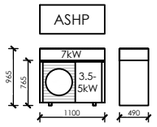
# LOW CARBON PLANT

Dimensions denote minimum installation & maintenance clearances, extrapolated to hatched areas. All as defined by manufacturer's requirements, refer to product literature for specifics.

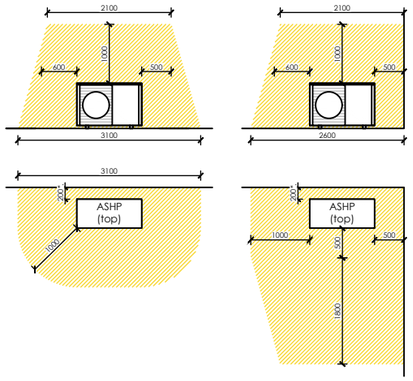
## ASHP




Vaillant aroTHERM plus 3.5 / 5 / 7kW

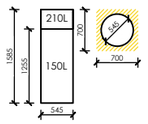
dimensions: 765 / 965x1100x490mm (hwd)

Vaillant aroTHERM plus 3.5kW: HT 211
Vaillant aroTHERM plus 5kW: HT 421 & HT 531
Vaillant aroTHERM plus 7kW: HT 641




*Clearance for heating only: +50mm if ASHP provides cooling.

## Hot Water Cylinder

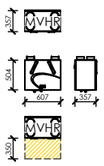



Mixergy cylinder 150 / 210L

dimensions: 1255 / 1585x545mm (hd)

Mixergy 150L for HT 211 & HT 212
Mixergy 210L for HT 421, HT 531 & HT 641

## MVHR




Nuaire MRXBOX-ECO2 (TBC)
dimensions: 504x607x357mm (hwd)

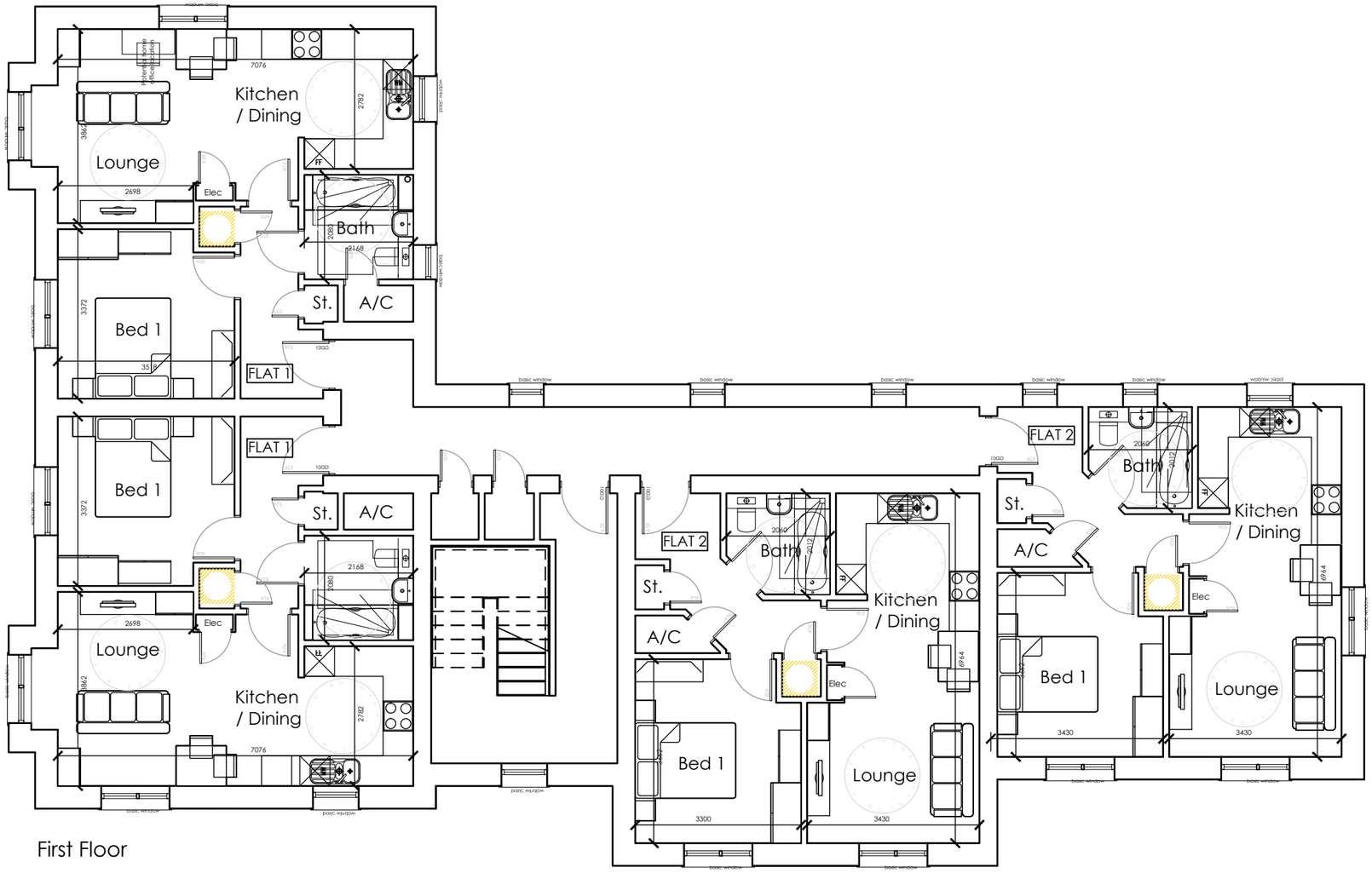
Volume flow: 40-324m³/h
Heat recovery: 83.0%* at 225m³/h

N.B. Maintenance clearances to be coordinated with Nuaire prior to installation.

## Battery Storage

Further discussion is required to consider the impact of PAS 63100 : 2024, which effectively precludes the indoor installation of storage batteries.

Note: Information presented indicatively for coordination with all - including manufacturer & model specification - TBC by relevant specialist consultant / subcontractor. All revisions to the plant specification must be reported for coordination.




First Floor

## ASSUMED CONSTRUCTIONS

| | |
|---|---|
| External walls | 451mm |
| Internal walls | 120mm |
| Intermediate floors | 300mm |

NB: The currently assumed external wall thickness of 451mm requires the use of PIR or similar petrochemical insulants in order to achieve the fabric u-value requirements of WDQR 2021 & revised AD: L (Wales) 2022 that are necessary for delivery of demand-based energy standards.

Increasing the allowance for external wall thickness to a notional 500mm would facilitate both the specification of natural/non-flammable insulation and closer alignment with Delivering Net Zero.

## STORAGE

**WDQR 2021 General Storage Requirements**
4 Person 2 Bedroom House: 2.5m²

**GF**
Store 1.17m²
**Total: 1.17m²**

**FF**
Airing Cupboard (AC) 0.66m²
Store 0.78m²
**Total: 1.44m²**

**Overal Total Storage: 2.61m²**

## FLOOR AREA

**WDQR 2021 Area Requirements**
4 Person 2 Bedroom House: 83m²

**GIA: 83.44m²**

0 1 2 3 4 5
Metres

A3
Original sheet size

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| Rev | Date | By | CHK | Description |
|---|---|---|---|---|

| Client: | Project: | Drawing Title: |
|---|---|---|
| Hedyn | Midway Lane | First Floor Plans 212 |

| Drawing Status: | Date: | Drawn By: | Director: | Scale: | Job No: | Opt. | Drawing No. | Rev. |
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| CONCEPT DESIGN | July 26 | CC | | 1:100 @ A3 | 2800 | | 212(03) 201 | |

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