



INFORMATION PACK

APPENDIX 3 TO ITT
CONNOLLY DRY CANTEEN,
DEFENCE FORCES TRAINING CENTRE,
CURRAGH CAMP,
CO. KILDARE
FOR
THE MINISTER FOR DEFENCE

CONTENTS

1. PSCS Collateral Agreement Pro-forma
2. Rates of Pay and Conditions of Employment Certificate
3. Preliminary Safety and Health Plan
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Appointment of Project Supervisor

(PW-CF6)

THIS AGREEMENT is made on BETWEEN

1. *The Client*

Whose principal office is at

and

2. *The Project Supervisor*

*Whose registered office is
at*

BACKGROUND

- A. By a contract (the **Contract**) made on or about ¹, the Client, as employer, has appointed ² as contractor (the **Contractor**) for

Name of Contract

(the **Works**).

- B. This Agreement is collateral to the Contract.
- C. Terms defined in the Contract have the same meaning in this Agreement. The terms **competent person** and **relevant statutory provisions** are construed according to section 2 of the Safety, Health and Welfare at Work Act 2005 and any amendment to it.

IT IS AGREED AS FOLLOWS:

1. The Client appoints the Project Supervisor as project supervisor for the construction stage according to the Safety, Health and Welfare at Work (Construction) Regulations 2013 and any amendment to them (the **Construction Regulations**) for the project comprising
the Works
 and ³
(the **Project**).
2. The Project Supervisor's appointment starts on the date of this Agreement and continues for as long as, under the Construction Regulations, the Client is required to have a project supervisor for the construction stage for the Project, unless the appointment is terminated earlier.
3. The Project Supervisor accepts the appointment.
4. The Project Supervisor shall perform all of its duties under the Construction Regulations as project supervisor for the construction stage for the Project.
5. The Project Supervisor represents and warrants to the Client that the Project Supervisor is and will continue to be a competent person to carry out its duties under this Agreement and the Construction Regulations and has allocated and will allocate sufficient resources to enable itself to comply with the requirements and prohibitions imposed on the Project Supervisor by this Agreement and under the relevant statutory provisions.
6. The Project Supervisor represents and warrants to the Client that the time allowed by the Contract for the completion of the Works is appropriate and sufficient to enable the Project Supervisor to

¹ Date of Tender acceptance

² Insert "the Project Supervisor" or the name of the Contractor, as appropriate.

³ Specify any additional scope for which this Project Supervisor is to be appointed – for example, a process installation.

- perform its duties under this Agreement and the Construction Regulations.
7. The Project Supervisor represents and warrants to the Client that the information provided by the Client to the Project Supervisor about the state or condition of the Site (as defined in the Contract) and any premises on it is appropriate and sufficient to enable the Project Supervisor to perform its duties under this Agreement and the Construction Regulations.
 8. The Project Supervisor shall ensure that it is insured by insurances in the same terms as the insurances the Contractor is required to have under clause 10.3 of the Conditions of the Contract, and that those insurances comply with all the requirements of the Contract, and are kept in force for the same period as required by the Contract, and include cover for death or injury resulting from the Project Supervisor's performance or non-performance of its duties under this Agreement and the Construction Regulations.
 9. Payment for the Project Supervisor's service is provided for under the Contract. Accordingly, the Client is not liable under this Agreement for the Project Supervisor's fees or expenses.
 10. If the Project Supervisor breaches its obligations or warranties under this Agreement, or if the Contractor's duty to complete the Works is terminated under the Contract, the Client may terminate the Project Supervisor's appointment under this Agreement.
 11. Without limiting its obligations under the Construction Regulations, the Project Supervisor shall give the Client all documents it prepares in the course of and for the purpose of performing its duties under this Agreement (**Project Supervisor's Documents**). If the Project Supervisor's appointment under this Agreement terminates, the Project Supervisor shall give all Project Supervisor's Documents to the Client immediately. Ownership of and copyright in the Project Supervisor's Documents shall become the Client's when the Project Supervisor delivers them to the Client, or the appointment is terminated, whichever is earlier. The Project Supervisor shall indemnify the Client against any liability resulting from the use or copying of the Project Supervisor's Documents infringing the property (including intellectual property) rights of any person.
 12. This Agreement is governed by and construed according to Irish law. The parties submit to the jurisdiction of the Irish courts in relation to all matters concerning it.

Given under the Client's seal

Affix Client's seal

*Signatures of persons authorised
to authenticate the seal*

OR

Signed on behalf of the Client

Signature of authorised person

In the presence of

Name of witness

Signature of witness

Witness's occupation

Witness's address

Given⁴ under the Project Supervisor's common seal

Affix Project Supervisor's common seal

Signatures of persons authorised to authenticate the seal

OR

Signed and delivered as a Deed by

Name of attorney

Signature of attorney

As lawful attorney of the Project Supervisor under a power of attorney dated

In the presence of

Name of witness

Signature of witness

Witness's occupation

Witness's address

OR

Signed on behalf of

Name of the Project Supervisor

Signature of authorised person

In the presence of

Name of witness

Signature of witness

Witness's occupation

Witness's address

⁴ If the Project Supervisor is not incorporated in Ireland, execution will be in accordance with the law of its jurisdiction of incorporation for execution in Ireland.

OR (if the Project Supervisor is an individual)

Signed and delivered as a Deed by

Name of Project Supervisor

Signature of Project Supervisor

In the presence of

Signature of witness

Name of witness

Witness's occupation

Witness's address

OR

Signed by

Name of Project Supervisor

Signature of Project Supervisor

In the presence of

Name of witness

Signature of witness

Witness's occupation

Witness's address

1. RATES OF PAY AND CONDITIONS OF EMPLOYMENT CERTIFICATE

For use during the course of the Contract

To:	The Employer:	Minister for Defence
	Address of Employer:	Directorate of Engineering, McKee Barracks, Blackhorse Avenue, Dublin 7.
	For the attention of: ⁵	Lt. Col Emmet Keeley
From:	The Contractor's Representative:	
Regarding:	The Contract:	Connolly Dry Canteen
Date:		

Period of interim statement:	From:	
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A Dhaoine Uaisle

We refer to the above Contract.

Terms defined in the Conditions of the Contract have the same meaning in this certificate.

The Contractor certifies that, in respect of the work to which the interim statement referred to above relates, clause 7 of the Contract has been observed by the Contractor and the employers of all work persons on the Site. This certification includes, but is not limited to, the following:

- the rates of pay and the conditions of employment (including in relation to pension contributions) of each work person comply with all applicable statutory provisions, and those rates and conditions have been no less favourable than those for the relevant category of work person in any employment agreements registered under the Industrial Relations Acts 1946 to 2004.
- all wages and other money due to each work person have been paid in accordance with the Payment of Wages Act 1991 and have not been more than 1 month in arrears or unpaid
- payments due to be paid on behalf of each work person (including pension contributions, where applicable) have been paid.
- all pension contributions and other amounts due to be paid on behalf of each work person, have been paid
- all deductions from payments to work persons required by law have been made and paid on, as required by Law
- in relation to the employment of work persons on the Site, the Safety, Health and Welfare at Work Act 2005 and all employment law including the Employment Equality Act 1998, the Industrial Relations Acts 1946 to 2004, the National Minimum Wage Act 2000, regulations, codes of practices, legally binding determinations of the Labour Court and registered employment agreements under those Laws have been observed.

⁵ Insert name of contact person identified in tender document
Background Information

2. PRELIMINARY SAFETY AND HEALTH PLAN AT DESIGN STAGE

1. Name of client

Employer: Minister for Defence

Employer's Representative: C/O Property Management Branch,
Department of Defence,
Station Road,
Newbridge,
Co. Kildare

Name Of Project Supervisors

Safety - Design Process and Construction Stages

Project Supervisor Design Process Comdt Shane Phelan

Health And Safety Coordinator – Design Stage

Project Supervisor Construction Stage Contractor appointed to carry out the Works

2. Nature of construction work to be carried out:

This project consists of refurbishment of Connolly Dry Canteen, DFTC.

Location: Defence Forces Training Centre, Curragh Camp, Co. Kildare.

3. GENERAL DESCRIPTION OF THE PROJECT

3.1 GENERAL

The works are located at Connolly Dry Canteen, DFTC, Curragh, Co. Kildare. Please refer to the mechanical & electrical drawings in accordance with this Specification. The Contractor shall take adequate precautions to protect the building during the works. Precautions shall be agreed with the Employer Representative prior to the commencement of the project. Any damage caused to the building shall be repaired immediately at the Contractor's expense.

Where disruption to the use of other buildings in the vicinity of the new building is unavoidable the Contractor shall inform the Employer Representative not later than two (2) working days prior to the commencement of that work and provide a detailed statement of extent and the program for the works. The Contractor shall liaise with the Liaison Officer to ensure co-ordination between construction activities and those of other workers and personnel in the Barracks area.

The Contractor will be deemed to have examined the site to ascertain the access/egress to the site, a compound location, existing services and ground conditions and to have included in the Contract Sum for all factors affecting the work. Claims for Delay or Compensation Events arising from the lack of knowledge of site conditions will not be approved.

3.2 ELECTRICAL INSTALLATION

The Contractor shall supply an ETCI Completion Certificate on completion of the works signed by a member company of RECI. Power distribution systems installed for the express purpose of providing temporary power for construction works shall be subject to the same standards of workmanship as permanent installations except where otherwise allowed for in the Contract Documents or authorised by the Employer's Representative (ER).

3.3 DESCRIPTION OF WORKS

The Contractor will supply and install all materials, equipment and systems necessary for a complete and operational facility as specified herein. All works shall be executed in strict accordance with the referenced drawings and applicable Irish/European standards.

3.4 LIGHTING INSTALLATION:

- a. The contractor will disconnect and remove all existing lighting infrastructure in the Plunkett Mess Conference Room.
- b. The Contractor will supply and install an internal lighting system in the Plunkett Mess Conference Room including general lighting, emergency lighting and PIR-controlled fixtures, all designed and installed to meet the requirements of I.S. 10101:2020 and I.S. 3217:2013 for emergency lighting of premises.
- c. The Contractor will supply and install new lighting in the Conference Room: Southgate Lighting Ltd. Cloud 1200mm 17040Lm LED Wire Suspended 300mA and external spot lighting.
- d. The Contractor will supply and install two Thorn Omega LED 1200 mm luminaires (surface or wire-suspended as required), two Thorn Voyager Blade 2 LED emergency exit signs, and five ERCO Prantac Wall Mounted Uplighters.
- e. The electrical contractor shall be responsible for the complete supply and installation of all light fittings as detailed.
- f. The contractor shall include for supply and installation of all associated cabling.
- g. All external lighting shall be controlled via H/O/A switch, time clock and photocell
- h. The internal power wiring shall be carried out in 4 sq.mm. L.S.F. insulated cables with a separate 4 sq.mm up to 70m of total circuit length and for circuits in excess of 70m cabling to be 6.0 sq.mm up to 130m of total circuit length.
- i. LSF insulated earth continuity conductors for each circuit, enclosed in trunking or conduit.
- j. All power and control cables shall be compatible in that they can be installed in the same containment without loss of performance or warranties.
- k. The protective device shall be a 10 Amp Type B MCB.
- l. Circuit loading shall not exceed 6.5 Amps.
- m. Circuit references and arrangements shall be agreed with the ERs before commencing work on site.
- n. Where cables or flexes pass through the metal framework of the luminaires, they shall be protected by rubber grommets.
- o. All Switches are to be the surface mounted metal clad type.
- p. The Electrical Contractor shall install switches, sensors and luminaires as detailed in the equipment schedule.
- q. Working Drawings: Produce working drawings throughout the installation to scale of 1:100.
- r. Sign-Off: Provide for co-ordination of Demonstrations and ER Testing leading to sign off and hand-over on a rolling basis.

3.5 LUMINAIRES:

- a. Luminaires for the purpose of this contract shall mean the housing, reflectors, lamps, optics and control gear all fulfilling the design criteria. It shall also include the flexible cable and all necessary support clips from the fitting to the click sockets.
- b. The lighting luminaires shall be as detailed in the equipment schedule.
- c. The Electrical Contractor shall be responsible for the means of erection for all luminaires, handling, storing, and transportation to site and setting to work.
- d. The Electrical Contractor shall instruct the Main Contractor with regard to the supply and installation of grounds or supports for all roof mounted luminaires and any builder's work which may be required to accommodate fittings.

3.6 EMERGENCY LIGHTING INSTALLATION:

- a. Emergency luminaires shall be Thorn Lara LED surface-mounted emergency fittings, be or Thorn Voyager Blade 2 LED emergency exit signs, each complete with integral 3-hour battery packs.
- b. The emergency lighting installation shall comprise self-contained 3 hour rated non-maintained luminaires or special inverter packs wired from an un-switched and switched supply from the lighting circuits, and central test units as shown on the 5000 series drawings and in accordance with IS 3217-2023.
- c. The Electrical Contractor shall include for the installation of the inverter packs within the general lighting luminaires (where shown).
- d. Control facilities shall be provided for the central testing of the system in accordance with IS 3217-2023.

- e. All emergency luminaires shall be fitted with status indication LED's and these shall be mounted such that they are visible and be contained on the luminaires.
- f. Power supplied to the emergency luminaires shall be on a non-switched line supply taken from nearest lighting circuit.
- g. A central test unit to provide the facility for manual testing for self-contained emergency lighting shall be supplied and installed within the new final distribution board.

3.7 EMERGENCY LIGHTING LUMINAIRES:

- a. Emergency luminaires for the purpose of this contract shall mean the housing, reflectors, lamps, optics and control gear and inverter and battery pack all fulfilling the design criteria. It shall also include the flexible cable and all necessary support clips.
- b. The system generally is to employ self-contained and remote non-maintained and maintained units and conversion packs for general lighting luminaires and conversion packs for general lighting luminaires (where applicable) with 3 hour capacity batteries connected to local lighting circuits so as to come in to operation in the event of loss of supplies in the various areas.
- c. The general lighting luminaires are to incorporate the emergency lighting lamps and control gear including batteries, where this is practicable. Where this cannot be achieved the batteries and control gear shall be housed in an appropriate enclosure located adjacent to the appropriate luminaires in accordance with I.S3217-2023.
- d. Luminaires shall be served by the general lighting conduit system. Luminaires with conversion packs to be arranged to illuminate the normal lamps.
- e. Power supplies to luminaires shall be on a non-switched circuit line and will be taken from the nearest lighting circuit.
- f. The emergency lighting control equipment shall monitor the local lighting circuits and the emergency lights shall come into operation in the event of loss of supply.
- g. All emergency luminaires shall be fitted with status indication "Green" LED's and these shall be mounted such that they are visible and be contained on the luminaires.
- h. Dedicated emergency luminaires shall be for 3 hours duration LED lamps and shall be of the maintained type with opal diffusers with appropriate legend silkscreen printed in green and all complying with BS 5266 and ICEL 1001.

3.8 GENERAL SERVICES & IT:

- a. The Contractor will remove and dispose of all existing general services in the Plunkett Mess Conference Room.
- b. The contractor will supply and install a new General Services installation in the Plunkett Mess Conference Room in accordance with ETCI Regulations.
- c. The contractor shall remove the ceiling mounted heater in the Reception Room.
- d. The Contractor shall supply and install three (3) recessed floor service boxes centrally beneath the new conference table, each complete with dual 230V switched socket outlets and at least two Cat 6e RJ45 data outlets. Boxes shall be heavy-duty flush floor units rated for commercial foot traffic with brush cable outlets and hinged lids (MK, Electrak, or equal approved).
- e. The Contractor shall install general service socket outlets at skirting height around the perimeter of the Plunkett Mess Conference Room, as indicated on the electrical layout drawings. Socket outlets shall be 13A double-pole switched type with a brushed steel finish or to match the specified interior standard.
- f. Each floor box shall include power and structured cabling provisions for AV and conferencing equipment, with conduits extended to the wall-mounted screen at the front of the room.
- g. The Contractor shall supply and install small power and IT connections from the floor boxes to support fixed audiovisual infrastructure, including HDMI/USB/DisplayPort faceplates, passive extenders or active AV plates as required.
- h. Final containment and outlet arrangements shall be coordinated with the AV system supplier and confirmed with the Employer's Representative before the first fix.
- i. All data cabling shall be Cat 6e UTP, certified to ISO/IEC 11801, terminated into labelled faceplates and patch panels, tested, and commissioned in accordance with TIA/EIA-568 standards.
- j. The contractor shall supply and install Cat 6e cable in cable ducting from existing cabinet.

- k. Supply and Fit Computer outlets in DADO trunking as shown drawings. MK or equivalent.
- l. Supply and fit IT/phone outlets in concealed DADO trunking as shown, MK or equal approved.
- m. All exposed and extraneous conductive parts within the Plunkett Mess Conference Room, including cable containment, metallic trunking, switchgear enclosures, and luminaires, shall be bonded to the main earth bar in accordance with I.S. 10101:2020 and BS 7671:2018+A2:2022.
- n. Protective equipotential bonding conductors shall be LSF-insulated copper conductors sized not less than the associated phase conductor (minimum 4.0 mm²) and terminated using crimped lugs with corrosion-resistant fixings.
- o. The Electrical Contractor shall install general services as shown on drawings. The wiring to all general services sockets shall be in 4sq.mm LSF cables with a 4.0 sq. mm. earth continuity conductor in conduits in radial circuits.
- p. Circuit references shall be agreed with the ERs before commencing on site.
- q. General Service sockets and spur outlets shall be of 13 Amp rating with double pole switch, to BS 1363. The face plate and housing shall be the invisible range.
- r. Fused plug tops with no fuses shall be provided for 10% of all socket outlets.
- s. Circuit Specification unless otherwise stated the following circuit specification shall apply - General Socket Outlets (radial circuit):
 - i. Protective device and rated - 25 Amp M9 SP&N MCB/RCD Type B: Cabling 4.0 sq.mm c/w 4.0 sq mm CPC. All cabling LSF singles. Cabling to be 4.0 sq mm up to 70m of total circuit length and for circuits in excess of 70m cabling to be 6.0 sq.mm up to 130m of total circuit length - C.P.C.'s to be full phase conductor size 13A Fused Connection Units/Spurs (Radial Circuiting):
 - ii. Protective device and rating - 20A M9 SP&N MCB/RCD Type B: Cabling to be 4.0 sq.mm up to 70m of total circuit length and for circuits in excess of 70m cabling to be 6.0 sq mm up to 130m of total circuit length - C.P.C.'s to be full phase conductor size. 32A Isolators either SP&N or TP&N (Radial Circuit):
 - iii. Protective device and rating - 32A M9 SP&N or TP&N MCB/RCD Type B: Cabling to be 6.0 sq.mm up to 50m of total circuit length and for circuit in excess of 50m 10 sq mm up to a total circuit length of 85m. C.P.C. to be full phase conductor size. All cabling to be LSF insulated singles. Unless otherwise stated all circuits that serve 13 A socket outlets shall have 30 mA rated RCD's fitted within the respective distribution board serving that circuit, i.e. each circuit shall have a dedicated combined MCB/RCD unit.
- s. The contractor will replace the following electrical fittings in Plunkett Mess:

TABLE 1 – WIRING ACCESSORIES (MK ELECTRIC)

Item Description	Manufacturer / Series	Model / Product Reference	Qty
13A 2-Gang Switched Socket (Metalclad)	MK Metalclad Plus	K2946ALM	86
13A 1-Gang Switched Socket (Metalclad)	MK Metalclad Plus	K2947ALM	29
13A 2-Gang Switched Socket (PVC)	MK Logic Plus	K2747WHI	8
13A 2-Gang Unswitched Socket for Dado	MK Logic Plus	K2737WHI	8
Metalclad Surface Box – 2 Gang	MK Metalclad	K2143ALM (or equiv.)	82
Metalclad Surface Box – 1 Gang	MK Metalclad	K2142ALM (or equiv.)	110
PVC Surface Box – 2 Gang	MK Logic Plus	Standard 2G 25mm	9
PVC Surface Box – 1 Gang	MK Logic Plus	Standard 1G 25mm	8
1-Gang Light Switch (Metalclad)	MK Metalclad Plus	K4871ALM	49
2-Gang Light Switch (Metalclad)	MK Metalclad Plus	K4872ALM	3

3-Gang Grid Plate + Modules	MK Metalclad Plus	Grid Plate + Modules	7
1-Gang Light Switch (PVC)	MK Logic Plus	K4871WHI	2
2-Gang Light Switch (PVC)	MK Logic Plus	K4872WHI	2
Fused Spur, Unswitched, Neon (Metalclad)	MK Metalclad Plus	K370ALM (or equiv.)	9
Fused Spur, Unswitched, No Neon (PVC)	MK Logic Plus	K370WHI	1
20A DP Isolator with Neon (Metalclad)	MK Metalclad Plus	K5403ALM	13
20A DP Isolator with Neon (PVC)	MK Logic Plus	K5203WHI	4
Door Release Switch (Metalclad)	MK Metalclad Plus	Engraved retractive/grid	12

TABLE 2 – DATA & DADO TRUNKING SYSTEM (MK PRESTIGE 3D)

Item Description	Manufacturer / Series	Model / Product Reference	Qty
Metalclad Euro Data Plate	MK Metalclad Plus	K181ALM	47
PVC Euro Data Plate	MK Logic Plus	1G / 2G Euro Plates	25
Data Outlets in Trunking	MK Logic Plus	Euro Plate + Keystone	4

**TABLE 3 – LIGHTING (THORN LIGHTING)
GENERAL 600×600 LUMINAIRES**

Item Description	Manufacturer / Series	Model / Product Reference	Qty
LED Panel 600×600 (Standard)	Thorn	Omega LED 600×600	174
LED Panel 600×600 (Emergency 3h)	Thorn	Omega LED 600×600 E3	56
LED Panel 1200×300	Thorn	Omega LED 1200×300	4
LED Panel 450×450	Thorn	Eco Elsa / Compact LED	1

BULKHEADS / 2D REPLACEMENTS

Item Description	Manufacturer / Series	Model / Product Reference	Qty
Circular LED Bulkhead (330 mm Standard)	Thorn	Lara LED 330 mm	24
Circular LED Bulkhead (330 mm Emergency)	Thorn	Lara LED 330 mm E3	8
Large Circular LED Bulkhead (450 mm replacement)	Thorn	Lara LED High Output	24

EMERGENCY / EXIT SIGNAGE

Item Description	Manufacturer / Series	Model / Product Reference	Qty
Exit Sign – Running Man 410×185	Thorn	Voyager Blade 2 (30 m)	1
Exit Sign – 300×100	Thorn	Voyager Blade 2 (23 m)	1
Twinspot Emergency Unit	Thorn	Voyager Twinspot	1
Corridor Exit Signs (Bulkhead Style)	Thorn	Voyager Blade 2 series	24

SPECIALITY & DECORATIVE

Item Description	Manufacturer / Series	Model / Product Reference	Qty
Decorative Pendant/Chandelier	Thorn / Decorative Line	College 2 Pendant / Equivalent	2
Wall Lanterns	Thorn	EyeKon / College 2 Wall	5
Recessed Spots	Thorn	Cetus / Amy Vario LED	8
External/Entrance Bulkhead	Thorn	Club LED EM	1

TABLE 4 – FIRE DETECTION & ALARM (APOLLO XP95)

Item Description	Manufacturer / Series	Model / Product Reference	Qty
Optical Smoke Detector	Apollo XP95	55000-600APO	73
Heat Detectors (if required for bathrooms/kitchens)	Apollo XP95	55000-140APO	5
Sounder Bases / Fire Buzzers	Apollo XP95 Sounder Base	45681-277APO	35
Manual Call Points (Break Glass)	Apollo XP95	55100-908APO	8
Input/Output Modules (Door Interfaces)	Apollo XP95 I/O	55000-853APO	12
Addressable Fire Panel	Advanced MXPro 5	MXPro 5 Series	1
Repeater Panel (Optional)	Advanced MXPro	MXP-510 Series	1

TABLE 5 – VENTILATION (XPELAIR)

Item Description	Manufacturer / Series	Model	Qty
150 mm Axial Extract Fan with Timer	Xpelair	DX150S	12
150 mm Ducting Kits	Xpelair	150 mm PVC Kit	12

TABLE 6 – DOOR HOLDERS & ACCESS CONTROL

Item Description	Manufacturer / Series	Model	Qty
Electromagnetic Door Holders	ASSA ABLOY / Dorma	EM Series 24 V DC	12
Door Release Switches	MK Metalclad Plus	Engraved Retractive Switch	12
Fire Alarm Interfaces	Apollo XP95 I/O	55000-853APO	Included above (12)

TABLE 7 – BLIND & MOTOR CONTROL (SOMFY)

Item Description	Manufacturer / Series	Model	Qty
Motorised Blind Tubular Motor	Somfy RTS/Modbus	Based on blind width	9
Relay Interface Panel	Somfy DIN-Rail Relay Pack	4–8 Channel	2

TABLE 8 – SPECIAL CONTROLS & THERMOSTATS

Item Description	Manufacturer / Series	Model	Qty
PVC Electronic Thermostat	Siemens / Danfoss	Wall Electronic Stat	1
Heating Thermostats	Siemens / Danfoss	Wall Stat	2

TABLE 9 – PROJECT SUMMARY (TOTAL QUANTITIES)

System	Qty
Total Sockets (All Types)	131
Total Data Outlets	76
Total Lighting Fixtures	323
Total Fire Devices	116
Total Extract Fans	12
Total Special Equipment (Door Holders, Blinds etc.)	26
Grand Total Items	764

3.9 FIRE BARRIERS:

- a. The Electrical Contractor shall allow in his tender for the internal fire sealing of the conference room including rising ducts, trunking and tray.
- b. Barriers shall include fire Batt, fire stop pillows, intumescent pads, envirograf mastic etc. where required.
- c. All penetrations through fire resisting elements shall be marked with a 3mm thick ABS plastic of 75mmx56mm see 6000 series drawings label adhered to a surface within 300m of the penetration and denote the following;
 - i. Fire Stopping: Do not alter or cut this fire seal without permission, damage must be repaired immediately.
 - ii. WARNING – DO NOT REMOVE
 - iii. Date Installed: DD/MM/YY
 - iv. Hr Rating: E.g. 1hr
 - v. Location Reference: BLDG 326-01-Plant_Room_Wall
 - vi. This opening has been sealed with the following product. If damaged or removed please contact us using the details below: FIREPRO Ablative Coated Batt,
 - vii. For further information contact Infrastructure and Utilities Company, Engineer Group. Defence Forces Training Centre

3.10 DEMOLITION – REMOVAL OF EXISTING STUD PARTITION

- a. The Contractor shall control the dismantling and removal of internal lightweight partitions (timber or metal stud), including associated linings, trims, skirtings, fixings, and podium.
- b. Before work, ensure complete isolation and tagging-out of associated electrical and ICT services by certified personnel. Services are to be rerouted, terminated or temporarily capped per I.S. 10101:2020 and ET101 standards.
- c. Demolition methods shall be non-percussive and dust-controlled. No mechanical impact tools are permitted where lime plaster walls or ceilings are within 1.5m.
- d. All removed materials shall be segregated and disposed of in compliance with the Waste Management Act 1996.
- e. On completion, adjacent junctions and surfaces are to be made good using lime-based materials (where the original fabric is lime) or gypsum as specified for secondary partitions.

3.11 INTERNAL WALL PLASTERING – LIME PLASTER TO SOLID AND LATH BACKGROUNDS

- a. All internal walls throughout the project area will be finished in traditional lime plaster in strict compliance with BS EN 998-1 (Renders and Plasters) and conservation best practices.
- b. Substrates shall be assessed for compatibility:
 - i. **Solid Masonry:** Raked joints cleaned to 15mm depth; dampened before plastering.
 - ii. **Timber Lath:** Inspect for damage, decay, spacing (max 10mm), and fix integrity. Replace damaged laths with riven oak or chestnut laths nailed at 100mm centres using stainless annular nails.
 - iii. c. Apply a full three-coat lime plaster system:
 - iv. **Scratch Coat:** NHL 3.5 hydraulic lime, sharp washed sand, with goat hair fibre. Depth: 10–12mm. Heavily scratched for bond.
 - v. **Float Coat:** NHL 2 or 3.5 lime, graded sand, depth 7–9mm. Wood floated.
 - vi. **Finish Coat:** Lime putty (fat lime) and fine sand blend, 2–3mm thickness. Steel trowelled.

- c. All coats are to be applied with proper dwell time between applications (minimum 7 days between coats), protected from rapid drying using hessian sheeting and mist-sprayed regularly.
- d. Ambient working conditions: 8°C–25°C, no direct sun or forced heat sources.
- e. All junctions with dissimilar materials (timber, stone) to include expanded stainless mesh reinforcement.
- f. The plaster will terminate with clean arises using traditional lime beads where appropriate. No gypsum or PVA-based products are to be used at any stage.

3.12 CEILING WORKS – LIME PLASTER TO TRADITIONAL LATH CEILINGS

- a. Survey and record all defects before intervention. Secure all loose areas with stainless steel fixings and timber grounds as required.
- b. Carefully remove delaminated areas of historic lime plaster by hand. Clean and retain sound adjacent edges.
- c. Renew or reinstate timber laths using split riven oak lath fixed to joists at max 10mm spacing.
- d. Apply a three-coat plaster system as per Clause 2, ensuring tight inter-coat bonding and maintaining the original plaster depth and texture.
- e. Finish flush with existing cornices or detailing. Feather and blend interfaces to avoid visible ridges.
- f. Allow for all ceiling rises, angles, and deflections. No levelling will be carried out unless instructed. The ceilings will retain historic undulations.

3.13 INTERNAL DECORATION – BREATHABLE SYSTEM TO LIME PLASTER

- a. Internal lime-plastered surfaces shall be finished with a breathable mineral paint system (e.g. Keim Ecosil-ME, Earthborn Claypaint, or equivalent).
- b. The Contractor will remove all wall-paper in the Conference & Reception Rooms.
- c. Surfaces to be thoroughly dry (28 days minimum curing post lime application) before applying paint. Moisture content to be <5% WME before priming.
- d. Apply one mist coat (diluted) and two full coats of mineral paint using a brush or roller. The finish should be matt, uniform, and free from lap marks.
- e. Paint system must be fully vapour-permeable (SD value < 0.05m) and free of acrylic, vinyl, or latex binders.
- f. Timber elements (skirting, architraves) to be primed with alkali-resistant primer and finished with low-VOC water-based paint (Class A+).
- g. Colour palettes to be approved by the Employer's Representative based on heritage-compatible tones.

3.14 FLOOR FINISHES – CARPET CONFERENCE & RECEPTION ROOMS

- a. The contractor shall supply and install carpet in the Conference Room and adjoining reception room.
- b. **Substrate Preparation:** All existing coverings to be carefully lifted and disposed of. Substrate to be cleaned, levelled, and prepared using a breathable lime floor screed or natural hydraulic lime-based levelling compound (where the existing substrate is lime/masonry), to preserve historic fabric and allow vapour permeability.
- c. **Insulation and Underlay:** Install a breathable natural underlay, such as 100% recycled felt or natural rubber/cork composite, to enhance underfoot comfort and acoustic performance. All materials to be VOC-free and compatible with conservation principles.
- d. **Carpet Specification:** Supply and install a custom-woven 100% New Zealand wool broadloom carpet (Axminster or Wilton construction, or equivalent), minimum 1800g/m² pile weight, pile height 9–12mm, and Bfl-s1 fire rating. Design to feature heritage-appropriate colours and patterns, echoing original Victorian or Edwardian motifs where possible (subject to client/ER approval of sample). Carpet shall be mothproofed, antistatic, and treated for stain and fade resistance using environmentally responsible treatments. Installation to be fully tensioned (double stick or stretch fit), with all seams hand-sewn and invisible, using natural jute or hessian secondary backing for breathability.
- e. **Trims and Detailing:** Provide solid brass or powder-coated aluminium transition strips at all thresholds and ramps, with integral tactile and contrast profiles compliant with TGD Part M. Border insets or runners to be included as per agreed design.

- f. **Acoustic and Comfort Performance:** Carpet and underlay system shall provide a minimum of 30dB reduction in impact sound transmission, with a soft, resilient underfoot feel suitable for high-traffic executive use.
- g. **Standards and Workmanship:** All works to be carried out to BS 5325 for textile floor coverings and BS 8204-1 SR1 surface regularity (higher than standard tolerances), with careful protection of adjoining heritage finishes. Installation by NICF-certified (or equivalent) master fitters.
- h. **Sustainability:** Carpet and underlay to be Cradle-to-Cradle or equivalent certified for sustainability, with full manufacturer EPD and low-emission certification. Preference for wool sourced from traceable, ethical suppliers.
- i. **Sample and Mock-up:** Prior to installation, provide a 1m² sample of carpet (including border/runners as applicable) and underlay for ER/Client/Conservation Architect approval.

FLOOR FINISHES – OFFICE AREAS

- a. **Manufacturer:** Interface / Milliken / Tarkett Desso / Forbo Tessera — or equal approved.
- b. **Product reference:** Tufted solution-dyed nylon 6.6 loop-pile carpet tiles/planks with cushion backing (recycled content).
- c. **Tile/Plank size:** 500×500 mm tiles or 250×1000 mm planks (to ER's approval, single format per area).
- d. **Colour/Design:** ER to select from manufacturer's standard ranges; mix-and-match patterning allowed for zoning (submit A3 layout).
- e. **Use classification:** EN ISO 10874 Class 33 (heavy commercial).
- f. **Fire performance:** EN 13501-1: Bfl-s1.
- g. **Castor chair:** EN 985 Test A r ≥ 2.4 (continuous use).
- h. **Dimensional stability:** EN 986 ≤ 0.2%.
- i. **Electrostatic propensity:** ISO 6356 < 2.0 kV (antistatic).
- j. **Pile fibre:** 100% SDN 6.6; pile weight ≥ 600 g/m²; pile height 3.0–4.5 mm (loop).
- k. **Total thickness:** 6.0–9.0 mm (incl. cushion).
- l. **Acoustic performance:** ΔLw ≥ 24 dB; αw ≥ 0.25 (curve to submit).
- m. Thermal: Suitable for UFH; R ≤ 0.15 m²K/W.
- n. **VOC/Sustainability:** Indoor Air Comfort Gold/CRI Green Label Plus; EPD available; minimum ≥ 50% recycled content by weight in backing (declare %). Carbon-neutral programme where offered (declare).
- o. **Edge detail:** PVC or polymer-encapsulated tile edges; colour matched.
- p. **Accessories & Matting:** Entrance protection: Heavy-duty primary/secondary entrance matting at office entries (spec in Section L30), sized to capture ≥ 5 m walk-off. Transition trims: Low-profile metal trims at thresholds; colour/finish to Architect approval.
- q. **Preparation:** Substrate per M50/210ff; moisture testing per BS 8203/BS 5325 (≤ 75% RH unless manufacturer states otherwise). Smoothing: Latex-cement underlayment where required to achieve SR1 (BS 8204-1).
- r. **Adhesive/Fixings: Tackifier:** Low-VOC EC1 PLUS (e.g., F. Ball F41 / UZIN U 2100) or manufacturer-approved equal. Use full-spread tackifier to allow future tile lift and maintain breathability where possible. Primers as adhesive manufacturer recommends.
- s. **Installation (BS 5325):** Monolithic, **quarter-turn, ashlar, or herringbone** (planks) as indicated on drawings; maintain arrow orientation.
Set out to avoid slivers at perimeters and to centre in doorways. Cut tight to perimeters; no peaking or tenting; tiles butted without gaps. Provide attic stock: **2% of installed quantity** (boxed, labelled by area).
- t. **Cleaning & Handover:** Initial clean and maintenance guide from manufacturer; include O&M manual, care schedule, and stain chart. Warranty: Minimum 10-year heavy-commercial wear, ravel, backing and castor-chair warranty (submit certificate).
- u. **Samples/Mock-ups:** Submit full-size tile/plank and A4 layout board with two proposed colourways. Install a 5 m² control sample on site for approval before proceeding.

3.15 HEATING SERVICES – RADIATOR REPLACEMENT

- a. The Contractor shall remove all existing radiators within Plunkett Mess Conference Room, adjoining Reception Room and corridor responsibly dispose of them off-site per the Waste Management Act 1996.

- b. The Contractor shall supply and install designer radiators, each providing the same BTU (or kW) output as the existing radiators being replaced. Nine 1200 x 600mm radiators, Room 1 (Bay window) - 2150 x 600mm & 850 x 600mm, Room 2 (Computer room) - 1580 x 600mm & 970 x 600mm, Col AT Lawlor room: **2nr** 1580 x 600mm, 2150 x 600mm & 860 x 600mm, Male toilet - 1300 x 500mm, Female toilet - 960 x 400mm.
- c. Specification and Make: Make/Model: Specify Zehnder Chime (vertical brushed stainless steel), Bisque Arteplano (anodised aluminium), or Vasco Oni (ultra-slim, powder-coated aluminium) — or equivalent approved.
- d. Construction: Premium-grade steel or aluminium, certified to EN 442 standards, individually pressure tested to 10 bar. Contemporary, minimalist profile; fully welded corners and concealed brackets for a seamless appearance.
- e. Finish Options: Polished or brushed stainless steel, anodised brushed aluminium, or powder-coated in any RAL colour as approved by the client/architect. Available in bespoke finishes such as matt black, bronze, or textured metallic for a modern, executive aesthetic.
- f. Detail: Flush wall-mount design or with discreet feet as appropriate. Optional integrated towel rails or concealed valves, with matching designer thermostatic or manual valves (chrome, black, or architectural brass finish). Radiators shall be positioned to minimise visual intrusion and complement interior joinery and wall panelling.
- g. Performance: Each radiator must deliver the same BTU output as the existing unit it replaces. The contractor shall confirm heat output and submit technical submittals for ER/Client approval before ordering.
- h. Accessories and Controls: Include matching low-profile thermostatic radiator valves (TRVs) and lockshield valves in the selected finish. Integrate smart controls compatible with the building's BMS or wireless heating system for zone control, if specified.
- i. Installation and Workmanship: All pipework to be chased or concealed, with high-quality escutcheons and wall finishes to maintain a clean appearance. Installation to EN 14336 and manufacturer's guidelines. All radiators to be protected until practical completion.
- j. All radiators shall be equipped with thermostatic radiator valves (TRVs) and manual lockshield valves rated for a working pressure of at least 10 bar and a maximum operating temperature of 110°C.
- k. All pipework modifications shall be made of copper with crimp or press-fit joints and installed by IS EN 806 and CIBSE Code W.
- l. The contractor will move gun-barrel heating pipes so that they follow the contour of the bay.
- m. Radiators shall be securely wall-mounted using manufacturer-supplied brackets, maintaining a minimum of 150mm floor clearance and 75mm wall offset for airflow.
- n. Following installation, the system shall be pressure tested to 1.5 times the operating pressure, flushed, chemically cleaned, and dosed with a corrosion inhibitor (e.g. Sentinel X100 or equally approved) before commissioning.

3.16 FOLD-DOWN WALL-MOUNTED SEATING INSTALLATION

- a. The Contractor shall supply and install wall-mounted, fold-down seating units in three separate locations within the Plunkett Mess Conference Room, providing seating for nine (9) personnel. Each location shall accommodate three (3) fold-down seats, evenly spaced and ergonomically positioned to allow unimpeded circulation when in both open and closed positions.
- b. The seating shall be of high-quality commercial specification, designed for fixed wall installation, and suitable for continuous use in a formal briefing or conferencing environment. Units shall comply with EN 16139:2013 for non-domestic seating strength, durability, and safety.
- c. Each seat shall comprise:
 - i. A robust steel or aluminium support frame with wall-fixing plates designed for mounting to solid blockwork or timber-backed walls.
 - ii. Upholstered or high-density moulded polyurethane seat and backrest panels, with integrated seat return mechanism ensuring silent and controlled fold-up operation.
 - iii. The seat dimensions shall be at least 450mm wide, with a minimum seat depth of 400mm, a back height of 450mm, and an installed height of 450–500mm from the finished floor level (FFL).

- iv. All upholstery materials shall be flame-retardant to BS 5852 Part 2, abrasion-resistant (minimum 100,000 Martindale rubs), and available in a colour approved by the Employer's Representative.
- d. All fixings shall be concealed, tamper-resistant, and suitable for high-use environments. Installation must ensure a minimum of 50mm clearance between closed seats and adjacent surfaces and a minimum aisle clearance of 600mm when seats are in use.
- e. The Contractor shall coordinate installation locations with the Employer's Representative to ensure that seating does not interfere with floor boxes, skirtings, wall-mounted services, or radiator positions.
- f. A full product submittal, including the manufacturer's datasheet, fire certification, dimensional drawings, and wall load requirements, shall be provided for approval **before procurement and installation**.

3.17 SASH WINDOW REPAIRS

- a. The Contractor will repair and paint the Sash Windows in the Conference Room and Reception Room as per the specification.
- b. The Contractor shall supply and install secondary glazing on all windows In the Conference Room and Reception Room.
- c. The Works comprise the careful dismantling, repair, and reinstatement of existing Victorian timber sash windows, ensuring maximum retention of original fabric and compliance with conservation principles of minimum intervention, reversibility, and like-for-like repair.
- d. Sashes shall be carefully removed, cords and counterweights secured, and all components labelled and stored upright in a controlled environment. Historic glass shall be salvaged wherever feasible. New sash cords shall be of natural fibre (cotton or hemp), cut and balanced to original specifications. Weights shall be checked, adjusted, and re-hung to ensure smooth and safe operation.
- e. All replacement timbers shall be slow-grown Douglas Fir or Irish Oak, quarter-sawn, air-dried, and approved prior to use. New beads shall be profiled to match existing, with patented brush draft beads fitted discreetly to improve performance. Lead paint removal shall be undertaken in full compliance with health and safety regulations; blowtorches are strictly prohibited.
- f. Historic glazing shall be retained wherever possible. Linseed oil putty shall be used for re-glazing, with careful bedding, pointing, and subsequent painting to seal joints.
- g. Timber surfaces shall be prepared, primed with aluminium-based primer where required, and repainted using compatible water-based systems. Friction surfaces shall be waxed, not painted, to prevent binding.
- h. All pulleys, hinges, catches, and latches shall be refurbished where practicable. Replacements, where necessary, shall be in cast brass or equivalent to original profile and approved samples.
- i. All works shall be carried out by specialist joiners experienced in historic building conservation, with samples provided for approval. On completion, windows shall be tested for smooth operation, weather-tightness, and compliance with specification.

3.18 SECONDARY GLAZING (INTERNAL) — SUPPLY & INSTALLATION

- a. Provide twelve (12) Selectaglaze Series 20/90 vertical-sliding secondary glazing, slim aluminium frame, DFT/colour per schedule; 4 mm toughened Low-E pane; spring-balanced self-supporting sashes; 80 mm min glass-to-glass separation to primary sash; woolpile perimeter seals; reveal-fix or face-fix; factory-finished to EN 12206; safety glass EN 12150; install to manufacturer's instructions with fully reversible fixings.
- b. Provide and install vertical sliding internal secondary glazing to existing timber sash windows (12 windows). Works shall be fully reversible, non-destructive to historic fabric, and colour-matched to existing joinery.
- c. Slim, unobtrusive aluminium profile with discreet sightlines.
- d. Self-supporting vertical sliders with smooth action via spring balances; panels remain in position at any chosen height.
- e. Glazing: 4 mm toughened Low-E glass; minimum 80 mm glass-to-glass separation to primary sash (maintain consistent air gap).
- f. Seals: Woolpile inserted into panel section grooves to form continuous outer frame seal.

- g. Fixing: Pre-drilled and countersunk for face-fix or reveal-fix as required; use proprietary bevelled timber subframe for bays/splayed reveals (fix to new subframe in preference to original fabric).
- h. Configurability: Units may be coupled/stacked for long runs or large glazing areas; arched applications supported.
- i. Trims & Finish: PVCu finishing trims supplied; RAL colour to match existing windows (submit sample for approval).
- j. Ironmongery: Fitch catch centrally on mid-rail (finish to match frame).
- k. Performance intent: Improved thermal and acoustic insulation and security with no alteration to the external elevation.
- l. Preparation & Installation: Carry out measured survey and templating; confirm plumb, level, and tolerances before fabrication. Protect all historic fabric; use packers/spacers that do not penetrate original joinery. Maintain ventilation strategy to manage condensation risk; do not bridge existing drainage paths. All edges clean, square, and de-burred; seals continuous at perimeters; no visible fixings after trim application.
- m. Materials & Standards: Aluminium extrusions to relevant EN standards; safety glass to EN 12150 (toughened); coatings to EN 12206 (powder coating).
- n. Low-E performance as manufacturer's data; install strictly to manufacturer's instructions.

3.19 TIMBER SLIDING SASH WINDOWS — DESCRIPTION OF WORKS (28 NO.)

- a. Scope of Works: Provide a complete service for the supply, manufacture, delivery, removal, and replacement of 28 No. timber sliding sash windows, including complete measured survey, detailed shop drawings, factory glazing and finishing, on-site installation, perimeter air- and weathertight sealing, ironmongery, ventilation, making good, testing, certification, and warranties. All works shall comply with approved drawings, window schedule, BC(A)R requirements, and Irish Building Regulations (Parts A, B, F, K, and L).
- b. Approved Manufacturers: Timeless Sash Windows, Kells Windows & Doors, Mellott Joinery, Sean Doyle Windows, or Munster Joinery (Heritage Hardwood Range) — or equal and approved. Manufacturers must demonstrate full compliance with this specification, submit documented evidence of conformity with EN 14351-1, EN 1279 (IGUs), EN 1026–12211 (Air/Water/Wind), and maintain traceable FSC® or PEFC™ certification for all timber. All manufacturing, finishing, and assembly shall be performed within the island of Ireland to guarantee quality assurance, sustainability, and regulatory traceability.
- c. Design and Aesthetic Requirements - Windows shall replicate traditional heritage detailing with:
 - i. Ultra-slim meeting rail (~35 mm) and mechanically jointed sash corners;
 - ii. Through horns, putty-line glazing, and authentic astragal bar layouts;
 - iii. True heritage sightlines and timber proportions matching existing elevations;
 - iv. Balanced operation with concealed weights or spring balances, as appropriate.
 - v. All joinery profiles are to be pre-approved against architectural reference drawings.
- d. Compliance, Marking, and Declaration: Each window system shall be CE-marked to EN 14351-1 and shall include a valid Declaration of Performance (DoP) covering thermal, air/water/wind, acoustic, and security parameters. Provide third-party-verified test results from a UKAS or NSAI accredited laboratory.
- e. Thermal and Energy Performance:
 - i. Whole-window U-value $\leq 1.4 \text{ W/m}^2\text{K}$, project target $\leq 1.2 \text{ W/m}^2\text{K}$, calculated per ISO 10077-2.
 - ii. Argon-filled, Low-E, warm-edge double or triple IGUs as required.
 - iii. Submit the manufacturer's verified U-value report before production.
 - iv. Thermal bridging is to be minimised via continuous insulated cavity closers and PPC cill flashings.
- f. Air, Water, and Wind Performance - Minimum performance classifications to EN 1026–12211:
 - i. Air permeability: Class 4 (600 Pa)
 - ii. Watertightness: Class E1050
 - iii. Wind resistance: Class C3/C4 (2000 Pa)
 - iv. Provide verified laboratory certification and detail anchorage/fixing methodology.
- g. Safety and Security
 - i. Safety glazing: To EN 12600 (1B1) in all critical zones per Part K.

- ii. Security: Compliant with PAS 24:2016 or equivalent; includes multi-point sash locks, reinforced meeting rails, and child-safety restrictors (100 mm initial opening).
 - iii. All restrictors are to permit full egress in emergencies.
- h. Ventilation: Integrate discreet trickle vents or concealed slot ventilators, sized in accordance with TGD Part F. Provide airflow calculations for each room type and cross-reference them with the mechanical ventilation strategy.
- i. Acoustic and Comfort Performance: Where indicated, provide laminated acoustic IGUs to meet the target R_w per-room schedule. Sealant specification and perimeter detailing must ensure continuous acoustic integrity across the frame-to-wall interface.
- j. Materials and Construction
 - i. Timber species: Engineered hardwood (Accoya, Sapele, or equivalent).
 - ii. Joinery: Mortice-and-tenon or dowelled construction with D4 adhesive (EN 204).
 - iii. Finish: Factory-applied, microporous three-coat system (total DFT $\geq 125 \mu\text{m}$).
 - iv. End-grain sealed, moisture content $12 \pm 2 \%$.
 - v. Preservative treatment: To EN 599, suitable for Use Class 3.1/3.2.
 - vi. Draught-proofing: Continuous compression seals; replaceable parting and staff beads.
- k. Operation and Balancing
 - i. Smooth, counterbalanced operation via traditional lead weights or concealed spring balances.
 - ii. All moving parts are calibrated for equalised movement and frictionless sliding.
 - iii. The design team approves an optional tilt-in cleaning function.
- l. Cills, Flashings, and Interfaces
 - i. Cills: Solid hardwood with PPC aluminium weathering and DPC upstand.
 - ii. Flashings: Head and jamb flashings integrated into façade waterproofing.
 - iii. Air/Weathertightness layers: Internal airtight tape ($S_d \geq 10 \text{ m}$); external vapour-open membrane ($S_d \leq 0.5 \text{ m}$).
 - iv. Ensure complete continuity with surrounding insulation and façade membranes.
- m. Ironmongery and Fittings: Provide traditional sash lifts, fasteners, and restrictors in architectural finishes — satin chrome, blackened brass, or stainless steel. All hardware shall be stainless steel grade A4 or brass-based, corrosion-resistant, and pre-approved via submitted samples.
- n. Finishes and Colour: Factory finish to RAL/NCS colour as scheduled; uniform, defect-free coating. Internal and external colours may differ. Touch-ups on site to follow the complete system build-up sequence. The expected external coating life is 8–12 years before recoating.
- o. Installation and Fixing
 - i. Install in accordance with EN 14351-1 and the manufacturer's instructions.
 - ii. Fix plumb, level, and square using stainless-steel fixings, max 600 mm centres, min 2 per jamb/head.
 - iii. No frame distortion permitted.
 - iv. Airtightness: Continuous internal tape sealed to plaster return.
 - v. Weathering: Impregnated expanding tape or low-modulus silicone with backer rod.
 - vi. Provide full BCAR photo evidence of concealed interfaces.
- p. Site Works and Making Good: Remove existing windows carefully, protect adjacent fabric, segregate waste in accordance with the Waste Management Act 1996, and reinstate all reveals, trims, beads, and finishes. Use compatible materials (lime mortar for heritage structures). Decorate to match the existing finish.
- q. Testing and Verification - Conduct on-site performance checks for:
 - i. Airtightness (blower door confirmation where feasible);
 - ii. Functional operation, restrictor engagement, and smooth sash travel;
 - iii. Visual inspection for coating, glazing, and sealing defects.
 - iv. Submit as-installed compliance certificates signed by both installer and manufacturer.
- r. Documentation and Handover - Provide a comprehensive documentation pack including:
 - i. CE/DoP certification;
 - ii. U-value and airflow calculations;
 - iii. PAS 24 and acoustic evidence;
 - iv. Ironmongery schedule;
 - v. Installation and maintenance manuals;
 - vi. Cleaning and recoating guidance;
 - vii. Manufacturer and installer warranties.

- s. Samples and Mock-Up: Install one prototype window on site for review of sightlines, finish, horns, colour, bar layout, hardware, and seals. Production may proceed only upon written acceptance by the Contracting Authority and Architect.
- t. Warranties and Service Life
 - i. Frame and coating: 10 years minimum;
 - ii. IGUs: 10 years;
 - iii. Hardware: 5 years;
 - iv. Installer workmanship: 2 years.
 - v. Expected design service life: ≥ 40 years, subject to maintenance schedule compliance.
- u. Quality Assurance and Competence: Installation must be performed by an approved specialist timber sash contractor with demonstrable BCAR experience, valid insurance, and references for comparable heritage or government works. All materials, workmanship, and documentation shall be subject to inspection and acceptance by the Assigned Certifier before Practical Completion.
- v. Final Acceptance Criteria: Windows shall operate smoothly, achieve airtightness and weathertightness to the specified class, maintain uniform sightlines, and present flawless finish quality. No visible sealant smears, mechanical damage, or coating discontinuities shall be tolerated. All compliance documentation must be lodged before handover.

3.20 INTERNAL PAINTING – OFFICES, HALLS, TOILETS & RECEPTION ROOMS

Provide a fully integrated internal painting and finishing package to offices, circulation halls, toilets, and reception rooms in Plunkett Mess, including protection, surface preparation, priming, finishing coats, touch-ups, QA/QC, samples, handover documentation, and waste management. Coordinate with lime works (Clauses 7.11–7.13), electrical, fire-stopping, floor finishes, joinery repairs, and radiator replacements to ensure sequencing integrity.

- a. Standards & Compliance
 - i. BS 6150: Painting of buildings — Code of practice
 - ii. EN 13300: Paints — Wet scrub (Class), gloss, opacity classification
 - iii. ISO 11998: Wet scrub resistance (Class 1/2 as specified)
 - iv. ISO 7783: Water-vapour diffusion (Sd) — breathable systems
 - v. ISO 8501-1 / ISO 12944-5 (C2 internal): Ferrous metal preparation and coating systems
 - vi. TGD Parts B, F, L & M (interface considerations), BCAR record-keeping
 - vii. VOC: A+ / Indoor Air Comfort Gold or equivalent; submit SDS/COSHH
- b. Substrate Matrix (determine on survey):
 - New/Existing Lime Plaster (per 7.11–7.12): breathable mineral/silicate system only
 - Existing Gypsum/Previously Painted Emulsion: low-VOC acrylic systems
 - Internal Timber (skirtings, architraves, doors, window linings): water-borne enamel system
 - Radiators/Pipework/Steel: water-borne metal enamel over anti-corrosive primer
 - Moisture-prone zones (Toilets): antimicrobial, scrubbable finish; breathable where on lime
- c. Environmental & Conditions: Apply at 10–25 °C, RH <65%, substrate MC <16% (timber); lime plaster cured ≥ 28 days and <5% WME before coating—no forced drying. Protect adjacent finishes; dust-control only on lime.
- d. Paint Systems by Area
- e. Offices, Halls & Reception – Walls/Ceilings
 - i. If the substrate is lime (A):
 - ii. Primer/bond: Silicate/mineral primer to manufacturer data (Sd total system ≤ 0.05 m).
 - iii. Finish: 2 × coats mineral/silicate paint, matt; EN 13300 Class 1 scrub; colour to ER approval.
 - iv. If substrate is gypsum/previous emulsion (B):
 - v. Spot-prime stains (shellac) as needed; acrylic sealer/primer.
 - vi. Finish: 2 × coats low-VOC acrylic matt/eggshell, Class 1 scrub, $\geq 95\%$ opacity @ 8 m²/L.
- f. Toilets – Walls/Ceilings (high humidity)
 - i. Mineral primer as above;
 - ii. Finish: 2 × coats silicate/mineral hygiene finish with mould-resistant additive; Sd ≤ 0.05 m.
 - iii. On gypsum/previous emulsion (B):

- iv. Acrylic sealer/primer;
 - v. Finish: 2 × coats antimicrobial acrylic eggshell/satin, Class 1 scrub, ISO 11998 Class 1.
- g. Internal Timber Joinery – Doors, Skirtings, Architraves (C)
- i. Prep: De-nib; degrease; knotting on resinous timber; fill (water-based wood filler); denib between coats.
 - ii. System: 1 × adhesion primer (water-borne), 1 × undercoat, 2 × water-borne enamel topcoats (satin/eggshell); EN 13300 Class 1. End-grain sealed. Colours per ER schedule.
 - iii. (4) Metalwork – Radiators, Pipework, Grilles (D)
 - iv. Prep to St 2 (or Sa2½ if abrasive permitted), dust-free.
 - v. 1 × anti-corrosive water-borne primer (ISO 12944 C2 internal), 2 × water-borne metal enamel (satin). Radiator coatings rated to ≥80 °C continuous.
- h. Feature/Accent Finishes (if scheduled): Submit sample boards for ER sign-off (colour, sheen, edge discipline)—no vinyl/acrylic on lime.
- i. Surface Preparation (all areas)
- i. Make good defects with compatible fillers (lime on lime; gypsum on gypsum; two-pack timber filler where appropriate).
 - ii. Remove loose/flaking paint to a firm edge; feather in.
 - iii. Lead-paint precautions where suspected: refurbish using wet-abrade/chemical methods; prohibit open flame; comply with H&S plan.
 - iv. Clean substrates; remove salts/efflorescence on lime with dry brushing only.
- j. Masking & Protection: Mask all ironmongery, switches, luminaires, fire signage, and new carpets/tiles. Temporary protection to radiators and timber. Maintain safe access/egress and ensure emergency signage is visible at all times.
- k. Application & Workmanship
- i. Brush/Roller; HVLP only where approved and compatible with substrate (never on lime without consent).
 - ii. Observe manufacturer recoat intervals; denib between coats for joinery.
 - iii. Edges crisp; no paint on hardware/glass.
 - iv. Coverage: achieve manufacturer's declared spread rate — reject "holidaying", flashing, picture-framing, or lap marks.
- l. QA/QC & Acceptance Criteria
- i. Mock-up: Provide a 10 m² control area (one office wall + ceiling, one toilet wall) demonstrating each system; obtain written ER approval before full rollout.
 - ii. Finish quality: Even sheen; no sags/runs; full opacity; straight lines at junctions; clean interfaces to cornices and skirtings.
 - iii. Record batch numbers, colours, and locations for BCAR.
 - iv. Defects: rectify and re-present for inspection at no cost.
- m. Colour Management: ER to approve colour schedule (walls/ceilings/woodwork/radiators) referencing RAL/NCS or manufacturer codes. Provide A4 draw-downs and 1 m² site sample per colour.
- n. Coordination & Sequencing: Paint after completion of lime curing (Clauses 7.11–7.12) and after first-fix M&E, fire-stopping labels (7.9), and window/door repairs (7.21). Complete before carpet and floor finishes (7.14) and, where practical, before final luminaire/faceplate installation (protect if out of sequence).
- o. Deliverables
- i. Submittals: Product data, EN 13300/ISO 11998 classifications, Sd values (mineral), VOC certificates, SDS/COSHH, colour schedule, method statement.
 - ii. Handover: O&M with maintenance regimes, touch-up schedule, spare labelled tins (≥1 L per colour), and as-applied register (room-by-room).
- p. Warranty: Minimum 5-year material warranty against film failure (peeling, cracking, blistering) when maintained per O&M; 12-month workmanship warranty.

3.21 FLAT ROOF REPAIRS

- a. The Works comprise the removal of existing flat roof coverings down to the original concrete substrate, the preparation and repair of the retained structure, and the installation of a new mastic asphalt roof system complete with vapour control layer, insulation, flashings, outlets, and protective finishes. The completed system shall be robust, durable, free-draining, and compliant with BS 6229, BS 5250, and all relevant I.S., EN, and BBA-certified product standards.
- b. **Preparation:** Remove existing asphalt, decking, and coverings, retaining and making good the original concrete deck. Grind down ridges and projections, and repair all voids, cracks, and honeycombs with appropriate repair mortars. Treat all timber elements (joists, kerbs, battens) against wet/dry rot and beetle infestation in accordance with BS 8417. Apply vapour control layer: IKO Systems Vapour Control Layer, spot-bonded with IKO Easy Melt Bitumen.
- c. **Roof Covering:** Install Permaphalt Polymer Modified Mastic Asphalt (IKO, BBA Cert. 89/2299) in two-coat, 20 mm nominal thickness, to prepared deck. Provide solar reflective paint finish (IKOpro Asphalt Protection Coat, light grey) as Clause 495. Introduce free-standing timber kerbs with lead flashings to abutments and upstands, and lead aprons/drips at perimeters. Install outlets through parapets (lead chute or compatible corner outlets) to ensure positive drainage.
- d. **Skirtings & Vertical Work:** Form skirtings to upstands and kerbs using Permaphalt asphalt in three-coat, 20 mm nominal thickness, over galvanised expanded metal lathing, with black sheathing felt separating layer. Provide 45° fillets, minimum 40 mm face, at all junctions. Protect with solar reflective paint.
- e. **Insulation:** Install rigid thermoset insulation (Kingspan Kooltherm K18 Insulated Plasterboard, 112.5 mm) to achieve a maximum U-value of 0.16 W/m²K. All insulation to be butted tight, fixed per manufacturer's instructions, and fully compliant with BS EN ISO 6946 and BS 4841.
- f. Provide vapour barrier and accessories as recommended by manufacturer to prevent interstitial condensation.
- g. **Ancillary Items:** All bonding compounds, battens, trims, and sand for rubbing to be IKO-approved or equal. Timber trims to be planed, preservative-treated, and fixed at ≤300 mm centres. All flashings to be in Code 7 lead, dressed and fixed in accordance with BS EN 12588 and Lead Sheet Association (LSA) guidance.
- h. **Performance Requirements:** Roof to be secure, durable, free-draining, and fully weathertight. Condensation risk analysis to be demonstrated in accordance with BS 5250 and BS 6229. Finished roof to provide robust protection and ease of maintenance, with minimum service life of 20 years.
- i. **Quality Assurance:** Works to be executed by an IKO-accredited specialist roofing contractor. All products to be BBA-certified and installed in strict accordance with manufacturer's instructions. Final inspection and certification to confirm compliance with specification and Building Regulations.

3.22 REPAIRS TO THREE EXTERNAL DOUBLE-LEAF TIMBER DOORS

Repair, renovate and (where strictly necessary) replace defective elements to three external double-leaf timber entrance doors, including frames, thresholds, glazing, seals and ironmongery, to restore safe operation, weather-tightness, security and appearance. Works include opening-up, temporary protection/secure weathering, joinery repairs, replacement components, coatings/finishes, adjustment and commissioning.

- a. **Opening-Up, Surveys & Temporary Works:** Carefully remove beads, cover trims, local linings and selected hardware to expose concealed timber and junctions without damaging retained fabric. Photograph and schedule defects (decay type/extent, moisture ingress paths, hardware condition, glazing defects). While leaves are off hinges or removed to workshop, provide robust temporary doors/panels with secure locking and weather seals. Do not destabilize or remove any retained structure/fabric.
- b. **Timber Procurement & Documentation:** All new timber (including sheet goods) from well-managed forests/plantations; comply with producer-country law and relevant international agreements (e.g., CITES). Provide independently verifiable documentation of provenance or supplier's formal environmental purchasing policy (CPET Cat. B acceptable). Match existing species for visible repairs where identifiable; otherwise use durable exterior hardwood (Class 2 or better, e.g., iroko/sapele), FSC/PEFC certified. Moisture content at installation 12–16%.

- c. **Evidence of Performance:** For any new door leaves/frames or significant component replacements, provide certified evidence of compliance with BS EN 14351-1 (materials, glazing, ironmongery, seals). Safety performance to EN 12600 (minimum class 1B1 where within 1,500 mm of FFL or as required). If any door is designated fire-resisting, submit test evidence to BS 476-22 / EN 1634-1/-3 covering the complete assembly (door, frame, glass, ironmongery, seals).
- d. **Site Dimensions & Control Samples:** Take full site dimensions of each opening (frame squareness, plumb, twist, hinge side set-backs, threshold levels). Record on shop drawings before fabrication/repairs. 1 nr splice/repair mock-up showing dutchman/scarf detail, arris profile and finish. 1 nr finish sample board (primer/undercoat/topcoat system) for approval.
- e. **Repair Methodology (Doors & Frames):** Identify decay; cut back to sound timber. Treat cut surfaces with boron or manufacturer-approved preservative; allow dwell time. Like-for-like hardwood inserts with minimum 1:8 scarf (preferably 1:10) in the direction of grain. Bond using D4 exterior adhesive or structural epoxy as appropriate; clamp to intimate contact; no face-filled joints. Two-part timber repair resin with matching modulus; stainless pins where required; prime substrate per system data. Replace rotten rail ends; fit drip profiles; ensure 6–8 mm drainage gap above threshold weather bar. Consolidate jambs/heads; true and plumb; pack behind fixings; replace decayed cills with new hardwood cills with throating/drip. Replace cracked/blown panes with laminated safety glass (min 6.4 mm ext.), warm-edge where double-glazed units are present. Re-glaze with timber beads (primed on all faces) and silicone/ butyl as specified; vented glazing where units require. Install new compression perimeter seals and threshold weather bar/drop seal to achieve improved air/water performance. Replace worn hinges with grade 13 S/S hinges, fit new S/S multipoint lock or mortice lock to schedule, S/S flush bolts to inactive leaf, S/S door closers where required. All external ironmongery stainless steel 316; through-bolted where possible. Provide concealed wireways within stiles/frames for devices; coordinate with Electrical Contractor. Repairs must not invalidate any performance certification.
- f. **Finishes:** Strip failing coatings to sound base; feather edges; sand to uniform key; degrease denib new joinery. Priming & coating: Factory/in-shop priming of new components on all faces/edges. Site system: 1 × primer + 1 × undercoat + 2 × exterior topcoats (microporous). Colour to ER schedule. BS 6150 workmanship for painting; seal all end grain; maintain clearances after coating.
- g. **Installation, Tolerances & Adjustment:** Plugged and screwed (stainless), pack to solid backing; maintain frame square/plumb (± 2 mm over 2 m). Head/jamb 2–3 mm, meeting stiles 2–3 mm, threshold 6–8 mm (post-seal). Smooth, self-closing (where closers fitted), secure locking; no binding/rubbing. Demonstrate to ER.

3.23 RESIN WALL LINING SYSTEM — SUPPLY & INSTALLATION

- a. Provide and install a complete, seamless hygienic resin wall-lining system to all internal wall surfaces within the two designated toilet/shower room areas, as per drawing schedule. System to be installed by the approved manufacturer/applicator, John Slattery Hygienic Applications Ltd (or pre-approved equal), forming a continuous, impervious, and impact-resistant surface.
- b. System: MMA or PU hygienic resin wall coating; minimum total thickness 1.0–2.0 mm built up in multiple coats; smooth/semi-smooth satin hygienic finish; single uniform colour per room as scheduled.
- c. **Substrate Preparation:** All surfaces to be sound, clean, dry, and stable. Carry out necessary making good; remove existing tiles, coatings, and contaminants; achieve fine mechanical key via sanding or shot-blasting. Verify moisture content $< 5\%$ WME. Apply resin-compatible primer to entire substrate.
- d. **Application:** Apply base coat with embedded reinforcement scrim at all internal/external corners, wall/floor junctions, and around all penetrations. Apply subsequent coats to achieve specified thickness and seamless finish. Maintain ambient conditions: $10\text{--}25^{\circ}\text{C}$, $\text{RH} \leq 65\%$.
- e. **Critical Details:** Form integral resin cove skirting at wall/floor junctions; radius all internal corners (min 25mm); protect external corners with stainless steel or PVC angle trims fully encapsulated in resin. Seal all penetrations with chemical-resistant elastomeric sealant. Terminate neatly at ceilings, door frames, and interfaces with other finishes using stop beads or trims.
- f. **Performance Requirements:** System must be abrasion and impact resistant; chemically resistant to common cleaning agents (bleach, quaternary ammonium compounds); vapour

- permeable ($S_d \leq 0.5 \text{ m}$); with integrated anti-microbial properties. Fire performance minimum Class B-s1, d0 (EN 13501-1).
- g. **Coordination & Protection:** Remove and safely store all sanitaryware, mirrors, and accessories prior to works. Protect adjacent finishes, floors, and services. Reinstate all fittings upon completion, ensuring proper sealing to the resin surface. Maintain adequate ventilation during application and curing in compliance with COSHH.
 - b. **Testing & Handover:** Prior to installation, submit method statement and provide 2 m² sample panel for approval of colour and finish. Upon completion, conduct adhesion pull-off tests ($\geq 1.0 \text{ N/mm}^2$) and verify thickness. Submit manufacturer's technical data, QA test results, maintenance manual, and minimum 5-year warranty against delamination or adhesion failure.
 - c. **Clean-Up & Maintenance:** Upon completion, clean all surfaces with approved pH-neutral detergent. Remove all protection and debris. Provide client with full cleaning and maintenance instructions for the expected 10+ year service life.

3.24 MAKING GOOD AND FINAL COMPLETION

- a. All disturbed wall, floor, ceiling, cornice, and junction finishes will be reinstated using lime-compatible materials, conserving as much original fabric as possible.
- b. Provide a full clean-down of the site using dry vacuum systems only – no water-based cleaning is to be carried out on lime or breathable substrates.
- c. Attend a joint inspection with the Employer's Representative. A punch list will be issued, and all items must be completed within five working days.
- d. Submit close-out documentation, including material datasheets, paint SDS sheets, lime supplier certifications (e.g., Saint Astier NHL), a photographic before/after record, and a conservation method statement.

4. TIME FOR COMPLETION

The time for the completion of the works shall be 10 working weeks (50 days). The time is judged adequate to allow the project to be executed safely. If a Tenderer believes that this is not the case then they should note this on their Form of Tender and attach a covering letter explaining their reservations. Such an amendment will not be deemed a qualification of the Tender providing the matters contributing to their longer suggested period solely relate to the safe execution of the works.

5. OTHER WORK ON THE SITE

There will be normal day to day activity in the buildings around the site.

6. PARTICULAR RISKS RELATING TO THE PROJECT.

- 1. Working at heights.
- 2. Demolition works.
- 3. Electrical works.

7. EXISTING SERVICES

There is a risk of exposed electrical conductors during the works and measures should take to ensure these are identified and isolated.

Safety File

The PSCS and Contractor shall compile all information regarding the processes and materials used in the construction of the project and shall mark up the construction drawings to show how the building was constructed, in the event of any departure from the drawings' intent. All information relevant to the compilation of the Safety File shall be handed over to the PSDP before the end of construction, paying particular attention to the information needed by the end-user in relation to services, maintenance operations, operation manuals, as built drawings, specifications, cleaning processes, construction techniques, load bearing capacities, etc.

The PSDP is obliged to provide three (3) copies of this Safety File to the Client and the PSCS / Contractor shall provide a minimum of three copies of all information to be handed over to the PSDP.

Continuing Liaison

The safety and health implications of design elements considered during the Design of these works are communicated in the Preliminary Safety and Health Plan to the Project Supervisor Construction Stage (PSCS). The Project Supervisor for the Design Process (PSDP) has outlined in this Plan reasonably foreseeable hazards.

The PSCS shall establish lines of communication on safety related matters with the PSDP

Design Alterations: (Procedure for dealing with unforeseen eventualities during project execution resulting in substantial design change and which might affect particular risks, contract period, or have other safety and health implications).

The PSCS shall immediately inform the appointed PSDP of unforeseen eventualities that necessitate a change to the design of the work during the construction phase.

Following assessment of the implications of such changes, the PSDP shall provide all necessary information to the PSCS on particular risks foreseen. The Safety implications (if any) of the proposed alterations shall be noted in the Safety File.

3. REVENUE COMMISSIONERS INFORMATION ON VALUE ADDED TAX

NOTE THAT ADVICE WAS PUBLISHED WHEN THE STANDARD VAT RATE WAS 21% - NOW 23%

VAT REVERSE CHARGE CLARIFICATIONS

“Fittings” included in construction contract

The supply and installation of fittings (as described in appendix attached) is subject to VAT at 21% even when part of a wider contract that includes construction services subject to the 13.5% rate. These supplies and installations are not services within the scope of Section 8 (1B) (b) Value-Added tax Act 1972 (Amended) and therefore not subject to the VAT reverse charge. The supplier should invoice VAT at 21% as before.

Construction Services subject to the VAT reverse charge and liable to VAT at 21%

The rate of VAT is not the determining factor in deciding whether or not the reverse charge applies. The reverse charge applies to services consisting of construction operations, regardless of the VAT rate. While most of these services are subject to VAT at 13.5% there are some that attract the 21% rate, including:

- a. The hire and erecting of scaffolding
- b. The hire and erecting of temporary fencing
- c. The hire of crane and driver
- d. The hire of site labour through an agency (not to be confused with an employment agency)

VAT Interpretation Branch
1st September 2008.

Appendix

As distinct from fixtures, fittings are goods which, though often attached to buildings, can be removed without substantial damage being caused to the goods themselves or to the building to which they are attached. Their supply and installation is therefore subject to the 21 per cent rate.

Examples are as follows:

- a. Blinds (most types)
- b. Clocks including time clocks such as flexitime equipment
- c. Cooker hoods
- d. Curtains
- e. Electric and gas fires
- f. Exhibition stands
- g. Fitted carpets and lino, other than floor covering stuck down over its entire surface
- h. Freestanding shop counters
- i. Kitchen cookers
- j. Lighting other than recessed lighting
- k. Mirrors
- l. Most shelving
- m. Refrigeration units, including deep freezers
- n. Safes (certain)
- o. Seating, including cinema and church seating whether or not secured to the floor
- p. Snooker tables and other games tables
- q. Washing machines and dishwashers, including plumbed-in machines.
- r. Wooden flooring ('floating' – not permanently fixed)

The supply, or supply & fitting for a single inclusive charge, of these goods is chargeable to VAT at 21 per cent. For example the supply & fitting of a kitchen cooker for an inclusive charge is liable at 21 per cent. If, however, it was necessary to re-wire for a power supply point and a separate charge was raised for such work, the 13.5 per cent rate would apply to that separate charge. The connection only of the cooker to an existing power supply would however be subject to 21 per cent.