

VENTILATION/EXTRACTION STATEMENT

**PROPOSED CARE HOME FOR OLDER PEOPLE,
LAND TO THE WEST OF MENDALGIEF ROAD,
NEWPORT**



LNT Care Developments

Helios 47

Leeds

LS25 2DY

Date: June 2026

Ref: LNT-VES01

1.0 INTRODUCTION

1.1 This Ventilation and Extraction Statement has been produced to provide technical details of ventilation and extraction systems within the proposed development to demonstrate that the proposed equipment to be installed will give rise to no unacceptable/adverse amenity impacts. This report is provided in support of the application to erect a new purpose-built, three-storey, sixty-six bed residential care facility for older people with associated access, car parking and landscaping on land to the west of Mendalgief Road, Newport.

1.2 This information has been submitted to address planning condition 11 of the full planning application (ref. 25/0375) approved on 14th January 2026. Condition 11 reads:

Fumes from the food preparation areas shall be mechanically extracted and the extraction system shall be provided with the degreasing and de-odourising filters. Details of the extraction equipment (including scaled schematics, location plans, odour attenuation measures and future maintenance) shall be submitted to and approved in writing by the LPA prior to its installation, and the equipment shall be installed in accordance with the approved details prior to the commencement of use for the cooking of food. The fume extraction shall thereafter be maintained and retained as approved for the lifetime of the development.

1.3 This Ventilation and Extraction Statement has been produced to address the requirements of the above condition and provides full details of the kitchen extraction and ventilation scheme.

2.0 VENTILATION AND EXTRACTION IN LNT CARE HOMES

2.1 There will be no externally accommodated plant, machinery, or equipment associated with the proposed kitchen extract system. The system will only manifest itself external to the building, in the form of 2 No. louvred openings.

2.2 The kitchen is situated within the southern part of the building, facing east over Mendalgief Road.



Figure 1: Site Layout Plan

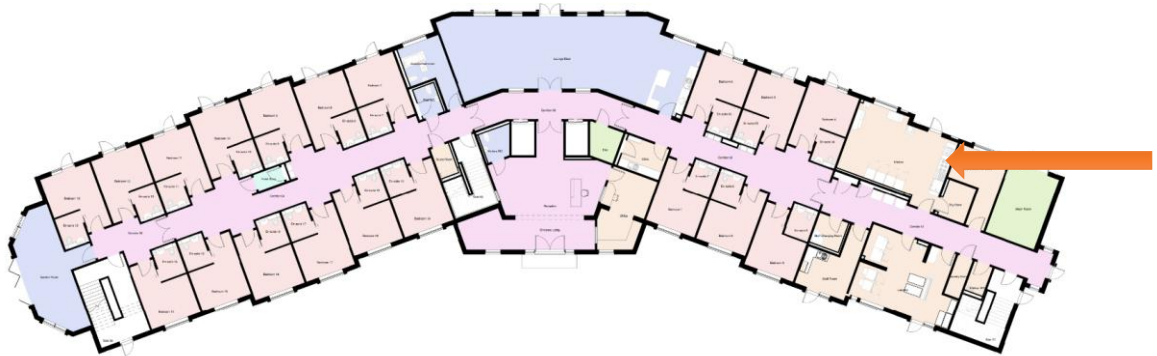


Figure 2: Ground Floor Plan showing location of kitchen

Kitchen Extract System

- 2.3 A ventilation and extraction system is proposed within the kitchen of the care home intended to deal with cooking fumes and odours, when required. The extraction system takes the form of a linear extraction hood (see attached image at Figure 3 below) and detailed kitchen layout drawing at Figure 4 overleaf) with extract fan above the cooking range.
- 2.4 This will be ducted to the external wall via pleated panel filters and an odour neutralising component. Details of the extraction fan can be seen at Appendix A, the pleated panel filters at Appendix B and the odour neutralising component at Appendix C.



Figure 3: Extract Hood

- 2.5 Externally, the system will involve two 600mm x 400mm colour co-ordinated louvred grills within the external walls, one providing a general air intake facility and the other utilised to expel warm air from the extract system, it having passed through the pleated filters and odour neutralising equipment. These will be within the north facing elevation of the building.
- 2.6 On the basis that all the kitchen extract/mechanical system is wholly accommodated within the masonry/building envelope, noise generated externally to the building will be negligible. Despite the closest residential properties being those on the south and west, there is a significant distance between those existing properties and the proposed development due to the site and positioning of the building. As a result, the chances of nearby residents being affected by the care home's kitchen extraction system is very low.

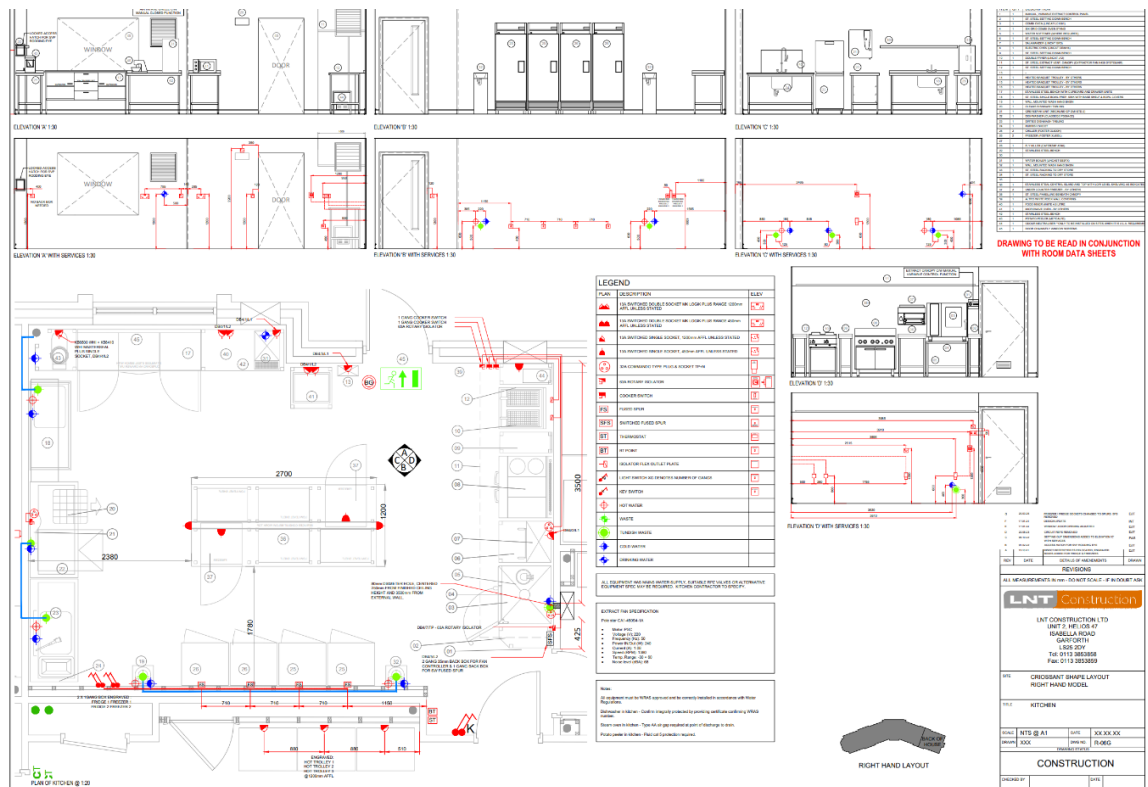
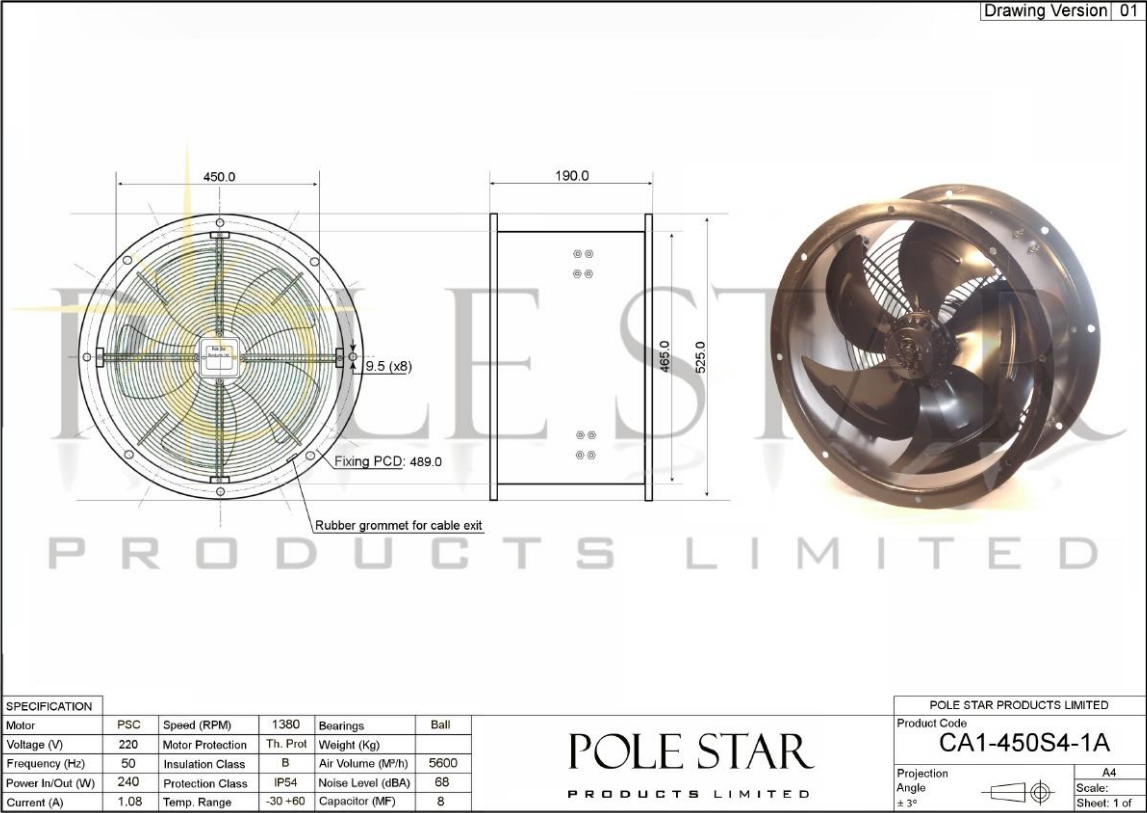


Figure 4: Proposed Kitchen Layout

- 2.6 The technical details of the extract fan, the only potentially noisy element of the intended kitchen extract system, are provided at Appendix A to this statement. This states that the predicted noise level generated by the extract fan will be a maximum of 68 dB(A). Notwithstanding the stated specification, given the fan's location, suitable noise attenuation and mitigation are offered by the building envelope, such that there are no noise impacts external to the building and no resultant harm to general or residential amenity.
- 2.7 Given the proprietary odour neutralising system proposed to be installed, details of which are provided at Appendix C to this Statement, cooking odours external to the kitchen will be mitigated. This mitigation will be such that all that will be expelled from the extract system, through the louvred opening within the external wall, will be odour free warm air. There would be no noise generated from the operation of this odour neutralising system.
- 2.8 This extract system comprising these same components has now been implemented within at least the last 50 completed Care Home projects to date, all of which are now operational. Following an operational period more than a varying period of years, there have been no noise or odour complaints received.
- 2.9 The extraction system will be fitted with a filter to capture and treat cooking odours emitted by the kitchen. The details of which are also contained within the appendix. This will comprise ON100 Odour Control Unit with 'V Line' Panel Filter.

APPENDIX A – Details of the Kitchen Extract Fan



APPENDIX B – Details of the Pleated Panel Filters

Economy Pleated Intrepid Media

V LINE PANEL FILTER

The V Line pleated Panel filter is a standard capacity disposable product offering a better than basic level of filtration, or pre-filtration in HEVAC applications. This product is made using patented Kimberly Clark media which delivers a constant level of filtration over its life.

Construction

This product is constructed by bonding a pleat pack of Intrepid V Line media into a water repellent AquaKote card frame



FEATURES

The Frame is made from AquaKote card which has:

- Superior tear resistance when wet
- Great dry tear resistance and manufactured from a renewable source

KIMBERLEY CLARK PATENTED INTREPID MEDIA

Graduated Density for even dirt loading, resulting in greater dust holding

Hydrophobic will not load with moisture in the air

Constant efficient due to extra electrostatic charge

Superior Efficiency V's Particle size (see table)

Low pressure drop

Made from continuous fibres so will not shed

OPERATING TEMPERATURE

Continuous 80 °Centigrade

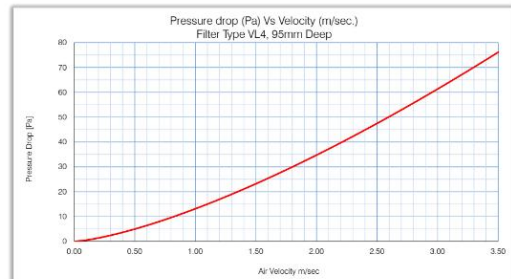
Test Comparing Filtration efficiency V's different sized particles, Intrepid Media V's Cotton Polyester Filters

Particle Size Range(mm)	Initial Fractional Efficiency(%)	
	V Line Intrepid	The 'best' Cotton Poly Alternative
0.3-0.4	7	2
0.4-0.55	15	6
0.55-0.7	28	11
0.7-1.0	41	19
1.0-1.5	52	24
1.5-1.6	58	28
1.6-2.2	63	32
2.2-3.0	67	36
3.0-4.0	70	37
4.0-5.5	71	38
5.5-7.0	72	38
7.0-10.0	73	39

Filter Class EN 779:2012			G4	
Filter Depth	Rated Airflow	Initial Pressure Drop		
20mm	1.5m/sec	45Pa		
45mm	2.0m/sec	45Pa		
95mm	2.7m/sec	53Pa		
Final Recommended Pressure Drop			200Pa	

STANDARD SIZES VL4

No.	Nominal Size Inches	Height (mm)	Width (mm)	Depth (mm)	Rated Airflow m ³ /hr
VL4-1010	10x10x4	241	241	95	565
VL4-1020	10x20x4	241	495	95	1160
VL4-1212	12x12x4	292	292	95	829
VL4-1224	12x24x4	292	594	95	1686
VL4-1515	15x15x4	368	368	95	1316
VL4-1520	15x20x4	368	495	95	1771
VL4-1616	16x16x4	394	394	95	1509
VL4-1620	16x20x4	394	495	95	1896
VL4-1625	16x25x4	394	622	95	2382
VL4-1818	18x18x4	445	445	95	1925
VL4-1831	18x31x4	445	775	95	3352
VL4-2020	20x20x4	495	495	95	2382
VL4-2024	20x24x4	495	594	95	2858
VL4-2025	20x25x4	495	622	95	2993
VL4-2424	24x24x4	594	594	95	3404



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APPENDIX C – Details of the odour neutralising component



KITCHEN EXTRACT

ON100

ODOUR CONTROL UNIT

Purified Air use patented technology to scientifically treat cooking odours emitted by commercial kitchen and restaurant exhausts.

Draw the odours in the exhaust duct line back the supply of the particulate removed by use of our ESP units the grease phase or stainless can then be treated by the CHOCU.

The vapour from a specially treated neutralising agent, ELIMINODOR[®], is mixed with ambient air drawn into the CHOCU and ionised to a negative potential of 75,000 volts.

The treated vapour then passes along a micro-ducture into the discharge into the centre of the duct static venting system, the central ducting is treated through the same high tension circuit which makes the contents of an expensive potential to the negatively charged ELIMINODOR[®] vapour.

This then causes the negative and positive particles to combine, as breaking the molecules by chemical reaction.



KEY FEATURES

- ✓ Compact Design
- ✓ Easy to maintain
- ✓ Simple to install
- ✓ No air-flow restriction
- ✓ Energy efficient

HOW IT WORKS



- 01 Cooking particulates and odours
- 02 Greasy Grease Filter
- 03 ESP - Particulate Control Unit
- 04 CHOCU Odour Control Unit
- 05 Static Venting point airflow

THE BENEFITS OF ON100

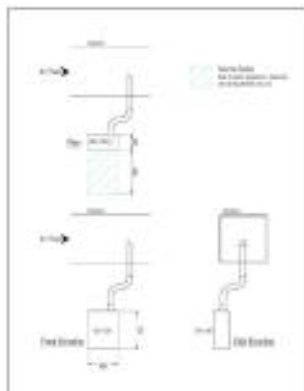
- ✓ Reduces odours up to 95%
- ✓ Low pressure loss
- ✓ Easy to service
- ✓ Energy efficient

TECHNICAL SPECIFICATION

	CHOCU
Supply	220-240v a/c
Power Consumption	40w
Installation voltage	12v or higher
Maximum airflow	4.12 M3/SEC SUPPLY
Dimensions (mm)	W 400 H 500 D 100
Weight	12.25 KG APPROX

DRAWINGS

ON100

ELIMINODOR[®]

This product has been specifically developed and intended for use in Purified Air's CHOCU unit.

ELIMINODOR[®] is a finely balanced blend of essential oils and other chemicals which neutralise odorous gases found in the exhausts of commercial kitchens and restaurants.

Purified Air have designed this unique system to ensure that only minimal quantities of ELIMINODOR[®] are required for optimum results.

Approximate discharge rate:



GUARANTEED PROCESS

Purified Air's CHOCU unit in conjunction with ELIMINODOR[®] can reduce odours in your commercial kitchen exhaust by up to 95%.

This combination is a proven process with long term ingredients and can be used to reduce odours and neutralise in your kitchen company. However, if you are using a new or replacement unit, we will supply you with a new or replacement unit.

OUR SERVICES



Design



Manufacture



Maintain

