10 John Street
London
WC1N 2EB

Installation of A/C condensers

Design and Access Statement

August 2017

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1.0 INTRODUCTION

1.01 Danks Badnell Architects Ltd. has prepared this statement in support of a Planning Application for the installation of external air conditioning condensers at 10 John Street.

2.0 OBJECTIVES

2.01 **The Brief.** The property was originally designed and built as a private residence between 1799 and 1813. The building was later converted to office use and has been used as such for many years.

The building becomes unbearably hot during the summer and this has now become completely unmanageable. It is extremely important that air conditioning be installed as soon as possible or there is a very real risk that the site will no longer be considered a viable proposition in today's competitive commercial letting market. This is likely to lead to the loss of the site as a valuable employment generator for the local area.

2.02 **Drawings and Supporting Information.** This statement makes reference to the following application drawings:

1. 14/37/01 Site Location Plan
2. 14/37/05 Existing Building
3. 14/37/40 Proposed Scheme

3.0 SITE AND SURROUNDINGS

3.01 **Location.** The site is 10 John Street, London, WC1N 2EB. This is on the junction of John Street and Northington Street.

3.02 **Site Extents.** Site location plan ref: 14/37/01 highlights the extent of the site in red.

3.03 **Existing Building.** The existing building has a formal four storey frontage to John Street but the height reduces to just two storeys to the rear of the site. There is also a basement below ground level.

3.04 **Setting.** The setting of the site is completely urban.

3.05 **Use of Site.** The entire site is in private commercial use by a firm of Solicitors.

3.06 **Surrounding Properties.** The application site forms the southern end of a long terrace heading north along John Street. The whole terrace is uniform in terms of appearance and massing. Similar terraces run north and south along both sides of John Street. The most unique building is The Lady Ottoline public house which stands directly opposite the application site on the far side of Northington Street. This has a curved façade and decorative brickwork in contrast with the more Conservative terraces all around.

3.07 **Views into the Site.** 10 John Street is clearly visible from John Street and Northington Street.

4.0 TOWN PLANNING CONSIDERATIONS

4.01 **Heritage.** The site forms part of a Grade II Listed terrace (ref: 1379156) and also falls within the Bloomsbury Conservation Area. A detailed analysis of the site history is provided in the heritage statement submitted with this application.

4.02 **Planning History.** The Local Authority's online Planning records show only two applications in recent years. These are:

1.	2007/2926/P	Planning	Change of Use to C3	GRANTED (S106)
2.	2009/1235/L	Listed Building	Repairs and redecoration	GRANTED
3.	2015/2037/P	Planning	Change of Use to C3	GRANTED (S106)

4.03 **Previous Pre-Application Advice.** Pre-application advice has not been sought for this exact scheme, however, advice has been sought of some previous alternatives.

In 2014 advice was sought for a scheme involving 2no. relatively large condensers positioned on the flat roof over the rear block of the building (ref: 2014/6997/PRE). The scheme included a louvred enclosure to screen any views of the units, however, the Local Authority deemed the proposal to be too visible.

In 2015 advice was sought for a scheme involving 5no. smaller condensers positioned on the same roof to the rear (ref: 2015/3946/PRE). These low-level units were all hidden inside neat acoustic casings, however, the Local Authority still deemed the proposal to be visually harmful.

A third solution was also prepared involving 5no. small units all hidden within the building's lightwells to ensure that they were never visible to the public. Unfortunately it was not possible to get this option to meet the noise limitations set by the Local Authority and so pre-application advice was not sought.

5.0 CONTEXT

5.01 **Physical Context**. The site is in an urban area. The surroundings are relatively flat although the ground levels do fall away slightly along Northington Street.

5.02 **Social Context**. The neighbouring property at 11 John Street is a private residence although the majority of other properties along the terrace are in commercial use. We are very keen to ensure that neighbours are not disturbed by the proposed condenser units and so rigorous acoustic tests have been undertaken as discussed further later.

6.0 DESIGN PROPOSALS

6.01 **Proposals**. The application seeks consent for the installation of 3no. air conditioning condensers onto the roof of the existing building.

6.02 **Use**. The site will remain entirely in Class B1 use.

6.03 **Scale and Visibility**. The proposed condensers are relatively modest in size. They have been carefully selected to minimise the chance of causing any harmful impact.

The condensers have been grouped together as closely as the manufacturers will allow. They have also been carefully located in a position on the roof that minimises the possibility of the being visible from ground level. The proposed scheme drawing 14/37/40 incorporates lines-of-sight which show that the natural screening afforded by the building itself will block any view from nearby. From ground level the condensers could only theoretically be seen from a great distance, however, these theoretical vantage points are hindered by existing urban screening.

When viewed from the north along John Street the existing party wall between nos. 10 & 11 completely blocks any view of the condensers. To the south views will be hindered by the existing trees that line the street and also by The Lady Ottoline pub. To the east any line of sight is promptly blocked by No. 8 Northington Street whilst similarly to the west any potential views are hindered by the corner of 28 John Street.

We have also concluded that it would be inappropriate to erect visual screening around the units. We do not believe that a screen would offer any benefit, in fact it would prove counter-productive as it would necessarily be *more* visible than the units themselves.

We also note that the proposed condensers are a very nondescript grey colour. This finish ensures that even if the condensers were more visible to the public they would still attract no attention.

6.04 **Area.** The proposal will have no impact upon the floor area of the building.

6.05 **Landscaping**. The proposal will have no impact upon landscaping.

6.06 **Appearance**. The proposal will have no impact upon the appearance of the building.

6.07 **Access.** The proposals will not have any impact upon the access arrangements for the building. The condensers themselves would be accessed via an existing roof hatch.

6.08 **Heritage.** The proposal will not require the demolition or significant alteration of any part of the Listed Building. A more detailed analysis is provided in the heritage statement submitted with this application.

6.09 **Acoustics.** Noise levels are a key concern for any proposal like this. Our acousticians Hann Tucker Associates have undertaken noise surveys and have calculated the potential impact of the proposed condensers using the manufacturer's official noise data. Their detailed acoustic report confirms that the proposed units meet the Local Authority's noise criteria and would be deemed acceptable. A copy of the report is submitted with this application.

6.10 **Condensers.** The proposed scheme involves the installation of 3no. Daikin RXYSCQ5TV1 condenser units. Night set-back cards will be installed in the condensers as a precaution to ensure that there would be no disturbance at night time. Technical details for the condensers are provided as an appendix to this document.

7.0 CONCLUSION

The proposed installation of air conditioning condensers is long overdue as it is considered critical to the ongoing viability of the site as an employment generator for the local area.

This is a sensitive site, however, the careful positioning of the condensers helps to ensure that no harmful impact will be inflicted upon the neighbouring properties or members of the public in general. More specifically, the key issues of heritage value and noise control have both been carefully considered by respected experts and their reports submitted with this application show that the scheme is considered acceptable.

8.0 APPENDIX

Technical specifications for Daikin RXYSCQ5TV1 external condenser units.

DAIKIN

Air Conditioning

Technical Data

VRV IV S-series compact heat pump

EEDEN16-200_2

RXYSCQ-TV1

2 Specifications

2-1 Technical Specifications					RXYSCQ4TV1	RXYSCQ5TV1
Capacity range				HP	4	5
Cooling capacity	Nom.			kW	12.1 (1)	14.0 (1)
Heating capacity	Nom.			kW	12.1 (2)	14.0 (2)
	Max.			kW	14.2 (2)	16.0 (2)
Power input - 50Hz	Cooling	Nom.		kW	3.43 (1)	4.26 (1)
	Heating	Nom.		kW	3.18 (2)	3.91 (2)
		Max.		kW	4.14 (2)	5.00 (2)
Capacity control	Method				Inverter controlled	
Maximum number of connectable indoor units					64 (3)	
Indoor index connection	Min.				50	62.5
	Nom.				-	
	Max.				130	162.5
Dimensions	Unit	Height		mm	823	
		Width		mm	940	
		Depth		mm	460	
	Packed unit	Height		mm	995	
		Width		mm	1,030	
		Depth		mm	580	
Weight	Unit			kg	94	
	Packed unit			kg	106	
Packing	Material				Carton	
	Weight			kg	3.8	
Packing 2	Material				Wood	
	Weight			kg	5.8	
Packing 3	Material				Plastic	
	Weight			kg	1.1	
Casing	Colour				Daikin White	
	Material				Painted galvanized steel plate	
Heat exchanger	Type				Cross fin coil	
	Fin	Treatment			Anti-corrosion treatment	
Compressor	Quantity				1	
	Type				Hermetically sealed swing compressor	
	Crankcase heater			W	33	
	Model				Inverter	
Fan	Quantity				1	
	Air flow rate	Cooling	Nom.	m^3/min	91	
	External static pressure	Max.		Pa	-	
	Discharge direction				Horizontal	
	Type				Propeller fan	
Fan motor	Quantity				1	
	Model				Brushless DC motor	
	Output			W	200	
Sound power level	Cooling	Nom.		dBA	68 (4)	69 (4)
Sound pressure level	Cooling	Nom.		dBA	51 (5)	52 (5)
Operation range	Cooling	Min.~Max.		°CDB	-5~46	
	Heating	Min.~Max.		°CWB	-20~15.5	
Refrigerant	Type				R-410A	
	Charge			kg	3.7	
				TCO_2eq	7.7	
	GWP				2,087.5	
Refrigerant oil	Type				Synthetic (ether) oil FVC50K	
	Charged volume			l	1.4	

2 Specifications

2-1 Technical Specifications					RXYSCQ4TV1	RXYSCQ5TV1
Piping connections	Liquid	Type			Flare connection	
		OD		mm	9.52	
	Gas	Type			Flare connection	
		OD		mm	15.9	
	Heat insulation				Both liquid and gas pipes	
	Piping length	OU - IU	Max.	m	300	
	Total piping length	System	Actual	m	-	
	Level difference	OU - IU	Outdoor unit in highest position	m	-	
			Indoor unit in highest position	m	-	
Defrost method					Reversed cycle	
Safety devices	Item	01			High pressure switch	
		02			Fan driver overload protector	
		03			Inverter overload protector	
		04			PC board fuse	
		05			Fusible plugs	
PED	Category				Category I	
	Most critical part	Name			Compressor	
		Ps*V		Bar*l	167	

Standard Accessories : Installation manual;

Standard Accessories : Operation manual;

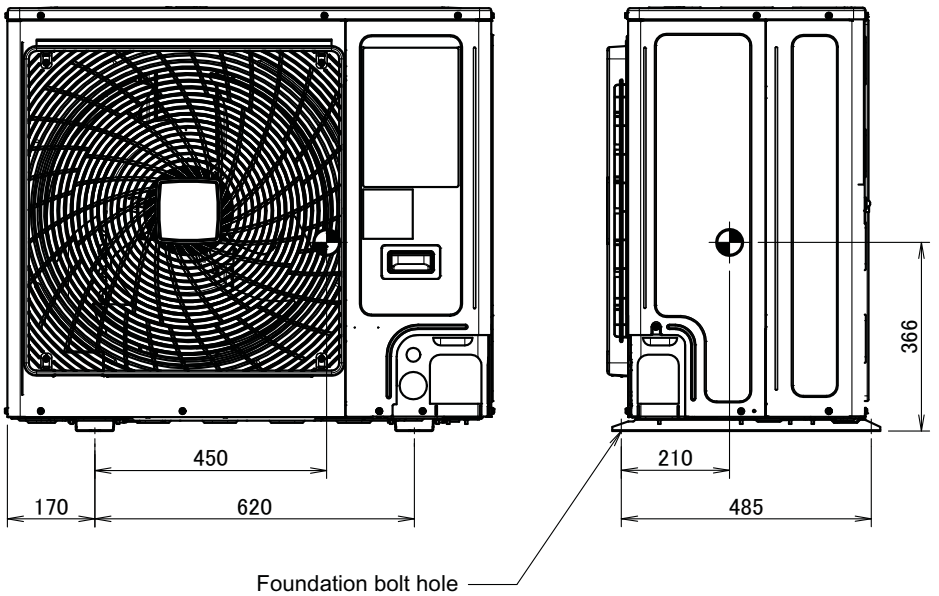
Standard Accessories : Connection pipes;

2-2 Electrical Specifications				RXYSCQ4TV1	RXYSCQ5TV1
Power supply	Name			V1	
	Phase			1~	
	Frequency		Hz	50	
	Voltage		V	220-240	
Voltage range	Min.		%	-10	
	Max.		%	10	
Current	Nominal running current (RLA) - 50Hz	Cooling	A	19.0 (6)	
Current - 50Hz	Minimum circuit amps (MCA)		A	29.1	
	Maximum fuse amps (MFA)		A	32	
	Total overcurrent amps (TOCA)		A	29.1 (7)	
	Full load amps (FLA)	Total	A	0.6	
Wiring connections - 50Hz	For power supply	Quantity		3G	
	For connection with indoor	Quantity		2	
		Remark		F1,F2	
Power supply intake				Both indoor and outdoor unit	

7 Centre of gravity

7 - 1 Centre of Gravity

RXYSCQ-TV1



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