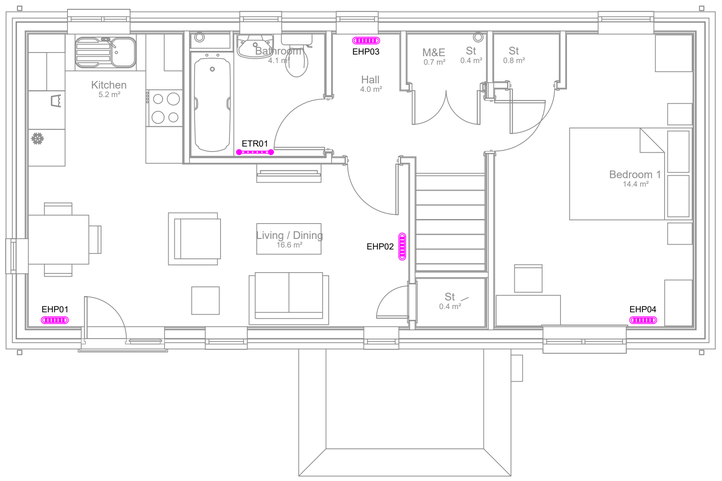
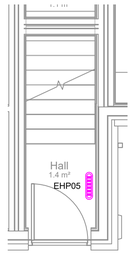
Heating Notes

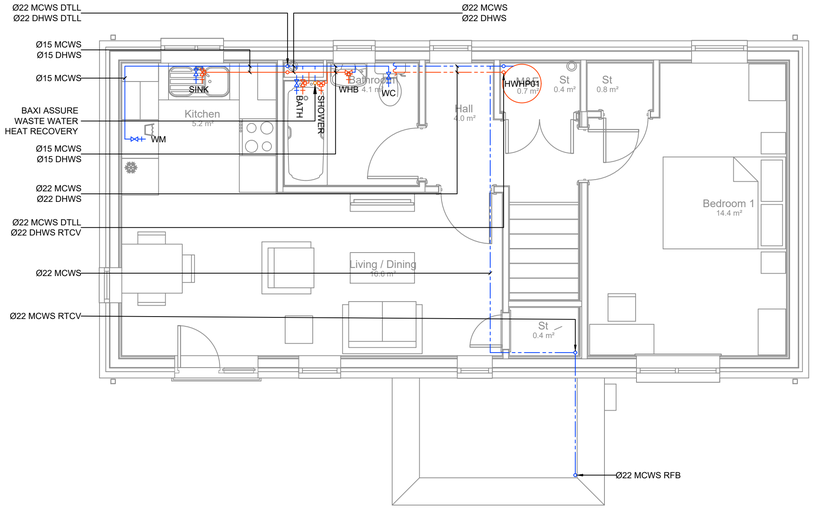
1. Electric heating panels/towel rails to be complete with integral stat/controller.
2. Controls and power wiring between heating systems/plant by mechanical contractor and their appointed controls specialist.

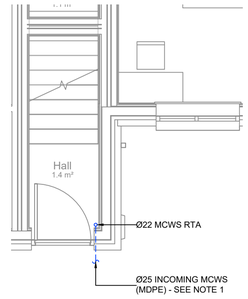
LEGEND

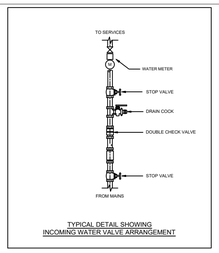
- ELECTRIC HEATING PANEL
- ELECTRIC TOWEL RAIL











TYPICAL DETAIL SHOWING
INCOMING WATER VALVE ARRANGEMENT

Domestic Notes

1. Incoming 25mm mdpe water supply (continuous length) with blue detection tape above from UU connection to external isolation valve in WRAS approved below ground box enters building in 100mm dia. PVC duct with slow bend with 22 mm stop cock, concentric meter adaptor, United Utilities AMR water meter, double check valve and drain cock
2. Domestic services shall be installed inline with building regulations part G.
3. All distribution pipework to be BS 12449 press fit copper pipe.
4. Valves will be installed as indicated on the mechanical tender drawings.
5. Local ballofix quarter turn isolation valves will be installed on to all items of plant
6. Contractor to allow for TMV3 compliant under sink mixer valves for all wash hand basins and sinks regulating water to 41°C.
7. All final connections are to be ridged.
8. Drain points will be installed at all low points.
9. Automatic air vents will be installed at all high points.
10. All pipework and fittings shall be thermally insulated inline with specification, and must be anti-ligature.
11. All installed water services will be chlorinated to BS EN 806.
12. TMVs for shower/bath to be fitted within bathroom boxing before serving shower head/bath taps with 41°C blended water.
13. Pipework length between TMV and outlet to be less than 2 meters.

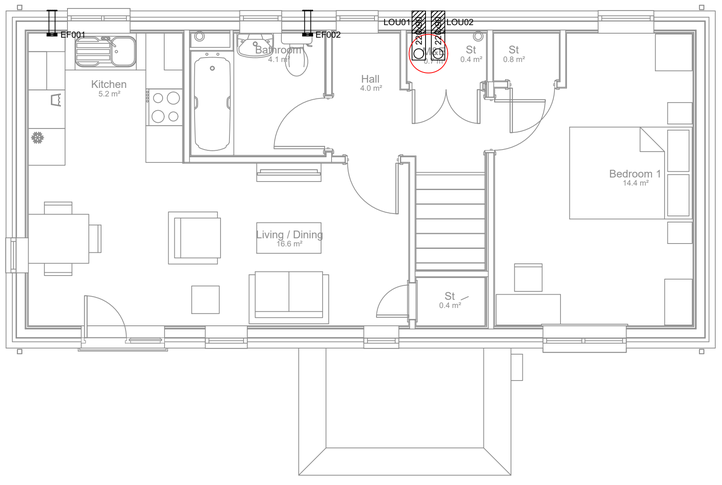
LEGEND

- LOW LEVEL PIPEWORK
- HIGH LEVEL PIPEWORK
- CEILING VOID PIPEWORK
- FLOOR SPACE PIPEWORK
- TMV3 MIXING VALVE
- RTA - RISE TO ABOVE
- RTLL - RISE TO LOW LEVEL
- DTB - DOWN TO BELOW
- DTLL - DOWN TO LOW LEVEL
- MCWS - MAINS COLD WATER SERVICE
- DHWF - DOMESTIC HOT WATER FLOW
- DHWR - DOMESTIC HOT WATER RETURN

Ventilation Notes

1. All ventilation provisions shall be in accordance with the requirements of building regulations and NHBC Standards.
2. All builders works, making good of apertures and fire stopping to be carried out by others
3. All flexible ductwork final connections not to form bends or exceed 300mm vertical drop.
4. Fire dampers shall be provided where ductwork passes through any fire rated structure.
5. All openings to be made good and fire rated where services pass through fire rated partitions and cavity barriers.
6. All installations to comply with DW guides & TR17.
7. Access hatches shall be provided for all equipment installed within ceilings for maintenance as shown. access hatches dimensions shall match manufacturers recommendations for the specific equipment.
8. All ductwork shall be galvanised Z265 type.
9. Mechanical contractor responsible for all final connections of mechanical plant, controls and power wiring between heating systems/plant by mechanical contractor. power supplies to be provided by electrical contractor.
10. Trickle vents to be provided in accordance with Building Regulations Part F, as below

> **1.64** Where continuous mechanical extract ventilation is used, background ventilators should satisfy all of the following conditions.
> a. Not be in wet rooms.
> b. Provide a minimum equivalent area of 4000mm² for each habitable room in the dwelling.
> c. Provide a minimum total number of ventilators that is the same as the number of bedrooms plus two ventilators (i.e. a one bedroom dwelling should have three background ventilators, a two-bedroom dwelling should have four background ventilators, etc.).



LEGEND

- EXTRACT FAN
- LOUVRE
- FD — FIRE DAMPER

Electric Heater Schedule

Ref	Location	Manufacturer	Model	Load (kW)	Dimensions (mm) - HxW
EHP001	Kitchen/Living			0.75	
EHP002				0.75	
EHP003	Hall			0.5	
EHP004	Bedroom			1.25	
EHP005	Stairwell			0.5	
ETR001	Wet Room			0.6	

Extract Fan Schedule

Ref	Manufacturer	Model	Duty (l/s) - Trickle/Boost	Dimensions (mm) - HxWxL	SFP (W/l/s)	Controls
EF001	Vent-Axia	Lo Carbon	9/13	213x213x46	0.12	Continuous/Boost Switch
EF002		NBRdMEV125	5/8		0.16	

1. BEDROOM OVERHEATING FANS TO BE COMPLETED WITH SEPARATE SWITCH LOCATED NEXT TO ROOM LIGHT SWITCH
2. THROUGH-WALL EXTRACT FANS TO BE COMPLETED WITH MANUFACTURERS WALL TERMINATION KIT

Louvre Schedule

Ref	Manufacturer	Model	Dimensions (mm) - HxWxL	Duty (l/s) - Trickle/Boost
LOU01		Double		89
LOU02		AirBrick		89

Hot Water Heat Pump Schedule

Ref	Manufacturer	Model	Duty (l/s)	Dimensions (mm) - HxØ	Weight (kg) - Empty/ Full	Capacity (l)	Max Output (kW)	Electrical
HWHP01	Dimplex	Edel 200	89	1460x630	56.5/256.5	200	2.5	1ph 8A RC

CONSTRUCTION ISSUE

Rev	Date	Description
C02	18/12/25	Updated to comment.
C01	13/10/25	Construction issue.

Project -

Longhurst Road,
Manchester

Title -

Block 2 - FF
Proposed Mechanical Services

Scale - 1:50 @ A1 Design by - JU

Date - 13/10/25 Cad by - JU

Drawing No. - 6386-KGA-02-01-DR-M-0103

Revision - C02

KGA (UK) Ltd

Chartered Building Services
Consulting Engineers

Trinity Chambers
10 Ivy Street
Birkenhead
Merseyside
CH41 5EF

T: 0151 647 5021
E: eng@kga.co.uk
W: www.kga.co.uk

Constructionline Gold Member

ISO 9001 REGISTERED FIRM 0054

ISO 14001 REGISTERED FIRM 0054