

# DESIGN & ACCESS STATEMENT

## Installation of Air Conditioning Plant in the Garage & Installation of flush mounted conservation SKYLIGHT

6 Templewood Avenue, London (Camden) NW3 7XA

### Executive Summary

This report has been compiled by Red Square Design & Build on behalf of our client to submit to Camden Council a Planning Application within the grounds of 6 Templewood Avenue, NW3 7XA for:

- 1.AC Plant in Garage  
Planning application for the installation of an Air Handling Enclosure (AHE) inside existing Garage Building. Permission required for external alterations to the garage elevation such as creating opening to allow for external plant vents, extract ducts and access louvred doors.
- 2. Installation of flush mounted conservation SKYLIGHT to roof of garage with opaque privacy glass. Permission required to install flush mounted conservation skylight to allow for natural light and ventilation .

### PROPOSED DESIGN

Addition of an Air Handling Enclosure in the garage and required aletration works to the elevation facing the rear garden.

Installation of flush mounted conservation skylight to garage.

Refer to drawings: ACG00/ ACG01/ ACG02/ 780344 drg101A Garage AC Enclosure.pdf

### ACOUSTIC CONSULTANCY REPORT

Environmental Noise Survey Results, Local Authority Plant Noise Requirements and Garage Enclosure Plant Noise Impact Assessment

REV	DATE	STATUS
A	06.06.2018	Memo 000_Pla_AHE Garage and Skylight

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This report has been prepared for the owner of 6 Templewood Avenue and is solely for her use for the purpose for which it has been prepared. No liability is accepted for third party use.

This report is confidential.

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6 TAv Envir Noise Survey and Garage Enclosure Plant Assessment Report.pdf



# DESIGN & ACCESS STATEMENT

## Installation of Air Conditioning Plant & Skylight

6 Templewood Avenue, London (Camden) NW3 7XA

### 1.0 Introduction

This Design & Access Statement, is to be read in conjunction with the accompanying drawing package.

This statement provides a summary of the works proposed, both in terms of design and access, and assesses the impact of the proposals on both residential and visual amenity. The statement concludes that the planning applications comply with the Council's policies and the proposals will not have any harmful impact and therefore permission should be granted accordingly.

### 1.1 Location

"The site is a substantial detached dwelling on the corner of Templewood Avenue and Templewood Gardens. It was designed in the early 20th Century by Quenell in the Neo-Georgian style and is constructed in red brick. It comprises two storeys plus attic and is set within a generous plot. It lies within the Fitzjohns/Netherhall Conservation Area and is listed as a building that makes a positive contribution to the conservation area."

### 1.2 Preapplication Advice

This proposal was issued out to planning for comments prior to the wubmission. No fomal preplanning advice was requested. Refer to communication attached with planning officer.  
Contact: Robert Lester

SITE PLAN



### 1.3 Previous Planning Records

No 6 T.Avenue has been the subject of a number of applications made in recent years:

Relevant Planning history

- 10790/12094 - The erection of a summer-house - Granted - 06/11/1951.
- PW9802935R1 - The erection of a single storey ground floor extension fronting Templewood Avenue - Granted - 24/05/1999.
- 2007/5596/P - Excavation of basement accommodation under rear garden, erection of single-storey rear ground floor level glazed extension to link new basement to existing single-family dwellinghouse (Class C3) - Refused - 16/01/2008.
- 2010/0834/P - Conversion of garage and alterations to the rear with extension to the basement of a dwelling house (Class C3) - Granted - 27/04/2010.
- 2012/1976/P - Excavation of basement with associated lightwells, replacement of single storey garage and rear garden summer house, addition of two new dormer windows to north east roof slope, alterations to existing fenestration and new hard and soft landscaping, all associated with the use as residential dwelling (Class C3) - Granted subject to s.106 - 12/10/2012.
- 2015/7046/P - Alterations to fenestration, new single storey side extension with terrace, installation and enlargement of window on side elevation - Granted - 01/03/2016.
- 2015/5692/P - Variation of condition 3 (approved plans) of planning permission 2012/1976/P dated 21/10/12 for 'the excavation of basement with associated lightwells, replacement of single storey garage and rear garden summer house, addition of two new dormer windows to north east roof slope, alterations to existing fenestration and new hard and soft landscaping, all associated with use as residential dwelling (Class C3)' to remove proposed basement. Associated removal of conditions nos. 4, 5, 6, 8, 9, and 10 - Granted subject to s.106 - 05/08/2016.
- 2016/2963/P - Submission of an arboricultural report, as required by condition 4 of planning application ref 2015/7046/P (dated 01/03/2016) for a new single storey side extension with terrace - Granted - 04/08/2017.





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## Installation of Air Conditioning Plant & Skylight

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### 2.0 Design

(information extracted from Environmental noise survey report)

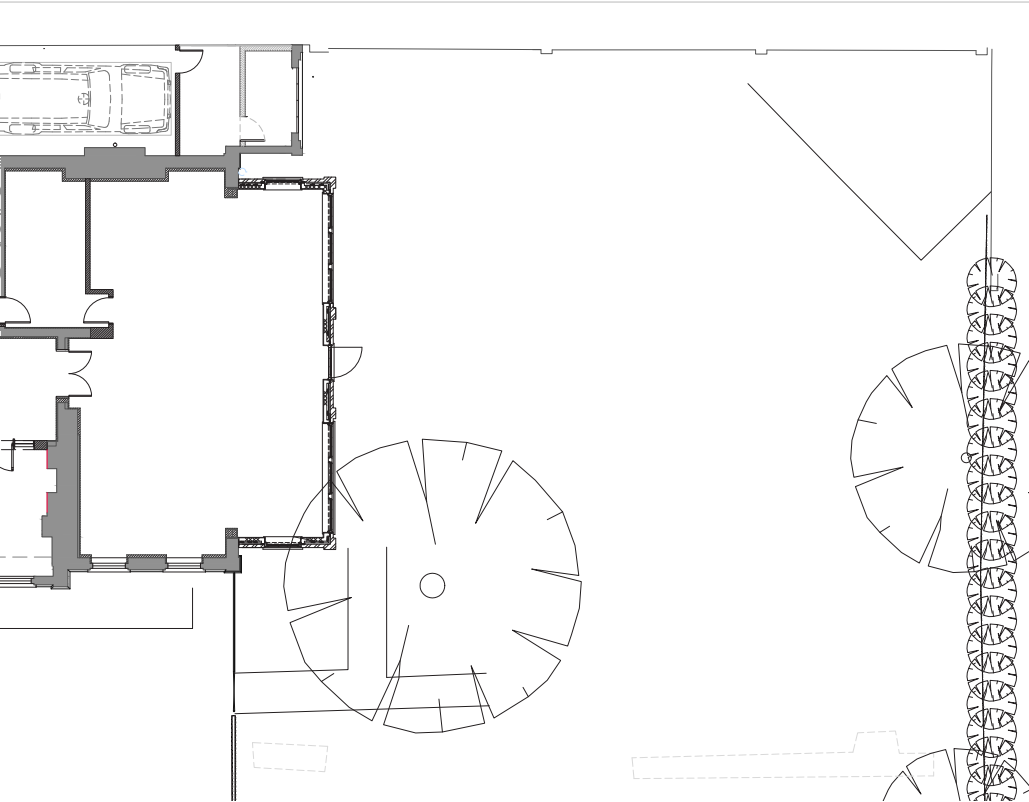
### 2.1 Site Layout

The site is located at 6 Templewood Avenue, Hampstead at the junction with Templewood Gardens and contains a large early 20th Century detached dwellinghouse. The property has a large side/rear garden set behind railings and a hedge. The site is located within the Redington Frognal Conservation Area. The area is characterised by large detached dwellings with an early 20th Century neo-Georgian design largely designed or influenced by Quennell, set within large gardens and on tree lined streets.

The proposed plant would consist of two Mitsubishi air conditioning condensing unit, located in the rear part of the existing garage building at the rear south east elevation of the building.

The existing garage building is constructed with brick walls and solid roof. There will be louvred openings in the front face of the enclosure for attenuated fresh air supply into the enclosure and attenuated discharge air from the enclosure.

The front face of the enclosure will be orientated so that the intake and discharge openings face south east towards the consulate building.



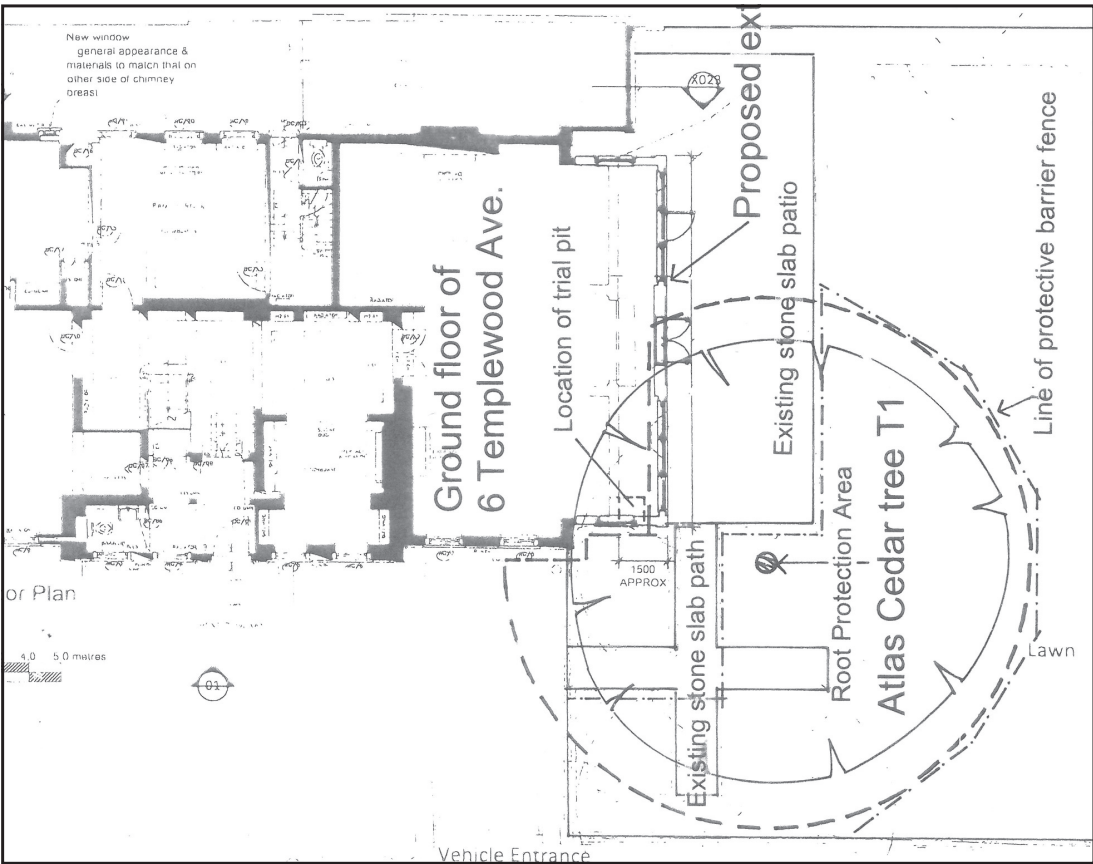
### 2.2 Landscaping and Trees

In relation to the impact of the development on trees, there is a large Cedar tree located on site which provides a high level of visual amenity in the Conservation Area.

The proposed plant enclosure would be sited away from this tree. The Plant will be located inside the existing garage building thus no significant impact on existing landscaping.

We are proposing to level the external ground floor level with the internal floor finish for access to the Plant room from the rear garden.

Excavation of the soft landscaped/grassed garden area for access would be replaced.



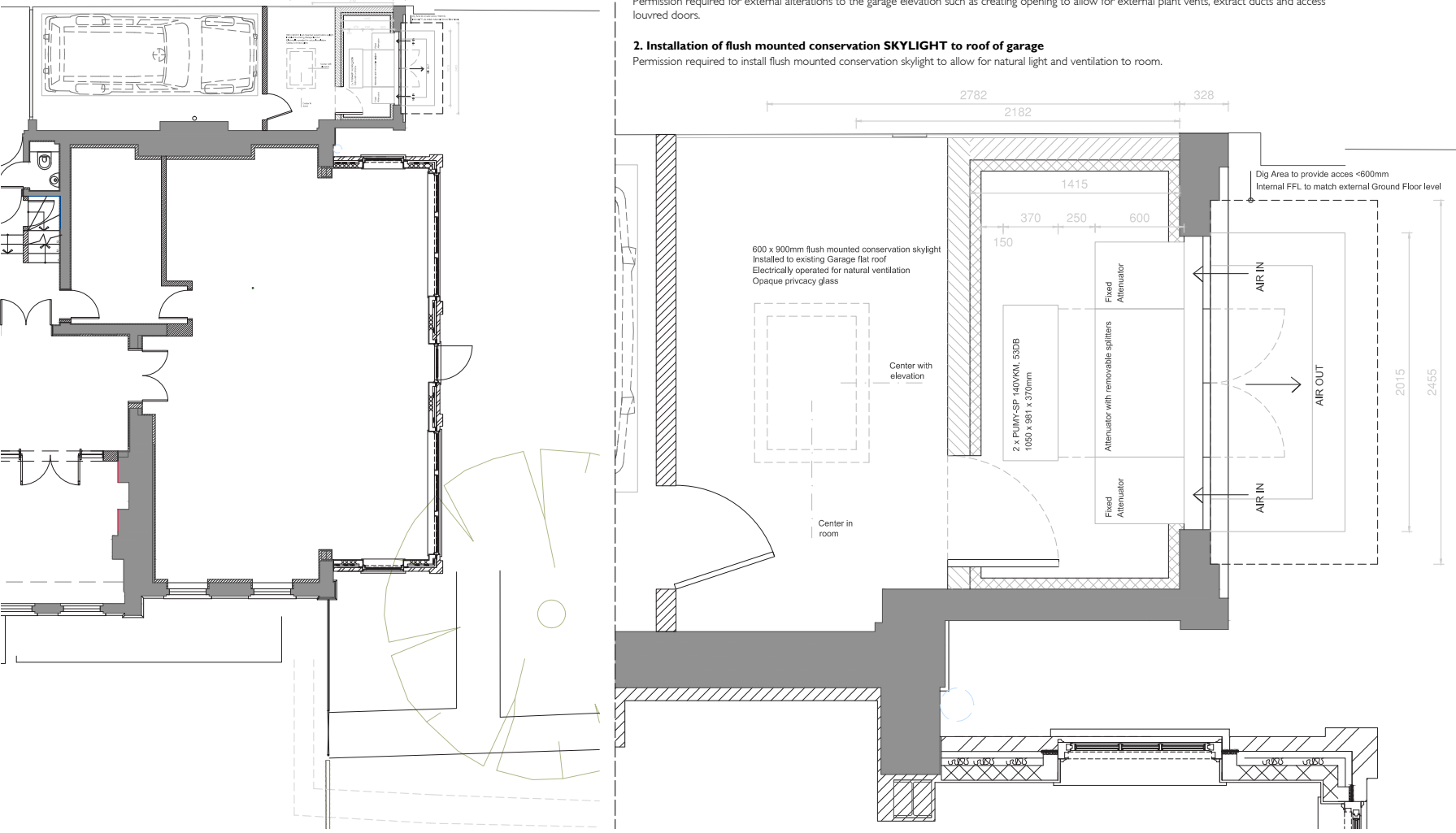
### Planning Application for AC PLANT & Installation of flush mounted conservation SKYLIGHT

#### 1. AC PLANT\_Garage


Planning application for the installation of an Air Handling Enclosure (AHE) inside existing Garage Building. Permission required for external alterations to the garage elevation such as creating opening to allow for external plant vents, extract ducts and access louvred doors.

#### 2. Installation of flush mounted conservation SKYLIGHT to roof of garage

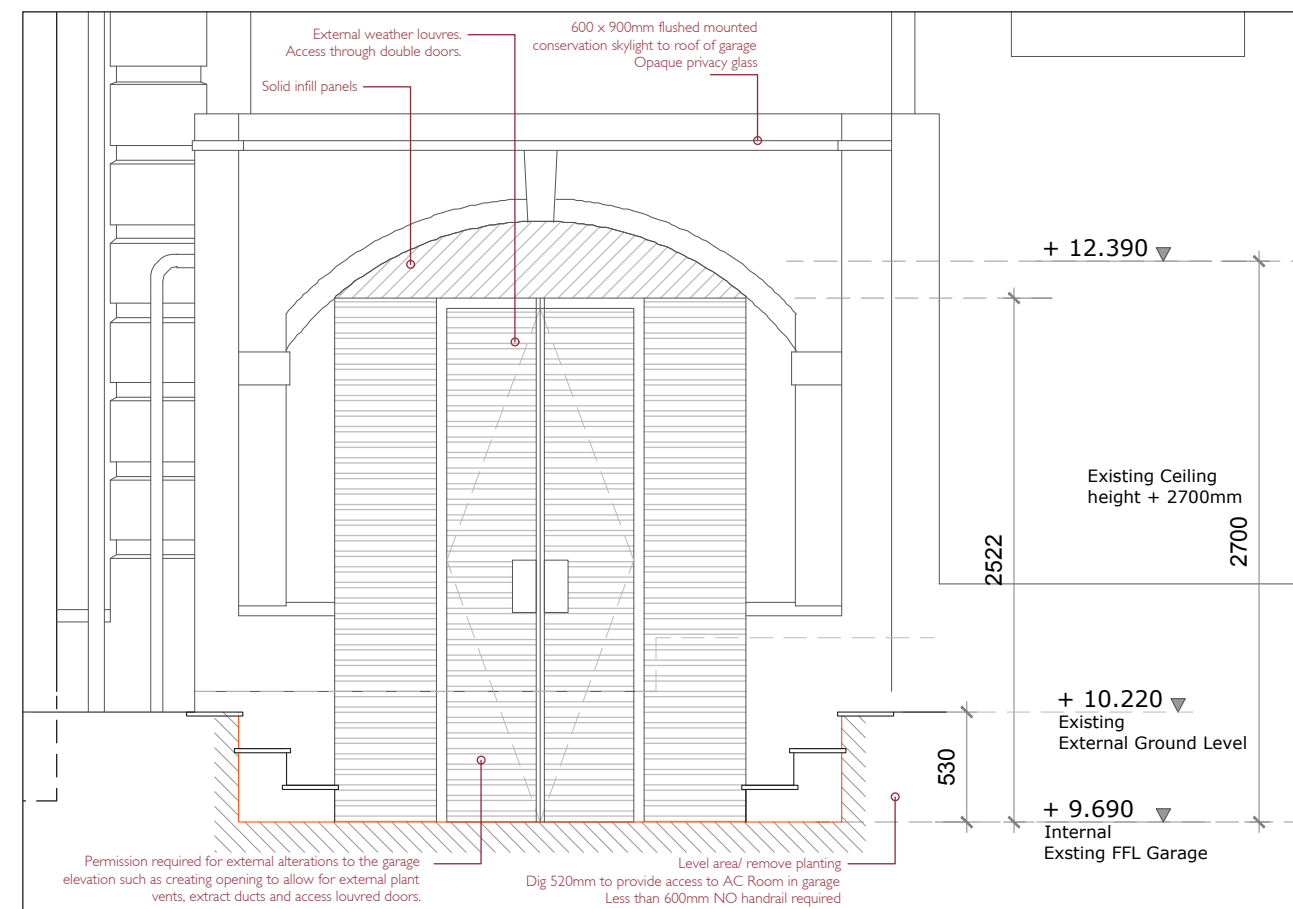
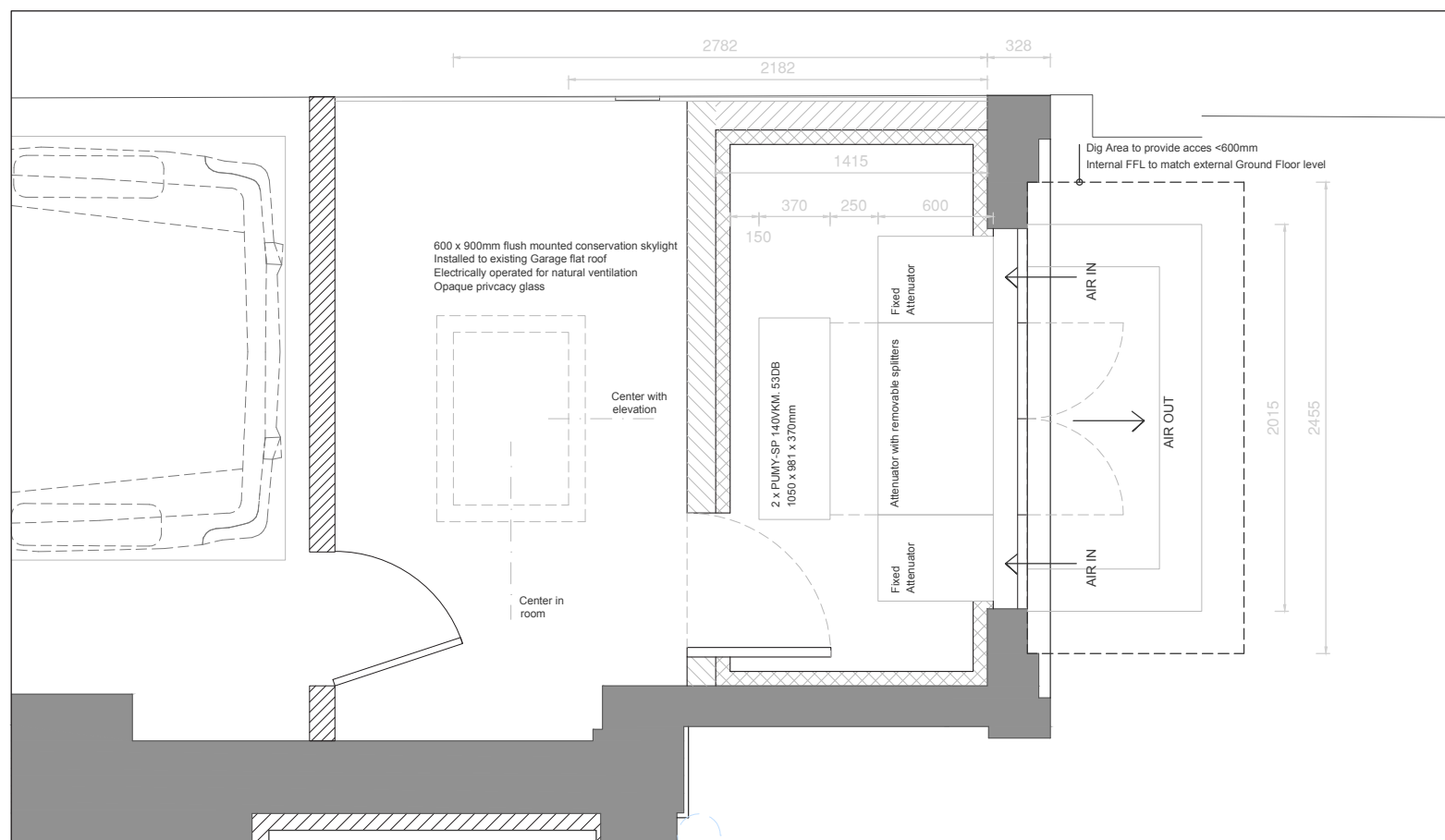
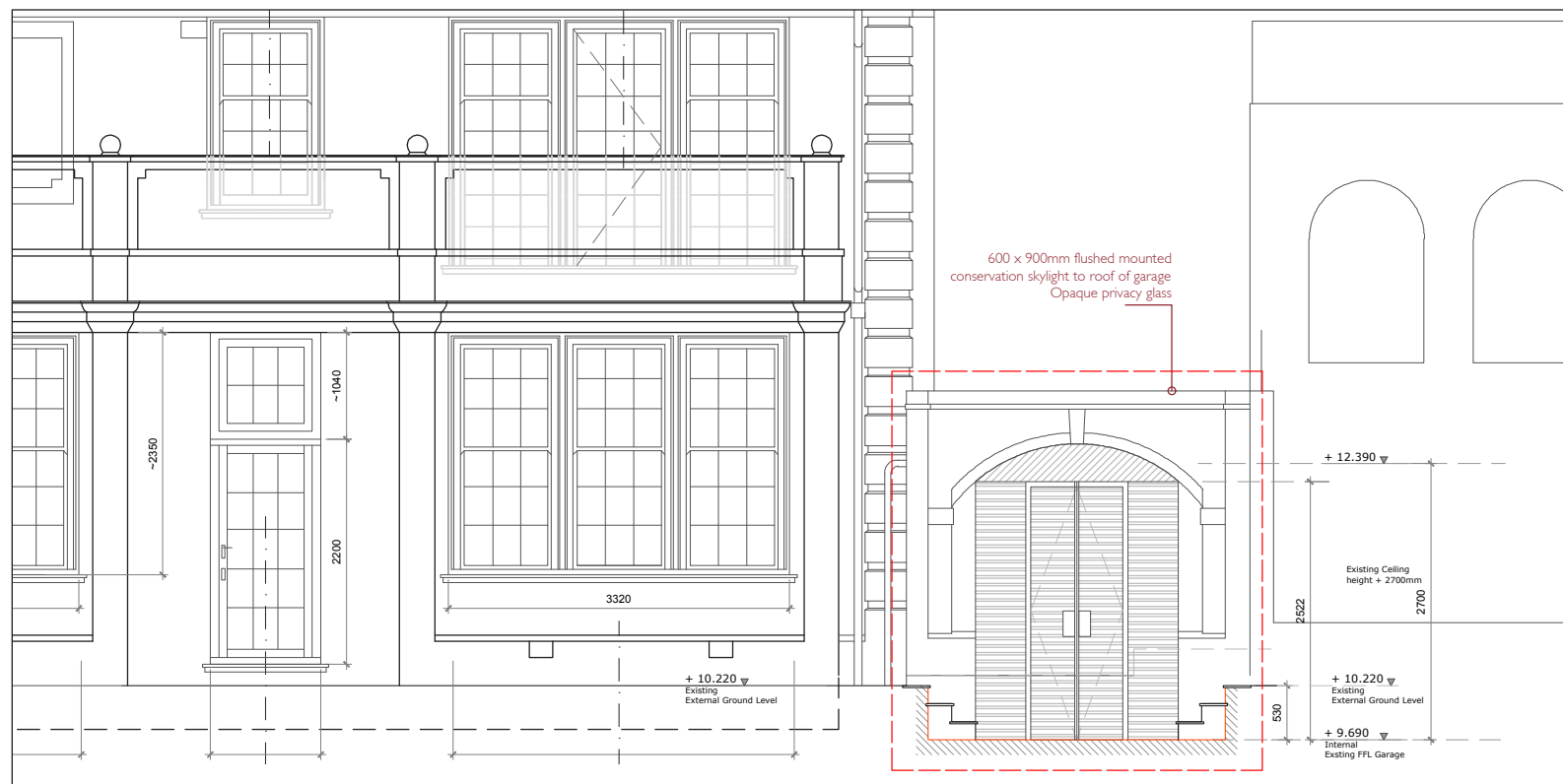
Permission required to install flush mounted conservation skylight to allow for natural light and ventilation to room.



6 Templewood Avenue, London (Camden) NW3 7XA



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## Installation of Air Conditioning Plant & Skylight

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### 2.3 Proposed Design

(images extracted from the noise control engineer's drawings)

Finish

- 1) Louvres to be finish painted to a standard RAL colour
- 2) Steel acoustic door to be finish painted to a standard RAL colour
- 3) Attenuators, splitters, plenum plates and closing off angles to be galvanised finish
- 4) Masonry walls in brick to match existing and roof finish as existing

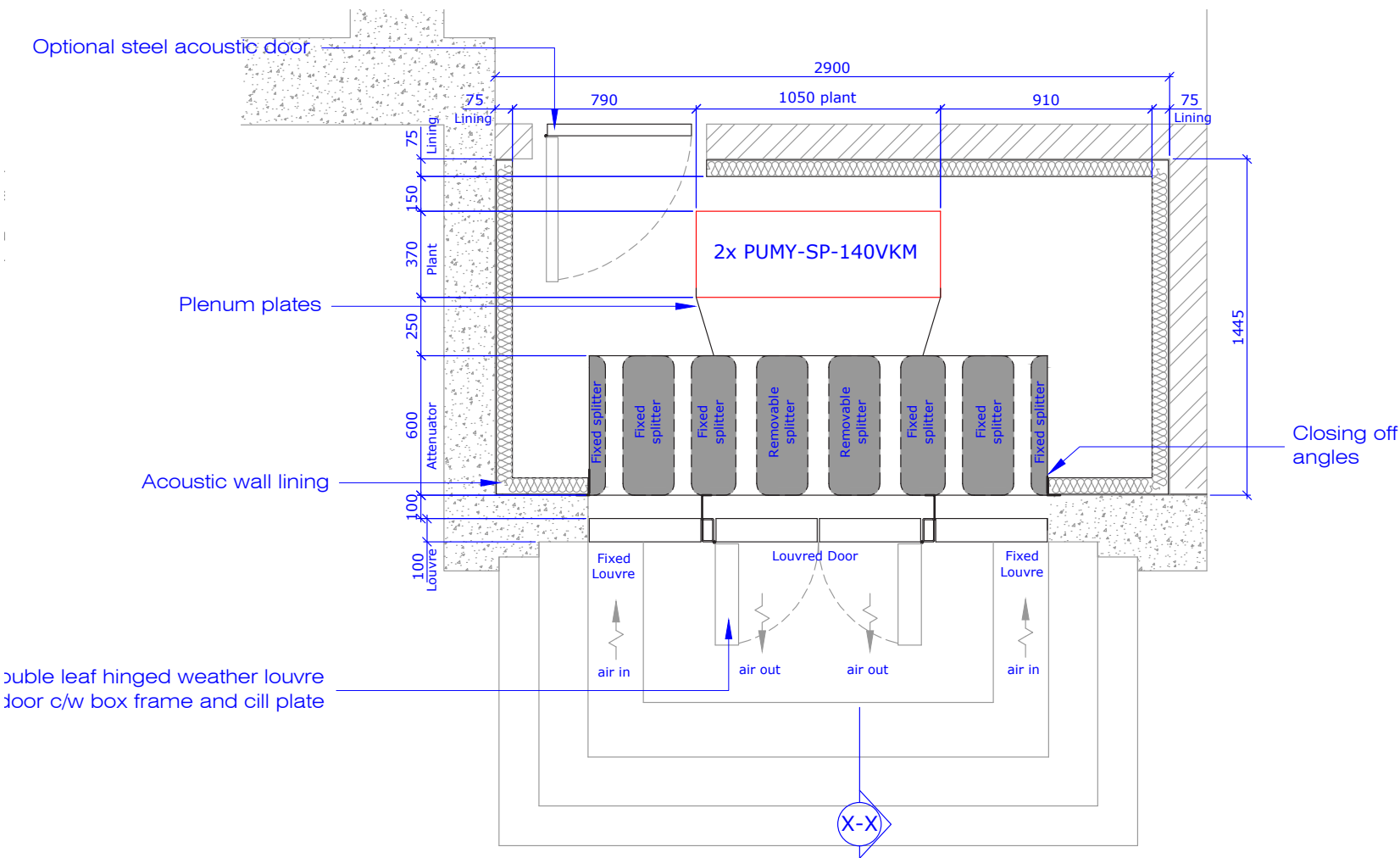
Builders Work

Existing external wall modified as shown  
External ground dug away to create clear opening for doors

Mitigation Measures

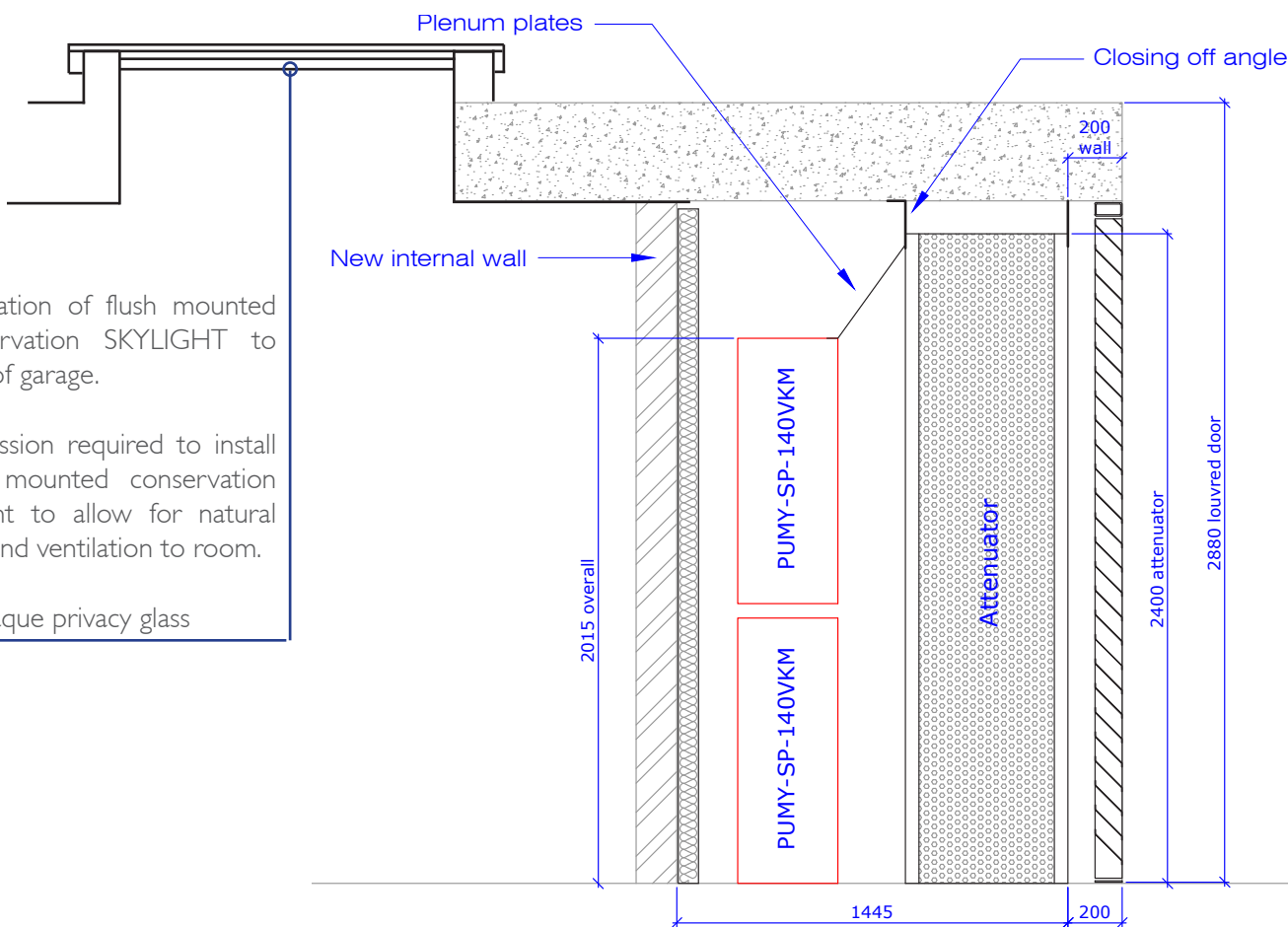
- steel weather louvres
- plenums
- attenuator splitters - fixed and removable
- hinged steel weather louvred door - double leaf

Doors to have a welded box section frame, satin finish pull handles and Eurocylinder deadlock.

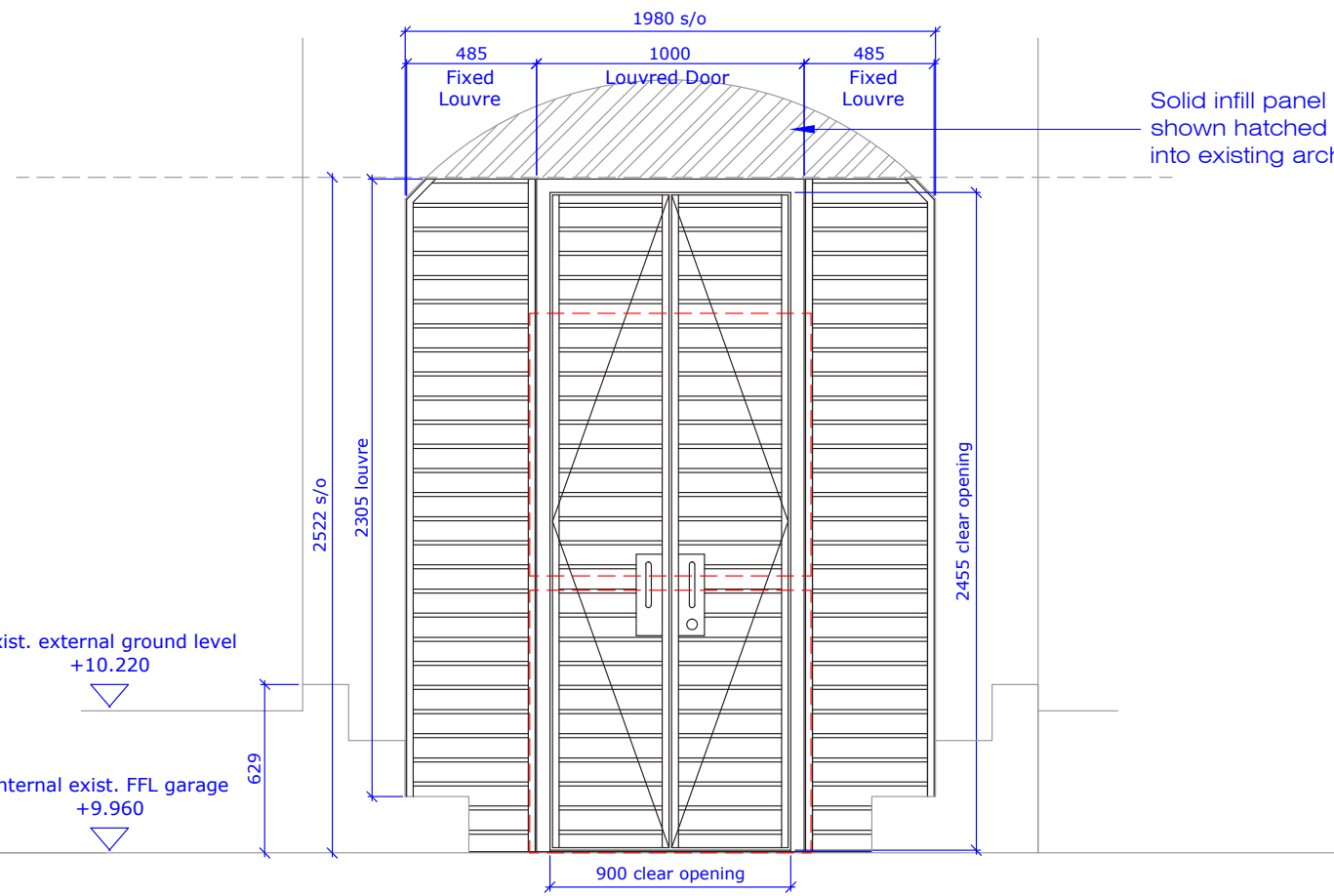


Plan View

1000 s/o



Section X-X



Elevation On Doors

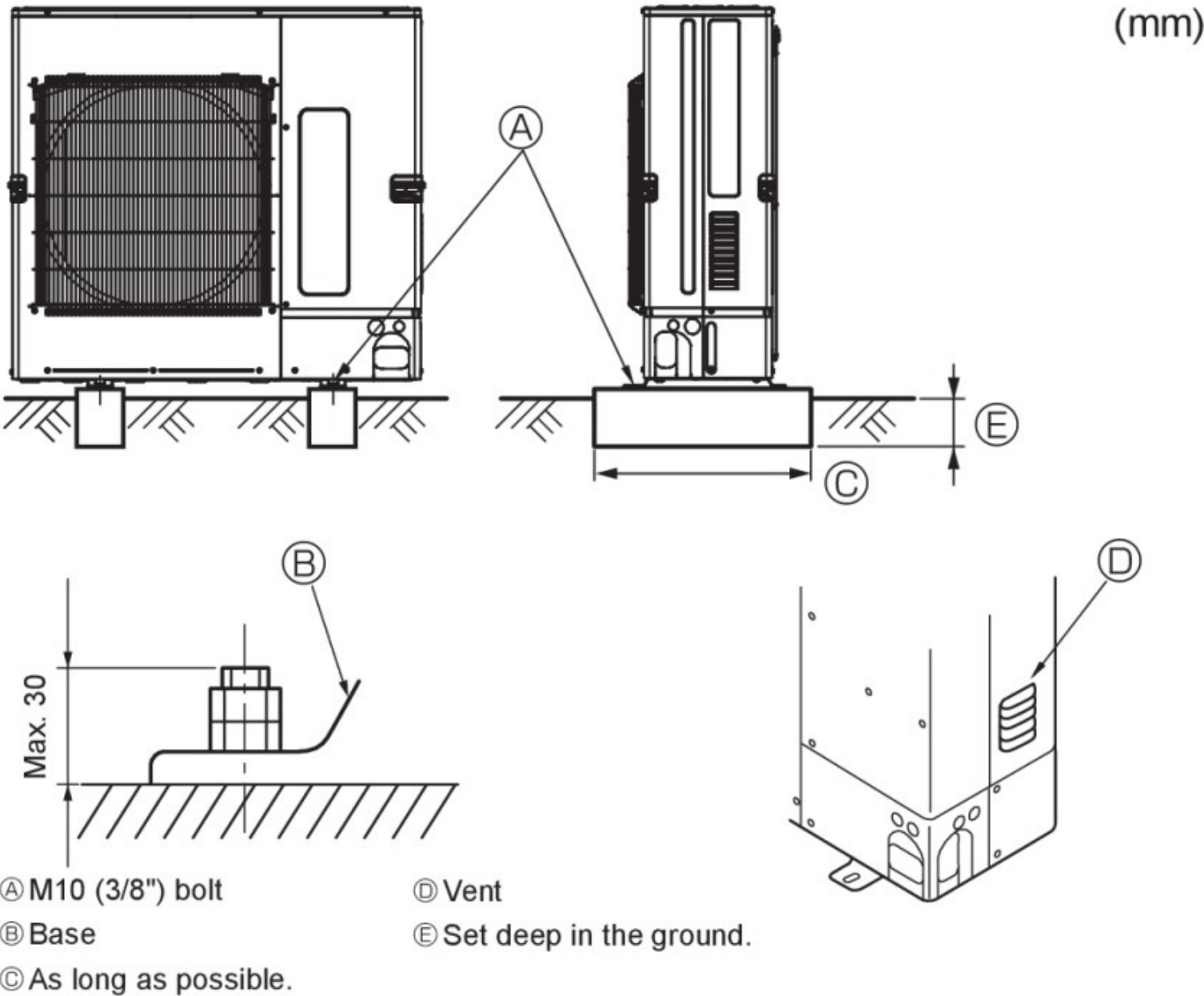
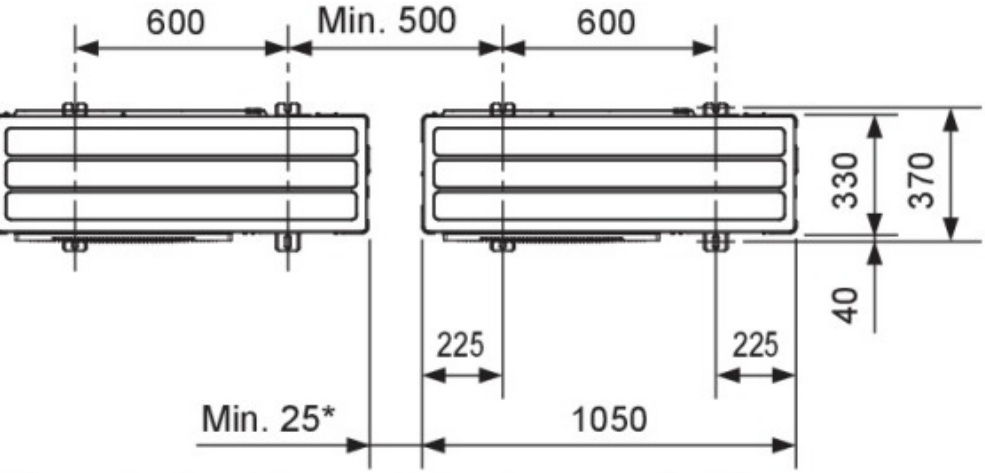
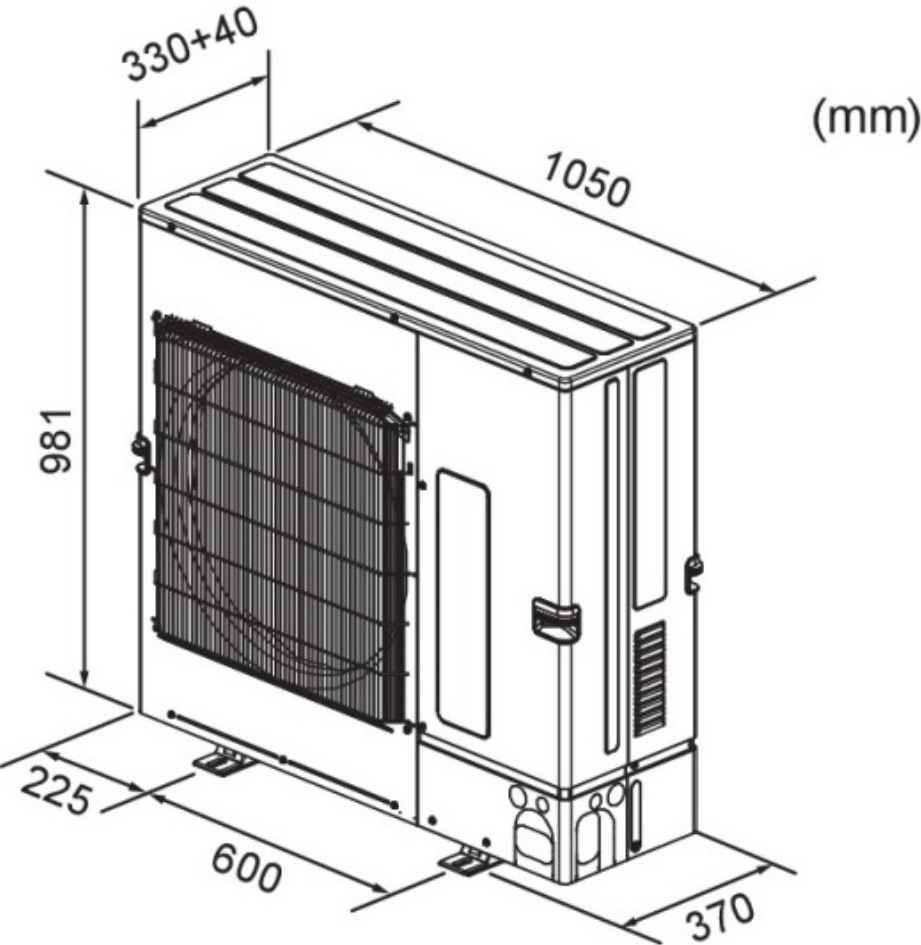
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### 2.4 Technical information for Condensing Units

2 x Mitsubishi PUMY-SP-140VMK condensing units:



The proposed plant would consist of two Mitsubishi PUMY-SP-140VKM condensing units, located in the south west corner of the rear garden area within an attenuated plant enclosure.

The units have the following manufacturers noise data based on standard mode operation.

Air Conditioning Plant Manufacturers Noise Data									
Sound Pressure Level, dB at 1m									
Unit	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	dBA
PUMY-SP-140VKM	62	58	56	53	52	47	41	34	56



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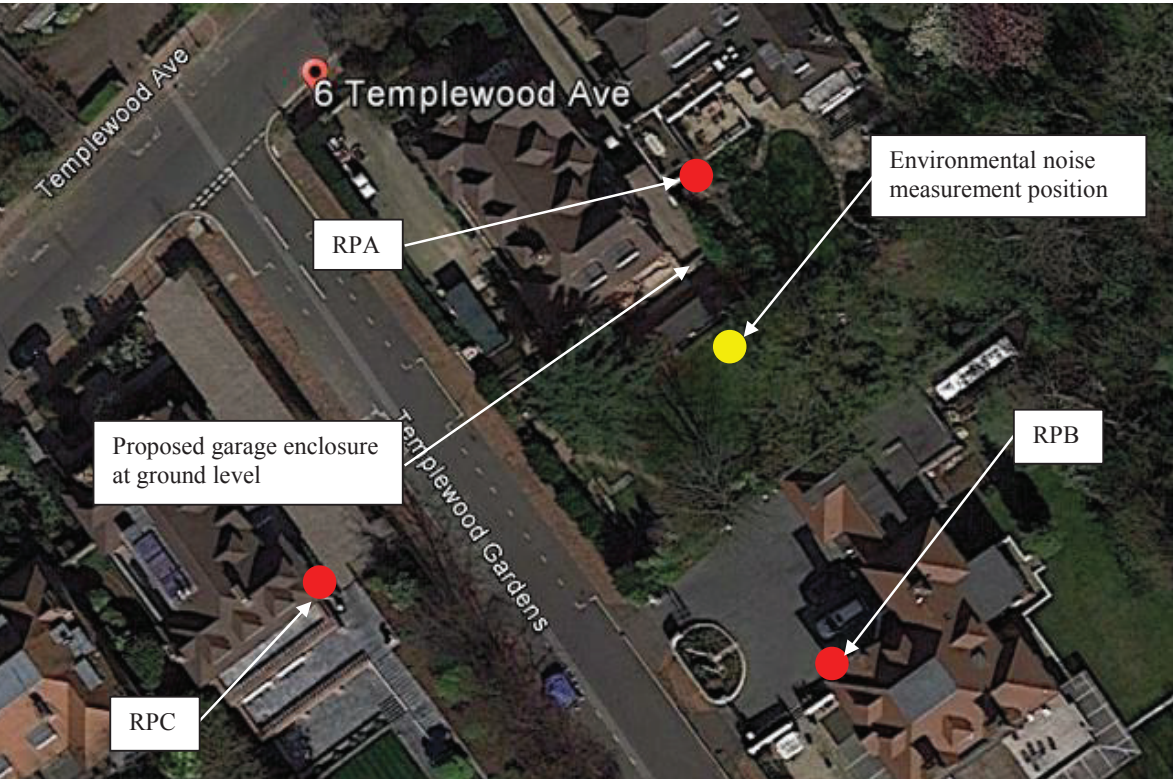
### 2.5 Environmental Noise Survey

(Please Refer to: 6 TAv Envir Noise Survey and Ext Enclosure Plant Assessment Report\_REV D.pdf)

RPA The rear of No 8 Templewood Avenue to the north west. The proposed unit would be approximately 10m from the first floor rear façade and at an angle of, at least 90 degrees to the enclosure intake and discharge.

RPB The front elevation of the consulate building to the south of the site. The proposed unit would be approximately 40m from the front façade and with line of sight to the enclosure intake and discharge.

RPC The front elevation of the building on the opposite side of Templewood Gardens. The proposed unit would be approximately 45m from the front façade and with line of sight at an angle of 45 degrees to the enclosure intake and discharge.



### Plant Noise Assessment

The proposed plant noise has been calculated at the façade of the three receptor positions and attenuation proposals will need to be incorporated into the intake and discharge louvred openings, and acoustic wall lining to the intake plenum, to ensure the target noise levels are achieved in accordance with the London Borough of Camden standard noise requirements.

### 4.0 Conclusion

The proposed plant would consist of two Mitsubishi air conditioning condensing unit, located in the rear part of the existing garage building at the rear south east elevation of the building. The existing garage building is constructed with brick walls and solid roof. There will be louvred openings in the front face of the enclosure for attenuated fresh air supply into the enclosure and attenuated discharge air from the enclosure.

The front face of the enclosure will be orientated so that the intake and discharge openings face south east towards the consulate building.

Planning permission is sought for the external alterations to the garage rear elevation only visible from top floors of consulate building. Surrounding houses have no views towards the elevation and the required noise survey was carried in the premises to ensure there will be no impact on the amenity of any neighbouring properties.

The development will ensure the protection of nearby trees and vegetation including the hedge on the site boundary.

The proposed plant enclosure would be completely screened from view from the street by the adjacent dense boundary hedge and trees. The development is therefore not considered to have a significant impact on the character of the property or neighbouring street scene and would preserve and enhance the character of the surrounding conservation area.

Regarding the conservation SKYLIGHT to the roof of the existing garage building, permission is required to install a flush mounted conservation skylight with opaque privacy glass to allow for natural light and ventilation . There are no windows on the section of elevation of the neighbouring property just by the garage, therefore the proposed skylight is considered not to have a significant visual impact on the area and permission could be granted.

### 3.0 Access

The proposals do not have any bearing on the access of the unit.

There are currently three recognised vehicular access routes onto the site. Two on Templewood Avenue and one on Templewood Gardens. Only two of the three are currently used and both have electrically controlled security gates. Both Templewood Avenue and Templewood Gardens are controlled parking zones. Currently the occupants make use of the offstreet hard-standing space along the front elevation of the property.

It is anticipated that during the course of construction all items will not need to be stored on the public highway thus will not have an impact on the local transport network. We do not anticipate any occupation of the public highway, for hoarding, skips or storage of materials. The existing on-street waiting and loading controls, should be sufficient as not adversely affect the safety of those making use of the public highway.



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## 5.0 Appendices

Appendix 1. Specification for Mitsubishi PUMY-SP-I 40VMK condensing units

Appendix 2. Skylight Images of reference

Appendix 3. Noise Survey Report

Please refer to separate attachment:

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Air Conditioning

Product Information

PUMY-SP R410A  
Inverter Heat Pump (12.5-15.5kW)  
Multi-Split Units

Making a  
World of  
Difference

Multi-Splits



The **PUMY-SP** series allow up to 10 indoor units to be connected to a single outdoor unit, using the standard City Multi branch pipework system or via branch boxes and/or LEV kits to connect M Series or Mr Slim indoor units. This makes it an economic and efficient answer for multi-room applications, whilst also offering space saving benefits.

Key Features

- The condensing unit is extremely slimline which allows easy location and application of the system
- Connect stylish M Series wall mounted and floor mounted indoor units to the system via the LEV kit interface **PAC-LV11M**
- Connect M Series and Mr Slim indoor units via the **PAC-MK-BC** boxes alongside VRF indoor units to the same system



Cooling | Heating | Ventilation | Controls

Product Information

PUMY-SP R410A  
Inverter Heat Pump (12.5-15.5kW)  
Multi-Split Units

Making a  
World of  
Difference



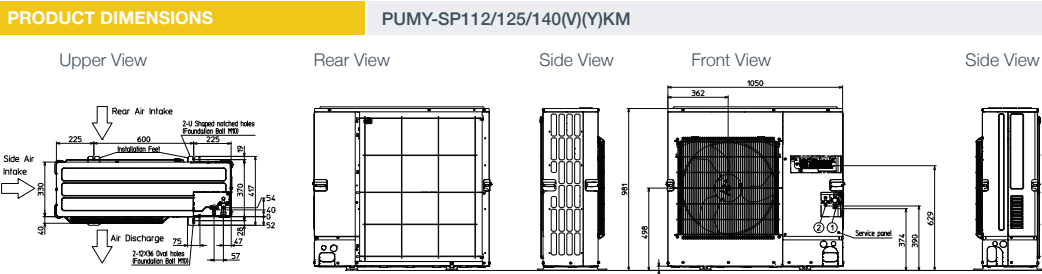
Air Conditioning

PUMY-SP OUTDOOR UNITS		PUMY-SP112YKM	PUMY-SP112YKM	PUMY-SP125YKM	PUMY-SP125YKM	PUMY-SP140YKM	PUMY-SP140YKM
NUMBER OF CONNECTABLE INDOOR UNITS	Branch box / Mixed*1	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10
CAPACITY (kW)	Heating (nominal)	14.0	14.0	16.0	16.0	16.5	16.5
	Cooling (nominal)	12.5	12.5	14.0	14.0	15.5	15.5
	Heating (UK)	13.9	13.9	15.8	15.8	16.3	16.3
	Cooling (UK)	10.0	10.0	11.2	11.2	12.4	12.4
COP / EER (NOMINAL)		4.42 / 4.03	4.42 / 4.03	4.10 / 3.65	4.10 / 3.65	4.10 / 3.30	4.10 / 3.30
SCOP / SEER		-	-	-	-	-	-
MAX AIRFLOW (m³/min)	Heating / Cooling	77	77	83	83	83	83
SOUND PRESSURE LEVEL (dBA)		52	52	53	53	54	54
SOUND POWER LEVEL (dBA)	Cooling	72	72	73	73	74	74
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981
WEIGHT (kg)		93	94	93	94	93	94
ELECTRICAL SUPPLY		220-240V, 50Hz	380-415V, 50Hz	220-240V, 50Hz	380-415V, 50Hz	220-240V, 50Hz	380-415V, 50Hz
PHASE		Single	Three	Single	Three	Single	Three
POWER INPUT (kW)	Heating/Cooling (nominal)	3.17 / 3.10	3.17 / 3.10	3.90 / 3.84	3.90 / 3.84	4.02 / 4.70	4.02 / 4.70
	Heating/Cooling (UK)	4.18 / 1.61	4.18 / 1.61	5.15 / 2.00	5.15 / 2.00	5.31 / 2.44	5.31 / 2.44
STARTING CURRENT (A)		14	7	14	7	14	7
RUNNING CURRENT (A)	Heating/Cooling [MAX]	13.48 / 13.18 [30.5]	4.82 / 4.71 [13.0]	16.58 / 16.33 [30.5]	5.93 / 5.83 [13.0]	17.09 / 19.98 [30.5]	6.11 / 7.14 [13.0]
FUSE RATING (BS88) - HRC (A)		1 x 32	1 x 16	1 x 32	1 x 16	1 x 32	1 x 16
		15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
PIPE SIZE MM (in)	Gas	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
	Liquid						
TOTAL PIPING LENGTH (m)	Branch box / Mixed*1	120	120	120	120	120	120
FURTHEST PIPING LENGTH (m)	(With no branch boxes)	80 (70)	80 (70)	80 (70)	80 (70)	80 (70)	80 (70)
BETWEEN BRANCH BOX AND OUTDOOR UNIT - LENGTH (m)		55	55	55	55	55	55
BETWEEN BRANCH BOX AND INDOOR UNIT - LENGTH (m)		25	25	25	25	25	25
BETWEEN INDOOR AND OUTDOOR UNIT - HEIGHT (m)		50m max*2	50m max*2	50m max*2	50m max*2	50m max*2	50m max*2
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT (m)	Branch box / Mixed*1	12	12	12	12	12	12
CHARGE REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (t) - R410A (GWP 2088)		3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31
MAX ADDITIONAL REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (t) - R410A (GWP 2088)		9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79

**Notes:** \*1 Branch box - only using branch boxes (PAC-MK) on the system. Mixed - using a mix of branch boxes (PAC-MK) and City Multi indoor units on the same system. \*2 40m max if outdoor installed below. 30m if mixed system. \*3 SCOP / SEER available separately in the 'City Multi VRF Seasonal Efficiency' document, based on Ecodesign Lot 6 to EN14825 standard.

PAC-MK - BRANCH BOX	PAC-MK31BC	PAC-MK51BC	PAC-LV - LEV KIT INTERFACE	PAC-LV11M	
NUMBER OF CONNECTABLE INDOOR UNITS	3	5	NUMBER OF CONNECTABLE INDOOR UNITS	1	
COMPATIBLE INDOOR UNITS	M Series, Mr Slim	M Series, Mr Slim	COMPATIBLE INDOOR UNITS	M Series	
WEIGHT (kg)	6.7	7.4	CAPACITY INDEX OF INDOOR UNITS	15 to 50	
DIMENSIONS (mm)	Width x Depth x Height	450 x 280 x 170	450 x 280 x 170	WEIGHT (kg)	3.5
POWER SUPPLY TO BRANCH BOX*1	From outdoor unit	3 core + earth	3 core + earth	DIMENSIONS (mm)	Width x Depth x Height
	Separate supply	220-240V, 50Hz / Single Phase	220-240V, 50Hz / Single Phase		355 x 142 x 138
	Separate supply fuse rating (BS88) - HRC (A)	6	6	ELECTRICAL SUPPLY	220-240V, 50Hz / Single Phase
POWER SUPPLY TO INDOOR UNITS	From branch box	3 core + earth	3 core + earth	FUSE RATING (BS88) - HRC (A)	6

**Note:** \*1 Either option is available for power supply from outdoor unit OR from a separate supply.



Note: The indoor unit connected to the PAC-LV11 cannot be grouped with other City Multi indoor units. Group control with other M Series indoor units + PAC-LV11 is possible via ME controller or system controller only. Group control is not possible via an MA controller, IT terminal or wireless remote controller. ME control functions energy management, charge apportioning, interlock and free contact are not available.

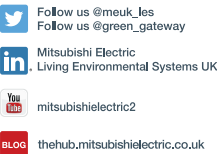


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Telephone: Dublin (01) 419 8800 Fax: Dublin (01) 419 8890 International code: (003531)

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Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774) or R134a (GWP:1430). \*These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows: R410A (GWP:1975), R32 (GWP: 550), R407C (GWP:1650) or R134a (GWP:1300).



Effective as of April 2018



