flowing items clauses, 130J, 131, 131c, 131d, 131f, 135e, 130o, 130p, 130q, 110p, 110q, 110o, 130s, 130t, 130u, 130x, 135j, 135k, 135l, 135m, 130v, 130o, 160y, 106z, 160qb, 160q, 110n, 135a, 135b Securing clip note added to all under bench units and bench frames Hinge positions noted on all corridor furniture items Mastic / silicone seal noted on corridor furniture plinths Post box cut out noted on corridor safety stations Gas cylinder cupboard manifold note revised to BAMSE supply Melamine colour confirmed as Ivory Mastic seal note added to peninsular units Drip detail and rounded corners note added to worktop specifications End panel note added to bench frames Up stands noted as being fixed to worktops Notes added to items with drawers specifying rebate in drawer front & 200m deep sides to deep drawers Melamine colour confirmed as Finsa 183-Crema 005 Trespa colour confirmed as CM E 0-015 Pastel grey

> Rev D – Issued for D3 Client Comment FLA-001 reference for bench frames revised to FLA-001 'types' PVC lipping reference omitted for veneer furniture items

FLA-048 (blackout blinds) Clause 242 revised noting manual operation Stainless Steel Grade added to shelving spur and uprights 160Ia added - FLA-83/1a

Rev E – Informally issued to Burdinola for comment Clause 160Qa omitted due to duplication FLA-057 (Clause 1350) dimensions revised PVC Lipping added back into veneer furniture (pelmets, carcasses & shelves only)

#### Rev F – Issued for Construction

FLA-039 added FLA-068, FLA-068A, FLA-069, FLA-69A, FLA-073 updated from RMJM FLA-067, FLA-067A, FLA-072, FLA-68B, FLA-68C added from RMJM

Rev G - Issued for C2 - 03-08-10

Clause 160F amended Clause 200Wa (FLA-103) & 200Wb (fla-102) added

REV H - Issued for C3 - 23-08-10

Clause 160A amended Clause 135Q updated

REV J – Issued for C4 06-09-10

Clause 160La added Clause 160la amended

#### **Rev K**

Clause 160Ga amended (Chemistry Peninsular Bench) Clause 160F amended In response to RFI-295

Rev L

Updated to include Restaurant Staff Lockers & Benches -Clause170Aa 170Ab

Rev M

Clauses 270, 270a, 270a/1, 270c & 270 amended omitting 'MRC supply & Fit Note' Clause 200BB added – FLA-001/1

#### Rev N

Grade of stainless steel for shelving spurs, under shelf brackets and bookends revised from 202 to 304 RMJM: Clause 110V- FXT-13 added ; Cable grommets added to desk tops of FXT-07, FLA-071, FLA-067, FLA-069

#### Rev O

FLA-005 additional information added

Rev P Clause 240 amended

#### Rev Q

Clause 270a amended Various clauses -Melamine colour to laboratory furniture and shelving globally revised to RAL-9010 Clause 110 clarified Mirror sizes amended to align with current drawings clauses 270 & 270a Colour confirmed for clause 170AB Locations identified for Curtains, clause 235

Rev R

Rev R RMJM Items added Clauses 160Q & 161J Clause 110K updated (FLA-014)

Rev S Clause 171a revised – Lecture seat colour confirmed

Rev T

Clauses 171A (Lecture Theatre seating) & 125D (Library Desk) updated and issued for C12

### Rev U

Mirror references updated to include restaurant area, Clauses 207A & 270D

N10 N10 Furniture, Equipment, Fixtures and Fittings

### N10 Furniture, Equipment, Fixtures and Fittings

To be read with Preliminaries/General conditions.

#### PRODUCTS

110 PURPOSE MADE - FXT-02a - COUNTER TO DISPATCH (refer to drawing (40) 050 & (40) 164/4)

Location Main Stores Dispatch Room facing Atrium

- Manufacturer: By Specialist Joinery Contractor TBC
- Standard: To BS EN 527.
- Timber: To BS EN 942.
  - Species: N/A.
  - Appearance class: N/A.
  - Moisture content on delivery: N/A.
- Wood based boards: Oak veneer faced plywood manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 18 mm thick.
- Other materials: Stainless steel kick plinth & solid plastics counter top by Staron (UK) or similar equal and approved.
- Finishes: match FLA-093.
- Adhesive: To BS 1203.
- Fixings: As Manufactured.
  - Fasteners: As Manufactured.
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: concealed cable management; integral power & data outlets- Work surface to be site scribed

#### 110A CORRIDOR FURNITURE REF - FLA-010/1 - STORAGE CUPBOARDS

- Manufacturer: Burdinola
- Dimensions: 1100mm H x 650mm W x 480mm D
- Typical Location: Corridors refer to drawing (40) 164/100/01-100/10 inclusive & (40) 100 series drawings for locations
- Standard: To BS EN 527.

• Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick. Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310

- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS – All hinges on corridor furniture to line through horizontally

- Other materials: 4mm tempered safety glass
- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.

• Fixings: Handles: Flush as per mock up. made from brass with metal finished, manufactured by Hafele ref. 151.04.613

Joinery workmanship: As section Z10.

- Metalwork materials and workmanship: As section Z11.
- Other requirements: Shelving supports to be continuous @ 30mm c/c Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal.

Worktop, made from 28mm thick laminate with post-formed front edge ref : Ebony WOHO694 F. Clear mastic / silicone seal to be provided between plinth and vinyl flooring

### 110B CORRIDOR FURNITURE REF - FLA-010/2 - STORAGE CUPBOARDS

- Manufacturer: Burdinola
- Dimensions: 1100mm H x 650mm W x 480mm D
- Typical Location: Corridors refer to drawing (40) 164/100/01-100/10 inclusive series & (40) series drawings for locations
- Standard: To BS EN 527.
  - Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 + 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
- traction-resistant:	0,6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS All hinges on corridor furniture to line through horizontally

Other materials: 4mm tempered safety glass

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush as per mock up. Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.

•Other requirements: Shelving supports to be continuous @ 30mm c/c Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Clear mastic / silicone seal to be provided between plinth and vinyl flooring

#### 110C CORRIDOR FURNITURE REF - FLA-010/4 - STORAGE CUPBOARDS

- Manufacturer: Burdinola
- Dimensions: 1100mm H x 570mm W x 480mm D
- Typical Location: Corridors refer to (40) 164/100/01-100/10 inclusive & (40) series drawings for locations
- Standard: To BS EN 527.

• Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick. Assembled using hidden fixings

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
<ul> <li>traction-resistant:</li> </ul>	0,6 N/mm2	EN 319

- traction-resistant: 0,6 N/mm2 E
   to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS All hinges on corridor furniture to line through horizontally

Other materials: 4mm tempered safety glass

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush as per mock up. Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.

• Other requirements: Shelving supports to be continuous @ 30mm c/c Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Worktop, made from 28mm thick laminate with post-formed front edge ref :

Ebony WOHO694 F Clear mastic / silicone seal to be provided between plinth and vinyl flooring

110E CORRIDOR FURNITURE REF - FLA-011 - PERSONAL LOCKERS

- Manufacturer: Burdinola
- Dimensions: 1100mm H x 350mm W x 480mm D
- Typical Location: Corridors refer to drawing (40) 164/100/01-100/10 inclusive & (40) series drawings for locations
- Standard: To BS EN 527.

• Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
<ul> <li>traction-resistant:</li> </ul>	0,6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS All hinges on corridor furniture to line through horizontally

Other materials: None.

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Locks Metal Finished "OJMAR" ref: Linea Uno.
  - Handles: N/A
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.

• Other requirements: Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Worktop, made from 28mm thick laminate with post-formed front edge ref : Ebony WOHO694 Clear mastic / silicone seal to be provided between plinth and vinyl flooring

- 110F CORRIDOR FURNITURE REF FLA-012 FIRE EXTINGUISHER CUPBOARDS
  - Manufacturer: Burdinola.
  - Dimensions: 2100mm H x 530mm W x 450mm D
  - Typical Location: Corridors refer to (40) 164/100/01-100/10 inclusive & (40) series drawings for locations
  - Standard: To BS EN 527.

Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

<ul> <li>density;</li> </ul>	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
- traction-resistant:	0,6 N/mm2	EN 319
to inflote with water	24 hours: 12% EN 317	,

- to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS All hinges on corridor furniture to line through horizontally

- Metal Hinges: , opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials: None.
- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush as per mock up. Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Shelving supports. Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Clear mastic / silicone seal to be provided between plinth and vinyl flooring

## 110G CORRIDOR FURNITURE REF - FLA-013/1 - STORAGE CUPBOARD

- Manufacturer: Burdinola
- Dimensions: 2100mm H x 630mm W x 480mm D
  - Typical Location: Corridors refer to drawing (40) 164/2, (40) 100/01-100/10 inclusive
  - Standard: To BS EN 527.

• Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick. All the edges lipped with PVC edging 2mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA.

EN 323

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

density;

700 Kg/m3

- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310

- 0,6 N/mm2 EN 319 traction-resistant:
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2

UNE 11-023-92 Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS All hinges on corridor furniture to line through horizontally Other materials: 4mm tempered safety glass

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush as per mock up. Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
  - Other requirements: Adjustable shelving. Shelving supports to be continuous @ 30mm c/c Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Clear mastic / silicone seal to be provided between plinth and vinyl flooring
- CORRIDOR FURNITURE REF FLA-013/2 STORAGE CUPBOARD 110H
  - Manufacturer: Burdinola
  - Dimensions: 2100mm H x 730mm W x 80mm D
  - Typical Location: Corridors refer to drawing (40) 164/2, (40) 100/01-100/10 inclusive •
  - Specification as FLA-013/1
- CORRIDOR FURNITURE REF FLA-013/3 STORAGE CUPBOARD 110
  - Manufacturer: Burdinola
  - Dimensions: 2100mm H x 620mm W x Site Dimension (Approx 85mm) D Specification as FLA-013/1
- 110K CORRIDOR FURNITURE REF FLA-014 GAS CYLINDER CUPBOARD
  - Manufacturer: Burdinola
  - Dimensions: 2100mm H x 630mm W x 480mm D
  - Typical Location: Corridors (40) 164/100/01-100/10 inclusive
    - Standard: To BS EN 527.
    - Wood based boards: Doors/Pelmet fronts: Doors, pelmet fronts: manufactured from 30mm thick fire resistant birch plywood panel, covered with 1mm white oak veneer both faces, all sides dully lacquered without pores, fire resistant lacquer M1 (UNE 23.727) class 1 bonding quality to BS EN 314-2, appearance class E &

to BS EN 635-2 with sanded grade surface finish, 30 mm thick.

Carcass/ Pelmets:

Plastic manufactured from 30mm thick MDF fire resistant panel (UNE-EN 13501), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings.

30mm melamine MDF core physical and mechanical characteristics:

density;	700 Kg/m3	EN 323
humidity:	7 + 3%	EN 322

- humidity:	7 <u>+</u> 3%	EN 32
	00 N/ 0	

- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Lock Hafele 3 Point locking mechanism
- Hinges 4 No. Blum clip top 95 degree opening Other materials: None.
- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
  - Handles: Hefele Ref 151.04.613

- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Unit to be 30mins fire rated (tested against BS:EN 15659) with intumescent seals Therma A Blade 9x3mm. Inside of carcass sides, back and top) to be lined with 20mm thick Promatect silicate insulation board. Inside surface of door to be linned with Promaglaf 12mm blanket & 6mm mdf within aluminium frame. All joints in carcass and door / carcass junctions to be stepped Allowance to be made for fitting of gas manifold & outlets by BAMSE.

#### 20mm Trespa 'Athlon' ramp base.

skirting. made from 20-6mm thick Trespa Athlon,. Classification for Fire resistance - as Euroclass D-S2DO EN 438-4. Clear mastic / silicone seal to be provided between plinth and vinyl flooring

## 110L CORRIDOR FURNITURE REF - FLA-023 - SAFETY STATION

- Manufacturer: Burdinola
- Dimensions: 2100mm H x 530mm W x 350mm D
- Typical Location: Corridors (40) 164/100/01-100/10 inclusive drawings for locations
- Standard: To BS EN 527.

• Wood based boards: Doors/Pelmet fronts: Doors, pelmet fronts: manufactured from 19mm thick fire resistant (see annex 01) birch plywood panel, covered with 1mm white oak veneer both faces, all sides dully lacquered without pores, fire resistant lacquer M1 (UNE 23.727) class 1 bonding quality to BS EN 314-2, appearance class E & to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves/Pelmets:

Plastic manufactured from 19mm thick MDF moisture resistant panel (UNE-EN 13501), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick.

19mm melamine MDF core physical and mechanical characteristics:

<ul> <li>density;</li> </ul>	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
- traction-resistant:	0,6 N/mm2	EN 319
to inflote with woter	04 hours 100/ EN 04	7

- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zinc, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS All hinges on corridor furniture to line through horizontally

Other materials: None.

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.

• Fixings: Handles: made from brass with metal finished, manufactured by Hafele ref. 151.04.613Flush as per mock up. Joinery workmanship: As section Z10.

- Metalwork materials and workmanship: As section Z11.
- Other requirements: Shelving supports, Worktop to receive inset WHB.
   20 x 6mm Trespa 'Athlon' splashback ref: White E2-10.
   20mm Trespa 'Athlon' worktop ref: White E2-10
   Sealant, clear silicone Krafft ref. 62593
   Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Clear mastic / silicone seal to be provided between plinth and vinyl flooring
   Mirror ref: MIR-03 (see clause 270)
   Semi-recessed sink vitreous china Ideal Standard ref. tempo oval 480
   Post box cut out to be provided, refer to drawings for setting out

## 110M CORRIDOR FURNITURE REF - FLA-024 - SAFETY STATION

- Manufacturer: Burdinola
- Dimensions: 2100mm H x 530mm W x 480mm D
- Typical Location: Corridors Refer to (40) 164/100/01-100/10 inclusive drawings for locations

• Standard: To BS EN 527.

Wood based boards: Doors/Pelmet fronts: Doors, pelmet fronts: manufactured from 19mm thick fire resistant (see annex 01) birch plywood panel, covered with 1mm white oak veneer both faces, all sides dully lacquered without pores, fire resistant lacquer M1 (UNE 23.727) class 1 bonding quality to BS EN 314-2, appearance class E &

to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves/Pelmets:

Plastic manufactured from 19mm thick MDF moisture resistant panel (UNE-EN 13501), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
<ul> <li>traction-resistant:</li> </ul>	0,6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: ref Hafele 151.04.613 All hinges on corridor furniture to line through horizontally

Other materials: None.

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
  - Fixings: Handles: made from brass with metal finished, manufactured by Hafele ref. 151.04.613Flush as per mock up.
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Shelving supports, Worktop to receive inset WHB.
   20 x 6mm Trespa 'Athlon' splashback ref: White E2-10.
   20mm Trespa 'Athlon' worktop ref: White E2-10
   Sealant, clear silicone Krafft ref. 62593
   Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal. Clear mastic / silicone seal to be provided between plinth and vinyl flooring
   Mirror ref: MIR-03 (see clause 270)
   Semi-recessed sink ref: Ideal Standard Tempo Oval 48C.
   Post box cut out to be provided, refer to drawings for setting out
- 110N PURPOSE MADE REF FLA-093 PIGEON HOLES
  - Manufacturer: By Specialist Joinery Contractor TBC
  - Dimensions: See drawing (40) 170
  - Typical Location: Dispatch refer to drawing (40) 170/1 & (40) 50 series drawings for locations
  - Standard: To BS EN 527.
  - Wood based boards: Oak veneer faced plywood manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 18 mm thick. Other materials: Oak veneer kick plinth
  - Finishes: Oak veneer to be matt varnished as section M60 to match FX-02a.
  - Adhesive: To BS 1203.
  - Fixings: N/A.
    - Joinery workmanship: As section Z10.
  - Metalwork materials and workmanship: As section Z11.
  - Other requirements: Setting out of pigeon holes TBC by MRC.
- 110-0 PURPOSE MADE REF FLA-049/3 ISLAND STORAGE UNIT WITH PIGEON HOLES • Manufacturer: TBC
  - Dimensions: See drawing (40) 170/2
  - Typical Location: Cores 2N284, 2S165, 3N284, 3S164 refer to RMJM drawings Design and installation: To BS EN 14056.
Standard: To BS EN 527.

Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved EN 314-2, appearance class E to BS EN thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick. Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 + 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
- traction-resistant:	0,6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Adhesive: To BS 1203.
- · Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: 180 degree concealed door hinges; magnetic door catches; shelving supports; door handles;
- 110P PURPOSE MADE REF FLA-049/1 STORAGE UNIT WITH PIGEON HOLES
  - Manufacturer: Burdinola
  - Dimensions: See drawing (40) 170
  - Typical Location: Media Prep & Corridor refer to drawing (40) 164/100 series & (40) 13 series drawings for locations

Design and installation: To BS EN 14056.

Standard: To BS EN 527.

• Wood based boards: All elements: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310

- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.

- Other requirements: Doors: 6mm toughened glass
   2 No. shelves set back 10mm from door to be adjustable at 30mm c/C Other materials: 6mm Glass sliding doors to pigeon holes & doors.
  - Adhesive: To BS 1203.
  - Fixings: Handles: Flush
     loipony workmapship: As so
  - Joinery workmanship: As section Z10. • Metalwork materials and workmanship: As section Z11.
  - Other requirements: Worktop spec TBC. –

### 110Q PURPOSE MADE REF - FLA-049/1a - STORAGE UNIT WITH PIGEON HOLES

- Manufacturer: Burdinola
- Dimensions: See drawing (40) 170
- Typical Location: Media Tissue Culture Prep Corridor refer to drawing (40) 164/100 series & (40) 13 series drawings for locations Design and installation: To BS EN 14056.

Standard: To BS EN 527.

• Wood based boards: All elements: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
the other and shate of	0.0 11/0	

- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Doors: 6mm toughened glass
  - 2 No. shelves set back 10mm from door to be adjustable at 30mm c/C
- Metal Hinges: Nickel plated MB8310.
  - Other materials: 6mm Glass sliding doors to pigeon holes.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Worktop spec TBC.

### 110R PURPOSE MADE REF: FXT-002; RECEPTION DESK

- Location: Atrium Reception: see drawings 2053-G(40)097, 2053(40)170 • Manufacturer: Receptek, Estate 2, South Humberside Ind. Est., Grimsby North East Lincs., DN31 2TG, TEL: +44(0)1472 360 111. • Standard: To BS EN 527. • Timber: To BS EN 942. • Species: Oak. • Appearance class: J2.
- Moisture content on delivery: 6 to 10%.
- · Wood based boards: Oak veneer faced Medium density moisture resistant fibreboard to

BS EN 622-5, type MDF H, formaldehyde class E1 to BS EN 622-1, 18 mm thick .

- Metal: Stainless steel.
- Grade: 1.4310 (304)..

• Other materials: Stainless steel kick plinth & Solid plastics countertop by STARON (UK) LIMITED or similar equal and approved,

Unit 5, Orde Wingate,

Primrose Hill Industrial Estate,

Stockton-on-Tees,

TS19 0GA,

United Kingdom.

Telephone : +44(0) 1642 616880.

• Finishes: Oak veneer to be matt varnished as section M60, Counter tops to be as manufactured-Colour: Bright White; Code BW010.

- Adhesive: To BS 1203.
- Fixings: As manufactured.
- Fasteners: As manufactured.
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.

• Other requirements: All constructed from standard POD2 modular components to include:Bar flap and gate; concealed cable management; integral power and data outlets.

- 110S PURPOSE MADE REF: FLE-112; RELOCATABLE LECTURN UNIT TO LECTURE –MRC SUPPLY
- 110T PURPOSE MADE REF: FXT-04; SOLID OAK TIMBER SEAT TO PRIMARY ATRIUM STAIR PLINTHS

Location: Atrium Objects' Stair cases Atrium floor: see drawings 2053-F(24)113, F(24)114 • Manufacturer: TBC.

- Standard: To BS EN 527.
- Timber: To BS EN 942.
- Species: Oak.
- Appearance class: J2.
- Moisture content on delivery: 6 to 10%.
- Wood based boards: N/A.
- Metal: N/A.
- Grade: N/A.
- Other materials: None.
- Finishes: matt varnished as section M60.
- Adhesive: To BS 1203.
- Fixings: As manufactured.
- Fasteners: As manufactured.
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: N/A.

110U PURPOSE MADE REF: FXT-093; PIGEON HOLES TO RECEPTION OFFICE

Location: Atrium Reception Office: see drawings 2053-G(40)097, 2053(40)170

- Manufacturer: TBC.
- Standard: To BS EN 527.
- Timber: To BS EN 942.
- Species: Oak.
- Appearance class: J2.
- Moisture content on delivery: 6 to 10%.
- Wood based boards: Oak veneer faced plywood manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance classE to BS EN 635-2 with sanded grade surface finish, 18 mm thick.
- Metal: N/A.
- Grade: N/A.
- Other materials: None.
- Finishes: Oak veneer to be matt varnished as section M60.
- Adhesive: To BS 1203.
- Fixings: As manufactured.

- Fasteners: As manufactured.

• Joinery workmanship: As section Z10.

• Metalwork materials and workmanship: As section Z11.

• Other requirements: 3no rows of 25 pigeon holes (total 75) each 200mm wide x 150mm high x 300mm deep, Oak finish to match worktop.

# 110V STORAGE CUPBOARDS TO RECEPTION MEETING AREA REF: FXT-13. 3no FULL HEIGHT CUPD' S SET WITHIN OPENING IN CLADDING

• Typical Location: Reception Informal meeting room 1A031, set in opening within cladding wall. See drawings 2053-(40)-170-3, 2053-(40)-097

• Manufacturer: TBC.

• Dimensions: Total width 3253mm x 580mm depth x 2180mm high

3 double doors to 3 separate cupboards; 5 no shelves to the interior.

• Standard: To BS EN 527.

•Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick. Solid oak lippings to edges

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA.

Assembled using hidden fixings. All the edges lipped with solid oak to match veneer

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
- traction-resistant:	0,6 N/mm2	EN 319
- to inflate with water, 24 hours	: 12%	EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 90 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS

Finishes: All door sides lacquered.

• Adhesive: To BS 1203.

• Fixings: locks only - flush

Joinery workmanship: As section Z10.

• Metalwork materials and workmanship: As section Z11.

• Other requirements: Cupboards to be floor mounted and free standing not fixed to the surround cladding. Site measurement recommended prior to construction.

Shelving supports to be continuous @ 30mm c/c Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal.

#### 125 DESKS AND TABLES

• Item: REF: FLA-069; LIBRARIAN'S DESKING

Location: Library; see drawings 2053-E(40)093, 2053(40)170

Manufacturer: Contractors choice.

- Product reference: tbc.
- Dimensions: 1800w x750d x730h.

• Worktops:

- Material: Oak veneer top and sides with translucent glass modesty panels
- Finish/ Colour: As Standard.
- Exposed edges: glass: polished, timber: solid oak lippings to match veneer
- Pedestal units: N/A
- Material: N/A.
- Finish/ Colour: N/A.
- Exposed edges: N/A.

• Supports: PPC coated metal legs and frame.

• Accessories/ Other requirements: Cable management and cable grommets to desk tops where indicated on drawings; translucent glass modesty panels.

#### 125A DESKS AND TABLES Type A

• Item: REF: FLA-069A; LIBRARIAN'S DESKING

Location: Library; see drawings 2053-E(40)093, 2053(40)170

• Manufacturer: Contractors choice.

- Product reference: tbc.
- Dimensions: 1400w x750d x730h.
- Worktops:
- Material: Oak veneer top and sides with translucent glass modesty panels
- Finish/ Colour: As Standard.
- Exposed edges: glass: polished, timber: solid oak lippings to match veneer
- Pedestal units:N/A
- Material: N/A.
- Finish/ Colour: N/A.
- Exposed edges: N/A.
- Supports: PPC coated metal legs and frame.

• Accessories/ Other requirements: Cable management and cable grommets to desk tops; translucent glass modesty panels.

#### 125B DESKS AND TABLES

• Item: REF: FLA-067; LIBRARY DESK CARRELS WITH SCREENS

- Location: Library; see drawings 2053-E(40)093, 2053(40)170
- Manufacturer: Contractors choice.
- Product reference: tbc.

• Dimensions: 1300w x 800d x730h, with approx 450mm high translucent glass screens between desks

- Material: Oak veneer
- Finish/ Colour: As Standard.
- Exposed edges: solid oak lippings to match veneer
- Pedestal units: N/A
- Material: N/A.
- Finish/ Colour: N/A.
- Exposed edges: N/A.
- Supports: PPC coated metal legs and frame.
- Accessories/ Other requirements: Cable management and cable grommets to desk tops.

### 125C DESKS AND TABLES

• Item: REF: FLA-067A; LIBRARY DESKS AT THE END OF FREESTANDING SHELVING Location: Library; see drawings 2053-E(40)093, 2053(40)170

- Manufacturer: Contractors choice.
- Product reference: tbc.
- Dimensions: 600w x750d x730h.
- Material: Oak veneer
- Finish/ Colour: As Standard.
- Exposed edges: solid oak lippings to match veneer
- Pedestal units: N/A
- Material: N/A.
- Finish/ Colour: N/A.
- Exposed edges: N/A.
- Supports: PPC coated metal legs and frame.
- Accessories/ Other requirements: Cable management
- 125D DESKS AND TABLES

• Item: REF: FLA-072; LIBRARY PEDESTALS WITH DRAWER Location: Library; see drawings 2053-E(40)093, 2053(40)170

- Manufacturer: Contractors choice.
- Product reference: tbc.
- Dimensions: 420w x740d x620h.
- Material: Oak veneer
- Finish/ Colour: As Standard.
- Exposed edges: solid oak lippings to match veneer
- Supports: metal legs and frame; lockable wheels
- Accessories/ Other requirements: Lockable cup'd with single drawer

#### 130A LABORATORY FURNITURE - BENCH FRAME

- Item: FLA-003-1- Bench Frame.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Generic & Specialist Labs.
- Dimensions: 910mm high refer to (40) series drawings & schedules for depth x width.
- Performance: To BS EN 13150, grade H.
  - Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm. - Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester
  - dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016
  - Thickness (EN ISO 2360) ..... 60-80 u

  - Adhesion (EN ISO 2409)
     100%

     Impact (ECCA-T5)
     50 cm

     Gloss 60° (ISO 2813)
     25+/- 5

     Persoz pressing (UNE 48024)
     275 se

     Erichsen pressing (EN ISO 1520)
     5 mm

     50 cm (1 kg)
  - 25+/- 5%
  - 275 sec.

  - Folding 5mm (EN ISO 1519) ...... ok
    - Salt spray test (ISO 9227) ..... 500 hrs.. minimum
  - Saturated humidity (DIN 50017) ... 500 hrs . minimum
    - Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types

### · Accessories/ Other requirements: 860mm clear beneath bench, recessed metal end panel,

- The frame has level systems for the contact with the floor
  - Bench Tolerances: Length/ width = 0 2 mm
    - Height = + 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### LABORATORY FURNITURE - BENCH FRAME 130B

- Item: FLA-003-2- Bench Frame.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical location: Specialist Labs.
- Dimensions: 710mm high refer to individual (40) series drawings & schedules for depth x width.
- Performance: To BS EN 13150, grade H.
- Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

	- Thickness (EN ISO 2360)	60-80 u
-	Adhesion (EN ISO 2409)	100%
-	Impact (ECCA-T5)	50 cm (1 kg)
-	Gloss 60° (ISO 2813)	25+/- 5%
-	Persoz pressing (UNE 48024)	275 sec.

- Erichsen pressing (EN ISO 1520)..
- Folding 5mm (EN ISO 1519) ......

Salt spray test (ISO 9227) .....

Saturated humidity (DIN 50017) ...

- Exposed edges: Epoxy coated metal frame.

- Worktops:
  - Material: Refer to FLA-001 types

Accessories/ Other requirements: 660mm clear beneath bench, recessed trespa end panel.

5 mm

500 hrs.. minimum

500 hrs . minimum

ok

the frame has level systems for the contact with the floor

Bench Tolerances: Length/ width = 0 - 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### 130C LABORATORY FURNITURE - BENCH FRAME

- Item: FLA-003-3- Double Bench Frame.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Media Prep 2S265.

 Dimensions: 910mm high to accommodate 1100mm deep worktop FLA-001/3 - refer to (40) series drawings.

• Performance: To BS EN 13150, grade H.

Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

- Thickness (EN ISO 23007 ..... Adhesion (EN ISO 2409) ..... 100% Impact (ECCA-T5) ..... 50 cm (1 Gloss 60° (ISO 2813) ..... 25+/- 5% Persoz pressing (UNE 48024) ..... 275 sec. Station (EN ISO 1520)... 5 mm 60-80 u

- Folding 5mm (EN ISO 1519) ......
- Salt spray test (ISO 9227) .....
  - Saturated humidity (DIN 50017) ... 500 hrs . minimum
  - Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types.

Accessories/ Other requirements: 860mm clear beneath bench, recessed trespa end panel.

ok

- The frame has level systems for the contact with the floor
- Bench Tolerances: Length/ width = 0 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### 130D LABORATORY FURNITURE - BENCH FRAME

- Item: FLA-003-4 Bench Frame.
- Design and installation: To BS EN 14056.
- · Manufacturer: Burdinola
  - Typical Location: Plate Pouring 2S235.

• Dimensions: 505mm high to accommodate 750mm deep worktop FLA-001/18 - refer to (40) series drawings.

- Performance: To BS EN 13150, grade H.
  - Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

50 cm (1 kg)

500 hrs., minimum

- Thickness (EN ISO 2360) ..... 60-80 u
- Adhesion (EN ISO 2409) ..... 100% 50 cm (1 kg)
- Impact (ECCA-T5) ..... \_
- Gloss 60° (ISO 2813) ..... \_
- Persoz pressing (UNE 48024) .....
- Erichsen pressing (EN ISO 1520)..
- Folding 5mm (EN ISO 1519) .....
- Salt spray test (ISO 9227) .....
- Saturated humidity (DIN 50017) ...
- Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types.
- Accessories/ Other requirements: 455mm clear beneath bench, recessed trespa end panel.
- The frame has level systems for the contact with the floor
- Bench Tolerances: Length/ width = 0 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### 130E LABORATORY FURNITURE - BENCH FRAME

- Item: FLA-003-5 Bench Frame.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Machine Chemistry 2S180.
- Dimensions: 750mm high to accommodate FLA-001-13 refer to (40) series drawings.
- Performance: To BS EN 13150, grade H.
- Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

	- Thickness (EN ISO 2360)	60-80 u
-	Adhesion (EN ISO 2409)	100%
-	Impact (ECCA-T5)	50 cm (1 kg)
-	Gloss 60° (ISO 2813)	25+/- 5%
-	Persoz pressing (UNE 48024)	275 sec.
-	Erichsen pressing (EN ISO 1520)	5 mm
-	Folding 5mm (EN ISO 1519)	ok
-	Salt spray test (ISO 9227)	500 hrs minimum
-	Saturated humidity (DIN 50017)	500 hrs . minimum

- Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types.

Accessories/ Other requirements: 700mm clear beneath bench, recessed trespa end panel.

- The frame has level systems for the contact with the floor
- Bench Tolerances: Length/ width = 0 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

130F

- LABORATORY FURNITURE BENCH FRAME • Item: FLA-003-6 - Bench Frame.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola

275 sec. 5 mm ok

25+/- 5%

500 hrs., minimum 500 hrs . minimum

- Typical Location: Cold Rooms Type B, C & D.
- Dimensions: 280mm high to accommodate FLA-001-21 refer to (40) series drawings.
- Performance: To BS EN 13150, grade H.
- Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant, RAL 9016.

- Thickness (EN ISO 2360) ..... 60-80 u
- Adhesion (EN ISO 2409) ..... 100%
  - Impact (ECCA-T5) ..... 50 cm (1 kg) 25+/- 5%
- Gloss 60° (ISO 2813) .....
- Persoz pressing (UNE 48024) ..... 275 sec.
- Erichsen pressing (EN ISO 1520).. 5 mm
- Folding 5mm (EN ISO 1519) ......
- ok Salt spray test (ISO 9227) .....
  - 500 hrs.. minimum Saturated humidity (DIN 50017) ... 500 hrs . minimum
- Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types.

• Accessories/ Other requirements: 230mm clear beneath bench. The frame has level systems for the contact with the floor

Bench Tolerances: Length/ width = 0 - 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### 130Fa LABORATORY FURNITURE - BENCH FRAME

- Item: FLA-003-7 Bench Frame with mid height shelf
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Radioactive Hot room 1S180 & Media Prep room 2S265
- Dimensions: 910mm high to (40) series drawings.
- Performance: To BS EN 13150, grade H.
- Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

- Thickness (EN ISO 2360) ..... 60-80 u
- Adhesion (EN ISO 2409)
   100%

   Impact (ECCA-T5)
   50 cm (1 kg)
- Gloss 60° (ISO 2813) ..... 25+/- 5% -
  - Persoz pressing (UNE 48024) .....
  - Erichsen pressing (EN ISO 1520).
- Folding 5mm (EN ISO 1519) ......
  - Salt spray test (ISO 9227) .....
  - Saturated humidity (DIN 50017) ...
  - Exposed edges: Epoxy coated metal frame.
- - Material: Refer to FLA-001 types.
- Accessories/ Other requirements: Mid height shelves to be 20mm Trespa Athlon
  - Bench Tolerances: Length/ width = 0 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### LABORATORY FURNITURE - BENCH FRAME 130Fb Item: FLA-003-8 - Bench Frame

- 275 sec. 5 mm ok
  - 500 hrs.. minimum
- 500 hrs . minimum
- Worktops:

- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Mechanical Workshop Offices
- Dimensions: 820mm high to (40) series drawings.
- Performance: To BS EN 13150, grade H.
- Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

500 hrs.. minimum

- Thickness (EN ISO 2360) ..... 60-80 u
- Adhesion (EN ISO 2409) ..... 100%
- Impact (ECCA-T5) ..... 50 cm (1 kg) 50 cm 25+/- 5%
- Gloss 60° (ISO 2813) .....
- Persoz pressing (UNE 48024) ..... 275 sec.
- Erichsen pressing (EN ISO 1520).. 5 mm ok
- Folding 5mm (EN ISO 1519) ......
- Salt spray test (ISO 9227) .....
  - Saturated humidity (DIN 50017) ... 500 hrs . minimum
- Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types.
- Accessories/ Other requirements:
- Bench Tolerances: Length/width = 0 2 mm

Height = + - 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### 130Fc LABORATORY FURNITURE - BENCH FRAME

- Item: FLA-003-9 Bench Frame with 2no. mid height shelf
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: 1S006 Store
- Dimensions: 910mm high to (40) series drawings.
- Performance: To BS EN 13150, grade H.
- Material: Metal frame, built of steel hollow section, cold lamination (carbon fine steel UNE EN 10027-2). Tube sections 50x20x3mm, 60x30x2mm and 30x15x1.5mm.

- Finish/ Colour: Protected with a coat of hardening dust of epoxy resin (epoxy-polyester dust), chemical reaction-resistant, knock and abrasion-resistant. RAL 9016.

-	Thickness	(EN ISO 2360)	60-80 u
		100 0 (00)	1000/

- Adhesion (EN ISO 2409) ..... 100% 50 cm (1 kg)
- Impact (ECCA-T5) ..... 25+/- 5% Gloss 60° (ISO 2813) .....
- Persoz pressing (UNE 48024) ..... 275 sec.
- Erichsen pressing (EN ISO 1520)... 5 mm
  - Folding 5mm (EN ISO 1519) ..... ok
- - Salt spray test (ISO 9227) ..... 500 hrs.. minimum
- Saturated humidity (DIN 50017) ... 500 hrs . minimum
- Exposed edges: Epoxy coated metal frame.
- Worktops:
  - Material: Refer to FLA-001 types.
- Accessories/ Other requirements: Mid height shelves to be 20mm Trespa Athlon
- Bench Tolerances: Length/ width = 0 2 mm
  - Height = + 10 mm (adjusting leveling device)

Bench to be secured to wall by retaining device, end panels to be provided to all bench frames with open aspect

#### 130G LABORATORY FURNITURE - UNDER BENCH DRAWER UNITS

- Item: FLA-004/1 4 Drawer unit refer to drawing (40) 164/1 for dimensions & (40) series drawings for locations.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola.
  - Typical Location: Generic & Specialist Labs.
- Dimensions: 840mm tall x 600mm deep x 500mm wide bottom 2 No. drawer 280mm deep, top 2 No. drawers 125mm deep.
- Performance: To BS EN 13150, grade H.
  - Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
  - Finish/ Colours, Finsa RAL-9010
    - density; 700 Kg/m3 EN 323
    - Humidity: 7 + 3% EN 322
    - Inflection-resistant: 30 N/mm2 EN 310
    - Traction-resistant: 0,6 N/mm2 EN 319
    - to inflate with water, 24 hours: 12% EN 317
    - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:
  - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
  - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
  - Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base. Unit to be secured to bench frame with securing clip. Drawer fronts to be rebated to accommodate the drawer base. Deep drawer sides to be 200mm tall

#### 130Ga LABORATORY FURNITURE - UNDER BENCH DRAWER UNITS

- Item: FLA-004/2 4 Drawer unit refer to drawing (40) 20 164/1 for dimensions
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Tissue Culture Labs
- Dimensions: 810mm tall x 600mm deep x 500mm wide bottom 2 No. drawer 265mm deep, top 2 No. drawers 125mm deep.
- Performance: To BS EN 13150, grade H.
  - Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
- Finish/ Colours, Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - Humidity: 7 + 3% EN 322
  - Inflection-resistant: 30 N/mm2 EN 310
  - Traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
  - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
  - Accessories/ Other requirements:
    - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
    - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
    - Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base. Unit to be secured to bench frame with securing clip Drawer fronts to be rebated to accommodate the drawer base. Deep drawer sides to be

200mm tall

- 130H LABORATORY FURNITURE UNDER BENCH DRAWER UNITS
  - Item: FLA-004/3 3 Drawer unit refer to drawing (40) 164/1 for dimensions & (40) series drawings for locations.
  - Design and installation: To BS EN 14056.
  - Manufacturer: Burdinola
    - Typical Location: Specialist Labs.
  - Dimensions: 650mm tall x 600mm deep x 500mm wide 3 No. equal drawers
  - Performance: To BS EN 13150, grade H.
    - Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
- Finish/ Colours, Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - Humidity: 7 + 3% EN 322
  - Inflection-resistant: 30 N/mm2 EN 310
  - Traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
  - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
  - Accessories/ Other requirements:
    - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
    - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
    - Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base. Unit to be secured to bench frame with securing clip Drawer fronts to be rebated to accommodate the drawer base. Deep drawer sides to be 200mm tall

#### 130I LABORATORY FURNITURE - UNDER SINK UNITS

- Item: FLA-005/1 refer to drawing (40) 164/1 & (40) series drawings for locations.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Machine Chemistry 2S190, Mass Spec Main Lab 1S255.
- Dimensions: 1590mm W x 600mm D x 910mm H .
- Performance: To BS EN 13150, grade H.
  - Material: Carcass, Doors, pelmet fronts and plinths manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
  - Finish/ Colour: Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - humidity: 7 + 3% EN 322
  - inflection-resistant: 30 N/mm2 EN 310
  - traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
- Accessories/ Other requirements:
  - Hinge, opening 270 degrees, epoxy coated , DIN 68857
  - Pull knob made of Zamak with chrome matt coating high resistant.
  - Single shelves 18mm melamine set back 10mm from door
     Unit supports: made from height adjustable plastic levelers manufactured by Hettich, with clips for Plinth fixing

#### Plinth: Finish as doors

- 130J LABORATORY FURNITURE UNDER SINK UNITS
  - Item: FLA-005/1a (Melamine Type) refer to drawing (40) 164 (40) series drawings.
  - Design and installation: To BS EN 14056.
  - Manufacturer: Burdinola

- Typical Location: Centrifuge, Bio Ship, Oocyte ante, (for First Aid rooms, see veneer spec below)

- Dimensions: 1590mm W x 600mm D x 910mm H .
- Performance: To BS EN 13150, grade H.
  - Material: Carcass, Doors, pelmet fronts and plinths: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
  - Finish/ Colour: Finsa RAL-9010

-	density;	700 Kg/m3 EN 3	323
-	humidity:	7 + 3%	EN 322
-	inflection-resistant:	30 N/mm2	EN 310

- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- Accessories/ Other requirements:
  - Hinge, opening 270 degrees, epoxy coated , DIN 68857
  - Pull knob made of Zamak with chrome matt coating high resistant.
  - Single shelves 18mm melamine set back 10mm from door to be adjustable at 30mm Unit supports: made from height adjustable plastic levelers manufactured by Hettich, with clips for Plinth fixing Plinth: Finish as doors

Item: FLA-005/1a (Veneer Type) - refer to drawing (40) 164 (40) series drawings.

- Typical Location: First Aid .
- Standard: To BS EN 527.

• Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
------------	-----------	--------

- humidity:	7 <u>+</u> 3%	EN 322

<ul> <li>inflection-resistant:</li> </ul>	30 N/mm2	EN 310
· · · · · ·	0.0.11/ 0	

- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

• Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
   Other requirements: Adjustable shelving. Shelving supports to be continuous @ 30mm centres.

Unit supports: made from height adjustable plastic levelers manufactured by Hettich, with clips for Plinth fixing Plinth: Finish as doors

- 130K LABORATORY FURNITURE UNDER SINK UNITS
  - Item: FLA-005/2 refer to drawing (40) 164 (40) series drawings for locations.
  - Design and installation: To BS EN 14056.
  - Manufacturer: Burdinola
    - Typical Location: TBC, .
  - Dimensions: 1200mm W x 600mm D x 910mm H .
  - Performance: To BS EN 13150, grade H.
    - -Material: Carcass, Doors, pelmet fronts and plinths manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
    - Finish/ Colour: Finsa RAL-9010
    - density; 700 Kg/m3 EN 323
      - humidity: 7 + 3% EN 322
    - inflection-resistant: 30 N/mm2 EN 310
    - traction-resistant: 0,6 N/mm2 EN 319
    - to inflate with water, 24 hours: 12% EN 317

Accessories/ Other requirements: As FL-005/1

### 130L LABORATORY FURNITURE - WELDING BENCH FRAME

- Item: FLA-097-2 Bench Frame.
- Manufacturer: TBC.
  - Typical Location: Welding within Main Workshop (40) 50.
- Dimensions: 820mm Tall to suit FLA-097-1 .
- Performance: To BS EN 13150, grade H.
- Worktops: FLA-097-1
  - Material: TBC
  - Finish/ Color: TBC
  - Exposed edges: TBC
- Pedestal units:
  - Material: Epoxy coated metal frame.
  - Finish/ Color: RAL 9006.
  - Exposed edges: Epoxy coated metal frame.
- Accessories/ Other requirements: 785mm clear beneath bench.
- 130M LABORATORY FURNITURE UNDER BENCH DRAWER UNITS
  - Item: FLA-004/3 item moved to 130H
- 1300 LABORATORY FURNITURE UNDER BENCH DRAWER UNIT Item: [FLA-032 - 8 Drawer unit refer to drawing (40) 164/1 for dimensions & (40) series drawings for locations]. Design and installation: To BS EN 14056. Manufacturer: Burdinola
   Typical Location: [Organic Chemistry & Tissue Culture (ES Cells)].
  - Typical Location: [Organic Chemistry & Tissue Culture (ES Cells)].
     Dimensions: [840mm tall x 600mm deep x 982mm wide Performance: To BS EN 13150, grade [H].
  - Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces,

manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.

- Finish/ Colours, Finsa RAL-9010
  - 700 Kg/m3 density: EN 323
  - Humidity: 7 + 3% EN 322
  - Inflection-resistant: 30 N/mm2 EN 310
  - Traction-resistant: 0.6 N/mm2 EN 319
  - EN 317 to inflate with water. 24 hours: 12%
  - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:
  - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
  - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
    - Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base Unit to be secured to bench frame with securing clip Drawer fronts to be rebated to accommodate the drawer base. Deep drawer sides to be 200mm tall

LABORATORY FURNITURE - UNDERBENCH UNIT 130P

Item: [FLA-041/1 - Double unit - refer to drawing (40) 164 & (40) series drawings for locations].

Design and installation: To BS EN 14056.

Manufacturer: Burdinola

Typical Location: [Media Prep Tissue Culture Prep, Plate Pouring, Organic / Machine Chemistry, Bio Ship, EM Prep, Computing Workshop].

Dimensions: [840mm H x 600mm deep x 950mm wide

- Performance: To BS EN 13150, grade H.
  - -Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
  - Finish/ Colour: Finsa RAL-9010
  - density: 700 Kg/m3 EN 323
  - humidity: 7 + 3% EN 322
  - inflection-resistant: 30 N/mm2 EN 310
  - traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317

• Accessories/ Other requirements:

- Hinge, opening 270 degrees, epoxy coated , DIN 68857
- Pull knob made of Zamak with chrome matt coating high resistant.
- Adjustable shelves 18mm melamine set back 10mm from door Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele. screwed directly to the unit base Unit to be secured to bench frame with securing clip

#### 130Q LABORATORY FURNITURE - UNDERBENCH UNIT

Item: [FLA-041/2 - double width unit - refer to drawing (40)

164/1 & (40) series drawings for locations].

- Design and installation: To BS EN 14056.
- Manufacturer : Burdinola
- Typical Location: [Electronic Workshop & Crystal Growing].
- Dimensions: [640mm H x 600mm deep x 1000mm wide
- Performance: To BS EN 13150, grade H.
- -Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.

- Finish/ Colour: Finsa RAL-9010
- 700 Kg/m3 density; EN 323
- humidity: 7 + 3% EN 322
- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317

Accessories/ Other requirements:

- Hinge, opening 270 degrees, epoxy coated, DIN 68857
- Pull knob made of Zamak with chrome matt coating high resistant.
- Adjustable shelf 18mm melamine set back 10mm from door

Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base Unit to be secured to bench frame with securing clip

130R LABORATORY FURNITURE - FLAMMABLES CABINET Item: [FLA-042 - 60 minute fire rated Design and installation: To BS EN 14470-2 Manufacturer; Burdinola Material: Metal Finish / Colour - Grey

Typical Location: [PCB room Electrical Workshop]. Dimensions: [to fit under 850mm bench

#### 130S LABORATORY FURNITURE - GLASS STORAGE UNIT Item: [FLA-050-1 refer to drawing (40) 170 & (40) 013 series drawings Design and installation: To BS EN 14056

Manufacturer: Burdinola

Typical Location: [Media Prep].

Dimensions: [670mm H x 600mm deep x 1518mm wide ].

Standard: To BS EN 527.

Wood based boards: All elements: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick. 19mm melamine MDF core physical and mechanical characteristics:

- density; 700 Kg/m3 EN 323 - humidity: 7 + 3% EN 322 - inflection-resistant: 30 N/mm2 EN 310 - traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

Other materials:

- · Finishes:
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10. .
- Metalwork materials and workmanship: As section Z11.
  - Doors 6mm toughened Clear glass sliding doors on ball bearing sliders

LABORATORY FURNITURE - GLASS STORAGE 130T Item: [FLA-050-2 refer to drawing (40) 170 & (40) 013 series drawings Design and installation: To BS EN 14056. Manufacturer: Burdinola Typical Location: [Media Prep]. Dimensions: [1568mm H x 750mm deep x 2718mm wide ]. Standard: To BS EN 527.

• Wood based boards: All elements: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

UNE 11-023-92

Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick. 19mm melamine MDF core physical and mechanical characteristics:

- density: 700 Kg/m3 EN 323
- humidity: 7 + 3% EN 322
- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0.6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2
- Other materials:
- Finishes:
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10. .
- Metalwork materials and workmanship: As section Z11.
  - Doors 6mm toughened Clear glass sliding doors on ball bearing sliders
- 130U LABORATORY FURNITURE GLASS STORAGE Item: [FLA-050-3 refer to drawing (40) 170 & (40) 013 series drawings Design and installation: To BS EN 14056. Manufacturer: Burdinola
  - Typical Location: Tissue Culture Prep.
  - Dimensions: [1568mm H x 750mm deep x 2418mm wide ].

Standard: To BS EN 527.

• Wood based boards: All elements: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
<ul> <li>traction-resistant:</li> </ul>	0,6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

Other materials:

- Finishes:
- Adhesive: To BS 1203.
- Fixings: Handles: Flush

Joinery workmanship: As section Z10. .

- Metalwork materials and workmanship: As section Z11.
  - Doors 6mm toughened Clear glass sliding doors on ball bearing sliders

130V LABORATORY FURNITURE - UNDERBENCH CUPBOARD AND DRAWER UNIT Item: [FLA-056 refer to drawing (40) 164/1 & (40) 017 series drawings for locations]. Design and installation: To BS EN 14056.

- Manufacturer: Burdinola
  - Typical Location: [EM Prep].
- Dimensions: [840mm H x 600mm deep x 1000mm wide ].
- Performance: To BS EN 13150, grade H.
  - Material: 18mm melamine faced MR MDF.

- Finish/ Colour: Finsa RAL-9010
- density; 700 Kg/m3 EN 323
- humidity: 7 + 3% EN 322
- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
   loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:
  - Hinge, opening 270 degrees, epoxy coated , DIN 68857
- Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
  - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
  - Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base. Unit to be secured to bench frame with securing clip
  - 2 No. shelves 18mm melamine set back 10mm from door to be adjustable at 30mm c/c Drawer fronts to be rebated to accommodate the drawer base. Deep drawer sides to be 200mm tall

#### 130W LABORATORY FURNITURE - FILING CABINET Omitted from specification

130X LABORATORY FURNITURE - GLASS STORAGE

Item: [FLA-050-4 refer to drawing (40) 170 & (40) 013 series drawings Design and installation: To BS EN 14056.

Manufacturer: Burdinola

- Typical Location: Tissue Culture Prep.
- Dimensions: [1568mm H x 750mm deep x 1518mm wide ].

Standard: To BS EN 527.

• Wood based boards: All elements: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings..

19mm melamine MDF core physical and mechanical characteristics:

- density; 700 Kg/m3 EN 323
- humidity: 7 + 3% EN 322
- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0.6 N/mm2 EN 319
- to inflate with water. 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

Other materials:

- Finishes:
- Adhesive: To BS 1203.
- Fixings: Handles: Flush

Joinery workmanship: As section Z10. .

- Metalwork materials and workmanship: As section Z11.
  - Doors 6mm toughened Clear glass sliding doors on ball bearing sliders

#### 131 LABORATORY FURNITURE - UNDER BENCH CUPBOARDS

• Item: FLA-006-1 (melamine type) refer to drawing (40) 164/1 & (40) series drawings for locations.

- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola

- Typical Location: Electrphysiology, , Electronic workshop. (for First Aid rooms see veneer spec below)
- Dimensions: 840mm tall x 600mm deep x 500mm wide .
- Performance: To BS EN 13150, grade H.
  - Material: 18mm melamine faced MR MDF.
  - Finish/ Colour: Finsa RAL-9010
    - density; 700 Kg/m3 EN 323
  - humidity: 7 + 3% EN 322
  - inflection-resistant: 30 N/mm2 EN 310
  - traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
  - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:

\_

- Hinge, opening 270 degrees, epoxy coated , DIN 68857
- Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
- Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
- Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base. Unit to be secured to bench frame with securing clip
  - 2 No. shelves 18mm melamine set back 10mm from door to be adjustable at 30mm c/c

Item: FLA-006-1 (Veneer Type) - refer to drawing (40) 164 (40) series drawings.

Typical Location: First Aid .

• Standard: To BS EN 527.

• Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick. Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310

- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:
- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
  - Other requirements: Adjustable shelving. Shelving supports to be continuous @ 30mm c/c Plinth supports, made from height adjustable plastic levelers manufactured by Hettich, with clips for decorative plywood panel fixing and ease of periodical removal.
- 131A LABORATORY FURNITURE UNDER BENCH CUPBOARDS Refer to drawing (40) 164/1
   Item: FLA-006-2 refer to FLA-031 item 135 E
  - ٠

- LABORATORY FURNITURE UNDER BENCH CUPBOARDS 131B
  - Item: FLA-006-3 Refer to FLA-053 refer to drawing (40) 164/1
- 131C LABORATORY FURNITURE UNDER BENCH CUPBOARDS
  - Item: FLA-006-4 as FLA-006-1(veneer specification) sitting on 100mm plinth.
  - Design and installation: To BS EN 14056.
  - Manufacturer: TBC.
    - Typical Location: Kitchenettes. Location and guantities unknown

### 131D LABORATORY FURNITURE - WALL CUPBOARDS

- Item: FLA-007-1 refer to (40) 164 drawing.
- Design and installation: To BS EN 14056.
- Manufacturer: Burdinola
  - Typical Location: Mass Spec Corridor & Growing Rooms (40) 022.
- Dimensions: 600mm tall x 1200mm wide x 400 deep .
- Performance: To BS EN 13150, grade H.
  - Material: Carcass/shelves: Oak veneer faced plywood manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick Doors: 6mm toughened glass .
  - 4 No. Sliding glass doors on ball bearing system Accessories/ Other requirements: .
- Item: FLA-007-1 (melamine type) refer to drawing (40) 164/1 & (40) 22 series drawings
  - Design and installation: To BS EN 14056.
  - Manufacturer: TBC.
    - Typical Location: Growing Rooms (for Mass Spectrometry see veneer spec below)
  - Dimensions: 600mm tall x 1200mm wide x 400 deep -.
  - Performance: To BS EN 13150, grade H.
    - Material: 18mm melamine faced MR MDF.
      - Finish/ Colour: Finsa RAL-9010
    - density: 700 Kg/m3 EN 323
      - humidity: 7 + 3% EN 322
    - inflection-resistant: 30 N/mm2 EN 310
    - traction-resistant: 0,6 N/mm2 EN 319
    - to inflate with water, 24 hours: 12% EN 317
    - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
  - · Accessories/ Other requirements:
    - Hinge, opening 270 degrees, epoxy coated, DIN 68857
    - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
    - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
      - Doors: 6mm toughened glass
      - 2 No. shelves 18mm melamine set back 10mm from door to be adjustable at 30mm c/c

Item: FLA-007-1 (Veneer Type) - refer to drawing (40) 164 (40) series drawings.

- Typical Location: Mass Spectrometry
- Dimensions: 600mm tall x 1200mm wide x 400 deep -.
  - Standard: To BS EN 527.
    - Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish,

19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density; 700 Kg/m3 EN 323
- humidity: 7 <u>+</u> 3% EN 322
- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:
- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Doors: 6mm toughened glass
  - 2 No. shelves set back 10mm from door to be adjustable at 30mm c/C

131E Item omitted FLA-007 type 3

Design and installation: To BS EN 14056.

Manufacturer: TBC.

- Dimensions: Refer to (40) 164/4 & (40)
- Performance: To BS EN 13150, grade H.
- Worktop Trespa Athlon
- Accessories/ Other requirements:
- Hinge, for access flap, epoxy coated , DIN 68857

Access Flap to be lockable

# 131F LABOARTORY FURNITURE - WALL CUPBOARDS Item: FLA/007/2 (melamine type)

Design and installation: To BS EN 14056.

- Manufacturer: Burdinola
- Typical Location: Welding Room (for Mass Spec see veneer spec below) Dimensions: [ 600mm tall x 1200mm wide x 400 deep - ].
- Design and installation: To BS EN 14056.
- Manufacturer: TBC.

\_

- Typical Location: Growing Rooms (for Mass Spectrometry see veneer spec below)
- Dimensions: 600mm tall x 1200mm wide x 400 deep -.
- Performance: To BS EN 13150, grade H.
  - Material: 18mm melamine faced MR MDF.
  - Finish/ Colour: Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - humidity: 7 + 3% EN 322 - inflection-resistant: 30 N/mm2 EN 310
  - traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
  - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:
  - Hinge, opening 270 degrees, epoxy coated , DIN 68857

- Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
- Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
  - Doors: Melamine Doors
- 2 No. shelves 18mm melamine set back 10mm from door to be adjustable at 30mm c/c

Item: FLA/007/2 (veneer type)

Design and installation: To BS EN 14056.

Manufacturer: [TBC].

Typical Location: Mass Spectrometry (for Welding Room see melamine spec above) Dimensions: [600mm tall x 1200mm wide x 400 deep - ].

Standard: To BS EN 527.

Wood based boards: Doors: Doors, pelmet fronts and plinths: manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Carcass/Shelves: manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. All the edges lipped with PVC edging 2mm thick.

Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310

- traction-resistant: 0.6 N/mm2 EN 319

- to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92

 Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zink, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials:

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- · Fixings: Handles: Flush
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Doors: 6mm toughened glass
  - 2 No. shelves set back 10mm from door to be adjustable at 30mm c/C

#### 131 G LABORATORY FURNITURE - GOODS IN DESK

Item FLA-120 – Goods In Desk. Refer to drawings (40) 50

- Design and installation: To BS EN 14073-2.
  - Manufacturer: TBC.
    - Typical Location: Main Stores
  - · Dimensions: Refer to design drawings Worktop top be site measured
  - Performance: To BS EN 13150, grade H.
    - Material: Backing panel 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
  - Finish/ Colours, Finsa RAL-9010
    - density: 700 Kg/m3 EN 323
    - Humidity: 7 + 3% EN 322
    - Inflection-resistant: Traction-resistant 30 N/mm2 EN 310
    - Traction-resistant: 0,6 N/mm2 EN 319
    - to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:
  - Handles, N/A
    - Adjustable Shelving Melamine as above

• Trespa Athlon worktop with hinged (lockable) section – Allow for catch for flap mounted on adjacent wall

#### 135A STORAGE AND DISPLAY UNITS - UNDER BENCH FILING CABINET

- Item: FLA-095 -Two drawer filing cabinet. Refer to drawings (40) 164/1 & (40) 52.
- Design and installation: To BS EN 14073-2.
- Manufacturer: Burdinola
  - Typical Location: Computing Workshop.
- Dimensions: 640mm tall x 600mm deep x 500mm wide.
- Performance: To BS EN 13150, grade H.
  - Material: Carcass and drawer/door fronts manufactured from 19mm thick MDF moisture resistant panel (EN 622-5), covered with 0.8mm melamine laminate to both faces, manufactured by FINSA. Unit Assembled using allen type screws and capped with plastic inserts. All edges lipped with PVC edging material at 2 7 1mm thicknesses.
  - Finish/ Colours, Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - Humidity: 7 + 3% EN 322
    - Inflection-resistant: 30 N/mm2 EN 310
  - Traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
  - loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Accessories/ Other requirements:
  - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
  - Mixed drawers (metal/ wood) equipped with epoxy painted metal rails manufactured by Indaux
    - Plinth, made from height adjustable Ø50mm plastic skates (4x) manufactured by Hafele, screwed directly to the unit base Unit to be secured to bench frame with securing clip, Drawer fronts to be rebated to accommodate the drawer base.

#### 135B STORAGE AND DISPLAY UNITS - SECURE STORAGE CABINET

- Item: FLA-096 Refer to drawings (40) 164 & (40) 50.
- Manufacturer: TBC.
  - Product reference: TBC.
- Typical Location: Main Stores
- Dimensions: 1850mm tall x 450mm deep x 900mm w.
- Doors/ Drawers:
  - Material: Metal.
  - Finish/ Colour: Grey
- Frames/ Legs: N/A.
  - Finish/ Colour: Grey.
- Other requirements: MRC to confirm any other requirements.
- 135Ba STORAGE AND DISPLAY UNITS SECURE STORAGE CABINET
  - Item: FLA-096/1 Refer to drawings (40) 164 & (40) 53.
  - Manufacturer: TBC.

- Product reference: TBC.
- Typical Location: Electronic Workshop Store Room
- Dimensions: 2000mm tall x 500mm deep x 1000mm w.
- Doors/ Drawers:
  - Material: Metal.
  - Finish/ Colour: Grey
- Frames/ Legs: N/A.
  - Finish/ Colour: Grey.
- Other requirements: MRC to confirm any other requirements.

### 135C STORAGE AND DISPLAY UNITS -WELDING STORAGE CABINETS

- Item: FLA-097-3.
- Design and installation: To BS EN 14073-2.
- Manufacturer: TBC.
  - Typical Location: Main workshop welding room refer to drawing (40) 54.
- Dimensions: 670mm tall x 440mm deep x 1000mm wide.
  - Material: TBC.
    - Finish/ Colour: Grey.
  - Accessories/ Other requirements: housed beneath welding bench & Frame FLA-97-2 & FLA-97-1

135D STORAGE AND DISPLAY UNITS - DRY STORAGE CABINETS

- Item: [FLA-029].
- Location & Quantities unknown
- Design and installation: To BS EN 14073-2.
- Manufacturer: [TBC].
  - Typical Location: [TBC].
- Dimensions: [1800mm H x 500mm deep x 1000mm wide].
  - Material: [Metal].
  - Finish: [Powder coated].
  - Colour: TBC
- 135E STORAGE AND DISPLAY UNITS CHEMICAL STORAGE CABINET
  - Item: [FLA-031 As FLA-006 (Melamine Finish) with polyurethane trays refer to drawing (40) 164/1 & (40) series drawings for locations].
- 135F STORAGE AND DISPLAY UNIT WASTE CONTAINER
  - Item: [FLA-038]- MRC Supply & Unit
  - Manufacturer: [TBC].
    - Typical Location: [Containment CL3].
  - Dimensions: [TBC].
- 135G STORAGE AND DISPLAY UNIT PEDESTAL Item: [FLA-046]- MRC Supply & Fit Manufacturer: [TBC].
  Typical Location: [Unknown ].
  - Dimensions: [TBC].
- 135J STORAGE AND DISPLAY UNIT LIGHTPROOF CUPBOARD
  - Item: FLA-053 as FLA-006 (Melamine Finish) with neoprene seals and mastic seals to all joints
    - Typical Location: [X-omat Rooms].

-

#### 135K STORAGE AND DISPLAY UNIT - OVERBENCH CUPBOARDS

- Item: [FLA-054/1 refer to drawing (40) 164/1 & (40) 25 series drawings].
  - Design and installation: To BS EN 14073-2.
- Manufacturer: [TBC].
  - Typical Location: [Aquatics Procedure].
- Dimensions: [600mm H x 250mm D x 1200mm W].
- Performance: To BS EN 13150, grade H.
  - Material: 18mm melamine faced MR MDF.
  - Finish/ Colour: Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - humidity: 7 + 3% EN 322
  - inflection-resistant: 30 N/mm2 EN 310
  - traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
- Accessories/ Other requirements:
  - Hinge, opening 270 degrees, epoxy coated , DIN 68857
  - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.

Other requirements: Internal shelves at vertical 400mm centres

- 135L STORAGE AND DISPLAY UNIT OVERBENCH CUPBOARDS
  - Item: [FLA-054/2 refer to drawing (40) 164/1 & (40) 03 series drawings].
  - Design and installation: To BS EN 14073-2.
  - Manufacturer: [TBC].
    - Typical Location: [Aquatics Procedure].
  - Dimensions: [600mm H x 250mm D x 600mm W].
    - Performance: To BS EN 13150, grade H.
    - Material: 18mm melamine faced MR MDF.
    - Finish/ Colour: Finsa RAL-9010
    - density; 700 Kg/m3 EN 323
    - humidity: 7 + 3% EN 322
    - inflection-resistant: 30 N/mm2 EN 310
    - traction-resistant: 0,6 N/mm2 EN 319
    - to inflate with water, 24 hours: 12% EN 317
  - Accessories/ Other requirements:
    - Hinge, opening 270 degrees, epoxy coated , DIN 68857
    - Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.
    - Other requirements: Internal shelves at vertical 400mm centres

#### 135M STORAGE AND DISPLAY UNIT - OVERBENCH CUPBOARDS

- Item: [FLA-054/3 includes peninsular supports as FLA-081 refer to drawing (40) 164/4 & (40) series drawings].
  - Performance: To BS EN 13150, grade H.
  - Material: 18mm melamine faced MR MDF.
  - Finish/ Colour: Finsa RAL-9010
  - density; 700 Kg/m3 EN 323
  - humidity: 7 + 3% EN 322
  - inflection-resistant: 30 N/mm2 EN 310
  - traction-resistant: 0,6 N/mm2 EN 319
  - to inflate with water, 24 hours: 12% EN 317
- Accessories/ Other requirements:
  - Hinge, opening 270 degrees, epoxy coated , DIN 68857

Handles, "D" type made from zamak alloy (aluminium, zinc, and magnesium) with matt chrome finish.

Other requirements: Internal shelves at vertical 400mm centres

#### 135N STORAGE AND DISPLAY UNITS

- Item: REF: FLA-057 ROLLING RACK STORAGE (Computing Workshop refer to (40)-52 drawings).
  - Manufacturer: Rackline Oaktree Lane Talke Newcastle-Under-Lyme Staffordshire ST7 1RX Tel: 01782 777666. Product reference: Monotrak.
  - Dimensions: 2400mm L x 500mm W x 200mm H.
  - Doors/ Drawers:
    - Material: None.
    - Finish/ Colour: N/A.
  - Outer panels/ Plinths/ Shelves:
    - Material: Metal.
      - Finish/ Colour: As Standard.
  - Frames/ Legs: None.
    - Finish/ Colour: N/A.
  - Other requirements: Floor standing track to be bolted down.

#### 1350 PURPOSE MADE REF - FLA-058 - STORAGE UNIT WITH PIGEON HOLES

- Manufacturer: TBC
- Dimensions: See drawings (40) 033 & (40) 170/1
- Typical Location: Outside Fermentation room
  - Design and installation: To BS EN 14056.
    - Dimensions: [1760mm tall x 2055mm (site dim) mm wide x 395 deep ]. Standard: To BS EN 527.

Wood based boards: All elements manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

<ul> <li>density;</li> </ul>	700 Kg/m3	EN 323
	7 00/	

- humidity: 7 <u>+</u> 3% EN 322
- inflection-resistant: 30 N/mm2 EN 310 EN 319
- traction-resistant: 0,6 N/mm2
- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Other materials:
- · Finishes:
- Adhesive: To BS 1203.
- Fixings: Handles: Flush
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements: Site survey required prior to fabrication

#### 135P STORAGE AND DISPLAY UNITS REF: FXT-05; GLASS DISPLAY CABINET TO ATRIUM PLINTH.

Location: Alongside Atrium ramp; See drawings 2053 G(24)107, 2053(40)170 Manufacturer: Contractors choice .

- Product reference: TBC.
- Dimensions: 7310mm long x 1175mm wide x 550mm high.
- Doors/ Drawers:
- Material: Class C safety glass to BS 6206.
- Finish/ Colour: N/A.
- Outer panels/ Plinths/ Shelves:
- Material: Class C safety glass to BS 6206.
- Finish/ Colour: As Standard.
- Frames/ Legs: None.
- Finish/ Colour: N/A.
- Other requirements: Integral lighting, shelves required, lockable

# 135Q STORAGE AND DISPLAY UNITS REF: IWS-012A; BUILT IN WALL MOUNTED MAGAZINE/JOURNAL RACK TO RECEPTION WAITING

Location: Atrium reception waiting area; see drawings 2053-G(40)097, 2053(40)170 Manufacturer: Contractors choice .

- Product reference: TBC.
- Dimensions: Approx 1650mm long x570mm deep x 750mm high.
- Doors/ Drawers:
- Material: N/A.
- Finish/ Colour: N/A.
- Outer panels/ Plinths/ Shelves:
- Material: Solid Oak.
- Finish/ Colour: As Standard.
- Frames/ Legs: None.
- Finish/ Colour: N/A.

• Other requirements: 5no. level of shelves - 2No units Integrated and close fitted to wall cladding framework;

Integral lighting; lockable glass doors.

#### 135R STORAGE AND DISPLAY UNITS REF: IWS-016; GLASS FRONTED BUILT IN WALL MOUNTED DISPLAY CABINET TO RECEPTION WAITING Location: Atrium reception area; see drawings 2053-G(40)097, 2053(40)170

Manufacturer: Contractors choice .

- Product reference: TBC.
- Dimensions: Approx1650mm long x250mm deep x 945mm high.
- Doors/ Drawers:
- Material: Class C safety glass to BS 6206.
- Finish/ Colour: N/A.
- Outer panels/ Plinths/ Shelves:
- Material: Class C safety glass to BS 6206.
- Finish/ Colour: As Standard.
- Frames/ Legs: None.
- Finish/ Colour: N/A.

• Other requirements: 2No units; Integrated and close fitted to wall cladding framework; Integral lighting; lockable glass doors.

# 135S STORAGE AND DISPLAY UNITS

• Item: REF: FXT-06; GLASS FRONTED BUILT IN DISPLAY CABINET Location: see drawings 2053(40)170 Manufacturer: Contractors choice .

- Product reference: TBC.
- Dimensions: TBC.
- Doors/ Drawers:
- Material: Class C safety glass to BS 6206.
- Finish/ Colour: N/A.
- Outer panels/ Plinths/ Shelves:

- Material: Class C safety glass to BS 6206.
- Finish/ Colour: As Standard.
- Frames/ Legs: None.
- Finish/ Colour: N/A.
- Other requirements: Integral lighting; lockable glass doors.

### 160A SHELVING SYSTEM - FLA-008-1

- Manufacturer: TBC.
  - Locations: Instrument Rooms & Generic Laboratories.
- Design & Installation: To BS EN 14073-2
- Shelves:
  - -Dimensions: Top shelf 300mm D & 1850mm AFFL, Bottom shelf 350mm D & 1562mm AFFL
  - -Material: 18mm MDF.
  - -Finish/ Colour: Finsa RAL-9010
- Other components: Stainless Steel Spurs (Grade 304)with top hung brackets (book ends) spurs
- to be

spaced at Max be 930mm c/c. Shelving to withstand a loading of 75 kg/lm - Shelving heights to be checked against (40) series drawings – Shelving above peninsular units to have s/s rear guard

NOTE: Shelving in all Generic Laboratory rooms to have Task Lighting (FLE-006) installed

### 160B SHELVING SYSTEM - FLA-008-1a

- Manufacturer: TBC.
  - -Locations: Specialist rooms & General Rooms as shown on (40) series drawings.
- Design & Installation: To BS EN 14073-2
- Shelves:

-Dimensions: Top shelf - 300mm D & 1850mm AFFL, Bottom shelf - 350mm D & 1562mm AFFL

-Material: 18mm MDF.

-Finish/ Colour: Finsa RAL-9010.

 Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights a checked against(40) series drawings.
 NOTE: Shelving in Oocyte Injection, Bio Ship room to have Task Lighting (FLE-006) installed

#### 160Ba SHELVING SYSTEM - FLA-008-5

- Manufacturer: TBC.
  - Locations: Electronic Workshop.
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: Top shelf 300mm D & 1712mm AFFL, Bottom shelf 450mm D & 1342mm AFFL
  - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010

• Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) - spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against(40) series drawings.

NOTE: Shelving in Main Workshop 1S119 to have Task Lighting (FLE-006) installed

160Bb SHELVING SYSTEM - FLA-008-6

- Manufacturer: TBC.
  - Locations: Electronic Workshop.
- Design & Installation: To BS EN 14073-2

- Shelves:
  - Dimensions: Top shelf 300mm D & 1850mm AFFL, Bottom shelf 400mm D & 1470mm AFFL
    - Material: 18mm MDF.
    - Finish/ Colour: Finsa RAL-9010
- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against(40) series drawings.

#### 160Bc SHELVING SYSTEM - FLA-008-2

- Manufacturer: TBC.
  - Locations: Electronic Workshop.
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: Top shelf 300mm D & 1850mm AFFL, Bottom shelf 450mm D & 1562mm AFFL
    - Material: 18mm MDF.
    - Finish/ Colour: Finsa RAL-9010.
- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against(40) series drawings. NOTE: Shelving in Instrument Ser.W/S to have Task Lighting (FLE-006) installed

160Bc SHELVING SYSTEM - FLA-008-3

- Manufacturer: TBC.
  - Locations: Dom Store
- Design & Installation: To BS EN 14073-2
- Shelves:
- Dimensions: Top shelf 300mm D & 1220mm AFFL, Middle Shelf 300mm D & 870mm AFFL, Bottom shelf 300mm D & 520mm AFFL
  - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010
- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings.

160Be SHELVING SYSTEM - FLA-008-4

- Manufacturer: TBC.
- Locations: Shared Workshop
- Design & Installation: To BS EN 14073-2

Finish/ Colour: Finsa RAL-9010 •

- Shelves:
  - Dimensions: Top shelf 300mm D & 1920mm AFFL, Bottom shelf 400mm D & 1570mm AFFL
    - Material: 18mm MDF.
- Other components: RAL 9003 white Epoxy

coated steel spurs with undershelf brackets) -

spurs to be spaced at 630mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against(40) series drawings.

NOTE: Shelving in Shared Workshop to have Task Lighting (FLE-006) installed

- 160C SHELVING SYSTEM FLA-080-2
  - Manufacturer: TBC.
    - Locations: Offices associated with write up areas, Fly Rooms, Cold Rooms & Crystal Growth Room 1S230 , .
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: Top shelf 300mm D & 1714mm AFFL, Bottom shelf 300mm D & 1362mm AFFL
      - Material: 18mm MDF.
      - Finish/ Colour: Finsa RAL-9010
  - Stainless steel spurs with undershelf brackets (Grade 304) spurs to be

spaced at max 630mm vertical centers- Shelving to withstand a loading of 75 kg/lm - Shelving heights to be checked against (40) series drawings

• Other components: Stainless steel spurs with undershelf brackets(Grade 304) - spurs to be spaced at 900mm (max 930mm) centers. Shelving to withstand a loading of 75 kg/lm - Shelving

heights to be checked against(40) series drawings

. All other offices - Epoxy coated steel spurs with undershelf brackets) - spurs to be spaced at max 630mm vertical centers- Shelving to withstand a loading of 75 kg/lm - Shelving heights to be checked against (40) series drawings

### 160D SHELVING SYSTEM - FLA-080-3

- Manufacturer: TBC.
  - Locations: Terminal room.
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: Top shelf 300mm D & 1726mm AFFL, Bottom shelf 350mm D & 1220mm AFFL
    - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010
  - Other components: Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at max 630mm vertical centers- Shelving to withstand a loading of 75 kg/lm Shelving heights to be checked against (40) series drawings

..

- 160E SHELVING SYSTEM: FLA-080-4
  - Manufacturer: TBC.
    - Locations: Dispatch room.
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: Top shelf 300mm D & 1850 AFFL, Bottom shelf 350mm D & 1562 AFFL
    - Material: 18mm MDF
      - Finish/ Colour: Finsa RAL-9010
  - Other components: Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at max 630mm vertical centers- Shelving to withstand a loading of 75 kg/lm -Shelving heights to be checked against (40) series drawings

160F SHELVING SYSTEM - FLA-081/1

- Manufacturer: TBC.
  - Locations: Forms part of the Laboratory peninsular unit.
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010.

• Other components: Stainless steel spurs with top hung brackets (Grade 304) (book ends)) - spurs to be spaced at max 930mm centers (As Mock-up) . Shelving to withstand a loading of 75 kg/lm - spurs to be fixed at high level by means of shoe fixing through ceiling into timber patress - Shelving heights as shown on drawings - All as per signed off mock up Shelving above peninsular units to have s/s rear guard Shelving above peninsular units to have s/s rear guards

NOTE: Shelving in all Generic Laboratory rooms to have Task Lighting (FLE-006) installed-Provide mastic seal between worktop up-stand and peninsular unit

Provide Melamine backing board fixed to uprights to support dado electrical trunking

### 160G SHELVING SYSTEM - FLA-081/1a

• Manufacturer: [TBC].

. .

- Locations: [Forms part of the Laboratory penisular unit].
- Design & Installation: To BS EN 14073-2Shelves:
  - Material: [18mm MDF].
  - Finish/ Colour: Finsa RAL-9010

• Other components: [Stainless steel spurs with underhung brackets(Grade 304) - spurs to be spaced at

900mm centers (max 930mm) . Shelving to withstand a loading of 75 kg/lm -purs to be fixed at high level by means of shoe fixing through ceiling into timber patress - Shelving heights as shown on drawings - All as per signed off mock up Provide mastic seal between worktop up-stand and peninsular unit

### 160Ga SHELVING SYSTEM - FLA-081/2

• Manufacturer: TBC.

- Locations: Electronic Workshop & Chemistry Laboratory

- Design & Installation: To BS EN 14073-2
- Shelves:

- Dimensions for Electronic Workshop : Top shelf - 300mm D & 1712mm AFFL, Bottom shelf - 450mm D & 1342mm AFFL refer to drawings (40) 53

- Dimensions for Chemistry Laboratory : Top shelf - 400mm Deep 1855mm AFFL &, Bottom shelf - 400mm Deep 1567mm AFFL refer to drawings (40) 164/3 & (40) 10 – Shelves to be single section of Trespa accessible from both sides of bench – Jencons Scaffold to be attached to shelving, set 40mm from front edge of shelf

- Material Electronic Workshop: 18mm MDF.
- Material Chemistry : 20mm Trespa.
- Finish/ Colour: Finsa RAL-9010.

 Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets - spurs to be spaced at max 930mm centers (As Mock-up). Shelving to withstand a loading of 75 kg/lm purs to be fixed at high level by means of shoe fixing through ceiling into timber patress -Shelving heights as shown on drawings - All as per signed off mock up.

NOTE: Shelving in Main Workshop 1S119 to have Task Lighting (FLE-006) installed

#### 160Gb SHELVING SYSTEM - FLA-081/3

- Manufacturer: TBC.
  - Locations: Workshop.
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: Top shelf 400mm D & 1850mm AFFL, Bottom shelf 450mm D & 1562mm AFFL
  - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010

• Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets - spurs to be spaced at max 930mm centers (As Mock-up) . Shelving to withstand a loading of 75 kg/lm -

purs to be fixed at high level by means of shoe fixing through ceiling into timber patress -Shelving heights as shown on drawings - All as per signed off mock up.

NOTE: Shelving in Workshop 1S080 to have Task Lighting (FLE-006) installed

160H SHELVING SYSTEM - FLA-082

- Manufacturer: TBC.
  - Locations: TBA.
- Design & Installation: To BS EN 14073-2
  - Shelves:
    - Material: 18mm MDF.
    - Finish/ Colour: Finsa RAL-9010
- Other components: Stainless steel spurs with top hung brackets (Grade 304) (book ends)) -

#### spurs to be

spaced at 900mm centers (max 930mm) . Shelving to withstand a loading of 75 kg/lm -purs to be fixed at high level by means of shoe fixing through ceiling into timber patress - Shelving heights as shown on drawings - All as per signed off mock up

- 160I SHELVING SYSTEM FLA-083/1 as FLA-008-1a but full height
  - Manufacturer: TBC.
    - Locations: Live Imaging, Confoc, Tissue Culture, Plate pouring, PCB, X-ray generator .
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: 300mm Deep & 1850, 1530, 1210, 890, 570, 250mm AFFL
  - Material: 18mm MDF. - Finish/ Colour: Finsa RAL-9010
- Other components: RAL 9003 white Epoxy

coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings. Note bottom 2 No. shelves for tissue culture rooms type 2 & 3 to be 450mm deep

160Ia SHELVING SYSTEM - FLA-083/1a as FLA-008-1a but full height

- Manufacturer: TBC.
  - Locations: Tissue Culture Type 3 & 4.
- Design & Installation: To BS EN 14073-2
- Shelves:
- Dimensions: 300mm Deep @ 1850, 1530, 1210, 890 AFFL & 450mm Deep @ 570, 250mm AFFL
  - Material: 18mm MDF.

- Finish/ Colour: Finsa RAL-9010 • Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) -

spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings. Note bottom 2 No. shelves for tissue culture rooms type 3 & 4 to be 450mm deep

160J SHELVING SYSTEM - FLA-083/2 as FLA-008-1a but full height

- Manufacturer: TBC
  - Locations: Robotics
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: 450mm Deep & 1850, 1530, 1210, 890, 570, 250mm AFFL
  - Material: 18mm MDF
  - Finish/ Colour: Finsa RAL-9010
- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against(40) series drawings.

- 160K SHELVING SYSTEM FLA-083/3 as FLA-008-1a but full height
- Manufacturer: [TBC].
  - Locations: Store 3N205
- Design & Installation: To BS EN 14073-2Shelves:
  - Dimensions: 500mm Deep & 1850, 1530, 1210, 890, 570, 250mm AFFL
  - Material: 18mm MDF
  - Finish/ Colour: Melamine with PVC lipping / colour lvory
- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings
- 160L SHELVING SYSTEM FLA-084/2 as FLA008 but full height
  - Manufacturer: TBC.
    - Locations: Offices.
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: 300mm Deep & 1714, 1362, 845, 525mm AFFL
    - Material: 18mm MDF.
    - Finish/ Colour: Finsa RAL-9010

Other components: For office areas Stainless Steel Spurs with top hung

brackets (Grade 304) (book ends) - spurs to be spaced at 900mm (max) centers. Max spur centres to be 930mm.

Shelving to withstand a loading of 75 kg/lm - For all other areas spurs to be epoxy coated - Shelving heights to be checked against (40) series drawings

160La SHELVING SYSTEM - FLA-084/4 as FLA008 but full height

- Manufacturer: TBC.
- Locations: Energy Centre Office.
- Design & Installation: To BS EN 14073-2
- Shelves:
- Dimensions: 300mm Deep & 400, 750, 1200, 1470, 1740, mm AFFL
- Material: 18mm MDF.
- Finish/ Colour: Finsa RAL-9010
- Other components: For office areas Stainless Steel Spurs with top hung

brackets (Grade 304) (book ends) - spurs to be spaced at 900mm (max) centers. Max spur centres to be 930mm.

Shelving to withstand a loading of 75 kg/lm - For all other areas spurs to be epoxy coated - Shelving heights to be checked against (40) series drawings

160M SHELVING SYSTEM - FLA-084/3 as FLA008 but full height

- Manufacturer: [TBC].
  - Locations: Scienitic Computing 2N255
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: 300mm Deep & 1850, 1570, 1220, 870, 520, 170mm AFFL
  - Material: [18mm MDF].
  - Finish/ Colour: Finsa RAL-9010
- Other components: For office areas Stainless Steel Spurs with top hung brackets (Grade 304) (book ends) spurs to be spaced at 900mm (max) centers. Max spur centres to be 930mm.

Shelving to withstand a loading of 75 kg/lm - For all other areas spurs to be epoxy coated -Shelving to be checked against (40) series drawings

1600 SHELVING SYSTEM - FLA-085 as FLA-008-1 with Tespa Shelving

- Manufacturer: TBC
  - Locations: Cold Rooms.
- Design & Installation: To BS EN 14073-2
- Shelves:

- Dimensions: Top 300mm Deep & 1850mm AFFL, Bottom 350mm Deep & 1562mm AFFL
- Material: 18mm Trespa.
- Finish/ Colour: Trespa to match worktops.
- Other components: stainless steel spurs (Grade 304) with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings.
- 160P SHELVING SYSTEM FLA-086 as FLA-008-1 with Tespa Shelving (FULL HEIGHT • Manufacturer: TBC.
  - Locations: Cold Rooms.
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: 400mm Deep & 1850, 1530, 1210, 890, 570, 250mm AFFL
    - Material: 18mm Trespa.
    - Finish/ Colour: To match worktops.

• Other components: RAL 9003 white stainless steel spurs with undershelf brackets(Grade 304) - spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm.

Shelving heights to be checked against (40) series drawings. .

# 160Q SHELVING SYSTEM - FLA-087

- Manufacturer: TBC.
  - Locations: CL2 Labs.
- Design & Installation: To BS EN 14073-2
- Shelves: Pigeon hole shelving unit for storage of Lab coats refer to (40) 164 & (40) 12 drawings
   Material: 18mm Trespa.
  - Finish/ Colour: To match worktops.
- Other components: . .

#### 160Qa SPECIALIST SHELVING WITH LOW LEVEL CUPBOARDS FLA-058 Item duplicated – refer to clause 1350

### 160Qb • H & S CUPBOARD - FLA-066

Dimensions: 2100mm H x 700mm W x 600mm D

Location: Rooms – Recycling Bay & H & S Cupboard Rooms refer to drawings (40) 164/1 & (40) 167/1; RMJM drawings 2053-E(40)091, E(40)090

Standard: To BS EN 527.

• Wood based boards: Doors/Pelmet fronts: Doors, pelmet fronts: manufactured from 19mm thick fire resistant (see annex 01) birch plywood panel, covered with 1mm white oak veneer both faces, all sides dully lacquered without pores, fire resistant lacquer M1 (UNE 23.727) class 1 bonding quality to BS EN 314-2, appearance class E &

to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

• Carcass/Shelves/Pelmets:

Plastic manufactured from 19mm thick MDF moisture resistant panel (UNE-EN 13501), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
humidity	7 + 2%	EN 222

- numuny.	7 <u>+</u> 3%	EN JZZ
- inflection-resistant	30 N/mm2	EN 310

	50 N/11112	
<ul> <li>traction-resistant;</li> </ul>	0.6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317

- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zinc,

and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS Other materials: None.

- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Locks Metal Finished "OJMAR" ref: Linea Uno.
- Handles: N/A.
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
  - 18mm melamine faced shelves set 10mm back from doors

### 160Qc • H & S CUPBOARD - FLA-066A

- Dimensions: 2100mm H x 700mm W x 600mm D
- Location: Rooms Western Stack Admin and Directors' suites 2053-(40)-90, 2053-(40)-91 Standard: To BS EN 527.
- Doors : solid oak white oak to sample approval.
- Carcass/Shelves/Pelmets:
  - Plastic manufactured from 19mm thick MDF moisture resistant panel (UNE-EN 13501), covered with 0.8mm melamine laminate to both sides, colour similar to white oak, manufactured by FINSA. Assembled using hidden fixings. All the edges lipped with PVC edging 2mm thick

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
- inflection-resistant:	30 N/mm2	EN 310
<ul> <li>traction-resistant:</li> </ul>	0,6 N/mm2	EN 319

- to inflate with water, 24 hours: 12% EN 317
- loading capacity for drawer: 1 Kg/dm2 UNE 11-023-92
- Metal Hinges: opening 270 degrees DIN 68857 made from Zamak alloy (aluminium, zinc, and magnesium) and metal finished, manufactured by Hetal ref. MB2000CS
   Other materials: None.
- Finishes: All door sides lacquered.
- Adhesive: To BS 1203.
- Fixings: Locks Metal Finished "OJMAR" ref: Linea Uno. - Handles: N/A.
- Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
  - 18mm melamine faced shelves set 10mm back from doors

### 160R SHELVING SYSTEM - FLA-088/1

- Manufacturer: TBC.
  - Locations: Dark rooms, Containment Labs
- Design & Installation: To BS EN 14073-2
- Shelves: Single shelf 450mm deep & 1562 AFFL
  - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010
- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings.

#### 160Ra SHELVING SYSTEM - FLA-088/2

- Manufacturer: TBC.
  - Locations: Server Rooms .
- Design & Installation: To BS EN 14073-2
- Shelves: Single shelf 400mm deep & 1562 AFFL
  - Material: 18mm MDF.
  - Finish/ Colour: Finsa RAL-9010

- Other components: RAL 9003 white Epoxy coated steel spurs with undershelf brackets) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings.
- 160S SHELVING SYSTEM FLA-089 Ladder rack column support
  - Manufacturer: TBC.
    - Locations: Organic Chemistry.
  - Design & Installation: To BS EN 14073-2
  - Shelves: End user to confirm
    - Material: TBC.
    - Finish/ Colour: TBC.
- 160T SHELVING SYSTEM FLA-090/1
  - Manufacturer: TBC
    - Locations: Fly Rooms.
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: 400mm Deep & 1700, 1400, 1100, 800, 500, 200mm AFFL
    - Material: 18mm Trespa.
    - Finish/ Colour: To match worktops
  - Other components: RAL 9003 white stainless steel spurs with undershelf brackets(Grade 304)
     spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm.

Shelving heights to be checked against (40) series drawings. .

#### 160U SHELVING SYSTEM - FLA-090/2

- Manufacturer: [TBC]
  - Locations: Fly Rooms
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: 300mm Deep & 1840, 1470, 1100, 750, 400mm AFFL
  - Material: 18mm Trespa
  - Finish/ Colour: To match worktops
- Other components: stainless steel spurs with undershelf brackets (Grade 304) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against(40) series drawings.
- 160V SHELVING SYSTEM FLA-090/3
  - Manufacturer: TBC
    - Locations: Fly Rooms.
  - Design & Installation: To BS EN 14073-2
  - Shelves:
    - Dimensions: 600mm Deep & 1500, 900 & 300mm AFFL
    - Material: 18mm Trespa.
    - Finish/ Colour: To match worktops
  - Other components: stainless steel spurs with undershelf brackets) (Grade 304) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings.
- Manufacturer: TBC.
  - Locations: Fly Rooms.
- Design & Installation: To BS EN 14073-2
- Shelves:

-

- Dimensions: Top Shelf 300mm Deep & 1850AFFL, Bottom Shelf 350mm Deep & 1562mm AFFL
  - Material: 18mm Trespa.
  - Finish/ Colour: colour to match tespa worktops.
- Other components: stainless steel spurs with undershelf brackets (Grade 304) spurs to be spaced at 600mm vertical centers. Shelving to withstand a loading of 75 kg/lm. Shelving heights to be checked against (40) series drawings.

160Y ADJUSTABLE SHELVING SYSTEM - FLA-062/1 - Heavy Duty Metal Racks

Manufacturer: TBC

- Locations: Main Stores Area, Flammable Stores, Domestic Stores C, Archive Stores
- Design & Installation: To BS EN 14073-2
- Shelves:
  - Dimensions: 2100mm H x 900mm W x 500mm D
  - Material: Metal
  - Finish/ Colour: Grey.
  - Other requirements Shelves to be adjustable

#### 160Z SHELVING SYSTEM

- Item: FLA-065 refer to drawing (40) 164/1& (40) series drawings for locations.
- Manufacturer: TBC.
  - Locations: Growing & Crystal Room .
- Design & Installation: To BS EN 14073-2
- Dimensions: see relevent dwg.
  - Design and installation: To BS EN 14056.
  - Standard: To BS EN 527.
- Wood based boards: All elements manufactured from 19mm thick birch plywood panel, covered with 1mm white oak veneer to both faces, all sides fully lacquered without pores manufactured to an approved national standard, class 1 bonding quality to BS EN 314-2, appearance class E to BS EN 635-2 with sanded grade surface finish, 19 mm thick.

Assembled using hidden fixings.

19mm melamine MDF core physical and mechanical characteristics:

- density;	700 Kg/m3	EN 323
- humidity:	7 <u>+</u> 3%	EN 322
inflantion registants	20 NI/mama 2	

- inflection-resistant: 30 N/mm2 EN 310
- traction-resistant: 0,6 N/mm2 EN 319
- to inflate with water, 24 hours: 12% EN 317
- Other materials:
- Adhesive: To BS 1203.
  - Joinery workmanship: As section Z10.
- Metalwork materials and workmanship: As section Z11.
- Other requirements:
- Other components: shelving at 300mm vertical centres & 300mm horizontal centres to unsure the construction is vibrant free, secured to concrete floor (MRC to advise preferred fixing method

#### 160AA SHELVING SYSTEM REF: FLA-068; FOR LIBRARY

- Location: Library; see drawings 2053-E(40)093, 2053(40)170
- Manufacturer: Contractor's choice.
- Product reference: Full height library shelving freestanding back to back
- Shelves: Required see drawings for details
- Material: Solid Oak

- Finish/ Colour: As manufacturer's standard.

• Other components: End panels, Integrated lighting.

#### 160BB SHELVING SYSTEM REF: FLA-068A; FOR LIBRARY

- Location: Library; see drawings 2053-E(40)093, 2053(40)170
- Manufacturer: Contractor's choice.
- Product reference: Full height library shelving .
- Shelves:
- Material: Solid Oak
- Finish/ Colour: As manufacturer's standard.

• Other components: End panels, Integrated lighting,450mm deep with angled provision for journals.

#### 160CC SHELVING SYSTEM REF: FLA-068B; FOR LIBRARY

- Location: Library; see drawings 2053-E(40)093, 2053(40)170
- Manufacturer: Contractor's choice.
- Product reference: Half height library shelving
- Shelves: Required see drawings for details
- Material: Solid Oak
- Finish/ Colour: As manufacturer's standard.
- Other components: End panels, Integrated lighting.

#### 160DD SHELVING SYSTEM REF: FLA-073; TO LIBRARY

- Location: Library; see drawings 2053-E(40)093, 2053(40)170
- Manufacturer: Contractor's choice.
- Product reference: Full height precious books library shelving unit with glass fronted doors
- Shelves: Full height library shelving
- Material: Solid Oak, clear glass fronted doors
- Finish/ Colour: As manufacturer's standard.
- Other components: End panels, Integrated lighting; Lockable glass front

#### 160EE SHELVING SYSTEM REF: FLA-068C; FOR LIBRARY

- Location: Library; see drawings 2053-E(40)093, 2053(40)170
- Manufacturer: Contractor's choice.
- Product reference: Full height library shelving wall mounted
- Shelves: Required see drawings for details
- Material: Solid Oak
- Finish/ Colour: As manufacturer's standard.
- Other components: End panels, Integrated lighting.

#### 161D SHELVING SYSTEM

- Item: [FLA-077 refer to drawing (40) 164 & (40) series drawings for locations.
- Manufacturer: TBC.
  - Locations: Crystal Growth Room.
- Dimensions: TBC
- · Shelves :
  - Material: 18mm Trespa
  - Finish/ Colour: To match worktops
  - Other requirements: Compartments to be formed at 300mm centres to ensure whole construction is vibration free, secured to floor
- 161F Removed

- 161G SHELVING SYSTEM FULL HEIGHT METAL RACKS
  - Item: FLA-062/2 refer to drawing (40) 164 & (40) series drawings.
  - Manufacturer: TBC.
    - Locations: Shared Store
  - Design & Installation: To BS EN 14073-2
  - Dimensions: 2100mm W x 500mm D x 2100mm H
  - · Shelves :
    - Material: Metal
    - Finish/ Colour: TBC
  - Other components: None

#### 161H SHELVING SYSTEM - FULL HEIGHT METAL RACKS

- Item: FLA-062/3 refer to drawing (40) 164 & (40) series drawings.
- Manufacturer: TBC.
  - Locations: Media Prep Glasswash
- Design & Installation: To BS EN 14073-2
- Dimensions: 1200mm W x 750mm D x 2100mm H
- Shelves :
  - Material: Metal
  - Finish/ Colour: TBC
- Other components: None

#### 161Ha SHELVING SYSTEM - FULL HEIGHT METAL RACKS

- Item: FLA-062/4 refer to drawing (40) 164 & (40) series drawings.
- Manufacturer: TBC.
- Locations: Mechanical Workshop
- Design & Installation: To BS EN 14073-2
- Dimensions: 1200mm W x 750mm D x 2100mm H
- Shelves :
  - Material: Metal
  - Finish/ Colour: TBC
- Other components: None

#### 161Hb SHELVING SYSTEM - FULL HEIGHT METAL RACKS

- Item: FLA-062/5 refer to drawing (40) 164 & (40) series drawings.
- Manufacturer: TBC.
  - Locations: Shared Store
- Design & Installation: To BS EN 14073-2
- Dimensions: 1200mm W x 750mm D x 2100mm H
- Shelves :
  - Material: Metal
    - Finish/ Colour: TBC
- Other components: None

#### 161J SHELVING SYSTEM - FULL HEIGHT METAL PIPE RACKS

- Item: FLA-074 refer to drawing 2053-(40)-051
- Manufacturer: Key Industrial Equipment Ltd
  - www.keyonline.co.uk
- Locations: Energy Centre Store
- Design & Installation: To BS EN 14073-2
  - Load capacity per arm: up to 350Kg
- Dimensions: 2500mm uprights, bay width 1228mm, arm length 400mm
- Shelves :
  - Material: steel racking
  - Finish/ Colour: TBC
- Other components:

- 170A BENCHES FREE STANDING FLA-064 MRC Supply & Fit
  - Manufacturer: [TBC].
    - Locations: [Oocyte Injection].
    - Dimensions: TBC
    - Material: [].
    - Finish/ Colour: To match workbench-

170Aa BENCHES - FREE STANDING PFU-05 – Wall & Floor Mounted Benching

- Manufacturer: Amwell
- Locations: Restaurant Staff Changing Rooms
- Dimensions: 300mm deep & 450mm High 3 Slat Type C
- Material: Solid Grade Laminate
- Finish/ Colour: TBC

170Ab LOCKERS - PFU-06 & PFU07

- Manufacturer: Amwell
- Locations: Restaurant Staff Changing Rooms
- Dimensions: 515mm deep & 300mm Wide Aquasafe SGL Two tier 150mm plinth
- Material: Solid Grade Laminate
- Finish/ Colour: Charcoal AM275
- 170B BENCHES AND LINKED SEATS REF: FXT-04A (TYPE A): TO RECEPTION WAITING AREA Location: Atrium Reception; see drawings 2053-G(40)097, 2053(40)170
  - Manufacturer: TBC.
  - Product reference: Gulliver Oak Dining Bench 165 .
  - Seat/ Back:
  - Material: Solid European Oak.
  - Finish/ Colour: Natural polished oak.
  - Frame:
  - Material: Solid wood.
  - Finish/ Colour: Natural polished oak.
  - Fixing: Free Standing.
    - Fittings/ Other requirements: MRC to supply and fit.
- 171 FIXED SEATING REF: FXT-03 TYPE A; TO LECTURE THEATRE Location: see drawings 2053-G(40)080
  Manufacturer: DESTRO SPA Via Marco Polo, 11 35020 Albignasego (PD) Italy Tel: +39 049 8805299 .
  - Product reference: 1300 Series; Forum AP.
  - Dimensions:
  - Seat spacing (lateral): As drawing 2053 (40) 080.

- Row spacing: As drawing 2053 (40) 080.
- Seat/ Back:
- Material: Upholstered.
- Finish/ Colour: Upholstery colour TBC.
- Frame:
- Material: Steel section.
- Finish/ Colour: Black.
- Fixing: To manufacturer's specification.
- Accessories/ Other requirements: armrests and fold away writing table; Pivot seat.

# 171A FIXED SEATING REF: FXT-03 TYPE B; TO LECTURE THEATRE Location: see drawings 2053-(40)-080

- Manufacturer: DESTRO SPA
- Via Marco Polo, 11
- 35020 Albignasego (PD)

Italy

- Tel: +39 049 8805299 .
- Product reference: 1300 Series; Forum AP.
- Dimensions:
  - Seat spacing (lateral): As drawing 2053 (40) 080.
  - Row spacing: As drawing 2053 (40) 080.
- Seat/ Back:
  - Material: Upholstered.
- Finish/ Colour: Upholstery: Camira Fabrics Main Line Plus tweed; colour IF116.
- Frame:
  - Material: Steel section.
  - Finish/ Colour: PPC; Black.
- Fixing: To manufacturer's specification.
- Accessories/ Other requirements: lift up writing shelf; Pivot seat.

# 171B FIXED SEATING REF: FXT-03 TYPE C; TO LECTURE THEATRE

- Location: see drawings 2053-G(40)080
- Manufacturer: DESTRO SPA
- Via Marco Polo, 11

35020 Albignasego (PD)

Italy

- Tel: +39 049 8805299.
- Product reference: 1300 Series; Forum AP.
- Dimensions:
- Seat spacing (lateral): As drawing 2053 (40) 080.
- Row spacing: As drawing 2053 (40) 080.
- Seat/ Back:
- Material: Upholstered.
- Finish/ Colour: Upholstery colour TBC.
- Frame:
- Material: Steel section.
- Finish/ Colour: PPC; Black.
- Fixing: To manufacturer's specification.
  - Accessories/ Other requirements: fold away writing table; Pivot seat.

#### 188 BATHROOM AND WASHROOM EQUIPMENT

- Item: REF: SAF-01; Soap dispensers.
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: Plugged and screwed to wall .
- Other

• Other requirements: MRC to supply and fit.

188A BATHROOM AND WASHROOM EQUIPMENT

- Item: REF: SAF-02; Toilet roll holders.
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: Plugged and screwed to wall .
- Other requirements: MRC to supply and fit.

# 188B BATHROOM AND WASHROOM EQUIPMENT

- Item: REF: SAF-003; Paper towel dispensers.
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: Plugged and screwed to wall .
- Other requirements: MRC to supply and fit.

#### 188C BATHROOM AND WASHROOM EQUIPMENT

- Item: REF: SAF-004; Paper towel disposal bin.
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: free standing.
- Other requirements: MRC to supply and fit.

# 188D BATHROOM AND WASHROOM EQUIPMENT

- Item: REF: SAF-005; Sanitary towel dispensers.
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: Plugged and screwed to wall .
- Other requirements: MRC to supply and fit.

#### **188E BATHROOM AND WASHROOM EQUIPMENT**

- Item: REF: SAF-006; Sanitary towel disposal bin.
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: free standing.
- Other requirements: MRC to supply and fit.

188F BATHROOM AND WASHROOM EQUIPMENT

- Item: REF: SAF-057; Alchohol wipe dispenser to hygene stations .
- Manufacturer: TBC.
- Product reference: TBC.
- Finish/ Colour: TBC.
- Fixing: Plugged and screwed to wall .
- Other requirements: MRC to supply and fit.
- 193 WHITEBOARDS FLA-035
  - Type: Marker pen.
    - Manufacturer: Nobo.
      - Product reference: gbpe 1290 Enamel Whiteboard Nobo Prestige 1200 x 900.
  - Frame:
    - Material: Aluminium.
    - Finish/ Colour: Satin silver anodized.
  - Surface: Manufacturer's standard.
    - To BS EN 438-1
    - Markings: None.
    - Colour: White.
  - Size: 900mm H x 1200mm W.
  - Accessories: None.

#### 193A WHITEBOARDS FLA-035a

- Type: Marker pen.
- Manufacturer: Nobo.
  - Product reference: qbpe 1290 Enamel Whiteboard Nobo Prestige 1200 x 900.
- Typical Location: Corridors & Shell Areas
- Frame:

\_

- Material: Aluminium.
- Finish/ Colour: Satin silver anodized.
- Surface: Manufacturer's standard.
  - To BS EN 438-1
  - Markings: None.
  - Colour: White.
- Size: 900mm H x 600mm W.
- Accessories: None.

#### 193B WHITEBOARDS FLA-035/2

- Type: Marker pen.
- Manufacturer: Nobo.
  - Product reference: qbpe 1290 Enamel Whiteboard Nobo Prestige 1200 x 900.
- Typical Location: Corridors & Offices
  - Frame:
    - Material: Aluminium.
- Finish/ Colour: Satin silver anodized.
- Surface: Manufacturer's standard.
  - To BS EN 438-1
  - Markings: None.
  - Colour: White.
- Size: 1200mm H x 900mm W.
- Accessories: None.

#### 193C WHITEBOARDS FLA-035/3

- Type: Marker pen.
- Manufacturer: Nobo.
  - Product reference: qbpe 1290 Enamel Whiteboard Nobo Prestige 1200 x 900.
- Typical Location: Corridors & Offices
- Frame:
  - Material: Aluminium.

- Finish/ Colour: Satin silver anodized.
- Surface: Manufacturer's standard.
  - To BS EN 438-1
  - Markings: None.
  - Colour: White.
- Size: 1200mm H x 600mm W.
- Accessories: None.

#### 195A NOTICEBOARDS - FLA-098

- Type: Wall mounted.
  - Location Office 1S171
- Use: Pins.

-

- Manufacturer: TBC.
  - Product reference: TBC.
- Size: 1200mm x 900mm.
- Fire resistance: Class 0.
- Board:
  - Covering finish/ Colour: tba.
- Frame: TBC.
  - Finish/ Colour: Satin silver anodized.
- Other requirements: None.

#### 195B NOTICEBOARDS REF: FLA-70; TO ATRIUM ALONGSIDE LIBRARY ENTRANCE

- Type: Wall mounted.
- Use: Magnets.
- Manufacturer: TBC.
- Product reference: TBC.
- Size: 1200wide x 900high.
- Fire resistance: Class 0.
- Board:
- Covering finish/ Colour: Grey.
- Frame: Aluminium.
- Finish/ Colour: Grey.
- Other requirements: N/A.

#### 200A WORKTOPS FLA-001-2

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
- Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 900mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high.
- Other requirements: 'V' drip to be provided, 15mm rounded corners to exposed edges, 50mm Up stand fixed to worktop.

## 200B WORKTOPS FLA-001-03

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 1100mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high.
- Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges , 50mm Upstand fixed to worktop.

## 200C WORKTOPS FLA-001-04

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.

- Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 500mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high.

## 200D WORKTOPS FLA-001-05

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 400mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high.

• Other requirements: V' drip to be provided, 15mm rounded corners to exposed edges , 50mm Up stand fixed to worktop.

- 200E WORKTOPS FLA-001-06
  - Manufacturer: Trespa.
    - Product reference: Trespa Athlon -- white top & bottom.
  - Material: Trespa.
    - Colour: CM E 0-015 Pastel grey.
  - Dimensions: 20mm x 800mm.
  - Exposed edges: Trespa black core.
  - Support: FLA-003- (930mm high.

• Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges , 50mm Upstand fixed to worktop.

#### 200F WORKTOPS FLA-001-07

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 650mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high.

• Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges , 50mm Up stand fixed to worktop.

#### 200G WORKTOPS FLA-001-08

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
- Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 475mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high.

• Other requirements: V' drip to be provided, 15mm rounded corners to exposed edges, 50mm Up stand fixed to worktop.

#### 200H WORKTOPS FLA-001-09

- Manufacturer: Trespa.
  - Product reference: tba.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- · Dimensions: tba.
- Exposed edges: tba.
- Support: tba.
- Other requirements: tba.

- 200I WORKTOPS FLA-001-10
  - Manufacturer: Trespa.
    - Product reference: Trespa Athlon -- white top & bottom.
  - Material: Trespa.
    - Colour: CM E 0-015 Pastel grey.
  - Dimensions: 20mm x 910mm.
  - Exposed edges: Trespa black core.
  - Support: FLA-003 (930mm high.

## 200J WORKTOPS FLA-001-11

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 495mm.
- Exposed edges: Trespa black core.
- Support: FLA-003 (930mm high.
- Other requirements: V' drip to be provided , 15mm rounded corners , 50mm Upstand fixed to worktop.

200K WORKTOPS FLA-001-12 as FLA-01but with 730 bench height

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
- Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 750mm.
- Exposed edges: Trespa black core.
- Support: FLA-003 (730mm high.

• Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges , 50mm Up stand fixed to worktop.

- 200L WORKTOPS FLA-001-13 as FLA-001-2 but with 770mm bench height
  - Manufacturer: Trespa.
    - Product reference: Trespa Athlon -- white top & bottom.
  - Material: Trespa.
    - Colour: CM E 0-015 Pastel grey.
    - Dimensions: 20mm x 900mm.
  - Exposed edges: Trespa black core.
  - Support: FLA-003- (770mm high.

• Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges , 50mm Up stand fixed to worktop.

#### 200M WORKTOPS FLA-001-014 as FLA-006 but with 840mm bench height

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
  - Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
  - Dimensions: 20mm x 800mm.
  - Exposed edges: Trespa black core.
  - Support: FLA-003 (840mm high.

• Other requirements: V' drip to be provided, 15mm rounded corners to exposed edges , 50mm Upstand fixed to worktop.

#### 200N WORKTOPS FLA-001-15 as FLA-001-2 but with 730mm bench height

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 900mm.
- Exposed edges: Trespa black core.

- Support: FLA-003- (730mm high.
- Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges , 50mm Up stand fixed to worktop.
- 2000 WORKTOPS FLA-001-16 as FLA-006 but with 840mm bench height
  - Manufacturer: Trespa.
    - Product reference: Trespa Athlon -- white top & bottom.
  - Material: Trespa.
    - Colour: CM E 0-015 Pastel grey.
  - Dimensions: 20mm x 800mm.
  - Exposed edges: Trespa black core.
  - Support: FLA-003-(840mm high.
  - Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges, 50mm Upstand fixed to worktop.
- 200P WORKTOPS FLA-001-17 as FLA-006 but with 840mm bench height
  - Manufacturer: Trespa.
    - Product reference: Trespa Athlon -- white top & bottom.
  - Material: Trespa.
    - Colour: CM E 0-015 Pastel grey.
  - Dimensions: 20mm x 800mm.
  - Exposed edges: Trespa black core.
  - Support: FLA-003 (840mm high.

200Q WORKTOPS FLA-001-18 as FLA-001-01 but with 525mm bench height

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
- Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 800mm.
- Exposed edges: Trespa black core.
- Support: FLA-003 (525mm high.

• Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges, 50mm Upstand fixed to worktop.

200R WORKTOPS FLA-001-19 as FLA-001-2 but with 800mm bench height

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
  - Dimensions: 20mm x 900mm.
- Exposed edges: Trespa black core.
- Support: FLA-003 (800mm high.

• Other requirements: V' drip to be provided ,15mm rounded corners to exposed edges 50mm Upstand fixed to worktop.

200S WORKTOPS FLA-001-20 as FLA-001-8 but with 300mm bench height

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 900mm.
- Exposed edges: Trespa black core.
- Support: FLA-003 (300mm high.

• Other requirements: V' drip to be provided , 15mm rounded corners to exposed edges, 50mm Up stand fixed to worktop.

200T WORKTOPS FLA-001-21 as FLA-001-01 but with 300mm bench height • Manufacturer: Trespa.

- Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
  - Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 900mm.
- Exposed edges: Trespa black core.
- Support: FLA-003 (300mm high.

- 200U WORKTOPS FLA-097-1
  - Manufacturer: TBC.
    - Product reference: TBC.
    - Location Welding within Main Workshop
  - Material: tbc. Colour CM E 0-015 Pastel grey.
  - Dimensions: 600mm Deep x 2900mm (site survey required .
  - Exposed edges: Tespa core.
  - Support: FLA-097-2.
  - Other requirements: TBC.

#### 200V WORKTOPS - SPLASHBACK FLA-016

- Manufacturer: [TBC].
  - Product reference: [Trespa Athlon - to match worktops].
- · Location Typically with sinks and WHB
- Material: 15mm Trespa.
   Colour CM E 0 015 Past
- Colour CM E 0-015 Pastel grey.
- Dimensions: [to suit sink size].
- Exposed edges: [TBC].

## 200W WORKTOP - FLA-017 SLASHSIDE

- Manufacturer: [TBC].
  - Product reference: [Trespa Athlon - to match worktops].
- · Location Typically with sinks
- Material: 15mm Trespa.
- Colour CM E 0-015 Pastel grey.
- Dimensions: [to suit sink size or worktop depth ].
- Exposed edges: [TBC].

## 200Wa – Wet Bench backing Panel FLA-103

Manufacturer: [TBC].

- Product reference: [Trespa Athlon - to match worktops].
- Location Generic Labs as shown on (40) series drawings
- Material: 15mm Trespa. Colour CM E 0-015 Pastel grey.
- Dimensions: [to Burdinola details ].
- Exposed edges: N/A

## 200Wb - Infill Panel FLA-102

## Manufacturer: [TBC].

- Product reference: [Trespa Athlon - to match worktops].
- Location Tissue Culture Type 4
- Material: 15mm Trespa. Colour CM E 0-015 Pastel grey.
- Dimensions: [as shown on drawings ].
- Exposed edges: N/A

#### 200X WORKTOPS - FLA-039 PULL-OUT FLAP

- Manufacturer: [TBC].
  - Product reference: [Trespa Athlon - to match worktops].
- Location Containment rooms & Tissue Culture Type 2
- Material: 20mm Trespa. Colour CM E 0-015 Pastel grey.
- Dimensions: [400mm W x 500mm D.
- Exposed edges: [chamfered].
- Other requirements: Metal runners and rubber stops secured to FLA-003

#### 200Y WORKTOPS REF: FXT-07; TO RECEPTION OFFICE

Location: Atrium Reception Office: see drawings 2053-(40)097

- Manufacturer: TBC..
- Product reference: TBC.
- Material: Oak veneered 18mm plywood.
- Dimensions: As Drawing 2033 (40) 097.
- Exposed edges: Solid wood lippings.
- Support: PPC coated metal legs.
- Other requirements: cable grommets to desk tops where indicated on drawings.

#### 200Z WORKTOPS REF: FLA-100; TO SECURITY OFFICE

Location: Atrium Reception Office: see drawings 2053-(40)097

- Manufacturer: TBC..
- Product reference: TBC.
- Material: Oak veneered 18mm plywood.
- Dimensions: As Drawing 2033 (40) 097.
- Exposed edges: Solid wood.
- Support: PPC coated metal legs.
- Other requirements: none.

#### 200AA WORKTOPS REF: FLA-071; TO LIBRARY

Location: Library: see drawings 2053-(40)093

- Manufacturer: TBC..
- Product reference: TBC.
- Material: Oak veneered 18mm plywood.
- Dimensions: As Drawing 2033 (40) 093.
- Exposed edges: Solid oak lipping to match veneer.
- Support: PPC coated metal legs.
- Other requirements: cable grommets to desk tops where indicated on drawings.

#### 200BB WORKTOPS FLA-001-1

- Manufacturer: Trespa.
  - Product reference: Trespa Athlon -- white top & bottom.
- Material: Trespa.
- Colour: CM E 0-015 Pastel grey.
- Dimensions: 20mm x 750mm.
- Exposed edges: Trespa black core.
- Support: FLA-003- (930mm high).

• Other requirements: 'V' drip to be provided, 15mm rounded corners to exposed edges, 50mm Up stand fixed to worktop.

## 210 COAT HOOKS - FLA-026

- Manufacturer: Allgoods .
  - Product reference: SS85610500 or similar approved .
- Material: Metal .
  - Finish/ Colour: Stainless Steel .
- Fittings: None

230 CURTAIN - FLA-043 - MANUAL HEAVY GAUGE DOUBLE FABRIC CURTAIN

- Manufacturer: Contractor's Choice.
  - Product reference: TBC
- Standard: To BS 5867-1 & 2
- Finish/ Colour: Black pattern less
- Fixing: Top rack support from suspended ceiling only.
- Operation: Manual.

• Accessories: 4.0m high curtain ceiling track mounted heavy gauge double curtain – ceiling to be locally reinforced.

#### 230A CURTAIN - FLA-52 - FLY SCREEN MESH

- Manufacturer: TBC.
  - Product reference: pore size must be 500 microns (0.5 mm) or less.
- Material: Stainless Steel.
- Finish/ Colour: None.
- Fixing: TBC.
- Operation: N/AI.
- Other requirements: The mesh needs to be robust for cleaning and resilient to fly food is quite corrosive.
- 235 CURTAIN TRACKS: (refer to FLA-043)
  - Location: Electrophysiology (40) 26, Electorn Microscopy (40) 17, Confocal type U & V (40) 28 • Manufacturer: Silent Gliss Ltd.
    - Product reference: TBC
  - Material: PVC
  - Finish/ Colour: White RAL 9010
  - Fixing: Screw fixed to reinforced suspended ceiling
  - Operation: Manual
    - Other requirements: Pull cords & Pelmets

#### 240 BLINDS Ref: FLA-048/A; TYPE A

Location: Western Stack, Restaurant: see drawings 2053-(40)090, (40)091, (40)093, (40)098, (40)096, (40)070,

- Manufacturer: Hunter Douglas Window Coverings..
- Product reference: Luxaflex- Solar Shade
- Type: Vertical roller.
- Material: Fabric.
- Finish/ Colour: Light Grey Solar Shade
- Operation: Manual
- Accessories/ Other requirements: Side tracks.

#### 242 BLINDS Ref: FLA-048; Blackout blinds to internal windows and door vision panels

Location: Western Stack Visual Aids: see drawings 2053-(40)098 FAC's Room 40 039 & Xray Chrystalography (40)

- Manufacturer: Hunter Douglas Window Coverings..
- Product reference: Luxaflex-Blackout.
- Type: Vertical roller.
- Material: Fabric.
- Finish/ Colour: Black.
- Operation: Manual
- Accessories/ Other requirements: Side tracks.

VENETIAN BLINDS REF: FLA-094; TO OFFICES & SEMINAR ROOMS – MRC SUPPLY & FIT Location: Atrium Objects: see drawings 2053-(40)092, (40)095
Manufacturer: Hunter Douglas Window Coverings Projects Department, Battersea Road, Heaton Mersey Industrial Estate, Stockport. SK4 3EQ T: +44 (0)161 442 5627.

- Product reference: Luxaflex-The Native Collection.
- Standard: To BS 3415.
- Material: 50mm wooden slats.
- Finish/ Colour: 1473, white oak.
- Operation: Manual.
- Accessories/ Other requirements: 2.45m high blind-ceiling mountedceiling to be locally reinforced.
- 270 MIRRORS MIR-01 Fixed Mirror for Male & Female Toilets -
  - Material: Safety glass to BS6206, class C.
  - Quality: Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.
  - Size: 960w x 758h (Female WC refer to drawings (40) 59 & (22)1102 501w x 758h (Male WC refer to drawings (40) 59 & (22) 1108drawings.
  - Backing: Aluminium foil with frosted panel to luminaire as shown of drawings.
  - Edges: polished.
  - Fixing: side hung piano hinge to stainless steel frame, magnetic catch, mounting height 300mm above worktop.
  - Installation: Accurately with sides vertical Allowance to be made for access to bulb replacement Site survey req'd to confirm dimensions
- 270A MIRRORS MIR-02 Type A- Fixed Mirror to Accessible WC's & Foyer, energy centre & Staff changing within restaurant refer to drawings (40) 59 & (40) 070/17
  - Material: Safety glass to BS6206, class C.
  - Quality: Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.
  - Size: 700mm wide x 1000mm high
  - Backing: Aluminium foil.
  - Edges: Polished.
  - Fixing: Double sided self adhesive pads. Mounting height 600mm above FFL. (staff changing 700mm AFFL)
  - Installation: Accurately with sides vertical.

## 270A/1 MIRRORS REF: MIR-02 TYPE B; TO FOYER TOILETS

Location: Foyer WCs: see drawings 2053-(40)059

- Material: Class C safety glass to BS 6206 in polished stainless steel frame .
- Quality: Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.
- Size: 750mm wide x 750mm high.
- Backing: Aluminium foil .
- Edges: polished.
- Fixing: Double sided self adhesive pads, Mounting height 300mm above basin.
- Installation: Accurately with sides vertical.
- 270B MIRRORS MIR-03 Type A Safety Station Mirror FLA-021 & FLA-022 -
  - Material: Safety glass to BS6206, class C.
  - Quality: Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.
  - Size: 400w x 500h. Refer to (40) series drawings.
  - Backing: Aluminium foil.
  - Edges: Polished.
  - Fixing: Double sided self adhesive pads. Mounting height 1300mm above FFL.
  - Installation: Accurately with sides vertical.

270C MIRRORS - MIR-03 Type B - Safety Station Mirror FLA-023 & FLA-024 -

- Material: Safety glass to BS6206, class C.
- Quality: Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.

- Size: 500w x 950h. Refer to (40) 100 drawings.
- Backing: Aluminum foil.
- Edges: Polished.
- Fixing: Double sided self adhesive pads. Mounting height 1150mm above FFL
- Installation: Accurately with sides vertical.

#### 270D MIRRORS - REF: MIR-005 Restaurant Unisex WC

Location: Unisex WC: see drawings 3911-ARCH- (40) 070/22

- Material: Class C safety glass to BS 6206 in polished stainless steel frame .
- Quality: Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.
- Size: 1030mm wide x 500mm high.
- Backing: Aluminium foil .
- Edges: polished.
- Fixing: Double sided self adhesive pads, Mounting height 300mm above basin.
- Installation: Accurately with sides vertical. Survey prior to manufacture
- 290 MATWELL FRAMES REF: SFL-02;TO FRONT & GARDEN ENTRANCES

Location: Main Entrance Reception, Western Stack entrance: see drawings 2053-E(GA)100, G(GA)100

 Manufacturer: Forbo Flooring UK Limited High Holborn Road

Ripley

DE5 3NT

- Tel: 01773 744121 . .
- Product reference: Nuway-Bonar.
- Material: Aluminium.
- Finish: Mill .
- Size: As Drawing no 2053 E (GA) 100 & 2053 G (GA) 100.
- Angles: 17mm deep matwell to suit matting.
- Corners: Mitred and welded.
- Angle size: As Standard.
- 300 ENTRANCE MATTING REF: SFL-02;TO FRONT & GARDEN ENTRANCES

Location: Main Entrance Reception, Western Stack entrance: see drawings 2053-E(GA)100, G(GA)100 • Manufacturer: Forbo Flooring UK Limited High Holborn Road

Ripley Derbyshire

DE5 3NT

Tel: 01773 744121 .

- Product reference: Nuway-Bonar .
- Colour: TBC .

• Size: As Drawing no 2053 E (GA) 100 & 2053 G (GA) 100.

350 MISCELLANEOUS FITTINGS

Item: TYPE FLE-114: PROJECTOR SCREEN TO SEMINAR ROOMS Location: Atrium Objects: see drawings 2053-(40)095
Manufacturer: Sapphire AV Manufacturing Ltd Units 8 and 9, Wern Trading Estate, Newport, NP10 9FQ, UK Tel:01633 895918.
Product reference: Sapphire 3.0m Tab Tensioned Screens SETTS300WSF-A.
Size/ Capacity: 3m wide Aspect ratio 16:9 .
Fize/ Capacity: 3m wide Aspect ratio 16:9 .

- Finish/ Colour: Matt white with black case .
- Fixing: Ceiling mounted.
- Other requirements: retractable.
- 350A MISCELLANEOUS FITTINGS
  - Item: TYPE FLE-116: PROJECTOR SCREEN TO LECTURE THEATRE.

Location: Lecture Theatre: see drawings 2053-(40)080

- Manufacturer: TBC.
- Product reference: TBC.
- Size/ Capacity: Aspect ratio 16:9 .
- Finish/ Colour: Concorde Pearl Surface (high reflection) Front projection 1.8 gain.
- Fixing: Wall mounted.

• Other requirements: All screen surfaces comply with BS 5867: Part 2: 1980 Type B performance requirements.

#### 350B MISCELLANEOUS FITTINGS

- Item: TYPE FLA-030: WASTE PAPER BIN.
  Manufacturer: Brabantia (UK) Ltd Blackfriars Road Nailsea Bistol BS48 4SB.
- Tel 0845 602 4877.
- Product reference: Brabantia® Classic Waste Paper Bin .`
- Size/ Capacity: 7 Litre .
- Finish/ Colour: Matt Steel.
- Fixing: Free standing.
- Other requirements: MRC to supply and fit.

#### 350C MISCELLANEOUS FITTINGS

- Item: TYPE FLA-099: SERVER CABINETS TO TELECOMS ROOMS.
- Manufacturer: TBC.
- Product reference: TBC .
- Size/ Capacity: TBC .
- Finish/ Colour: As Standardl.
- Fixing: Free standing.
- Other requirements: MRC to supply and fit.
- 350 D MISCELLANEOUS FITTINGS
  - Item: TYPE FLA-116: RECYCLING BAY
  - Glass Bin 20 Litre
  - Other requirements: MRC to supply and fit.
- 350 E MISCELLANEOUS FITTINGS
  - Item: TYPE FLA-117: RECYCLING BAY
  - Paper Bin 60-80 Litre
    - Other requirements: MRC to supply and fit.

#### 350 F MISCELLANEOUS FITTINGS

- Item: TYPE FLA-118: RECYCLING BAY
- Biohazard Bin 60 Litre
- Other requirements: MRC to supply and fit.

## 350 G MISCELLANEOUS FITTINGS

- Item: TYPE FLA-119: RECYCLING BAY
- Dirty Lab Coat Bin 60-80 Litre
- Other requirements: MRC to supply and fit.

## 460 SEALANT TO WORKTOPS

- Standard: To BS EN ISO 11600, class F20 HM.
- Type: One part silicone.
- Manufacturer: Adshead Ratcliffe & Co Ltd.
- Product reference: Contractor's choice.
- Colour: White.

#### 710 MOISTURE CONTENT OF WOOD AND WOOD BASED BOARDS

- Temperature and humidity: During delivery, storage, fixing and to handover maintain conditions to suit specified moisture contents of timber components.
- Testing: When instructed, test components with approved moisture meter to manufacturer's recommendations.
- 720 INSTALLATION GENERALLY
  - General: As Preliminaries section A33.
  - Fixing and fasteners: As section Z20.
  - Services: Not applicable.

#### 760 SEALANT BEDDING AND POINTING

- Application: As section Z22.
- Bedding: Sink to top of worktop.
- Pointing: Between units and splash backs.
- 770 TRIMS
  - Lengths: Wherever possible, unjointed between angles or ends of runs.
  - Running joints: Where unavoidable, obtain approval of location and method of jointing.
  - Angle joints: Mitred.

#### COMPLETION

- 910 GENERAL
  - Doors and drawers: Accurately aligned, not binding. Adjusted to ensure smooth operation.
  - Ironmongery: Checked, adjusted and lubricated to ensure correct functioning.

#### 920 APPLIANCES

- Test: Ensure that all functions and features work correctly.
- Documentation: Submit guarantees, instruction manuals, etc.

# 3911- NLMBB

# N13 Specification 18 February 2010

Rev A	Updated to show sanitary ware totals. SAN-06 reference revised on clauses 335B, C, D & E. SAN reference added to clauses 341A & 343A. Overflow omitted from clause 331B. 10 <sup>th</sup> March 2010
Rev B	Revisions highlighted in blue. 21th May 2010
Rev C	Clause 331A amended to include water drinking tap FLA-015/1 & FLA-015/2 Totals amended FLA-515sink dims amended in response to RFI-465 Single level note added to SAN-06 basins 20th July 2010 re-issued fro D2
Rev D	Clause 335A - FLA-021 quantity decreased Clause 335B – FLA-022 quantity increased 12 <sup>th</sup> August 2010 for Construction
Rev E	Clause 331&, 375B, 335A & 335B amended
Rev F	Product Reference clarified for clause 331A
Rev G	Clause 351B added Local water storage units
Rev H	WC totals & Doc M pack totals revised. Revisions highlighted in blue. 11 <sup>th</sup> January 2011 – internal Issue
Rev J	Waste size to SAN-03 revised.
	Hot water dispenser added clause 336
	RMF references added
	Clause 375d added – Domestic Store Taps
Rev K	Clause 335 amended (SAN-04 waste type revised)

Dilution traps added to all laboratory sinks

Cleaners Sink totals reduced to 1 No.

Rev L	Dilution Traps spec changed to Gerebrit HDPE with product references
Rev M	Clause 311B revised
Rev N	Shower control quantities revised clause 375a
Rev O	Reception WHB specification (SAN-04a) added clause 335/1a. Quantities for SAN-04 adjusted accordingly
Rev P	Doc M specifications amended. Clause 335 amended (tap spec for SAN- 04). Tap spec for reception sink clarified (clause 335/1a)

# Table of Contents

Title		Page
Ν	Furniture/Equipment	3
N13	Sanitary appliances and fittings	5

# N Furniture/Equipment

# N13 Sanitary appliances and fittings

# N13 Sanitary appliances and fittings

To be read with Preliminaries/ General conditions.

# PRODUCTS

300 WCS AND CISTERNS: SAN-01 (RMF/ BAMSE ref: P-1) - Unisex, Staff, Male & Female WC's - 17 Total

- WC standard: To DEFRA WC suite performance specification or equivalent approved by relevant water company.
- Type: Back to wall, concealed cistern.
- Pan:
  - Standards: To BS EN 33 and BS EN 997.
  - Manufacturer: Armitage Shanks
  - www.thebluebook.co.uk
  - info@thebluebook.co.uk
  - T: +44 (0)870 122 8822
  - F: +44 (0)870 122 8282
  - Armitage, Old Road, Rugeley. WS15 4BT.
  - Product reference: S3056 Contour 21 back-to-wall standard height WC suite.
  - Material: Vitreous china, white.
- Seat and cover:
  - Standard: To BS 1254.
  - Manufacturer: As Pan.
  - Product reference: S4065 Contour 21, top fixing hinges.
  - Material: TBC.
- Pan connector:
  - Standard: To BS 5627.
  - Manufacturer: As Pan.
  - Product reference: S4300 Panekta, finned pattern, to convert horizontal outlet to S or turned P trap.
  - Colour: To match pan.
- Cistern:
  - Standard: Not applicable.
  - Manufacturer: As Pan.
  - Product reference: S3643 Conceala 2 with cover, 4.5/ 3 litre, pneumatic dual flush valve fittings, side supply.
  - Material: Plastics.
  - Colour and finish: To match pan.
- Flushing arrangement: Compact type float operated valve and siphon, to BS 1212-4 and float to BS 2456.
  - Manufacturer: As Pan.
  - Product reference: S4504 Armitage Shanks Contemporary dual flush flushing plate stainless steel.
  - Operating control: Push button.
  - Water supply connection: TBC.
  - Flush volume: Dual flush 6 or 4 L.
- · Flush pipe: Concealed.
  - Manufacturer: As Pan.
    - Product reference: Contractor's choice.
    - Material: Plastics, white.
- Accessories: None.

311 DOCUMENT M PACKAGES: Close Coupled Disabled WCs End Cores B,D,H & K (RMF /

BAMSE ref: P-1a, P-3c) - 12 Total

- Manufacturer: Armitage Shanks
  - www.thebluebook.co.uk
  - info@thebluebook.co.uk
  - T: +44 (0)870 122 8822
  - F: +44 (0)870 122 8282

Armitage, Old Road, Rugeley. WS15 4BT.

- Product reference: S6955MY (Stainless Steel) Doc M close coupled pack with grab rails and hinged arm

support with toilet roll holder and clothes hook ref: N13/429.

• Type approval certificate: Submit.

311A DOCUMENT M PACKAGES: Wall Mounted Disabled WC's Central Cores C1, C2, J1 & J2, Atrium & Restaurant (RMF/ BAMSE ref: P-1a, P-3c) - *15 Total* 

Manufacturer: Armitage Shanks

www.thebluebook.co.uk

info@thebluebook.co.uk

- T: +44 (0)870 122 8822
- F: +44 (0)870 122 8282

Armitage, Old Road, Rugeley. WS15 4BT.

- Product reference: S6956YY (Chrome) Doc M Contour 21 wall mounted pack, seat, hand rails and

hinged rail, back support, concealed pneumatic cistern, dual flush plate, Contour 21 wall mounted WC, Contour 21 washbasin with lever operated thermostatic mixer, chrome plated bottle trap and concealed hangers and clothes hook ref: N13/429.

• Type approval certificate: Submit.

311B DOCUMENT M PACKAGES: Accessible Shower Room Core C1 (RMF/ BAMSE ref: P-8a) - 1 Total

- Manufacturer: Armitage Shanks
  - www.thebluebook.co.uk

info@thebluebook.co.uk

- T: +44 (0)870 122 8822
- F: +44 (0)870 122 8282

Armitage, Old Road, Rugeley. WS15 4BT.

- Product reference: **S6960LJ (Grey)** Shower room pack with folding shower seat and back support in grey, three grab rails, two hinged rails and a Multi System 450 mm handrail, lever operated thermostatic mixer for concealed supplies, Multi System handset holder, handset and hose, fixed short projection shower head, lever operated diverter and 1200 x 1200 mm shower curtain, with angle rail and clothes hook ref: N13/429.
- Type approval certificate: Submit.
- 311C DOCUMENT M PACKAGES: Ambulant Disabled WC's Central Cores C1, C2, J1 & J2, & Restaurant (RMF / BAMSE ref: P-1) 26 Total
  - Manufacturer: Armitage Shanks
    - www.thebluebook.co.uk
    - info@thebluebook.co.uk
    - T: +44 (0)870 122 8822
    - F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.

- Product reference: S6957MY (Stainless Steel) Doc M Ambulant care WC pack with Contour 21 rimless

back to wall WC, floor fixing kit, Conceala cistern with lever, grab rails, seat no cover with retaining buffers and clothes hook ref: N13/429.

• Type approval certificate: Submit.

## 311D DOCUMENT M PACKAGES: Close Coupled Disabled WC Energy Centre – 1 Total • Manufacturer: Armitage Shanks

www.thebluebook.co.uk info@thebluebook.co.uk T: +44 (0)870 122 8822 F: +44 (0)870 122 8282 Armitage, Old Road, Rugeley. WS15 4BT. - Product reference: S6955LJ (Grey) Doc M close coupled pack with grab rails and hinged arm

support with toilet roll holder and clothes hook ref: N13/429.

- Type approval certificate: Submit.
- 315A URINALS: SAN-03 (RMF/ BAMSE ref: P-2) Male WC's 12 Total
  - Urinals:
    - Standard: To BS 5520.
    - Manufacturer: Armitage Shanks
    - www.thebluebook.co.uk
    - info@thebluebook.co.uk
    - T: +44 (0)870 122 8822
    - F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.
    - Product reference: S6110 (UR H) Contour urinal, 670 mm.
    - Material: Vitreous china, white.
    - Wastes: Grated, flush.
      - Standards: To BS EN 274-1, -2 and -3.
      - Manufacturer: As Urinal.
      - Product reference: S8811 11/4" plastics strainer waste, 50 mm unslotted tail.
      - Size: DN 40.
      - Material: Plastics, self colour.
      - Tail: Unslotted.
    - Traps: Bottle.
      - Standards: To BS EN 274-1, -2 and -3.
      - Manufacturer: As Urinal.
        - Product reference: S8970 1 1/2in plastic P trap with 75mm seal, multi-purpose outlet suitable for plastic and BS copper pipe
      - Size: DN 40.
      - Material: Plastics, self colour.
      - Depth of seal (minimum): 75 mm.
    - Other Requirements: Sensorflow Solo An electronic water control system for use with a single outlet

- 331 SINKS: SAN-24 Cleaners Sink *1 Total* 
  - Standard: To BS 1206.
  - Manufacturer: Armitage Shanks www.thebluebook.co.uk info@thebluebook.co.uk T: +44 (0)870 122 8822 F: +44 (0)870 122 8282 Armitage, Old Road, Rugeley. WS15 4BT.
    Product reference: S5827 Belfast sink 60cm x 46cm x 26cm unboxed.
  - Size: 610 x 455 mm.
  - Material: Glazed fireclay, white.
  - Tap/ Chainstay/ Overflow holes: Taps S7205 (TB3) Nimbus 1/2in inclined bib taps Tap Mounts S8331 1/2in wall mounts for exposed plumbing (pair) S8766 (WT4) 1 1/2in slotted waste, chain and plug, screw stay, 90mm tail
  - · Water supply fittings: TBC.
    - Flow rate (maximum): TBC.
    - Manufacturer: TBC.
    - Product reference: TBC.
  - Wastes: Strainer.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: As Sink.
    - Product reference: S8775 Self colour plastics, 1<sup>1</sup>/<sub>4</sub>" acid resistant waste with loose lift out grid and plug.
    - Size: DN 40.
    - Material: Plastics, self colour.
    - Tail: Slotted.
  - Traps: Bottle.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: As Sink.
    - Product reference: S8990 Self colour plastics, 1<sup>1</sup>/<sub>4</sub>" acid resistant bottle trap with 75 mm seal, outlet screwed 1<sup>1</sup>/<sub>4</sub>" BSP male with compression nut and ring.
    - Size: DN 40.
    - Material: Plastics, self colour.
      - Depth of seal (minimum): 75 mm.

• Accessories: \$9217 aluminium alloy build-in brackets, 455mm overall,405mm stud (pairs)

- 331A SINKS: SAN-08 (RMF/ BAMSE ref: P-6, P-6d) Coffee/Mtng Rooms Sink & Drainer 23 Total
  Standard: To BS EN 13310.
  - Manufacturer: Franke Sissons Ltd www.franke-sissons.co.uk
    - ws.uk@franke.com
    - T: +44 (0)1246 450255
    - F: +44 (0)1246 451276
    - Carrwood Road, Sheepbridge, Chesterfield. S41 9QB.
      - Product reference: Mythos MMX 611
  - Size: 1000 x 520.
  - Material: Stainless steel, silk.
  - Tap/ Chainstay/ Overflow holes: One tap hole centre and Overflow hole.
  - Water supply fittings: Mixer taps.
    - Flow rate (maximum): 75 PSI (5 bar).
    - Manufacturer: As Sink.
    - Product reference: Mythos MTX.
  - Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
  - Traps: Tubular, S type.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Contractor's choice.
    - Product reference: Contractor's choice.
    - Size: DN 40.
    - Material: Plastics, self colour.
    - Depth of seal (minimum): 75 mm.

• Accessories: For P6 kitchen sinks indicated on (50) series drawings, allow for drinking water tap Bullet Q7 Water Filler tap or similar approved

331B SINKS: FLA-015/1 (RMF / BAMSE ref: P-4a, P-4b, P-4c, P-4d, P-4e, P-4f, P-4h, P-4i) - Laboratory Sink & Drainer - *114 Total* 

- Standard: To BS EN 13310.
- Manufacturer: TBC.
  - Product reference: TBC.
- Bowl Size: 500l x 400w x 300d with drainer.
- Material: Stainless steel, satin.
- Tap/ Chainstay/ Overflow holes: *Three tap holes and No Overflow hole*.
- Water supply fittings: Pillar taps.
  - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - **Cleton Street**
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
  - broenvalves@broen.com.

Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.

- Wastes: FLE-084 waste disposal unit product ref: TBC. Refer to BAMD (40) series
- drawings for specific locations.
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: TBC.
  - Product reference: TBC.
  - Size: TBC.
  - Material: TBC.
  - Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
- Accessories: Incorporate FLA-016 splashback.

331C SINKS: FLA-015/2 (RMF/ BAMSE ref: P-4, P-4b, P-4h, P-4i) - Centrifuge & -85 Freezer Type 5 Sink & Drainer - *22 Total* 

- Standard: To BS EN 13310.
- Manufacturer: TBC.
  - Product reference: TBC.
- Bowl Size: 500l x 400w x 300d with drainer.
- Material: Stainless steel, satin.
- Tap/ Chainstay/ Overflow holes: Two tap holes and Overflow hole.
- Water supply fittings: Pillar taps.
  - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - Cleton Street
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
- · Wastes: TBC.
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: TBC.
  - Product reference: TBC.
  - Size: TBC.
  - Material: TBC.
  - Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
- Accessories: Incorporate FLA-016 splashback

- 331D SINKS: FLA-915/1 Tissue Culture Sink (RMF/ BAMSE ref: P-4a) 3 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: 400mm diameter x 300d.
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Three tap holes and Overflow hole.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - Cleton Street
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
  - · Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
  - Traps: 2.3 Litre Dilution recovery Trap
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Gerberit HDPE Product reference: 152.096.00.1
    - Size: To suit connection to appliance.
    - Material: Glass
    - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback

- 331E SINKS: FLA-915/2 Tissue Culture Sink (RMF/ BAMSE ref: P-4) 14 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: 400mm diameter x 300d.
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Two tap holes and Overflow hole.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - Cleton Street
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
  - · Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
  - Traps: 2.3 Litre Dilution recovery Trap
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Gerberit HDPE Product reference: 152.096.00.1
    - Size: To suit connection to appliance.
    - Material: Glass
    - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback

- 331F SINKS: FLA-1015 Cold Room Type 4 (RMF/ BAMSE ref: P-4b) 22 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
  - Product reference: TBC.
  - Bowl Size: 2001 x 300w x 250d.
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Three tap holes and Overflow hole.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - Cleton Street
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
  - · Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback.

#### 331G SINKS: FLA-115/1 - Media Prep Sink (RMF/ BAMSE ref: P-4g) - 1 Total

- Standard: To BS EN 13310.
- Manufacturer: TBC.
  - Product reference: TBC.

## · Bowl Size: 400l x 400w x 350d (Bench Mounted)

- Material: Stainless steel, satin.
- Tap/ Chainstay/ Overflow holes: Three tap holes and Overflow hole.
- Water supply fittings: Pillar taps.
  - Flow rate (maximum): TBC.
  - Manufacturer: BROEN VALVES Ltd.
  - Unit 7, Cleton Street Business Park
  - **Cleton Street**
  - Tipton, West Midlands DY4 7TR
  - England
  - Tel.: +44 (0) 121 522 4505
  - Fax: +44 (0) 121 522 4535
  - www.broen.co.uk
  - broenvalves@broen.com.
  - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles (TBC).

# Wastes: FLE-084 waste disposal unit product ref: TBC. Refer to BAMD (40) series

# drawings for specific locations.

- Standards: To BS EN 274-1, -2 and -3.
- Manufacturer: TBC.
- Product reference: TBC.
- Size: TBC.

-

- Material: TBC.
- Tail: TBC.

Traps: 2.3 Litre Dilution recovery Trap

- Standards: To BS EN 274-1, -2 and -3.
- Manufacturer: Gerberit HDPE
- Product reference: 152.096.00.1
- Size: To suit connection to appliance.
- Material: Glass
- Depth of seal (minimum): 75 mm.
- Accessories: Incorporate FLA-016 splashback

- 331H SINKS: FLA-215 (RMF/ BAMSE ref: P-13) Dark Room Trough Sink 3 Total
  - Standard: To BS EN 13310.
  - · Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: 1200l x 750w x 350d.
  - · Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Three tap holes and Overflow hole.
  - · Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
      - Manufacturer: BROEN VALVES Ltd.
      - Unit 7. Cleton Street Business Park
      - **Cleton Street**
      - Tipton, West Midlands DY4 7TR
      - England
      - Tel.: +44 (0) 121 522 4505
      - Fax: +44 (0) 121 522 4535
      - www.broen.co.uk
      - broenvalves@broen.com.
        - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable 1/4" BSP serated nozzles.
  - · Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
- Accessories: Incorporate FLA-016 splashback. Sink to be incorporated into suitably framed bench system.

- 3311 SINKS: FLA-315 (RMF/ BAMSE ref: P-18a) PCB Trough Sink 1 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: 1600l x 700w x 340d.
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Three tap holes and Overflow hole.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - Cleton Street
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
  - · Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
  - Traps: 2.3 Litre Dilution recovery Trap
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Gerberit HDPE
    - Product reference: 152.096.00.1
    - Size: To suit connection to appliance.
    - Material: Glass
    - Depth of seal (minimum): 75 mm.

• Accessories: Incorporate FLA-016 splashback. *Refer to RMF drg no. (59) 504 for details. Sink to be incorporated into suitably framed bench system.*
- 331J SINKS: FLA-515 (RMF / BAMSE ref: P-4a) Warm Water Sink & Drainer both Sides *3 Total*Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: 1000l x 500w x 380d (500mm drainer both sides)
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Three tap holes and Overflow hole.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - Cleton Street
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
  - · Wastes: TBC.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback

- 331K SINKS: FLA-715 (RMF/ BAMSE ref: P-19) Typically Fermentation Trough Sink 1 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: 800l x 600w x 300d.
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Two tap holes and Overflow hole.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
      - Manufacturer: BROEN VALVES Ltd.
      - Unit 7, Cleton Street Business Park
      - **Cleton Street**
      - Tipton, West Midlands DY4 7TR
      - England
      - Tel.: +44 (0) 121 522 4505
      - Fax: +44 (0) 121 522 4535
      - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable 1/4" BSP serated nozzles.
  - · Wastes:
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: TBC.
    - Product reference: TBC.
    - Size: TBC.
    - Material: TBC.
    - Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback.

- 331L SINKS: FLA-415 (RMF / BAMSE ref: P-6b) Glass Wash Triple Sink 1 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.
  - Bowl Size: (500l x 3) x 400w x 400d.
  - Material: Stainless steel, satin.
  - Tap/ Chainstay/ Overflow holes: Nine tap holes and Three Overflow holes.
  - Water supply fittings: Pillar taps.
    - Flow rate (maximum): TBC.
    - Manufacturer: BROEN VALVES Ltd.
    - Unit 7, Cleton Street Business Park
    - **Cleton Street**
    - Tipton, West Midlands DY4 7TR
    - England
    - Tel.: +44 (0) 121 522 4505
    - Fax: +44 (0) 121 522 4535
    - www.broen.co.uk
    - broenvalves@broen.com.
    - Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.

# • Wastes: FLE-084 waste disposal unit product ref: TBC. Refer to BAMD (40) series drawings for specific locations.

- Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: TBC.
  - Product reference: TBC.
  - Size: TBC.

-

- Material: TBC.
- Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback

- 331M SINKS: FLA-1115 (RMF/ BAMSE ref: P-4a) Fly Room Sink- 1 Total
  - Standard: To BS EN 13310.
  - Manufacturer: TBC.
    - Product reference: TBC.

```
• Bowl Size: 700l x 630w x 600d (500mm drainer) Bowl size to accommodate fly cage 500l x
```

#### 430w x 400d.

- Material: Stainless steel, satin.
- Tap/ Chainstay/ Overflow holes: Three tap holes and One Overflow hole.
- Water supply fittings: Pillar taps.
  - Flow rate (maximum): TBC.
  - Manufacturer: BROEN VALVES Ltd.
  - Unit 7, Cleton Street Business Park

Cleton Street

Tipton, West Midlands DY4 7TR

- England
- Tel.: +44 (0) 121 522 4505
- Fax: +44 (0) 121 522 4535
- www.broen.co.uk
- broenvalves@broen.com.
- Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles.
- · Wastes: TBC.

-

- Standards: To BS EN 274-1, -2 and -3.
- Manufacturer: TBC.
- Product reference: TBC.
- Size: TBC.
- Material: TBC.
- Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
  - Accessories: Incorporate FLA-016 splashback

331N SINKS: FLA-115/2 (RMF / BAMSE ref: P-4, P-7a) - Main Store Area & User Autoclave Sink - 2 Total

- Standard: To BS EN 13310.
- Manufacturer: TBC.
  - Product reference: TBC.
- Bowl Size: 400l x 400w x 350d (Wall Mounted).
- Material: Stainless steel, satin.
- Tap/ Chainstay/ Overflow holes: Two tap holes and Overflow hole.
- Water supply fittings: Pillar taps.
  - Flow rate (maximum): TBC.
  - Manufacturer: BROEN VALVES Ltd.
  - Unit 7, Cleton Street Business Park

Cleton Street

Tipton, West Midlands DY4 7TR

- England
- Tel.: +44 (0) 121 522 4505
- Fax: +44 (0) 121 522 4535
- www.broen.co.uk
- broenvalves@broen.com.
- Product reference: Broen Boss epoxy coated swan neck with wrist blade controls with removable <sup>1</sup>/<sub>4</sub>" BSP serated nozzles (TBC).
- Wastes:.

-

- Standards: To BS EN 274-1, -2 and -3.
- Manufacturer: TBC.
- Product reference: TBC.
- Size: TBC.
- Material: TBC.
- Tail: TBC.
- Traps: 2.3 Litre Dilution recovery Trap
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: Gerberit HDPE
  - Product reference: 152.096.00.1
  - Size: To suit connection to appliance.
  - Material: Glass
  - Depth of seal (minimum): 75 mm.
- Accessories: Incorporate FLA-016 splashback.

- 335 WASH BASINS: SAN-04 (RMF/ BAMSE ref: P-3) Male & Female WC's 36 Total
  - Manufacturer: Armitage Shanks www.thebluebook.co.uk info@thebluebook.co.uk
     T: +44 (0)870 122 8822
     F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.

Product reference: E3081 Create Drift vessel basin, 440 mm, no tapholes, no overflow.

- Size: 440 mm dia.
- Material: Vitreous china, white.
  - Tap/ Chainstay/ Overflow holes:
  - No tap holes;
  - No chainstay hole; and
  - No overflow hole.
- Water supply fittings: Mixer taps.
  - Flow rate (maximum): 6 L/ min. at 3 bar.
  - Manufacturer: Ideal Standard.
  - Product reference: E0069AA Mono-block mixer tap No Pop up waste.
  - Operation: Lever handles.
- · Wastes: Swivel type
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: As Wash basin.
    - Product reference: TBC.
  - Size: DN 40.
  - Material: Plastics, chrome plated.
  - Tail: Slotted.
- Traps: Bottle.
  - Standards: To BS EN 274-1, -2 and -3.
  - Manufacturer: As Wash basin.
  - Product reference: S8910.
  - Size: DN 40.
  - Material: Plastics, self colour.
  - Depth of seal (minimum): 75 mm.
- · Accessories: None.
- 335/1a WASH BASINS: SAN-04a (RMF/ BAMSE ref: P-3) Reception WC's 2 Total
  - Manufacturer: Ideal Standard
    - Tel: 01482 346461
    - Fax: 01482 445886
  - Product reference: Concept Cube 40 E8031, with Pedestal E7838
  - Material: Vitreous china, white.
    - Tap/ Chainstay/ Overflow holes:
    - 1 tap hole;
    - No chainstay hole; and
    - No overflow hole.
  - Water supply fittings:
    - Flow rate (maximum): 6 L/ min. at 3 bar.
    - Manufacturer: Ideal Standard.
  - Product reference: Ideal Standard Attitude A4597AA Single Lever One Tap Hole
    - Operation: Lever handles.
  - Wastes: Pop-up type
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: As Wash basin.
    - Product reference: TBC.
    - Size: DN 40.
    - Material: Plastics, chrome plated.
    - Tail: Slotted.
  - Traps: Bottle.
    - Standards: To BS EN 274-1, -2 and -3.

- Manufacturer: As Wash basin. -
  - Product reference: to suit. Size: DN 40.
- -
- Material: Plastics, self colour. -
- Depth of seal (minimum): 75 mm.
  Accessories: None.

- 335A WASH BASINS: SAN-06 (RMF / BAMSE ref: P-7, P-12) Safety Station FLA-21 35 Total
  - Manufacturer: Armitage Shanks www.thebluebook.co.uk info@thebluebook.co.uk
     T: +44 (0)870 122 8822
     F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.
      - Product reference: S2212 Portman 400 mm Wall Mounted Washbasin.
  - Size: 400 x 365 mm.
  - Material: Vitreous china, white.
    - Tap/ Chainstay/ Overflow holes:
    - One tap hole, right;
    - No overflow hole.
  - Water supply fittings: Mixer taps.
    - Flow rate (maximum): 6 L/ min. at 3 bar.
    - Manufacturer: Hidraulica or acceptable equivalent. Product reference: Extended single lever medical basin tap.
      - Operation: Single lever.
  - Traps: Bottle.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Armitage Shanks.
    - Product reference: S8910 NB: Traps located within containment suites to withstand negative pressure regime.
    - Size: DN 40.
    - Material: Plastics, self colour.
    - Depth of seal (minimum): 75 mm.
  - Accessories: None.
- 335B WASH BASINS: SAN-06 Safety Station FLA-22 (RMF/ BAMSE ref: P-7a) 27 Total
  - Manufacturer: Armitage Shanks
    - www.thebluebook.co.uk
    - info@thebluebook.co.uk
    - T: +44 (0)870 122 8822
    - F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.
      - Product reference: S2212 Portman 400 mm Wall Mounted Washbasin.
  - Size: 400 x 365 mm.
  - Material: Vitreous china, white.
    - Tap/ Chainstay/ Overflow holes:
    - One tap hole, right;
    - No overflow hole.
  - Water supply fittings: Mixer taps.
    - Flow rate (maximum): 6 L/ min. at 3 bar.
    - Manufacturer: Hidraulica or acceptable equivalent.
    - Product reference: Extended single lever medical basin tap.
    - Operation: Single lever.
  - Traps: Bottle.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Armitage Shanks.
    - Product reference: S8910 NB: Traps located within containment suites to withstand negative pressure regime.
    - Size: DN 40.
    - Material: Plastics, self colour.
    - Depth of seal (minimum): 75 mm.
  - Accessories: Include trigger eye wash unit REF: SAN-16.

- 335C WASH BASINS: SAN-06a Safety Station FLA-24 (RMF /BAMSE ref: P-12) 13 Total
  - Manufacturer: Armitage Shanks www.thebluebook.co.uk info@thebluebook.co.uk T: +44 (0)870 122 8822 F: +44 (0)870 122 8282 Armitage, Old Road, Rugeley. WS15 4BT.
    - Product reference: E7979 Sphere 450 mm semi-countertop washbasin.
  - Size: 450 diameter x 165d
  - · Material: Vitreous china, white.
    - Tap/ Chainstay/ Overflow holes:
    - One tap hole, centre;
    - No overflow hole.
  - Water supply fittings: Mixer taps.
    - Flow rate (maximum): 6 L/ min. at 3 bar.
    - Manufacturer: Hidraulica or acceptable equivalent. Product reference: Extended single lever medical basin tap.
      - Operation: Single lever.
  - · Traps: Bottle.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Armitage Shanks.
    - Product reference: S8910.
    - Size: DN 40.
    - Material: Plastics, self colour.
    - Depth of seal (minimum): 75 mm.
  - · Accessories: Include trigger eye wash unit REF: SAN-16.
- 335D WASH BASINS: SAN-06b Safety Station FLA-24 (RMF / BAMSE ref: P-12) Total 46
  - Manufacturer: Armitage Shanks
    - www.thebluebook.co.uk
    - info@thebluebook.co.uk
    - T: +44 (0)870 122 8822
    - F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.
      - Product reference: E1630 Tempo 500 mm countertop washbasin, single central taphole.
  - Size: 500 x 400 mm.
  - Material: Vitreous china, white.
    - Tap/ Chainstay/ Overflow holes:
    - One tap hole, centre;
    - No overflow hole.
  - Water supply fittings: Mixer taps.
    - Flow rate (maximum): 6 L/ min. at 3 bar.
    - Manufacturer: Hidraulica or acceptable equivalent.
       Product reference: Extended single lever medical basin tap.
    - Operation: Single lever.
  - Traps: Bottle.
    - Standards: To BS EN 274-1, -2 and -3.
    - Manufacturer: Armitage Shanks.
    - Product reference: E3199.
    - Size: DN 40.
    - Material: Plastics, self colour.
    - Depth of seal (minimum): 75 mm.
  - · Accessories: Include trigger eye wash unit REF: SAN-16.

WASH BASINS: SAN-06c (RMF / BAMSE ref: P-9b) - Goods Yard - 1 Total Manufacturer: HUGHES SAFETY SHOWERS Ltd.
Whitefield Road Bredbury Stockport Cheshire SK6 2SS United Kingdom Tel: +44 (0)161 430 6618 Fax: +44 (0)161 430 7928 E-mail: info@hughes-safety-showers.co.uk.
Product reference: STD-H-25K/P - Pedestal Mounted Outdoor Emergency

- Wash Station.
- Size: Refer to manufacturers literature.
- Material: Stainless steel, polished.
- Other requirements: To be insulated from freezing. Complete with wash hand basin and lever operated taps (hot and cold water) to replace eyewash bowl. Include hand held face and body wash.
- Hot Water Beverage Dispenser (RMF / BAMSE ref: P-17)
  - Location 1N252 Tea Point within H & S Lab refer to (40) 58 drawings for location Manufacturer: Zip.
  - Web: www.zipheaters.co.uk.
  - Email: sales@zipheaters.co.uk.
  - Product reference: HS107
  - Material: Stainless steel finish.
  - Colour: N/A

-

• Size: 7.5 Ltr capacity - dimensions 578 x 318 x 198

#### 341A VANITY TOPS: **SAN-17** - Male & Female WC's

- Manufacturer: Formica Ltd.
  - Web: www.formica.com.
  - Email: info@formica.co.uk.
  - Product reference: ColorCore® by Formica
- Material: Plastic laminate on MR MDF background with 150mm splaskback.
- · Colour: CC7927 Folkestone Velour.
- Size: Refer to (40) series drawings.

#### 343A UNDER COUNTER VANITY UNITS: **SAN-18** - Male & Female WC's

- Manufacturer: Formica Ltd
  - Web: www.formica.com
  - Email: info@formica.co.uk.
  - Product reference: Veneered laminate.
- Size: Refer to (40) series drawings.
- · Material: Veneered laminate on MR MDF background.
- Colour: V8437-WX Cathedral Oak
- · Shelves: Grey melamine interior surfaces, predrilled holes & adjustable.
- ٠
- 351A EYE WASH UNIT: SAN-16 Trigger Eye Wash to Safety Station FLA-022

 Manufacturer: BROEN VALVES Ltd. Unit 7, Cleton Street Business Park Cleton Street Tipton, West Midlands DY4 7TR England Tel.: +44 (0) 121 522 4505 Fax: +44 (0) 121 522 4535 www.broen.co.uk broenvalves@broen.com.

- Product reference: Single eye wash unit ref: 17 02.000. -
- Local Water Storage Units FLE-108 Millipore (PE) reservoir 30 Ltr reservoir 351B

  - Wall mounted -
  - Located within Media Tissue Media Prep 2S265 & Tissue Culture Prep 2S260 -

- 375A SHOWER UNITS: SAN-14 (RMF / BAMSE ref: P-8) Shower Rooms 7 Total
  - Shower fittings: Thermostatic shower mixer concealed and Fixed adjustable spray head.
     Manufacturer: Armitage Shanks
    - www.thebluebook.co.uk
    - info@thebluebook.co.uk
    - T: +44 (0)870 122 8822
    - F: +44 (0)870 122 8282
    - Armitage, Old Road, Rugeley. WS15 4BT.
    - Product reference: E3335AA Traditional thermostatic shower mixer, and 6" fixed overhead, chromium plated.
    - Finish: Chrome plated.
    - Operating control: Manual.
    - Flow rate: 9 L/ min. at 37 ℃ at 3 bar.

375B SHOWER UNITS: SAN-26 - Energy Centre & Restaurant Manufacturer: Armitage Shanks www.thebluebook.co.uk info@thebluebook.co.uk T: +44 (0)870 122 8822 F: +44 (0)870 122 8282

Armitage, Old Road, Rugeley. WS15 4BT

- Product reference: L5332 Simplicity square Idealite flat top shower tray, 800 x 800 mm with chrome plated waste.
- Colour: White.
- Accessories: LV699 Simplicity add on upstand, adhesive option, for trays without upstand (TBC).
- 375C SHOWER SCREENS: SAN-13 Shower Rooms 5 Total
  - Enclosure: Full height 8mm glazed toughened screen 2100h x 1000w with satin etched finish.
    - Manufacturer: C.P.Hart or similar approved Newnham Terrace, Hercules Road London, UK SE1 7DR 020 7902 5250 www.cphart.co.uk. Product reference: TBC.
  - Accessories: Stainless steel fixing angles.
- 375d WALL MOUNTED TAPS: (RMF / BAMSE ref: P-16) Domestic Store Cupboards 12 pairs Total

Manufacturer: Armitage Shanks www.thebluebook.co.uk info@thebluebook.co.uk T: +44 (0)870 122 8822 F: +44 (0)870 122 8282 Armitage, Old Road, Rugeley. WS15 4BT - Product reference: S7205 Nimbus ½ in inclined bib taps (Pair)

- · Colour: Chrome.
  - Accessories: S8336 <sup>1</sup>/<sub>2</sub> in wall mounts for concealed plumbing (pair)
- 429 CLOTHES HOOKS: SAN-10 Male & Female WC's
  Manufacturer: Allgood plc
  - www.allgood.co.uk info@allgood.co.uk T: +44 (0)20 7387 9951 F: +44 (0)20 7255 9342
  - Carterville House, 297 Euston Road, London. NW1 3AQ.
  - Product reference: SS85610S00: With slot, supplied with bush for wall mounting, pre-

drilled countersunk 5 mm diameter holes.

- Material: Steel.
- Finish: Satin stainless steel.

## 434A ALCOHOL WIPES: FLA-025 & SAF-07

- Manufacturer: MRC supply & fit.
   Product reference: MRC supply & fit.
   Material: MRC supply & fit.
- Finish: MRC supply & fit.

- 442A PAPER TOWEL DISPENSERS: **SAF-03** 
  - Manufacturer: MRC supply & fit.
    - Product reference: MRC supply & fit.
  - Material: MRC supply & fit.
  - Finish: MRC supply & fit.

#### 442B SANITARY TOWEL DISPENSERS: SAF-05

- Manufacturer: MRC supply & fit.
   Product reference: MRC supply & fit.
- Material: MRC supply & fit.
- Material: MRC supply & fit
   Finish: MRC supply & fit
- Finish: MRC supply & fit.

### 446 SANITARY TOWEL DISPOSAL BINS: SAF-06

- Manufacturer: MRC supply & fit.
  - Product reference: MRC supply & fit.
- Material: MRC supply & fit.
- Finish: MRC supply & fit.

#### 458 SOAP DISPENSERS: SAF-01

- Manufacturer: MRC supply & fit.
   Product reference: MRC supply & fit.
- Material: MRC supply & fit.
- Finish: MRC supply & fit.

#### 462 TOILET PAPER HOLDERS: SAF-02

- Manufacturer: MRC supply & fit.
  - Product reference: MRC supply & fit.
- Material/ finish: MRC supply & fit.
- Finish: MRC supply & fit.

#### 474 WASTE BINS: SAF-04

- Manufacturer: MRC supply & fit.
  - Product reference: MRC supply & fit.
- Material: MRC supply & fit.
- Finish: MRC supply & fit.

### EXECUTION

- 610 INSTALLATION GENERALLY
  - Assembly and fixing: Surfaces designed to falls to drain as intended.
  - · Fasteners: Nonferrous or stainless steel.
  - Supply and discharge pipework: Fix before appliances.
  - Fixing: Fix appliances securely to structure. Do not support on pipework.
  - Jointing and bedding compounds: Recommended by manufacturers of appliances, accessories and pipes being jointed or bedded.
  - · Appliances: Do not use. Do not stand on appliances.
  - On completion: Components and accessories working correctly with no leaks.
  - Labels and stickers: Remove.

#### 613 COMPATIBILITY OF COMPONENTS

- General: Each sanitary assembly must consist of functionally compatible components, preferably obtained from a single manufacturer.
  - Exceptions: Wastes and traps.

- 620 NOGGINGS AND BEARERS
  - · Noggings, bearers, etc. to support sanitary appliances and fittings: Position accurately. Fix securely.
- 630 TILED BACKGROUNDS OTHER THAN SPLASHBACKS
  - · Timing: Complete before fixing appliances.
  - · Fixing appliances: Do not overstress tiles.
- 650 INSTALLING WC PANS
  - · Floor mounted pans: Screw fix and fit cover caps over screw heads. Do not use mortar or other beddings.
  - · Seat and cover: Stable when raised.
- 670 **INSTALLING CISTERNS** 
  - · Cistern operating components: Obtain from cistern manufacturer. Float operated valve: Matched to pressure of water supply.
  - Overflow pipe: Fixed to falls and located to give visible warning of discharge. \_
    - Location: Agreed, where not shown on drawings.
- **INSTALLING TAPS** 710
  - · Fixing: Secure against twisting.
  - · Seal with appliance: Watertight.
  - · Positioning: Hot tap to left of cold tap as viewed by user of appliance.

#### 720 INSTALLING WASTES AND OVERFLOWS

- · Bedding: Waterproof jointing compound.
- · Fixing: With resilient washer between appliance and backnut.