Imperial College
London

ARCHITECTURAL STANDARDS

Laboratory Furniture

FUME CUPBOARDS

N10/130

PREFERED SUPPLIER INFORMATION

NBS REFERENCE N10
MANUFACTURER:
WALDNER Ltd
Unit B1, 7400 The Quorum, Oxford Business Park North, Cowley, Oxford, OX4 2JZ
Tel 01865-788170
E-mail info@waldner.co.uk
Website www.waldner.co.uk
Contact: Nell Coker / tel: 07789-980625 / email: nell.coker@waldner.co.uk

PRODUCT DESCRIPTION

ICL APPROVED SPECIFICATION

Range: The SCALA laboratory system
Description: A comprehensive laboratory furnishing system which includes Fume Cupboards and Extraction Devices; Airflow Control and Monitoring Technology; Benches and Sinks; Service Modules; Storage Cabinetry; Chemical Supply and Disposal Systems; Accessories; Service and Maintenance; Laboratory Planning including 3D visualisation.

Application: Suitable for a wide range of laboratories from Class 1 to Class 4

Construction/Material: A wide range of materials is used, subject to particular project requirements. All timber based products are sourced from either FSC or PEFC accredited sources and a full chain of custody can be proven.

Environmental: Compliance with EN 14001; BREEAM (ENE19)
Warranties Subject to particular project requirements

Production: Established supply and value chains using raw materials, components and manufacturing from the UK and EU. All products are CE and GS marked

Details WALDNER company operations: to ISO 9001: Manufacturing to: ISO 14001

Design 26 patents, 11 trademarks and 17 registered designs.

TYPICAL NBS SPECIFICATION

N10
Standard Approved laboratory Fume Cupboards to Imperial College London Architectural Standards.
Manufacturer WALDNER Ltd, Unit B1, 7400 The Quorum, Oxford Business Park North, Cowley, Oxford, OX4 2JZ
Range The SCALA laboratory system
Contact Nell Coker / tel: 07789-980625 / email: nell.coker@waldner.co.uk

N20:110 — FUME CUPBOARDS GENERAL

Models: to project requirements eg. Bench, Low Ceiling, Walk-in, Low Level, Special Applications, EN7; Filter; Radio-active; Mobile, Ventilated Enclosures, Local extract
Performance: to project requirements eg. Standard extract volume or SECUFLOW low extract volume
Service Configuration: to project requirements eg. Rear Wall Installation (RWI), Side Wall Installation (SWI)
Airflow Control and Monitoring: to project requirements eg. FAZ, AC3, SC, GC for either CAV or VAV - Constant or Variable Air Volume requirements
ICL APPROVED SPECIFICATION

Range:
SYSTEM 10

Styles:   Bench frame benching
Application:    Laboratory and office areas

Construction/Material:  Please refer to specification below

Environmental:     Labflex utilises materials and products, (wherever practicable) originating from sources which are sustainable, reusable or can be recycled and established to be environmentally sensitive.

For full details of our Environmental Policy please contact us.

Warranties:     2 year warranty on furniture
10 year availability for replacement components

Production:    Made in Denmark

Details:     For full details of the ranges please contact Sean Smith

Design:  Labflex furniture offers simple, practical solutions based on modular and flexible systems, which satisfy user needs.

TYPICAL NBS SPECIFICATION
FLOOR STANDING WALL/ISLAND BENCHING

Description:     Floor standing continuous linear benching
assembly Location:     Laboratories/offices
Manufacturer:     Labflex Ltd.
System reference:     System 10 benching system
Structural frame:     Colour (framing): White RAL9016
Height:  To suit work surface (+750mm or +950mm above FFL nominal) Depth:
750mm/1500mm deep
All steel components are to be electrostatically powder-coated. High grade steel 037 DIN 2395A.

Work surfaces:     Material:  To architects specification
Colour:  To architects specification
Configuration:  Supported by structural frame
Finish:  2mm chamfer to front edge
Upstand:  50mm upstand in work surface material, surface fixed to work surface

Under bench storage units:Type:  Suspended or mobile to architects specification
Dimensions:  To architects specification
Quantity:  To architects specification
Colour (doors): Formica Plain Colours to architects specification
Handles:  Omega label handle or D-style handles to architects specification

PREFERRED SUPPLIER INFORMATION
NBS REFERENCE:     N10, N13, N20
MANUFACTURER:     Labflex Ltd

ADDRESS:
Labflex Limited, Regus House, Pegasus Business Park, Castle Donington, DE74 2TZ
Tel: +44 (0) 1332 638 071      Fax: +44 (0) 1332 638 179
Website:  www.labflex.com
Supplier Contact: Sean Smith (UK Manager) sls@labflex.com Tel: +44 (0) 7775 853 007
ICL ARCHITECTURAL STANDARDS SPECIFICATION TEMPLATE

Imperial College
London

ARCHITECTURAL STANDARDS
PRODUCT DATA SHEET

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Website: www.labflex.com

Supplier Contact: Sean Smith (UK Manager) sls@labflex.com Tel: +44 (0) 7775 853 007

PRODUCT DESCRIPTION
ICL APPROVED SPECIFICATION

Range: SYSTEM 11
Styles: Cantilevered benching
Application: Laboratory and office areas
Construction/Material: Please refer to specification below
Environmental: Labflex utilises materials and products, (wherever practicable) originating from sources which are sustainable, reusable or can be recycled and established to be environmentally sensitive.

Warranties:
2 year warranty on furniture
10 year availability for replacement components

Production: Made in Denmark

Details: For full details of the ranges please contact Sean Smith

Design: Labflex furniture offers simple, practical solutions based on modular and flexible systems, which satisfy user needs.

TYPICAL NBS SPECIFICATION
CANTILEVERED WALL/ISLAND BENCHING

Description: Cantilevered continuous linear benching
Location: Laboratories/offices
Manufacturer: Labflex Ltd.
System reference: System 11 benching system
Structural frame: Colour (framing): White RAL9016
Height: To suit work surface (+750mm or +950mm above FFL nominal) Depth: 750mm/1500mm deep
All steel components are to be electrostatically powder-coated. High grade steel 037 DIN 2395A.

Work surfaces: Material: To architects specification
Colour: To architects specification
Configuration: Supported by structural frame
Finish: 2mm chamfer to front edge
Upstand: 50mm upstand in work surface material, surface fixed to work surface

Under bench storage units: Type: Suspended or mobile to architects specification
Dimensions: To architects specification
Quantity: To architects specification
Colour (doors): Formica Plain Colours to architects specification
Handles: Omega label handle or D-style handles to architects specification
ARCHITECTURAL STANDARDS
PRODUCT DATA SHEET

PREFERRED SUPPLIER INFORMATION
NBS REFERENCE: N10, N13, N20
MANUFACTURER: Labflex Ltd
ADDRESS:
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Website: www.labflex.com
Supplier Contact: Sean Smith (UK Manager) sls@labflex.com Tel: +44 (0) 7775 853 007

PRODUCT DESCRIPTION
ICL APPROVED SPECIFICATION

Range: SYSTEM 16
Styles: Plinth-mounted benching
Application: Laboratory and office areas
Construction/Material: Please refer to specification below
Environmental: Labflex utilises materials and products, (wherever practicable) originating from sources which are sustainable, reusable or can be recycled and established to be environmentally sensitive.
For full details of our Environmental Policy please contact us.
Warranties: 2 year warranty on furniture
10 year availability for replacement components
Production: Made in Denmark
Details: For full details of the ranges please contact Sean Smith
Design: Labflex furniture offers simple, practical solutions based on modular and flexible systems, which satisfy user needs.

TYPICAL NBS SPECIFICATION
PLINTH-MOUNTED BENCHING

Description: Plinth-mounted continuous linear benching
Location: Laboratories/offices
Manufacturer: Labflex Ltd.
System reference: System 16 benching system
Structural frame: Colour (framing): White RAL9016
Height: To suit work surface (+750mm or +950mm above FFL nominal) Depth:
750mm/1500mm deep
All steel components are to be electrostatically powder-coated. High grade steel 037 DIN 2395A.
Work surfaces: Material: To architects specification
Colour: To architects specification
Configuration: Supported by structural frame
Finish: 2mm chamfer to front edge
Upstand: 50mm upstand in work surface material, surface fixed to work surface
Under bench storage units: Type: Plinth-mounted
Dimensions: To architects specification
Quantity: To architects specification
Colour (doors): Formica Plain Colours to architects specification
Handles: Omega label handle or D-style handles to architects specification
**ARCHITECTURAL STANDARDS**

**PRODUCT DATA SHEET**

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**PREFERRED SUPPLIER INFORMATION**

<table>
<thead>
<tr>
<th>NBS REFERENCE:</th>
<th>N10, N13, N20</th>
</tr>
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<tbody>
<tr>
<td>MANUFACTURER:</td>
<td>Labflex Ltd</td>
</tr>
<tr>
<td>ADDRESS:</td>
<td>Labflex Limited, Regus House, Pegasus Business Park, Castle Donington, DE74 2TZ</td>
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<tr>
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**PRODUCT DESCRIPTION**

**ICL APPROVED SPECIFICATION**

<table>
<thead>
<tr>
<th>Range:</th>
<th>Model 600 fume cabinets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styles:</td>
<td>Constant volume with sloping front and extended internal working space</td>
</tr>
<tr>
<td>Application:</td>
<td>Laboratory areas</td>
</tr>
<tr>
<td>Construction/Material:</td>
<td>Please refer to specification below</td>
</tr>
<tr>
<td>Environmental:</td>
<td>Labflex utilises materials and products, (wherever practicable) originating from sources which are sustainable, reusable or can be recycled and established to be environmentally sensitive. For full details of our Environmental Policy please contact us.</td>
</tr>
<tr>
<td>Warranties:</td>
<td>2 year warranty on fume cabinets with 12 monthly maintenance &amp; face velocity check.</td>
</tr>
<tr>
<td>Production:</td>
<td>Made in Denmark</td>
</tr>
<tr>
<td>Details:</td>
<td>For full details of the ranges please contact Sean Smith</td>
</tr>
<tr>
<td>Design:</td>
<td>Labflex fume cabinets are design with the comfort and safety of the user in mind. The working chamber is larger than the traditional fume cabinets with:- 1200mm unit giving 1120mm inside working area. 1500mm unit giving 1420mm inside working area. 1800mm unit giving 1720mm inside working area.</td>
</tr>
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**TYPICAL NBS SPECIFICATION**

**FUME CABINET ASSEMBLY**

<table>
<thead>
<tr>
<th>Description:</th>
<th>Fume cabinet assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Laboratories</td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>Labflex Ltd. System</td>
</tr>
<tr>
<td>Reference:</td>
<td>Model 600</td>
</tr>
</tbody>
</table>

**Main carcass construction:** The main carcass of the fume cabinet is manufactured from 40mm thick high density particle board laminated in high pressure fire resistant laminate which is also resistant to chemicals. The front edges of the fume cabinet have an Aluminium bullnose which contains the alarm panel, keeping it at eye level for ease of observation. The rear baffle in manufactured from solid grade material 16mm thick (compact laminate) and is fully removable for cleaning.

**Sash specification:** The sash is manufactured from 5.5mm laminated safety glass. The sash wires are manufactured from stainless steel to prevent corrosion, The sash guides are sealed with PVC and are labelled with dimension to show the sash height. All air foils and sash handles are manufactured from Stainless Steel.

**Internal chamber fittings:** Internal light lens is manufactured from laminated safety glass which is fully sealed into the carcass to prevent leakage.

**Lighting:** Lighting inside the fume cabinet is by 2 florescent lighting fixtures (32W, rapid start) operated from a switch on the front control panel.

**Worktop material:** Is cast epoxy and is fully sealed inside the fume cabinet to prevent any leakage and to retain liquids inside the hood and includes 1 vulcanethene drip cup serviced by a cold water outlet and front control valve.
<table>
<thead>
<tr>
<th>Lining material:</th>
<th>to project requirements eg. Melamine, Solid Grade Laminate, Stainless Steel, Stoneware, Polypropylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worksurfaces:</td>
<td>to project requirements eg. Stoneware, Epoxy, Stainless Steel, Polypropylene, Solid Grade Laminate</td>
</tr>
<tr>
<td>Underbench storage units:</td>
<td>to project requirements eg. General purpose (unvented), Chemical Storage and/or Disposal (vented)</td>
</tr>
<tr>
<td>Services:</td>
<td>to project requirements eg. Lighting, Water, Gases, Electricity, Data, Fuses, RCDs etc</td>
</tr>
<tr>
<td>Pre-installation of services:</td>
<td>all SCALA fume cupboards can be provided with factory installed and tested M&amp;E services, where required</td>
</tr>
<tr>
<td>Accessories:</td>
<td>a full range of purpose-made accessories to be available to suit the fume cupboards. eg. scaffolding, cable ports etc</td>
</tr>
<tr>
<td>Standards:</td>
<td>BS EN 14175</td>
</tr>
<tr>
<td>Colours:</td>
<td>White RAL9010; Light Grey NCSS3005R80B; Anthracite NCSS5502R; Dark Grey NCSS7502B</td>
</tr>
</tbody>
</table>
# Historical Context

## Imperial College

**London**

### Architectural Standards

#### Laboratory Furniture

<table>
<thead>
<tr>
<th>NBS Reference</th>
<th>N10/130 and N20/110</th>
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</thead>
</table>

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### Preferred Supplier Information

**NBS Reference:** N10, N13, N20

**Manufacturer:** Waldner Ltd

**Address:** Unit B1, 7400 The Quorum, Oxford Business Park North, Cowley, Oxford, OX4 2JZ

**Tel:** 01865-788170

**E-mail:** info@waldner.co.uk

**Website:** [www.waldner.co.uk](http://www.waldner.co.uk)

**Contact:** Neil Coker / tel: 07789-980625 / email: neil.coker@waldner.co.uk

### Product Description

**ICL Approved Specification**

**Range:** The SCALA laboratory system

**Description:** A comprehensive laboratory furnishing system which includes Fume Cupboards and Extraction Devices; Airflow Control and Monitoring Technology; Benches and Sinks; Service Modules; Storage Cabinetry; Chemical Supply and Disposal Systems; Accessories; Service and Maintenance; Laboratory Planning including 3D visualisation.

**Application:** Suitable for a wide range of laboratories from Class 1 to Class 4

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**Environmental:** Compliance with EN 14001; BREEAM (ENE19)

**Warranties:** Subject to particular project requirements

**Production Details:** Established supply and value chains using raw materials, components and manufacturing from the UK and EU. All products are CE and GS marked

**Design:** 26 patents, 11 trademarks and 17 registered designs.

### Typical NBS Specification

**N10/130 Standard**

Approved laboratory furniture and Fume Cupboards to Imperial College London Architectural Standards.

**Manufacturer:** WALDNER Ltd, Unit B1, 7400 The Quorum, Oxford Business Park North, Cowley, Oxford, OX4 2JZ

**Range:** The SCALA laboratory system of furniture and fume cupboards

**Contact:** Neil Coker / tel: 07789-980625 / email: neil.coker@waldner.co.uk

**N20: 110 — Laboratory Furniture General**

**Works Surfaces:** to project requirements eg. Melamine, Solid Grade Laminate, Trespa Toplab Base or Plus, Epoxy, Stainless Steel etc.
Support framing: to project requirements eg. H-Frame, C-frame, Cantilever-frame, Mobile-frame etc

Underbench storage unit systems: to project requirements eg. Plinth mounted, Mobile on castors, Suspended etc

Underbench storage unit types: to project requirements eg. Cupboards, Drawers, Chemical Storage and Disposal

Service modules: to project requirements eg. Service Wall Duct, Service Spines, Service Booms, Service Wing, Service Ceiling etc

Overbench storage units: to project requirements eg. Wall mounted, Service Spine mounted etc

Tall storage units: to project requirements eg. Shelf units, Pull-out units, Acid units, solvent units, gas Cylinder units etc

Sinks and services: to project requirements eg. Stainless steel, Epoxy, Polypropylene, Stoneware

Pre-installation of services: all SCALA service modules can be provided with factory installed and tested M&E services, where required

Accessories: a full range of purpose-made accessories is available eg. drawer dividers, labels etc

Colours: White NCS S 0505 Y; Walnut; Light Grey NCS S 0505 Y/060; Anthracite NCS S 0502 Y; Dark Grey NCS S 0502 Y

Standards: BS EN 14056 and BS EN 13150