Project: COLT LON4

Planning Condition 9 – Materials

Materials schedule

Building 01

Building 01 – COLT LON4				
Façade materials				
Specification reference	**Material**	**Location**	**Finish**	**Colour Sample**
N/a	Masonry	North, East and West elevations	Forticrete Steel Grey	
Ss_25_20_14_52	Metal composite panels with projecting fins	North, East and South elevations	RAL 7016	
Ss_25_10_20_85	Stick Curtain wall system with projecting capping	East, South and West elevations	RAL 7016	
Ss_25_30_20_25	External metal doors	East and West elevations	RAL 7016	
Ss_25_30_20_76	Sectional overhead doors	West elevation	RAL 7016	
Ss_25_20_50_05	Mesh cladding system – Gantry	North, West and South elevations	RAL 9006	
Ss_25_50_45_45	Louvre screen	All elevations	RAL 7016	

Pr_35_90_30_01	Metal coppings, Flashings	All elevations	RAL 7016	
Ss_25_14_67_15	Continuous mesh fencing system – Gantry Level 00	North and West elevations	Black	

Project: COLT LON4

Planning Condition 9 – Materials

Mock up form

1. Mock up – Façade elements, Louvre screen system

Mock up Submission Form

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Multiple trade contractors	**Package Number:** Multiple trade contractors	
Sample Title: Mock up a) Façade elements b) Louvre screen system		
Sample Number: DCS20109-ISG-DC-01-00-FT-W-00019	**Revision:** P01	**Date submitted:** -
Package Description: a) Façade elements b) Louvre screen system		
Sample / Benchmark / Mock up: ~~Sample~~ / ~~Benchmark~~ / Mock up		
Purpose of sample sign off: ~~Procurement~~ / Mock up		
Manufacturer details: Multiple elements – Please refer to individual sample forms		
Installation details: As per manufacturers requirements and design intent		

Specification Reference: Multiple elements – Please refer to individual sample forms
Area / Location: South elevation Individual elements applicable to multiple elevations / locations as per the agreed design
Detailed description of area / item / equipment: As above

Photographs:
 
Comments: -

Project: COLT LON4

Planning Condition 9 – Materials

Sample forms

1. Engineering Brickwork
2. Stick Curtain walling system
3. Aluminium projecting fins
4. Aluminium roof flashing system
5. Clear glass – Curtain walling
6. Continuous mesh fencing system
7. EPDM
8. External metal doors
9. Louvre screen system with integrated fins
10. Masonry wall leaf system
11. Mesh cladding - Gantry
12. Powder coated Aluminium flashing – Small Z angle
13. Powder coated Aluminium flashing – Curtain walling cladding interface
14. Sectional overhead doors (Roller shutter)
15. Spandrel panel – Opaque

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Lesterose	**Package Number:** WP 3770	
Sample Title: 102.5mm Engineering brickwork		
Sample Number: DCS20109-ISG-DC-01-00-FT-W-00018	**Revision:** P01	**Date submitted:** N/a
Package Description: 102.5mm Engineering Brickwork		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / Mock up		
Manufacturer details: Ibstock Brick Ltd		
Installation details: As per manufacturer's instructions / design intent		

Specification Reference: Pr_20_93_52_27
Area / Location: Level 00 – at the base of the curtain walling system
Detailed description of area / item / equipment: 102.5mm Engineering brickwork to the base of the curtain walling and Masonry wall leaf systems (Level 00) Elevations: All elevations

Photographs:
 
Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Stick curtain walling system		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-00010	**Revision:** P01	**Date submitted:** N/a
Package Description: 1x no. Cruciform arrangement of the AA110 65mm framework provided. Capturing all interfaces of the stick curtain walling system.		
Sample / Benchmark / Mock up: Sample ~~/ Benchmark / Mock up~~		
Purpose of sample sign off: ~~Procurement /~~ Mock up		
Manufacturer details: Kawneer		
Installation details: As per manufacturers requirements / design intent		

Specification Reference: Ss_25_10_20_85
Area / Location: North, East, South, West Elevations
Detailed description of area / item / equipment: Curtain walling system Elevations: All elevations Multiple levels

Photographs:

Comments:
Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Aluminium projecting fins		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-00012	**Revision:** P01	**Date submitted:** N/a
Package Description: Projecting fin		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / Mock up		
Manufacturer details: Maples		
Installation details: As per manufacturers instructions / design intent		

Specification Reference: Ss_25_10_20_85
Area / Location: South, East and West Elevations
Detailed description of area / item / equipment: Projecting fins to curtain walling and cladding systems Elevations: All elevations Multiple levels

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Crown roofing	**Package Number:** WP 3000	
Sample Title: Aluminium Roof Flashing System		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00015	**Revision:** P01	**Date submitted:** N/a
Package Description: Roof flashing system Colour: RAL 7016		
Sample / Benchmark / Mock up: Sample ~~/ Benchmark / Mock up~~		
Purpose of sample sign off: ~~Procurement /~~ Mock up		
Manufacturer details: K+S Aluminium		
Installation details: As per manufacturers requirements		

Specification Reference: Ss_25_60_50_03
Area / Location: Level 05 – flashing system to roof between Levels 04 / 05
Detailed description of area / item / equipment: Flashing system to the roof level of the façade Multiple levels Elevations: All elevations

Photographs:
 
Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Clear glass (for curtain walling system)		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-00011	**Revision:** P01	**Date submitted:** N/a
Package Description: Clear glass sample for the Kawneer Curtain walling system		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / Mock up		
Manufacturer detail Euroview		
Installation details: As per manufacturers requirements / design intent		

Specification Reference: Ss_25_10_20_85
Area / Location: All elevations
Detailed description of area / item / equipment: Clear glass to the curtain walling system Elevations: All elevations Multiple Levels

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Littlewoods	**Package Number:** WP 8800	
Sample Title: Continuous mesh fencing system		
Sample Number: DCS20109-ISG-DC-01-00-FT-W-00002	**Revision:** P01	**Date submitted:** N/a
Package Description: Mesh fencing system to Level 00 of the Gantry		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / ~~Mock up~~ / Sample board		
Manufacturer details: CLD Securus S2 – High security fencing system to LPS 1175 B3 (SR2) Issue		
Installation details: As per the manufacturer's instructions / design intent		

Specification Reference: Ss_25_14_67_15
Area / Location: Gantry
Detailed description of area / item / equipment: Mesh fencing system to Level 00 of the Gantry block Elevations: North and West

Photographs:
 
Comments:
Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: EPDM		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-00006	**Revision:** P01	**Date submitted:** N/a
Package Description: 1 No. Item EPDM membrane SikaMembran Universal 25m x 20cm		
Sample / Benchmark / Mock up: Sample /~~ Benchmark~~ /~~ Mock up~~		
Purpose of sample sign off: ~~Procurement / Mock up~~ / Sample Board		
Manufacturer details: Sika Group		
Installation details: As per manufacturers requirements / design intent		

Specification Reference: Ss_25_20_14_52
Area / Location: All elevations of Building 01
Detailed description of area / item / equipment: Connection seal detail of vertical fins to the cladding system – Multiple Levels Elevations: All elevations

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Dudley's	**Package Number:** WP 3300	
Sample Title: External metal doors		
Sample Number: DCS20109-ISG-DC-01-00-FT-W-00016	**Revision:** P01	**Date submitted:** N/a
Package Description: External metal door samples		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / ~~Mock up~~ / Sample board		
Manufacturer details: Kawneer		
Installation details: As per manufacturers instructions / design intent		

Specification Reference: Ss_25_30_20_25
Area / Location: Level 00
Detailed description of area / item / equipment: External metal doors on Level 00 Elevations: East and West

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Louvre screen system with integrated fins		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00003	**Revision:** P01	**Date submitted:** N/a
Package Description: Louvre screen system		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / Mock up		
Manufacturer details: Maples		
Installation details: As per Architects specification and manufacturer's instructions		

Specification Reference: Ss_25_50_45_45
Area / Location: Roof level 01 and 02
Detailed description of area / item / equipment: Louvre screen system at Roof levels 01 and 02 Elevations: All elevations

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Lesterose	**Package Number:** WP 3770	
Sample Title: Masonry wall leaf system		
Sample Number: DCS20109-ISG-DC-01-00-FT-W-00004	**Revision:** P01	**Date submitted:** N/a
Package Description: Ibstock Brick – Forticrete		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / ~~Mock up~~ / Sample panel		
Manufacturer details: Ibstock Brick Ltd		
Installation details: As per manufacturers instructions / design intent		

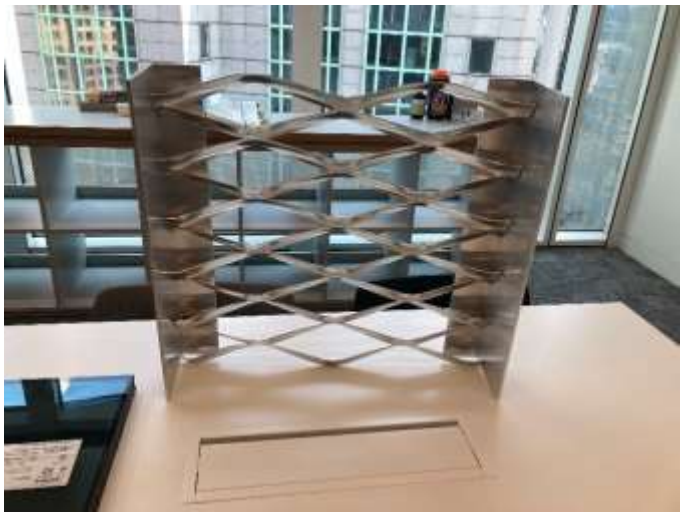
Specification Reference: Ss_25_13_50_51
Area / Location: Level 00 on the North, East and West elevations
Detailed description of area / item / equipment: Masonry wall at Level 00 Elevations: North, East and West

Photographs: 
Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Mesh Cladding with integrated blades (Gantry)		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00001	**Revision:** P01	**Date submitted:** N/a
Package Description: Mesh cladding to the Gantry block – Levels 01 to Roof level 02		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / ~~Mock up~~ / Sample Board		
Manufacturer details: Maples		
Installation details: As per manufacturer's instructions / design intent		

Specification Reference: Ss_25_20_50_05
Area / Location: Gantry block of Building 01
Detailed description of area / item / equipment: Mesh cladding with integrated projecting blades to the gantry block Elevations: North, West and South Multiple levels

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Powder Coated Aluminium Flashing (Small Z angle)		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00008	**Revision:** P01	**Date submitted:** N/a
Package Description: 1 No. Item - Aluminium Flashing Colour: RAL 7016		
Sample / Benchmark / Mock up: Sample ~~/ Benchmark / Mock up~~		
Purpose of sample sign off: ~~Procurement /~~ Mock up		
Manufacturer details: Bespoke Architectural Fabrications		
Installation details: As per manufacturers requirements / design intent		

Specification Reference: Pr_35_90_30_01
Area / Location: Envelope
Detailed description of area / item / equipment: Flashing between the curtain walling and Engineering brickwork below curtain walling Level 00 Elevations: West, South and East

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Powder Coated Aluminium Flashing		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-00007	**Revision:** P01	**Date submitted:** N/a
Package Description: 1 No. Item - Aluminium Flashing Colour: RAL 7016		
Sample / Benchmark / Mock up: Sample ~~/ Benchmark / Mock up~~		
Purpose of sample sign off: ~~Procurement /~~ Mock up		
Manufacturer details: Bespoke Architectural Fabrications		
Installation details: As per manufacturers requirements / design intent		

Specification Reference: Pr_35_90_30_01
Area / Location: Envelope
Detailed description of area / item / equipment: Flashing between curtain walling and cladding system South stair core only Level 00 Elevations: East and South

Photographs:

Comments:
Approved by – ISG, NWA, Cundall's

Sample

Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Hormann's	**Package Number:** TBC	
Sample Title: Sectional overhead door (Roller shutter)		
Sample Number: DCS20109-ISG-DC-01-00-FT-X-00017	**Revision:** P01	**Date submitted:** N/a
Package Description: Sectional overhead door sample with colour palette		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / ~~Mock up~~ / Sample board		
Manufacturer details: Hormann's		
Installation details: As per manufacturers instructions / design intent		

Specification Reference: Ss_25_30_20_76
Area / Location: Level 00 – Loading Bay – West of Building 01
Detailed description of area / item / equipment: Sectional overhead door (roller shutter) within the loading bay at Level 00 Elevation: West

Photographs:
  
Comments: Approved by – ISG, NWA, Cundall's

Sample

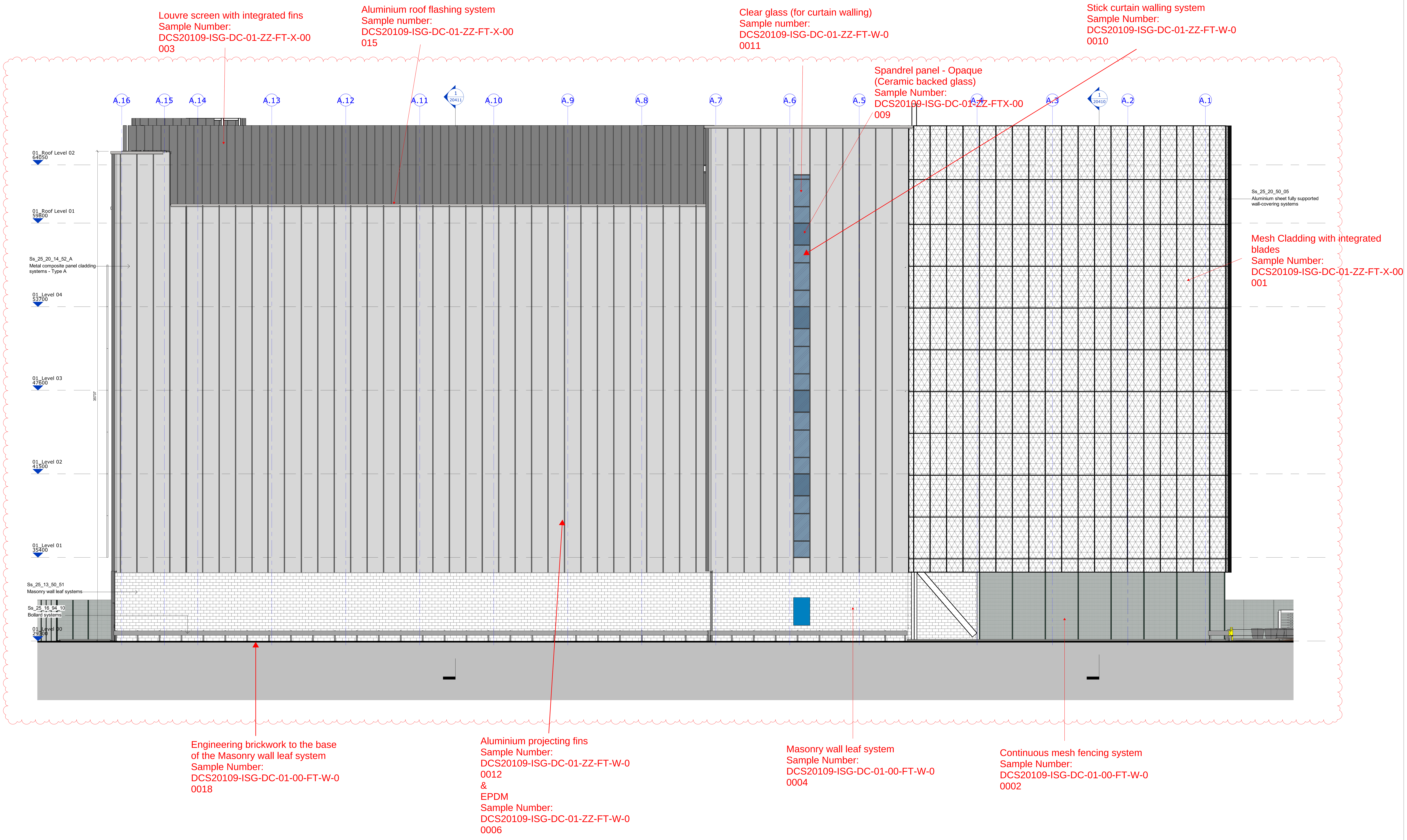
Project Name: COLT LON4	**Project Number:** EN20042	
Trade Contractor: Middlesex facades	**Package Number:** WP 3500	
Sample Title: Spandrel panel – Opaque		
Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00009	**Revision:** P01	**Date submitted:** N/a
Package Description: Clear glass with ceramic backing RAL 9016 and RAL 7016		
Sample / Benchmark / Mock up: Sample / ~~Benchmark~~ / ~~Mock up~~		
Purpose of sample sign off: ~~Procurement~~ / Mock up		
Manufacturer details: Euroview		
Installation details: As per manufacturer's instructions / Design intent		

Specification Reference: Ss_25_10_20_85
Area / Location: Glass panels forming the spandrel panels along the curtain walling system.
Detailed description of area / item / equipment: Forming opaque sections of stair cores 1, 2 and 3, and the curtain walling system Elevations: All elevations Multiple Levels

Photographs:

Comments: Approved by – ISG, NWA, Cundall's

A0 - Do not scale


Louvre screen with integrated fins Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00 003
Aluminium roof flashing system Sample number: DCS20109-ISG-DC-01-ZZ-FT-X-00 015
Clear glass (for curtain walling) Sample number: DCS20109-ISG-DC-01-ZZ-FT-W-0 0011
Stick curtain walling system Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-0 0010
Spandrel panel - Opaque (Ceramic backed glass) Sample Number: DCS20109-ISG-DC-01-ZZ-FTX-00 009
Mesh Cladding with integrated blades Sample Number: DCS20109-ISG-DC-01-ZZ-FT-X-00 001
Engineering brickwork to the base of the Masonry wall leaf system Sample Number: DCS20109-ISG-DC-01-00-FT-W-0 0018
Aluminium projecting fins Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-0 0012 & EPDM Sample Number: DCS20109-ISG-DC-01-ZZ-FT-W-0 0006
Masonry wall leaf system Sample Number: DCS20109-ISG-DC-01-00-FT-W-0 0004
Continuous mesh fencing system Sample Number: DCS20109-ISG-DC-01-00-FT-W-0 0002
A.16 A.15 A.14 A.13 A.12 A.11 A.10 A.9 A.8 A.7 A.6 A.5 A.4 A.3 A.2 A.1
01_Roof Level 02 64050
01_Roof Level 01 59800
Ss_25_20_14_52_A Metal composite panel cladding systems - Type A
01_Level 04 53700
01_Level 03 47600
01_Level 02 41500
01_Level 01 35400
Ss_25_13_50_51 Masonry wall leaf systems
Ss_25_16_94_10 Bollard systems
01_Level 00 29300
Ss_25_20_50_05 Aluminium sheet fully supported wall-covering systems

Fire Consultant
salus — Primea House, Marina Court, Maple Drive, Hinckley, Leicestershire, LE10 3BF, United Kingdom, www.salusai.co.uk

Security Designer
Control Risks — Cottons Centre, Cottons Lane, London, SE1 2QG, United Kingdom, www.controlrisks.com

Project Title: London 4

Drawing Title: Building 1 - North Elevation General Arrangement

Project Status: **STAGE 4A ISSUE**

Discipline	Status Code
ARCHITECTURE	S4

Project Number	Scale @ A0	Revision
0493	1:100	P03.01

Drawing Number: **DCS20109-NWA-DC-01-ZZ-DR-A-20400**

Project — Originator — Functional Breakdown — Spatial Breakdown — Level — Form — Discipline — Number

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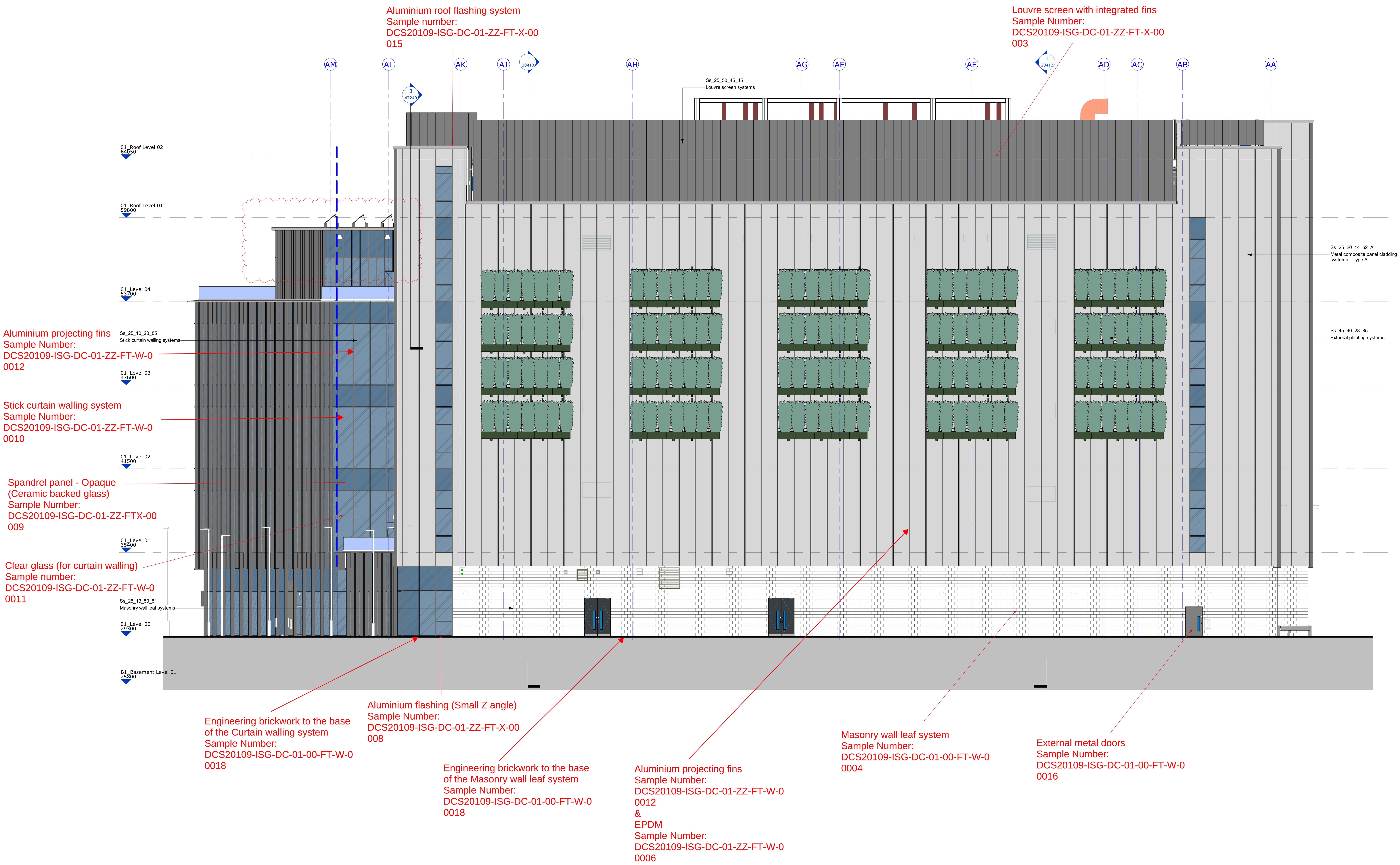
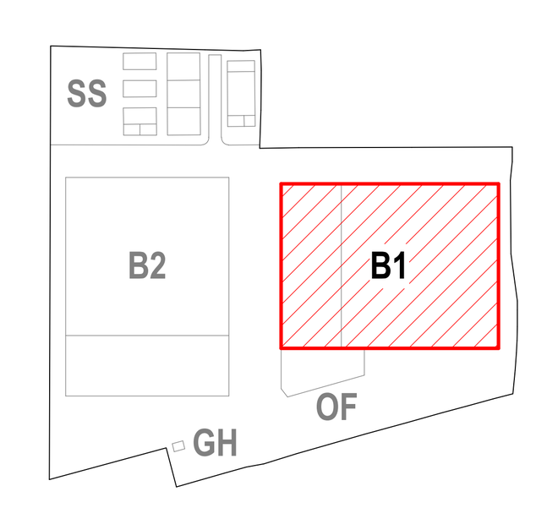


General Notes

1. Do not scale from this drawing. All dimensions indicated are in millimetres unless otherwise stated. Validate all measurements on site.
2. Any discrepancies between the drawings and other documents should be brought to the attention of the engineer.
3. This drawing is not an installation drawing. It is the Contractors responsibility to make final coordinated installation shop drawings.
4. The contents of this drawing shall be read in conjunction with the current revisions of Architectural, Civil, Structural, Mechanical, Electrical, Security, Telcoms drawings and all relevant sections of the specifications.

2000 0 2000 4000 6000 8000
SCALE: 1:200
N

Key Plan



Rev	Details	By / Chkd / App	Date
P05	STAGE 4B ISSUE	VM	14/10/22
P04	STAGE 4B ISSUE	VM	01/07/22
P03.01	STAGE 4A - PLANNING CHANGES	VM	21/03/22
P03	STAGE 4A ISSUE	VM	22/02/22
P02.03	STAGE 3 - 100% ISSUE	DL/EB/VM	17/12/21
P02.02	STAGE 3 - 90% ISSUE	DL/EB	19/11/21
P02.01	STAGE 3 - 50% ISSUE	DL/EB	15/10/21

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Fire Consultant
salus
Building Compliance without Complexity
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Security Designer
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Project Title
London 4

Drawing Title
Building 1 - East Elevation
General Arrangement

Project Status
STAGE 4B ISSUE

Discipline	Status Code
ARCHITECTURE	S4

Project Number	Scale @ A0	Revision
0493	1:100	P05

Drawing Number
DCS20109-NWA-DC-01-ZZ-DR-A-20402
Project — Originator — Functional Breakdown — Spatial Breakdown — Level — Form — Discipline — Number

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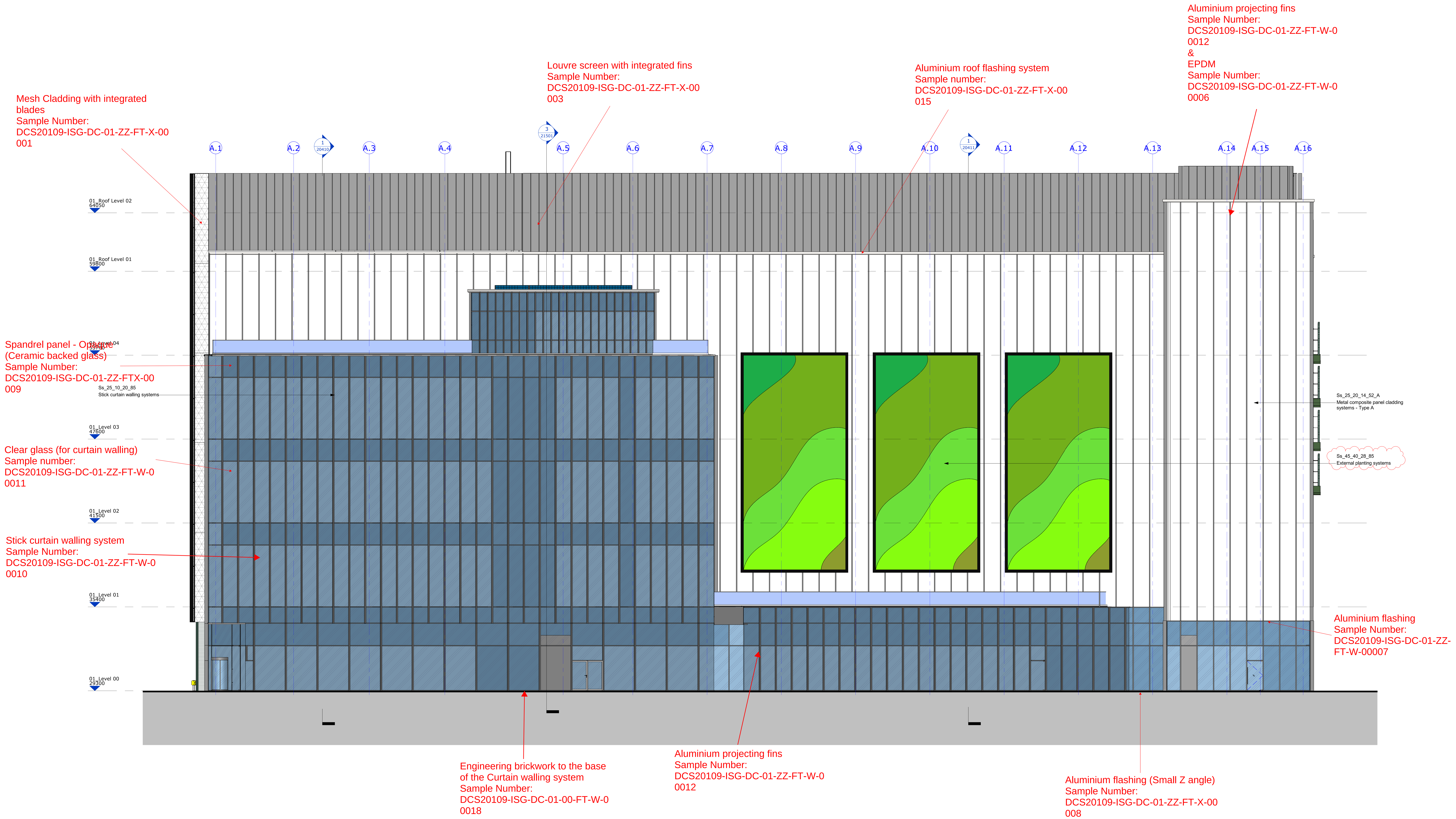

General Notes

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SCALE: 1:200

Key Plan

Rev	Details	By / Chkd / App	Date
P05	STAGE 4B ISSUE	VM	15/07/22
P04	STAGE 4B ISSUE	VM	01/07/22
P03.01	STAGE 4A - PLANNING CHANGES	VM	21/03/22
P03	STAGE 4A ISSUE	VM	22/02/22
P02.03	STAGE 3 - 100% ISSUE	DL/EB/VM	17/12/21
P02.02	STAGE 3 - 90% ISSUE	DL/EB	19/11/21
P02.01	STAGE 3 - 50% ISSUE	DL/EB	15/10/21

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Fire Consultant
salus Building Compliance without Complexity
Primea House, Marina Court
Maple Drive, Hinckley, Leicestershire
LE10 3BF, United Kingdom
www.salusai.co.uk

Security Designer
Control Risks
Cottons Centre, Cottons Lane
London, SE1 2QG, United Kingdom
www.controlrisks.com

Project Title
London 4

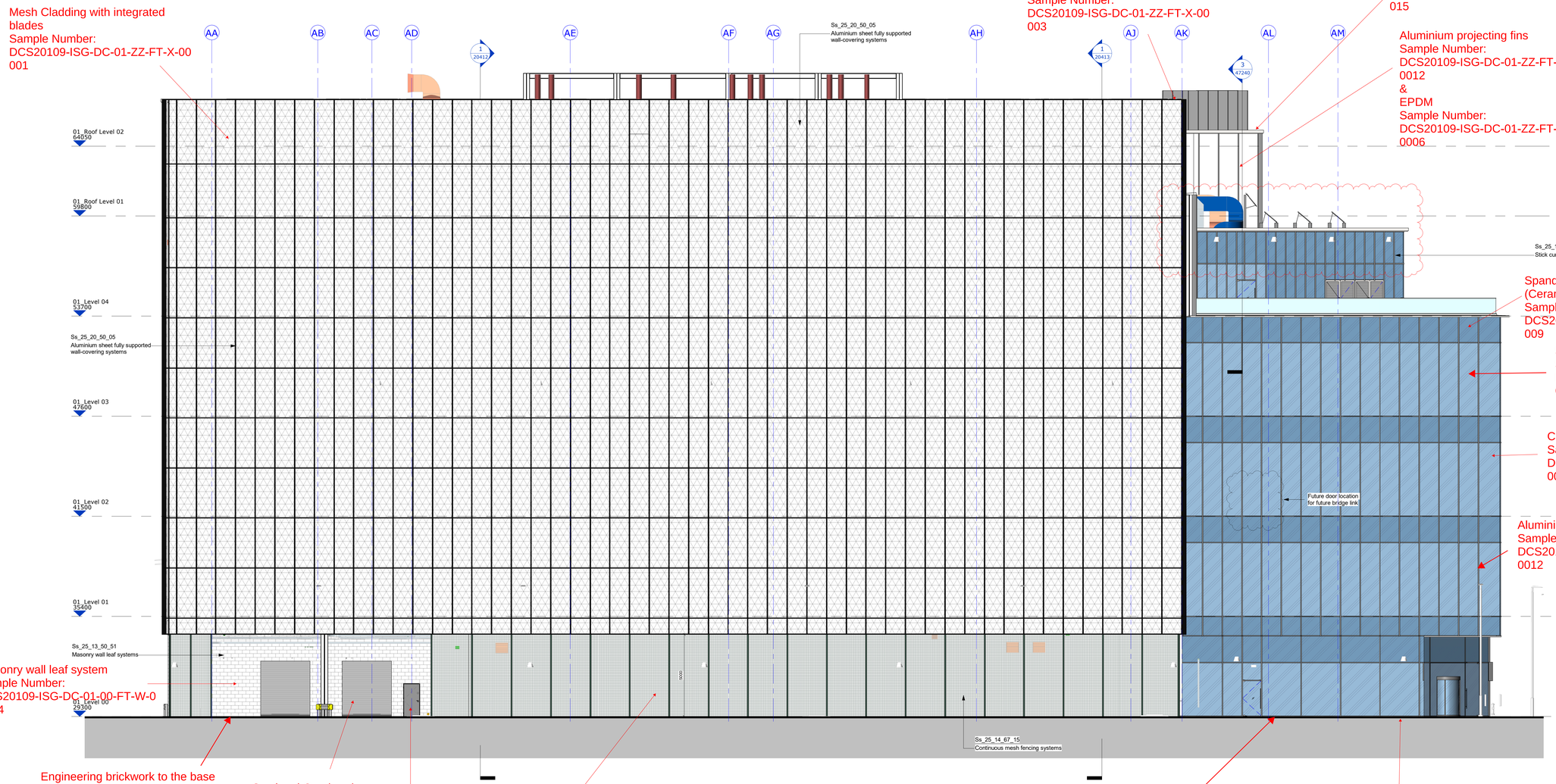
Drawing Title
Building 1 - South Elevation General Arrangement

Project Status
STAGE 4B ISSUE

Discipline: ARCHITECTURE
Status Code: S4
Project Number: 0493
Scale @ A0: 1:100
Revision: P05

Drawing Number
DCS20109-NWA-DC-01-ZZ-DR-A-20401
Project — Originator — Functional Breakdown — Spatial Breakdown — Level — Form — Discipline — Number

A0 - Do not scale



Mesh Cladding with integrated blades
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-X-00 001

Louvre screen with integrated fins
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-X-00 003

Aluminium roof flashing system
Sample number:
DCS20109-ISG-DC-01-ZZ-FT-X-00 015

Aluminium projecting fins
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-W-0 0012
&
EPDM
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-W-0 0006

Spandrel panel - Opaque (Ceramic backed glass)
Sample Number:
DCS20109-ISG-DC-01-ZZ-FTX-00 009

Stick curtain walling system
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-W-0 0010

Clear glass (for curtain walling)
Sample number:
DCS20109-ISG-DC-01-ZZ-FT-W-0 0011

Aluminium projecting fins
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-W-0 0012

Masonry wall leaf system
Sample Number:
DCS20109-ISG-DC-01-00-FT-W-0 0004

Engineering brickwork to the base of the Masonry wall leaf system
Sample Number:
DCS20109-ISG-DC-01-00-FT-W-0 0018

Sectional Overhead door
Sample Number:
DCS20109-ISG-DC-01-00-FT-X-00017

Continuous mesh fencing system
Sample Number:
DCS20109-ISG-DC-01-00-FT-W-0 0002

External metal doors
Sample Number:
DCS20109-ISG-DC-01-00-FT-W-0 0016

Engineering brickwork to the base of the Curtain walling system
Sample Number:
DCS20109-ISG-DC-01-00-FT-W-0 0018

Aluminium flashing (Small Z angle)
Sample Number:
DCS20109-ISG-DC-01-ZZ-FT-X-00 008

General Notes

1. Do not scale from this drawing. All dimensions indicated are in millimetres unless otherwise stated. Validate all measurements on site.
2. Any discrepancies between the drawings and other documents should be brought to the attention of the Architect.
3. This drawing is not an installation drawing. It is the Contractors responsibility to make final coordinated installation shop drawings.
4. The contents of this drawing shall be read in conjunction with the current revisions of Architectural, Civil, Structural, Mechanical, Electrical, Security, Tietoimia drawings and all relevant sections of the specifications.

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SCALE: 1:200

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Key Plan

Rev	Description	By / Chkd / App	Date
P05	STAGE 4B ISSUE	VM	14/10/22
P04	STAGE 4B ISSUE	VM	14/07/22
P03.01	STAGE 4A - PLANNING CHANGES	VM	21/03/22
P03	STAGE 4A ISSUE	VM	23/02/22
P02.03	STAGE 3 - 100% ISSUE	OLB/SH/VM	17/12/21
P02.02	STAGE 3 - 90% ISSUE	OLB/JB	19/11/21
P02.01	STAGE 3 - 50% ISSUE	OLB/JB	15/10/21

Client
colt Data Centre Services
Colt House, 20 Great Eastern Street London, EC2A 3EH, United Kingdom www.coltdatacentres.net

Lead Consultant / MEP Designer
28-30 Worship Street London, EC2A 2AH United Kingdom www.be-engineering.com

Architect
The Old Dairy Harpenden Bury Farm Redbourn, Hertfordshire AL3 7GA, United Kingdom www.nwarchitects.co.uk

Structural / Civil Engineer
Central Square, Forth Street Newcastle Upon Tyne NE1 3PL, United Kingdom www.arup.com

Fire Consultant
Primea House, Marina Court Maple Drive, Hinckley, Leicestershire LE10 3BF, United Kingdom www.salus.co.uk

Security Designer
Coltons Centre, Coltons Lane London, SE1 2QG, United Kingdom www.controlrisks.com

Project Title
London 4

Drawing Title
Building 1 - West Elevation
General Arrangement

Project Status
STAGE 4A ISSUE

Discipline	Status Code
ARCHITECTURE	S4

Project Number	Scale @ A0	Revision
0493	1:100	P05

Drawing Number
DCS20109-NWA-DC-01-ZZ-DR-A-20403

Project – Originator – Functional – Spatial – Level – Form – Discipline – Number
Breakdown Breakdown

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Project: COLT LON4

Planning Condition 9 – Materials

Samples – Specifications Register

1. Mesh Cladding – Gantry Ss_25_20_50_05
2. Continuous mesh fencing systems to Gantry (GF) Ss_25_14_67_15
3. Louvre screen systems Ss_25_50_45_45
4. Masonry wall leaf systems Ss_25_13_50_51
5. Aluminium flashings Pr_35_90_30_01
6. Stick curtain walling systems Ss_25_10_20_85
7. Metal composite panel cladding systems Ss_25_20_14_52
8. Doorset systems (External) Ss_25_30_20_25
9. Sectional overhead doorset systems Ss_25_30_20_76

Ss_25_20_50_05
Mesh Cladding - Gantry

Systems

Ss_25_20_50_05 Mesh Cladding - Gantry

1. Description: External Mesh Panel System
2. System performance: Ss_25_20_50/205 Design submittals; Ss_25_20_50/210 Design of aluminium sheet fully supported wall covering systems; Ss_25_20_50/250 Structural performance - permanent and imposed loads; Ss_25_20_50/270 Fire performance; Ss_25_20_50/275 Durability; Ss_25_20_50/280 Aesthetic performanceDemountable
3. System manufacturer: RMIG (or similar approved)
4. Product:: LT 280 X 98 X 30 X 2 Tokyo (or similar approved)
5. Wall sheathing: Critical dimensions should be shown on drawings
6. Substrate: refer to Structural engineers calculations
7. Aluminium sheets: Expermet - open joints - By agreement with Architect (Galvanised)
8. Vertical joints
   8.1. Fasteners to substrate: Refer to manufacturer for guidance on their material in context.
9. Samples required: Ss_25_20_50/608 Mock-up; Ss_25_20_50/305 Product samples
10. System accessories:
11. Execution: Ss_25_20_50/713 Installing continuous clips (bottom edge detail)
12. System completion: Ss_25_20_50/840 Operation and maintenance manual

System performance

Ss_25_20_50/205 Design submittals

1. Preliminary design
   1.1. Submittals: Product technical information and certification sufficient to demonstrate compliance of proposed incorporated products and finishes with specification. Proposals for additional support structure to that shown on preliminary design drawings. Proposals for connections to and support from the support structure. Typical detailed drawings at large scale. Typical plan, section and elevation drawings at suitable scales.
   1.2. Timing: At preliminary design stage.
2. Detailed design
   2.1. Submittals: Proposed fixing details and systems relevant to structural design and construction, including appropriate dimensions.
   2.2. Timing: Submit during detailed design. Submit before fabrication.
3. Format: Drawings and specification in BIM-compliant format.

Ss_25_20_50/210 Design of aluminium sheet fully supported wall covering systems

1. Requirement: Complete the design of the wall covering system, including the metal sheet covering, sheet underlay, substrate, carrier, ventilated void and membranes, together with all fixings, accessories and flashings at interfaces and penetrations.
2. Purpose: *To demonstrate compliance with performance and technical requirements*.
3. Standard: *In accordance with CP 143-15 and FTMRC*

Ss_25_20_50/250 Structural performance - permanent and imposed loads

1. Requirement: Determine sizes and thicknesses of metal sheets; size, number and spacing of fixings; configuration and location of support systems and incorporation of relevant accessories to ensure the system will resist factored dead, imposed and design live loads, and accommodate deflections and thermal movements without damage.
2. Standard: *In accordance with In accordance with* BS EN 1991-1-1

Ss_25_20_50/270 Fire performance

1. Reaction to fire classification
    1.1. External surfaces: *To* BS EN 13501-1 *Class A1.*

Ss_25_20_50/275 Durability

1. Relevant agents or degradation mechanisms: BS 7543, Annex A provides information on agents that cause deterioration, e.g. weathering agents such as temperature, solar radiation, precipitation, air contaminants, freeze-thaw and wind; biological agents such as plants or micro-organisms; intermittent or sustained stress agents; chemical and physical agents such as incompatibility of materials and use agents such as abuse. Guidance can also be found inBS ISO 15686-2
2. Metal finishes: Galvanised
3. Design life duration (minimum): 25 years
4. Electrolytic corrosion: Isolate dissimilar metals

Ss_25_20_50/280 Aesthetic performance

1. Requirements
    1.1. Appearance of system: Regular, true to line and plane with satisfactory fit at junctions.
    1.2. Appearance of metal: No marks to visible faces.

Products

Ss_25_20_50/305 Product samples

1. Manufacturer: Contractor Choice
2. Purpose: For use as a reference sample.
3. Labelling: Clearly label all submitted samples.
4. Timing: Before procurement of material

Execution

Ss_25_20_50/608 Mock-up

1. Requirement: Full mock up to one bay
2. Extent and location: 1 floor, 1 bay of gantry
3. Timing: prior procurment and manufacture of material

Ss_25_20_50/713 Installing continuous clips (bottom edge detail)

1. Fixing centres (maximum): in accordance with manufactures recommendations

System completion

Ss_25_20_50/840 Operation and maintenance manual

1. Schedule for maintenance and replacement of components: Submit.

2. Information to be included: Recommendations for safe dismantling and recycling or disposal of products.
3. Timing: On completion of metal sheet wall covering systems

Ω End of System

Ss_25_14_67_15
Continuous mesh fencing systems to Gantry (GF)

Systems

Ss_25_14_67_15 Continuous mesh fencing systems to Gantry (GF)

1. Description: Enclosing Ground Floor Gantry
2. System performance: SR 2 Rated Ss_25_14_63/265 Visual performance; Ss_25_14_63/220 Design working life; Ss_25_14_63/215 Anti-intruder and security fencing performance; Ss_25_14_63/201 Contractor design of fencing systems
3. System manufacturer: Submit proposals.
4. Posts: Steel.
5. Post foundations: Un-reinforced concrete pad and strip foundation systems.
6. Continuous materials: Pr_25_57_56_95 Welded metal mesh
7. Execution: Ss_25_14_63/603 Fencing work on or adjacent to highways; Ss_25_14_63/605 Alignment of fences; Ss_25_14_63/607 Fencing work generally
8. System completion: Ss_25_14_67/855 Certificates for wire mesh fencing systems

System performance

Ss_25_14_63/201 Contractor design of fencing systems

1. Design scope: Complete the design of the external boundary fencing.
2. Detailed design
   - 2.1. Standards: To the Eurocodes appropriate to the nature and location of the structure.
   - 2.2. Deflections and other structural movements: At serviceability limit state, these must be compatible with requirements of the pavement fabric, construction joints and weathertightness.

Ss_25_14_63/215 Anti-intruder and security fencing performance

1. Standards: Open mesh steel panel security fencing systems to BS 1722-14 Category 3.
2. Security level: Impenetrable without equipment. Climb resistant.

Ss_25_14_63/220 Design working life

1. Standard: To BS EN 1990.
2. Design working life category: 4. 50 years.

Ss_25_14_63/265 Visual performance

1. Colour: Submit proposals for selection.
2. Intervisibility: To BS 7818.
3. Sight lines: In accordance with BS 6180.
4. Transparency: To BS EN 1794-2.

Products

Pr_25_57_56_95 Welded metal mesh

1. Description: Anti climb high security fencing.
2. Manufacturer: Submit proposals.
3. Material: Carbon steel. 365wldmesh

4. Dimensions
   4.1. Mesh size: Submit proposals for selection.
   4.2. Wire diameter: Submit proposals for selection.
   4.3. Height: Refer to drawings and model.
5. Finish: Submit proposals for selection.
6. Colour: Submit proposals for selection.

Execution

Ss_25_14_63/603 Fencing work on or adjacent to highways

1. Requirement: Comply with the Department for Transport's Safety at street works and road works - a code of practice. Retain a copy of this document on site during the course of the works.

Ss_25_14_63/605 Alignment of fences

1. Alignment of fences and barriers: Straight lines or smoothly flowing curves, following profile of the ground.
2. Tops of posts: Follow ground profile.
3. Verticality: Plumb.
4. Tolerances: ±30 mm of prescribed alignment and, within any 10 m length, ±15 mm from the straight or required radius.
5. Changes of direction: Obtuse angles such that no angle is less than 130°.

Ss_25_14_63/607 Fencing work generally

1. Metal fixings: Protect from corrosion.
2. In situ welding: Not permitted.
3. Treatment of minor damage to galvanized surfaces
   3.1. Repairs to areas of damage less than 40 mm²
      3.1.1. Method: At least two coats of zinc-rich paint.
      3.1.2. Zinc coating thickness (minimum): Thickness of the original layer.
4. Site cutting of wood
   4.1. Components generally: Minimize cutting.
   4.2. Wood below or near ground level: Do not cut.
   4.3. Treatment of surfaces exposed by minor cutting and drilling
      4.3.1. Method: Apply sufficient material to provide a coating equal to the original preservative.
      4.3.2. Number of coats: Two.
5. Site applied finishes
   5.1. Timing: Prepare surfaces and apply finishes as soon as possible after fixing.
6. Disposal of arisings
   6.1. Biodegradable arisings: Compost on site.
   6.2. Tree roots and stumps: Remove from site.
   6.3. Litter and nonbiodegradable arisings: Remove from site.

System completion

Ss_25_14_67/855 Certificates for wire mesh fencing systems

1. Standard: To BS 1722-2.
2. Certificates

2.1. Fence manufacturer

2.1.1. Statement of conformity: Confirmation that fence and/ or gates are manufactured in accordance with client's instructions.

2.1.2. Format: Contract or order number. Date.

2.2. Fence installer

2.2.1. Statement of conformity: Confirmation that materials and execution are in accordance with client's instructions.

2.2.2. Format: Contract or order number.

Ω End of System

Ss_25_50_45_45
Louvre screen systems

Systems

Ss_25_50_45_45 Louvre screen systems

1. System performance: Ss_25_50_45/205 Compliance with performance requirements; Ss_25_50_45/220 Durability
2. System manufacturer: Levolux (Ligniti louvres or similar approved
3. Louvres
   3.1. Type: Pr_30_59_48_02 Aluminium louvre blades
   3.2. Operation: Fixed.
4. Acoustic panels
   4.1. Facing: Pr_30_59_48_04 Aluminium louvre panel units 50% free area minimum
   4.2. Banked
      4.2.1. First bank: Acoustic Optimum Type R acoustic louvres with normal pressure drop - **from chiller deck upwards**
5. System accessories: Corner panels. Handrail system.
6. Samples required: Ss_25_50_45/305 Product samples
7. Execution: Ss_25_50_45/620 Preconstruction survey
8. System completion: Ss_25_50_45/815 Documentation relating to brise-soleil and louvre systems; Ss_25_50_45/895 Verification of performance

System performance

Ss_25_50_45/205 Compliance with performance requirements

1. Requirement: Proof of compliance with specified performance.
2. Method
   2.1. Laboratory project testing : For fire performance.
   For acoustic performance.
   For water ingress performance.
   2.2. Previous test results: For fire performance.
   For acoustic performance.
   For water ingress performance.
   2.3. Computer simulation testing: For acoustic performance.
   For water ingress performance.
3. Submittals: Weather performance computer simulation.
4. Timing: Before manufacture.
5. Format: Test results and certification.

Ss_25_50_45/220 Durability

1. Design life span: 25 years.

Products

Pr_30_59_48_02 Aluminium louvre blades

1. Manufacturer: levolux or similar approved
2. Profile: 'S' profile. inverted to provide screening from low level

3. Material: Submit options for selection.
4. Finish: Submit options for selection.
5. Colour: Submit options for selection.
6. Texture: Matt.
7. Mounting arrangement: Clip fixing to mullions.

Pr_30_59_48_04 Aluminium louvre panel units

1. Manufacturer: Levolux or similar approved
2. Size (l x w x d): Refer to drawings and model.
3. Material: Submit options for selection.
4. Finish: Submit options for selection.
5. Colour: refer to drawings
6. Texture: Matt.
7. Construction: Integral drainage channels and drip cills. Mitred corners, welded joints.
8. Air intake and exhaust performance
    8.1. Application: Refer to Mechanical Engineer's specification.
    8.2. Air volume: Refer to Mechanical Engineer's specification.
    8.3. Face velocity: Refer to Mechanical Engineer's specification.
    8.4. Core velocity (maximum): Refer to Mechanical Engineer's specification.
9. Calculated weighted sound reduction index (Rw)
    9.1. Standard: Refer to Acoustician's report.
    9.2. Frequency range: Refer to Acoustician's report.
10. Weather performance
    10.1. Water penetration class (minimum): To BS EN 13030, class A.
11. Louvre configuration
    11.1. Blade orientation: Horizontal.
    11.2. Blade pitch: submit proposals
    11.3. Blade angle: Fixed.
12. Accessories: Blanking plates. Perforated expanded aluminium alloy 3.5 mm mesh insect guard.

Ss_25_50_45/305 Product samples

1. Purpose: For use as a reference sample.
2. Labelling: Clearly label all submitted samples.
3. Timing: Before ordering for project.

Execution

Ss_25_50_45/620 Preconstruction survey

1. Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
2. Primary support structure: Carry out survey sufficient to verify that required accuracy and security of erection can be achieved.
3. Timing: Before fabrication.

System completion

Ss_25_50_45/815 Documentation relating to brise-soleil and louvre systems

1. Operation and maintenance instructions
   1.1. Scope: All products used throughout this system.
   1.2. Requirements: Contact details for subcontractors and suppliers. Design criteria for the system. Product information for components and materials including manufacturers literature, COSSH data sheets and recommendations for cleaning maintenance and repair. Copies of material, components and finishes certification and test report. A full set of construction drawings, updated to include any changes made up to the time of completion. The terms and conditions of any guarantee. Method statement for means of access for maintenance and for use of any permanent equipment. Method statement covering the procedures for replacement of parts that have a design life less than the design life of the system. Recommendations for routine maintenance and cleaning, including suitable cleaning agents and lubrication/ adjustments to working parts. Record book for listing defects, maintenance and repairs.
2. Dismantling: Submit recommendations for safe dismantling and reuse, recycling or disposal of system and products.
3. Record layout drawings indicating: General arrangement drawings showing the location and type of louvre screens and units, and any actuators or controls.
4. Drawing format: Electronic.

Ss_25_50_45/895 Verification of performance

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ω End of System

Ss_25_13_50_51
Masonry wall leaf systems

Systems

Ss_25_13_50_51 Masonry wall leaf systems

1. Description: External brick wall bases around building - refer to model and drawings for locations
2. System performance: Ss_25_13_50/200 Accuracy of brick and block walling; Ss_25_13_50/252 Design for fire performance of masonry structures
3. Masonry units: Pr_20_93_52_27 Engineering bricks
4. Masonry units - specific applications
   4.1. Below dpc: Pr_20_93_52_27 Engineering bricks
   4.2. For dpc: Pr_20_93_52_27 Engineering bricks
5. Mortar: Pr_20_31_53_10 Cement gauged designed mortars
6. Dpcs: Pr_25_57_21_35 Gas-resistant damp proof courses
7. Insulation : Pr_25_57_06_50 Mineral fibre slab insulation
8. Movement joint components: Pr_35_90_87_53 Mineral fibre joint fillers; Pr_30_31_76_16 Construction joint sealants
9. System accessories: Pr_20_93_33_12 Cellular glass thermal blocks
10. Samples required: Ss_25_13_50/305 Product samples
11. Execution: Ss_25_13_50/600 Adverse weather; Ss_25_13_50/601 Cleanliness; Ss_25_13_50/605 Execution Standards for masonry structures; Ss_25_13_50/610 Reference panels to establish quality of masonry work; Ss_25_13_50/621 Installing cavity wall insulation; Ss_25_13_50/674 Masonry movement joints; Ss_25_13_50/678 Unexposed contraction joints; Ss_25_13_50/758 Levelling of separate leaves in brick and block walling
12. System completion: Ss_25_13_50/895 Verification of performance

System performance

Ss_25_13_50/200 Accuracy of brick and block walling

1. Courses: Level and true to line.
2. Faces, angle and features: Plumb
3. Permissible deviations
   3.1. Position in plan of any point in relation to the specified building reference line and/ or point at the same level: ± 10 mm.
   3.2. Straightness in any 5 m length: ± 5 mm.
   3.3. Verticality up to 3 m height: ± 10 mm.
   3.4. Verticality up to 7 m height: ± 14 mm.
   3.5. Overall thickness of walls: ± 10 mm.
   3.6. Level of bed joints up to 5 m (brick masonry): ± 11 mm.
   3.7. Level of bed joints up to 5 m (block masonry): ± 13 mm.

Ss_25_13_50/252 Design for fire performance of masonry structures

1. Standard: PD 6688-1-2 Annex B
2. Building purpose group: Refer to the Fire Report document.
3. Loadbearing capacity, integrity and insulation: By the equivalent time of fire exposure to PD 6688-1-2, Annex B.

4. Criteria: In accordance with PD 6688-1-2 Annex A.

Products

Pr_20_31_53_10 Cement gauged designed mortars

1. Manufacturer: Submit proposals.
2. Standard: To BS EN 998-2.
3. Mortar type: Ready to use cement:lime:sand.
4. Mix: M12.
5. Colour: Submit options for selection.
6. Reaction to fire classification: Class A1.
7. Additional requirements: Durability: Freeze/ thaw resistance: Suitable for exposed external use below dpc.
8. Execution: Pr_20_31_53/605 Testing compressive strength of mortar

Pr_20_93_33_12 Cellular glass thermal blocks

1. Description: Insulating cellular glass blocks can be used to form a thermal break in a masonry leaf for maintaining continuity of thermal insulation. To avoid thermal bridging, the perpend joints are tightly butted without mortar.
2. Manufacturer: Marmox (UK) Ltd., Caxton House, 101 - 103 Hopewell Drive, Chatham, Kent ME5 7NP T: 01634 835290 W: www.marmox.co.uk
3. Standard: To BS EN 13167
4. Work sizes (length x width x height): 215mm or 140mm - refer to architectural drawings
5. Fire classification:: REI 120 to BS EN 13501-2:2007+A1:2009
6. Compressive strength (minimum): 9N/mm2 (or as specified by structural engineer)
7. Thermal conductivity (maximum): 0.047W/mK
8. Execution: Pr_20_93_33/750 Installing cellular glass thermal blocks as a masonry course

Pr_20_93_52_27 Engineering bricks

1. Description: Engineering brickwork to the base of external walls - refer to drawing elevations for locations.
2. Manufacturer: Ibstock Brick Ltd
3. Product reference: Altas Smooth Blue cose:2249 215mm x 102mm x 65mm
4. Type: HD
5. Mean compressive strength:: Greater than or equal to 75 N/mm².
6. Category:: I
7. Standards: BS EN 771-1
8. Water absorption:: Equal to or less than. 7.5%.
9. Freeze/ Thaw category:: F2.
10. Active soluble salts content category:: S2.
11. Joints:: Concave.
12. Bond:: Stretcher.

Pr_25_57_06/310 Insulation products generally Type B

1. Third party product certification: Accreditation by the United Kingdom Accreditation Service (UKAS). or/and British Board of Agrément (BBA) certified.
2. Evidence of compliance: Submit copy of current certificate for proposed product.

Pr_25_57_06_50 Mineral fibre slab insulation

1. General requirements: Pr_25_57_06/310 Insulation products generally Type B
2. Manufacturer: Rockwool Ltd
3. Standard: To BS EN 13162.
4. Thermal conductivity (maximum): 0.035 W/mK
5. Thickness (minimum): Refer to drawing details.
6. Fire performance: Minimum of Class A2 to BS EN 13501-1

Pr_25_57_21_35 Gas-resistant damp proof courses

1. Description: Under BS 8102:2009 a waterproofing specialist needs to be appointed. It is expected that the waterproofing specialist will be the DPM Manufacturer/ Supplier. Principle considerations are listed in BS8102 in order to develop a robust design for protecting a structure against groundwater. The overall general principle is to assess the risk of water reaching the structure and then to select a waterproofing system capable of achieving the required internal environment.
2. Manufacturer: Submit proposals.
3. Third party certification: Third party approved UKAS laboratory and or British Board of Agrément Certified systems
4. Material: Submit options for selection.
5. Compatibility: Suitable for use with adjoining gas resistant dpms.
6. Execution: Pr_25_57_21/630 Installing ground level dpcs

Pr_30_31_76_16 Construction joint sealants

1. Manufacturer: Fosroc Ltd
2. Product Ref:: Flamex Two
3. Standard: To BS EN ISO 11600.
4. Third party certification: Third party accredited by UKAS approved or recognised body.
5. Material: Submit proposals.
6. Colour: Submit options for selection.
7. Fire performance : A2-s1, d0 or A1 to BS EN 13501-1
8. Execution: Pr_30_31_76/620 Joint preparation for sealant application; Pr_30_31_76/610 Suitability of joints for sealant application; Pr_30_31_76/630 Applying joint sealants

Pr_35_90_87_53 Mineral fibre joint fillers

1. Manufacturer: Promat UK
2. Product Ref:: PROMASEAL@ Expansion Joint Strip
3. Third party certification: Loss Prevention Certification Board (LPCB).
4. Fire performance
   4.1. Standard: To BS 476-20.
   4.2. Fire resistance: To match the resistance rating of the rest of the external wall.
5. Material: Dense mineral fibre.

Ss_25_13_50/305 Product samples

1. Submittals: Product samples generally of each product including PDF technical submittals. Benchmark panels / modules are to be supplied as stipulated at the start of the project.
2. Purpose: For use as a reference sample.
3. Labelling: Clearly label all submitted samples.
4. Timing: Prior to order being placed for materials.

Execution

Pr_20_31_53/605 Testing compressive strength of mortar

1. Testing authority: A UKAS Accredited laboratory.
2. Test method: To BS EN 1015-11.
3. Preliminary tests procedure
   - 3.1. Specimens
     - 3.1.1. Number: 6.
     - 3.1.2. Specimen type: 40 x 40 x 160 mm prisms.
     - 3.1.3. Preparation: At least six weeks before walling commences.
   - 3.2. Specimen testing: Half of specimens at 7 days, remainder at 28 days.
   - 3.3. Retarded mixes: Extend curing periods to include retardation period.
   - 3.4. Response to result: If mean compressive strength at 28 days is not within the range given below repeat tests with more suitable sand or next higher mortar class.
4. Site tests procedure
   - 4.1. Specimens
     - 4.1.1. Number: Six per 150m² of walling or per storey, whichever the more frequent.
     - 4.1.2. Specimen types: As preliminary test, but prepared during construction.
     - 4.1.3. Timing: Half of specimens at 7 days remainder at 28 days.
     - 4.1.4. Retarded mixes: Extend curing periods to include retardation period.

Pr_20_93_33/750 Installing cellular glass thermal blocks as a masonry course

1. Joints
   - 1.1. Bed joints: Full mortar bed below and above course, fully adhered.
   - 1.2. Perpend joints: Blocks closely butted without mortar.

Pr_25_57_21/630 Installing ground level dpcs

1. Joint with damp proof membrane: Continuous. Seal effectively.

Pr_30_31_76/610 Suitability of joints for sealant application

1. Joint dimensions: Within limits specified for the sealant.
2. Substrate quality: Surfaces regular, undamaged and stable.
3. Joints not fit to receive sealant: Submit proposals for rectification.

Pr_30_31_76/620 Joint preparation for sealant application

1. Surfaces to which sealant must adhere: Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
2. Cleaning: Use materials and methods recommended by sealant manufacturer.
3. Vulnerable surfaces adjacent to joints: Do not stain or smear with primer or sealant.

Pr_30_31_76/630 Applying joint sealants

1. Substrate: As recommended by sealant manufacturer.
2. Environmental conditions: Do not dry or raise temperature of joints by heating.
3. Sealant application: Completely and neatly fill joints. Provide firm adhesion to substrates.
4. Sealant profiles
   - 4.1. Butt and lap joints: Slightly concave.

4.2. Fillet joints: Flat.

5. Protection: Do not contaminate or damage finished joints.

Ss_25_13_50/600 Adverse weather

1. Freezing conditions: Do not use frozen material or lay on frozen surfaces.
2. Air temperature
   2.1. Cement gauged mortars: Do not lay units at or below 5°C and falling or as manufacturer's recommendations.
3. Temperature of masonry during curing: Refer to manufacturer's recommendations.
4. Newly erected walling
   4.1. Protect from precipitation: At all times.
   4.2. Protect from drying out too rapidly: At all time in hot conditions and in drying winds.

Ss_25_13_50/601 Cleanliness

1. Cavity base and faces, ties, insulation and exposed dpcs: Free from mortar and debris.

Ss_25_13_50/605 Execution Standards for masonry structures

1. Standard: To BS EN 1996-2.

Ss_25_13_50/610 Reference panels to establish quality of masonry work

1. Method: Finished masonry work preliminary installation.
2. Required samples
   2.1. Types: Masonary units, jointing, movement joint, pointing mortar and profile.
   2.2. Locations: The samples should be located in good natural light and, where possible, so that they can be seen in conjunction with the remaining/ finished work. A viewing distance of 3 m will normally be satisfactory.
   2.3. Sizes: 1.5x1.5m or whatever is the most appropriate for the project. Refer to BS 5628-3 and PAS 70 for minimum areas.
   2.4. Selection of masonry units: Reasonably representative of the average quality of the whole order to be delivered.
   2.5. Bond: Stretcher.
   2.6. Timing: Construct before commencement of walling. Obtain approval of appearance before proceeding.

Ss_25_13_50/621 Installing cavity wall insulation

1. Cavity fill: Full fill insulation.
2. Placement: Continuous.
3. Residual cavity: Clear and unobstructed.
4. Joints: No gaps between boards at closures and penetrations. Free from mortar and debris.

Ss_25_13_50/674 Masonry movement joints

1. Joint frequency: Refer to NA. 1 in NA BS EN 1996-2
2. Joint width: Refer to PD 6697 which indicates that the width of a joint in mm should be 30% more than the distance between joints in metres.
3. Joint location: Refer to PD 6697 for placement of joints in relation to features or the movement joints indicated on the drawing elevations.

Ss_25_13_50/678 Unexposed contraction joints

1. Joint frequency: Joints should be provided at no more than 6 m intervals in concrete brick and concrete block. Joints should not normally exceed 10 mm in width.
2. Formation: Close butt as work proceeds.

Ss_25_13_50/758 Levelling of separate leaves in brick and block walling

1. Locations for equal levelling of cavity wall leaves: Every course containing vertical twist type ties or other rigid ties, every third tie course for double triangle/ butterfly ties and courses in which lintels are to be bedded.

System completion

Ss_25_13_50/895 Verification of performance

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ω End of System

Pr_35_90_30_01
Aluminium flashings

Products

Pr_35_90_30_01 Aluminium flashings Type A

1. Manufacturer: Submit proposals.
2. Material: Submit proposals.
3. Item: Abutment flashing, capping, apron, cover flashing, weathered drip.
4. Size
   4.1. Thickness (minimum):
   - Aluminium: 0.8 mm.
   - Copper: 0.6 mm.
   - Galvanized carbon steel: 0.7 mm.
   - Lead: Code 4 or Code 5.
   - Stainless steel: 0.4 mm or 0.5 mm.
   - Zinc: 0.7 mm.
5. Fixing: Lapped joints.
6. Thermal movement: Joints and fixings must incorporate measures to avoid warping or damage from thermal movement, and maintain the weather resistance of the connection.
7. Finish: Submit options for selection.
8. Colour: Submit options for selection.
9. Texture: Plain.

Ω End of Product

Ss_25_10_20_85
Stick curtain walling systems

Systems

Ss_25_10_20_85 Stick curtain walling systems

1. Description: External glazed curtain walling
2. System performance: Ss_25_10_20/210 Curtain wall system design; Ss_25_10_20/212 Design and fabrication tolerances; Ss_25_10_20/215 Quality management; Ss_25_10_20/220 Structural performance; Ss_25_10_20/225 Thermal movement; Ss_25_10_20/255 Air permeability; Ss_25_10_20/260 Thermal performance; Ss_25_10_20/265 BREEAM requirements; Ss_25_10_20/270 Solar energy transmittance (solar factor); Ss_25_10_20/272 Solar transmission; Ss_25_10_20/275 Safety performance; Ss_25_10_20/291 Laboratory testing; Ss_25_10_20/297 Testing of fixings; Ss_25_10_20/298 Wind load fatigue test for small specimen
3. System manufacturer: Kawneer UK Ltd
4. Contact details
   - 4.1. Address: Astmoor Road
     Astmoor Industrial Estate
     Runcorn
     Cheshire
     WA7 1QQ
   - 4.2. Telephone: +44 (0)1928 502500
   - 4.3. Web: www.kawneer.co.uk
   - 4.4. Email: kawneerAST@arconic.com
5. Product reference: AA®100 Aluminium 50 mm Stick Curtain Wall System
6. Type:
7. Size:
8. Glazing/ infill thickness:
9. Drainage:
10. Finish:
11. Colour
    - 11.1. Internal:
    - 11.2. External:
12. Film thickness:
13. Product Reference:: AA®100 Aluminium 65 mm Stick Curtain Wall System
14. Framing
    - 14.1. Frame members: Pr_20_76_51_02 Aluminium curtain wall frame sections
    - 14.2. Frame accessories: Pr_35_90_28_15 Cover caps
15. Cladding units
    - 15.1. Glass units: Submit proposals.
    - 15.2. Glazing accessories: Pr_20_85_32_04 Aluminium structural sealant glazing sub-frames
    - 15.3. Panels and facings
      - 15.3.1. Material: Pr_25_71_14_08 Aluminium infill panels
      - 15.3.2. Thermal insulation: Pr_25_57_06_56 Mineral wool slab insulation
      - 15.3.3. Internal linings: Pr_25_71_52_84 Standard gypsum plasterboards
    - 15.4. Fasteners: Contractors choice.
    - 15.5. Perimeter seals: Contractors choice.

16. Samples required: Product samples and mock-ups.
17. System accessories: Pr_30_59_07_72 Roller blinds
18. Execution: Ss_25_10_20/610 Preconstruction survey; Ss_25_10_20/615 Curtain wall assembly and erection; Ss_25_10_20/620 Execution tolerances; Ss_25_10_20/625 Fixing anchor installation; Ss_25_10_20/630 Installing accessories in curtain walling; Ss_25_10_20/635 Installing fire and smoke stops; Ss_25_10_20/640 Site based project testing
19. System completion: Ss_25_10_20/810 Maintenance and replacement; Ss_25_10_20/895 Verification of performance

System performance

Ss_25_10_20/210 Curtain wall system design

1. Design requirements: Complete the design of the curtain walling system and associated features.
2. Standard: In accordance with BS EN 13830 and the CWCT Standard for systemised building envelopes.
3. Curtain wall selection: Modified proprietary.
4. Method of weathersealing: Drained and ventilated.
5. Appearance and fit: Ensure position and alignment of parts and features as shown on preliminary design drawings. Accommodate deviations in the primary support structure.
6. Related works: Coordinate in the detailed design.
7. Comparison or type testing: To BS EN 13830 and the CWCT Standard for systemised building envelopes, Part 8.
8. Detailed design: Complete and submit proposals for approval before fabrication.

Ss_25_10_20/212 Design and fabrication tolerances

1. Standard: In accordance with the CWCT Standard for systemised building envelopes, section 7.
2. Appearance and fit: Ensure position and alignment of parts and features as shown on preliminary design drawings. Accommodate all deviations in the primary support structure.
3. Primary support structure design tolerances: Refer to CWCT Standard for systemised building envelopes clauses 7.4.3 and 7.4.4.
4. Envelope zone tolerances
    4.1. Critical reference location: Dimensioned to centre line.
5. Component and installation tolerances (maximum): Panel length ±2 mm. Panel width ±1 mm.

Ss_25_10_20/215 Quality management

1. Required documentation: Project specific method statement in accordance with CWCT Standard for systemised building envelopes and guidance in CWCT Technical Note TN 53.
2. Timing: Submit during detailed design.

Ss_25_10_20/220 Structural performance

1. Standard: In accordance with BS EN 13830 and the CWCT Standard for systemised building envelopes.
2. Loads: Resist wind loads, dead loads and design live loads.
3. Deflections and movements: Accommodate without damage.
4. Deflection under dead load
    4.1. Frame members: Deflection of framing members parallel to the curtain walling plane must not reduce glass bite, edge clearance and general clearance below minimum stated requirements.
    4.2. Glass bite (minimum): 75% of design dimension.

4.3. Edge clearance (minimum): 3 mm between members and immediately adjacent glazing units, panel or facing units, or other fixed units.

4.4. Clearance (minimum): 2 mm between members and movable components such as doors and windows.

5. General movement: Anticipated building movements to be accommodated

6. Impact performance

6.1. Safety impact requirements: To CWCT TN75, Low risk.

6.2. Serviceability impact requirements: To CWCT TN75, serviceability class 1.

6.3. External impact exposure

6.3.1. Exposure category : To CWCT TN75, exposure category C.

6.3.2. Impact location: Impact by people and Impact by furniture – soft body impacts may arise from falls, trips or people being pushed against the facade. Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground. Impact above 1.5 m may be associated with maintenance, e.g. ladders or cradles.

6.4. Hard and soft body impact loads

6.4.1. Curtain walling: To CWCT Technical Note TN75 and BS EN 14019, suitable class for the use.

6.4.2. Glazing: To CWCT Technical Note TN75 and BS EN 12600, suitable class for the use.

6.5. Impact tests

6.5.1. Hard body impact tests: In accordance with CWCT Standard test methods for building envelopes and TN76 (curtain wall).

6.5.2. Soft body impact tests: In accordance with CWCT Standard test methods for building envelopes and TN76 (curtain wall). In accordance with BS EN 12600 (glass). In accordance with BS EN 13049 (curtain wall).

7. Imposed loads

7.1. Standard: In accordance with BS EN 1991-1-1.

7.2. Permanent imposed loads: Refer to model and drawings for details.

7.3. Temporary imposed loads: Maintenance access, occupant impact or furniture impact.

Ss_25_10_20/225 Thermal movement

1. Standards: In accordance with BS EN 13830 and the CWCT Standard for systemised building envelopes.
2. Service temperature range: Temperature range within CWCT Standard for systemised building envelopes, clause 2.7.2, Tables 2.2 and 2.3.

Ss_25_10_20/255 Air permeability

1. Permeability class: To BS EN 12152, class A4 or better.
2. Peak test pressure: 600 Pa.
3. Air exfiltration rate (maximum): To be determined as part of the whole building performance in section 05-20-60.
4. Air leakage rates (maximum) when subjected to peak test pressure

4.1. Fixed lights: 1.5 $m^3/hr/m^2$.

4.2. Opening lights: 2.0 $m^3/hr/lin.m$.

Ss_25_10_20/260 Thermal performance

1. Standards: In accordance with BS EN 13947.
2. Method of calculating thermal transmittance (U-value): Weighted U-value of system.

3. Method for assessing thermal transmittance (U-value) of assemblies: Hot box in accordance with BS EN ISO 8990.
4. Average U-value: 1.6 W/(m²K) or better in accordance with Table 5 of the Approved Document L2A.
5. Zone interfaces: Co-ordinate to achieve required average U-value.

Ss_25_10_20/265 BREEAM requirements

1. Daylight calculations
   1.1. Information: Confirmation that at least 80% of any room that complies with the average daylight factor requirement gives a view of sky from a seat at a 0.7 m high desk.
   1.2. Calculations: Minimum point daylight factor expressed as a percentage for each room/ area.
2. View out
   2.1. Arrangement: Glazed areas, opening sizes and position to be designed to meet BREEAM 'View out' criteria for relevant building type.
   2.2. Layout drawings: Submit design plan and elevation drawings showing all BREEAM defined 'relevant areas' dependent on building type and room depths, actual or notional workstation or desk layouts, glazed areas and open areas.
   2.3. Site arrangement: Submit site plan showing building location and proximity to external obstructions.
3. Ventilation: Submit design plan and elevation drawings, and calculations confirming potential for natural ventilation.
4. Opening lights: To be positioned minimum 10 m from sources of external pollution.

Ss_25_10_20/270 Solar energy transmittance (solar factor)

1. Standard: To BS EN 410.
2. Solar factor, g-value (glazing only) (maximum): 40% in accordance with Table 5 of the Approved Document L2A.

Ss_25_10_20/272 Solar transmission

1. Standard: In accordance with BS EN 410.
2. Effective light transmission (glazing with shading devices) (minimum): 70% as Table 5 of the Approved Document L2A.

Ss_25_10_20/275 Safety performance

1. Finished surfaces in accessible internal and external areas: Free of irregularities capable of inflicting personal injury. Free of release irritant or staining substances.
2. Thermal stress: The curtain wall system should provide adequate resistance to thermal stress generated by orientation, shading, solar control and construction.

Ss_25_10_20/291 Laboratory testing

1. Testing: Arrange for laboratory testing of specimens of curtain walling and components.
2. Criteria: CWCT discretionary test sequence.
3. Timing: During detailed design.
4. Testing authority: United Kingdom Accreditation Service (UKAS) approved independent laboratory.
5. Test results and reports: Before curtain walling installation, submit proof of compliance with this specification.

Ss_25_10_20/297 Testing of fixings

1. Test standard: To CWCT Standard for systemised building envelopes Standard test methods for building envelopes, Section 19.
2. Test location: Laboratory.
3. Test criteria
   3.1. Type: Ultimate load.
   3.2. Peak load: Not applicable.

Ss_25_10_20/298 Wind load fatigue test for small specimen

1. Test standard: To CWCT Standard for systemised building envelopes, Standard test methods for building envelopes, Section 14.
2. Test sequence: Tabulated, as CWCT Standard for systemised building envelopes.

Products

Pr_20_76_51_02 Aluminium curtain wall frame sections

1. Manufacturer: Kawneer
2. Standard: To relevant parts of BS EN 515, BS EN 573, BS EN 755 and BS EN 12020.
3. Alloy, temper and thickness: Suitable for the application and finish.
4. Structural members: To BS EN 1999-1-1, BS EN 1999-1-3 and BS EN 1999-1-4.
5. Finish
   5.1. Coating: Powder coating to BS EN 12206-1.
   5.2. Colour: Submit options for selection.
   5.3. Texture: Matt.

Pr_20_85_32_04 Aluminium structural sealant glazing sub-frames

1. Manufacturer: Submit proposals.
2. Standard: To relevant parts of BS EN 515, BS EN 573, BS EN 755 and BS EN 12020.
3. Alloy, temper and thickness: Suitable for the application and finish.
4. Structural members: To BS EN 1999-1-1, BS EN 1999-1-3 and BS EN 1999-1-4.
5. Finish
   5.1. Coating: Powder coating to BS EN 12206-1.
   5.2. Colour: Submit options for selection.
   5.3. Texture: Matt.

Pr_25_57_06_56 Mineral wool slab insulation

1. General requirements: Reference to missing clause Insulation products generally
2. Manufacturer: Rockwool
3. Standard: To BS EN 13162.
4. Thickness: As required to meet the required U-Value.
5. Facing: Faced with aluminium foil.
6. Edges: Square.
7. Density: Submit proposals.
8. Thermal conductivity (maximum): 0.035 W/m·°K
9. Fire performance: Refer to The Approved Document B Vol. 2 2019 edition Section B4 Table 12.1
10. Sound insulation rating: Refer to the Acoustic Consultant's report for the requirement.

Pr_25_71_14_08 Aluminium infill panels

1. Supplied by: Submit proposals.
2. Standards: To BS EN 485-1, BS EN 515 and BS EN 573-3.
3. Alloy, temper and thickness: Suitable for the application and finish.
4. Panel finish: To match surrounding.
5. Colour: Submit options for selection.

Pr_25_71_51_02 Aluminium long strips

1. Factory finishes: Submit options for selection.

Pr_25_71_52_84 Standard gypsum plasterboards

1. Manufacturer: Submit proposals.
2. Standard: To BS EN 520, type A.
3. Thickness (nominal): 15 mm.
4. Edge profile: Tapered.

Pr_30_59_07_72 Roller blinds

1. Description: Blinds for all external curtain walling and windows.
2. Manufacturer: Submit proposals.
3. Standards: To BS 5867-1, BS 5867-2 and BS EN 13120.
4. Position: Internal to vertical glazing.
5. Dimensions (minimum width x depth): Refer to schedule and model.
6. Headrail
   - 6.1. Material: Powder coated extruded aluminium.
   - 6.2. Colour: Submit options for selection.
7. Blinds
   - 7.1. Material: Submit options for selection. Dual roller - blackout and shade.
   - 7.2. Blackout function: Required.
   - 7.3. Finish: Submit options for selection.
   - 7.4. Colour: Submit options for selection.
   - 7.5. Pattern: Submit options for selection.
8. Tube
   - 8.1. Material: Extruded aluminium.
   - 8.2. Diameter: Submit options for selection.
9. Tube covers
   - 9.1. Material: Powder coated extruded aluminium.
   - 9.2. Colour: Submit options for selection.
10. Operation: Motorised.
11. Testing: Solar transmittance. Safety factor. Appearance and tolerance. Thermal resistance as determined by BS EN 13125.
12. Mechanism endurance: To BS EN 13120, class 2.
13. Accessories: Powder coated steel fixing brackets. Remote electrical operation. Side-guide tracks. Bracket/box covers.
14. Execution: Pr_30_59_07/630 Installing blinds

Pr_35_90_28_15 Cover caps

1. Manufacturer: Kawneer (or similar approved) projecting cap - refer to architects drawing DR_A_212601 Detail 3,4&5
2. Material: Pr_25_71_51_02 Aluminium long strips
3. Profile: Submit options for selection.
4. Purpose: Mullions. Transoms.
5. Size: Submit proposals.
6. Finish: Powder coating to BS EN 12206-1.
7. Film thickness (minimum): Minimum of 60 micrometres.
8. Colour: Submit options for selection.
9. Sheen: Matt.
10. Fixing: Submit proposals.

Execution

Pr_30_59_07/630 Installing blinds

1. Position: Window head. Window transoms.
2. Fixing: Face-fix in reveal.
3. Electronic controls: Group control.

Ss_25_10_20/610 Preconstruction survey

1. Primary support structure: Carry out survey sufficient to verify that required accuracy and security of erection can be achieved.
2. Notification: Submit details of non-compliant structure.
3. Timing: Prior to fabrication.

Ss_25_10_20/615 Curtain wall assembly and erection

1. Accuracy: As specified in CWCT Standard for systemised building envelopes, clause 2.20 for fabrication and erection.
2. Assembly works: Carry out as much assembly as possible in the workshop.
3. Joints (other than movement joints): Rigidly secure. Reinforce where necessary. Fix with hairline abutments.
4. Identification of products: When marking or tagging products to facilitate identification during handling, storage, assembly and installation, do not mark any surfaces visible in the completed installation.
5. Securing to fixing anchors: Through holes formed during fabrication only.
6. Tightening mechanical fasteners: To manufacturer's recommended torque figures. Do not overtighten fasteners intended to permit differential movement.
7. Closers and flashings: Correctly form and locate to provide weathertight junctions between the curtain wall system and the adjacent building fabric. Junctions must provide the same level of weathertightness and sealing as the curtain wall system.
8. Protective coverings: Remove prior to completion only where necessary to facilitate installation and from surfaces that will be inaccessible on completion.
9. Interfaces: Locate flashings, closers, etc. correctly. Neatly overlap to form a weathertight junction.

Ss_25_10_20/620 Execution tolerances

1. Standard: In accordance with the CWCT Standard for systemised building envelopes, Section 7.
2. Accuracy of erection

2.1. Line: ±2 mm of any line expressed by the framing or panels in any one storey height, or structural bay width, and ±5 mm overall.

2.2. Level: ±2 mm of horizontal in any one structural bay width, and ±5 mm overall.

2.3. Plumb: ±2 mm of vertical in any one storey height, and ±5 mm overall.

2.4. Plane: ±2 mm of the principal plane in any one storey height, or structural bay width, and ±5 mm overall.

Ss_25_10_20/625 Fixing anchor installation

1. Fixing positions: Clearly identify positions of all site drillings or cuttings not shown on detailed drawings.
2. Concrete supporting structure: Protect cavities in inserts from entry of concrete.
3. Cast-in inserts: Cast-in inserts must be held in place by formwork, not attached to reinforcement. Drilled-in fixings to slab edges must only be used for light stick systems.
4. Location of inserts: Submit detailed information prior to casting.
5. Edge fixing distances (minimum): Recommended by fixing anchor manufacturers.
6. Corrective fabrication: Minimize.

Ss_25_10_20/630 Installing accessories in curtain walling

1. Accessories
   1.1. Type: Doorsets.
   1.2. Size: Refer to schedule.
   1.3. Weatherstripping: Fix in undercut grooves in framing sections using preformed corners, with joints in the length.
2. Fire stopping
   2.1. Positioning: Locate at junctions of curtain walling with compartment walls and floors.
   2.2. Minimum fire resistance including fixings: The same as that specified for compartment walls and floors.
3. Thermal insulation: Attach to or support within the curtain walling so as not to bulge, sag, delaminate or detach during installation or in situ during the life of the curtain walling.
4. Vapour control layer: Locate on warm side of thermal insulation. Fit continuously and seal at joints.
5. Hardware: Assemble and fix accurately, using fasteners with matching finish supplied by hardware manufacturer. On completion check, adjust and lubricate as necessary to ensure correct functioning.

Ss_25_10_20/635 Installing fire and smoke stops

1. Fire and smoke stops: Fire and smoke stops to be located at all junctions between the curtain wall and compartment or separating walls and floors. To be installed strictly in accordance with manufacturers' guidelines and as recommended in CWCT Technical Note TN 98.
2. Installer qualification: To be a member of a UKAS accredited installer scheme.

Ss_25_10_20/640 Site based project testing

1. Testing: Arrange for testing of a section of curtain walling.
2. Timing: During preliminary installation.
3. Site water tests
   3.1. Test standard: Site hose test to CWCT Standard for systemised building envelopes, Standard test methods for building envelopes, section 9.
   3.2. Area or joints to be tested: Joint locations.
   3.3. Pressure difference across curtain wall: Not Applicable.

4. Site test results and reports showing compliance: Submit before continuing installation of general areas of curtain walling.

System completion

Ss_25_10_20/810 Maintenance and replacement

1. Curtain wall maintenance manual contents: Contact details for subcontractors and suppliers.
2. Dismantling: Submit recommendations for safe dismantling and recycling or disposal of curtain walling system and products.

Ss_25_10_20/895 Verification of performance

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Curtain wall Declaration of Performance, test results and certification.
   2.2. Timing: At completion of installation for project completion.

Ω End of System

Ss_25_20_14_52
Metal composite panel cladding systems

Systems

Ss_25_20_14_52 Metal composite panel cladding systems Type A

1. Description: Contractor and Cladding sub-contractor are to ensure that the insulation/thermal line around the building remains intact, airtight and that external walls are of limited combustibility as described in Approved Document B Vol. 2.
2. System Performance: Ss_25_20_14/225 Fire performance to BS EN 13501; Ss_25_20_14/205 Metal insulating sandwich panel cladding system design; Ss_25_20_14/215 Structural performance; Ss_25_20_14/230 Acoustic performance – sound transmittance; Ss_25_20_14/255 Thermal performance; Ss_25_20_14/260 Air permeability; Ss_25_20_14/265 Avoidance of condensation; Ss_25_20_14/270 Water penetration; Ss_25_20_14/275 Durability; Ss_25_20_14/290 Compliance with performance requirements
3. System manufacturer: Eurobond Laminated Ltd.
4. Product Reference:: Europanel F5 240mm (Fixed Vertically) 120min Fire rating (integrity & Insulation)
5. Cladding panels
   5.1. Panel type: Pr_25_71_14_06 Aluminium composite panels
   5.2. Panel Colours: Multiple colours - Colorcoat PrismaR range
6. Continuity thermal insulation: Pr_25_57_06_50 Mineral fibre slab insulation Type A
7. Panel joints
   7.1. Horizontal: Submit options for selection.
   7.2. Vertical: Submit options for selection.
8. Extension Capping: Levolux box section vertical blade, fixed through cladding back to main frame. see architects drawing DR-A-21602 DETAIL 4
9. Cavity barriers
   9.1. Vertical barriers: Located where cavities exist in the parapets in compartment walls.
   9.2. Horizontal barriers: As described in Diagram 9.1 of the Approved Document Part B Vol. 2
   9.3. Cavity closers: Provided at the edges of cavities and around all openings. Fire resistance to comply with the Approved Document B Vol.2 and installed in accordance with the manufacturer's recommendations.
10. Fire stops: Ss_25_60_30_45 [8] Fire stopping systems FRA
11. System accessories: Pr_35_90_30_01 Aluminium flashings
12. Samples required: Ss_25_20_14/305 Product samples
13. Execution: Ss_25_20_14/605 Control samples; Ss_25_20_14/640 Structural movement joints; Ss_25_20_14/630 Locating fasteners for site-assembled insulating sandwich panels
14. System Completion: Ss_25_20_14/895 Verification of performance

Ss_25_20_14_52 Metal composite panel cladding systems Type B

1. Description: Rear of parapet & dog boxes (roof level)
2. System Performance: Ss_25_20_14/225 Fire performance to BS EN 13501 Type A; Ss_25_20_14/205 Metal insulating sandwich panel cladding system design Type A; Ss_25_20_14/215 Structural performance Type A; Ss_25_20_14/230 Acoustic performance – sound transmittance Type A; Ss_25_20_14/255 Thermal performance Type A; Ss_25_20_14/265 Avoidance of condensation Type A; Ss_25_20_14/270 Water penetration Type A; Ss_25_20_14/275 Durability Type A; Ss_25_20_14/290 Compliance with performance requirements Type A; Ss_25_20_14/260 Air permeability

3. System manufacturer: contractors choice
4. Cladding panels
   4.1. Panel type: Pr_25_71_14_06 Aluminium composite panels Type A
   4.2. Panel Colours: Standard Colour Range
5. Continuity thermal insulation: Pr_25_57_06_50 Mineral fibre slab insulation
6. Panel joints
   6.1. Horizontal: Submit options for selection.
   6.2. Vertical: Submit options for selection.
7. Cavity barriers
   7.1. Vertical barriers: Located where cavities exist in the parapets in compartment walls.
   7.2. Horizontal barriers: As described in Diagram 9.1 of the Approved Document Part B Vol. 2
   7.3. Cavity closers: Provided at the edges of cavities and around all openings. Fire resistance to comply with the Approved Document B Vol.2 and installed in accordance with the manufacturer's recommendations.
8. Extension Capping: Levolux box section vertical blade, fixed through cladding back to main frame. see architects drawing DR-A-21602 DETAIL 4
9. Fire stops: Ss_25_60_30_45 [8] Fire stopping systems FRA
10. System accessories: Pr_35_90_30_01 Aluminium flashings Type B
11. Samples required: Ss_25_20_14/305 Product samples Type A
12. Execution: Ss_25_20_14/605 Control samples Type A; Ss_25_20_14/640 Structural movement joints Type A; Ss_25_20_14/630 Locating fasteners for site-assembled insulating sandwich panels Type A
13. System Completion: Ss_25_20_14/895 Verification of performance Type A

Ss_25_20_14_52 Metal composite panel cladding systems Type C

1. Description: Contractor and Cladding sub-contractor are to ensure that the insulation/thermal line around the building remains intact, airtight and that external walls are of limited combustibility as described in Approved Document B Vol. 2.
2. System Performance: Ss_25_20_14/225 Fire performance to BS EN 13501 Type B; Ss_25_20_14/205 Metal insulating sandwich panel cladding system design Type B; Ss_25_20_14/215 Structural performance Type B; Ss_25_20_14/230 Acoustic performance – sound transmittance Type B; Ss_25_20_14/255 Thermal performance Type B; Ss_25_20_14/260 Air permeability Type B; Ss_25_20_14/265 Avoidance of condensation Type B; Ss_25_20_14/270 Water penetration Type B; Ss_25_20_14/275 Durability Type B; Ss_25_20_14/290 Compliance with performance requirements Type B
3. System manufacturer: Eurobond Laminated Ltd.
4. Product Reference:: Europanel F5 150mm (Fixed Vertically) 120min Fire rating (integrity & Insulation)
5. Cladding panels
   5.1. Panel type: Pr_25_71_14_06 Aluminium composite panels Type B
   5.2. Panel Colours: Multiple colours - Colorcoat PrismaR range
6. Continuity thermal insulation: Pr_25_57_06_50 Mineral fibre slab insulation Type B
7. Panel joints
   7.1. Horizontal: Submit options for selection.
   7.2. Vertical: Submit options for selection.
8. Extension Capping: Levolux box section vertical blade, fixed through cladding back to main frame. see architects drawing DR-A-21602 DETAIL 4
9. Cavity barriers

9.1. Vertical barriers: Located where cavities exist in the parapets in compartment walls.

9.2. Horizontal barriers: As described in Diagram 9.1 of the Approved Document Part B Vol. 2

9.3. Cavity closers: Provided at the edges of cavities and around all openings. Fire resistance to comply with the Approved Document B Vol.2 and installed in accordance with the manufacturer's recommendations.

10. Fire stops: Ss_25_60_30_45 Linear gap fire stopping systems Type A
11. System accessories: Pr_35_90_30_01 Aluminium flashings Type C
12. Samples required: Ss_25_20_14/305 Product samples Type B
13. Execution: Ss_25_20_14/605 Control samples Type B; Ss_25_20_14/640 Structural movement joints Type B; Ss_25_20_14/630 Locating fasteners for site-assembled insulating sandwich panels Type B
14. System Completion: Ss_25_20_14/895 Verification of performance Type B

Ss_25_60_30_45 Linear gap fire stopping systems Type A

1. System performance: Ss_25_60_30/220 Fire performance Type A
2. System manufacturer: Submit proposals.
3. Gap filler: Pr_25_80_81_51 Mineral wool fire stopping Type A
4. Capping sealant
   4.1. Sealant type: Submit proposals. Pr_30_31_68_42 Intumescent putties Type A
   4.2. Cleaner: De-greaser.
   4.3. Primer: Required.
5. Samples required: Ss_25_60_30/605 Preliminary installation Type A
6. Execution: Ss_25_60_30/610 Fire stopping systems workmanship generally Type A; Ss_25_60_30/685 Installing mineral wool flexible stopping Type A
7. System completion: Ss_25_60_30/820 Inspection of fire stopping systems Type A; Ss_25_60_30/895 Verification of performance Type A

Ss_25_60_30_45 [8] Fire stopping systems FRA

1. System performance: Ss_25_60_30/220 Fire performance
2. System manufacturer: Submit proposals.
3. Gap filler: Pr_25_80_81_51 Mineral wool fire stopping
4. Capping sealant
   4.1. Sealant type: Submit proposals. Pr_30_31_68_42 Intumescent putties
   4.2. Cleaner: De-greaser.
   4.3. Primer: Required.
5. Samples required: Ss_25_60_30/605 Preliminary installation
6. Execution: Ss_25_60_30/610 Fire stopping systems workmanship generally; Ss_25_60_30/685 Installing mineral wool flexible stopping
7. System completion: Ss_25_60_30/820 Inspection of fire stopping systems; Ss_25_60_30/895 Verification of performance

System performance

Ss_25_20_14/205 Metal insulating sandwich panel cladding system design

1. Purpose: To demonstrate compliance with performance and technical requirements.
2. Standards: In accordance with BS EN 14509 and BS 5427.
3. Appearance and fit: Ensure that position and alignment of parts and features are as shown on preliminary design drawings. Accommodate all deviations in the primary support structure.

Ss_25_20_14/205 Metal insulating sandwich panel cladding system design Type A

1. Purpose: To demonstrate compliance with performance and technical requirements.
2. Standards: In accordance with BS EN 14509 and BS 5427.
3. Appearance and fit: Ensure that position and alignment of parts and features are as shown on preliminary design drawings. Accommodate all deviations in the primary support structure.

Ss_25_20_14/205 Metal insulating sandwich panel cladding system design Type B

1. Purpose: To demonstrate compliance with performance and technical requirements.
2. Standards: In accordance with BS EN 14509 and BS 5427.
3. Appearance and fit: Ensure that position and alignment of parts and features are as shown on preliminary design drawings. Accommodate all deviations in the primary support structure.

Ss_25_20_14/215 Structural performance

1. Loads: Resist wind loads, dead loads and design live loads.
2. Deflections and movements: Accommodate without damage.
3. General movement: Anticipated building movements to be accommodated
4. Hard body impact loads
   - 4.1. Category: Category C in accordance with BS 5427, Table B.1.
   - 4.2. Location: Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground.
5. Soft body impact loads
   - 5.1. Category: Category C in accordance with BS 5427, Table B.1.
   - 5.2. Location: Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground.
6. Imposed loads
   - 6.1. Standard: In accordance with BS EN 1991-1-1 and BS 5427.
   - 6.2. Permanent imposed loads: Refer to drawings and model.
   - 6.3. Temporary imposed loads: Maintenance and access equipment, personnel and occupant impact.
   - 6.4. Dead loads: In accordance with BS 5427.
   - 6.5. Dead and imposed loads: Refer to Structural Engineer's calculations.
   - 6.6. Wind loads: By calculation and testing in accordance with BS EN 14509.

Ss_25_20_14/215 Structural performance Type A

1. Loads: Resist wind loads, dead loads and design live loads.
2. Deflections and movements: Accommodate without damage.
3. General movement: Anticipated building movements to be accommodated
4. Hard body impact loads
   - 4.1. Category: Category C in accordance with BS 5427, Table B.1.
   - 4.2. Location: Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground.
5. Soft body impact loads
   - 5.1. Category: Category C in accordance with BS 5427, Table B.1.
   - 5.2. Location: Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground.

6. Imposed loads
    6.1. Standard: In accordance with BS EN 1991-1-1 and BS 5427.
    6.2. Permanent imposed loads: Refer to drawings and model.
    6.3. Temporary imposed loads: Maintenance and access equipment, personnel and occupant impact.
    6.4. Dead loads: In accordance with BS 5427.
    6.5. Dead and imposed loads: Refer to Structural Engineer's calculations.
    6.6. Wind loads: By calculation and testing in accordance with BS EN 14509.

Ss_25_20_14/215 Structural performance Type B

1. Loads: Resist wind loads, dead loads and design live loads.
2. Deflections and movements: Accommodate without damage.
3. General movement: Anticipated building movements to be accommodated
4. Hard body impact loads
    4.1. Category: Category C in accordance with BS 5427, Table B.1.
    4.2. Location: Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground.
5. Soft body impact loads
    5.1. Category: Category C in accordance with BS 5427, Table B.1.
    5.2. Location: Impacts are generally limited to areas within approximately 1.5 m of the adjacent ground.
6. Imposed loads
    6.1. Standard: In accordance with BS EN 1991-1-1 and BS 5427.
    6.2. Permanent imposed loads: Refer to drawings and model.
    6.3. Temporary imposed loads: Maintenance and access equipment, personnel and occupant impact.
    6.4. Dead loads: In accordance with BS 5427.
    6.5. Dead and imposed loads: Refer to Structural Engineer's calculations.
    6.6. Wind loads: By calculation and testing in accordance with BS EN 14509.

Ss_25_20_14/225 Fire performance to BS EN 13501

1. Fire resistance
    1.1. Standards: To BS EN 13501-2. 120min FR
    1.2. Complete wall assembly: Project specific - refer to Approved Document B Vol. 2
    1.3. Direction: Project specific - refer to Approved Document B Vol. 2
2. Reaction to fire classification
    2.1. External surfaces: Project specific - refer to Approved Document B Vol. 2 Colourcoat prismaR
    2.2. Internal surfaces: Project specific - refer to Approved Document B Vol. 2
3. Combustibility: Project specific - refer to Approved Document B Vol. 2
4. Testing and assessment reports: Submit evidence of successful testing by a UKAS accredited laboratory.
5. Timing: During detailed design.
6. Supplementary requirements: Factory Mutual approved to FM 4880 and FM 4881 Class 1 with unlimited height restriction.

Ss_25_20_14/225 Fire performance to BS EN 13501 Type A

1. Fire resistance
   1.1. Standards: To BS EN 13501-2. 120min FR
   1.2. Complete wall assembly: Project specific - refer to Approved Document B Vol. 2
   1.3. Direction: Project specific - refer to Approved Document B Vol. 2
2. Reaction to fire classification
   2.1. External surfaces: Project specific - refer to Approved Document B Vol. 2 Colourcoat prismaR
   2.2. Internal surfaces: Project specific - refer to Approved Document B Vol. 2
3. Combustibility: Project specific - refer to Approved Document B Vol. 2
4. Testing and assessment reports: Submit evidence of successful testing by a UKAS accredited laboratory.
5. Timing: During detailed design.
6. Supplementary requirements: Factory Mutual approved to FM 4880 and FM 4881 Class 1 with unlimited height restriction.

Ss_25_20_14/225 Fire performance to BS EN 13501 Type B

1. Fire resistance
   1.1. Standards: To BS EN 13501-2. 120min FR
   1.2. Complete wall assembly: Project specific - refer to Approved Document B Vol. 2
   1.3. Direction: Project specific - refer to Approved Document B Vol. 2
2. Reaction to fire classification
   2.1. External surfaces: Project specific - refer to Approved Document B Vol. 2 Colourcoat prismaR
   2.2. Internal surfaces: Project specific - refer to Approved Document B Vol. 2
3. Combustibility: Project specific - refer to Approved Document B Vol. 2
4. Testing and assessment reports: Submit evidence of successful testing by a UKAS accredited laboratory.
5. Timing: During detailed design.
6. Supplementary requirements: Factory Mutual approved to FM 4880 and FM 4881 Class 1 with unlimited height restriction.

Ss_25_20_14/230 Acoustic performance – sound transmittance

1. Weighted sound reduction index (Rw) (minimum)
   1.1. Standard: To BS EN ISO 717-1.
   1.2. Between internal and external surfaces of clad wall: Refer to Acoustician's Report.
2. Weighted standardized level difference (DnTw) (minimum)
   2.1. Standard: To BS EN ISO 717-1.
   2.2. Between adjacent floors abutting clad wall: Refer to Acoustician's Report
   2.3. Between adjacent rooms on same floor abutting clad wall: Refer to Acoustician's Report

Ss_25_20_14/230 Acoustic performance – sound transmittance Type A

1. Weighted sound reduction index (Rw) (minimum)
   1.1. Standard: To BS EN ISO 717-1.
   1.2. Between internal and external surfaces of clad wall: Refer to Acoustician's Report.
2. Weighted standardized level difference (DnTw) (minimum)

2.1. Standard: To BS EN ISO 717-1.
2.2. Between adjacent floors abutting clad wall: Refer to Acoustician's Report
2.3. Between adjacent rooms on same floor abutting clad wall: Refer to Acoustician's Report

Ss_25_20_14/230 Acoustic performance – sound transmittance Type B

1. Weighted sound reduction index (Rw) (minimum)
   1.1. Standard: To BS EN ISO 717-1.
   1.2. Between internal and external surfaces of clad wall: Refer to Acoustician's Report.
2. Weighted standardized level difference (DnTw) (minimum)
   2.1. Standard: To BS EN ISO 717-1.
   2.2. Between adjacent floors abutting clad wall: Refer to Acoustician's Report
   2.3. Between adjacent rooms on same floor abutting clad wall: Refer to Acoustician's Report

Ss_25_20_14/255 Thermal performance

1. Method for calculating the thermal transmittance of the cladding wall: Weighted U-value.
2. U-value of cladding wall (average): 0.18W/m²·K to Type A.
3. Method for assessing thermal transmittance of assemblies: By calculation.
4. Thermal bridging: Complete thermal design of the cladding system to avoid excessive thermal bridging.

Ss_25_20_14/255 Thermal performance Type A

1. Method for calculating the thermal transmittance of the cladding wall: Weighted U-value.
2. U-value of cladding wall (average): 0.18W/m²·K to Type A.
3. Method for assessing thermal transmittance of assemblies: By calculation.
4. Thermal bridging: Complete thermal design of the cladding system to avoid excessive thermal bridging.

Ss_25_20_14/255 Thermal performance Type B

1. Method for calculating the thermal transmittance of the cladding wall: Weighted U-value.
2. Method for assessing thermal transmittance of assemblies: By calculation.
3. Thermal bridging: Complete thermal design of the cladding system to avoid excessive thermal bridging.

Ss_25_20_14/260 Air permeability

1. Air leakage rate (maximum): : 5 m3/(hr.m2) @50Pa)

Ss_25_20_14/260 Air permeability Type B

1. Air leakage rate (maximum): : 5 m3/(hr.m2) @50Pa)

Ss_25_20_14/265 Avoidance of condensation

1. Condensation: Reduce the risk of forming on interior building surfaces, framing members or any part of infill panels or facings under notional psychrometric conditions.
2. Risk of condensation: Determine in accordance with BS 5250, Annex D and provide effective vapour control.
3. Notional outdoor psychrometric conditions: As BS 6229, Table A1.
4. Notional indoor psychrometric conditions
   4.1. Locations: Refer to Mechanical Engineer's report.

4.2. Temperature: Refer to Mechanical Engineer's report.

4.3. Relative humidity: Refer to Mechanical Engineer's report.

4.4. Vapour pressure: Refer to Mechanical Engineer's report.

5. Winter interstitial condensate

5.1. Calculated amount (maximum): Refer to Mechanical Engineer's report.

5.2. Calculated annual net retention: Refer to Mechanical Engineer's report.

6. Surface condensation: Determine surface condensation risk of cladding system using the method described in BS EN ISO 13788. If necessary, revise thermal insulation to provide satisfactory temperature factor (fmin). Ensure that damage and nuisance from surface condensation does not occur.

Ss_25_20_14/265 Avoidance of condensation Type A

1. Condensation: Reduce the risk of forming on interior building surfaces, framing members or any part of infill panels or facings under notional psychrometric conditions.
2. Risk of condensation: Determine in accordance with BS 5250, Annex D and provide effective vapour control.
3. Notional outdoor psychrometric conditions: As BS 6229, Table A1.
4. Notional indoor psychrometric conditions

4.1. Locations: Refer to Mechanical Engineer's report.

4.2. Temperature: Refer to Mechanical Engineer's report.

4.3. Relative humidity: Refer to Mechanical Engineer's report.

4.4. Vapour pressure: Refer to Mechanical Engineer's report.

5. Winter interstitial condensate

5.1. Calculated amount (maximum): Refer to Mechanical Engineer's report.

5.2. Calculated annual net retention: Refer to Mechanical Engineer's report.

6. Surface condensation: Determine surface condensation risk of cladding system using the method described in BS EN ISO 13788. If necessary, revise thermal insulation to provide satisfactory temperature factor (fmin). Ensure that damage and nuisance from surface condensation does not occur.

Ss_25_20_14/265 Avoidance of condensation Type B

1. Condensation: Reduce the risk of forming on interior building surfaces, framing members or any part of infill panels or facings under notional psychrometric conditions.
2. Risk of condensation: Determine in accordance with BS 5250, Annex D and provide effective vapour control.
3. Notional outdoor psychrometric conditions: As BS 6229, Table A1.
4. Notional indoor psychrometric conditions

4.1. Locations: Refer to Mechanical Engineer's report.

4.2. Temperature: Refer to Mechanical Engineer's report.

4.3. Relative humidity: Refer to Mechanical Engineer's report.

4.4. Vapour pressure: Refer to Mechanical Engineer's report.

5. Winter interstitial condensate

5.1. Calculated amount (maximum): Refer to Mechanical Engineer's report.

5.2. Calculated annual net retention: Refer to Mechanical Engineer's report.

6. Surface condensation: Determine surface condensation risk of cladding system using the method described in BS EN ISO 13788. If necessary, revise thermal insulation to provide satisfactory temperature factor (fmin). Ensure that damage and nuisance from surface condensation does not occur.

Ss_25_20_14/270 Water penetration

1. Water leakage requirements: Under site exposure conditions, moisture must not penetrate onto internal surfaces, or into cavities not designed to be wetted.

Ss_25_20_14/270 Water penetration Type A

1. Water leakage requirements: Under site exposure conditions, moisture must not penetrate onto internal surfaces, or into cavities not designed to be wetted.

Ss_25_20_14/270 Water penetration Type B

1. Water leakage requirements: Under site exposure conditions, moisture must not penetrate onto internal surfaces, or into cavities not designed to be wetted.

Ss_25_20_14/275 Durability

1. Relevant agents or degradation mechanisms: Refer to Annex A of BS 7543.
2. Primary components
   2.1. Design life duration (minimum): 25 years.
3. Secondary components
   3.1. Components: Joint gaskets. Joint sealant.
   3.2. Design life duration: Submit details for each product together with required maintenance regime, replacement periods and methods of replacement.
4. Electrolytic corrosion: Prevent.
5. Submittals: Prior to completion of detailed design, submit required maintenance regime, replacement periods and methods of replacement.

Ss_25_20_14/275 Durability Type A

1. Relevant agents or degradation mechanisms: Refer to Annex A of BS 7543.
2. Primary components
   2.1. Design life duration (minimum): 25 years.
3. Secondary components
   3.1. Components: Joint gaskets. Joint sealant.
   3.2. Design life duration: Submit details for each product together with required maintenance regime, replacement periods and methods of replacement.
4. Electrolytic corrosion: Prevent.
5. Submittals: Prior to completion of detailed design, submit required maintenance regime, replacement periods and methods of replacement.

Ss_25_20_14/275 Durability Type B

1. Relevant agents or degradation mechanisms: Refer to Annex A of BS 7543.
2. Primary components
   2.1. Design life duration (minimum): 25 years.
3. Secondary components
   3.1. Components: Joint gaskets. Joint sealant.
   3.2. Design life duration: Submit details for each product together with required maintenance regime, replacement periods and methods of replacement.
4. Electrolytic corrosion: Prevent.
5. Submittals: Prior to completion of detailed design, submit required maintenance regime, replacement periods and methods of replacement.

Ss_25_20_14/290 Compliance with performance requirements

1. Requirement: Proof of compliance with specified performance.
2. Method
   2.1. Laboratory project testing : For structural performance.
   For acoustic performance.
   For thermal performance.
   For air permeability.
   For fire performance.
   2.2. Previous test results: For structural performance.
   For acoustic performance.
   For thermal performance.
   For air permeability.
   For fire performance.
3. Testing authority: UKAS approved independent test agency.
4. Submittals
   4.1. Format: Test results and certification.
   4.2. Timing: Before commencing installation.

Ss_25_20_14/290 Compliance with performance requirements Type A

1. Requirement: Proof of compliance with specified performance.
2. Method
   2.1. Laboratory project testing : For structural performance.
   For acoustic performance.
   For thermal performance.
   For air permeability.
   For fire performance.
   2.2. Previous test results: For structural performance.
   For acoustic performance.
   For thermal performance.
   For air permeability.
   For fire performance.
3. Testing authority: UKAS approved independent test agency.
4. Submittals
   4.1. Format: Test results and certification.
   4.2. Timing: Before commencing installation.

Ss_25_20_14/290 Compliance with performance requirements Type B

1. Requirement: Proof of compliance with specified performance.
2. Method
   2.1. Laboratory project testing : For structural performance.
   For acoustic performance.
   For thermal performance.
   For air permeability.
   For fire performance.
   2.2. Previous test results: For structural performance.
   For acoustic performance.
   For thermal performance.
   For air permeability.
   For fire performance.
3. Testing authority: UKAS approved independent test agency.

4. Submittals
    4.1. Format: Test results and certification.
    4.2. Timing: Before commencing installation.

Ss_25_60_30/220 Fire performance

1. Resistance to fire: Project specific requirements.
2. Reaction to fire
    2.1. Standard: To BS EN 13501-1. In accordance with Building Regulations.
    2.2. Class: Class A2 to BS EN 13501-1.
3. Smoke resistance
    3.1. Air leakage rate (maximum): 5 $m^3/m^2 \cdot hr$.

Ss_25_60_30/220 Fire performance Type A

1. Resistance to fire: Project specific requirements.
2. Reaction to fire
    2.1. Standard: To BS EN 13501-1. In accordance with Building Regulations.
    2.2. Class: Class A2 to BS EN 13501-1.
3. Smoke resistance
    3.1. Air leakage rate (maximum): 5 $m^3/m^2 \cdot hr$.

Products

Pr_25_57_06/310 Insulation products generally Type B

1. Third party product certification: Accreditation by the United Kingdom Accreditation Service (UKAS). or/and British Board of Agrément (BBA) certified.
2. Evidence of compliance: Submit copy of current certificate for proposed product.

Pr_25_57_06/310 Insulation products generally Type C

1. Third party product certification: Accreditation by the United Kingdom Accreditation Service (UKAS). or/and British Board of Agrément (BBA) certified.
2. Evidence of compliance: Submit copy of current certificate for proposed product.

Pr_25_57_06/310 Insulation products generally Type I

1. Third party product certification: Accreditation by the United Kingdom Accreditation Service (UKAS). or/and British Board of Agrément (BBA) certified.
2. Evidence of compliance: Submit copy of current certificate for proposed product.

Pr_25_57_06_50 Mineral fibre slab insulation

1. General requirements: Pr_25_57_06/310 Insulation products generally Type B
2. Manufacturer: Rockwool Ltd
3. Standard: To BS EN 13162.
4. Thermal conductivity (maximum): 0.035 W/mK
5. Thickness (minimum): Refer to drawing details.
6. Fire performance: Minimum of Class A2 to BS EN 13501-1

Pr_25_57_06_50 Mineral fibre slab insulation Type A

1. General requirements: Pr_25_57_06/310 Insulation products generally Type C

2. Manufacturer: Submit proposals.
3. Standard: To BS EN 13162.
4. Thermal conductivity (maximum): 0.018 W/mK
5. Thickness (minimum): Refer to drawing details.
6. Fire performance: Minimum of Class A2 to BS EN 13501-1

Pr_25_57_06_50 Mineral fibre slab insulation Type B

1. General requirements: Pr_25_57_06/310 Insulation products generally Type I
2. Manufacturer: Submit proposals.
3. Standard: To BS EN 13162.
4. Thickness (minimum): Refer to drawing details.
5. Fire performance: Minimum of Class A2 to BS EN 13501-1

Pr_25_71_14_06 Aluminium composite panels

1. Description: Infill panels
2. Manufacturer: Submit Proposals.
3. Standard: To BS EN 14509.
4. Panels: Factory-assembled insulating sandwich panels.
5. Panel construction
    - 5.1. Panel external face
        - 5.1.1. Material: Submit proposals.
        - 5.1.2. Profile: Submit options for selection.
    - 5.2. Panel internal face
        - 5.2.1. Material: Submit proposals.
        - 5.2.2. Profile: Submit options for selection.
    - 5.3. Core insulation: Rock wool lamella.
6. Finish as delivered
    - 6.1. Outer skin
        - 6.1.1. Material: Submit options for selection.
        - 6.1.2. Colour: Submit options for selection.
    - 6.2. Inner skin
        - 6.2.1. Material: Submit options for selection.
        - 6.2.2. Colour: Submit options for selection.
7. Fire rating
    - 7.1. Reaction to fire
        - 7.1.1. Panel external face: As required by Approved Document B Vol. 2
        - 7.1.2. Panel internal face: As required by Approved Document B Vol. 2
    - 7.2. Combustibility: As required by Approved Document B Vol. 2
    - 7.3. Fire resistance: As required by Approved Document B Vol. 2

Pr_25_71_14_06 Aluminium composite panels Type A

1. Description: Infill panels
2. Manufacturer: Submit Proposals.
3. Standard: To BS EN 14509.
4. Panels: Factory-assembled insulating sandwich panels.

5. Panel construction
   5.1. Panel external face
      5.1.1. Material: Submit proposals.
      5.1.2. Profile: Submit options for selection.
   5.2. Panel internal face
      5.2.1. Material: Submit proposals.
      5.2.2. Profile: Submit options for selection.
   5.3. Core insulation: Rock wool lamella.
6. Finish as delivered
   6.1. Outer skin
      6.1.1. Material: Submit options for selection.
      6.1.2. Colour: Submit options for selection.
   6.2. Inner skin
      6.2.1. Material: Submit options for selection.
      6.2.2. Colour: Submit options for selection.
7. Fire rating
   7.1. Reaction to fire
      7.1.1. Panel external face: As required by Approved Document B Vol. 2
      7.1.2. Panel internal face: As required by Approved Document B Vol. 2
   7.2. Combustibility: As required by Approved Document B Vol. 2
   7.3. Fire resistance: As required by Approved Document B Vol. 2

Pr_25_71_14_06 Aluminium composite panels Type B

1. Description: Infill panels
2. Manufacturer: Submit Proposals.
3. Standard: To BS EN 14509.
4. Panels: Factory-assembled insulating sandwich panels.
5. Panel construction
   5.1. Panel external face
      5.1.1. Material: Submit proposals.
      5.1.2. Profile: Submit options for selection.
   5.2. Panel internal face
      5.2.1. Material: Submit proposals.
      5.2.2. Profile: Submit options for selection.
   5.3. Core insulation: Rock wool lamella.
6. Finish as delivered
   6.1. Outer skin
      6.1.1. Material: Submit options for selection.
      6.1.2. Colour: Submit options for selection.
   6.2. Inner skin
      6.2.1. Material: Submit options for selection.
      6.2.2. Colour: Submit options for selection.
7. Fire rating
   7.1. Reaction to fire

7.1.1. Panel external face: As required by Approved Document B Vol. 2
7.1.2. Panel internal face: As required by Approved Document B Vol. 2
7.2. Combustibility: As required by Approved Document B Vol. 2
7.3. Fire resistance: As required by Approved Document B Vol. 2

Pr_25_80_81_51 Mineral wool fire stopping

1. Manufacturer: Submit proposals.
2. Material
   2.1. Standard: To BS EN 13162.
   2.2. Type: Rigid.
   2.3. Facing: Ablative coated.
3. Fire performance: Class A2 to BS EN 13501-1 or better.

Pr_25_80_81_51 Mineral wool fire stopping Type A

1. Manufacturer: Submit proposals.
2. Material
   2.1. Standard: To BS EN 13162.
   2.2. Type: Rigid.
   2.3. Facing: Ablative coated.
3. Fire performance: Class A2 to BS EN 13501-1 or better.

Pr_30_31_68_42 Intumescent putties

1. Manufacturer: Submit proposals.
2. Material: One part synthetic elastomeric intumescent putty.
3. Form: Submit proposals.
4. Execution: Pr_30_31_76/610 Suitability of joints for sealant application Type A

Pr_30_31_68_42 Intumescent putties Type A

1. Manufacturer: Submit proposals.
2. Material: One part synthetic elastomeric intumescent putty.
3. Form: Submit proposals.
4. Execution: Pr_30_31_76/610 Suitability of joints for sealant application Type B

Pr_35_90_30_01 Aluminium flashings

1. Manufacturer: Submit proposals.
2. Material: Submit proposals.
3. Item: Abutment flashing, capping, apron, cover flashing, weathered drip.
4. Size
   4.1. Thickness (minimum):
      - Aluminium: 0.8 mm.
      - Copper: 0.6 mm.
      - Galvanized carbon steel: 0.7 mm.
      - Lead: Code 4 or Code 5.
      - Stainless steel: 0.4 mm or 0.5 mm.
      - Zinc: 0.7 mm.
5. Fixing: Lapped joints.

6. Thermal movement: Joints and fixings must incorporate measures to avoid warping or damage from thermal movement, and maintain the weather resistance of the connection.
7. Finish: Submit options for selection.
8. Colour: Submit options for selection.
9. Texture: Plain.

Pr_35_90_30_01 Aluminium flashings Type B

1. Manufacturer: Submit proposals.
2. Material: Submit proposals.
3. Item: Abutment flashing, capping, apron, cover flashing, weathered drip.
4. Size
   4.1. Thickness (minimum):
      - Aluminium: 0.8 mm.
      - Copper: 0.6 mm.
      - Galvanized carbon steel: 0.7 mm.
      - Lead: Code 4 or Code 5.
      - Stainless steel: 0.4 mm or 0.5 mm.
      - Zinc: 0.7 mm.
5. Fixing: Lapped joints.
6. Thermal movement: Joints and fixings must incorporate measures to avoid warping or damage from thermal movement, and maintain the weather resistance of the connection.
7. Finish: Submit options for selection.
8. Colour: Submit options for selection.
9. Texture: Plain.

Pr_35_90_30_01 Aluminium flashings Type C

1. Manufacturer: Submit proposals.
2. Material: Submit proposals.
3. Item: Abutment flashing, capping, apron, cover flashing, weathered drip.
4. Size
   4.1. Thickness (minimum):
      - Aluminium: 0.8 mm.
      - Copper: 0.6 mm.
      - Galvanized carbon steel: 0.7 mm.
      - Lead: Code 4 or Code 5.
      - Stainless steel: 0.4 mm or 0.5 mm.
      - Zinc: 0.7 mm.
5. Fixing: Lapped joints.
6. Thermal movement: Joints and fixings must incorporate measures to avoid warping or damage from thermal movement, and maintain the weather resistance of the connection.
7. Finish: Submit options for selection.
8. Colour: Submit options for selection.
9. Texture: Plain.

Ss_25_20_14/305 Product samples

1. Submittals: Product samples.
2. Purpose: For use as a reference sample.

3. Labelling: Clearly label all submitted samples.
4. Timing: Before ordering for the project.

Ss_25_20_14/305 Product samples Type A

1. Submittals: Product samples.
2. Purpose: For use as a reference sample.
3. Labelling: Clearly label all submitted samples.
4. Timing: Before ordering for the project.

Ss_25_20_14/305 Product samples Type B

1. Submittals: Product samples.
2. Purpose: For use as a reference sample.
3. Labelling: Clearly label all submitted samples.
4. Timing: Before ordering for the project.

Execution

Pr_30_31_76/610 Suitability of joints for sealant application Type A

1. Joint dimensions: Within limits specified for the sealant.
2. Substrate quality: Surfaces regular, undamaged and stable.
3. Joints not fit to receive sealant: Submit proposals for rectification.

Pr_30_31_76/610 Suitability of joints for sealant application Type B

1. Joint dimensions: Within limits specified for the sealant.
2. Substrate quality: Surfaces regular, undamaged and stable.
3. Joints not fit to receive sealant: Submit proposals for rectification.

Ss_25_20_14/605 Control samples

1. Purpose: Submit representative samples for approvals and establishment of quality.
2. Labelling: All submitted control samples should be clearly labelled.
3. Samples to be submitted: Control samples of products being submitted.
4. Fabricated panel: Area of cladding to include horizontal and vertical panel joint intersection, secondary support system and insulation. Internal and external corners.
5. Timing: During detailed design and to be kept on site until project completion. A set of powder coated samples will be retained in good condition for the duration of the guarantee period.

Ss_25_20_14/605 Control samples Type A

1. Purpose: Submit representative samples for approvals and establishment of quality.
2. Labelling: All submitted control samples should be clearly labelled.
3. Samples to be submitted: Control samples of products being submitted.
4. Fabricated panel: Area of cladding to include horizontal and vertical panel joint intersection, secondary support system and insulation. Internal and external corners.
5. Timing: During detailed design and to be kept on site until project completion. A set of powder coated samples will be retained in good condition for the duration of the guarantee period.

Ss_25_20_14/605 Control samples Type B

1. Purpose: Submit representative samples for approvals and establishment of quality.

2. Labelling: All submitted control samples should be clearly labelled.
3. Samples to be submitted: Control samples of products being submitted.
4. Fabricated panel: Area of cladding to include horizontal and vertical panel joint intersection, secondary support system and insulation. Internal and external corners.
5. Timing: During detailed design and to be kept on site until project completion. A set of powder coated samples will be retained in good condition for the duration of the guarantee period.

Ss_25_20_14/630 Locating fasteners for site-assembled insulating sandwich panels

1. Fastener locations: Refer to manufacturers' recommendations.

Ss_25_20_14/630 Locating fasteners for site-assembled insulating sandwich panels Type A

1. Fastener locations: Refer to manufacturers' recommendations.

Ss_25_20_14/630 Locating fasteners for site-assembled insulating sandwich panels Type B

1. Fastener locations: Refer to manufacturers' recommendations.

Ss_25_20_14/640 Structural movement joints

1. Joint type: Cover flashing fixed on one side over gap between panels.
2. Position: Coincident with structural movement joint.
3. Width of gap: Match structural movement joint requirements.
4. Criteria: Remain weathertight, not add to the fire load of the building and resist air loss.

Ss_25_20_14/640 Structural movement joints Type A

1. Joint type: Cover flashing fixed on one side over gap between panels.
2. Position: Coincident with structural movement joint.
3. Width of gap: Match structural movement joint requirements.
4. Criteria: Remain weathertight, not add to the fire load of the building and resist air loss.

Ss_25_20_14/640 Structural movement joints Type B

1. Joint type: Cover flashing fixed on one side over gap between panels.
2. Position: Coincident with structural movement joint.
3. Width of gap: Match structural movement joint requirements.
4. Criteria: Remain weathertight, not add to the fire load of the building and resist air loss.

Ss_25_60_30/605 Preliminary installation

1. Required samples
    1.1. Types: Panels, flashing, air sealing, weather sealing and fire stopping.
    1.2. Purpose: For use as an installation reference sample.
    1.3. Locations: Submit proposals.
    1.4. Features to be included: Respective junctions and changes in material.
    1.5. Timing: Construct during preliminary installation. Obtain approval of appearance before proceeding.

Ss_25_60_30/605 Preliminary installation Type A

1. Required samples
   1.1. Types: Panels, flashing, air sealing, weather sealing and fire stopping.
   1.2. Purpose: For use as an installation reference sample.
   1.3. Locations: Submit proposals.
   1.4. Features to be included: Respective junctions and changes in material.
   1.5. Timing: Construct during preliminary installation. Obtain approval of appearance before proceeding.

Ss_25_60_30/610 Fire stopping systems workmanship generally

1. Preparation: Remove loose dust and combustible materials.
2. Openings and gaps: Seal between building elements and services, to provide effective resistance to fire and the passage of smoke. Allow for capping sealants where required. Finish flush with surrounds.
3. Adjacent surfaces: Prevent overrun of filler, sealant or mortar on to finished surfaces.

Ss_25_60_30/610 Fire stopping systems workmanship generally Type A

1. Preparation: Remove loose dust and combustible materials.
2. Openings and gaps: Seal between building elements and services, to provide effective resistance to fire and the passage of smoke. Allow for capping sealants where required. Finish flush with surrounds.
3. Adjacent surfaces: Prevent overrun of filler, sealant or mortar on to finished surfaces.

Ss_25_60_30/685 Installing mineral wool flexible stopping

1. Packing: Compress mineral wool and fit into full depth of opening or gap. Pack until fully filled.

Ss_25_60_30/685 Installing mineral wool flexible stopping Type A

1. Packing: Compress mineral wool and fit into full depth of opening or gap. Pack until fully filled.

System completion

Ss_25_20_14/895 Verification of performance

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ss_25_20_14/895 Verification of performance Type A

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ss_25_20_14/895 Verification of performance Type B

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ss_25_60_30/820 Inspection of fire stopping systems

1. Notice for inspection (minimum): 4 working days.

Ss_25_60_30/820 Inspection of fire stopping systems Type A

1. Notice for inspection (minimum): 4 working days.

Ss_25_60_30/895 Verification of performance

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ss_25_60_30/895 Verification of performance Type A

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

Ω End of System

Ss_25_30_20_25
Doorset systems

Systems

Ss_25_30_20_25 Doorset systems Type A

1. Description: Doors to external envelope.
2. System performance: Ss_25_30_20/225 Weathertightness performance to BS 6375-1; Ss_25_30_20/230 Resistance to wind load; Ss_25_30_20/235 Air permeability; Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192; Ss_25_30_20/260 Doorset security performance; Ss_25_30_20/265 Inclusive design; Ss_25_30_20/218 Fire performance requirements to BS EN 13501
3. System manufacturer: Submit proposals.
4. Doorset
   - 4.1. Type: Pr_30_59_24_52 Metal doorsets Type B
   - 4.2. Seals or inserts
     - 4.2.1. Frame: Pr_35_90_33_22 Door and window weatherstrips and seals Type B
     - 4.2.2. Door: Pr_35_90_33_22 Door and window weatherstrips and seals Type B
5. Thresholds
   - 5.1. Base: Pr_35_90_31_33 Floor threshold strips Type B
   - 5.2. Weather or seal stripping: Required.
6. Hardware: Refer to door schedule for hardware requirements. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
7. Filler between frame and reveal: Pr_30_31_76_41 Intumescent foam fillers
8. Samples required: Ss_25_30_20/505 Prototypes or mock-ups
9. Execution: Ss_25_30_20/605 Installation control samples; Ss_25_30_20/610 Preconstruction survey; Ss_25_30_20/620 Priming and sealing; Ss_25_30_20/642 Installing external doorsets or frames; Ss_25_30_20/645 Installing fire resisting and smoke control doorsets, door assemblies or doors; Ss_25_30_20/655 Fixing hardware; Ss_25_30_20/675 Installation of emergency and panic exit devices; Ss_25_30_20/680 Frame sealant joints
10. System completion: Ss_25_30_20/810 Documentation relating to doors, door assemblies and doorsets; Ss_25_30_20/895 Verification of performance
11. System facility management: Ss_25_30_20/905 Fire door inspection and maintenance

Ss_25_30_20_25 Doorset systems Type B

1. Description: Internal doors fire rated steel
2. System performance: Ss_25_30_20/235 Air permeability; Ss_25_30_20/240 Acoustic performance; Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192 Type A; Ss_25_30_20/260 Doorset security performance; Ss_25_30_20/265 Inclusive design; Ss_25_30_20/290 Compliance with performance requirements; Ss_25_30_20/290 Compliance with performance requirements; Ss_25_30_20/218 Fire performance requirements to BS EN 13501 Type A
3. System manufacturer: Submit proposals.
4. Doorset
   - 4.1. Type: Pr_30_59_24_52 Metal doorsets Type A
   - 4.2. Glazing: Pr_30_59_97_94 Vision panels Type A
   - 4.3. Seals or inserts

4.3.1. Frame: Pr_35_90_33_22 Door and window weatherstrips and seals Type D

4.3.2. Door: Pr_35_90_33_22 Door and window weatherstrips and seals Type D

5. Thresholds
   5.1. Weather or seal stripping: Drop seals.
6. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
7. Filler between frame and reveal: Pr_30_31_76_41 Intumescent foam fillers
8. Samples required: Ss_25_30_20/305 Product samples
9. Execution: Ss_25_30_20/605 Installation control samples; Ss_25_30_20/610 Preconstruction survey; Ss_25_30_20/645 Installing fire resisting and smoke control doorsets, door assemblies or doors; Ss_25_30_20/655 Fixing hardware; Ss_25_30_20/675 Installation of emergency and panic exit devices; Ss_25_30_20/695 Protection of components
10. System completion: Ss_25_30_20/810 Documentation relating to doors, door assemblies and doorsets; Ss_25_30_20/895 Verification of performance
11. System facility management: Ss_25_30_20/905 Fire door inspection and maintenance

Ss_25_30_20_25 Doorset systems Type C

1. Description: Internal doors non-fire rated steel
2. System performance: Ss_25_30_20/235 Air permeability; Ss_25_30_20/240 Acoustic performance; Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192 Type A; Ss_25_30_20/260 Doorset security performance; Ss_25_30_20/265 Inclusive design; Ss_25_30_20/290 Compliance with performance requirements; Ss_25_30_20/218 Fire performance requirements to BS EN 13501 Type A
3. System manufacturer: Submit proposals.
4. Doorset
   4.1. Type: Pr_30_59_24_52 Metal doorsets Type C
   4.2. Glazing: Pr_30_59_97_94 Vision panels Type B
   4.3. Seals or inserts
      4.3.1. Frame: Pr_35_90_33_22 Door and window weatherstrips and seals Type A
      4.3.2. Door: Pr_35_90_33_22 Door and window weatherstrips and seals Type A
5. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
6. Filler between frame and reveal: Pr_30_31_76_41 Intumescent foam fillers
7. Samples required: Ss_25_30_20/305 Product samples
8. Execution: Ss_25_30_20/610 Preconstruction survey; Ss_25_30_20/655 Fixing hardware; Ss_25_30_20/675 Installation of emergency and panic exit devices; Ss_25_30_20/695 Protection of components
9. System completion: Ss_25_30_20/810 Documentation relating to doors, door assemblies and doorsets; Ss_25_30_20/895 Verification of performance

Ss_25_30_20_25 Doorset systems Type D

1. Description: Internal doors fire rated timber
2. System performance: Ss_25_30_20/235 Air permeability; Ss_25_30_20/240 Acoustic performance; Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192 Type A; Ss_25_30_20/260 Doorset security performance; Ss_25_30_20/265 Inclusive design; Ss_25_30_20/290 Compliance with performance requirements; Ss_25_30_20/218 Fire performance requirements to BS EN 13501
3. System manufacturer: Submit proposals.

4. Doorset
   4.1. Type: Pr_30_59_24_97 Wood doorsets Type A
   4.2. Glazing: Pr_30_59_97_94 Vision panels Type A
   4.3. Seals or inserts
      4.3.1. Frame: Pr_35_90_33_22 Door and window weatherstrips and seals Type C
      4.3.2. Door: Pr_35_90_33_22 Door and window weatherstrips and seals Type C
5. Thresholds
   5.1. Base: Pr_35_90_31_33 Floor threshold strips Type A
6. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
7. Filler between frame and reveal: Pr_30_31_76_41 Intumescent foam fillers
8. Trim: Pr_35_90_43_94 Wood mouldings and trims
9. Samples required: Ss_25_30_20/305 Product samples
10. Execution: Ss_25_30_20/610 Preconstruction survey; Ss_25_30_20/695 Protection of components; Ss_25_30_20/680 Frame sealant joints; Ss_25_30_20/655 Fixing hardware; Ss_25_30_20/645 Installing fire resisting and smoke control doorsets, door assemblies or doors; Ss_25_30_20/640 Fixing of wood frames; Ss_25_30_20/620 Priming and sealing; Ss_25_30_20/605 Installation control samples
11. System completion: Ss_25_30_20/810 Documentation relating to doors, door assemblies and doorsets; Ss_25_30_20/895 Verification of performance
12. System facility management: Ss_25_30_20/905 Fire door inspection and maintenance

Ss_25_30_20_25 Doorset systems Type E

1. Description: Internal doors non-fire rated timber
2. System performance: Ss_25_30_20/235 Air permeability; Ss_25_30_20/240 Acoustic performance; Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192 Type A; Ss_25_30_20/260 Doorset security performance; Ss_25_30_20/265 Inclusive design; Ss_25_30_20/290 Compliance with performance requirements
3. System manufacturer: Submit proposals.
4. Doorset
   4.1. Type: Pr_30_59_24_97 Wood doorsets
   4.2. Glazing: Pr_30_59_97_94 Vision panels Type B
   4.3. Seals or inserts
      4.3.1. Frame: Pr_35_90_33_22 Door and window weatherstrips and seals Type A
      4.3.2. Door: Pr_35_90_33_22 Door and window weatherstrips and seals Type A
5. Thresholds
   5.1. Base: Pr_35_90_31_33 Floor threshold strips Type A
6. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
7. Filler between frame and reveal: Pr_30_31_76_41 Intumescent foam fillers
8. Trim: Pr_35_90_43_94 Wood mouldings and trims
9. Samples required: Ss_25_30_20/305 Product samples
10. Execution: Ss_25_30_20/610 Preconstruction survey; Ss_25_30_20/620 Priming and sealing; Ss_25_30_20/640 Fixing of wood frames; Ss_25_30_20/655 Fixing hardware; Ss_25_30_20/675 Installation of emergency and panic exit devices; Ss_25_30_20/695 Protection of components

11. System completion: Ss_25_30_20/810 Documentation relating to doors, door assemblies and doorsets; Ss_25_30_20/895 Verification of performance

System performance

Ss_25_30_20/218 Fire performance requirements to BS EN 13501

1. Fire resistance
   1.1. Standard: To BS EN 1634-1; classification to BS EN 13501-2.
   1.2. Integrity: Refer to fire strategy.
2. Reaction to fire: To BS EN 13501-1, class B-s3, d2 or better.

Ss_25_30_20/218 Fire performance requirements to BS EN 13501 Type A

1. Fire resistance
   1.1. Standard: To BS EN 1634-1; classification to BS EN 13501-2.
   1.2. Integrity: Refer to fire strategy.
   1.3. Insulation: Refer to fire strategy.
   1.4. Radiation: Refer to fire strategy.
2. Reaction to fire: To BS EN 13501-1, class B-s3, d2 or better.

Ss_25_30_20/225 Weathertightness performance to BS 6375-1

1. Standard: BS 6375-1
2. Door performance: Fulfil classification parameters given in BS 6375-1 for weathertightness relating to specified UK exposure category.

Ss_25_30_20/230 Resistance to wind load

1. Resistance to wind load: To BS EN 12210, Class 4.

Ss_25_30_20/235 Air permeability

1. Air permeability: Refer to Mechanical Engineers requirements.

Ss_25_30_20/240 Acoustic performance

1. Sound insulation rating: Refer to the Acoustician's report.

Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192

1. Standard: To BS EN 1192.
2. Category of duty: Class 3.

Ss_25_30_20/250 Mechanical strength requirements to BS EN 1192 Type A

1. Standard: To BS EN 1192.
2. Category of duty: Class 2.

Ss_25_30_20/260 Doorset security performance

1. Risk assessment: Required to establish appropriate security measures and implications. To be cross-referenced with fire prevention, accessibility and egress measures. Submit for agreement.
2. Intruder resistance: Refer to Security Consultant's specification.
3. Conformity: Certification by accredited third party certification body. Type testing not permitted.

Ss_25_30_20/265 Inclusive design

1. Design standards: Building Regulations – England Approved Document M1 and M2. BS 8300-2.
2. Design considerations
   2.1. Occupancy: As Access Statement.
   2.2. Planning Permission use class: B8.
   2.3. Additional requirements: As Access Statement.
3. Risk assessment
   3.1. Scope: Required to establish appropriate measures and implications. To be cross-referenced with fire prevention, security, emergency egress and safety in use measures. Submit for agreement.
4. Inclusive design: Complete design in accordance with recommendations in Building Regulations Eng Approved Document M1 and M2 or Wales AD M and submit proposals. Complete design in accordance with recommendations in BS 8300-2 and submit proposals.
5. Best practice design
   5.1. Visual contrast: Operating controls, LRV 20 points contrast.
   5.2. Door furniture
      5.2.1. Operability: Knobs not permitted. Operable with clenched fist.
      5.2.2. Projection: 70 mm maximum.
      5.2.3. Maximum torque: Oval cross-section handle: 8 N m to depress and 5.5 N to lift. Rectangular cross-section handle: 4 N m to depress and lift.

Ss_25_30_20/290 Compliance with performance requirements

1. Method
   1.1. Laboratory project testing : *For acoustic performance.*
   For security performance.
   1.2. Previous test results: *For acoustic performance.*
   For security performance.
2. Testing authority: UKAS-accredited.
3. Submissions
   3.1. Format: Test results and certification.
   Declaration of Performance.
   3.2. Timing: Before commencing installation.

Products

Pr_30_31_76_41 Intumescent foam fillers

1. Manufacturer: Submit proposals.
2. Colour: Submit options for selection.

Pr_30_59_24_52 Metal doorsets Type A

1. Description: Internal fire rated steel doors.
2. Manufacturer: Submit proposals.
3. Standard: Internal fire rated steel doorset to BS 6510 and third party accredited.
4. Third party accreditation: Third party accredited by UKAS approved/ recognized body.
5. Configuration: Double leaf, single action. Leaf and part leaf, single action. Single leaf, single action.
6. Doorset size: Refer to schedule, drawings and model.

7. Performance
    7.1. Fire performance
        7.1.1. Fire integrity: To BS EN 1634-1, refer to fire strategy.
        7.1.2. Fire insulation: To BS EN 1634-1, refer to fire strategy.
        7.1.3. Radiation: To BS EN 1634-1, refer to fire strategy.
        7.1.4. Smoke control: To BS EN 1634-1, refer to fire strategy.
        7.1.5. Reaction to fire: To BS EN 13501-1, class B-s3, d2 or better.
    7.2. Acoustic performance: Refer to Acoustician's report.
    7.3. Strength and durability: To BS EN 1192, Class 3.
    7.4. Thermal: To prevent risk of condensation.
    7.5. Intruder resistance
        7.5.1. Minimum requirement: Refer to Security Consultant's specification.
8. Frame
    8.1. Material: Submit proposals.
    8.2. Perimeter seals or inserts: Fire and smoke seal.
    8.3. Finish
        8.3.1. Coating: Submit options for selection.
        8.3.2. Texture: Submit options for selection.
        8.3.3. Colour: Submit options for selection.
9. Door leaf
    9.1. Thickness: Submit options for selection.
    9.2. Core: Submit options for selection.
    9.3. Material: Submit options for selection.
    9.4. Lippings: Submit options for selection.
    9.5. Perimeter seals: Fire and smoke.
    9.6. Glazing
        9.6.1. Type: In accordance with BS 6262-4, clear fire-resisting safety glazing.
10. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
11. Architraves
    11.1. Material: Metal.
    11.2. Finish: Submit options for selection.
    11.3. Colour: Submit options for selection.
12. Execution: Pr_30_59_23/630 Installing hardware

Pr_30_59_24_52 Metal doorsets Type B

1. Description: Metal doorsets within external wall.
2. Manufacturer: Submit proposals.
3. Standard: External fire rated doorset to BS 4873 and CE marked in accordance with BS EN 14351-1 and BS EN 16034.
4. Third party accreditation: Third party accredited by UKAS approved / recognised body.
5. Configuration: Single leaf, single action. Double leaf, single action.
6. Doorset size: Refer to door schedule, drawings and model.
7. Performance

7.1. Fire performance
7.1.1. Fire integrity: To BS 476-22, 30 minutes.
7.1.2. Reaction to fire: To BS EN 13501-1, class B-s3, d2 or better.
7.2. Acoustic performance: Refer to the Acoustician's report.
7.3. Strength and durability: To BS EN 1192, Class 3.
7.4. Thermal: Refer to B&W requirements
7.5. Intruder resistance
7.5.1. Minimum requirement: Refer to the Security Consultants specification.
7.5.2. Conformity: Certification by accredited third party certification body. Type testing not permitted.

8. Frame
8.1. Material: Submit proposals.
8.2. Threshold: Required.
8.3. Finish
8.3.1. Coating: Submit options for selection.
8.3.2. Texture: Matt.
8.3.3. Colour: Submit options for selection.

9. Door leaf
9.1. Thickness: Submit proposals.
9.2. Core: Manufacturer's standard. Must limit risk of condensation.
9.3. Material: Steel.
9.4. Lippings: Submit options for selection.
9.5. Perimeter seals: Weather.
9.6. Beading

10. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent

11. Architraves
11.1. Material: Metal.
11.2. Finish: Submit options for selection.
11.3. Colour: Submit options for selection.

12. Accessories: Fire signage discs to doors.
13. Execution: Pr_30_59_23/630 Installing hardware

Pr_30_59_24_52 Metal doorsets Type C

1. Description: Internal metal non-fire rated doors.
2. Manufacturer: Submit proposals.
3. Standard: Internal non-fire rated steel doorset to BS 6510 and third party accredited.
4. Third party accreditation: Third party accredited by UKAS approved/ recognised body.
5. Configuration: Double leaf, single action. Leaf and part leaf, single action. Single leaf, single action.
6. Doorset size: Refer to schedule, drawings and model.
7. Performance
7.1. Acoustic performance: Refer to Acoustician's report.
7.2. Strength and durability: To BS EN 1192, Class 3.

7.3. Thermal: To avoid condensation.
7.4. Intruder resistance
7.4.1. Minimum requirement: To Security Consultant's specification.
8. Frame
8.1. Material: Metal
8.2. Threshold: Drop seals.
8.3. Perimeter seals or inserts: Air seals.
8.4. Finish
8.4.1. Coating: Submit options for selection.
8.4.2. Texture: Submit options for selection.
8.4.3. Colour: Submit options for selection.
9. Door leaf
9.1. Core: Submit options for selection.
9.2. Material: Metal.
9.3. Lippings: Submit options for selection.
9.4. Perimeter seals: Air seals.
9.5. Glazing
9.5.1. Type: In accordance with BS 6262-4, clear single safety glazing.
10. Hardware: Refer to door schedule. Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
11. Architraves
11.1. Material: Metal.
11.2. Finish: Submit options for selection.
11.3. Colour: Submit options for selection.
12. Execution: Pr_30_59_23/630 Installing hardware

Pr_30_59_24_97 Wood doorsets

1. Manufacturer: Submit proposals.
2. Third party accreditation: Third party accredited by UKAS approved/ recognised body.
3. Standard: Internal non-fire rated doorset third party accredited.
4. Wood in joinery standard: To BS EN 942.
5. Configuration: Double leaf, single action. Leaf and part leaf, single action. Single leaf, single action.
6. Doorset size: Refer to drawings, door schedule and model.
7. Performance
7.1. Acoustic performance: Refer to Acoustician's report.
7.2. Strength and durability: To BS EN 1192, Class 2.
7.3. Intruder resistance
7.3.1. Minimum requirement: Refer to Security Consultant's specification.
7.3.2. Conformity: Certification by accredited third party certification body. Type testing not permitted.
7.4. Accessibility: In accordance with BS 8300-2 and the Approved Document M Vol.2
8. Frame
8.1. Material: Submit proposals.

8.2. Species: Submit options for selection.
8.3. Appearance class: Submit options for selection.
8.4. Perimeter seals or inserts: Acoustic seal as required.
8.5. Finish: Submit options for selection.
8.6. Colour: Submit options for selection.
8.7. External: Submit options for selection.
8.8. Internal: Submit options for selection.

9. Door leaf
   9.1. Thickness: Submit options for selection.
   9.2. Core: Submit options for selection.
   9.3. Appearance class: Submit options for selection.
   9.4. Facings: Submit options for selection.
   9.5. Species: Submit options for selection.
   9.6. Cut: Submit options for selection.
   9.7. Lippings: Submit options for selection.
   9.8. Perimeter seals: Acoustic as required.
   9.9. Finish: Submit options for selection.
   9.10. Colour
      9.10.1. External: Submit options for selection.
      9.10.2. Internal: Submit options for selection.
   9.11. Glazing
      9.11.1. Type: Clear single safety glazing in accordance with BS 6262-4.
10. Architraves
   10.1. Material: Submit options for selection.
   10.2. Wood appearance class: Submit options for selection.
   10.3. Finish: Submit options for selection.
   10.4. Colour
      10.4.1. External: Submit options for selection.
      10.4.2. Internal: Submit options for selection.
11. Execution: Pr_30_59_23/630 Installing hardware; Pr_30_59_23/605 Moisture content of wood products

Pr_30_59_24_97 Wood doorsets Type A

1. Description:

   Fire rated timber doors.
2. Manufacturer: Submit proposals.
3. Third party accreditation: Third party accredited by UKAS approved/ recognised body.
4. Standard: Internal fire rated doorset to BS 8214 and third party accredited.
5. Wood in joinery standard: To BS EN 942.
6. Configuration: Double leaf, single action. Leaf and part leaf, single action. Single leaf, single action.
7. Doorset size: Refer to door schedule, drawings and model.
8. Performance
   8.1. Fire performance

8.1.1. Fire integrity: To BS EN 1634-1, refer to fire strategy.
8.1.2. Fire insulation: To BS EN 1634-1, refer to fire strategy.
8.1.3. Radiation: Refer to fire strategy.
8.1.4. Smoke control: To BS EN 13501-2, class Sa.
8.1.5. Reaction to fire: To BS EN 13501-1, class B-s3, d2 or better.
8.2. Acoustic performance: Refer to Acoustician's report.
8.3. Strength and durability: To BS EN 1192, Class 3.
8.4. Intruder resistance
8.4.1. Minimum requirement: Refer to Security Consultant's specification.
8.4.2. Conformity: Certification by accredited third party certification body. Type testing not permitted.
8.5. Accessibility: In accordance with the Approved Document M Vol.2 and BS 8300-2.

9. Frame
9.1. Material: Submit proposals.
9.2. Species: Submit options for selection.
9.3. Appearance class: Submit options for selection.
9.4. Perimeter seals or inserts: Fire and smoke seal.
9.5. Finish: Submit options for selection.
9.6. Colour: Submit options for selection.
9.7. External: Submit options for selection.
9.8. Internal: Submit options for selection.

10. Door leaf
10.1. Thickness: Submit options for selection.
10.2. Core: Submit options for selection.
10.3. Appearance class: Submit options for selection.
10.4. Facings: Submit options for selection.
10.5. Species: Submit options for selection.
10.6. Cut: Submit options for selection.
10.7. Lippings: Submit options for selection.
10.8. Perimeter seals: Fire and smoke.
10.9. Finish: Submit options for selection.
10.10. Colour
10.10.1. External: Submit options for selection.
10.10.2. Internal: Submit options for selection.
10.11. Glazing
10.11.1. Type: Clear fire-resisting safety glazing in accordance with BS 6262-4.

11. Planted stops
11.1. Wood species: Submit options for selection.
11.2. Appearance class: Submit options for selection.
11.3. Finish: Submit options for selection.
11.4. Colour: Submit options for selection.

12. Hardware: Refer to door schedule.

13. Architraves
13.1. Material: Submit options for selection.

13.2. Wood appearance class: Submit options for selection.
13.3. Finish: Submit options for selection.
13.4. Colour
13.4.1. External: Submit options for selection.
13.4.2. Internal: Submit options for selection.
14. Preservative treatment: Submit options for selection.
15. Execution: Pr_30_59_23/605 Moisture content of wood products; Pr_30_59_23/630 Installing hardware

Pr_30_59_97_94 Vision panels Type A

1. Description: Vision panels to internal fire rated doors as identified on the door schedule.
2. Manufacturer: Submit proposals.
3. Third party certification: Third party accredited by UKAS approved/ recognised body.
4. Resistance to fire: As fire strategy.
5. Frame
5.1. Material: Submit proposals.
5.2. Finish: Submit options for selection.
6. Glazing
6.1. Type: In accordance with BS 6262-4, clear fire resisting safety glazing.
6.2. Shape: As drawings and model.
6.3. Size: As drawings and model.

Pr_30_59_97_94 Vision panels Type B

1. Description: Vision panels to internal non-fire rated doors as identified on the door schedule.
2. Manufacturer: Submit proposals.
3. Third party certification: Third party accredited by UKAS approved/ recognised body.
4. Frame
4.1. Material: Submit options for selection.
4.2. Finish: Submit options for selection.
5. Glazing
5.1. Type: In accordance with BS 6262-4, clear single safety glazing.
5.2. Shape: Refer to drawings and model.
5.3. Size: Refer to drawings and model.

Pr_35_90_31_33 Floor threshold strips Type A

1. Description: Threshold strip for finish transition at door thresholds.
2. Manufacturer: Submit proposals.
3. Profile: Submit options for selection.
4. Material: Metal.
5. Finish: Submit options for selection.
6. Colour: Submit options for selection.
7. Width: Submit options for selection.
8. Predrilled: Centred.
9. Matching fasteners: Required.

Pr_35_90_31_33 Floor threshold strips Type B

1. Description: Threshold strip for external doors thresholds.
2. Manufacturer: Submit proposals.
3. Profile: Submit options for selection.
4. Material: Submit options for selection.
5. Finish: Submit options for selection.
6. Colour: Submit options for selection.
7. Width: Refer to door schedule.
8. Thickness: Submit options for selection.
9. Predrilled: Centred.
10. Matching fasteners: Required.

Pr_35_90_33_22 Door and window weatherstrips and seals Type A

1. Description: Internal non fire rated doors.
2. Manufacturer: Submit proposals.
3. Standard: To BS EN 12365-1.
4. Functions: Acoustic seals. Draught seals.
5. Classification grades (minimum)
    5.1. Category of use: Type G.
6. Seal type: Submit proposals.
7. Size: To suit doors.
8. Colour: Submit options for selection.

Pr_35_90_33_22 Door and window weatherstrips and seals Type B

1. Description: External metal doors.
2. Manufacturer: Submit proposals.
3. Standard: To BS EN 12365-1.
4. Third party certification: Required.
5. Functions: Weather seals. Draught seals.
6. Seal type: Submit options for selection.
7. Size: To suit doors.
8. Materials
    8.1. Seals: Submit options for selection.
9. Colour: Submit options for selection.
10. Execution: Pr_35_90_33/610 Installing weatherstripping or seals

Pr_35_90_33_22 Door and window weatherstrips and seals Type C

1. Description:

    Fire rated timber doors.
2. Manufacturer: Submit proposals.
3. Standard: To BS EN 12365-1.
4. Functions: Fire and smoke seals.
5. Seal type: Submit proposals.
6. Size: To suit doors.

7. Colour: Submit options for selection.
8. Execution: Pr_35_90_33/610 Installing weatherstripping or seals

Pr_35_90_33_22 Door and window weatherstrips and seals Type D

1. Description: Steel fire doors
2. Manufacturer: Submit proposals.
3. Standard: To BS EN 12365-1.
4. Functions: Fire and smoke seals.
5. Seal type: Submit options for selection.
6. Size: To suit doors.
7. Colour: Submit options for selection.
8. Execution: Pr_35_90_33/610 Installing weatherstripping or seals

Pr_35_90_43_94 Wood mouldings and trims

1. Manufacturer: Submit proposals.
2. Standard: To BS 1186-3.
3. Species: Submit options for selection.
4. Appearance class: Submit options for selection.
5. Profile: Submit options for selection.
6. Size: Submit options for selection.
7. Moisture content on delivery: 13–17%.
8. Execution: Pr_35_90_43/610 Finished wall and ceiling trim; Pr_35_90_43/606 Installing wood architraves, skirtings, mouldings and trims

Ss_25_30_20/305 Product samples

1. Submittals: Door leaf, frame, architrave and threshold.
2. Purpose: For use as a reference sample.
3. Labelling: Clearly label all submitted samples.
4. Timing: Before ordering for project.

Ss_25_30_20/505 Prototypes or mock-ups

1. Requirement: Single and double external doors.
2. Purpose: For use as a reference sample.
   To demonstrate compliance with performance requirements.
3. Timing: Before ordering for project.

Execution

Pr_30_59_23/605 Moisture content of wood products

1. Standard: To BS EN 942.
2. Moisture content on delivery: 13–19% for external joinery.

Pr_30_59_23/630 Installing hardware

1. Standard: In accordance with door, door assembly or doorset and hardware manufacturers' recommendations.
2. Submissions: Evidence of compliance with certification.

Pr_35_90_33/610 Installing weatherstripping or seals

1. Fixing method: Appropriate for type.
2. Continuity: Form weatherstripping or seals in a complete frame with sealed joints.

Pr_35_90_43/606 Installing wood architraves, skirtings, mouldings and trims

1. Lengths: Unjointed between angles or ends of runs.
2. Running joints: Submit proposals for location and method of jointing where unavoidable.
3. Angle joints: Mitred.
4. Conditioning regime: During delivery, storage, fixing and to handover maintain conditions to suit specified moisture contents of timber components.
5. Environmental conditions: Control ambient temperature and humidity conditions to maintain moisture content at average level specified in BS EN 942, Table B.1 for the relevant service condition until completion.
6. Fixing
   - 6.1. General: Fix securely.
   - 6.2. Secret fixing: Secret nailed, first and last rows surface nailed.
   - 6.3. Surface fixing: Face nailed.
   - 6.4. Exposed nail heads: Neatly punch below surface.

Pr_35_90_43/610 Finished wall and ceiling trim

1. Exposed fastener heads: Punch or set below surface. Fill with stopping to match wood.
2. Finish prior to decoration: Sand to give a clean, smooth and flush surface free from score marks.
3. Finished work: Free of dirt, stains and damage.

Ss_25_30_20/605 Installation control samples

1. Samples: Doorset.
2. Purpose: For use as an installation reference sample.
3. Locations: Submit proposals.
4. Features to be included: Hardware.
5. Timing: Construct during preliminary installation in an approved location. Obtain approval of appearance before proceeding.

Ss_25_30_20/610 Preconstruction survey

1. Procedure: Before starting work on designated items, take the site dimensions, record them on shop drawings and use them to ensure accurate fabrication.
2. Primary support structure: Survey sufficiently to verify that the required accuracy and security of erection can be achieved.
3. Timing: Before fabrication.

Ss_25_30_20/620 Priming and sealing

1. Application: Prepare and prime.
2. Wood surfaces inaccessible after installation: Prime or seal before fixing components.

Ss_25_30_20/640 Fixing of wood frames

1. Spacing of fixings (frames not predrilled) (maximum): 150 mm from ends of each jamb and at 600 mm centres.

Ss_25_30_20/642 Installing external doorsets or frames

1. Standard: In accordance with BS 8213-4.
2. Fixings and fasteners: Doors and, or door frames to be predrilled with matching pellets.

Ss_25_30_20/645 Installing fire resisting and smoke control doorsets, door assemblies or doors

1. Standard: In accordance with BS EN 16034.
2. Installer: A firm currently registered under a third party accredited fire door installer scheme.
3. Installation: In accordance with instructions supplied with the product conformity certificate, test report or engineering assessment.
4. Gaps between frames and supporting construction: Fill as necessary in accordance with requirements for certification, and/ or door and doorset manufacturer's instructions.
5. Labelling: To include manufacturer's name, fire rating and traceable serial number.

Ss_25_30_20/655 Fixing hardware

1. Holes for components: No larger than required for satisfactory fit and operation.
2. Adjacent surfaces: Do not damage.
3. Integrity of the assembly, as established by testing: Do not compromise.
4. Cutting: Cut accurately.
5. Clearances (maximum): 8 mm, unless protected by intumescent paste or similar.
6. Hinges
    - 6.1. Primary hinge positions: With centre lines 250 mm from top and bottom of door leaf.
    - 6.2. Third hinge position: On centre line of door leaf. With centre line 250 mm below centre line of top hinge.

Ss_25_30_20/675 Installation of emergency and panic exit devices

1. Installation: Emergency exit devices in accordance with BS EN 179. Panic exit devices in accordance with BS EN 1125.

Ss_25_30_20/680 Frame sealant joints

1. Application: Prepare joints. Form triangular fillets finished to a flat or slightly convex profile.

Ss_25_30_20/695 Protection of components

1. General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry, floored and covered storage.
2. Stored components: Stack on level bearers, separate with spacers to prevent damage by and to projecting hardware, beads, etc.

System completion

Ss_25_30_20/810 Documentation relating to doors, door assemblies and doorsets

1. Fire safety information: Location of every fire door in the building, the fire door certificate relevant to the installed door, fire safety strategy, maintenance information for each component, frequency of inspection and maintenance depending on expected usage of the door.
2. Fire performance evidence: Provide third party certification of product conformity with the specified fire performance for each door or doorset supplied. Include identifier schedule or similar to allow individual doors to be located.

3. Smoke performance: Provide third party certification of product conformity with the specified smoke performance for each door or doorset supplied. Include identifier schedule or similar to allow individual doors to be located. Test evidence must be in the name of the door or doorset manufacturer.
4. Acoustic performance evidence: Provide third party certification of product conformity for specified acoustic performance for sound attenuating door or doorset supplied.
5. Submittals
   5.1. Manufacturer's operation and maintenance instructions for the following products: All products used throughout this system.
      - Product description.
      - Date of purchase.
      - Performance characteristics.
      - Application (suitability for use).
      - Method of operation and control.
      - Cleaning and maintenance requirements.
   5.2. Record layout drawings indicating: General arrangement drawings showing the location of doors, shutters or hatches. Drawings may be cross-referenced to schedule.
   5.3. Drawing and schedule format: Electronic.

Ss_25_30_20/895 Verification of performance

1. Requirements: Check completed system and provide assurance of compliance with specified performance.
2. Submissions
   2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
   2.2. Timing: At completion of installation for project completion.

System facility management

Ss_25_30_20/905 Fire door inspection and maintenance

1. Requirements: Door identification number, Door location, Fire or fire and smoke rating, Installation date, Name of installer.
2. Frequency of inspection: All parts of a fire door assembly and doorset should be inspected by a competent person. As determined by the Regulatory Reform Fire Safety Order 2005.
   Doors in buildings with a heavy use may need to be checked more frequently.

Ω End of System

Ss_25_30_20_76
Sectional overhead doorset systems

Systems

Ss_25_30_20_76 Sectional overhead doorset systems

1. Description: External overhead sectional door systems.
2. System performance:
    - EN13241-1 for sectional doors.
    - Wind Resistance to EN 12424: Class 3
    - Waterproofness to EN12425: Class 3
3. System manufacturer: Hörmann https://www.hormann.com (or similar approved)
4. System reference: Hormann SPU F42. Series 50/60
5. Certification: Third party accredited by UKAS approved/ recognised body.
6. Products: Pr_30_59_24_75 Sectional overhead doorsets
7. Execution: Coordinate with services and loading bay equipment.

Products

Pr_30_59_24_75 Sectional overhead doorsets

1. Description: External sectional doors.
2. Manufacturer: Hörmann https://www.hormann.com (or similar approved)
3. Third party accreditation: Third party accredited by UKAS approved/ recognised body.
4. Grade: External. Thermally insulated.
5. Arrangement
    5.1. Type: Vertical sectional folding/ stacking.
    5.2. Track system: Heavy gauge cold rolled galvanized steel.
6. Door panels
    6.1. Type: Lightweight aluminium sandwich panels.
    6.2. Finish: Submit options for selection.
    6.3. Colour: Submit options for selection.
7. U-value: (Minimum): 1.5 W/(m^2·K)
8. Operation
    8.1. Activation: Electrical operation. Control options include constant pressure button, key switch and remote control (radio or loop detection). Manual operation by chain hoist for emergency.

    Door and ironmongery contractor shall provide all the required locks as per the architectural specifications and security equipment drawings by Control Risks. Lock types for each door have been show on control risks drawings to identify locking intent
    8.2. Control: Submit options for selection.
9. Accessories: Vision panels. Electrical wiring to Client-supplied isolator. Refer to Security Consultant's specification for any additional performance requirements.
    · Safety Data according to EN13241-1
    · Finger Trap protection on inside and outside
    · Side Trap Guard - side frame closed from top to bottom
    · Spring Break Safety Device - stops the spring shaft if a spring breaks and holds door in this
    · position.
    · Safety Catch - for protection in case a cable or spring breaks
    · Intermediate compressible weather seal between all individual door panels

- Precision guide rollers within enclosed side frames designed for long life
- Automatic Anti-burglary device to be electro-mechanically interlocked to motor assembly to prevent operation of door once switch is activated
- Pushbutton controls to be provided at low level and emergency manual operation via a hand chain connected and disconnected at low level.
- Fusible link to fire alarm.
- The roller door motor side needs to be confirmed, to ensure the chains do not hang down and impede on the card/roller door controls.
- Dock light which needs to be coordinated with the chains, and the switch for the light.
- Card readers and BGUs 'Security Low Voltage' (SLV) devices

10. Execution: Pr_30_59_23/630 Installing hardware Type A

Execution

Pr_30_59_23/630 Installing hardware Type A

1. Standard: In accordance with door, door assembly or doorset and hardware manufacturers' recommendations.
2. Submissions: Evidence of compliance with certification.

Ω End of System