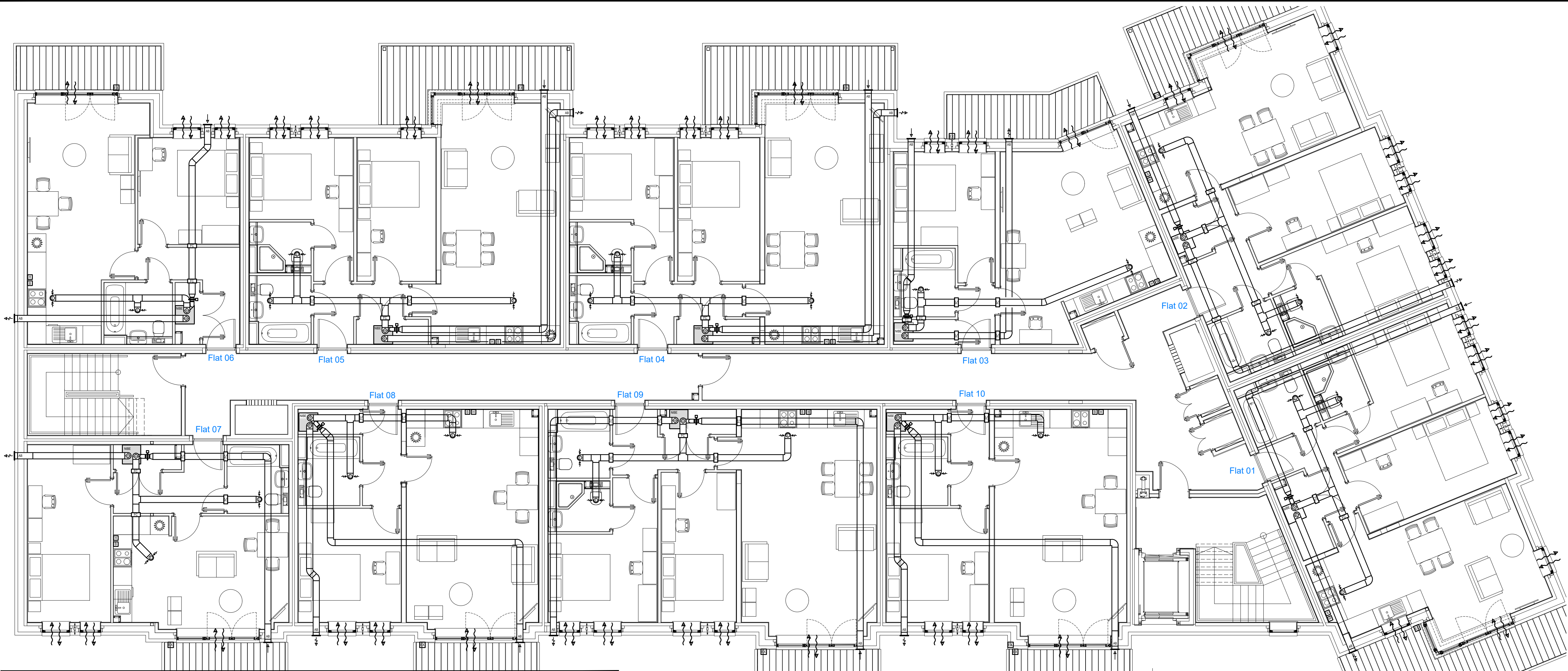


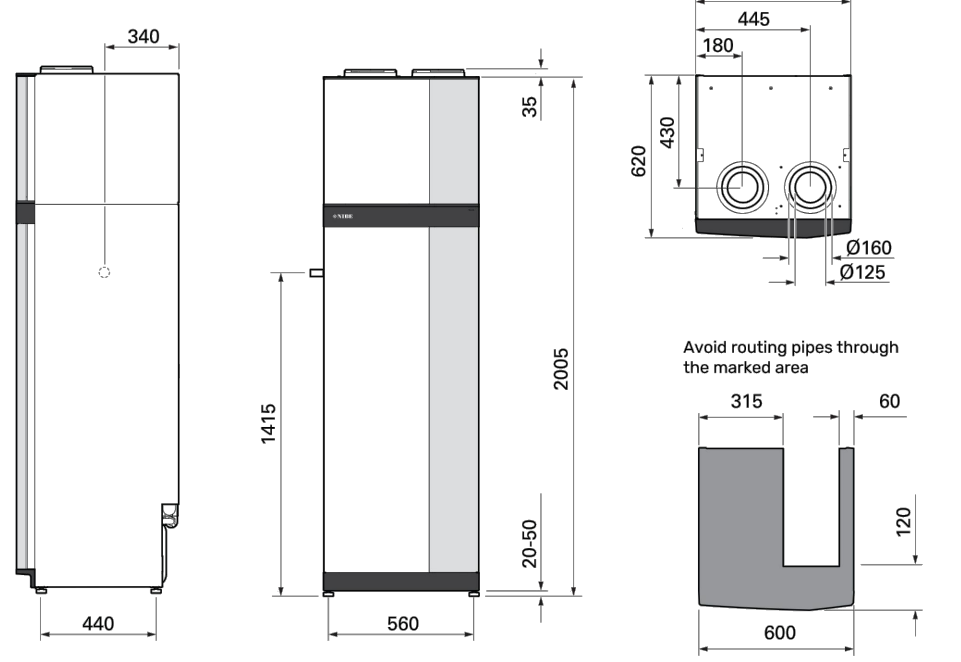


#### Technical specifications

| Output data according to EN 14 811                                                   | kW         | 4                        | 7                        |
|--------------------------------------------------------------------------------------|------------|--------------------------|--------------------------|
| Heating capacity (P <sub>h</sub> )/COP                                               | kW/-       | 1.01 / 3.41 <sup>1</sup> | 1.56 / 3.90 <sup>2</sup> |
| Heating capacity (P <sub>h</sub> )/COP                                               | kW/-       | 1.38 / 4.54 <sup>3</sup> | 1.57 / 5.19 <sup>4</sup> |
| Heating capacity (P <sub>h</sub> )/COP                                               | kW/-       | 4.22 / 3.18 <sup>5</sup> | 6.37 / 2.55 <sup>6</sup> |
| SCOP according to EN 14 825                                                          |            |                          |                          |
| Rated heating output (P <sub>h,rated</sub> )                                         | kW         | 4                        | 6                        |
| SCOP cold climate, 35°C / 55 °C                                                      |            | 5.02 / 3.70              | 4.75 / 3.81              |
| SCOP average climate, 35 °C / 55 °C                                                  |            | 4.79 / 3.70              | 4.50 / 3.67              |
| SCOP warm climate, 35°C / 55 °C                                                      |            | 4.45 / 3.41              | 4.41 / 3.62              |
| Additional power                                                                     |            |                          |                          |
| Max power, immersion heater (factory setting)                                        | kW         | 3.5 (3.3)                |                          |
| Energy rating, average climate                                                       |            |                          |                          |
| The product's efficiency class room heating, average climate 35 / 55 °C <sup>7</sup> | A+++ / A++ | A+++ / A++               | A+++ / A++               |
| The system's efficiency class room heating, average climate 35 / 55 °C <sup>8</sup>  | A+++ / A++ | A+++ / A++               | A+++ / A++               |
| Efficiency class hot water heating/Declared tap profile <sup>9</sup>                 | A / XL     | A / XL                   | A / XL                   |
| Electrical data                                                                      |            |                          |                          |
| Rated voltage                                                                        | V          | 230 V - 50 Hz            |                          |
| Max operating current including 5.0 kW immersion heater (Recommended fuse rating)    | A          | 11 (16)                  | 14 (16)                  |
| Max operating current including 3.5 kW immersion heater (Recommended fuse rating)    | A          | 27 (32)                  | 29 (32)                  |
| Drive output heating medium pump                                                     | W          | 75                       |                          |
| Driving power exhaust air fan                                                        | W          | 190                      |                          |
| Enclosure class                                                                      |            | IPX8                     |                          |
| For Connection Design Purposes, Compliant with Class A limits of IEC 61000-3-2       |            |                          |                          |
| For Connection Design Purposes, Compliant with IEC 61000-3-3 technical requirements  |            |                          |                          |
| Equipment Compliant with IEC 61000-3-12                                              |            |                          |                          |
| WiLAN                                                                                |            |                          |                          |
| 2.412 - 2.484 GHz max power                                                          | dBm        | 11                       |                          |
| Wireless units                                                                       |            |                          |                          |
| 2.405 - 2.480 GHz max power                                                          | dBm        | 4                        |                          |
| Refrigerant circuit                                                                  |            |                          |                          |
| Type of refrigerant                                                                  |            | R290                     |                          |
| GWP refrigerant                                                                      |            | 3                        |                          |
| Volume                                                                               | kg         | 0.3                      | 0.42                     |
| CO <sub>2</sub> equivalent                                                           | ton        | 0.0009                   | 0.00196                  |
| Heating medium circuit                                                               |            |                          |                          |
| Max pressure in the heating medium circuit                                           | MPa (bar)  | 0.35 (2.5)               |                          |
| Opening pressure, safety valve                                                       | MPa (bar)  | 0.25 (2.0)               |                          |
| Operating pressure                                                                   | MPa (bar)  | 0.2 / (2.0)              |                          |
| Hot temperature, supply line (factory setting)                                       | °C         | 70 (60)                  |                          |
| Ventilation                                                                          |            |                          |                          |
| Min. airflow                                                                         | l/s        | 17                       | 25                       |
| Sound                                                                                |            |                          |                          |
| Sound effect level according to EN 12 102 (L <sub>w,eq</sub> ) <sup>10</sup>         | dB(A)      | 39-47                    | 40-53                    |
| Sound pressure level in the installation room (L <sub>p,eq</sub> ) <sup>11</sup>     | dB(A)      | 35-43                    | 36-49                    |
| Pipe connections                                                                     |            |                          |                          |
| Heating medium ext Ø                                                                 | mm         | 22                       |                          |
| Hot water ext Ø                                                                      | mm         | 22                       |                          |
| Cold water ext Ø                                                                     | mm         | 22                       |                          |
| Ventilation Ø                                                                        | mm         | 125/160                  |                          |
| Water heater and heating section                                                     |            |                          |                          |
| Volume coil                                                                          | litre      | 7.8                      |                          |
| Volume, hot water heater                                                             | litre      | 178                      |                          |
| Max pressure in hot water heater                                                     | MPa (bar)  | 0.65 / (6.5)             |                          |
| Capacity, hot water heating according to EN 16 147                                   |            |                          |                          |
| Tap volume 40°C (V <sub>40</sub> ) <sup>12</sup>                                     | litre      | 223 - 264                |                          |
| COP (COP <sub>h</sub> )                                                              |            | 2.80 <sup>13</sup>       | 2.76 <sup>14</sup>       |
| Idle loss (P <sub>h</sub> )                                                          | W          | 55 <sup>15</sup>         | 69 <sup>16</sup>         |
| Tested according to EN 12897:2016                                                    |            |                          |                          |
| Maximum water supply pressure                                                        | MPa (bar)  | 1.6 / (16)               |                          |
| Operating pressure, tap water                                                        | MPa (bar)  | 0.6 / (6.0)              |                          |
| Expansion vessel, tap water, precharge pressure                                      | MPa (bar)  | 0.35 / (3.5)             |                          |
| Volume expansion vessel (external)                                                   | litre      | 98                       |                          |
| Pressure reduction valve, setting                                                    | MPa (bar)  | 0.3 / (3.0)              |                          |
| Opening pressure T&P-valve                                                           | MPa (bar)  | 0.7 / (7.0)              |                          |
| Max operating temperature T&P-valve                                                  | °C         | 95                       |                          |
| Discharge capacity of T&P-valve                                                      | kg         | 25                       |                          |
| Set operating pressure expansion relief valve                                        | MPa (bar)  | 0.6 / (6.0)              |                          |
| Cut out, temperature limiter                                                         | °C         | 80                       |                          |
| Heating time 12 °C to 42 °C <sup>17</sup>                                            | h min      | 2 h 55 min               | 2 h 55 min               |
| Equivalent amount of hot water (40 °C) <sup>18</sup>                                 | litre      | 270                      |                          |
| Pressure drop at 0.25 l/s                                                            | kPa        | 15                       |                          |
| Idle loss                                                                            | kWh/24 h   | 2.02                     |                          |
| Dimensions and weight                                                                |            |                          |                          |
| Width                                                                                | mm         | 600                      |                          |
| Depth                                                                                | mm         | 620                      |                          |
| Height incl. feet                                                                    | mm         | 2025                     |                          |
| Ceiling height                                                                       | mm         | 2170                     |                          |
| Net weight                                                                           | kg         | 200                      | 215                      |
| Mass unit, filled with water                                                         | kg         | 389                      | 402                      |
| Corrosion protection                                                                 |            | Stainless                |                          |
| Part No.                                                                             |            | 066 137                  | 066 137                  |

#### Dimensions

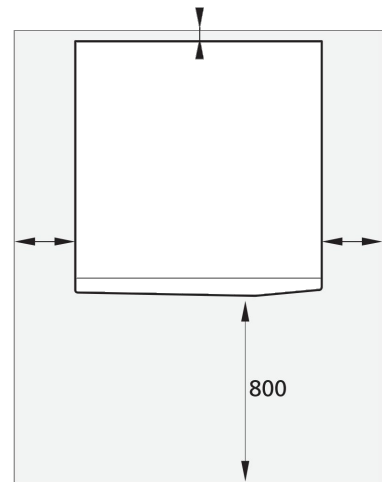
S735 installed as one unit.



#### INSTALLATION AREA

Leave a free space of 800 mm in front of the product. Leave free space between S735 and wall/other machinery/fittings/cables/pipes etc. It is recommended that a space of at least 10 mm is left to reduce the risk of noise and of any vibrations being propagated.

**NOTE**  
Ensure that there is sufficient space (300 mm) above S735 for connecting ventilation ducts.



#### SYMBOLS LEGEND

| SYMBOL | DESCRIPTION                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | NIBE S735-4 EXHAUST AIR HEAT PUMP WITH VERPLAS INS 127X4 125Ø INSULATED FLEXIBLE EXHAUST & EXTRACT DUCTWORK CONNECTIONS FROM HEAT PUMP SPIGOTS TO FLAT DUCT |
|        | 204x60mm VERPLAS SST-204-PL-IND PLENUM BEND TO CONNECT FLAT DUCT TO VERPLAS VKC356F 125Ø EXHAUST VALVE                                                      |
|        | DOMUS 220x126mm METAL AIRBRICK & SLEEVE 550mm LONG C/W DOUBLE AIRBRICK TO 204x60 DUCTWORK ADAPTOR                                                           |
|        | NIBE MOTORISED AIR VALVE DAMPER CONTROLLED BY HEAT PUMP INTEGRAL CONTROLS TO BOOST THERMAL PERFORMANCE OF HEAT PUMP UNDER LOW EXTRACT AIR CONDITIONS        |
|        | NIBE REMOTE BOOST SWITCH                                                                                                                                    |
|        | NIBE REMOTE HUMIDITY SENSOR                                                                                                                                 |
|        | NIBE INTERNAL AIR SENSOR                                                                                                                                    |
|        | NIBE EXTERNAL AIR SENSOR                                                                                                                                    |
|        | DENOTES DOOR UNDERCUT BY 10mm FOR MAKE-UP AIR                                                                                                               |
|        | DENOTES NATURAL VENTILATION PROVIDED BY OPENING WINDOW & TRICKLE VENTS TO ARCHITECT'S SPECIFICATION (TRICKLE VENTS TO HABITABLE ROOMS ONLY)                 |
|        | FIRE COLLAR TO DUCTWORK                                                                                                                                     |

#### NOTES:

- ALL HORIZONTAL DUCTWORK TO BE 204x60mm VERPLAS SST-204-IND PRE-INSULATED DUCT AT HIGH LEVEL IN CEILING VOID.
- DISTANCE BETWEEN KITCHEN COOKER HOOD & EXTRACT AIR VALVE TO BE MINIMUM OF 1500mm.
- VENTILATION CONTROL TO BE LIGHT SWITCH FOR BATHROOM & ENSUITE WITH REMOTE HUMIDITY SENSOR FOR KITCHEN & MANUAL BOOST SWITCH WITH RUN ON TIMER SET FOR 15 MINUTES.
- HEAT PUMP HWS SETTING AT TIME OF COMMISSIONING TO BE SET FOR MEDIUM TO ACHIEVE 50°C STORAGE TEMPERATURE WITH AUTOMATIC PASTEURISATION CYCLE.
- HEAT PUMP INSTALLATION TO BE UNDERTAKEN BY NIBE APPROVED INSTALLER WITH EVIDENCE OF THIS BEING PROVIDED BY THE ENGINEER.

#### GENERAL CONSTRUCTION NOTES:

- All plant & equipment shall be installed in accordance with the manufacturers recommendations.
- All works shall be generally in accordance with employers requirements.
- The entire works shall comply in all respects with all relevant statutory instruments & regulations including the following:
  - Health & Safety at Work, etc Act.
  - Health & Safety Executive publications.
  - British Standards, relevant European & International Standards.
  - The Requirements for Electrical Installations, BS 7671:2018.
  - Requirements under the Electricity Acts.
  - The Clean Air Act.
  - Control of Pollution Act.
  - Energy Conservation Act.
  - Regulations under The Factories Act.
  - The Building Regulations.
  - The Gas Safety Requirements.
  - Corgi publications.
  - Requirements of local electricity, gas & water undertakings & Fire Fighting Authorities.
  - The CIBSE Guide to Current Practice.
  - The IOP Plumbing Services Design Guide.
- All plant & equipment shall be approved by the Engineer/Architect prior to installation.
- Read this drawing in conjunction with the specifications and other employer's requirements documents.
- All contractor installation shall be in accordance with British Standards and British European (EN) Standards & Building Regulations.
- Contractor shall be responsible for monitoring and reporting the compliance of installations with all relevant national and local standards, codes of practice and regulations, including identifying any non-compliance.
- Refer to architect package for fire compartmentation.
- For detailed requirements for firestopping formed around meph services, including material specifications, approval of installers, materials and installation, identification and drawings, refer to the architect package.
- Building outline derived from architects drawing.

#### HAZARD NOTES:

- Refer to designer hazard identification schedule.
- Falls through openings**  
Riser openings between levels will necessarily be open for installation. Risk of falls and falling objects. Contractor to cover over openings when not in use.
- Work at height**  
Installation work involves work at height.
- Riser access**  
Risks associated with difficult access. Architectural design and planning to provide risers of sufficient width and good frontal access. Including edges and at high level. To avoid over-reaching into risers. Especially at high level and in corners clearly provide full height doors.
- Think safety**  
Is there safe, adequate and correct means of access? Adequate lighting? Is the task safe in today's environment and weather conditions? Correct PPE and correct tools? Work area free from conflicting activities? Could your task affect the safety of anyone else?



#### BUILDING SERVICES DESIGN ENGINEERS

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Project: ROPETACKLE  
SHOREHAM-BY-SEA  
WEST SUSSEX

Title: FLATS FIRST FLOOR  
VENTILATION SERVICES  
LAYOUT

Scale: 1:75 @ A1

Date: AUG '25

Drawn: JC

Checked: JSF

Drawing Number:

T15-01-117

Rev:

A

#### Amendments:

A: 08.12.25 REVISED TO SUIT CURRENT ARCHITECT LAYOUT.

#### Notes:

- Under no circumstances should scaled dimensions be used for setting out.
- All dimensions to be checked on site.
- This drawing to be read in conjunction with architects drawings.
- This drawing is copyright and shall not be reproduced without permission.