

A guide for operating and using your new flat efficiently



Commissioned by:

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114-116 Station Rd, Cardenden,
Fife, KY5 0BW, UK



Document produced for the tenants of:

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

FEATURES:

- Double glazed windows & uPVC frames
- Efficient condensing system boiler
- Programmable room thermostat & dial room thermostats
- Underfloor heating
- Dual coil water store with a 3kW immersion heater
- Mechanical Ventilation with heat recovery (MVHR) system
- 4.5m² of Solar water heating panels – 2 on side elevation

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Construction technologies
for tomorrow's communities

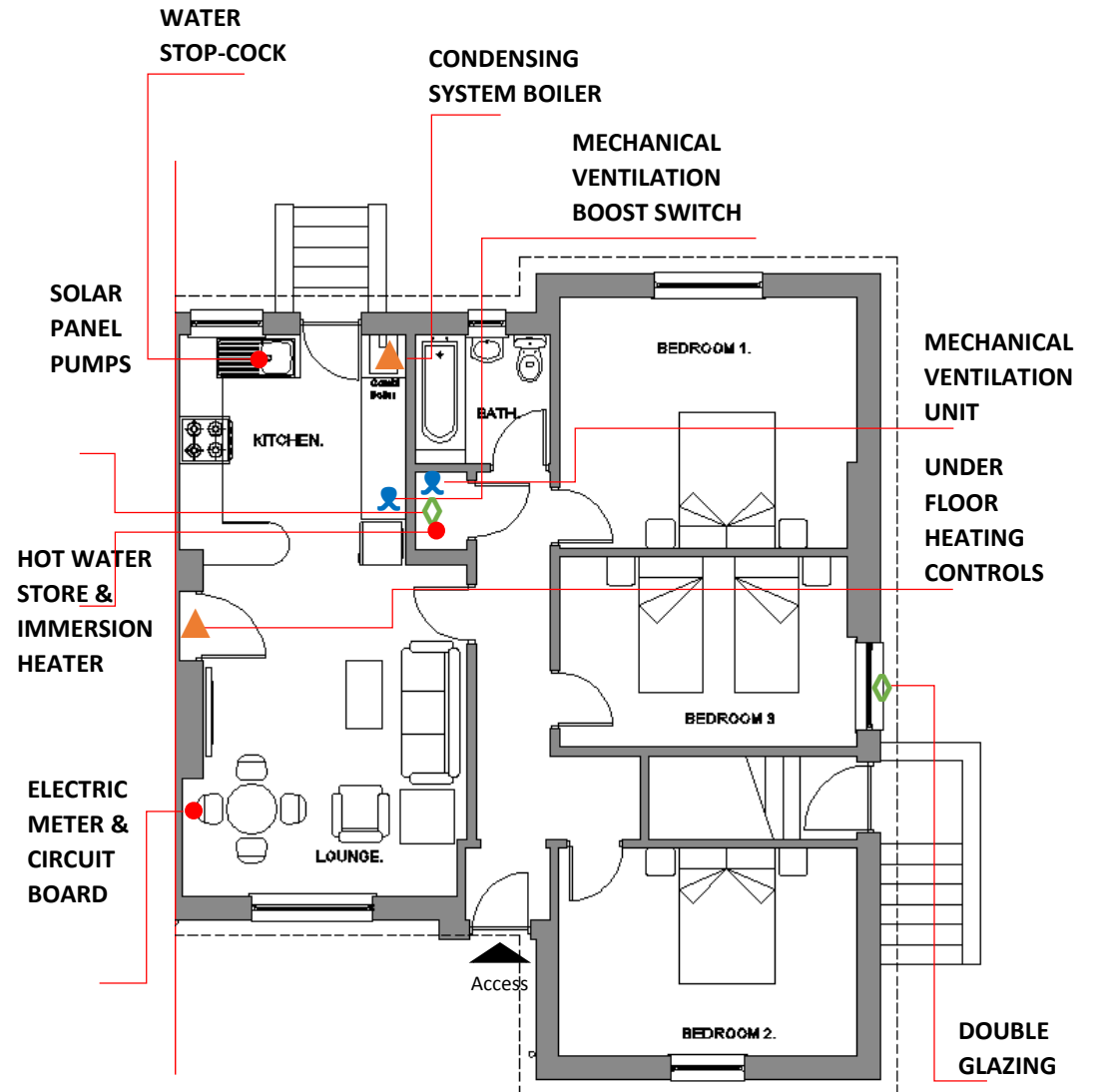
1. Overview

Identifying the main features of

YOUR FLAT:

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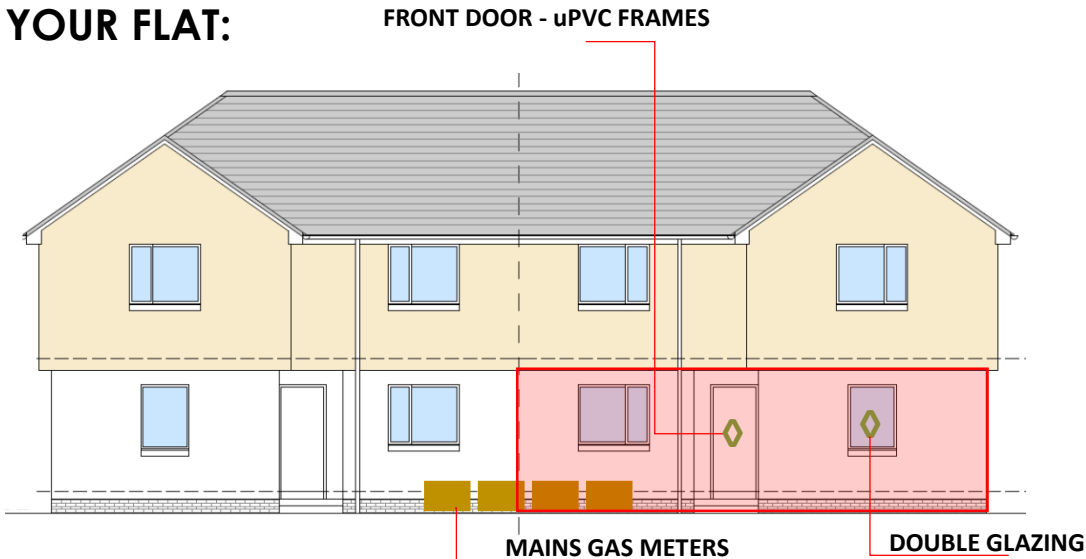


Main heating supplied by Combi boiler & underfloor heating (wet system) with independent thermostats in each room.

1. Overview

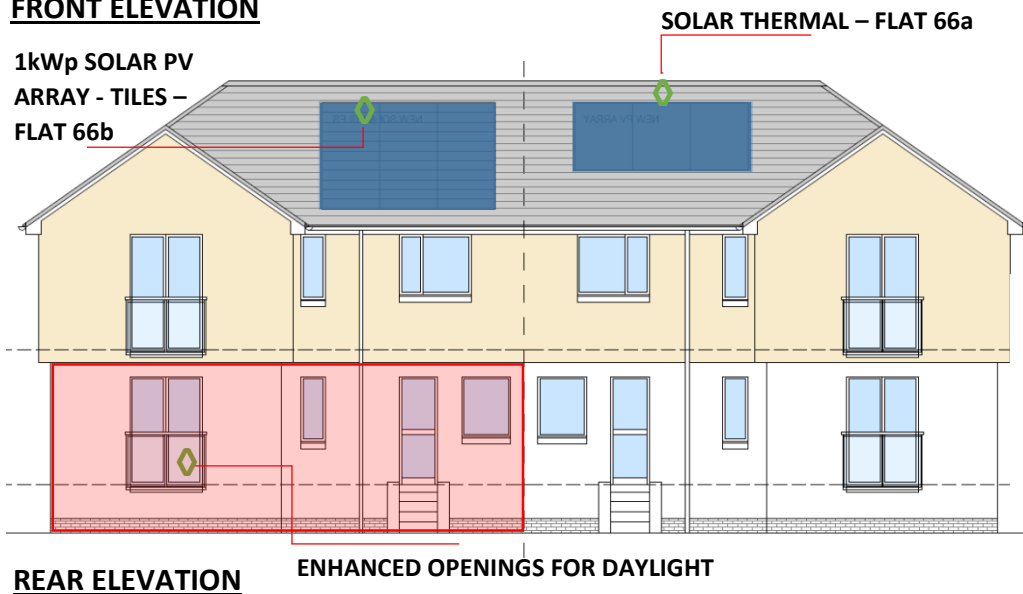
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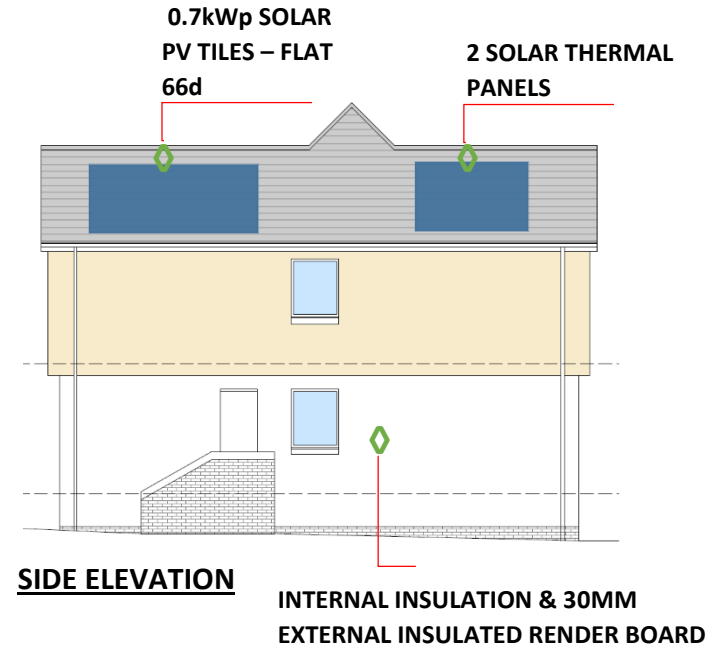


FRONT ELEVATION

1kWp SOLAR PV
ARRAY - TILES -
FLAT 66b



REAR ELEVATION



SIDE ELEVATION

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, used in the hot water too with the back-up of two solar thermal panels and an immersion electric heater. At the rear, bedroom windows have been increased in size to let day light. Kitchen and living room have been opened-up to provide enhanced day-light. There is also a Mechanical Ventilations with Heat Recovery (MVHR) system that extracts stale air from wet rooms and recycles it to bring fresh air to living rooms and bedrooms.

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 off before opening the windows.

Programmable thermostat: Each room has a dial room thermostat that is linked to the time clocks which can be programmed to 7 day and 4 zone controls. 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 talks to the time clocks and works when the heating is needed. Set it 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 see this link: [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 &

The house is ventilated by a Mechanical Heat Recovery system (MVHR) and windows that can be opened. The building is designed so there are no leaks or draughts, so it's important that the ventilation system is used properly. The MVHR System sucks stale air out of the kitchens and bathrooms and brings fresh air in through the vents in the ceiling, but keeps the heat from the old air. It runs all the time, there are switches in the kitchen to boost the system to get rid of moisture or smells.

The MVHR unit is located in the service cupboard in the hall way. This very low power fan unit powers the ventilation system, it needs no adjustment. It has filters to ensure the air in your house is clean, you need to clean the filters (located behind flaps on the front of the unit) every month by vacuuming them and washing them if necessary.

The ventilation controls are important. Low and the winter/ summer should be used accordingly in normal occupancy. When there is an increase in occupancy (party) please use boost as an alternative to opening windows.

The vents extract air from the wet rooms (kitchen and bathroom) while the vents in bedrooms and lounge supply fresh heated air. You will notice air quality immediately.



↑ Above: Polypipe extract and supply vents

↓ Below: Silavent ventilation controls



↑ Above: Silavent Polypipe HRX MVHR unit.

Windows can still be opened with this system, however it is preferred you keep them shut while the system is on. They 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.

For more information on the User instructions, installation and servicing see this link: [Silavent HRX MVHR](#) and [CMS windows – tilt and turn](#)



DO turn on the unit to "boost" when cooking

DO use the boost also in the bathroom after showering/bath

DO clean filters regularly (once a month) and replace them once a year.

DO open windows in the summer to get more ventilation and prevent overheating.



DON'T switch off the MVHR unit, it can lead to smells, mould and poor air quality

DON'T block or seal vents

DON'T try and repair the MVHR unit, please get a specialist. Talk to the housing provider first.

Note: accidentally the windows in this flat have trickle vents – please keep these shut at all times and seal if possible.

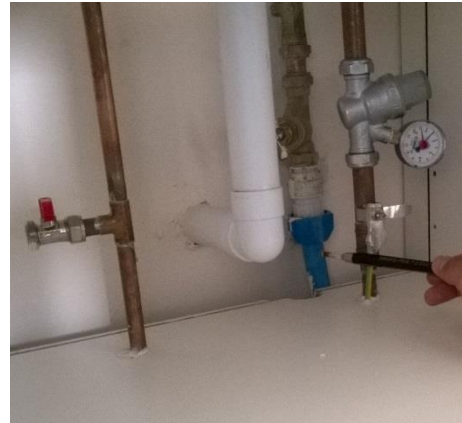
4. Hot Water •

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 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 a valve on the kitchen sink and bath which limits the water temperature to 48°C to prevent accidental scalding.



↑ Above: Anti-scalding valve to keep water temperature below 48°C

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




↑ Above: Solar panel pumps – do not adjust

For more information on the User instructions, installation and servicing see this link:

[Energy Saving Trust & Solar panels](#)




↑ Above: Solar water panels – 2 panels to service your flat

 **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

DON'T leave the immersion heater on, use only in very cold days when water temperature is low.

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 from a run-down property 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 30mm insulating board externally, cavity wall insulation, fibreglass insulation between dwangs and a solid board of 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

- Wipe clean any dust around extract and supply vents
- Wash filters at least once a month
- 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
- Clean the kitchen extractor filter or 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. Here are some more links to important information:

- [Ventilation Do's & Don't's](#)
- [Technical info – HRX MVHR unit](#)
- [Programmer – thermostat](#) & [User guide](#)
- [Energy Saving Trust – Solar thermal](#)
- [Generic Energy Saving Trust information on energy efficiency](#)

*The above links can be accessed by double clicking on the blue writing above



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		
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