

A guide for operating and using your new flat efficiently



Commissioned by:

Ore Valley Housing Association,
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Document produced for the tenants of:

66a Rosewell Drive, Lochore, Lochgelly, KY5 8DP

SPECIFICATIONS:

- Double glazed windows & uPVC frames
- Efficient gas-fired condensing system boiler
- Programmable room thermostat & dial room thermostats
- Underfloor heating
- Dual coil water store with a 3kW immersion heater
- Extract fans in bathroom and kitchen
- 6.8m² of Solar water heating panels – 3 on rear elevation

Guide prepared by:

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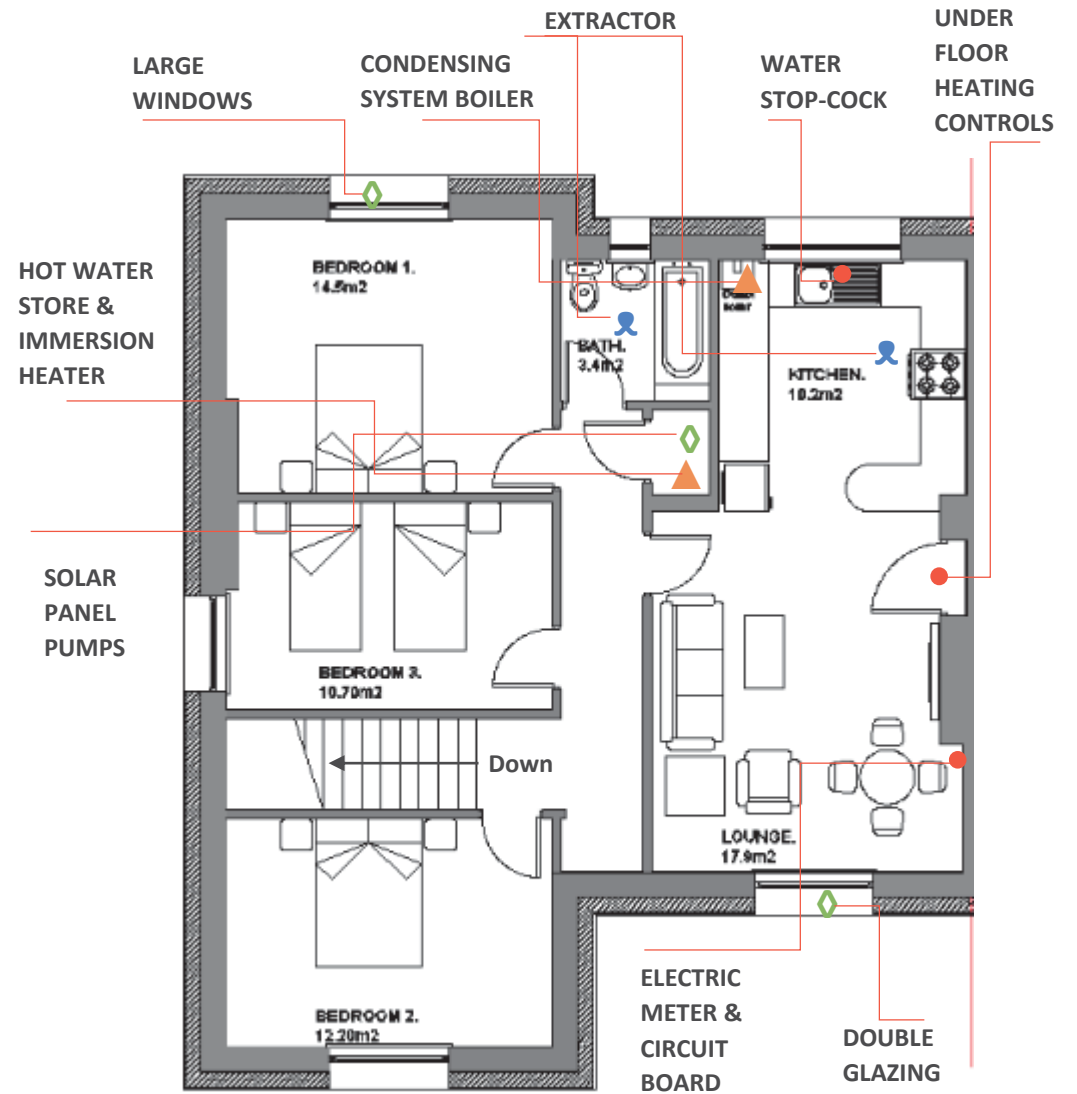
1. Overview

Identifying the main features of

YOUR FLAT:

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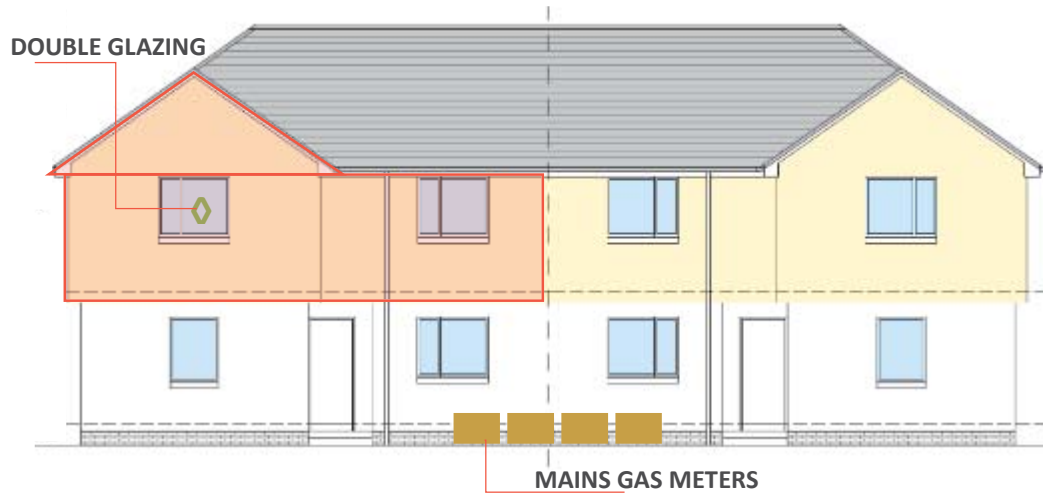


Main heating supplied by Combi boiler & underfloor heating (wet system) with independent thermostats in each room.

1. Overview

Identifying the main features of

YOUR FLAT:



FRONT ELEVATION

1kWp SOLAR PV
ARRAY - TILES -
FLAT 66b

3 SOLAR THERMAL
PANELS



REAR ELEVATION

ENHANCED OPENINGS FOR DAYLIGHT



SIDE ELEVATION

140MM EXTERNAL MINERAL WOOL
INSULATION

Welcome to your new home. This quick start guide is designed to help you get the best out of your new house, keeping your bills and carbon footprint as small as possible. Your flat has been recently enhanced to keep the heat in; additional insulation in walls and floor has been added. It has energy efficient double glazed windows and well-insulated doors. Your house has an efficient gas-fired heating system, and your hot water is heated by a gas combi-boiler with additional back-up from three solar water panels and an immersion electric heater. At the rear, bedroom windows have been increased in size to let more day light in. Kitchen and living room have been opened-up to provide enhanced day-light. There are also extract fans in the bathroom and kitchen that take out odours, extra moisture and avoid mould growth.

2. Heating ▲

Your heating system is powered by a Vokera Mynute i30 gas condensing system boiler located in the kitchen. This provides heat for the underfloor heating which warms the rooms. The underfloor heating controls are located in the lounge service cupboard and are regulated by time clocks and independent dial room thermostats located in each room. The construction of the house can retain heat in the winter so that it stays warmer for longer than many other houses. If the house gets too hot remember to turn the heating down or off before opening the windows.

Programmable thermostat: The thermostats linked to the time clocks can be programmed to 7 day and 4 control up-to 4 areas or rooms. These can also have a frost protection, holiday standby mode and are simple to use. It is managed by the manifolds located in the service cupboard that distribute hot water according to the settings. These settings are independent to the hot water heating in the kitchen and bathroom.



↑ Above: Vokera Mynute i30


↓ Below: Dial room thermostat - Polypipe



↑ Above: Manifold underfloor heating controls


Dial room thermostats: The thermostat turns the boiler off when the house has warmed up, it responds according to the time clocks operating when heating is needed. Set these to the temperature that you want your rooms to be. Most people are comfortable between 19°C to 21°C in living rooms while bedrooms can be set at 18°C or 19°C.

For more information on the User instructions, installation and servicing, Ctrl + Click the following links: [Vokera Mynute i30 & instructions](#). Vokera Boilers – Mynute i brand web site: <http://www.vokera.co.uk/trade-professionals/boilers/mynute-i/> Information on the underfloor thermostats can be accessed [here](#)

 **DO** learn how to set your programmer. There are instructions for this in the links below.

DO set your dial room thermostats to provide comfort, normally between 18 to 21°C

DO set your time clocks to suit your occupancy both during the week and weekends.

 **DON'T** set your thermostat too high, you can save energy and money by keeping it in the comfort temperatures.

DON'T tamper with the manifold valves

Don't make holes or repair work on the floor as these may damage the pipes underneath.

3. Ventilation

Your flat has been designed to be ventilated by hybrid systems through the supply of fresh air using the windows trickle vents and the removal of excess moisture, odours and stale air by the use of centrifugal extract fans.

All windows have trickle vents which can be manually opened/ closed. It is recommended that they are kept open in order to allow fresh air into the rooms. Although these can generate a small draught and some noise, the fresh air provides healthier conditions. If drying clothes on a clothes drying rack, maintaining this fresh air not only dries them quicker but also extracts moisture from the room.

Extractors are located in the bathroom and the kitchen. Extractors in the bathroom are activated by the intermittent light switch and should be used when showering and/or bathing. The extractor in the kitchen is operated by an independent switch and should be used to take out odours, steam and stale air while cooking.



↑ Above: Silavent standard centrifugal fan in Kitchen


↓ Below: Silavent standard centrifugal fan in bathroom (example)



↑ Above: CMS windows with trickle vents (external view)

Windows have been designed as “Tilt & Turn” which means you can open them partially to provide added fresh air into the room and to release moisture without fully opening the window. Ventilation during winter months is important as air changes between the inside and outside are less common causing poor air quality.

For more information on the User instructions, installation and servicing, Ctrl + Click the following links: [Extract fans – Silavent](#) and [CMS windows – tilt and turn](#).


 **DO** use extractor fans when showering and bathing

DO turn extract fan when cooking

DO clean the fans facia at least every month

DO leave trickle vents open during the winter months as well as summer.

DO use the tilt and turn system in windows to allow fresh air

 **DON'T** switch off the intermittent switch in the bathroom.

DON'T block or seal trickle vents in windows

DON'T dry clothes over radiators as it produces hot moist air that is unhealthy

4. Hot Water •

Hot water is provided by three sources. The first is your gas condensing system boiler; the second is by solar panels as a back-up and thirdly by an immersion heater in the water store. The water store is located in the service cupboard in the hall way and will store hot water from all these sources.

The solar panels heat the water when it is warm or sunny outside. You don't need to do anything to this system. The gas boiler and the immersion heater heat the water when there is not enough sun, the controls for this are part of the heating system programmer.

Hot water is stored in a hot water store, turning the taps or shower on will draw water from it. The tank contains enough water for about 5 showers. If the water begins to run cold you will need to turn on the immersion heater and wait for the water store to warm up again – this will take about 60 to 90 minutes.

You have an anti-scalding valve below the kitchen sink and bath which controls the water temperature to 48°C to prevent accidental scalding.



↑ Above: Time clock settings - Use (pre-set) to regulate when hot water will be used.


↓ Below: Hot water store & Solar panel pressure valves



↑ Above: Solar water panels – 3 panels to service your flat.

↓ Below: Anti-scalding valves under kitchen sink.




 **DO** set the programmer to give you hot water when there is not enough sun

DO try to use limited hot water when washing dishes

DO limit your bath shower times to max 10 minutes

DO wash clothes with cold water when possible

 **DON'T** disconnect or replace the anti-scalding valves

DON'T adjust solar panels or water store settings

For more information on the User instructions, installation and servicing, Ctrl + Click the following links: [Energy Saving Trust](#) & [Solar panels](#)

5. Energy Saving Features ◊



DO ask about maintenance to solar water panels

DO use energy efficient lightbulbs



DON'T unnecessarily puncture walls or floors

Your home has been recently refurbished to a highly efficient flat that has innovated in the way it keeps heat indoors and also how it can efficiently heat water and its interior space. All walls have been enhanced by having a 140mm of external mineral wool, cavity wall insulation, and fibreglass insulation before the dry lining. Most of these features are present in the flats envelope and also as innovative technology. Your flat has the following energy saving features: double glazing windows, low energy lightbulbs, solar water heating, enhanced internal insulation and efficient water/ heating controls.

Although windows are double glazed, they are of very good quality and are air-tight to keep heat inside the flat.



6. Keeping it Working

Your house requires regular maintenance to ensure it continues to work well for many years. Poorly maintained systems tend to be more inefficient and cost more to run.

Every Month

- Wash facias of extractor fans
- Wash extractor fan filters
- Check that your Solar hot water meter is working – located in the service cupboard in hall way

Every Year

- Boiler check by Registered Gas Safe Engineer
- Get a specialist MCS accredited engineer to check the Solar water panels and to wash tiles
- Twice a year make sure windows are clean to enhance day-light to use less artificial light
- Replace or clean the kitchen extractor filter of dust and accumulated kitchen oils



↑ Above: Solar panels require washing once a year to maintain efficiency

7. Links, References and more information

This quick guide to your home includes relevant websites for more information about the technology in the flat. It is essential that any problems encountered are discussed with your housing provider and that maintenance checks are done on a yearly basis. Please Ctrl + Click the following links:

- [Ventilation Do's & Don't's](#)
- [Replacement fan equipment – Silavent by Polypipe](#)
- [Programmer – thermostat & User guide](#)
- [Energy Saving Trust – Solar thermal](#)
- [Generic Energy Saving Trust information on energy efficiency](#)



References: The Scottish Government (2011), Guidance for Living in a Low Carbon Home, MEARU & 55° North Architecture, Published by Building Standards Division, Crown Copyright 2011.

Post-handover observations and meter readings

Year one

Tenants name:

Number of occupants:

Ages:

Maintenance checks		
Date	Engineer or staff member	Changes & observations

Electricity meter readings		
Date	Meter reading	Observations
		Hand over
		Quarter 1 (3 months)
		Quarter 2 (6 months)
		Quarter 3 (9 months)
		Quarter 4 (12 months)

Energy consumption meter readings:

Gas meter readings		
Date	Meter reading	Observations
		Hand over
		Quarter 1 (3 months)
		Quarter 2 (6 months)
		Quarter 3 (9 months)
		Quarter 4 (12 months)

Solar PV or water meter readings		
Date	Meter reading	Observations
		Hand over
		Quarter 1 (3 months)
		Quarter 2 (6 months)
		Quarter 3 (9 months)
		Quarter 4 (12 months)

Post-handover observations and meter readings

Year Two

Tenants name:

Number of occupants:

Ages:

Maintenance checks		
Date	Engineer or staff member	Changes & observations

Electricity meter readings		
Date	Meter reading	Observations
		Hand over
		Quarter 1 (3 months)
		Quarter 2 (6 months)
		Quarter 3 (9 months)
		Quarter 4 (12 months)

Energy consumption meter readings:

Gas meter readings		
Date	Meter reading	Observations
		Hand over
		Quarter 1 (3 months)
		Quarter 2 (6 months)
		Quarter 3 (9 months)
		Quarter 4 (12 months)

Solar PV or water meter readings		
Date	Meter reading	Observations
		Hand over
		Quarter 1 (3 months)
		Quarter 2 (6 months)
		Quarter 3 (9 months)
		Quarter 4 (12 months)