RIDGE

M&E LANDLORD SERVICES
PROPOSED WORKS FOR
10 DOMBEY STREET

24th January 2020

M&E LANDLORD SERVICES PROPOSED WORKS FOR 14 & 15 DOMBEY STREET

Prepared for

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Notes	

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1. INTRODUCTION

Surveys were undertaken on 17th, 18th July 2019 and 27th November 2019 by Ridge to identify the different issues occurred from the installation of the containment of the electrical and fire system installation carried out during the Upgrade Program of the Fire Detection and Alarm Systems on the 10 buildings of Dombey Street as the table below :

Property / Block Ref	Address	Postcode	Number of Flats
P110093	9 Dombey Street	WC1N 3PB	1
P110094	10 Dombey Street	WC1N 3PB	2
P110095	11 Dombey Street	WC1N 3PB	2
P110096	12 Dombey Street	WC1N 3PB	2
P110097	13 Dombey Street	WC1N 3PB	3
P110098	14 Dombey Street	WC1N 3PB	2
P110099	15 Dombey Street	WC1N 3PB	3
P110100	19 Dombey Street	WC1N 3PD	2
P110102	20 Dombey Street	WC1N 3PD	6
P110104	22 Dombey Street	WC1N 3PD	7

All buildings are Grade II Listed internally and externally, and Listed Building Consent required for such type of works in them.

This report describes the replacement of the existing containment of the electrical and fire system cabling with a new type decorative trunking and installation method which eventually will be more discreet, offend the eyes less and will suit the character of the listed building.

This report will be submitted for approval to London Borough of Camden as a Pilot Scheme for the commencement and the future works at the above-mentioned properties.

The described works and material which are presented in this report, are proposed for two of the buildings nr.14 and nr.15 Dombey Street, as these buildings were inspected by LBC and found to need urgent remedial works.

On receipt of the comments and the approval of LBC a schedule will be produced for the remedial works in all the rest properties.

2. CABLING CONTAINMENT

The existing trunking shall be stripped off and the walls ceilings and other damaged building fabric and elements shall be restored to their previous condition.

The dado rails, the skirting boards and the ceiling cornices that have been cut or damaged from the existing trunking installation shall be repaired where possible or be replaced with the same type and style as before.

New decorative trunking from the D-LINE or similar manufacturer shall be installed in the communal areas and inside the apartments.

All trunking shall be of type ½ round or ¼ round and sized accordingly, in addition, it shall be colour matched using the standard manufacturers colours to the surface it is mounted on. As the trunking installation is in the communal corridors and stairs which forms part of the escape route, the cabling inside the trunking shall be fixed using the metallic fire rated cable clips from the same manufacturer, installed at the recommended distances.

Accessories such as bends, tees, connectors etc. required during the trunking installation shall be of the same range, colour and size as the trunking installed.

The new trunking shall be installed to minimize the appearance of the trunking in the middle of walls and ceilings where is possible.

The new trunking shall be installed on the top of the skirting boards, dado trunking and below the cornices. Where possible the trunking shall be installed in the corners of walls and ceilings and where needed to follow the architrave or the door frames.

Where more than one trunking is used due to the segregation required of the cabling for the fire system cabling and the lighting, this shall be done, where possible by installing the trunking for each system on the different side of the walls or ceilings.

Trunking systems running parallel on a corridor or landing ceiling wall and ceiling shall have, where possible, their rising lengths installed on the corners of the opposite walls. Installing the trunking in the middle of walls and ceiling shall be avoided, where possible, even if it is the shortest route. The trunking drops to wall mounted luminaires shall be vertical.

Any breaches by services to the communal and apartments walls shall be fire stopped with a proprietary intumescent sealant to ensure best encapsulation.

The Installation Method shall conform with the manufactures instructions as per Appendix A.

3. COMMUNAL FIRE SYSTEM AND ELECTRICAL INSTALLATION.

3.1. Proposed Communal Lighting

All existing communal luminaires, emergency bulkheads and their cabling containments will be removed and disposed of accordingly.

The walls, the ceilings and other damaged building fabric and elements will be restored to their previous condition.

The existing lighting wiring shall be tested to ensure if it can be reused. If it is not suitable for reusing, then it shall be replaced.

New LED luminaires, wall or ceiling surface mounted with integral emergency battery pack, photocells and movement detectors shall be installed in all communal areas.

A new key switch for testing the emergency lighting shall be installed adjacent the supplying distribution board.

3.2. Proposed Communal Fire Alarm System

The existing communal Fire Alarm panels, detectors sounders and manual call points, cabling and associated containment shall be removed and disposed of accordingly.

The walls, the ceilings and other damaged building fabric and elements will be restored to their previous condition.

New addressable Fire Alarm panels, detectors, sounders and call point shall be installed in the communal area of each building. The new system shall comply with the current British Standard BS5839.

3.3. Proposed Communal Electrical Equipment Enclosures

All electrical switchgear and distribution board in the communal areas of the building shall be contained in fire rated enclosures complying with the current Building Regulation.

4. PROPOSED HISTORIC BUILDING FABRIC REFURBISHMENT WORKS

Where historic features of the building have been damaged, they will be sympathetically restored. Where possible splice repairs will be carried out to ensure as little historic material is lost. The aim of the remedial works is to have minimal intervention and as little disturbance into the existing historic building fabric as possible. Where historic elements of the building are beyond repair, they will be replaced on a like for like basis in terms of material specification and design using tradition construction methods.

5. ELECTRICAL ENCLOSURES

In number 15 there is a requirement for new fire rated enclosures for the distribution board and for the electrical meters found under the stairs. The enclosures should be formed to provide 30 minutes fire resistance, this must include all four sides of the cupboard structure. Where doors must be installed, doors must be of solid timber FD30S rating, complete with intumescent strips and smoke seals with gaps no wider than 3mm between door/frame/threshold with smoke seals touching the frame/door and conform to BS 476-33:1993, ISO 9705:1993. Doors must be provided with 3x fire rated hinges to conform with BS EN 1935:2002 and Fire door keep shut signage to conform with BS 5499-1:2002. Installation of doors must conform to BS 8214:2016.

The cupboard may be formed with double or single doors dependant on the best design for the space available, and/or practicalities of use for the residents. If two door leafs are utilised then the primary opening door is to have a FB2 (Fire Brigade) mortice deadbolt lock, and the secondary leaf to have cranked tower bolts top and bottom of door.

If applicable, if the base of the cupboard is sited on the property's floorboards, then 50mm mineral fibre Ablative coated fire batt must be laid at the base of the cupboards and pasted with intumescent sealant. New formation to be primed, undercoated and top coated to best suit the surroundings it is sited within. Any breaches by services to the newly formed cupboard must be fire stopped to provide 30 minutes fire resistance with materials such as Ablative coated fire batt and intumescent mastic to ensure best encapsulation.

In number 14 the existing fire enclosures are adequate however gaps exist above the fire enclosure and will need fire stopped to provide 30 minutes fire resistance with fire rated materials.

6. PROPOSED FIRE ALARM SYSTEM – COMMUNAL– OPTION 1

The contractor shall provide a cost to supply, install, test, and commission a new hard-wired fire alarm system in containment throughout.

A new analogue addressable open protocol fire alarm panel as Ziton ZP2 or Advanced MxPro or equal and approved shall be installed in the ground floor lobby.

Smoke optical detectors with integral sounders and manual call points compatible with the panel selected shall be installed in the communal areas of all floors.

Interface modules linked to the apartments fire detection and alarm systems shall be installed adjacent the fire alarm panel. Each interface unit shall be labelled with the flat served.

Interface module for the transmission of the alarm signals to the fire and rescue services via an Alarm Receiving Centre, shall be installed by the fire alarm panel for future use.

The Fire Alarm System shall be Grade A Category LD1 as per the recommendations of BS5839-6:2019 and BS5839-1 :2017. All equipment shall comply with the requirements of EN54.

The system shall be wired in compliance with BS5839-6:2019, BS5839-1:2017 and BS7671:2018.

The fire strategy and the Cause and Effect shall be in line with Clarion's requirements. Clarion to confirm that when a detector is activated within a property/flat there shall be a 2 minutes time delay before the fire alarm panel alert all other flats and communal areas to evacuate.

The fire detection and alarm system installation shall be installed as per the drawing provided. Any variation to the design of this system should be agreed by Clarion and the engineer.

As fitted drawings, cable loop readings, dB sounder readings, installation certificate, commissioning certificate and battery calculation certificates, shall be provided at the end of the installation to support a 72 hour standby back up for the fire alarm batteries.

All cabling shall be installed in trunking throughout the communal areas. D-Line trunking of type ½ round or ¼ round and sized accordingly shall be used. The new trunking shall be colour matched to the surface it is mounted on, using the standard manufacturers colours. Detailed information is provided in this document and the manufacturer D-Line product catalogue is included in the Appendix 1 of this document. The cabling within the trunking shall be held in place with metal D-clips or similar.

The existing Fire Alarm system with all components, cabling, batteries, panels, accessories and ancillary items made redundant by these works shall be stripped out in their entirety and removed from site and disposed in accordance with the WEEE directive. All holes drilled through the fabric of the building should be fire stopped and labelled once they have been filled.

7. FIRE ALARM SYSTEM- COMMUNAL– OPTION 2

The contractor shall provide a cost to supply, install, test, and commission a new wireless radio-linked fire alarm system.

A new analogue addressable open protocol fire alarm panel, Zerio Plus or Hochiki Firewave or equal and approved shall be installed in the ground floor lobby.

Smoke optical detectors with integral sounders and manual call points compatible with the panel selected shall be installed in the communal areas of all floors.

Interface modules linked to the apartments fire detection and alarm systems shall be installed adjacent the fire alarm panel. Each interface unit shall be labelled with the flat served.

Interface module for the transmission of the alarm signals to the fire and rescue services via an Alarm Receiving Centre, shall be installed by the fire alarm panel for future use.

The Fire Alarm System shall be Grade A Category LD1 as per the recommendations of BS5839-6:2019 and BS5839-1 :2017. All equipment shall comply with the requirements of EN54-25

The power supply for the fire alarm panel of the system shall be wired in compliance with BS5839-6:2019, BS5839-1:2017 and BS7671:2018.

The fire strategy and the Cause and Effect shall be in line with Clarion's requirements. Clarion to confirm that when a detector is activated within a property/flat there shall be a 2 minutes time delay before the fire alarm panel alert all other flats and communal areas to evacuate.

The fire detection and alarm system installation shall be installed as per the drawing provided. Any variation to the design of this system should be agreed by Clarion and the engineer.

As fitted drawings, cable loop readings, dB sounder readings, installation certificate, commissioning certificate and battery calculation certificates, shall be provided at the end of the installation to support a 72 hour standby back up for the fire alarm batteries.

The cabling for the power supply of the panel shall be installed in trunking from the landlord's distribution board located under the ground floor stairs to the location of the panel in the communal corridor. D-Line trunking of type ½ round or ¼ round and sized accordingly shall be used. The new trunking shall be colour matched to the surface it is mounted on, using the standard manufacturers colours. Detailed information is provided in this document and the manufacturer D-Line product catalogue is included in the Appendix 1 of this document. The cabling within the trunking shall be held in place with metal D-clips or similar.

The existing Fire Alarm system with all components, cabling, batteries, panels, accessories and ancillary items made redundant by these works shall be stripped out in their entirety and removed from site and disposed in accordance with the WEEE directive. All holes drilled through the fabric of the building should be fire stopped and labelled once they have been filled.

8. FIRE ALARM SYSTEM – APARTMENTS

The contractor shall provide a cost to supply, install, test, and commission a new hard-wired fire alarm system in containment in each flat.

14 Dombey Street building contains 2 apartments.
Apartment A has its entrance door at ground floor and occupies the basement, ground and the first floor.
Apartment B has its entrance door at the second-floor landing and occupies the second and the third floor.

15 Dombey Street building contains 3 apartments.
Apartment A has its entrance door at ground floor and occupies the basement and ground floor.
Apartment B has its entrance door at the second-floor landing and occupies the second floor.
Apartment C has its entrance door at the third-floor landing and occupies the third floor.

New fire detection and alarm system Grade D1 Category LD1 shall be installed in each apartment as per the recommendations of BS5839-6:2019.

Smoke, Multi-Sensor and Heat Detectors of the AICO Ei3000 product line, together with the Radio-Link modules, the Test/Locator and the alarm Interface devices shall be installed in each apartment.

Smoke or Multi-Sensor detector shall be installed in each hall, lounge and bedrooms as close to the centre of the room as possible ensuring its installed at least 300mm from the light fitting.

A Heat detector should be installed in each Kitchen as close to the centre of the room as possible ensuring it's at least 300mm away from the light fitting and 1000mm from the cooking appliances.

An Aico alarm locator/controller shall be installed in the hallway of each flat to locate and silence the alarm from an easily accessible position.

An Ei414 Interface module paired with each flat system, shall be installed adjacent the communal fire alarm panel in order for each flat to be linked to communal Fire Alarm system.

All detectors, Ei414 and locator should be linked together in each individual flat after they are installed and interlinked as per the cause and affects below.

As fitted drawings, installation certificate, commissioning certificate, shall be provided at the end of the installation.

All cabling shall be installed in trunking throughout the communal areas. D-Line trunking of type ½ round or ¼ round and sized accordingly shall be used. The new trunking shall be colour matched to the surface it is mounted on, using the standard manufacturers colours. Detailed information is provided in this document and the manufacturer D-Line product catalogue is included in the Appendix 1 of this document. The cabling within the trunking shall be held in place with metal D-clips or similar.

The existing Fire Alarm system with all components, cabling, batteries, panels, accessories and ancillary items made redundant by these works shall be stripped out in their entirety and removed from site and disposed in accordance with the WEEE directive. All holes drilled through the fabric of the building should be fire stopped and labelled once they have been filled.

9. COMMUNAL LIGHTING AND EMERGENCY LIGHTING.

The contractor shall provide a cost to supply and install new luminaires throughout the communal areas.

New LED luminaires with integral emergency 3 hours battery pack and movement sensor shall be installed in all communal areas of the building as per the drawing provided.

The new LED luminaires shall be IP 65,18W, surface mounted circular white polycarbonate body with satin acrylic diffuser. They shall be 1900 lumen output, colour 840, with 50,000 predicted life (L90) achieving a minimum of 106 luminaire lumens per circuit watt. The luminaires shall incorporate microwave detectors with corridor function which includes "hold-off" photocell and 3 hour maintained integral emergency facility, as Corrilux 360C by Luxonic or equal approved.

The microwave movement sensor of the new luminaires shall be adjusted to suit earliest possible movement and a delay time of 5 minutes should be set before stepping down to 10%, as per Clarion's requirement.

A new key-switch for testing the emergency lighting shall be installed adjacent the landlord's distribution board.

The luminaires shall be installed on the ceiling and on the walls as indicated in the proposed layout drawings.

The existing lighting circuits shall be inspected and tested in accordance with the BS7671 wiring regulations within the first week on site and if the cabling is found to be in satisfactory condition it shall be reused for the new luminaire's connection.

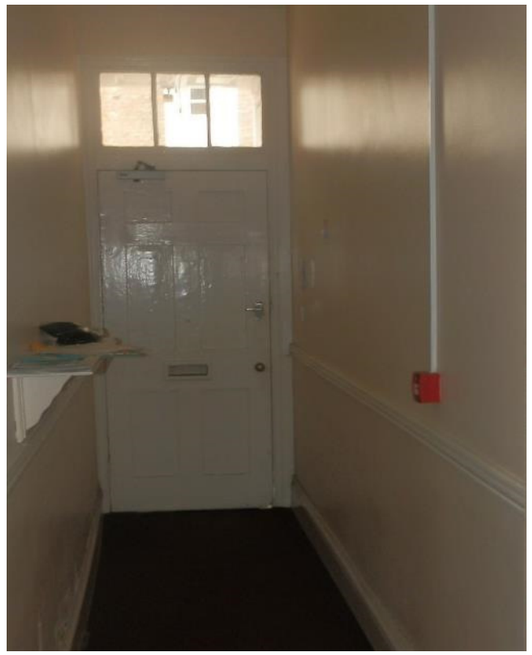
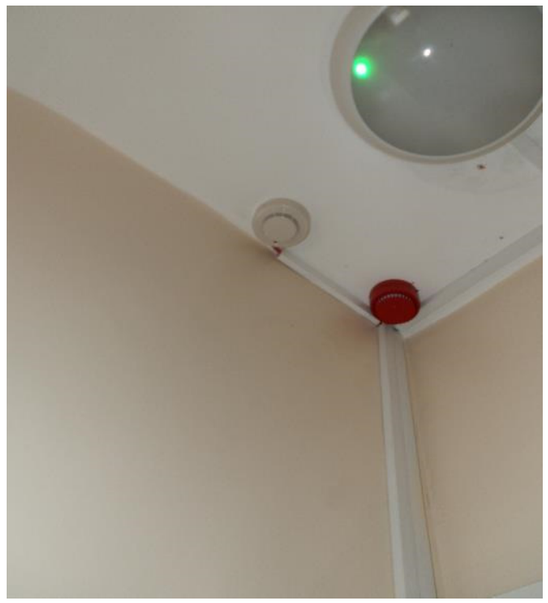
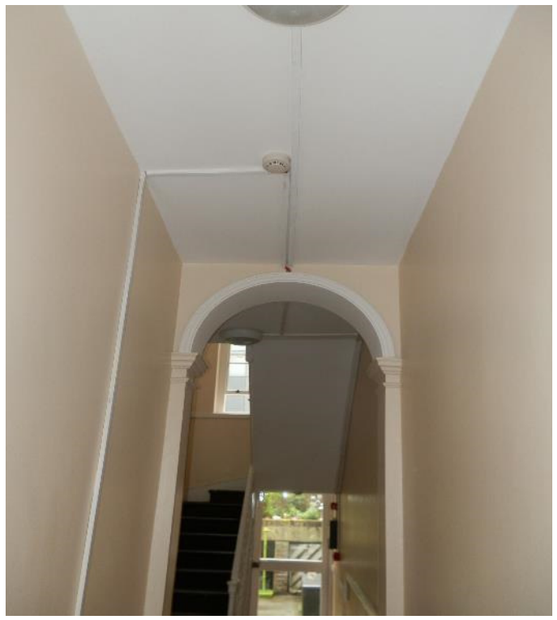
If the cabling of the lighting circuits failed the test and found in unsatisfactory condition then it shall be replaced with new LSOH/LSF Twin and Earth type cable with minimum conductor csa 1.5mm².

All cabling shall be installed in trunking throughout the communal areas. D-Line trunking of type ½ round or ¼ round and sized accordingly shall be used. The new trunking shall be colour matched to the surface it is mounted on, using the standard manufacturers colours. Detailed information is provided in this document and the manufacturer D-Line product catalogue is included in the Appendix 1 of this document. The cabling within the trunking shall be held in place with metal D-clips or similar.

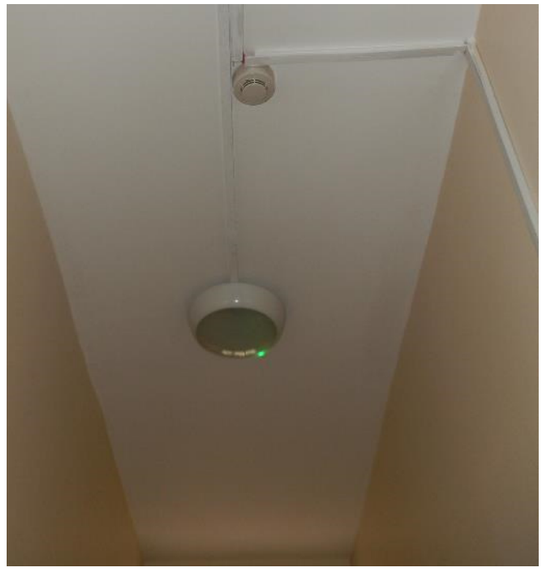
On completion of the installation the relevant certificates shall be issued as required by BS7671:2018 and BS5266-1:2016.

The existing luminaires with all components, cabling, accessories and ancillary items made redundant by these works shall be stripped out in their entirety and removed from site and disposed in accordance with the WEEE directive. As the new luminaires incorporate movement sensors and corridor function lighting control, the existing time lag switches where exist shall be disconnected, removed and disposed in accordance with the WEEE directive. Blank plates shall be installed where redundant switches removed. All holes drilled through the fabric of the building should be fire stopped and labelled once they have been filled.

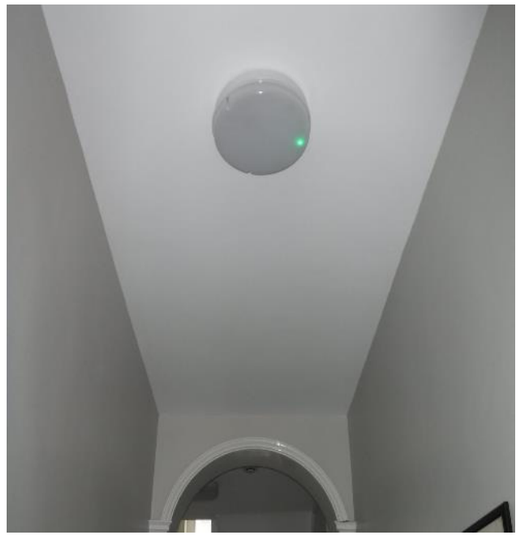
10. NO. 14 AND 15 DOMBEY STREET – EXISTING INSTALLATION OF CABLE CONTAINMENT PHOTOS

			
Existing white rectangular trunking in communal entrance corridor	Existing trunking approximately “cut to size” with exposed cabling	Existing trunking termination above Manual Call Point box with exposed cabling	Existing trunking termination to the smoke detector.
			
Existing white rectangular trunking in communal corridor	Existing white rectangular trunking in communal entrance corridor	Existing white rectangular trunking on top of skirting boards in communal corridor	Existing trunking termination on top of Fire Alarm Panel

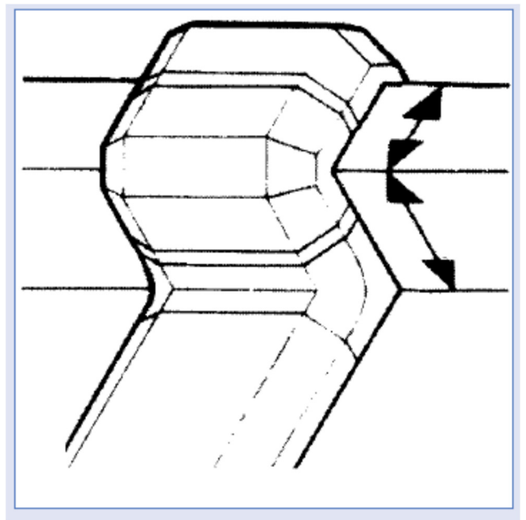
11. 14 DOMBEY STREET – EXISTING LUMINAIRES, FIRE ALARM SYSTEM AND ASSOCIATED CABLE CONTAINMENT PHOTOS

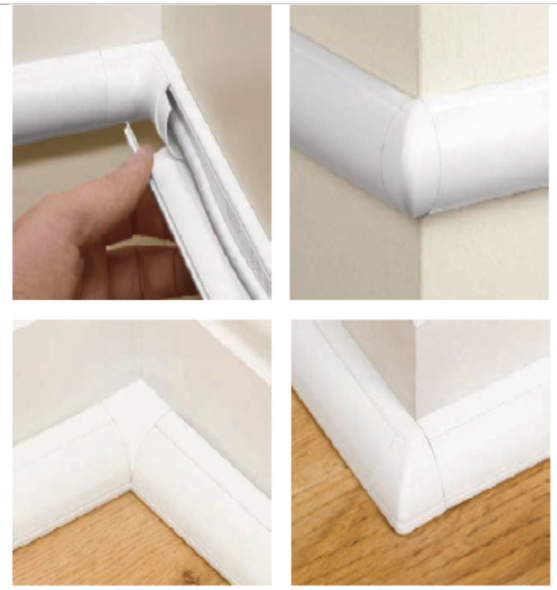
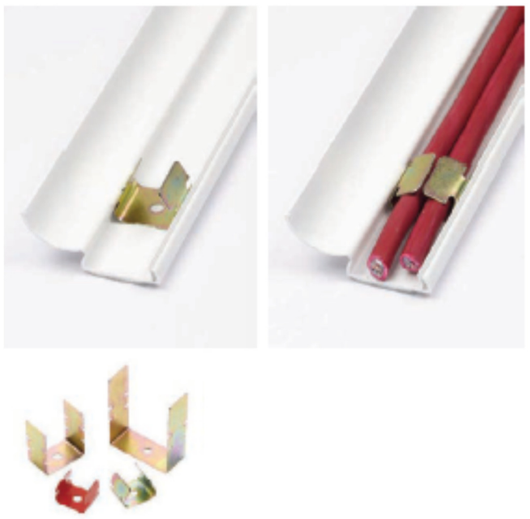
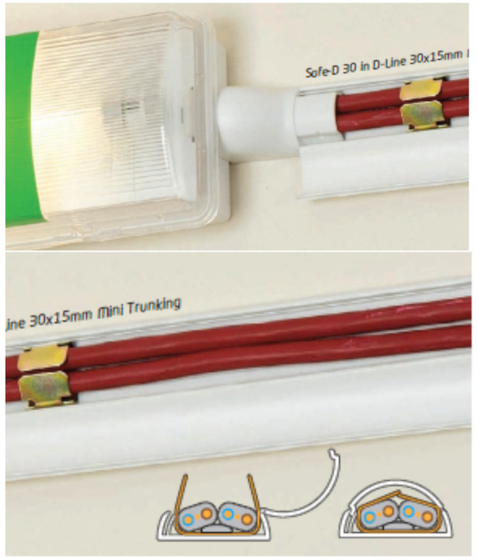
			
Communal lighting and fire alarm detector	Communal lighting, fire alarm detector and fire alarm sounder	Communal lighting	Fire Alarm Panel

12. 15 DOMBEY STREET – EXISTING LUMINAIRES, FIRE ALARM SYSTEM AND ASSOCIATED CABLE CONTAINMENT PHOTOS

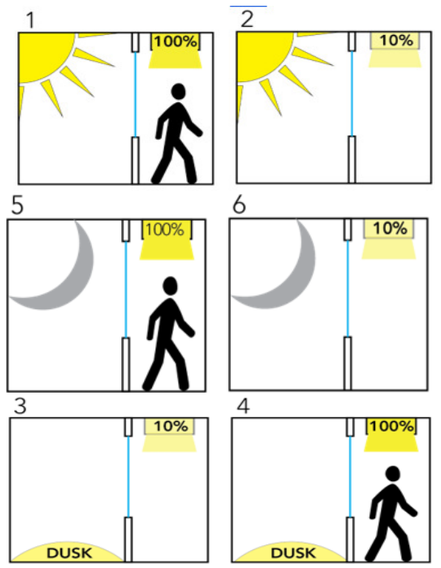
			
Communal lighting	Communal lighting, emergency lighting, fire alarm detector and fire alarm sounder	Fire alarm detector and fire alarm sounder	Fire Alarm Panel and sounder

13. PROPOSED DECORATIVE TRUNKING AND ACCESSORIES IMAGES

			
Paintable can blend in any décor	Decorative type of trunking to be used ½ or ¼ round	¼ round decorative trunking fitted on walls corners	½ round decorative trunking on top of the skirting boards
			
¼ round decorative trunking fitted in wall corners	Discreet installation on door frames and wall panels	Clip over accessories fit securely with no exposed cabling	Example of internal and external corner and bends accessories for installation oner existing dado rail etc

			
¼ round decorative trunking below cornice	Termination of the trunking to ceiling rose with purpose designed accessory	Internal and external corner and bends smooth fit accessories	Purpose designed circular adaptor for complete cover of the cabling to distribution boards or panels.
			
Safety fire clips for compliance with the building regulations	Safety fire clips for compliance with the building regulations	Purpose designed circular adaptor for wall mounted surface boxes.	Purpose designed circular adaptor for smoke detectors.

14. PROPOSED COMMUNAL CORRIDOR LUMINAIRES WITH INTEGRAL EMERGENCY BATTERY PACK AND CONTROLS, FIRE ALARM SYSTEMS AND DEVICES

			
Proposed 1 - THORLUX – Halo- OV-19281 Led luminaire with integral 3H emergency battery pack	Proposed 2 - LUXONIC - Corrilux 450CSM - Led luminaire with integral 3H emergency battery pack	Typical Corridor Function and Microwave Sensor In Operation.	Emergency lighting test switch
			
Landlords distribution board inside fire rated enclosure	Proposed 1 - ADVANCE – Analogue addressable fire alarm panel	Proposed 2 - ZITON Analogue addressable fire alarm panel	Detectors sounders and Manual Call Points

APPENDIX A

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