

DESIGN & ACCESS STATEMENT

College Building (Holden Building)
SOAS University of London

Lower Ground Refurbishment & Installation of Security Access Barriers



March 2024

This Design & Access Statement has been prepared by Neville Bruton Design on behalf of the School of Oriental and African Studies (SOAS), to support an application for listed building consent for interior refurbishment works within the Grade II College Building (Holden Building), SOAS University of London, Thornhaugh Street, London, WC1H 0XG.

LOCATION PLAN



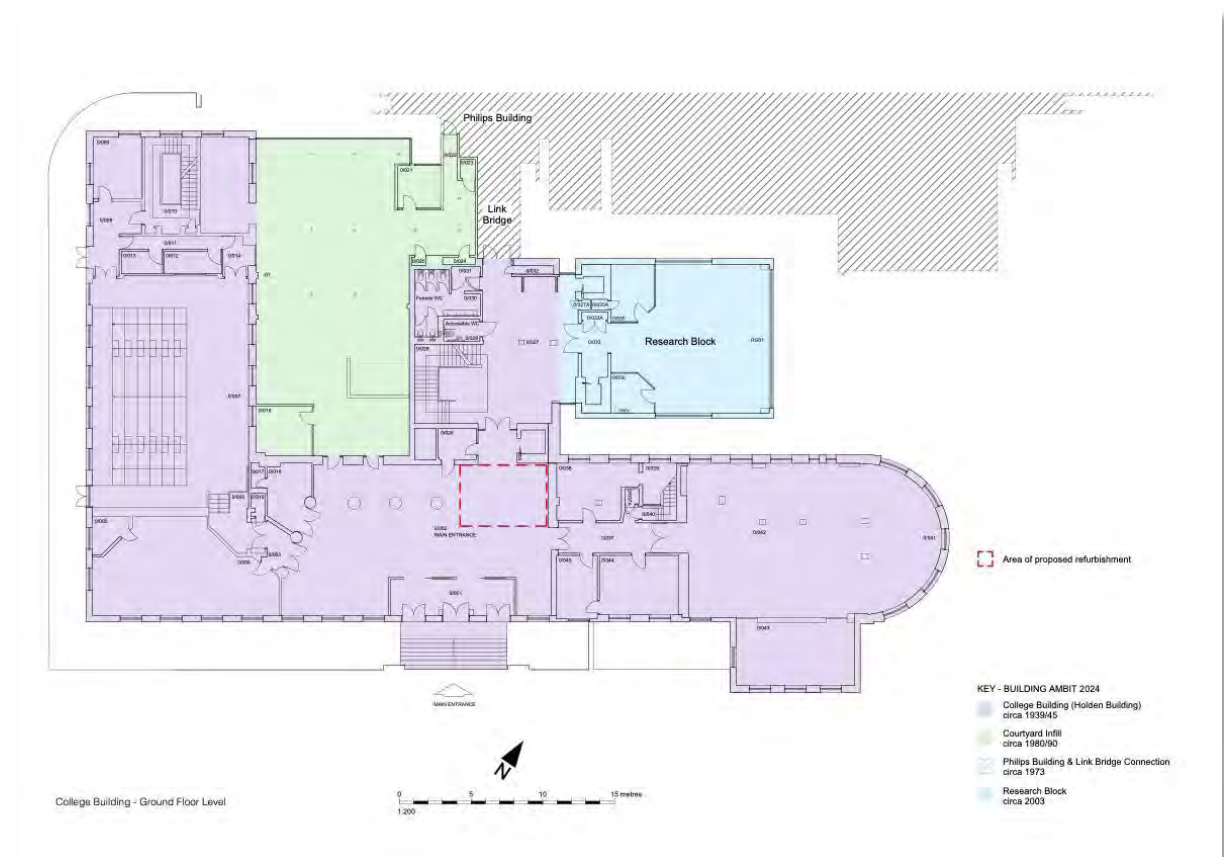
VISION & OBJECTIVES

The application for listed building consent is in relation to the SOAS Grade II listed College Building (Holden Building), situated within the Russell Square, University of London campus, which sits within the Bloomsbury Conservation Area.

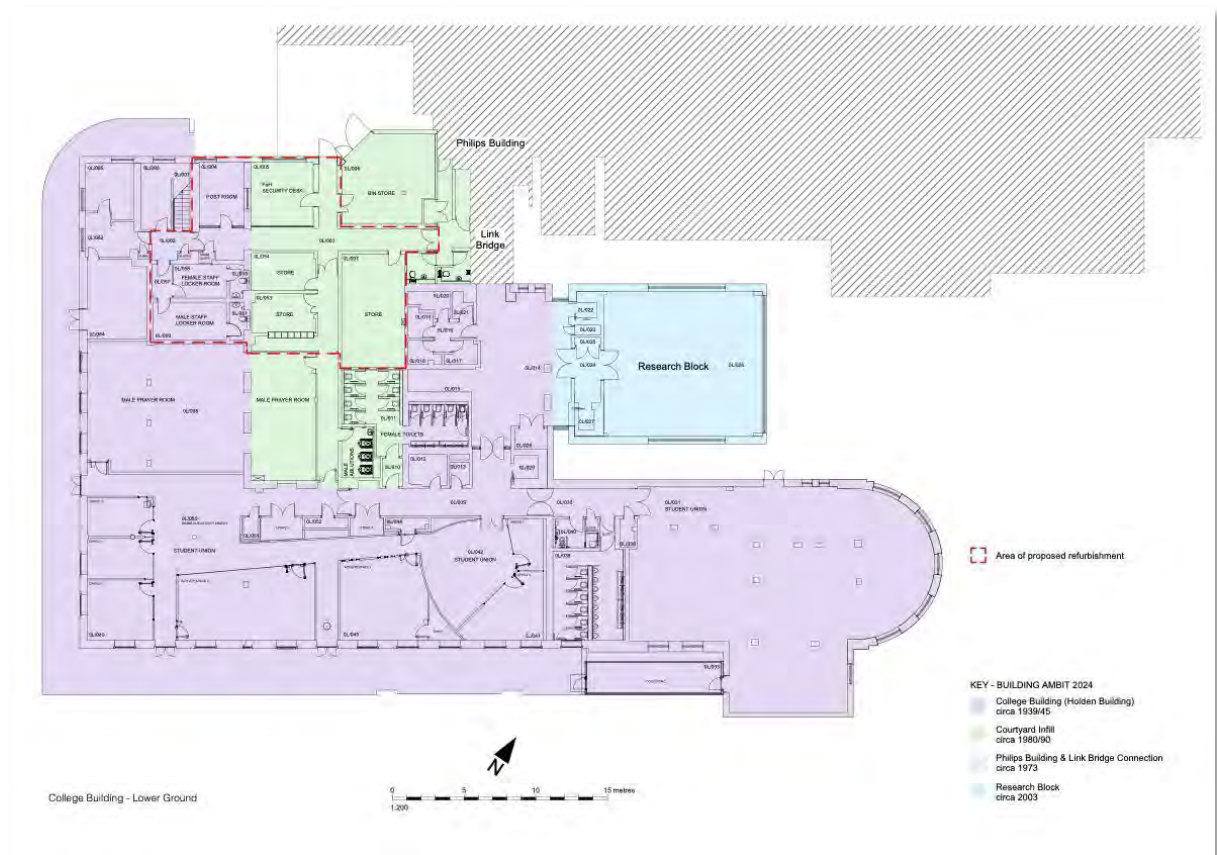
The proposals relate to the interior repurposing and refurbishment of approximately 194SQM of ancillary accommodation which occupies part of the original building demise and later 1980's west courtyard infill on the lower ground floor level, as outlined in red on the plans below.

The proposals also respond to the SOAS Safety and Security Policy, in respect to the welfare of students, staff and visitors, through the introduction of fast lane security access barriers located at both ground and lower ground floor level entrances to the building.

Please refer to *Access – Installation of Fast Lane Security Access Barriers* later in this document.



College Building Ground Floor – Proposed location of security access barriers (outlined in red)



College Building Lower Ground Floor – Line of Proposed Refurbishment Area

The proposed works sit within the below listed areas:

Ground Floor

- Area 0/002 Main Entrance Ground Floor

Lower Ground Floor

- Area 0L/005 Rear Entrance Security Desk (Primary Contractor Entrance)
- Area 0L/004 Post Room
- Area 0L/057* Locker Room Lobby
- Area 0L/58 & 0L/59* Female Staff Locker Room & Toilet
- Area 0L/60 & 0L/61* Male Staff Locker Room & Toilet
- Area 0L/54* Store (*decommissioned kitchen office*)
- Area 0L/53* Store (*decommissioned kitchen wash-up*)
- Area 0L/007** Store (*decommissioned dry goods store*)
- Areas 0L/002 & 0L/003 Circulation Areas

*Interior areas formed under previous 2011 planning application 2011/3969/P

** Interior area repurposed under previous 2011 planning application 2011/3969/P

Please refer to:

Appendix A Photographic Reference, Ground Floor Entrance Area

Appendix B Photographic Reference, Lower Ground Floor Development Area

SUMMARY OF PROPOSED WORKS

These proposals do not seek to increase the building's area.

- Removal of identified non-structural studwork
- Removal of later addition glazed screen partitions
- Removal of suspended ceilings
- Removal of floor finishes
- Removal of redundant service infrastructure
- Fire stopping
- Installation of new studwork
- Installation of new suspended ceilings
- Replacement of later addition interior doors and frames with new compliant fire doors
- Creation of new opening within non-structural interior brickwork wall
- Installation of new small power, lighting, emergency lighting
- Upgrading of fire control – smoke detection, call points, etc.
- Installation of security barriers at both lower ground and ground floor entrance points
- Upgrading security systems – access control, CCTV, etc.
- Modification of existing HVAC systems
- Installation of new floor finishes
- Interior decoration
- Installation of wayfinding, signage, manifestations, etc.

BACKGROUND

The Grade II College Building forms part of the SOAS central London campus, associated to the University of London and includes, the Philips Building (Grade II*), the Brunei Gallery, the Paul Webley Wing of Senate House (Grade II*), which sit within Sub Area 3 of the Bloomsbury Conservation Area and 53 Gordon Square (Grade II), which sits within Sub Area 2 of the Bloomsbury Conservation Area.

Please refer to the accompanying Heritage Statement for further detail

SOAS is home to leading research and expertise on the global issues of today. Students engage with academics on these issues throughout their study.

It is uniquely placed to inform and shape current thinking about the economic, political, cultural, security and religious challenges of our world.

Its decolonial outlook on education allows it to strive for a more equal and just world through its teaching and research. It is committed to building bridges within the global communities and forging equitable global partnerships.

It challenges perspectives, broaches debate, and empowers its students to question the global status quo and find solutions to the issues facing the world today.

Its programmes are taught by respected international academics with inter-disciplinary expertise. These scholars are engaged in fieldwork and research that influences governments, industries, and communities across the world.

SOAS has a very diverse student base, from over a hundred different countries, and has a number of unique courses.

SOAS cater for approximately 6,145 students on campus with a further 2,140 off campus/distant learning students – Supported by 1,010 academic and professional services staff.

The College Building provides teaching rooms, academic and administration offices, welfare facilities and Students Union facilities. It provides the main SOAS reception focus and access to both the Philips Building and Research Block.

The Philips Building, accessed via the Link Bridge within the College Building, houses one of only five National Research Libraries in the UK, with over 1.5 million volumes, periodicals and audio-visual materials in 400 languages, focusing on Asia, Africa and the Middle East. It also provides teaching rooms, academic and administration offices and welfare facilities.

A full overview of the SOAS offer can be viewed at: <https://www.soas.ac.uk>

DESIGN BRIEF

The design brief issued by SOAS sets out their aspirations as follows:

The aim of the project is to ensure the buildings long term and continued viability, by maintaining its assets through suitable and compliant interventions providing long-term and sustainable environments for its students and staff, which are fit for contemporary purpose and showcase the university and its facilities.

SOAS are committed to the preservation of its listed assets. The challenge is to design and specify a scheme which respects the integrity and maintains the preservation of the building.

DESIGN APPROACH

The design approach has been based on the following principles:

- To sustain the significance of the listed building
- To maintain the viable use of the building
- To find solutions that do not adversely impact on either the interior or exterior of the building or its context within the site.
- To undertake modifications and repairs in a sensitive way, respecting the integrity of the original fabric with sympathetic use of new materials and finishes

POLICY CONTEXT

The proposals have been developed with reference to:

- English Heritage 'Conservation Principles, Policies and Guidance' 2008
- Planning (Listed Buildings and Conservation Areas) Act 1990
- National Planning Policy Framework 2021
- Camden Core Strategy 2010-2025 'Policy CS14 – Promoting high quality places and conserving our heritage
- Bloomsbury Conservation Area Appraisal and Management Strategy – Adopted 18 April 2011

DESIGN PRINCIPLES

The design proposals have been progressed through discussions and consultations with the SOAS and have been subject to further discussions, consultations and design amendments as the project has proceeded through the preparation of the listed building consent application.

The final design proposals take into account the ambitions of the brief, the limitations of altering a listed building, the sensitivities of the site and the target costs.

The proposed works will not have an adverse impact on the building or its surrounding environment.

USE

The use of the building will remain the same

APPEARANCE

It is hoped that the proposed works will have a positive impact on the appearance of the interior of the building. The potential impact the proposed work will have, is detailed within the section 'Statement of Justification' later in this document.

ACCESS

The proposed scope of works to the interior of the building do not represent a material change of use so do not require the wholesale upgrading of the building to comply with The Building Regulations Approved Document Part M except where material alterations are made, however the Equality Act 2010 and the Equality (Disability) Regulations 2010 requires service providers to make reasonable adjustments to any physical features that might put a person with a disability at a "substantial disadvantage".

There is both stepped and ramped access with intermediate landing points to the main entrance of the College Building, with step free access also available to the rear of the College Building. Both entrances offer lift access to upper and lower floor levels, the Link Bridge to the Philips Building and Research Block levels.

The Link Bridge connection between the College Building and Philips Building has a shallow ramped floor, the double leaf fire doors at the head of the ramp are fitted with magnetic hold opens with fail release under fire condition.

SOAS do not propose to structurally alter any of existing access points as part of the proposals under this application.

ACCESS - INSTALLATION OF FAST LANE SECURITY BARRIERS

SOAS are continually assessing how students and staff interact with the campus, part of this focus being campus safety and security.

Security personnel are currently tasked to physically check the passes of everyone entering campus buildings, with enhanced security deployed when there are heightened safety risks (graduations, welcome week, etc.).

Studies have highlighted that there are a range of perceptions in the interactions with students and staff – these include:

- There is sometimes an excessive security presence, which is deemed inappropriate and raises anxieties.
- Security personnel checking passes of all those entering the building is often considered as confrontational and discriminatory by those who are challenged.

Checking passes causes the most friction and escalated behaviours. Tensions will be reduced by introducing pass operated high-speed access lane security barriers, eliminating the requirement for physical pass checks at building entrances and reducing a visible security presence at these locations.

Barriers located within the lower ground staff and contractor entrance will operate in the same manner, allowing contractors, once security cleared and issued with a pass, access to the site for pre-determined periods.

Gate configurations have been designed to provide accessible access.

EXISTING LAYOUT & FINISHES

The building has undergone significant change since its original construction. Both exterior and interior spaces have been adapted over the years, in response to a continually evolving and growing University environment.

The scope of the proposals are limited to the ground floor entrance area and defined lower ground level, which in part sits within the later addition west courtyard infill and footprint of the now decommissioned 2011 lower ground refectory and kitchen refurbishment project dealt with under previous planning application 2011/3969/P.

The proposed scheme has been developed to ensure that significant original features are maintained.

Please refer to the below listed drawings and appendices contained later in this document for details of existing and proposed layouts and finishes.

Drawings - EXISTING

SOAS-CB-G-001P	Existing Ground Floor Plan (1:100 @ A1)
SOAS-CB-LG-001P	Existing Lower Ground Floor Plan (1:100 @ A1)
SOAS-CB-EX-LG-001P	Existing Lower Ground Demolition Plan (1:50 @ A1)
SOAS-CB-EX-LG-002P	Existing Lower Ground Ceiling Plan & Services (1:50 @ A1)
SOAS-CB-EX-LG-004P	Existing Lower Ground Floor Finishes (1:50 @ A1)
SOAS-CB-EX-LG-005P	Existing Lower Ground General Elevations (1:50 @ A1)

Drawings – PROPOSED

SOAS-CB-PR-G-001P	Proposed Ground New Security Access Barriers (1:50 @ A2)
SOAS-CB-PR-LG-001P	Proposed Lower Ground New Structures (1:50 @ A1)
SOAS-CB-PR-LG-004P	Proposed Lower Ground New Ceiling Plan & Services (1:50 @ A1)
SOAS-CB-PR-LG-006P	Proposed Lower Ground New Floor Finishes (1:50 @ A1)
SOAS-CB-PR-LG-007P	Proposed Lower Ground General Elevations (1:50 @ A1)
SOAS-CB-PR-LG-008P	Proposed Lower Ground General Door Details (1:50 @ A1)

Appendices

- Appendix A Photographic Reference – Ground Floor Entrance Area
(Documented 2024)
- Appendix B Photographic Reference – Lower Ground Floor Development Area
(Documented 2024)
- Appendix C Suspended Ceiling Systems
- Appendix D Toilet Cubicles
- Appendix E Whiterock Wall Finishes
- Appendix F Floor Finishes
- Appendix G Lighting
- Appendix H Fast Lane Security Barriers

EXISTING STAIR

There are no planned works proposed to be undertaken on the original stair with 'Biancola' in situ cast composite marble finish leading off area 0L/002 on the lower ground floor.

WALLS & PARTITIONS

Areas of original internal partition walls are constructed from solid brick, plastered with paint finish. Plasterboard faced, timber and metal studwork partitions have been installed during later remodelling works.

Existing internal walls and partitions retained and/or altered to suit the new layout are to be made good prior to applying new finishes. Any blown, cracked plaster will be removed back to nearest stable, solid plaster and patch repaired.

Any areas of damp are to be stabilised – Plaster is to be hacked off and the area replastered using damp resistant plaster.

The proposals include the removal of later addition non load bearing brickwork and studwork walls as identified on drawing SOAS-CB-EX-LG-001P.

Also identified on the drawing for removal are:

- The glazed crittall screen partitions forming the corridor walls to areas 0L/004 & 0L/005, installed as part of the later addition west courtyard infill works.

The proposals include the installation of new plasterboard faced metal stud partitioning, as identified on drawing SOAS-CB-PR-001P forming the new layout for the area. The drawings detail the different metal stud partition types, make-up, sizing and performance requirements.

NEW BLOCKWORK

The existing interior double doors and related frame to the bin store, 0L/066 (off the lower ground entrance corridor) are to be removed and the opening permanently blocked using lightweight concrete blocks, tied to adjacent brickwork with fur fix connections. The interior face is to be plaster rendered, prior to decoration.

EXTERNAL WINDOWS

Original windows and doors throughout the building were replaced throughout, post c 2005 with powder coated metal frame casements.

As identified on drawing SOAS-CB-EX-LG-001P, the structural wall with retained casement window between areas 0L/004 and 0L/005, forms part of the original College Building outer wall. This became an interior flank wall with the addition of the late 1980s west courtyard infill project.

It is proposed to remove the casement window and brickwork beneath to form a new opening between areas 0L/004 & 0L/005, proposals that were previously granted consent in 2012 under listed building application 2012/5317/L.

EXTERNAL DOORS

The lower ground rear entrance to the College Building comprises an aluminium framed glazed single leaf door within an anodised aluminium framed glazed facade – see photographic reference contained within Appendix B.

It is proposed to replace the door with matching design and finish to that removed. The replacement door is to be fitted to provide outward opening to the opposite door stile, as shown on the proposal drawings.

INTERNAL DOORS

The proposed refurbishment has been developed to comply with Building Regulations and the Fire Strategy for the building, to ensure that both emergency escape routes and fire compartmentation are compliant for both building occupancy and use.

Whilst SOAS appreciate the importance of retaining original building features, their underlining responsibility is to ensure compliance with the Fire Regulations.

Existing interior doors within the proposed project area are later addition solid core, flush panel doors with oak veneer finish with decorated frames and architraves.

Please refer to photographic reference contained within Appendix B of this document.

It is proposed to replace these interior doors with new correctly fitted, compliant and certificated flush panel, oak veneered, FR30 fire doors with decorated frames and architraves

Refer to drawing SOAS-CB-PR-LG-008P door details.

A new access controlled anodised aluminium framed toughened glass single leaf door is proposed to be fitted within the entrance corridor, adjacent to the new security barriers.

SKIRTINGS

Skirtings within the project area are not original to the building, the majority of which will be removed as part of the proposed remodelling works.

New 18mm x 100mm MDF with simple pencil radii skirtings are to be installed throughout (other than areas specified as having integral vinyl coved skirtings).

CEILINGS

Existing ceilings are a combination of later addition metal frame suspended plasterboard and suspended ceiling grids with lay-in fibrous tiles, providing a service void above for mechanical and electrical services.

Refer to drawing SOAS-CB-EX-LG-002P Existing Ceiling Plan

As part of the reconfiguration of the area, it is proposed to replace the existing suspended ceiling systems with new.

The MF plasterboard ceiling within area 0L/004 is to be retained and modified.

Refer to drawing SOAS-CB-PR-LG-004P Proposed Ceiling Plan

Refer to Appendix C – Suspended Ceiling Systems

TOILET CUBICLES

New staff toilet facilities will comprise of cubicles, vanity units and associated panelling constructed from solid grade compact laminate.

See Appendix D – Toilet Cubicles

WET AREA WALL FINISHES

Wall areas within the new formed toilets and wet rooms are to be finished in fully seamed Altro Whiterock to provide a continuous hygienic and visually unbroken surface finish.

The Whiterock is to be seam welded to the integral coved skirting of the safety and/or wet room flooring within the area.

See Appendix E – Whiterock Wall Finishes

DECORATION

Walls & Ceilings

All plastered wall and ceiling surfaces (exception Whiterock surfaces) are to be finished in Dulux Trade Diamond Matt emulsion, colour TBC

Joinery – Skirtings & Door frames

All are to be finished in Dulux Diamond satinwood, colour TBC.

FLOORING

Existing floor finishes within the area, comprising sheet vinyl and carpet tiles are not original to the building and are to be removed along with associated coved skirtings, trims and formers.

Refer to drawing SOAS-CB-EX-LG- 005P Existing Floor Finishes

Existing area 0L/007, prior to its last use as a kitchen dry store, originally housed part of the College Building Library mobile racking installation. Floor track and associated chain drive remain recessed in the floor slab. To enable the area to be repurposed, it is proposed that the recessed track be removed and the floor made good, prior to installing new floor finishes.

Refer to drawing: SOAS-CB-PR-LG-006P New Floor Finishes

See Appendix F – Floor Finishes

SERVICES GENERALLY

Hot and cold water supplies and associated above ground drainage, heating, small power, lighting, data, fire and security control system distribution exist within the area, these services will be stripped back to localised distribution points within the area and re-run/reconfigured to the new layout requirements.

LIGHTING

It is proposed to strip out all existing lighting installations within the area, comprising PIR controlled perimeter fluorescent wall bulkheads and lay-in modular downlights & associated emergency fittings within the suspend ceiling zones.

Refer to drawing: SOAS-CB-EX-LG-002P Existing Ceiling Plan

New lighting installations will be designed to be functional in use, to aid safe movement and provide compliant lighting levels and colour rendering applicable to specific area activities. Installations will generally utilise high quality colour temperature matched LED luminaires to minimise both energy consumption and heat gains to spaces.

It is proposed that the new lighting installations shall be controlled by local microwave sensors.

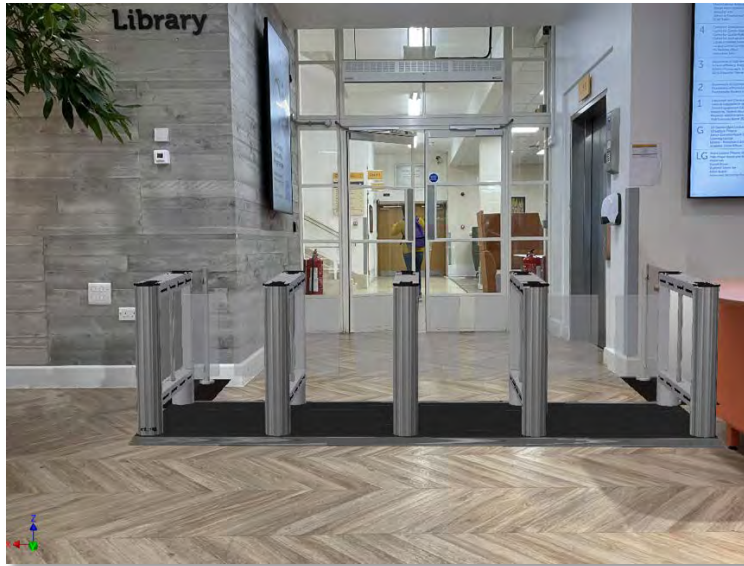
Emergency lighting will be a combination of LED pin spots and illuminated directional signage.

Refer to drawing: SOAS-CB-PR-LG-004P Proposed Ceiling Plan

See Appendix G - Lighting

FAST LANE SECURITY ACCESS BARRIERS

Proposed to be installed at both ground and lower ground entrance points.



Visual - Ground floor security access barriers in situ

For proposed locations, please refer to drawings:

SOAS-CB-PR-G-001P Proposed Ground New Security Access Barriers (1:50 @ A2)

SOAS-CB-PR-LG-001P Proposed Lower Ground New Structures (1:50 @ A1)

See Appendix H – Fastlane Security Access Barriers

VENTILATION

The existing ventilation servicing the area comprises ducted fresh air supply and extract run within the suspended ceiling voids from localised plant, this is supplemented within area 0L/005 by a localised split unit with plant located within the College Building perimeter lightwell.

The existing external mechanical plant will be retained to serve the redesigned fresh air supply & extract throughout the area.

The existing split unit within area 0L/005 is proposed to be relocated within Area 0L/004. Associated external plant will not be affected.

PROCUREMENT

The proposed work will be procured by means of competitive tendering, with drawings and specifications and schedules of work. This process is important to maintain cost control within budgetary constraints and retain control over design quality, especially within the context of work to a listed building.

To comply with procurement policy 'equal and approved/equivalent' is required to be adopted during tendering of services, products and equipment. Details contained within this

application therefore forms the basis of design intent and minimum performance requirements for the project.

STATEMENT OF JUSTIFICATION

The following issues have been considered during the preparation and development of the proposals.

- The importance of the building and its intrinsic architectural and historic interest on both a national and local level

The building forms part of the University of London campus which is an important and recognisable local landmark within Camden and which is recognised nationally. The building has architectural associations with Charles Holden, as mentioned earlier and within the accompanying Heritage Statement.

The proposals will not impact on the buildings intrinsic architectural or historical interest.

The proposals neither encroach on or involve the removal of significant original features

- Setting and contribution to the local scene

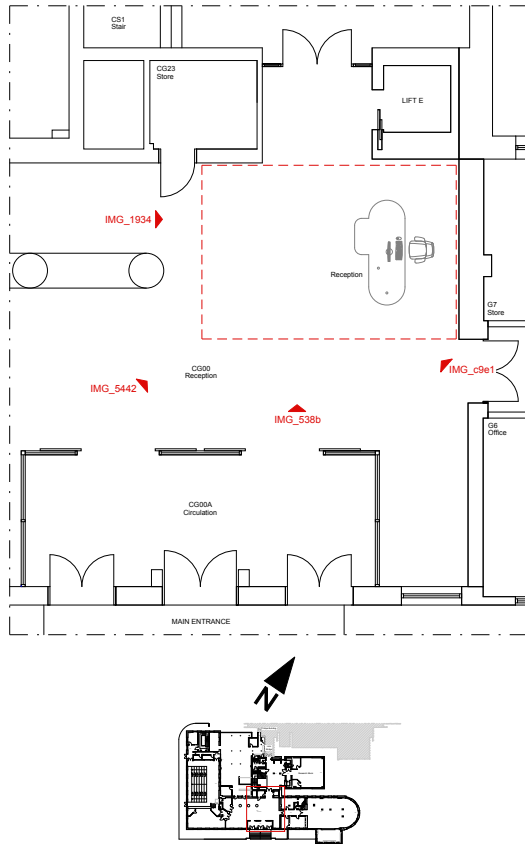
The elements of the proposed works will have a positive impact on the interior of the building but will not impact on the buildings setting and contribution to the local scene.

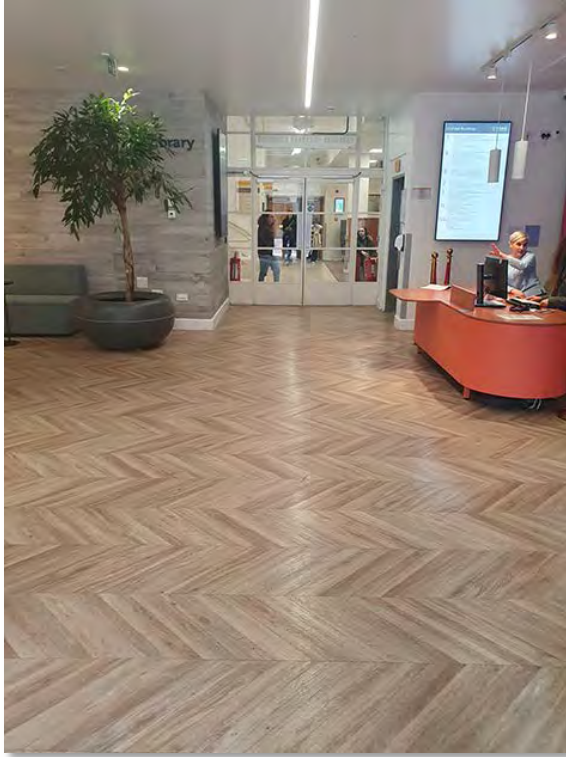
- Substantial benefits to the community
 - The proposed works highlight the strong commitment to the University's student population and will support a positive University offer, which is believed will benefit the local economy and community.
 - The maintenance and repair of the building illustrates the continued investment and care by the SOAS of a locally important building.

APPENDIX A

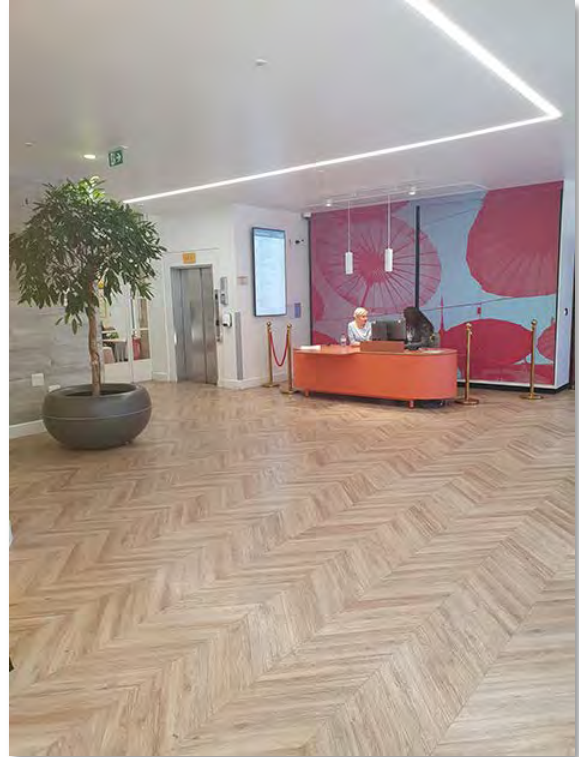
College Building

Photographic Reference – Ground Floor Entrance Area (Documented 2024)





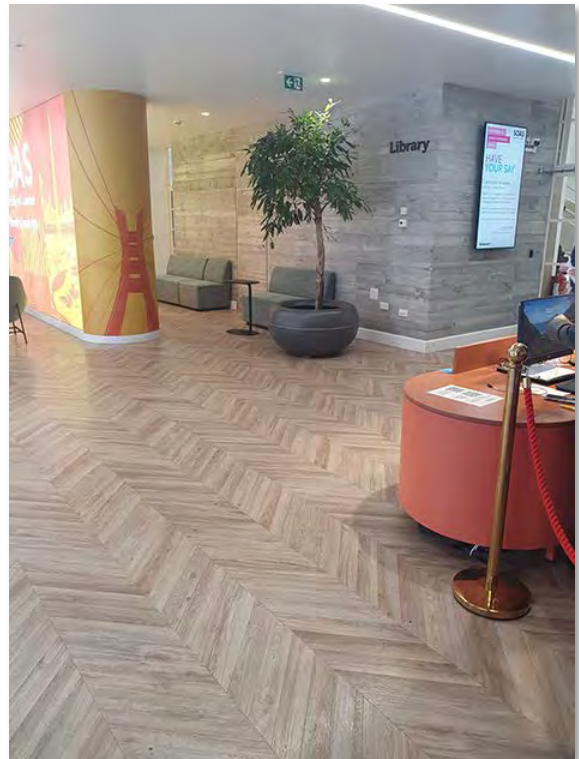
IMG_538b



IMG_5442

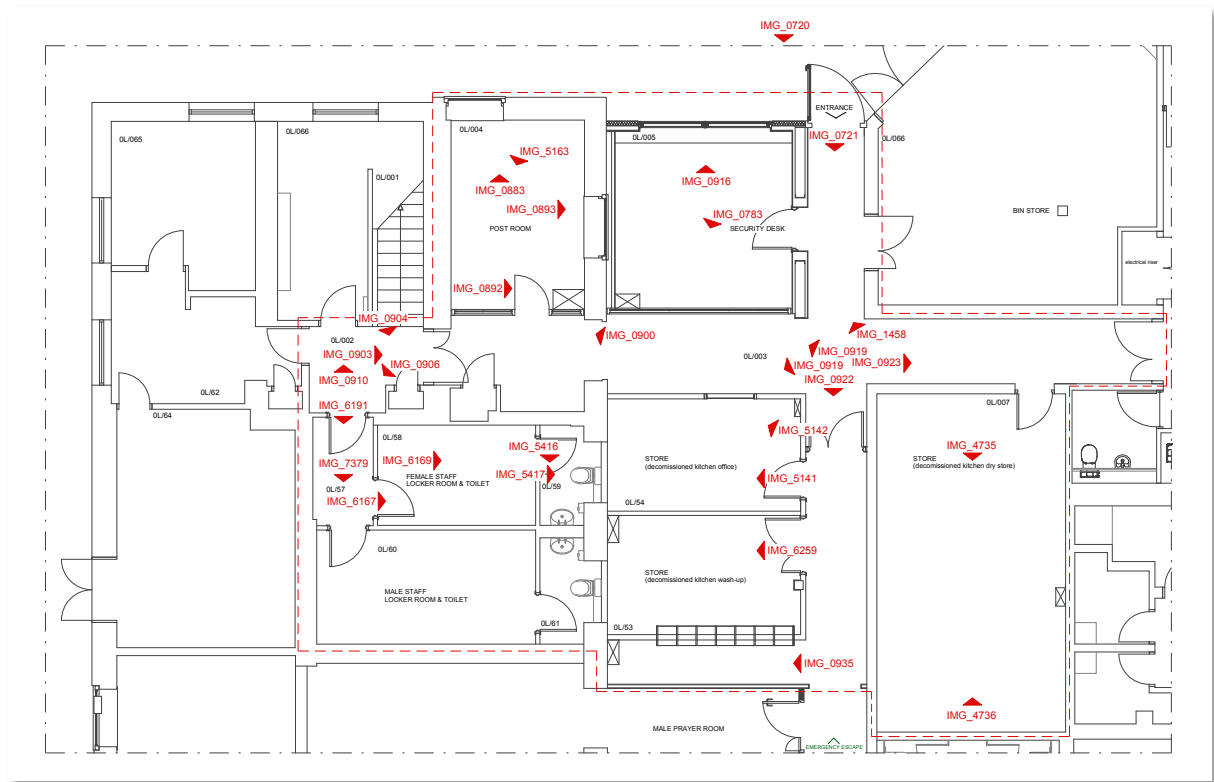


IMG_1934

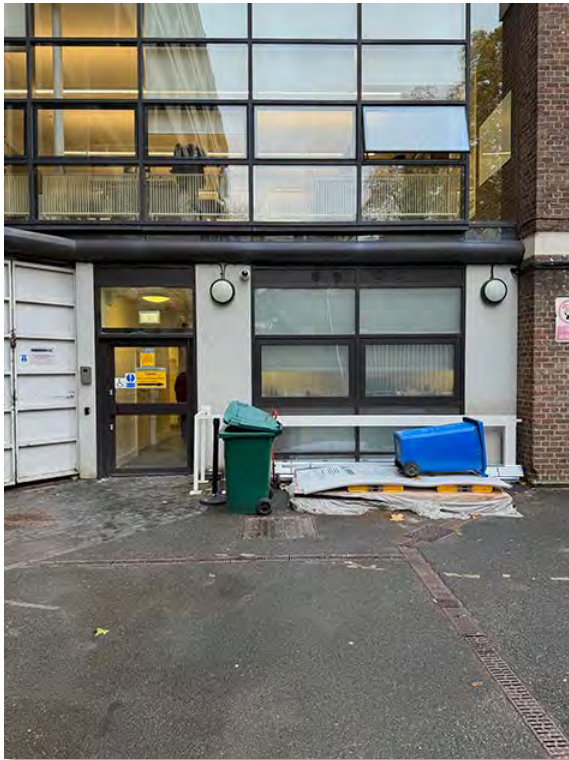


IMG_c9e1

APPENDIX B
College Building
Photographic Reference – Lower Ground Floor Development Area (Documented 2024)



College Building Lower Ground Level – Photographic Key



IMG_0720 lower ground entrance



IMG_1458 lower ground entrance corridor – upper section drylining removed to assess structure



IMG_0919 later addition glazed crittall screen partition



IMG_0900 later addition glazed crittall screen & oak framing



IMG_0921 later addition oak framed crittall window within interior corridor studwork



IMG_0903 stair lobby



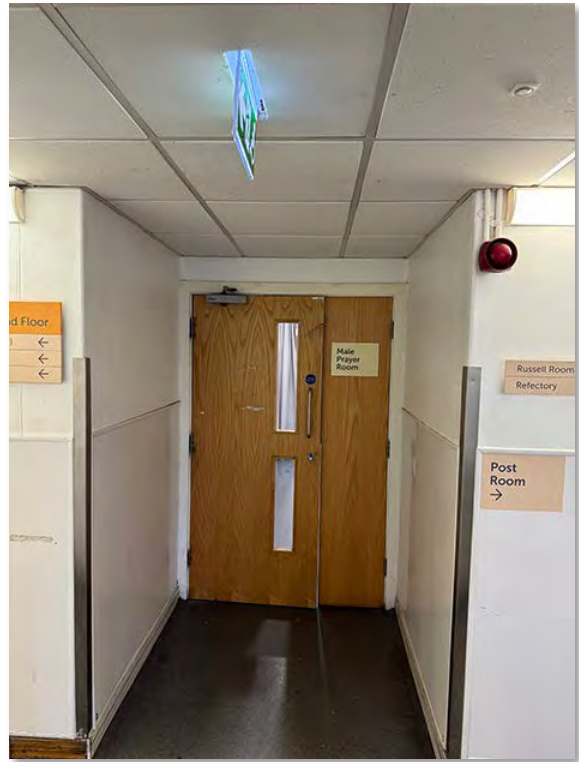
IMG_0910 original 'terrazzo' stair



IMG_0906



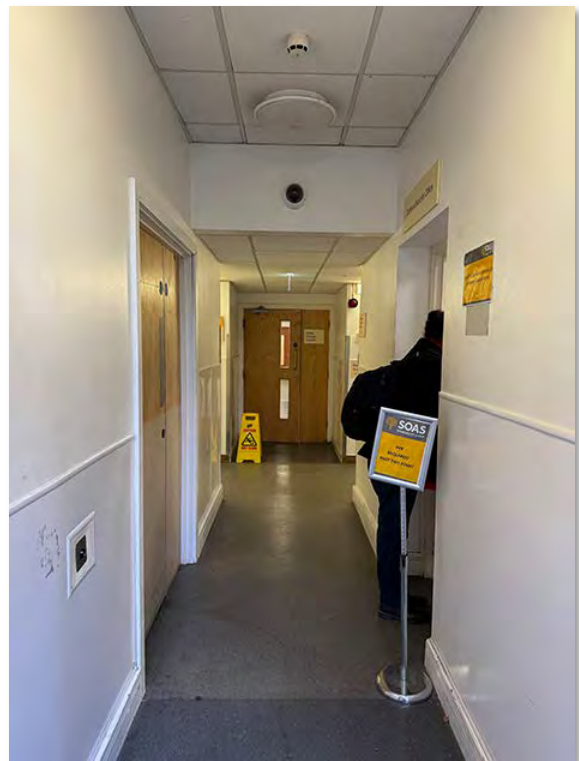
IMG_0904



IMG_0922



IMG_0923



IMG_0721 (pre removal of drylining IMG_1458)



IMG_0883 area 0L/004 post room



IMG_5163 area 0L/004 post room



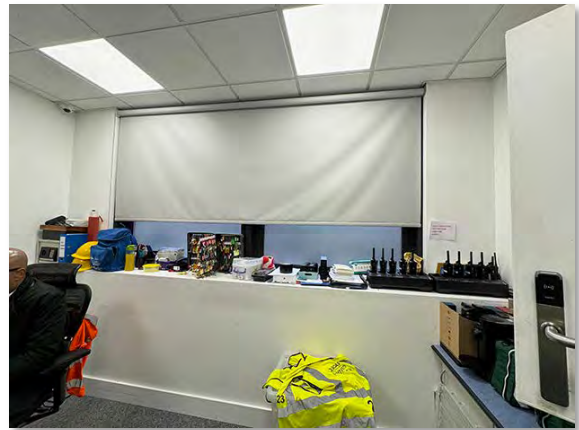
IMG_0892 area 0L/004 post room



IMG_0893 area 0L/004 post room – internal window proposed to be removed



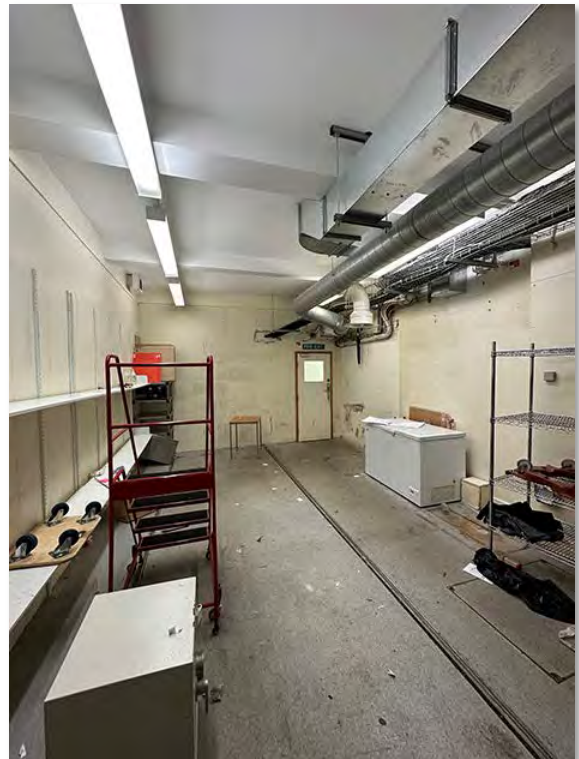
IMG_0783 area 0L/005



IMG_0916 area 0L/005



IMG_4735 area 0L/007 decommissioned kitchen dry store



IMG_4736 area 0L/007 decommissioned kitchen dry store



IMG_6259 area 0L/53 Store (decommissioned kitchen wash-up)



IMG_0935



IMG_5141 area 0L/54 Store (decommissioned kitchen office)



IMG_5142 area 0L/54 Store (decommissioned kitchen office)



IMG_6191 area 0L/57 lobby



IMG_7379 area 0L/57 lobby



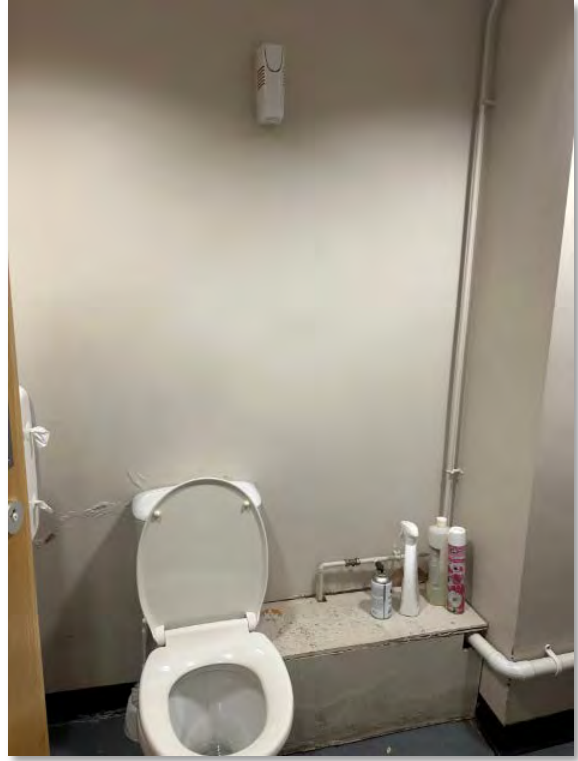
IMG_6167 area 0L/58



IMG_6169 area 0L/58



IMG_5416 area 0L/59 (mirrored in 0L/61)

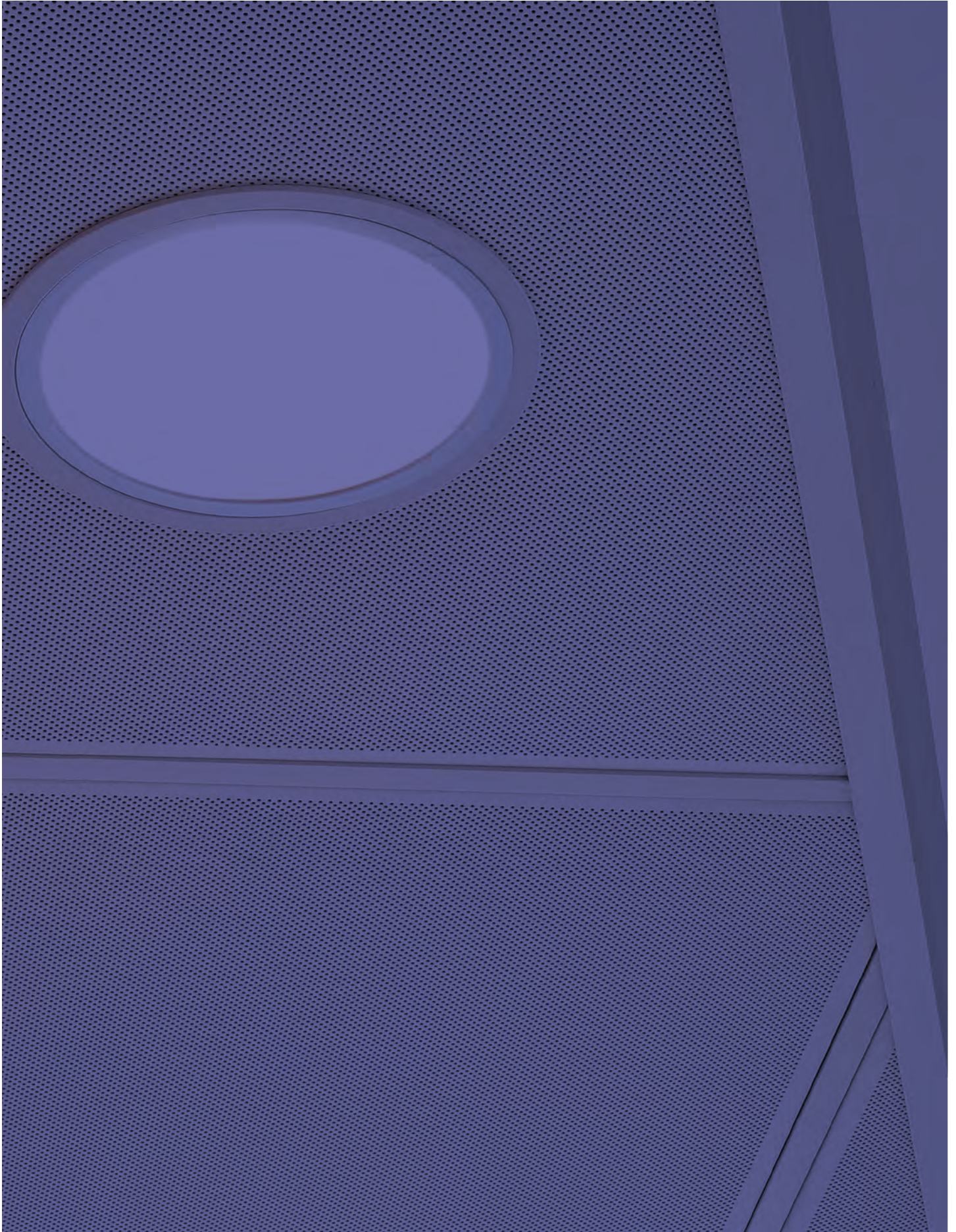
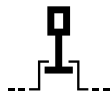


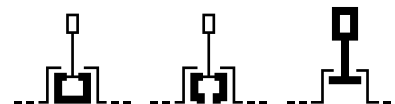
IMG_5417 area 0L/59 (mirrored in 0L/61)

APPENDIX C

Suspended Ceiling Systems

LOCATION	CEILING TYPE
Area 0L/002 (base of stair)	SAS International 130 system Alugrid-P grid with 600 x 600 lay-in perforated metal tiles, pattern D2414, polyester powder coated colour traffic white RAL 9016 – Perforated pattern replicating Philips Building corridor ceiling tiles
Area 0L/57 & 0L/60 Female Staff Toilets/Locker Rm	
Area 0L/54 & 0L/53 Male Staff Toilets/Locker Room	
Entrance corridor	
Area 0L/005 Security Reception	SAS International 130 system with 600 x 600 folded edge mesh tiles, finish polyester powder coated black. Installed as independent rafts, consisting full uncut tiles.
Area 0L/007 New Post Room	
Main Corridor Areas	
Female & Male Staff Wet Rooms	Gyproc CasoLine MF ceiling system with plasterboard linings





SAS130 offers either a flush (Alugrid) or tegular (Tee Grid) finish metal ceiling, depending on aesthetic preference. Lay-in tiles are quick to mount and dismount offering simple access to the ceiling void.

The suspended ceiling integrates seamlessly with both partitioning and signage for hassle free installations (Alugrid Q). The system can also form an airtight seal (with Alugrid Cleanseal) for air management and moisture control applications. Typical applications of SAS130 include commercial offices, Data Centres and labs.

Module Sizes (mm)

500 x 500	Bespoke module sizes and shapes are available on request.
600 x 600	
750 x 750	

Access

The void is completely accessible by removing the lay-in tiles, with no need for specialist tools.

Finishes

SAS130 is available in all standard SAS finishes, please refer to page 105. Bespoke finishes are available on request.

Perforations

Typically supplied with 1522 (available as stock item), 1820 or 2516. For our full range of perforations, please refer to page 83. Bespoke perforations are also an option.

Acoustic Materials

8/16/19mm deep, 80Kg density mineral wool pad with black tissue face, foil back and sides. Other acoustic materials are available, please refer to page 20.

Service Integration

Tiles can be formed with apertures during manufacturing and post painted for integration with lights and other services.

Please note Alugrid-Q sections can be supplied with "bird's mouth" mitres on one side only. These form a flush abutment to lighting and other services resting directly on the grid. These sections are suitable for ceilings where the services are of a larger modular size than the ceiling tiles.

Please note SAS130 can support additional loads up to 3Kg. This is based on a point or uniformly distributed load over 0.36m², with hanger centres positioned 1000mm apart, maximum. For loads greater than 3Kg, SAS recommends using independent suspension.

Airtightness and Acoustics

The Alugrid-P Cleanseal grid option creates an airtight barrier between the grid and tile. This stops unwanted dirt getting in behind or falling through the tile. This can be a highly desirable trait in labs and Data Centre applications.

Partitioning and Signage

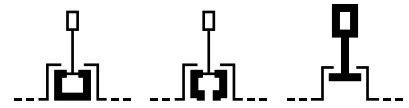
The continuous linear thread form allows the easy location and relocation of partition heads by means of an M6 bolt. The design of Alugrid-Q means this can happen repeatedly without causing damage. This same feature also allows for hanging signs and other lightweight features.



Technical Support

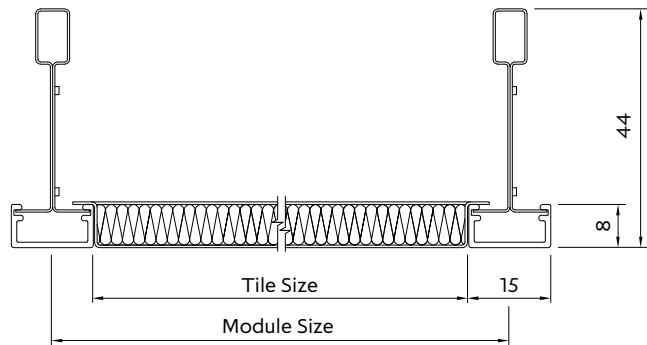
Please contact our technical team for all questions relating to access, security, bespoke features, service integration or load support.

SAS130 | Grid options



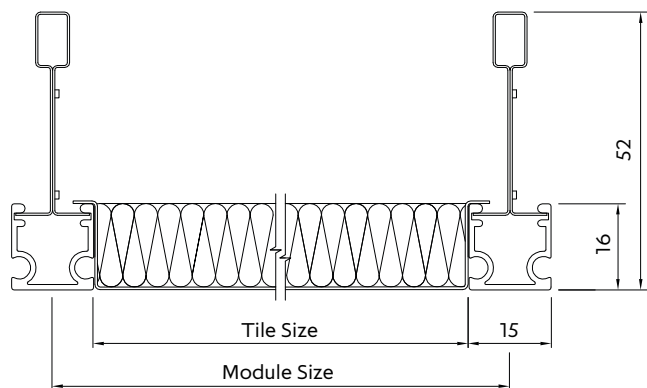
SAS Alugrid-P 15/08

Module size mm	Tile size mm
500 x 500	484 x 484
600 x 600	584 x 584
750 x 750	734 x 734



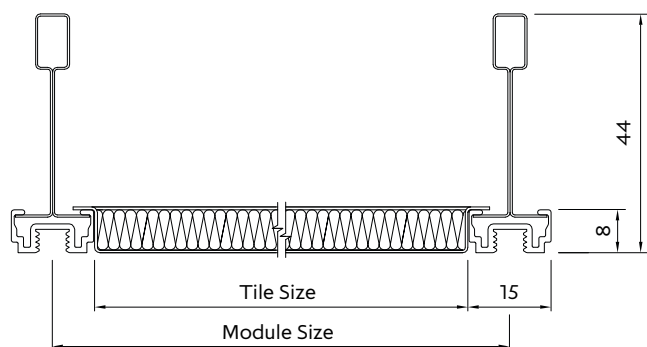
SAS Alugrid-P 15/16

Module size mm	Tile size mm
500 x 500	484 x 484
600 x 600	584 x 584
750 x 750	734 x 734



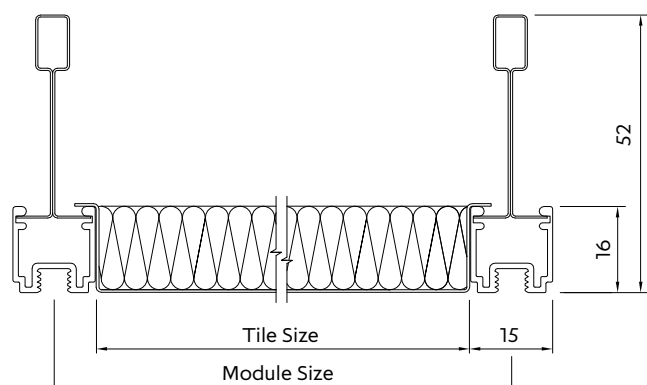
SAS Alugrid-Q 15/08

Module size mm	Tile size mm
500 x 500	484 x 484
600 x 600	584 x 584
750 x 750	734 x 734



SAS Alugrid-Q 15/16

Module size mm	Tile size mm
500 x 500	484 x 484
600 x 600	584 x 584
750 x 750	734 x 734



All dimensions are in mm.



SAS**130**

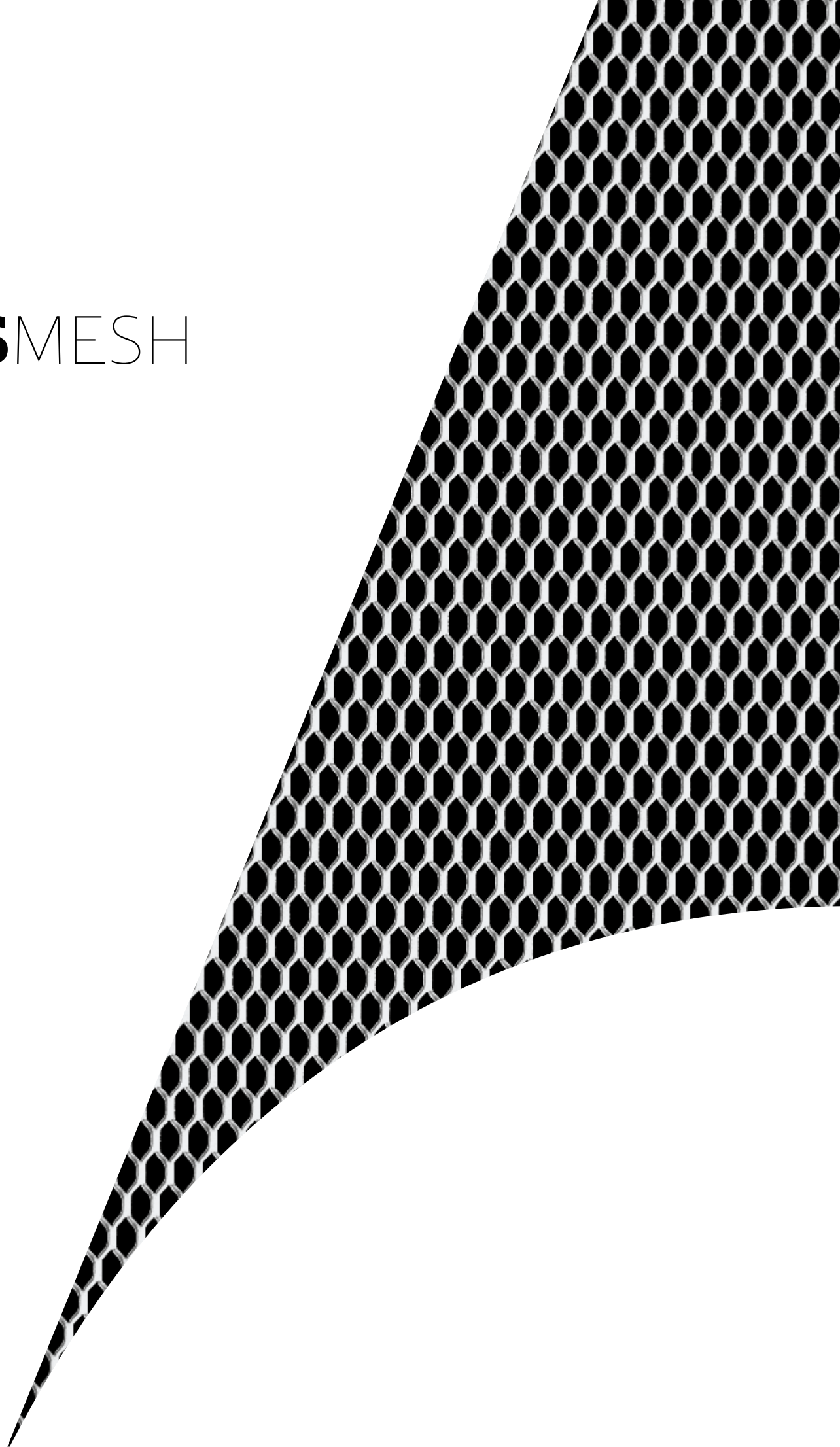
Slater Gordon, 58 Mosley Street

Location
Manchester
Architect
Harmen Tilney
Shane

Contractor
Eric Wright
Group Limited
Purpose
Commercial



SASMESH



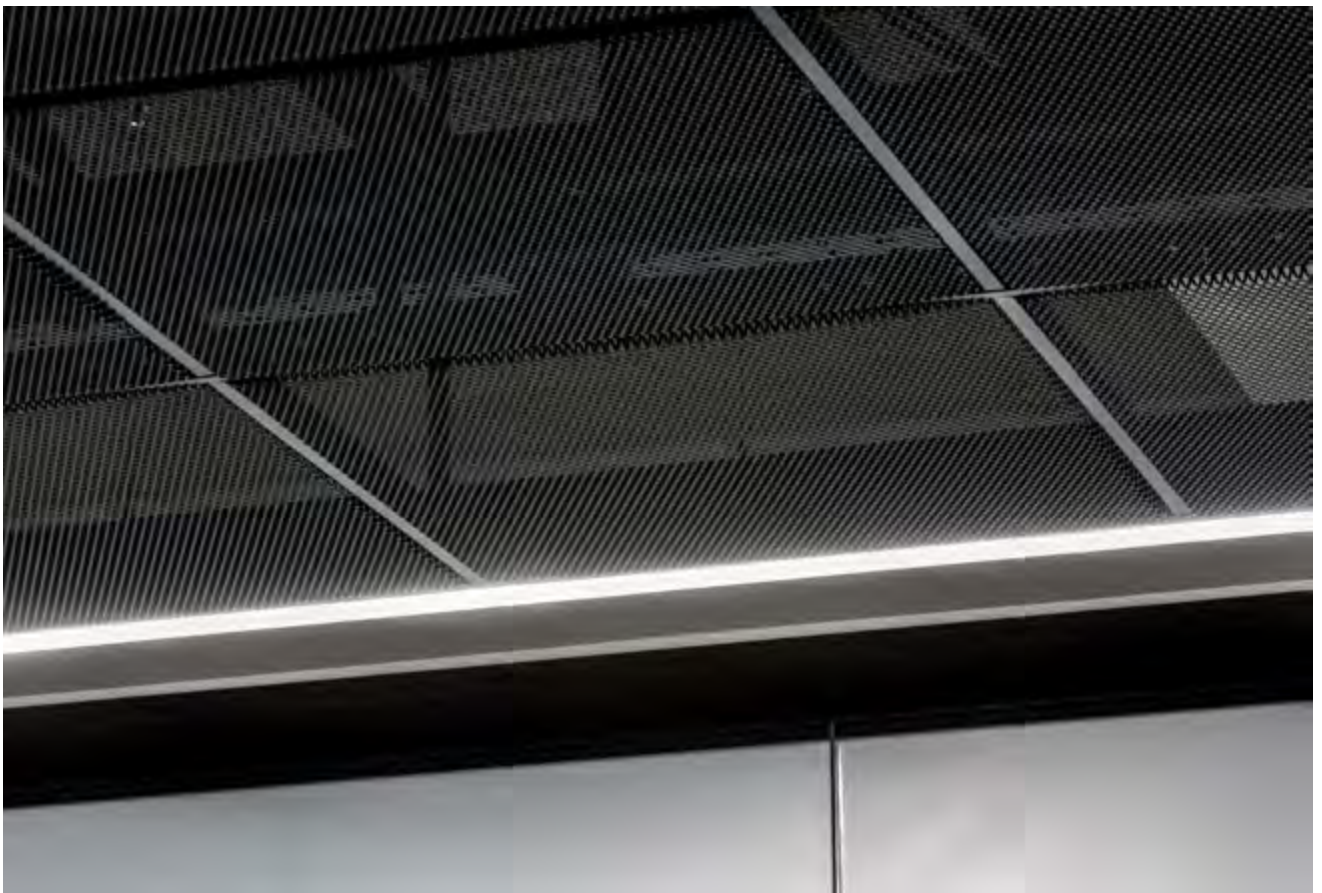


Mesh

Atrium

Location
Dublin, Ireland
Architect
Plus Architecture

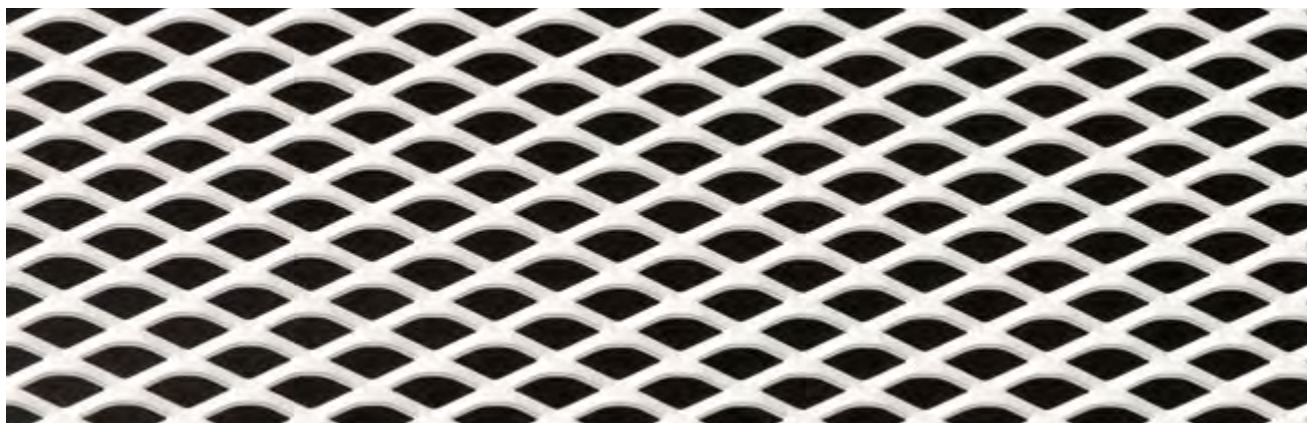
Contractor
Mac Interiors
Purpose
Commercial



Mesh

Commercial Office, London

Mesh



An increasingly popular material option, mesh is an ideal choice to achieve contemporary design aesthetics and is an alternative option to exposed soffit. Across commercial, transportation, retail, leisure and educational sectors, we work directly with architects, designers and contractors to meet the desired aesthetic and functional needs of the project.

SAS Mesh has a wide range of pattern and finish options and can be manufactured to the specifiers shape and design.

System Features

Specified for its textured appearance, the additional main features of SAS International mesh panels include:

- Compatible with multiple SAS systems
- Available in six patterns and the full range of RAL colours
- Incorporates M&E services and complex building layouts
- Adjustable to bespoke designs

Tile Shape & Design

Mesh can be designed and manufactured in a wide range of patterns including profiles that are round, square, diamond and hexagonal.

For best results and to maximise the strength of the material, mesh should be specified with the long-way pattern direction across the tile width.

Specification considerations for mesh include:

- Visible face ('A' face as standard)
- Open view orientation
- Longway direction (across width as standard)
- Pattern selection
- Finishes and integration requirements

Bespoke Designs

Non-standard, bespoke options can also be manufactured to specification. Please contact our technical design team for more information on bespoke mesh patterns and applications, access, security, service integration and load support.

Finishes Availability

- Coating – Polyester powder coat
- Colour – Available in a full range of RAL PPC

Lighting and Integration

Various effects can be achieved using light location. From discreet illumination to bold up-lighting, the expanded metal provides multiple possibilities.

Like other suspended metal ceilings, the system can also be designed with cut outs for lights and sensors. For precise and secure integration, flanged lights and vents are recommended and should be independently supported.

Texture (A and B side)

The mesh manufacture process results in the material having a different appearance depending on which face is visible. Tiles are manufactured with the "A Face" visible as standard but if desired the "B face" could be specified as the finished face.

The "A" side of the tile is smoother with more gentle curves while the "B" side has a more pronounced texture. Depending on aesthetic preference, specifiers will need to choose their preferred visible face.

Acoustic Performance

Acoustic pad is optional (16x80Kg/ m3 density mineral-wool pad tissue wrapped).

Other acoustic treatments are available, depending on project requirement. Please contact our technical department for more information.

Storage and Handling

Full PPE must be worn due to the nature of mesh.

APPENDIX D

Toilet Cubicles

The attached brochure is for illustration purposes only



A Fresh Palette

Commercial Washroom Colour Choices

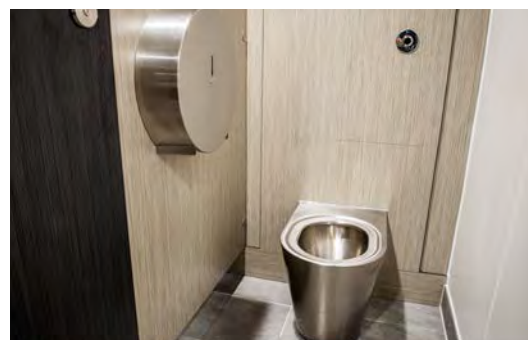
Introduction

Welcome to Commercial Washrooms.



Whether it's an executive washroom at a law firm, or a diverse changing space in a leisure centre, we strive to make customisation simple. In partnership with leading laminate manufacturer, Polyrey, we've developed this extensive range of rich colours, contemporary patterns, and detailed luxury woodgrains to easily transform your washroom.

From incorporating your school's colours, to delivering a touch of elegance to a golf club changing room, we have options available across a number of materials including High Pressure Laminate (HPL), Solid Grade Laminate (SGL), and Melamine Faced Chipboard (MFC). We also bring you the option to use digital print in your washroom, opening up endless possibilities for logos, imagery and photography.



Further details can be found at
commercialwashroomsltd.co.uk

 01202 650900

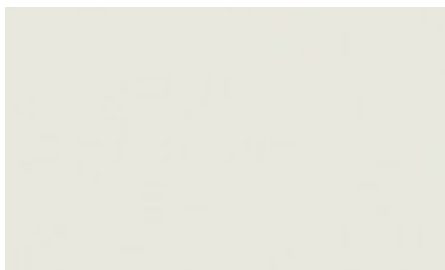
 info@commercialwashroomsltd.co.uk

Colour Swatches

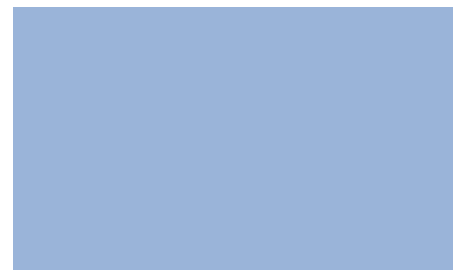
A selection of our colours.



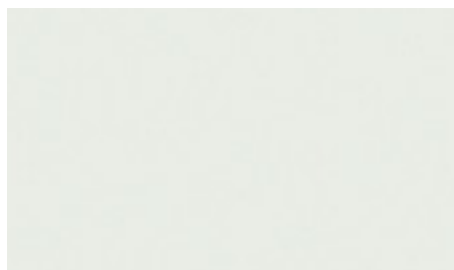
B001 Bleu Flash - FA



B015 Blanc Menuires - FA



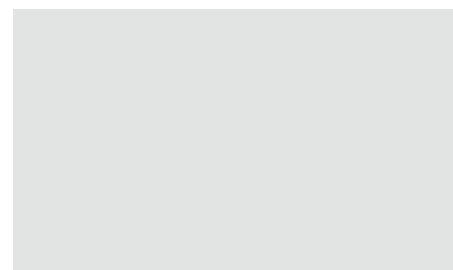
B048 Bleu Oslo - FA



B070 Blanc Megève - FA



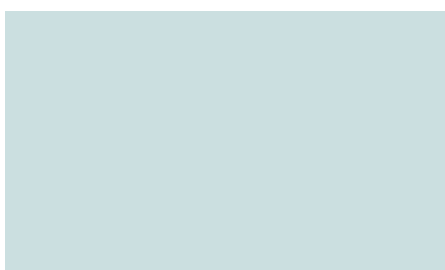
B086 Bleu Caraïbes - FA



B116 Beige Nature - FA



B119 Bleu Turquoise - FA



B194 Bleu Buée - FA



C017 Coquille d'Oeuf - FA



C018 Chardon - FA



C049 Cactus - FA



C062 Capucine - FA



Further details can be found at
commercialwashrooms.co.uk

 01202 650900

 info@commercialwashrooms.co.uk

Colour Swatches

A selection of our colours.



C189 Cyclamen - FA



G003 Gris Perle - FA



G029 Gris Tourterelle - FA



G031 Genét - FA



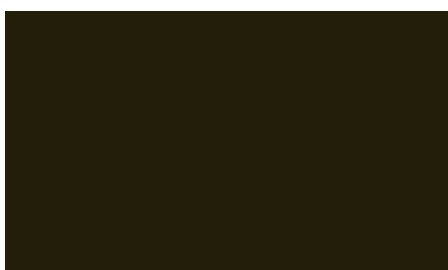
G059 Gris Orage - FA



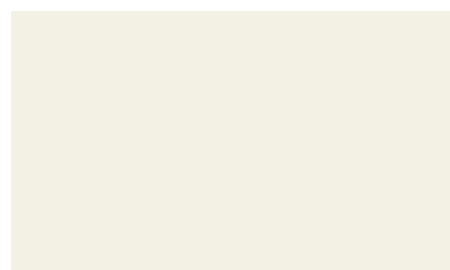
G075 Gris Cendré - FA



M047 Mousse - FA



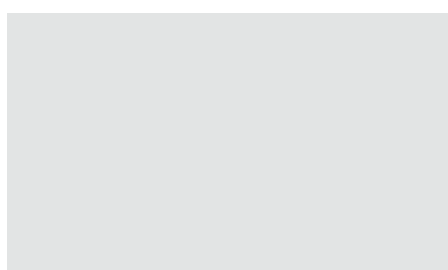
N005 Noir - FA



o111 Orgeat - FA



P001 Pierre de Lune - FA



P092 Pomme Verte - FA



R036 Rouge Cerise - FA



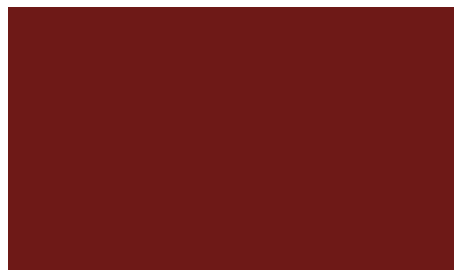
Further details can be found at
commercialwashrooms.co.uk

01202 650900

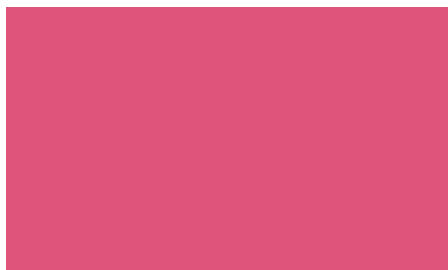
info@commercialwashrooms.co.uk

Colour Swatches

A selection of our colours.



R057 Rouge Amarante - FA



R059 Rose Indien - FA



V014 Vinyle - FA



V109 Vert Bali - FA



V110 Vert Impérial - FA

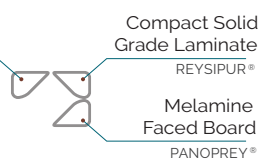


Z016 Zeste de Citrono - FA



WASHROOM DECOR COMPLEMENTARITY

High Pressure
Laminate (HPL)
POLYREY HPL®



Decors shown as samples are the decor/finish combination in HPL.



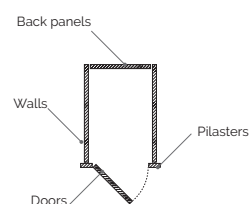
Finish with anti-fingerprint technology



Also available in Premier finish

CUBICLE

FA - SURF



Further details can be found at
commercialwashroomsltd.co.uk

t 01202 650900

e info@commercialwashroomsltd.co.uk

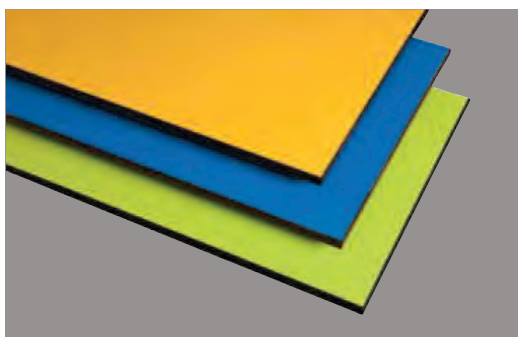
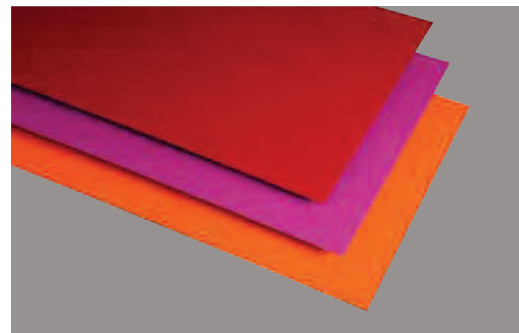
Finishes

Washroom Technical Solutions



Polyrey HPL® High Pressure Laminate

Polyrey HPL is a versatile product offering outstanding durability with superior resistance against impact, abrasion and general surface wear. Its surface is impervious to water and maintains its integrity even in the most heavy duty applications. It is composed of layers of kraft paper impregnated with phenolic resin. Polyrey HPL is readily available in larger sheet sizes specifically aimed at washroom and related applications offering the best optimisation and most cost-effective solutions.

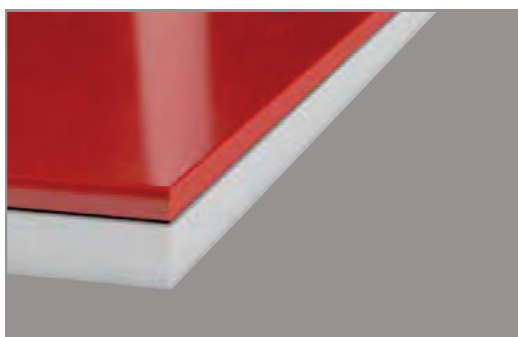


Reysipur® Compact Solid Grade Laminate

Compact Solid Grade Laminate is a dense self-supporting decorative panel with a black core offering the same surface advantages as those of HPL. This product is particularly suited for high humidity environments due to its inherent water resistance. It is composed of layers of kraft paper impregnated with phenolic resin and two decorative faces on both sides.

Panoprey® MR MFC Melamine Faced Chipboard

Polyrey Melamine Faced Chipboard offers the most cost-effective solution for non-wet area applications. It is a self-supporting, moisture resistant board with a chipboard core with two decorative faces, which are impregnated with melamine resin.



Glass Effect Vanity Worktops

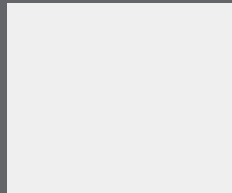
Polyrey glass effect ready made vanity worktops achieve a sleek and contemporary finish. The black, red, white and frosted glass colours have been carefully selected to coordinate with all colour schemes. The four chosen decors are supplied as prefinished laminated panels available in 3070 x 600 x 18 mm. A ready made board bonded with gloss HPL with a white balancer and pre-edged on one long side with Rehau's unique duo-colour edging. Additional edging strips are provided for the fitter to complete the finish.

APPENDIX E
Whiterock Wall Finishes

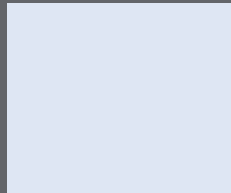
Refer to drawing: SOAS-CB-PR-LG-001P



Altro Whiterock Satins™



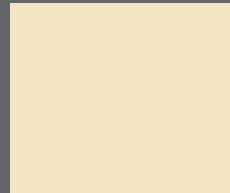
Linen | 41
LRV 83



Cesco | 53
LRV 71



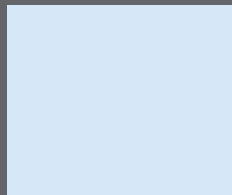
Echo | 208
LRV 43



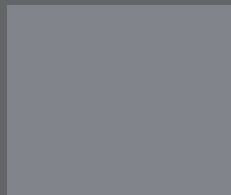
Oyster | 32
LRV 70



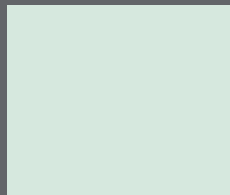
Fawn | 206
LRV 41



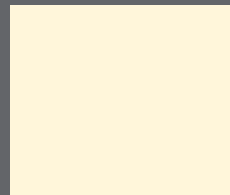
Ice | 44
LRV 80



Urban | 210
LRV 28



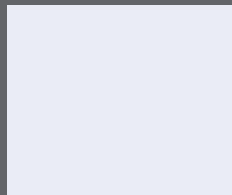
Seafoam | 43
LRV 81



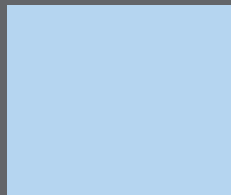
Citron | 56
LRV 80



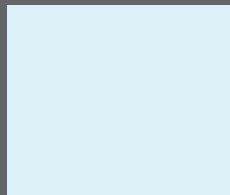
Fenland | 219
LRV 13



Malva | 57
LRV 68



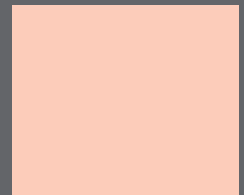
Clarity | 207
LRV 64



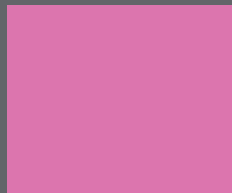
Mint | 203
LRV 62



Daybreak | 222
LRV 69



Sorbet | 216
LRV 59



Zandra | 217
LRV 24



Flint | 201
LRV 32



Promenade | 212
LRV 32



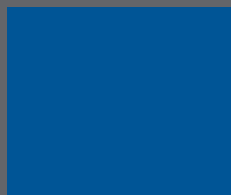
Glow | 215
LRV 50



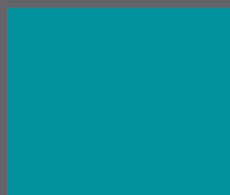
Scarlett | 221
LRV 13



Viola | 214
LRV 13



Ozone | 211
LRV 10



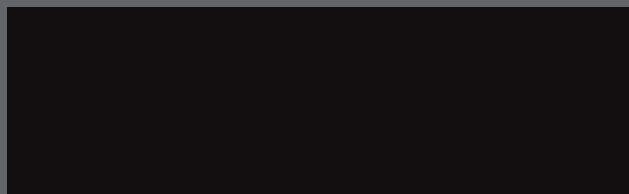
Vibrance | 213
LRV 22



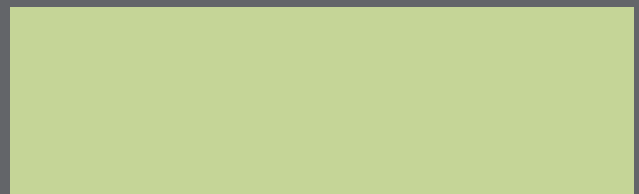
Olea | 218
LRV 28



Bergamot | 220
LRV 26



Dakota | 209
LRV 6



Orchard | 223
LRV 50



Typical applications / Typische Anwendungsbereiche / Zonas de instalación recomendadas / Type d'applications

Bathrooms, showers and changing rooms. Operating theatres and wards. Splashbacks. Cooking and food preparation areas. Serveries. Kitchens open to public view.

Küchen, Essenstheken, Lebensmittelzubereitung. Showküchen. Klinische-, Pflege- und Spa-Bereiche: Badezimmer, Duschen und Umkleiden. Operationssäle und Stationen.

Baños, duchas y zonas de vestuarios. Quirófanos y pasillo. Salpicaderos. Zonas de cocinado y preparación de alimentos. Minibares. Cocinas abiertas al público.

Salles de bain, douches et vestiaires. Blocs opératoires et salles d'hôpitaux. Crédences de cuisine.

Technical information / Technische Informationen / Información técnica / Information technique

Surface finish	Oberfläche	Acabado de la superficie	Finition	Satin, Satin, Satinado, Satin	
Thickness	Gesamtdicke	Espesor	Epaisseur	2.5 mm	
Size	Größe	Dimensiones	Dimension	2500 mm x 1220 mm 3000 mm x 1220 mm	
Weight	Flächengewicht	Peso	Poids	3600 g/m²	
Maximum service temperature	Max. Betriebstemperatur	Temperatura máxima de uso	Température maximale supportée	60°C	
E-modulus of elasticity	Bruchfestigkeit	Módulos de elasticidad	Module d'élasticité	ISO 527	2950 MPa
Notched Impact resistance	Kratz- und Kerbzähigkeit (Charpy)	Resistencia al impacto	Résistance à l'impact	ISO 179/1ea	9.5 KJ/m²
Flexural strength	Biegefestigkeit	Resistencia a la flexión	Résistance à la flexion	ISO 178	70 MPa
Tensile strength	Zugfestigkeit	Resistencia a la tensión	Résistance à la traction	ISO 527	52 MPa
Shore D hardness	Shore D-Härte	Dureza (Shore D)	Dureté Shore D	ISO 868	76
Thermal conductivity- 'K Value'	Wärmeleitung	Conductividad térmica	Conductivité thermique	EN 12524	0.17 W/mK
Water absorption	Wasserabsorption	Absorción de agua	Imperméabilité	ISO 62	≤ 0.1%
Moisture vapour transmission rate (MVTR)	Wasserdampfdurchlässigkeitsrate (MVTR)	Rango de transmisión de humedad de vapor (MVTR)	Taux de transmission de vapeur d'eau	ASTM E96	≤ 0.12 g/m²/24h
Fire performance	Brandverhalten	Resistencia al fuego	Réaction au feu	EN 13501-1 BS 476 pt 6 BS 476 pt 7	B- s3, d0 Class 0, Klasse 0, Clase 0, Classe 0 Class 1, Klasse 1, Clase 1, Classe 1



Altro Limited a company certified by SGS to ISO 9001 and ISO 14001.



2812
EN 15102



1121
EN 15102



Installation and maintenance / Verlegung und Pflege / Instalación y mantenimiento / Pose et entretien

Please refer to Altro installation and maintenance instructions. Failure to follow these instructions can affect product performance. Technical information on installation can be found at www.altro.com

Bitte beachten Sie unsere Verlege- und Pflegeanleitung. Erfolgt die Verlegung und Pflege der Wandelemente nicht gemäß Anleitung, können sich die Eigenschaften ändern. Technische Informationen zur Verlegung und Pflege finden Sie unter www.altro.de

Consulte las instrucciones de instalación y mantenimiento de Altro. El no respetar estas instrucciones podría afectar al rendimiento del producto. Para más información sobre mantenimiento o instalación de nuestros productos Pinche aquí: www.altroscandess.com

Veillez vous référer aux instructions de notre guide d'installation et d'entretien. Le non respect de ces instructions peut affecter la performance du revêtement. L'information technique sur la pose est également disponible sur notre site internet www.altro.fr

Light Reflectance Values measured in accordance with BS 8493:2008. Exact material match with samples cannot be guaranteed.

LRV = light reflectance value

Lichtreflexionsgrad (LRV) gemäß BS 8493:2008. Eine exakte Übereinstimmung des Materials mit Mustern kann nicht garantiert werden.

LRV = Lichtreflexionsgrad

Los Valores de Reflectancia de la luz se miden de acuerdo con BS 8493:2008. Las muestras no pueden garantizar un color exacto.

LRV = Valor de reflectancia de la Luz

Les valeurs de l'indice de Réflexion Lumineuse sont mesurées conformément au BS 8493:2008. Les échantillons ne peuvent garantir le coloris exact.

LRV = IRL : Indice de Réflexion Lumineuse



Altro and Altro Whiterock Satins are trademarks of Altro Limited.

United Kingdom ☎ +44 (0) 1462 707 700 ✉ enquiries@altro.com

Germany ☎ +49 (0) 340 6500 0 ✉ anfrage@altro.de

France ☎ +33 1 57 32 92 30 ✉ france@altro.com

Australia ☎ +61 3 9764 5666 ✉ info@asf.com.au

Spain ☎ +34 91 549 5230 ✉ suelos@altro.com

APPENDIX F

Floor Finishes

Refer to drawing: SOAS-CB-PR-LG-006P

LOCATION	FLOORING TYPE
0L/005 Security Desk/Reception 0L/002 & 0L/003 (corridor areas)	Sheet Linoleum Range: Forbo Marmoleum Marbled Thickness: 3.2mm Colour: TBC
0L/57 Female Toilets 0L/60 Female Locker Room 0L/54 Male Toilets 0L/53 Male Locker Room	Sheet Vinyl Safety Flooring Range: Altro Aquarius Thickness: 2mm Colour: TBC
Male & Female Wet Rooms	Sheet Vinyl Safety Flooring Range: Altro Pisces Thickness: 2mm Colour: TBC
Lower Ground Entrance Threshold	Entrance Matting Range: Evergreen Debris Channel Barrier Matting Type: Heavy Duty Recessed Colour: Graphite Frame: Aluminium
0L/004 Security Office 0L/007 Post Room	Carpet Tiles Range: Marlings Glacier Carpet Tiles Type: Terrain 50 x 50cm Heavy Duty

marmoleum® marbled

fresco | real | terra | vivace | splash



Fresco: a strong palette of tone in tone colours creating a fresh, delicate and balanced aesthetic with a soft contrast and a refined marbled structure.

Real: the 'royal' classic blend of carefully selected colours, developed to create choice and mixes of colour ranging from warm neutrals to calm greys as well as exciting brights and fashion shades.

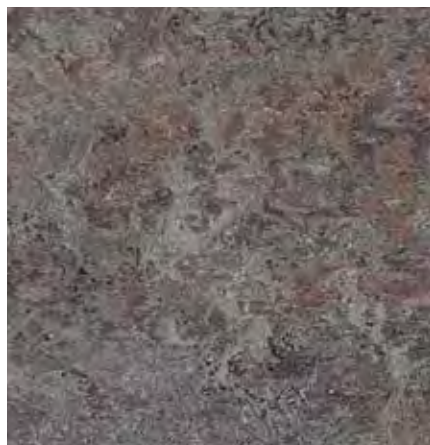
Terra: a design with exciting bright and on trend shades and highly contrasting structure inspired by ingenious rock types. It creates a sophisticated small scale marble with great soil hiding properties in an authentic colour mix.

Vivace: Marmoleums' liveliest and most outspoken blend made with six to eight colours to create a chameleon floor that adapts well to a multitude of interiors.

Splash: a modern playful design which from a distance appears a contemporary light grey solid floor with a slight nuance in tone, yet from up close surprising colours are peeking through, offering great combinations of interior elements.



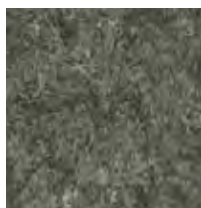
3883 | moonstone LRV 45



3421 | oyster mountain



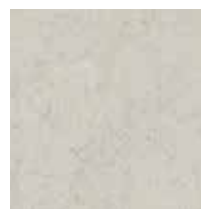
2629 | eiger LRV 19



3048 | graphite LRV 14



3257 | edelweiss LRV 58



3860 | silver shadow LRV 48



3136 | concrete LRV 47



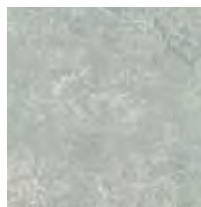
3428 | seashell LRV 45



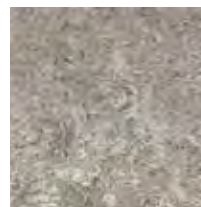
3032 | mist grey LRV 42



3405 | Granada LRV 28



2621 | dove grey LRV 36



3420 | surprising storm LRV 31



3889 | cinder LRV 30



3053 | dove blue LRV 27



3146 | serene grey LRV 27



5802 | alpine mist LRV 31



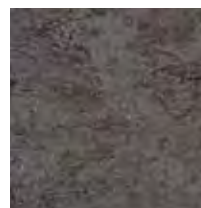
3866 | eternity LRV 21



3137 | slate grey LRV 16



3872 | volcanic ash LRV 10



3139 | lava LRV 9



2939 | black LRV 5

Description	Linoleum sheet	
Dimensions	EN-ISO 24341	Roll width 2.0m Roll length ≤ 331m
Total thickness	EN-ISO 24346	2/2.5/3.2mm
Collection size	90	
Application	EN-ISO 10874	Class 23/34/43
CE	EN 14041	
UK	BS EN 14041	
Reaction to fire	EN 13501-1	C _s -s1
Slip resistance	EN 13893	DS: ≥0.30

Our recommended adhesive is 414 Euroflex Lino Plus or 611 Eurostar Lino Plus. Full technical specifications are available at www.forbo-flooring.co.uk/downloads



marmoleum® marbled

fresco | real | terra | vivace | splash



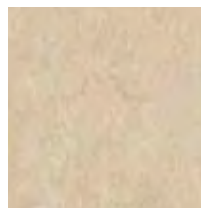
3858 | Barbados

LRV 65



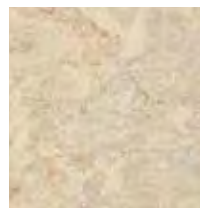
2713 | calico

LRV 53



3861 | Arabian pearl

LRV 50



3120 | rosato

LRV 51



3433 | rockpool

LRV 46



3141 | Himalaya

LRV 40



3232 | horse roan

LRV 40



5804 | pink granite

LRV 27



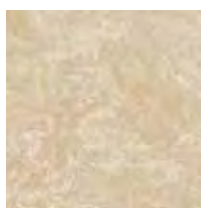
3252 | sparrow

LRV 29



3234 | forest ground

LRV 33



2499 | sand

LRV 56



3038 | Caribbean

LRV 55



5803 | weathered sand

LRV 31



3246 | shrike

LRV 21



5801 | river bank

LRV 29



3890 | oat

LRV 31



3407 | donkey island

LRV 36



3233 | shitake

LRV 23



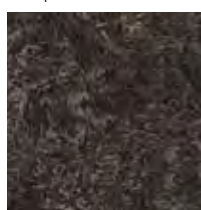
3426 | cork tree

LRV 16



3874 | walnut

LRV 11



3236 | dark bistre

LRV 7



3427 | agate

LRV 39



3075 | shell

LRV 44

BREEAM generic ratings

Marmoleum – Linoleum (plain and decorative EN548)

Commercial	Education	Health	Domestic	Retail (Durability)	Retail (Fashion)	Meets Ska criteria
A	A+	A+	A	A+	A+	✓



Please note: Digital representations may vary from the actual product.
Please order a sample to see the full effect. Contact 0800 731 2369.

marmoleum® marbled

fresco | real | terra | vivace | splash



3846 | natural corn LRV 56



3411 | sunny day LRV 45



3431 | limoncello LRV 48



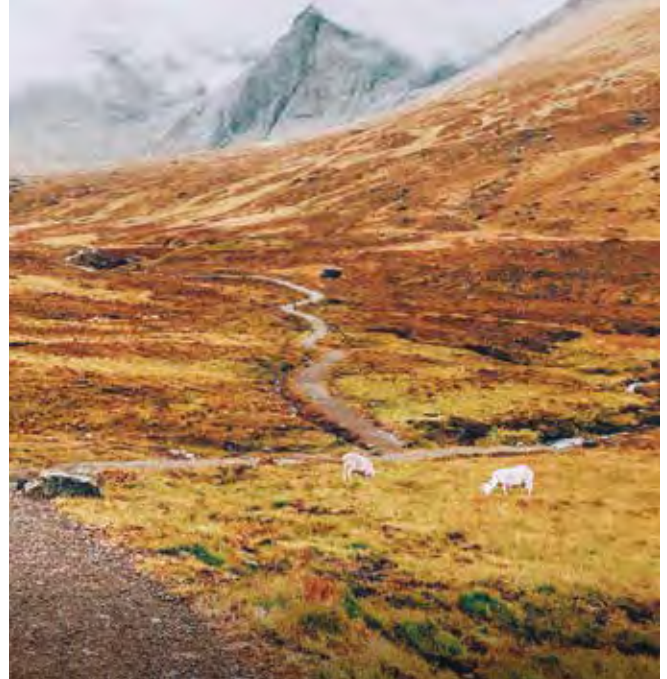
3173 | Van Gogh LRV 46



3251 | lemon zest LRV 52



3125 | golden sunset LRV 38



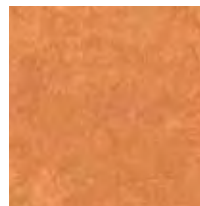
3174 | Sahara LRV 29



3225 | dandelion LRV 46



3847 | golden saffron LRV 41



3825 | African desert LRV 26



3403 | Asian tiger LRV 29



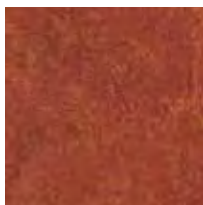
3262 | marigold LRV 34



2767 | rust LRV 19

Description	Linoleum sheet	
Dimensions	EN-ISO 24341	Roll width 2.0m Roll length ≤ 331m
Total thickness	EN-ISO 24346	2/2.5/3.2mm
Collection size	90	
Application	EN-ISO 10874	Class 23/34/43
CE	EN 14041	
UK	BS EN 14041	
Reaction to fire	EN 13501-1	C _s -s1
Slip resistance	EN 13893	DS: ≥0.30

Our recommended adhesive is 414 Euroflex Lino Plus or 611 Eurostar Lino Plus. Full technical specifications are available at www.forbo-flooring.co.uk/downloads



3203 | henna LRV 11



3432 | fruit punch LRV 46



3126 | Kyoto LRV 18



3272 | plum LRV 13



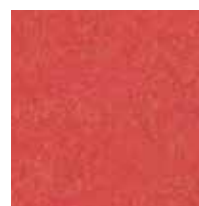
3273 | ruby LRV 10



3127 | Bleekerstreet LRV 9



3131 | scarlet LRV 13



3263 | rose LRV 17



3268 | honey suckle LRV 33

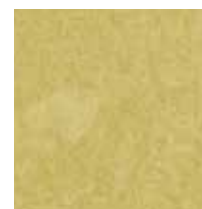


marmoleum® marbled

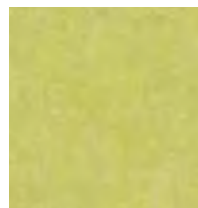
fresco | real | terra | vivace | splash



3881 | green wellness LRV 51



3259 | mustard LRV 38



3885 | spring buds LRV 46



3413 | green melody LRV 34



3224 | chartreuse LRV 38



3267 | aqua LRV 39



3219 | spa LRV 32



3269 | turquoise LRV 28



3430 | salsa verde LRV 47



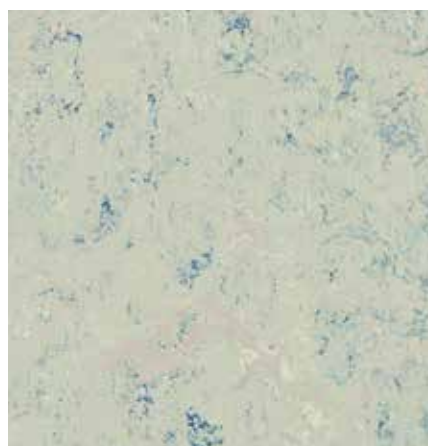
3265 | avocado LRV 31



3247 | green LRV 23



3828 | blue heaven LRV 34



3429 | bluemoon LRV 45



3266 | lilac LRV 37



3891 | sage LRV 31



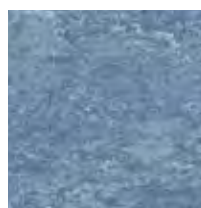
3271 | hunter green LRV 13



3260 | leaf LRV 27



3123 | arabesque LRV 23



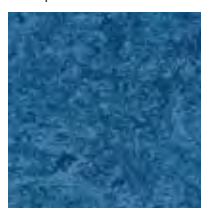
3055 | fresco blue LRV 23



3264 | Greek blue LRV 17



3270 | violet LRV 17



3030 | blue LRV 12



3261 | marine LRV 8





Altro Aquarius™



Cygnet | AQ2004
WR287 / A1M79 / LRV 46



Sea Snail | AQI2024
WR370 / A1M370 / LRV 50



Iguana | AQ2021
WR297 / A1M20 / LRV 41



Swan | AQI2012
WR291 / A1M01 / LRV 75



Puffin | AQI2005
WR287 / A1M79 / LRV 46



Dragonfly | AQ2001
WR292 / A1M292 / LRV 33



Vole | AQ2010
WR289 / A1M265 / LRV 43



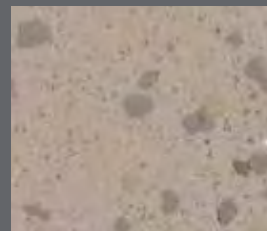
Treefrog | AQI2003
WR293 / A1M271 / LRV 33



Walrus | AQ2007
WR261 / A1M81 / LRV 29



Blue Penguin | AQI2002
WR288 / A1M71 / LRV 24



Terrapin | AQI2009
WR289 / A1M265 / LRV 40



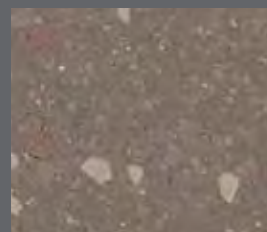
Gosling | AQI2023
WR369 / A1M369 / LRV 59



Tern | AQI2008
WR261 / A1M81 / LRV 31



Newt | AQ2022
WR368 / A1M368 / LRV 10



Otter | AQI2006
WR290 / A1M239 / LRV 26



Salamander | AQI2011
WR294 / A1M294 / LRV 41



Hippo | AQI2013
WR301 / A1M82 / LRV 11



Mallard | AQI2015
WR302 / A1M302 / LRV 13



Coral Crab | AQI2014
WR300 / A1M42 / LRV 14



Spoonbill | AQI2016
WR303 / A1M303 / LRV 11



Typical applications

Bathrooms. Showers. Changing rooms (except where spikes/studs – then see 2.5mm+ options). Saunas. Spas. Wet rooms. Home adaptation level access bathrooms.

Technical information

	Fire behaviour tested in acc. with	EN ISO 9239-1 EN ISO 11925-2 EN 13501-1	≥ 8 kW/m ² Pass B _{f1} -s1
	Slip resistance	EN 13893 PTV EN 16165 Annex B / ASR A1.5 EN 13845 Annex C EN 16165 Annex A	≥ 0.30 / DS ≥ 50 (slider 96) R11 ESf / ESb B
	Sound insulation	EN ISO 140-8	ca. 5 dB
	Flooring type	EN 13845	Safety flooring
	Thickness	EN ISO 24346	2 mm
	Wear layer thickness	EN ISO 24340	2 mm
	Roll dimensions	EN ISO 24341	2 m x 20 m = 40 m ²
	Weight	EN ISO 23997	2.6 kg/m ²
	Residual indentation	EN ISO 24343-1	≤ 0.10 mm
	Classification for use	EN ISO 10874	34, 43
	Flexibility	EN ISO 24344	Pass
	Dimensional stability	EN ISO 23999	≤ 0.4 %
	Light fastness	EN ISO 105-B02	≥ 6
	Castor chair abrasion	EN 425	Yes, type W
	Wear resistance	EN 13845 Annex D	≤ 10% / 50000 cycles
	Chemical resistance	EN ISO 26987	Good
	Underfloor heating	EN 12524	Suitable
	Electrical behaviours	EN 1815	≤ 2 kV, antistatic
	VOC emissions	CDPH 1350 / Floorscore	Approved



Altro Limited a company certified by SGS to ISO 9001 and ISO 14001.



*Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).



Sustainability



†A+ BRE generic green guide rating for resilient flooring, full details available at www.thegreenguide.org.uk



Installation and maintenance

Please refer to Altro installation and maintenance instructions. Failure to follow these instructions can affect product performance and may affect or invalidate Altro's product guarantee. Technical information on installation and maintenance (including cleaning and staining) can be found at www.altro.com

Light Reflectance Values measured in accordance with BS 8493:2008. Exact material match with samples cannot be guaranteed.
Codes: WR = weld rod, A1M = mastic, LRV = light reflectance value



altro.com

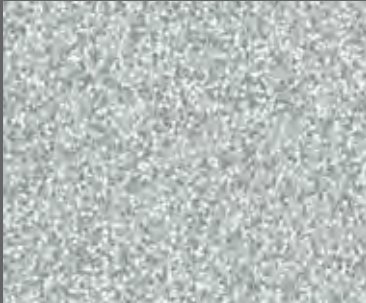
Designed for possibilities.
Made for people.

Altro Pises

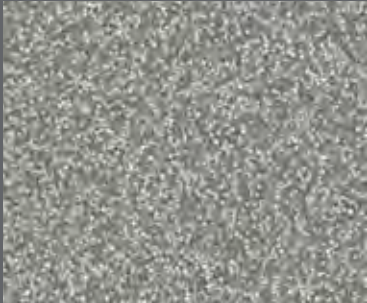




Altro Pisces



Jellyfish | SB2005
WR388 / A1M388 / LRV 46



Porthole | SB2007
WR390 / A1M390 / LRV 30



Anchor | SB2008
WR391 / A1M82 / LRV 16



Deckchair | SB2013
WR396 / A1M396 / LRV 50



Sea Urchin | SB2014
WR397 / A1M397 / LRV 34



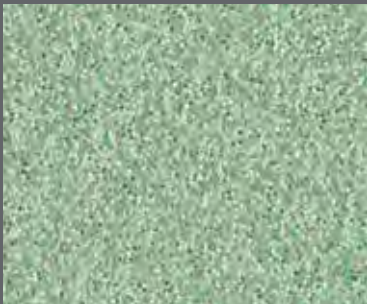
Houseboat | SB2015
WR398 / A1M398 / LRV 25



Seahorse | SB2011
WR394 / A1M394 / LRV 47



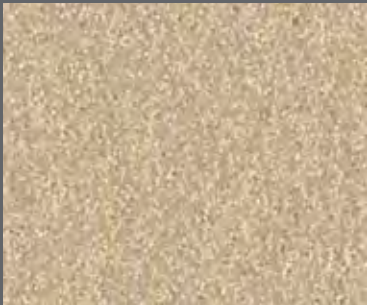
Beach Hut | SB2012
WR395 / A1M395 / LRV 37



Windbreak | SB2016
WR399 / A1M399 / LRV 38



Fisherman | SB2009
WR392 / A1M392 / LRV 48



Breakwater | SB2003
WR386 / A1M20 / LRV 42



Starfish | SB2010
WR393 / A1M393 / LRV 21



NEW Sand Dune | SB2018
WR568 / A1M239 / LRV 20



Driftwood | SB2004
WR387 / A1M387 / LRV 32



Lighthouse | SB2001
WR291 / A1M01 / LRV 70



Cuttlefish | SB2002
WR385 / A1M385 / LRV 50

Typical applications

Bathrooms. Showers. Changing rooms (except where spikes / studs – then see 2.5mm+ options). Saunas. Spas. Wet rooms. Home adaptation level access bathrooms. Therapy pools with specialist care.

Technical information

	Fire behaviour tested in acc. with	EN ISO 9239-1 EN ISO 11925-2	≥ 8 kW/m² Pass
	Classified in acc. with	EN 13501-1	B _{fl} -s1
	Slip resistance	EN 13893 PTV EN 16165 Annex B / ASR A1.5 EN 13845 Annex C EN 16165 Annex A	≥ 0.30 / DS ≥ 50 (slider 96) R11 ESf / ESb B
	Sound insulation	EN ISO 140-8	ca. 5 dB
	Flooring type	EN 13845	Safety flooring
	Thickness	EN ISO 24346	2 mm
	Wear layer thickness	EN ISO 24340	2 mm
	Roll dimensions	EN ISO 24341	2 m x 20 m = 40 m²
	Weight	EN ISO 23997	2.6 kg/m²
	Residual indentation	EN ISO 24343-1	≤ 0.10 mm
	Classification for use	EN ISO 10874	34, 43
	Flexibility	EN ISO 24344	Pass
	Dimensional stability	EN ISO 23999	≤ 0.4 %
	Light fastness	EN ISO 105-B02	≥ 6
	Castor chair abrasion	ISO 4918	Yes, type W
	Wear resistance	EN 13845 Annex D	≤ 10% / 50000 cycles
	Chemical resistance	EN ISO 26987	Good
	Underfloor heating	EN 12524	Suitable
	Electrical behaviours	EN 1815	≤ 2 kV, antistatic
	VOC emissions	CDPH 1350 / Floorscore	Approved



Altro Limited a company certified by SGS to ISO 9001 and ISO 14001.



UKAS ISO 9001
UKAS ISO 14001



1029
EN 14041



0120
EN 14041



EMISSIONS DANS L'AIR INTERIEUR
A+
A B C

*Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).



floor score



M1+
EMISSION CLASS FOR BUILDING MATERIALS

Sustainability



1A+ BRE generic green guide rating for resilient flooring, full details available at www.thegreenguide.org.uk



Exhalate-free



Contains bio-plasticiser



BRE Global Verified
EPD
EN 15804 SD207
EPD No.: 000254



Contains recycled



Recofloor™
Vinyl Take-Back Scheme

Installation and maintenance

Please refer to Altro installation and maintenance instructions. Failure to follow these instructions can affect product performance and may affect or invalidate Altro's product guarantee. Technical information on installation and maintenance (including cleaning and staining) can be found at www.altro.com

Light Reflectance Values measured in accordance with BS 8493:2008. Exact material match with samples cannot be guaranteed.
Codes: WR = weld rod, ATM = mastic, LRV = light reflectance value

Evergreen Debris Channel Barrier Entrance Matting System



DC022 Aluminium grid barrier entrance matting system with heavy ribbed polypropylene infills, colour anthracite. As specified by Marks & Spencer.

EMS Evergreen Debris Channel aluminium entrance matting retains more foot borne dirt than any other matting on the market. Due to its innovative channel sections it collects dirt below the surface of the mat which results in less dirt on the surface that can be tracked into the building by foot traffic.

EMS Evergreen Debris Channel entrance matting is the only aluminium matting product to have **Greenspec accreditation**. <http://www.greenspec.co.uk/green-products/entrance-mats/details/evergreen-debris-channel-matting/> The minimum recycled content of any of the Debris Channel range is 80%. This is achieved through sourcing suppliers who aim to recognise the importance of minimising the impacts of consumption, whilst still providing a product that can outperform less sustainable alternatives.

Available as recessed and surface mounted with ramped frame edge entrance matting systems.

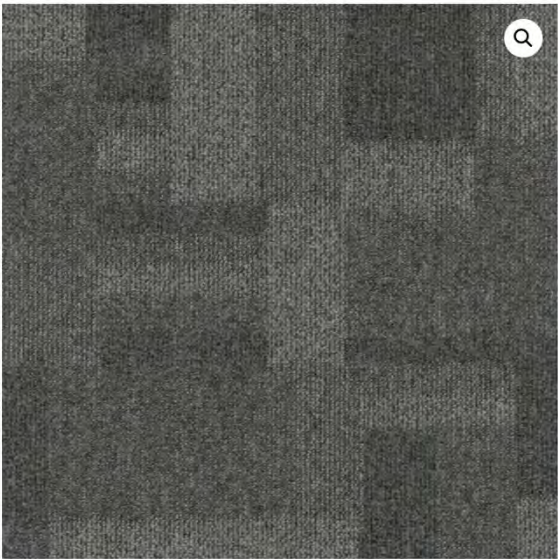
For our full EMS Debris Channel range of entrance matting please see below. NBS Specification PDFs can be found alongside every infill listed below.

What are the benefits?

- ✓ Easily cut on site – solid grid system, no wires
- ✓ Manufactured with **vegan** materials
- ✓ Recessed or surface mounted
- ✓ Innovative Debris channels – collects dirt in channels and easy to remove
- ✓ Closed and Open entrance matting systems
- ✓ Recessed or surface mounted with ramped edge frames
- ✓ Extra Heavy duty
- ✓ Several infill material options and colours to suit any application
- ✓ 100% recycled aluminium grid system
- ✓ Available in Primary and Secondary Barrier Entrance Matting System
- ✓ **Green spec** accreditation

Suitable for:

	Internal Use		Public sector
	Leisure		Industrial
	High footfall		Retail
	Office		External Use



Glacier Carpet Tile

Range: Terrain

Quality: Loop Pile

Pattern Type: Patterned

Downloads

Please download our data sheets for further information:

[DOWNLOAD NOW](#)

[Report Abuse](#)

Category: Terrain Tags: Carpet Tiles, Flooring

[Send an Enquiry](#)

[ADD TO SAMPLE REQUESTS](#)

Description	Additional information	More Offers
Description Construction: Tufted Loop Pile Fibre: 100% SD Nylon Gauge: 1/10th Pile Weight: 600 gms Pile Height: 3.1mm Total Height: 6.8mm Format: Tiles 50 x 50cm Backing: Bitumen Wear Rating: Class 33 Heavy Traffic		

APPENDIX G

Lighting

Refer to drawing: SOAS-CB-PR-LG-004P

LOCATION	LIGHTING TYPE
Lower Ground Entrance Corridor	Mount Canta surface mounted Black powder coated Colour option 4000K
Area 0L/005 Security Desk /Reception	Mount Floe-Line surface mounted Aluminium extruded body, colour TBC Size 2100 x 1500mm Colour option 4000K
	Mount Canta surface mounted Black powder coated Colour option 4000K
Area 0L/004 Security Office	Mount M-Line Surface Mounted Aluminium extruded body, colour TBC Size 1984 x 50mm Colour option 4000K
Area 0L/003 Main Corridors	Mount M-Line Recessed System Aluminium extruded sections, colour TBC Colour option 4000K
Corridor 0L/002	Lay-in Commercial Modular LED panel to suit ceiling
0L/57 Female Toilets	grid
0L/60 Female Locker Room	White anodised aluminium frame
0L/54 Male Toilets	Low glare even light distribution
0L/53 Male Locker Room	Colour option 4000K
Male & Female Wet Rooms	IP65 Recessed circular LED downlight White anodised aluminium frame Colour option 4000K
Area 0L/007 Post Room	Lay-in Commercial Modular LED panel to suit ceiling grid <u>Black</u> anodised aluminium frame to match ceiling Low glare even light distribution Colour option 4000K

CANTA

Surface/Suspended Pendant Light

- // Surface/Suspended luminaire with options for track lighting
- // UGR>19 can be achieved with narrower beam angles
- // Beam angle 60° as standard, options for 24° or 36°
- // High-quality powder-coated aluminium
- // 3000K option
- // CRI>80 as standard, CRI>90 option available
- // IP20
- // Flex length can be adjusted
- // Compatible with Casambi wireless control system
- // 5-year warranty



Construction

Our Cantata luminaire has been designed as a stylish option for surface, track or suspended applications and is ideal where appearance is important.

The body is powder-coated aluminium and gives good heat dissipation. The faceted reflector has a good reflective rate.

Typical Applications

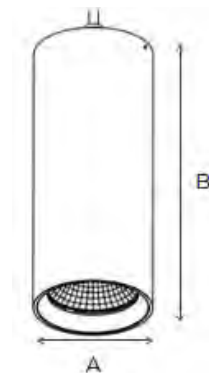
Hospitality, Tea Points, Seating, Reception and Leisure Areas.

Size Options

Ceiling Rose



Body



Product Code	Size (A)	Size (B)
CAN10	Ø65mm	180mm
CAN 15	Ø85mm	206mm
CAN25	Ø100mm	220mm



White Option



Black Option

Product Code	LED Wattage	Lumen Output	Lumen/Watt	Colour Temperature	Beam Angle
CAN10	10W	1244	121	4000K	60°
CAN15	15W	1822	126	4000K	60°
CAN25	25W	3006	126	4000K	60°

Replace CAN with CANS for surface mount option

Section	Option Code	Description
1 - CONTROL	/ -	Non-Dim
	/ TD	Mains Dimmable Driver
	/ DA	DALI Dimmable Driver
	/ BT	Casambi Dimmable Driver
2 - COLOUR FINISH	/ BK	Black
	/ WH	White
3 - CCT	/ 4K	4000K LED
	/ 3K	3000K LED (light output -3%)
4 - BEAM ANGLE	/ R24	24 degree lens (light output -1%)
	/ R36	36 degree lens
	/ R60	60 degree lens
5 - CRI	/ 80	CRI>80
	/ 90	CRI>90 (light output -15%)

For optional features, please include the option code suffix with the product code when ordering.

FLOE-LINE



Construction

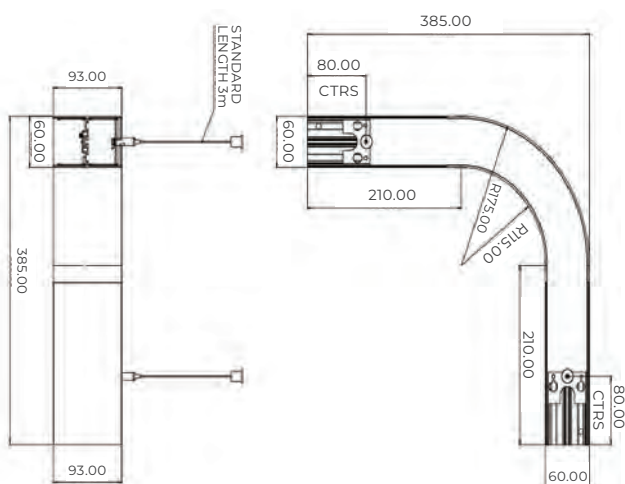
The 90° curve of the Floe-Line has been designed to break the conventions of linear lighting and take lighting design to another dimension. It has flexible connections which can be fully integrated with multiple linear lengths. With so many options, let your imagination defy limitations and enhance interiors like never before.

Typical Applications

General Office Areas, Large Receptions, Boardrooms, Atriums, Function Halls, Education Facilities, Hotels and Leisure Facilities, Hospitality Venues, Retail and Residential Properties.

- // Your design specification
- // Your choice of RAL colour
- // Up to 120 lumens per circuit watt
- // Opal diffuser as standard, microprism option available
- // Direct or direct/indirect in 90:10 ratio available
- // 3000K and 4000K options available
- // Emergency and DALI options
- // Compatible with Casambi wireless system
- // Colour-matched ceiling rose
- // Suspended or surface mounted options
- // 2m suspension cables as standard
- // 5-year warranty

Size Options



SURFACE



SUSPENDED



FLOE-LINE



Floe-Line					
Product Code	LED Wattage	Lumen Output	Lumen/Watt	Colour Temperature	Size
FLE/RTG/2129/1000	86W	8563	99	4000K	2129 x 1000mm
FLE/RTG/2411/1000	94W	9378	99	4000K	2411 x 1000mm
FLE/RTG/2694/1000	103W	10194	99	4000K	2694 x 1000mm
FLE/RTG/3258/1000	119W	11825	99	4000K	3258 x 1000mm
FLE/RTG/3258/1565	135W	13456	99	4000K	3258 x 1565mm
FLE/RTG/4105/1565	164W	16310	99	4000K	4105 x 1565mm

Control Options

Option Code	Description
/M	3 Hour Maintained Emergency (Downlight Only)
/MZ	3 Hour Maintained DALI Emergency (Downlight Only)
/DALI	DALI/DSI Dimmable (Downlight Only)
/BTC	Casambi Dimmable
/3K	3000K LED
/MP	Microprism Diffuser
/DIR	Direct Lighting Only
/DIR/IND	Direct and Indirect Lighting

Colour Options

Option Code	Description
/W	White (RAL 9003)
/G	Grey (RAL 9007)
/B	Black (RAL 9005)
/BRZ	Bronze
/GLD	Gold
N.B Other RAL colours available upon request	

Suspension Options

Option Code	Description
Supply Cable	
CABTR3C	1.5m Transparent Current Cable 3 x0.75mm²
CABTR5C	1.5m Transparent Current Cable 5 x0.75mm²
CR375W/2M	3 Core 0.75mm White Flex Cable - 2m Lead
CR375B/2M	3 Core 0.75mm Black Flex Cable - 2m Lead
CR475W/2M	4 Core 0.75mm White Flex Cable - 2m Lead
CR475B/2M	4 Core 0.75mm Black Flex Cable - 2m Lead
CR575W/2M	5 Core 0.75mm White Flex Cable - 2m Lead
CR575B/2M	5 Core 0.75mm Black Flex Cable - 2m Lead
FSUS	2m Suspension kit for suspended Floe-Line
NOTE: Alternative length suspension kits available - POA	

Sizes shown are standard sizes. For custom size, please enquire and our team will be happy to help.

For optional features, please include the option code suffix with the product code when ordering.

M-LINE SUSPENDED & SURFACE SYSTEM



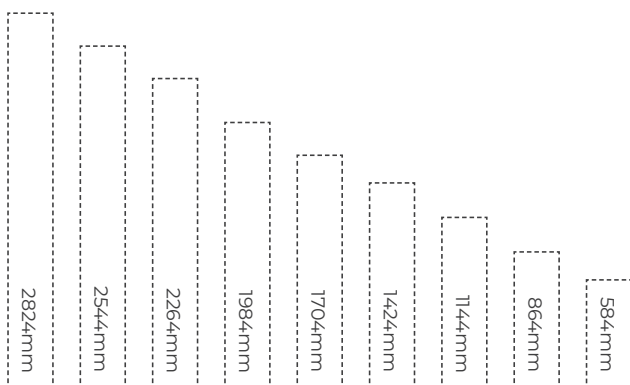
Construction

The suspended and surface system utilises the same profile and is available in standard lengths up to 2824mm with bespoke lengths available to order. Surface mounting is achieved by directly fixing through the rear of the profile. Suspension is made simple using a single-point ceiling bracket with 2m adjustable stainless steel wire system. Uplighting is available on lengths from 584mm upwards.

Typical Applications

General Office Areas, Conference Rooms, Reception Areas, Educational Facilities, Retail Units, Bars, Restaurants, Hotels and Leisure Facilities, and Residential Properties.

- // Aluminium extruded sections in 9 standard lengths
- // Bespoke lengths available in 140mm increments
- // 104 lumens per watt
- // Colour options in 3000K/4000K/5000K
- // Custom shapes available subject to design
- // Incorporates European branded LED drivers
- // Direct/Indirect lighting options available for suspended fittings
- // Utilises latest generation long-life LEDs from leading manufacturers
- // Clip-in gear tray for easy installation
- // Opal polycarbonate diffuser
- // Tuneable white and RGB options available
- // Dimmable and emergency options available
- // Compatible with Casambi wireless control system
- // Dual Switch option available
- // CRI>80, 50,000h life
- // 5-year warranty



SURFACE



SUSPENDED



M-LINE SUSPENDED & SURFACE SYSTEM



Suspended Direct Lighting System					
Product Code	LED Wattage	Lumen Output	Lumen/Watt	Colour Temperature	Size
MLE584	12.5W	1298	104	4000K	584mm x 50mm
MLE864	19W	1947	104	4000K	864mm x 50mm
MLE1144	25W	2596	104	4000K	1144mm x 50mm
MLE1424	31W	3245	104	4000K	1424mm x 50mm
MLE1704	37.5W	3895	104	4000K	1704mm x 50mm
MLE1984	44W	4543	104	4000K	1984mm x 50mm
MLE2264	50W	5192	104	4000K	2264mm x 50mm
MLE2544	56W	5841	104	4000K	2544mm x 50mm
MLE2824	62.5W	6490	104	4000K	2824mm x 50mm
NOTE: Includes 2m suspension kits (longer bespoke lengths available in 140mm increments)					

Suspended Direct/Indirect Lighting System/70% Direct/30% Indirect					
Product Code	LED Wattage	Lumen Output	Lumen/Watt	Colour Temperature	Size
MLE584/DIR/IND	17W	1788	104	4000K	584mm x 50mm
MLE864/DIR/IND	26W	2683	104	4000K	864mm x 50mm
MLE1144/DIR/IND	34W	3570	104	4000K	1144mm x 50mm
MLE1424/DIR/IND	44W	4543	104	4000K	1424mm x 50mm
MLE1704/DIR/IND	53W	5518	104	4000K	1704mm x 50mm
MLE1984/DIR/IND	62W	6490	104	4000K	1984mm x 50mm
MLE2264/DIR/IND	72W	7464	104	4000K	2264mm x 50mm
MLE2544/DIR/IND	81W	8437	104	4000K	2544mm x 50mm
MLE2824/DIR/IND	91W	9411	104	4000K	2824mm x 50mm
NOTE: Includes 2m suspension kits (longer bespoke lengths available in 140mm increments)					

Surface Mounted System					
Product Code	LED Wattage	Lumen Output	Lumen/Watt	Colour Temperature	Size
MLES584	12.5W	1298	104	4000K	584mm x 50mm
MLES864	19W	1947	104	4000K	864mm x 50mm
MLES1144	25W	2596	104	4000K	1144mm x 50mm
MLES1424	31W	3245	104	4000K	1424mm x 50mm
MLES1704	37.5W	3895	104	4000K	1704mm x 50mm
MLES1984	44W	4543	104	4000K	1984mm x 50mm
MLES2264	50W	5192	104	4000K	2264mm x 50mm
MLES2544	56W	5841	104	4000K	2544mm x 50mm
MLES2824	62.5W	6490	104	4000K	2824mm x 50mm

M-LINE SUSPENDED & SURFACE SYSTEM



Suspended Direct/Indirect System



Surface Mounted System

Control Options

Option Code	Description
/M	3 Hour Maintained Emergency
/MZ	3 Hour Maintained DALI Emergency
/D	1-10V Driver
/DALI	DALI/DSI Dimmable Driver
/BTC	Casambi Dimmable
/3K	3000K LED
/5K	5000K LED
/RGB	Colour Changing LED
/TW	Tunable White LED

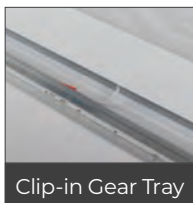
Suspension Options

Option Code	Description
Supply Cable	
CABTR3C	1.5m Transparent Current Cable 3 x 0.75mm ²
CABTR5C	1.5m Transparent Current Cable 5 x 0.75mm ²
CR375W/2M	3 Core 0.75mm White Flex Cable - 2m Lead
CR375B/2M	3 Core 0.75mm Black Flex Cable - 2m Lead
CR475W/2M	4 Core 0.75mm White Flex Cable - 2m Lead
CR475B/2M	4 Core 0.75mm Black Flex Cable - 2m Lead
CR575W/2M	5 Core 0.75mm White Flex Cable - 2m Lead
CR575B/2M	5 Core 0.75mm Black Flex Cable - 2m Lead
MLESUS	2m Suspension kit for suspended M-Line

NOTE: Alternative length suspension kits available - POA



CABTR3C



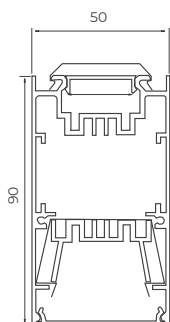
Clip-in Gear Tray



CABTR5C



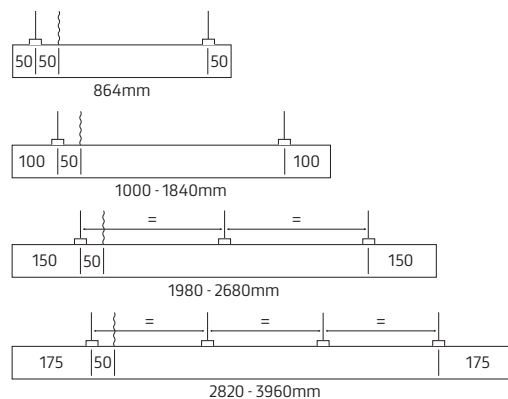
MLESUS



Colour Options

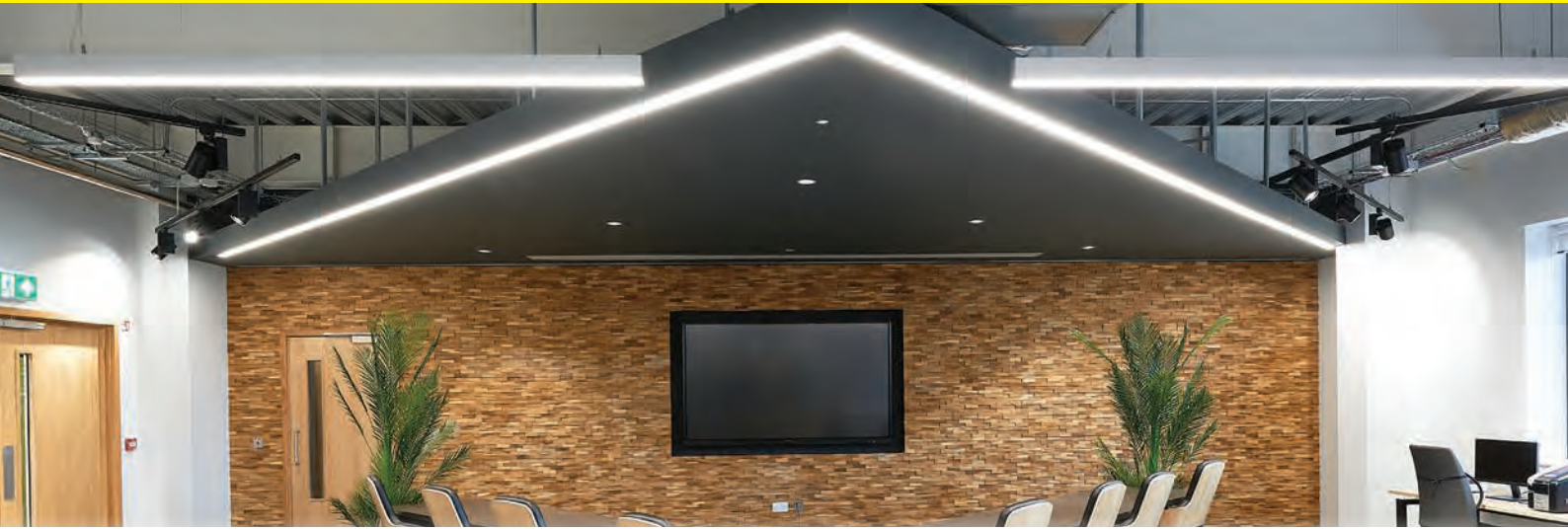
Option Code	Description
/W	White (RAL 9016)
/G	Grey (RAL 9006)
/B	Black (RAL 9005)
/U (POA)	Blue (RAL 5002)
/V (POA)	Green (RAL 6018)
/T (POA)	Yellow (RAL 1021)
/K (POA)	Red (RAL 3020)
/N (POA)	Jungle
/D (POA)	Goldeneye
/O (POA)	Sahara
/L (POA)	Autumn
/R (POA)	Rusty chain
/C (POA)	Pure chocolate
/I (POA)	Mist
/9 (POA)	Darkrock
/I (POA)	Carbon

Typical Suspension and Cable Entry Points



For optional features, please include the option code suffix with the product code when ordering.

M-LINE RECESSED SYSTEM



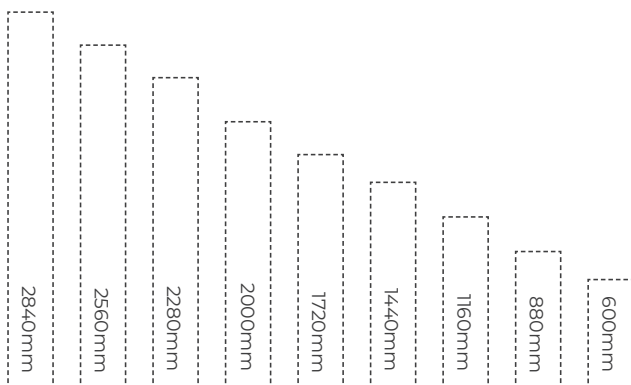
Construction

The recessed system is available in standard lengths up to 2840mm with bespoke formations and continuous lengths available to order. The standard system is designed for ceiling mounting, however, wall mounting systems can be supplied on request. Installation is simple using the easy-fix bracket system.

Typical Applications

General Office Areas, Conference Rooms, Reception Areas, Educational Facilities, Retail Units, Bars, Restaurants, Hotels and Leisure Facilities, and Residential Properties.

- // Aluminium extruded sections in 9 standard lengths
- // Bespoke lengths available to order in 140mm increments
- // 104 lumens per watt
- // Colour options in 3000K/4000K/5000K
- // Custom-shaped formations subject to design
- // Incorporates European branded LED drivers
- // Utilises latest generation long-life LEDs from leading manufacturers
- // Clip-in gear tray for easy installation
- // Opal polycarbonate diffuser
- // Tuneable white and RGB options available
- // Dimmable and emergency options available
- // Compatible with Casambi wireless control system
- // CRI>80, 50,000h life
- // 5-year warranty



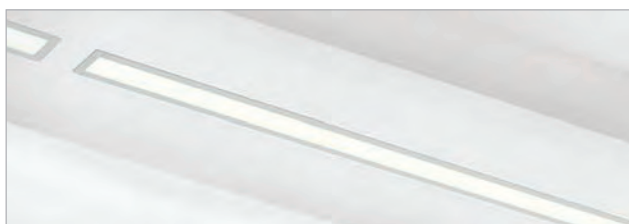
RECESSED CEILING



RECESSED WALL



M-LINE RECESSED SYSTEM



Typical Recessed Installation



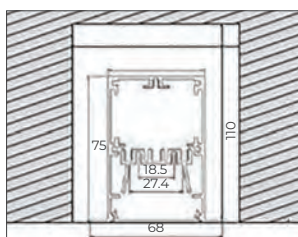
Recessed System

Recessed System						
Product Code	LED Wattage	Lumen Output	Lumen/Watt	Colour Temperature	Size	Cutout Dimensions
MLER600	12.5W	1298	104	4000K	600mm	584mm x 52mm
MLER880	19W	1974	104	4000K	880mm	864mm x 52mm
MLER1160	25W	2596	104	4000K	1160mm	1144mm x 52mm
MLER1440	31W	3245	104	4000K	1440mm	1424mm x 52mm
MLER1720	37.5W	3895	104	4000K	1720mm	1704mm x 52mm
MLER2000	44W	4543	104	4000K	2000mm	1984mm x 52mm
MLER2280	50W	5192	104	4000K	2280mm	2264mm x 52mm
MLER2560	56W	5841	104	4000K	2560mm	2544mm x 52mm
MLER2840	62.5W	6490	104	4000K	2840mm	2824mm x 52mm

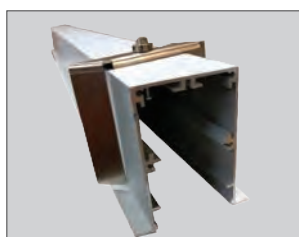
NOTE: Longer bespoke lengths available in 140mm increments.

Control Options

Option Code	Description
/M	3 Hour Maintained Emergency
/MZ	3 Hour Maintained DALI Emergency
/D	1-10V Driver
/DALI	DALI/DSI Dimmable Driver
/BTC	Casambi Dimmable
/3K	3000K LED
/5K	5000K LED
/RGB	Colour Changing LED
/TW	Tunable White LED



Aperture Size Within Ceiling Void



Fitted Recessed Bracket

Colour Options

Option Code	Description
/W	White (RAL 9016)
/G	Grey (RAL 9006)
/B	Black (RAL 9005)
/U (POA)	Blue (RAL 5002)
/V (POA)	Green (RAL 6018)
/T (POA)	Yellow (RAL 1021)
/K (POA)	Red (RAL 3020)
/N (POA)	Jungle
/D (POA)	Goldeneye
/O (POA)	Sahara
/L (POA)	Autumn
/R (POA)	Rusty chain
/C (POA)	Pure chocolate
/I (POA)	Mist
/9 (POA)	Darkrock
/I (POA)	Carbon

For optional features, please include the option code suffix with the product code when ordering.

ATMOS LED PANEL

40W & 60W, IP20



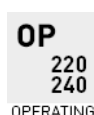
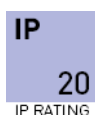
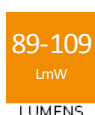
PRODUCT INFORMATION DOCUMENT

FEATURES

- UGR <19 for small offices to comply with EN12464
- A high quality PP thermoplastic diffuser ensures that light transmission is maximized into lit space and provides a TP_a rating to comply with fire regulations
- Emergency pack provides high lumen output to comply with emergency lighting regulations using minimum number of fittings and utilises LiFePO₄ battery technology for long life
- Suitable for switching by external PIR, Microwave or Photocell

CONSTRUCTION

- White powder coated aluminium frame
- Polypropylene thermoplastic diffuser
- Steel back plate



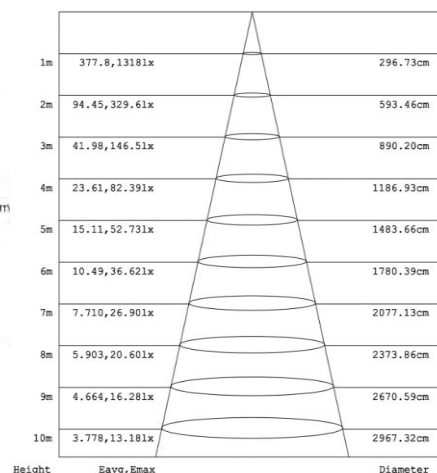
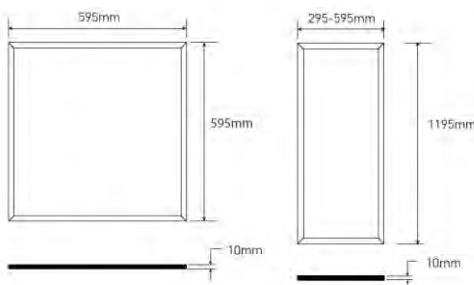
	RAM40306060-01	RAM40406060-01	RAM40506060-01	RAM40403012-01	RAM60406012-01
Comparable to:	4x18W T8	4x18W T8	4x18W T8	2x36W T8	4x36W T8
Total Power (W):	38.1	38.3	37.7	37.5	60.8
Power Factor:	0.97	0.97	0.97	0.97	0.97
Total Light Output (lm):	3390	3810	3800	3730	6620
Total Emergency Light Output (lm):	550	550	550	NA	NA
Efficacy (lm/cctW):	89	99	101	100	109
Lux at 1m (lux):	1170	1310	1310	1290	2110
Emergency Lux at 1m (lux):	160	160	160	NA	NA
CCT (K):	3000	4000	5000	4000	4000
IP:	20	20	20	20	20
Operation Temperature (°C):	-20 ≤ Ta ≤ +40	-20 ≤ Ta ≤ +40	-20 ≤ Ta ≤ +40	-20 ≤ Ta ≤ +40	-20 ≤ Ta ≤ +40
Inrush Current:	27A/0.6us	27A/0.6us	27A/0.6us	10A/2us	
RG Value:	0	0	0	0	0
Rated Life to L70B50 (Hrs):	>60000	>60000	>60000	>60000	>60000
Dimensions LxWxH (mm):	595x595x10	595x595x10	595x595x10	1195x295x10	1195x595x10
Weight (kg):	2.0	2.0	2.0	2.4	5.0

Product is certified to all the relevant standards.

Please contact our technical department for market specific compliances.

ACCESSORIES:

R3EMPk4-PSU	3 hour emergency pack with LiFePO ₄ battery
R6060SMKFB-01	Flat packed surface mount box 600x600mm
R1230SMKFB-01	Flat packed surface mount box 300x1200mm
R60120SMKFB-01	Flat packed surface mount box 600x1200mm
RAM4040FFDVR	40W flicker free driver
RAM40DDVR	40W Mains dimming driver
HED2040-D	DALI, 1-10V and push dim driver
RAMRC	Plaster board recessed clips
RAMSUS-4W	4 wire suspension kit for 600x600mm panels
RAMSUS-3W	3 wire suspension kit for 300x1200mm
RAMSUS-6W	6 wire suspension kit for 600x1200mm
RAMSST	Safety bracket and 2m strap



PLEASE NOTE: INFORMATION IN THIS DOCUMENT MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

Diagram for RAM40406060-01 in 4000K. Other diagrams available on request

APPENDIX H

Fast Lane Security Access Barriers

Refer to drawings: SOAS-CB-PR-G-001P & SOAS-CB-PR-LG-001P

LOCATION	GATE TYPE
Ground Entrance 4N° standard lane + 1N° accessible lane	Fastlane Glassgate 200 961mm (h) glass gates
Lower Ground Entrance 2N° standard lane + 1N° accessible lane	satin stainless steel finish pedestals Card reader option A mounted

Fastlane® Glassgate 200

with Ethernet Connectivity



Setting the Standard

The original, now iconic Fastlane swing barrier has been newly updated to feature IP connectivity for Ethernet control and monitoring. Featuring the latest 32 beam-path platform, the GG200 has all the enhanced functionality of the new Fastlane range. Intelligent & safe, it presents users with a familiar glass door arrangement, which is as easy to use as it is on the eye. The timeless design with new processing power and Ethernet connectivity puts the GG200 back on the cutting edge of turnstile products. Optional locking brakes are now available on this product.



GG200 is designed to integrate seamlessly with Access Control, CCTV and whole building management systems. By receiving information from your Access Control system, Glassgate 200 knows how many people to admit and in which direction of travel. Any unexpected movements are instantly met with an audible and visual alarm and signals can be passed to your Access Control or CCTV system to acknowledge an alarm condition has occurred. Glassgate 200 now features Fastlane *Connect* Ethernet communications for control, configuration and diagnostics. Locking brake options and a new barrier height option of 1,800mm has also been introduced across the GG200 range.

Barrier type

GLASS

ARM

OPTICAL

Secure

- Class leading infrared detection systems
- Detects and deters tailgaters in very close proximity
- Barriers are a visual and physical deterrent

Accurate

- Accurately assesses traffic through the barrier
- Differentiates body mass from smaller objects
- Provides instant feedback of traffic flow and incidents

Features

- Quick and safe action
- High processing speed reduces traffic build-up
- Door-like motion ensures quick user acceptance

Aesthetics

- Inspired, elegant design
- Glass barriers provide secure and welcome entry
- Barriers open flush with the pedestal, minimising footprint

Reliability

- Quality build lowers whole life costs
- Fewer failures mean lower repair costs
- Online diagnostics and support packages



Fastlane[®] Glassgate 200

with Ethernet Connectivity



Physical

Enclosure material
Dimensions L x W x H
Weight (Interlane / TX / RX Pedestal)
Weight (Optical Only Pedestal)
STD Glass Barrier (Barrier Height: 1800mm)
DDA Glass Barrier (Barrier Height: 1800mm)
Standard lane width
DDA/ADA lane width
Barrier height – 5 options
Barrier material

Stainless steel 304, 240 grit (satin no.4), horizontal grain
1411 x 168 x 962mm / 55.6 x 6.6 x 37.9 Inches
82kg / 180.7lbs
69kg / 152.1lbs
19kg / 41.9lbs (12kg / 26.5lbs for Dual Interlane)
17kg / 37.5lbs
600mm / 23.6" (660mm/26.0" for Dual Interlane)
914mm / 36"
962mm/37.8" | 1200mm/47.2" | 1500mm/59.1" | 1700mm/66.9" | 1800mm / 70.9"
10mm Toughened Safety Glass EN12150
12mm Toughened/Laminated for 1800mm Tall option EN12150/EN14449
≥ 60N (measured at 285mm from the shaft axis)
≥ 300N* (Damage to the Glass clamps and panel may occur above the rated force)
< 1 second
32
940
5mm / 1/4"

Barrier Breakaway Force - Friction Brakes

Maximum Rated Force - Locking Brakes
Barrier speed of operation
Infrared optical matrix – pulsed beam paths
Infrared wavelength nm
Tailgate detection distance

1 person per second
30 persons per minute
10 cards max
As detailed in the configuration manual

Pedestrian Access Throughput

Optical system performance
Typical application
Card buffering capacity
Turnstile functions

Turnstile Power Specifications

Receive Gate / Transmit Gate
Transmit Optical Only Gate

24Vdc 1.25A (max)
24Vdc 250mA

Environmental

Temperature
Relative humidity
Energy consumption per lane
Ingress protection

5 to 50 degrees centigrade
5 to 95% non-condensing
421kW hours per annum
IP20 (Internal building applications only)

Power Supply (Included)

Enclosure
Modules
Input voltage

Black mild steel, wall mounted, 330mm (13") x 200mm (8") x 136mm (5.5")
Single, Dual or quad 24Vdc 2.5A overcurrent fold back
100-240Vac, 60/50Hz, 5A fused spur connection

Access Control Inputs

Voltage-free contact;
1mA current sense
Screw terminal connector
Max conductor CSA 16AWG/ 1.5mm²
Fire panel integration input
Ethernet connection

Entry request (NORMALLY OPEN closing for 1 second)
Exit request (NORMALLY OPEN closing for 1 second)
Visitor entry (NORMALLY OPEN momentary closing contact)
Visitor exit (NORMALLY OPEN momentary closing contact)
Opto-coupled Input 12-24Vdc @ 25mA nominal
RJ45 TCP/IP Port

Access Control Outputs

Voltage-free contact;
Contact Rating 28Vdc 0.5A
Screw terminal connector
Max conductor CSA 16AWG/ 1.5mm²

Entry monitor (NORMALLY CLOSED opening for 1 second)
Exit monitor (NORMALLY CLOSED opening for 1 second)
Alarm 1 (NORMALLY CLOSED opening for 1 second)
Alarm 2 (NORMALLY CLOSED opening for 1 second)

System Output

Turnstile status display
Alarm sounder output

RGB LED diffused through 10mm high clear frosted acrylic
75 – 100 dB (93dB at 1 metre)

Reliability

In Normal use, 5,000,000 cycles of operation is expected before electro mechanical parts require replacement as part of an approved preventative maintenance programme.

Technical Specification Version A8

Manufactured by Integrated Design Limited.



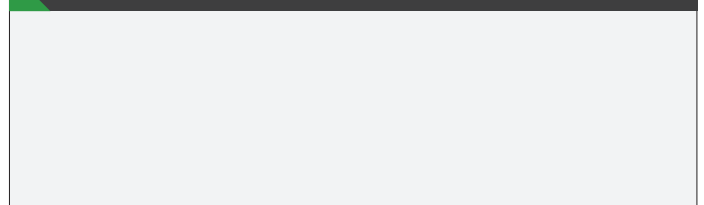
Feltham Point, Air Park Way, Feltham,
Middlesex, TW13 7EQ, United Kingdom

T: +44 (0)208 890 5550
E: info@fastlane-turnstiles.com
W: www.fastlane-turnstiles.com

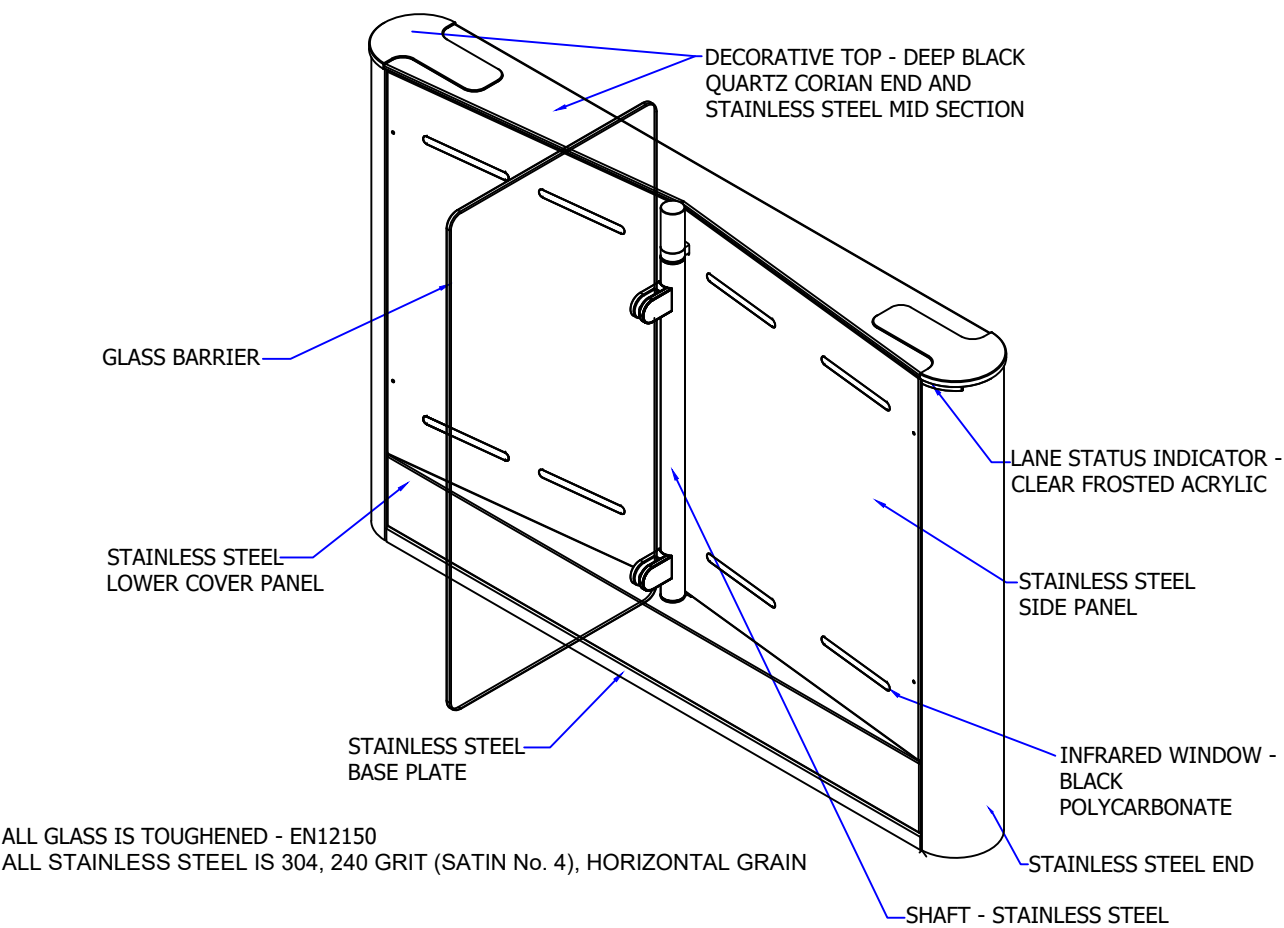
Issue B8

Installation photos may not represent current production models.
Please note specifications are subject to change without prior notice and performance features vary from model to model.

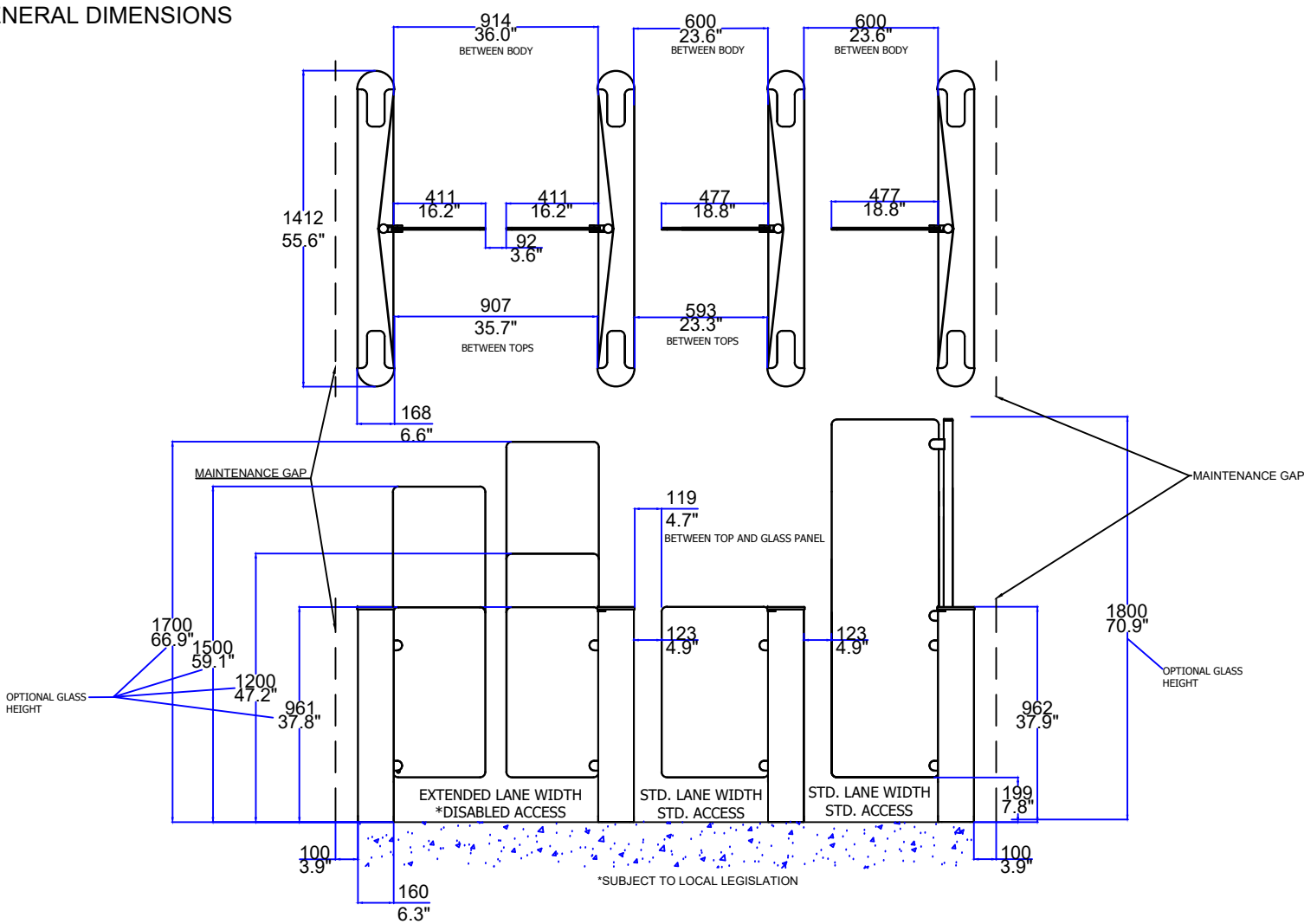
Local Reseller



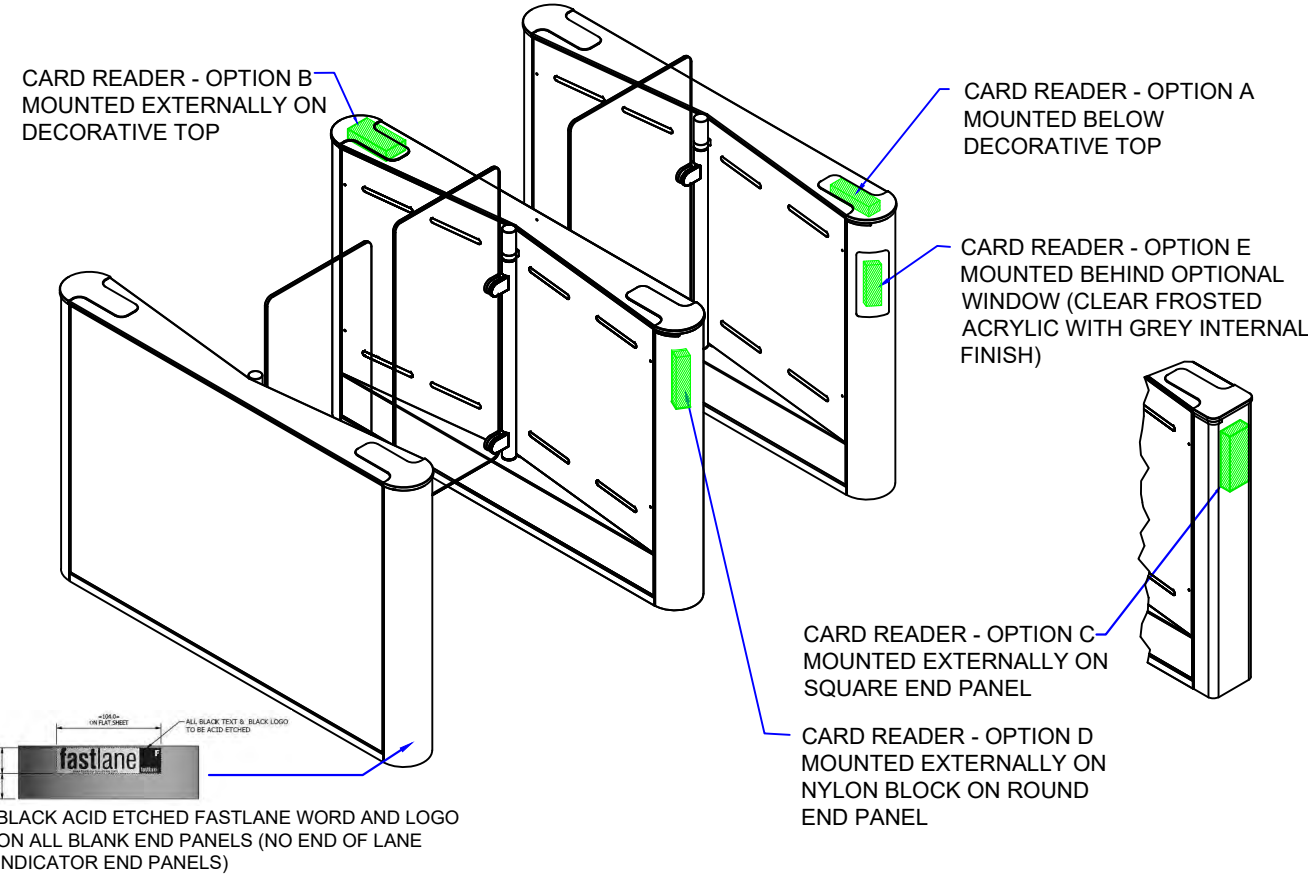
MATERIAL SPECIFICATION



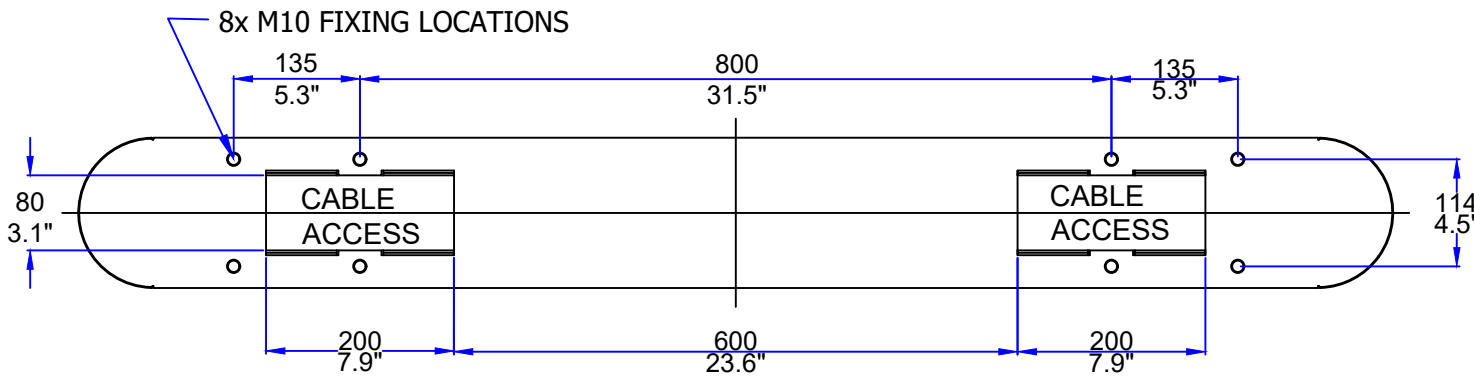
LANE LAYOUT & GENERAL DIMENSIONS



READER MOUNTING OPTIONS AND LOGO DETAILS



PEDESTAL FOOTPRINT



PRODUCT: GLASSGATE 200

TITLE: GENERAL INFORMATION

DRAWING No: GG200V3_A7

FOR SALES INFORMATION ONLY-SUBJECT TO CHANGE
ALL DIMENSIONS +/-2mm

This document is the copyright of Integrated Design LTD

