

# Developing a Template for a 'Quick Start' User Guide for New Home Owners

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## Acknowledgements

# 1 . Context

This project was developed in response to earlier MEARU Post Occupancy Evaluation research and work with the Scottish Government on occupant guides highlighting the benefits to home energy efficiency through simple, bespoke instructions for operating a new house.

In May 2011 the Scottish Building regulations changed to include Section 7 'Sustainability'. This section in the building regulations outlines optional standards for sustainability for new housing- the higher levels all include the need for straightforward user information for homes including a 'quick start guide' to the building fabric, mechanical systems, ventilation strategies and other sustainability features.

This project seeks to address the need for a 'quick start' guide by the creation of a template for an occupant guide highlighting the benefits of energy efficiency through clear visual instructions for operating a new house. The Home Log Book Company (HLB) together with MEARU developed a bespoke 'quick start' guide for housing including the aspects addressed in the new building standards in Scotland. This project seeks to identify the most effective process of gathering this information and to propose a simple template which could be replicated by housing providers to meet the Section 7 criteria for new homes.

This 'pilot' guide was tested within a range of new house owners and tenants in both the public and private sectors. Feedback on the guide was obtained from residents by both a postal survey questionnaire and by a series of face to face interviews.

It is anticipated that this 'quick start' guide template would form part of a new service offered by the Home Log Book company to existing and new clients within Scotland. If there be a demonstrable benefit to residents and their energy bills, it is anticipated that this product would be marketed to clients across the UK in particular social housing clients.

Note- the 'Quick Start' guide as been re-named ' Home Starter Guide' for branding purposes by the Home Log Book Company.

## 2. Methodology

In order to inform the study, examples of housing currently under construction were identified in both the public and private sector. Information including floor plan layouts and heating and ventilation systems for each house type was gathered from the house builder and architect. Parameters for the home starter guide were identified and meetings with a graphic designer helped to clarify effective presentation methods for the technical information.

As it was the intention for the guide to be bespoke, the information regarding building fabric construction, heating systems and location of services within floor plan layouts required significant clarification from the housing providers, architects and contractors to ensure the correct layout was reflected in the residents guide.

Design layouts were generated for each house type and draft layouts were issued to housing providers for comment. After many revisions and additions the home starter guides were then printed and issued to owners and tenants of the selected properties.

Feedback was then gained via a combination of postal survey questionnaires and face to face interviews with residents. Feedback on the final product, the production process and the future direction of the home starter guides was also gained through meetings with housing providers and Homes for Scotland.



## 3. The Team

### Home Log Book

The Home Logbook Company (previously known as Property Logbook Company) has developed and become the UK's leading supplier of online housing logbooks. It provides online logbooks (interactive home user guides) to new home developers and housing associations.

This product would form part of new services to existing and new clients within Scotland. Should there be a demonstrable benefit to residents and their energy bills, this product would be marketed to clients across the UK in particular social housing clients.

### MEARU

The Mackintosh Environmental Architecture Research Unit (MEARU) was established within the Mackintosh School of Architecture. MEARU undertakes strategic and applied research into a wide range of aspects of sustainable environmental design, responding to a growing commitment to user-centred, low energy, eco-sensitive architecture in the context of increasing global concerns. The unit is also well networked with similar European partners, is represented on the International Energy Agency, ISES Europe and publishes regularly at the Eurosun, PLEA, Healthy Buildings and WREC conference circuits.

## 4. Project Partners

### GHA

Glasgow Housing Association (GHA) is one of the largest social landlords in the UK, with more than 50,000 tenants and 26,500 factored homeowners across Glasgow. Glasgow Housing Association (GHA) is a not-for-profit company created in 2003 by the then Scottish Executive for the purpose of owning and managing Glasgow's social housing stock. GHA's stated aim is to provide better homes, better lives and a better Glasgow through providing warmer, safer and drier homes in safer, cleaner and more attractive communities.

### Ogilvie Homes

Ogilvie Homes is a private speculative house builder based in Stirling and has been building and selling mid to high-end homes in Scotland for approx 60 years.

## 5. The Home Starter Guide



The template of the home starter guide was adapted from the existing home logbook product from the HLB but aims to provide simple, bespoke instructions for operating a new house.

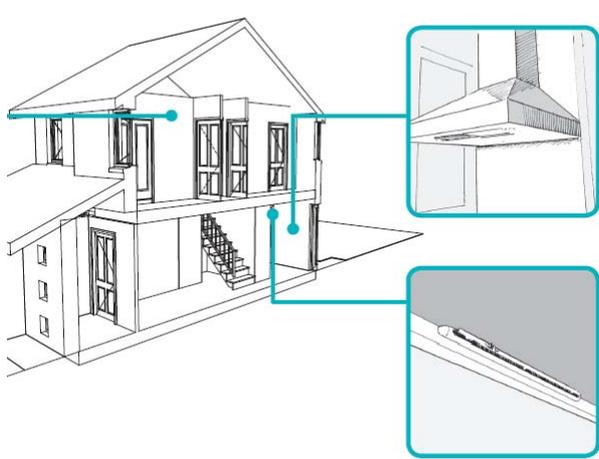
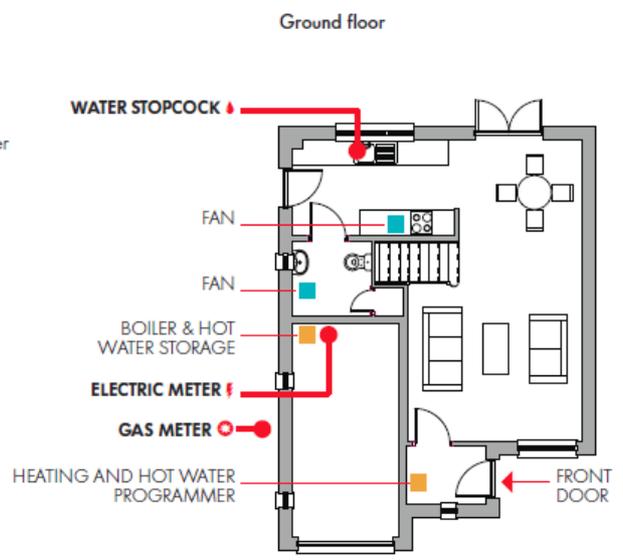
The A5 booklet size is designed to be a convenient size which can be kept in a drawer and not filed away with documentation received at the time of house purchase. The booklet is divided into colour coded key sections including Heating, Ventilation, Hot Water and Energy Saving Features.

Information contained within the home starter guide was gathered from the housing developer, their architect and the contractors on site. It is envisaged that with this template, housing providers could create the home starter guide for each new home within a development and distribute to individual home owner or a tenant when they first move in to help them access better quality information and better manage their property.

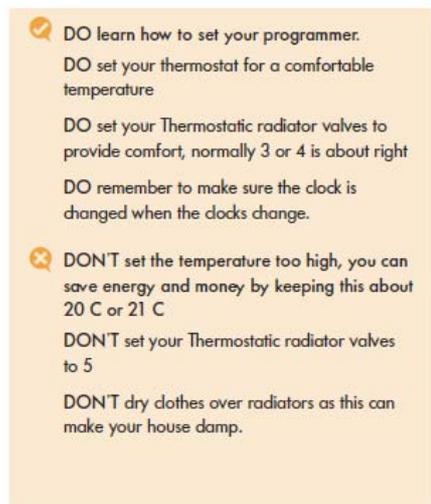
Within the home starter guide is a link to an online logbook - a simple online tool where a resident can access more detailed property information helping to ensure that home owners and tenants have additional technical information beyond that included in the home starter guide.

### Methods of Communication

The design of the homes starter guide aimed to provide simple methods of communication enabling occupants to understand and operate their home efficiently. Information was presented predominantly through easy to read floor plans and diagrams reflective of each house types rather than text based information.

	
3D House Layout	Floor plan

Simple floor plans indicating key locations of key services including boiler, heating timer etc are highlighted in red. 3D layouts also provided an opportunity to provide exact location of items such as ventilation extracts.

 <p><b>DO</b> learn how to set your programmer.  <b>DO</b> set your thermostat for a comfortable temperature  <b>DO</b> set your Thermostatic radiator valves to provide comfort, normally 3 or 4 is about right  <b>DO</b> remember to make sure the clock is changed when the clocks change.</p> <p><b>DONT</b> set the temperature too high, you can save energy and money by keeping this about 20 C or 21 C  <b>DONT</b> set your Thermostatic radiator valves to 5  <b>DONT</b> dry clothes over radiators as this can make your house damp.</p>	 <p>WELCOME TO YOUR HOME</p> <h3>Sustainability &amp; Accessibility</h3> <p><b>Adaptable House</b>  Your home has been designed to be adaptable for different stages of peoples lives. Each storey is wheelchair accessible in terms of corridor widths, turning areas and door widths.</p> <p>Each house has a level access entrance, and accessible sanitary accommodation on the ground floor. On the ground floor there is space to install a shower in the WC or an adjacent cupboard. The stairs are designed to accommodate a stair lift including space at the top and bottom of the stairs.</p> <p>The ground floor of the house is designed to be wheelchair accessible with space for turning in the halls and kitchen.</p> <p><b>Saving Energy</b>  The Energy Saving Trust (EST) is one of the UK's and Scotland's leading impartial organisations helping people save energy and reduce carbon emissions.</p> <p>There are lots of ways to make your home more energy efficient – and when you save energy, you save money!</p> <p>EST has a network of advice centres that you can phone to get help and information on a range of energy saving issues, including:</p> <ul style="list-style-type: none"> <li><b>BOILERS</b> – the latest on energy-efficient boilers to save you energy and money, and the right controls to use as little energy as possible.</li> <li><b>LIGHTING</b> – cutting your lighting bill is one of the easiest ways to save energy and money in the home, choose low energy light bulbs to lower your carbon emissions.</li> <li><b>ELECTRICAL APPLIANCES</b> – one third of your household's energy bills, and well over a quarter of your household's carbon dioxide emissions, come from electrical appliances, choose A or A+ rated appliances for lowest energy bills.</li> </ul> <p>We provide expert insight, knowledge and advice about energy saving, support people to take action and help local authorities and communities to save energy. Call your local Energy Saving Scotland advice centre for free impartial advice: 0800 512 012 or visit <a href="http://www.energysavingtrust.org.uk/scotland">www.energysavingtrust.org.uk/scotland</a></p> <p><b>energy saving trust</b>  <b>FIXED UP THE GOOD WORK</b></p> <p>12   Ophie Green v01.indd 12 6/21/12 10:33:59</p>
Information in a series of simple 'do's and don'ts'	Advice pages and contact details

Simple bullets points indicating how to work the heating system in the most energy efficient manner aims to provide the home owner with basic principles rather than overly technical information. Information was clearly selected to ensure that it is not over complicated but provides enough technical information to get the resident confident in the basic requirements of their house.

<p><b>OVERVIEW</b></p>  <p><b>Doors</b> Some of your internal doors may be fire doors, they impede the progress of fire and allow you more time to escape. Fire doors are designed to close automatically, you should not disable the closer mechanism or wedge them open.</p> <p><b>Walls</b> Your house is built from a timber frame which is insulated to a high standard, the bricks are fixed to this frame. Your home has been carefully detailed to avoid draughts, you should avoid drilling holes deep into the wall to avoid creating a new route for draughts.</p> <p><b>Stopcock</b> The water stopcock, sometimes called a stop valve is normally, but not always, found underneath your kitchen sink. This is the control for the water supply to your property and allows you to turn off the water supply if you are doing plumbing work or an external pipe bursts.</p> <p><b>Floor</b> The floor is fully insulated.</p> <p>Optiva Etern-vill.indd 5 6/21/12 16:38:53</p>	<p><b>WELCOME TO YOUR HOME</b></p> <h2>Maintaining your home</h2> <p>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.</p> <p><b>Every week</b> Check smoke alarm</p> <p><b>Every six months</b> Vacuum smoke alarm to clear dust</p> <p><b>Every Year</b> Boiler check by registered gas safe engineer. Clear leaves from gutters.</p> <p>www.homebook.co.uk home log book 14 Optiva Etern-vill.indd 14 6/21/12 16:38:57</p> <h2>Homes for Scotland</h2> <p>As the voice of the Scottish home building industry, Homes for Scotland congratulates you on your choice of a new home. Energy efficient with the protection of a ten year warranty and Consumer Guide, not to mention the wide range of help available from builders, new homes offer a host of benefits simply not available in the second-hand market.</p> <p>Homes for Scotland aims to create an environment in which the home building industry can prosper and make a significant contribution to the social, environmental and economic well-being of Scotland. Visit our website at <a href="http://www.homesforScotland.com">www.homesforScotland.com</a> for further information.</p> <p>improving living in Scotland HOMES FOR SCOTLAND</p>
<p>Information on how the house is constructed</p>	<p>Advice on ongoing maintenance</p>

Building Regulations (Section 7- sustainability, see Appendix A) also suggests that a quick start guide should indicate the basic construction materials of the home. This template provides a breakdown of wall, floor and roof constructions. The pages to the rear of the guide give simple advice regarding ongoing maintenance to the property giving a series of bullet points for 'every week', 'every 6 months' and 'every year'.

A full set of the 5 or 6 house type variations for each development are appended to this report however, a few typical pages of a home starter guide are given below:

WELCOME TO YOUR HOME

### Your home

Welcome to your new home. Your house type is the Eden. It's a three bed detached villa comprising of a lounge, kitchen/dining room with French doors to rear garden, downstairs WC, upstairs bathroom and master bedroom with en-suite. Single integral garage.

This guide describes the key features and functions of your home. More information and user guides can be found on the Home Log Book website: [www.homalogbook.co](http://www.homalogbook.co)

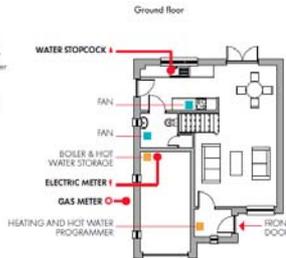


[www.homalogbook.co](http://www.homalogbook.co)  
**home log book**

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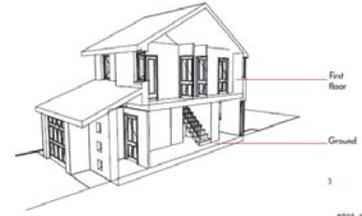
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OVERVIEW

First floor



First floor  
Ground

3

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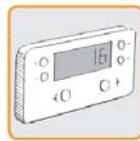
WELCOME TO YOUR HOME

### Heating

Your heating system is powered by a gas condensing boiler. This provides heat for your radiators which warm the rooms. You need to adjust the thermostatic radiator valves (TRV's) and thermostat to get a comfortable temperature. If you keep your house cool it will cost less to run, a warmer house will give you a bigger fuel bill.

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.

**Programmer**  
LOCATION: Ground floor hallway.  
The programmer turns the heating on and off and should be set to your requirements.

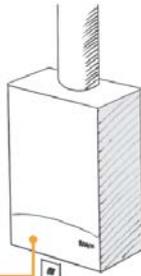


[www.homalogbook.co](http://www.homalogbook.co)  
**home log book**

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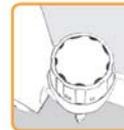
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**Boiler**  
LOCATION: In the garage.  
The boiler is A-rated with ultra-low emissions. It provides both heating and hot water. It is turned off by the programmer and temperature in the houses is controlled by a thermostat and radiator valves.



**Thermostat**  
LOCATION: On programmer in hallway.  
The thermostat turns the boiler off when the house has warmed up, it warms the TRV's thermostatic radiator valves. Set it to the temperature that you want your hall to be, this may be different than the temperature of your main living rooms.



**Thermostatic radiator valves (TRV's)**  
LOCATION: On most radiators.  
These valves control the amount of heat coming out of individual radiators. When the room is at the right temperature they turn the valve off. If it gets cooler the radiator warms up again.  
The setting 1 is quite cool, 4 is warm, 5 is no warmer than 4, but means the radiator does not turn off even if it gets very warm.

- HEATING**
- DO learn how to set your programmer.
  - DO set your thermostat for a comfortable temperature.
  - DO set your Thermostatic radiator valves to provide comfort, normally 3 or 4 is about right.
  - DO remember to make sure the clock is changed when the clocks change.
  - DONT set the temperature too high, you can save energy and money by keeping this about 20 C or 21 C.
  - DONT set your Thermostatic radiator valves to 5.
  - DONT dry clothes over radiators as this can make your house damp.

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WELCOME TO YOUR HOME

### Ventilation

The house is ventilated by natural ventilation and extract fans. Trickle vents at the top of every window provide ventilation to keep your house fresh and airy. You need to adjust them to minimise draughts when it is windy but keep enough air coming in. Extract fans in the bathrooms are operated with the light, they take away humid air and smells. In the kitchen you have an extract cooker hood which also reduces smells and fumes, you have to turn this manually.

- DO turn on the extract fan when cooking
- DO use the fan when using the bathrooms
- DO open windows in the summer to get more ventilation
- DONT close your trickle vents as the air will become stale and smelly
- DONT leave your heating on when opening windows for ventilation

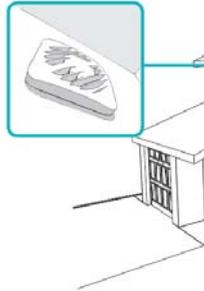
[www.homalogbook.co](http://www.homalogbook.co)  
**home log book**

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**Extract Vents**  
LOCATION: Kitchen and bathrooms.  
In the bathrooms the fan switches on with the light and goes off a couple of minutes after the light is switched off. The Kitchen fans are operated by a separate switch.



**Cooker hood**  
LOCATION: Above hob in kitchen.  
There is a cooker hood to help remove smells from the kitchen. The switch to operate it is underneath the hood.

**Trickle Vents**  
All rooms have a vent that supplies or extracts air above your windows. Keep these open to keep your house fresh and airy. You can close them in winter if it is cold and windy but open them again as soon as possible.

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WELCOME TO YOUR HOME

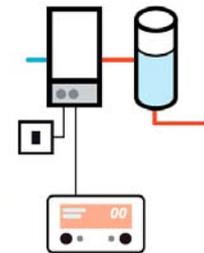
### Hot water

Hot water comes from the boiler, using the same programmer as the heating system. Program it to come on at least once a day to ensure you have sufficient hot water for washing and bathing.

Hot water is stored in a hot water tank, turning the taps or shower on will draw water from it. The tank contains enough for about five average showers. If the water begins to run cold you will need to turn on the boiler and wait for the cylinder to warm up again - this will take about 30 minutes.

You have a valve on the bath which limits the water temperature to 45 C to prevent accidental scalding.

**Hot water tank**  
LOCATION: Garage.  
Hot water is stored in this insulated tank. The insulation keeps the water temperature constant and saves money on fuel. Do not remove the insulation.



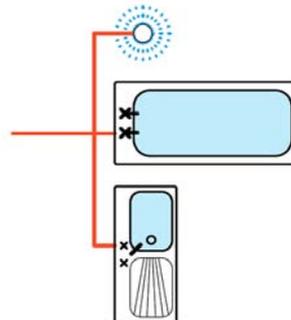
**Programmer**  
LOCATION: Ground floor hallway.  
The programmer turns the hot water on and off and should be set to your requirements.

[www.homalogbook.co](http://www.homalogbook.co)  
**home log book**

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Optiva Eden (H) (H) 10

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- HOT WATER**
- DO set the programmer to give you hot water regularly.
  - DONT adjust the cylinder settings.

11

Optiva Eden (H) (H) 11

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## Case Study Housing

### Ogilvie Homes, Stirling

A private housing development by Ogilvie Homes on the High School site in Stirling.

	
<p>Site Layout identifying mix of house types</p>	<p>Typical 6 bedroom house type</p>

Home starter guides were created for 6 house types within a new build development of detached homes and apartments. The guides were issued to the new home owners shortly after they gained entry to the house and their feedback was gathered via a short questionnaire (see Appendix B).

### GHA, Tambowie Street, Anniesland, Glasgow



Homes Starter Guides were created for 5/6 house types within GHA's new build development of terraced homes and apartments on Tambowie Street. The guides were issued to the new home owners shortly after they gained entry to the house and their feedback was gathered via face to face interviews and postal questionnaires.

## Challenges in the Methodology

MEARU and Home Log book Company worked with two housing builders (GHA and Ogilvie Homes) to produce guides for 11 different house types including flats, terraced houses and detached houses. Each house builder has a different system with the GHA employing an external architect to design and inspect these 'bespoke' housetypes whilst Ogilvie Homes develop their house types inhouse, these are constantly being updated to ensure the best products are used together with meeting changing building regulations.

In practice, obtaining specific information for each of the house types required the commitment of one person within each organisation and detailed discussion to determine key information required for the guide. Whilst specifications for all components were available, the more resident focused information took a number of iterations to get right. This included issues where specifications had been changed on site or parts of the build (such as mechanical systems) which were undertaken as contractor design portions. It was noted that undertaking this work early in the build process might be difficult to ensure accuracy due to changes made on site.

Each organisation had specific requirements regarding the language and specific messages embedded in the document. Maintenance is a potentially problematic issue where specific language was required for home owners and tenants. There was a desire for particular corporate information to be included in each of the guides, however attempts were made to keep this to a minimum to ensure a concise and useful document. In practice there is no one template for this document, but a template for each organisation with specific changes to reflect the house types.

The importance of text being written or proof read by someone who has technical knowledge together with an understanding of the project is imperative to ensure that the instructions make sense for residents and deliver the intended results. Drawing and illustrations need to be carefully considered, 3D information can help to reduce the amount of text required to explain concepts and issues clearly.

In future we would recommend that each organisation appointed a single person to act as a conduit for all of the information required for the guides and as a coordinator for the proof reading and review process. It would probably be best if this person were the architect or designer responsible for the project, they would have an overview of the design and crucially any changes made to it as the building work progresses. Each of the organisations who participated in this research have significantly reduced the time required to do more future documents now that there is an agreed 'corporate' format. Other organisations should ensure that they recognise the time required to bring the information together and to agree a corporate format for the document at an early stage.

## 6. Analysis

### The Home Starter Guide Evaluation

The questionnaires distributed by hand either by the site agent (Ogilvie Homes) or Housing Officer (GHA) or by post. The questionnaire covered timing and distribution of the home starter guide; understanding of key information; understanding of heating and ventilation systems and general comments on the success of the guide.

See Appendix B for a copy of questionnaire issued to residents

Ogilvie Homes  
Development- Stirling High School

10 different house types, 10 Home Log Book variations  
25 questionnaires issued  
11 questionnaires were returned

GHA- Glasgow Housing Association  
Tambowie Street (21 homes)

6 different house types, 6 Home Log Book variations

21 questionnaires issued

4 questionnaires were returned  
2 face to face interviews  
1 telephone interview

Total dataset - 18 respondents

## Questionnaire results

See Appendix C for full data set and graphical analysis of data

### Timing and Method of Distribution of Home Starter Guide

The home starter guides (HSG) were distributed by hand either by the site agent (Ogilvie Homes) or Housing Officer (GHA) or were posted to the resident. As indicated below most respondents agreed that the best placed person to distribute would be the sales person, site manager or housing officer within the 1<sup>st</sup> week of moving in.

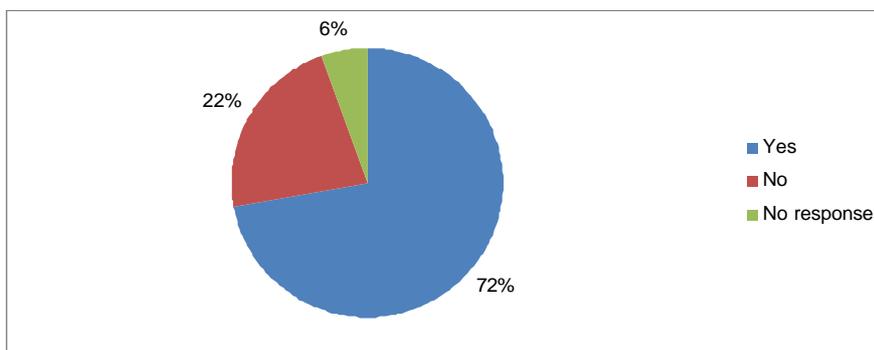
Who do you think is the best placed person to give you your Guide and why?



### Understanding of Key Information

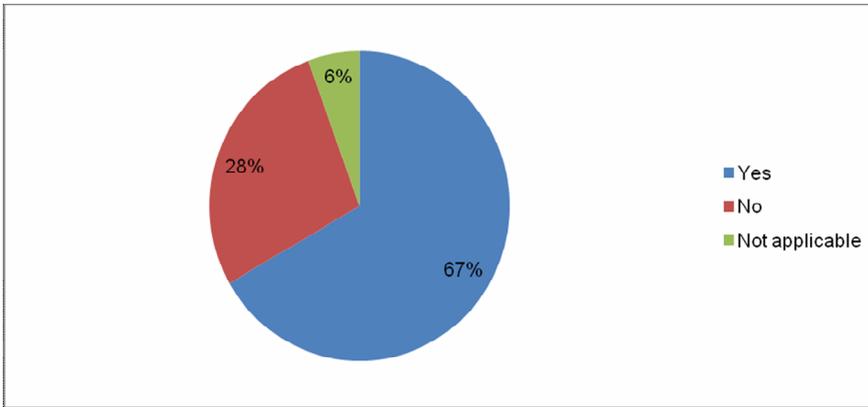
100% of respondents noted that the information was 'clear and easy to read' and 100% noted that the diagrams were easy to understand. One of the major aims in the design of the guide was to ensure that it was very different from a technical manual which may require significant reading. The guide aims to direct residents to the location of controls within the home and the survey results again highlight that the guide had largely been successful. Those who answered 'no' indicated that they had already located the controls before consulting the guide.

Did the floor plan layout help you to understand the location of controls within your home?



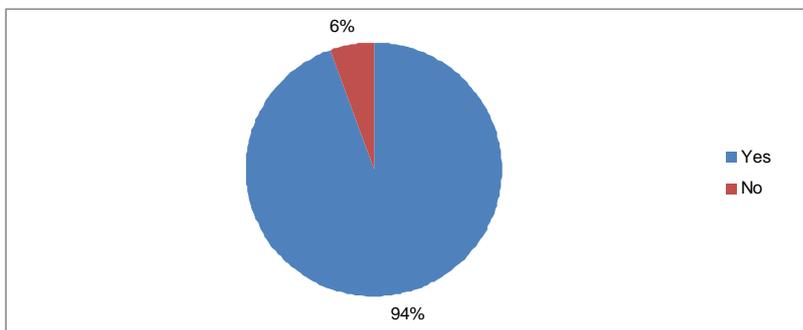
Again this was a very positive result with 72% having found the controls and those who answered negatively confirmed that they had already located them prior to reading the guide.

Was the information about the heating system easy to understand?



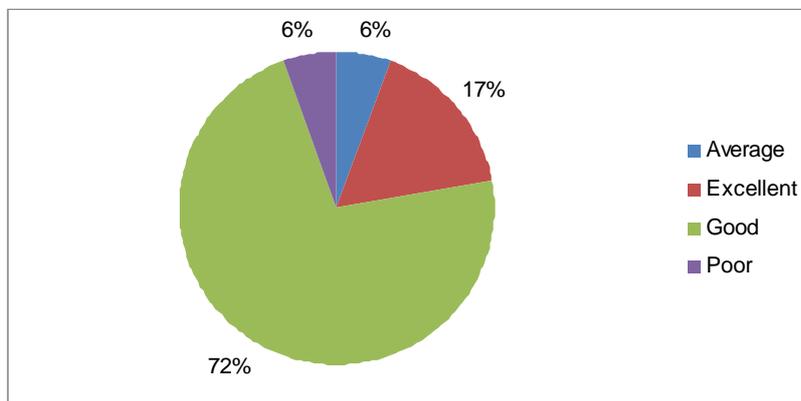
67% confirmed that the information about the heating was easy to understand however, the one issue which several residents identified was a problem was setting the thermostat and the timer on the heating and hot water system. Given the variety of electronic timers on heating systems it is a highly specific item and whilst basic guidance could be given in the HSG this may be an occasion when a resident has to consult the technical manual for their particular digital control unit.

Do you feel more informed about how to use your home in an energy efficient manner?



94% of respondents indicated that they feel more informed about energy efficiency in their home after having read the HSG. Several commented on the use of the thermostatic radiator valves and their previous lack of knowledge whilst others noted the advice on clothes drying helpful. Significantly 89% confirmed that they were confident in knowing how their house was designed to be ventilated. Given that using appropriate methods of ventilation has an impact on energy efficiency this is a significant result. Feedback comments also noted that the function of trickle vents had been unknown to several residents prior to reading the user guide.

How helpful was the Home Starter Guide overall?



Overall the feedback on the guides has been very positive with 100% of respondents saying the guide is easy to read and the diagrams were clear and understandable. 72% rated the guide as GOOD and 17% EXCELLENT.

The aim of the HSG is to help owners and tenants improve their understanding of how their home was designed to operate and how to maintain it- the feedback from residents certainly indicates that it has been successful in achieving this.

Who do you think is the best placed person to give you your Guide and why?



96% of respondents agreed that the HSG is most useful in the 1<sup>st</sup> week of moving in. During this study many respondents had already moved in before they received the guide. The usefulness of the guide to them is more limited but in the case of social housing, this information can be retained for the next tenant. Two residents noted that the guide they were given didn't accurately reflect the floor plan of their house. In this pilot study, each house had a bespoke guide generated so it is most likely that the resident was issued with the wrong guide. This highlights the importance of distributing the guide and ensuring that the person issuing it knows clearly which house type matches with which house number.

### Homes for Scotland Feedback

Homes for Scotland have been consulted in an advisory capacity and to ensure a successful outcome of the project. On completion of final printed copies of the HSG, they were given the opportunity to comment on the format and the challenges in producing the guides as mainstream practise. They acknowledged the guides benefit to the homeowner and the long term benefit to energy efficiency.

They noted that their ability to produce a plot specific HSG would be difficult due to build changes and customer changes however appreciated that if the guide is produced near to the handover date it would ensure all information was correct. It was suggested the guide could be more generic rather than plot specific which would make it easier for them to produce, but there are concerns that this would then dilute the intent. Homes for Scotland indicated concern around the property mis-descriptions act and ensuring that the guide reflected the actual property and carefully worded legal caveats may need to be included.

In relation to the compilation of information, information they felt that it might be too much of an internal burden for an internal resource and that it would probably be done by someone from sales & marketing. However there are concerns that perhaps a more technically minded department should take the lead in this aspect. Homes for Scotland took the view that sales & marketing would oversee the HSG and then hand it over to the technical team.

## 7 . Conclusions

This project successfully designed and delivered a template product meeting the requirements and standards set by Section 7 Sustainability which has been tested on the new home developer and housing association sectors.

Overall the results of this research reinforce previous studies which indicate that residents need information about how their home was designed and constructed in order to be able to operate the house in the most energy efficient manner. Using this highly graphic format allows residents a greater understanding of the guide however this requires time and resource to collate but overall it offers the greatest potential to reduce the running costs of the house.

Whilst the process of collating the information needed time and commitment from the housing provider to prepare the necessary layouts and diagrams, the feedback indicated that the presentation of clear information in simple diagrams was most successful. This research confirms that guides are most useful within the 1st week of moving into a property therefore it is suggested that handover procedures for housing associations and developers should be adjusted to reflect this to maximise the impact of these guides.

The user guide successfully provides guidance enabling occupants to understand and operate their home efficiently and it certainly helps ensure that home owners and tenants can better run and manage their home leading to improved energy efficiency and environmental performance. Ogilvie Homes appreciated the guides ambitions and plan to continue giving it out as new home owners move into the remainder of the development.

Further to this research there is a clear opportunity for future research such as undertaking Post Occupancy Evaluation of houses with and without a quick start guide to compare users understanding of their house systems.

## 8 . Appendices

- e. Section 7- Sustainability
- f. Templates for 6 house types
- g. Feedback Questionnaire
- h. Feedback Analysis

## 9 . Acknowledgements

The authors would like to express their thanks to CIC Start Online for the financial support. Also, we would like to thank Ogilvie Homes and Glasgow Housing Association for their assistance in gaining access to willing residents to participate in the feedback surveys.

## Appendix A – Scottish Building Regulations, Section 7- Sustainability Advice for producing a quick start user guide

The quick start guide (QSG) should be produced in 2-stages:

- at building warrant application submit as much information as possible including the plan, an outline of the construction and building fabric, specified systems or equipment and any other environmental features; and
- re-submit at completion after review and updating of specified items as necessary.

A good practice example of QSG is on the Scottish Government website at [www.scotland.gov.uk/bsd](http://www.scotland.gov.uk/bsd)

### 7.B.1 Scope

The QSG should be specific to each individual dwelling. Where there are a number of houses or flats of the same type, it is likely that the information could be repeated for each type, taking care to ensure correct orientation of plans and correct positions of installed items on the plan.

The purpose is not to explain details of how or why a home is designed to work environmentally, but rather what occupiers need to know to make a home work efficiently. It should describe the overall performance of the dwelling as a system itself. The focus should be on maintaining internal comfort in an efficient manner. Do not include unnecessary detail on the operation of the individual elements or systems of technology.

### 7.B.2 Format

The QSG should be as compact and graphic as possible to aid rapid comprehension, making it more likely to be kept available, used for future reference and be capable of being passed on to future owners or residents. A variety of formats could be used to convey the information but it should be a free-standing document, separate from other documentation (but including directions to further information). It may be designed to meet a similar graphic standard of other material which is provided at completion. The recommended formats are:

- an A4 guide of maximum 6 pages, preferably 4 or less; or
  - a booklet with page sizes smaller than A4, possibly with double page spreads such as the booklet in the first good practice example.
- Better design and construction of control mechanisms should make systems more intuitive and reduce the need for guidance, therefore please be very concise if appropriate.

### 7.B.3 Graphics, images and text

The QSG should include plans, locating key items of equipment and information only on the systems installed. The format should revolve around simple illustrations following the principle – ‘show don’t tell’. An illustration can be a hand-drawn sketch, a computer image or a photograph. These can be mixed because consistency in style is less important than content.

Illustrations do not need to be to scale, but should show relationships and explain things quickly and easily. These guidelines should be followed:

- Use illustration where possible to focus the occupant on the equipment that users normally come into contact with. For example, the programmer in the heating section should show where it is placed in relation to the boiler.
- Link key components (such as heating controls) to a location plan to help domestic | sustainability | annex 7.B | annex b: supplementary guidance in the aspect of optimising performance | 2011

### 7.B.0 — 7.B.3

the resident to make connections between controls and systems quickly.

- Images should be labelled.
- Avoid non-essential images (e.g. lifestyle image) which can reduce the

authority of the document.

- Use graphic formats that preserve the sharpness of lines, such as PDF.
- Illustrations should be associated with a legible caption of standard size and colour.
- Many people have difficulty understanding plans, so use other images, for example a simple 3D diagram alongside plans to aid comprehension.
- Use colour where possible as an easy way to differentiate categories visually. However readers may be colour blind, so use icons, illustrations and high contrast type.
- Text size should aim to be at least 11pt but can be of smaller sizes in annotations, labels or text boxes if a typeface designed for text reading at small sizes is used. Make headings as large as possible.
- Use clear, colour, photographs (well lit, avoid use of flash if possible) or line illustrations of actual installed equipment.
- Use engineer's or manufacturer's drawings as reference in order to comprehend the system but edit these to remove unnecessary items. Do not attempt to replace the manufacturer's manuals, but do refer to them for further information. The main elements or products should be identified with their full names/reference model numbers and links to more information such as manuals or manufacturers websites.
- Use plain English avoiding detailed technical descriptions.
- Use bullet points where possible.
- Avoid jargon and acronyms. If an acronym is necessary define it on first use. In the good practice example MVHR (Mechanical Ventilation Heat Recovery system) is used because the acronym is more likely to lead to success in internet searches for more information.

#### 7.B.4 DOs and DON'Ts

Provide a brief list of up to 5 essential DOs and DON'Ts for occupant interaction with each system (heating, ventilation etc). This should be specific to the heating system installed and ideally, in a colour coded text box, in a consistent position on the page. General guidance is available on the Energy Saving Trust website: <http://www.energysavingtrust.org.uk/>

#### 7.B.5 Sections

Aim to fit a section relating to each of the following categories on the equivalent of a single A4 sheet, or less where possible.

##### a) Overview

Give a brief description of the basic features of the house, including insulation, building fabric, heating, ventilation, hot water use and any major equipment that make a difference to how the house operates. Avoid large paragraphs. Keep to between 100 to 150 words.

The overview page should include the following sentence: This guide is produced to meet the aspect of 'Optimising Performance' within Section 7: Sustainability of the Building Standards Technical Handbooks.

Locate key parts of the equipment, annotated on a legible plan or other illustration. Plans should be simple and clear, generally 'planning application' standard with walls blacked in, dimensions and unnecessary annotation removed in the CAD program. Showing fittings such as bathrooms and domestic | sustainability | annex 7.B | annex b: supplementary guidance in the aspect of optimising performance | 2011

#### 7.B.3 — 7.B.5

kitchens on layouts can assist. Limitations on alterations due to the construction (e.g. avoid holes in external walls that penetrate the vapour barrier) can be mentioned here. Use 3D plan perspectives, axonometric diagrams, or cutaway models to aid understanding. Items to be shown include:

- Key elements of the construction and materials - roof, walls, windows and doors
- Elements of heating, hot water and ventilation equipment
- Heat emitting devices
- Control locations
- Meters
- Water stop-cock

If the dwelling has achieved a silver, gold or platinum level, it is permissible to use the associated 'badge' on the overview page or front cover.

#### b) Heating

Describe how the home can be heated including aspects of the building fabric and ventilation that are relevant to how the system works. Cover the main principles of use in both warm and cold weather. Simple diagrams illustrating how the building is heated in both winter and summer are useful. Avoid engineering heating system schematics as many people find these hard to understand.

Describe in around 50-100 words the main heating source in the home, including the principles of operation and fuel source if relevant.

Supplementary heating sources should be mentioned, where included.

Provide a brief description of how heat reaches rooms e.g. radiators, underfloor heating, air grilles, with illustrations provided as required.

Briefly describe how heating is controlled. Illustrations and locations are required for all the main controls. Identify the reaction to heating controls (for example there may be a time lag before a heating system operates at optimum capacity) and outline the normal range if this is not obvious.

#### c) Ventilation

Describe in around 50-100 words how the home is ventilated and the main principles for its use, in both warm and cold weather. Simple diagrams illustrating how the building is ventilated in winter and summer are useful.

Briefly describe how the ventilation is controlled with illustrations and locations required for all the main controls. This should include both natural and mechanical systems. Identify the elements that users have the most interaction with, so in natural ventilation, it may be trickle vents and opening of windows together with a reference to cross ventilation. For mechanical ventilation it may be the boost switch and location of filters.

#### d) Hot Water

Provide up to 50-100 words on how water is heated in the homes, including primary and secondary systems (for example a boiler working with solar hot water panels). Consider a simple diagram illustrating how the system works if it has a number of components or options.

Briefly describe how hot water generation is controlled. Illustrate the controls, identify the reaction to hot water controls (for example there may be a time lag before a hot water system operates at optimum capacity) and outline the normal range if this is not obvious.

#### 7.B.5 — 7.B.5

lag before a hot water system operates at optimum capacity) and outline the normal range if this is not obvious.

#### e) Other Energy Saving Features (if installed)

Cover any other energy saving feature installed as part of the fabric of the home or included in the SAP calculation. Include instructions for items not covered elsewhere. Each item should have a brief (around 50 words) description of other energy saving features. Identify for each item:

- Name or description
- Location
- How to control it and where the controls are located
- Manufacturer and model number
- Location of further information such as a manual or specific website address

#### f) How to Maintain Systems

A 'how to keep your home running efficiently' section should provide an easy to understand list of maintenance required for systems outlined in the guide. It must only include items that residents should be undertaking without tools or specialist knowledge. In particular consider including the following information:

- List of equipment names/serial numbers
- Links to further detailed information
- Manufacturers Websites
- Recommended Servicing Organisations



## Home Starter Guide Evaluation

You were given a Home Starter Guide when you moved into your home. This is a new initiative aimed at helping people better understand how to use their home in an energy efficient manner. We welcome your feedback and ideas on the guide, which will enable us to make the necessary improvement.

This survey is carried out by the Mackintosh Environmental Architecture Research Unit based at the Mackintosh School of Architecture. If you have any questions regarding the survey then please call 0141 353 4657.

Address or name of development:.....

Property type. Please circle: HOUSE/ FLAT No. of Bedrooms: 1 / 2 / 3 / 4 / 5 / 6

Date:.....

1. Did you receive the Home Starter Guide within the first week of moving in?

Please circle: YES / NO

If No: When did you receive it? .....

2. When do you think is the best time to receive the Home Starter Guide?

.....

3. Who gave you your Home Starter Guide

Please circle: Sales Person / Site Manager / Housing Officer / Other

If Other please specify: .....

4. Who do you think is the best placed person to give you your Guide and why?

.....

.....

5. Have all the adults in the household read it?

Please circle: YES / NO / NOT SURE

6. Was it clear and easy to read?

Please circle: YES / NO

**7. Were the diagrams easy to understand?**

Please circle: YES / NO

**8. Did the floor plan layout help you to understand the location of controls within your home?**

Please circle: YES / NO

If NO, please explain why.....

**9. Is it important to you to know how your home is built?**

Please circle: YES / NO / NOT SURE

**10. Was the information about the heating system easy to understand?**

Please circle: YES / NO

If NO, please explain why.....

**11. Did the guide help you set your thermostat and heating timers?**

Please circle: YES / NO

If NO, please explain why.....

**12. Do you feel confident in knowing how your house is designed to be ventilated?**

Please circle: YES / NO

If NO, please explain why.....

**13. Do you feel more informed about how to use your home in an energy efficient manner?**

Please circle: YES / NO

If NO, please explain why.....

**14. Have you visited your property's Home Log Book yet [www.homelogbook.co](http://www.homelogbook.co)?**

Please circle: YES / NO

If NO, please explain why.....

**15. Was it easy to obtain your access details to log in to your Home Log Book ?**

Please circle: YES / NO

If NO, please explain why.....

**16. How helpful was the Home Starter Guide overall?**

Please circle: EXCELLENT / GOOD/ AVERAGE / POOR

Why?.....

.....

**17. Where is the best place to keep a copy of the guide?**

.....  
.....

**18. Is there anything additional which you think this guide should have included?**

.....  
.....  
.....

**19. Are there any parts of the guide which you did not understand or were not clear?**

.....  
.....

**Do you have any other ideas about the Home Starter Guide:**

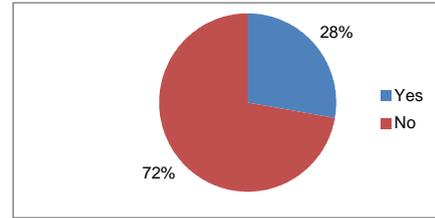
.....  
.....  
.....

**Thank you for completing this survey as it is really helpful to us.  
If you have any questions about the Home Starter Guide, please contact Home Log Book at [enquiries@homelogbook.co](mailto:enquiries@homelogbook.co) or by phone on 0845 612 0205.**

Analysis

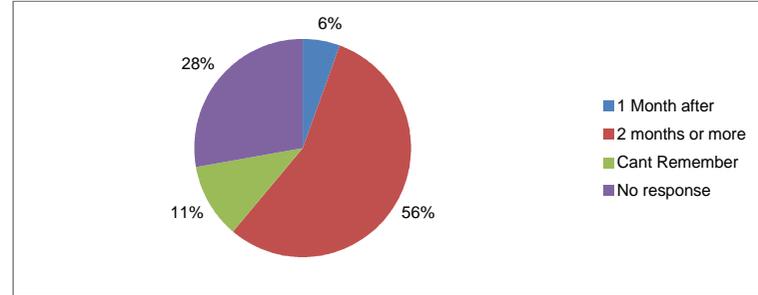
**Did you receive the Home Starter Guide within the first week of moving in?**

Yes	5	28%
No	13	72%



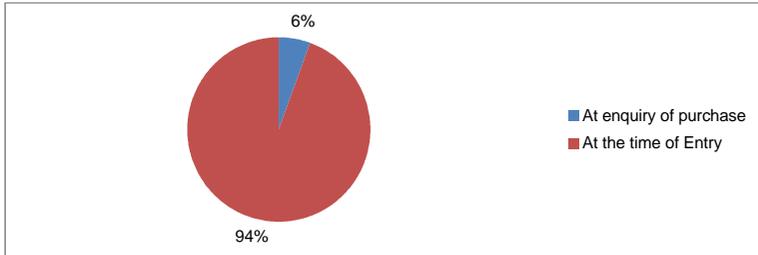
**If No: When did you receive it**

1 Month after	1	6%
2 months or more	10	56%
Cant Remember	2	11%
No response	5	28%



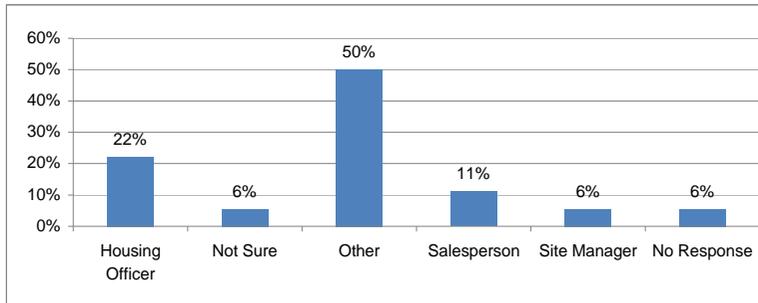
**When do you think is the best time to receive the Home Starter Guide?**

At enquiry of purchase	1	6%
At the time of Entry	17	94%



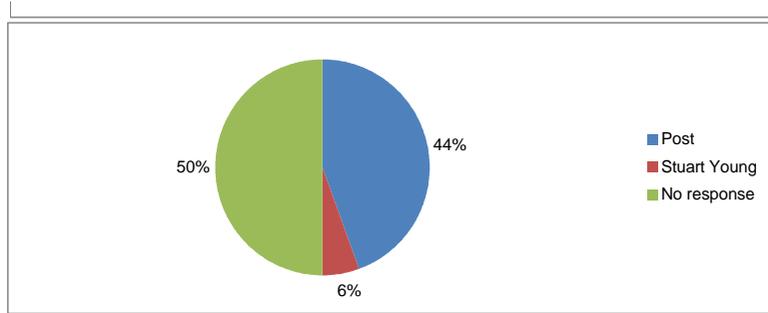
**Who gave you your Home Starter Guide**

Housing Officer	4	22%
Not Sure	1	6%
Other	9	50%
Salesperson	2	11%
Site Manager	1	6%
No Response	1	6%



**If Other please specify:**

Post	8	44%
Stuart Young	1	6%
No response	9	50%



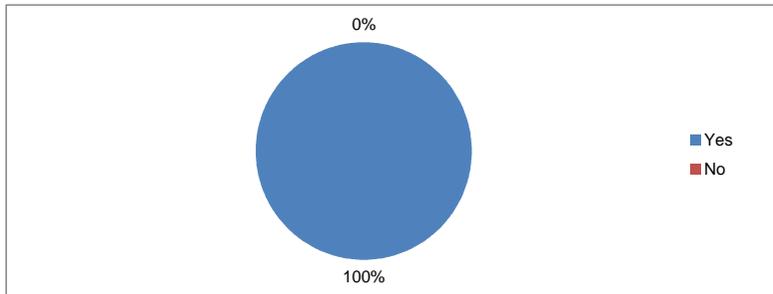
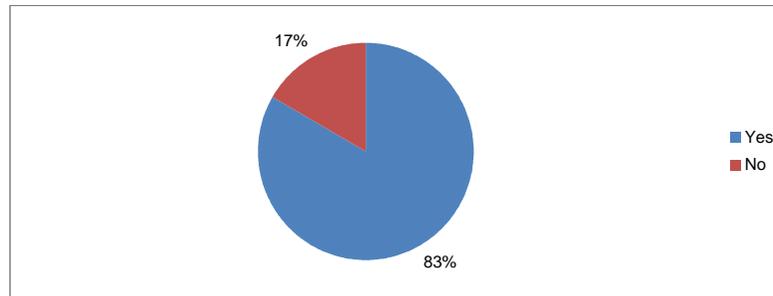
**Who do you think is the best placed person to give you your Guide and why?**

Housing Officer	6	33%
Post	1	6%
Salesperson	6	33%
Site Manager	2	11%
Site Manager or Sales Person	2	11%
Someone with time to explain it	1	6%



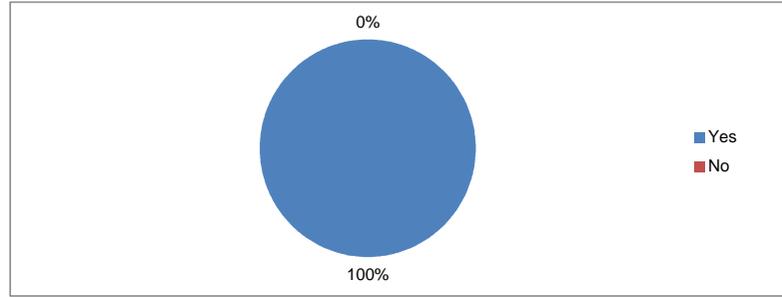
**Have all the adults in the household read it?**

Yes	15	83%
No	3	17%



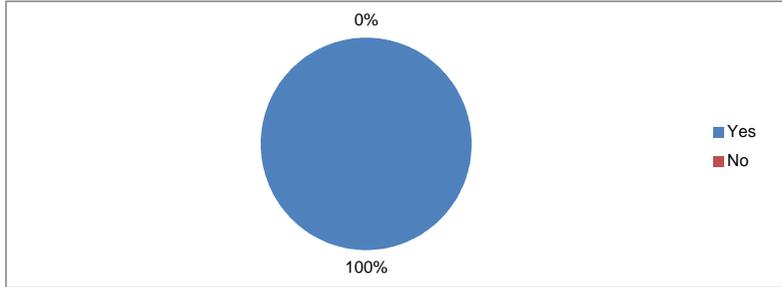
**Was it clear and easy to read?**

Yes	18	100%
No	0	0%



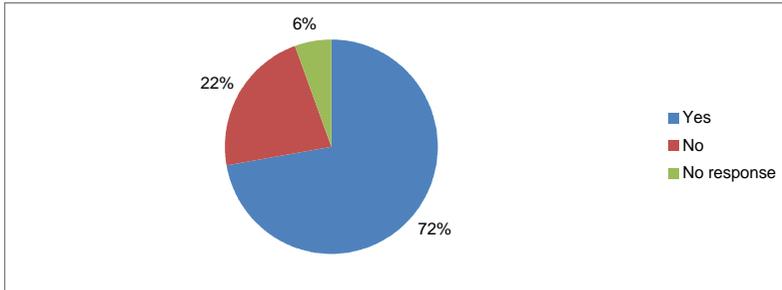
**Were the diagrams easy to understand?**

Yes	18	100%
No	0	0%



**Did the floor plan layout help you to understand the location of controls within your home?**

Yes	13	72%
No	4	22%
No response	1	6%

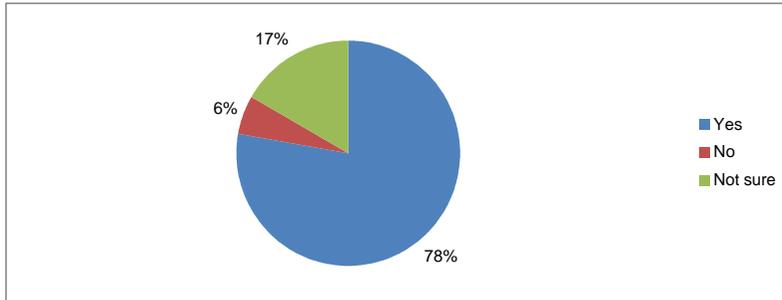


**If NO, please explain why**

Already aware of locations, heating timer not in the hallway as indicated  
 Guide for a different house type  
 Design and location does not match my house  
 It was based on a 2 bedroom house and mine is 3 bedroom

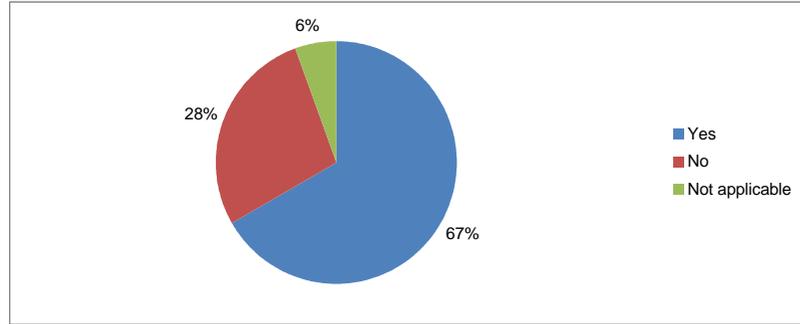
**Is it important to you to know how your home is built?**

Yes	14	78%
No	1	6%
Not sure	3	17%



**Was the information about the heating system easy to understand?**

Yes	12	67%
No	5	28%
Not applicable	1	6%

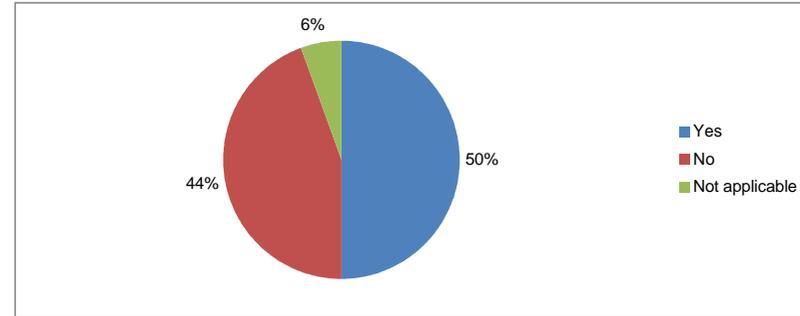


**If NO, please explain why**

- Not detailed enough
- can't do it
- Didn't look at it- I had already worked it out
- Couldn't get the timer

**Did the guide help you set your thermostat and heating timers?**

Yes	9	50%
No	8	44%
Not applicable	1	6%



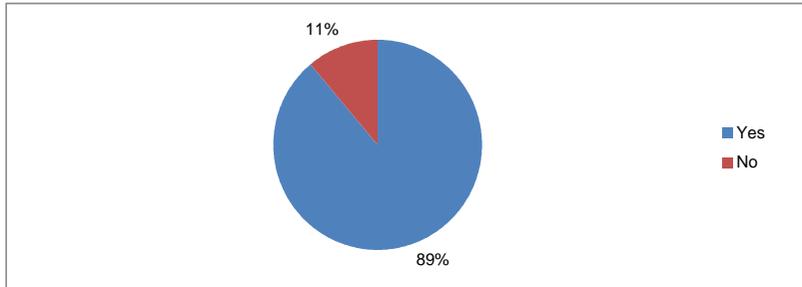
**If NO, please explain why**

- Booklet gives no information on settings of heating system
- Complicated system; needed manual
- Tried and other people tried but just couldn't get it
- Timer was too complicated- had to look at manual
- Didn't look at it- I had already worked it out
- Already new how to worked it

Analysis

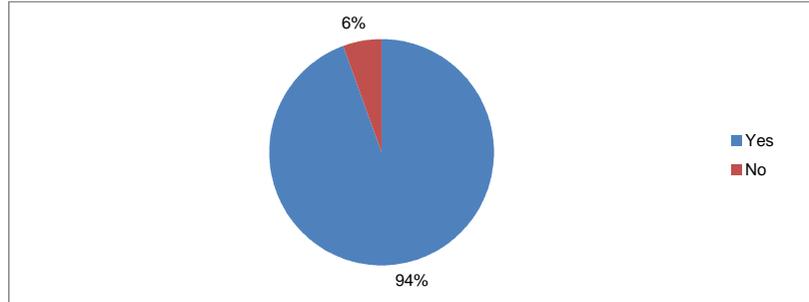
**Do you feel confident in knowing how your house is designed to be ventilated?**

Yes	16	89%
No	2	11%



**Do you feel more informed about how to use your home in an energy efficient manner?**

Yes	17	94%
No	1	6%



**If NO, please explain why**

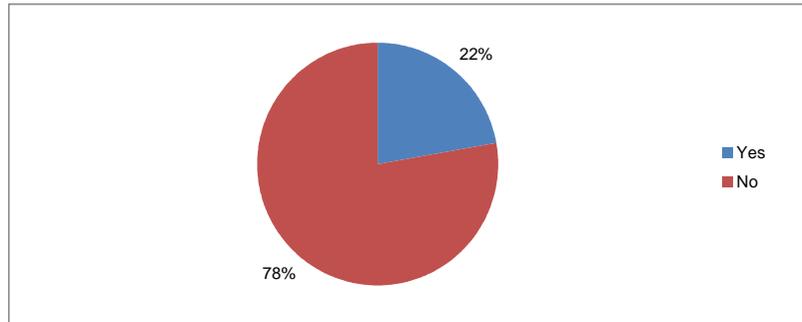
Already aware

**Have you visited your property's Home Log Book yet [www.homelogbook.co](http://www.homelogbook.co)?**

Yes	4	22%
No	14	78%

**If NO, please explain why**

- No Computer
- Emailed for access details
- Have no wish to do so
- Was not aware it existed
- No internet
- Never heard of it
- I had already found out everything
- No need
- Haven't had time but will check it

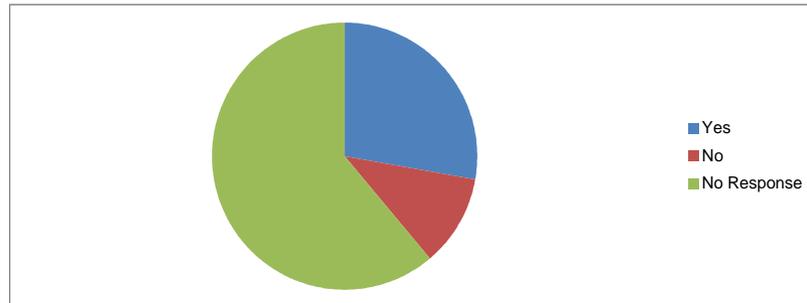


**Was it easy to obtain your access details to log in to your Home Log Book ?**

Yes	5	28%
No	2	11%
No Response	11	61%

**If NO, please explain why**

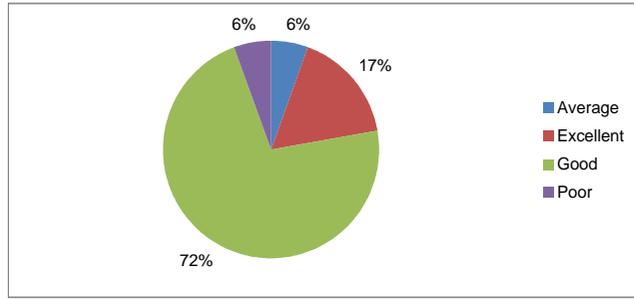
- Do not have details yet
- Was not aware it existed



Analysis

**How helpful was the Home Starter Guide overall?**

Average	1	6%
Excellent	3	17%
Good	13	72%
Poor	1	6%

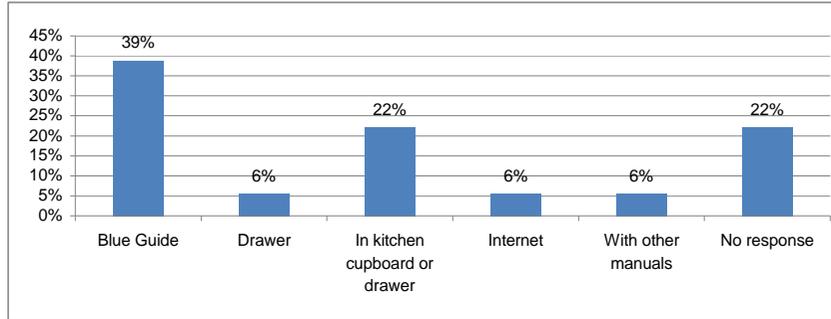


**Why?**

Excellent	No response
	In a language most people will understand with clear diagrams
Good	Concise, clear and easy to understand
	All easy to understand except the heating
	All easy to understand except the heating
Average	I had already found out everything
Poor	Arrived late, information basic and not accurate

**Where is the best place to keep a copy of the guide?**

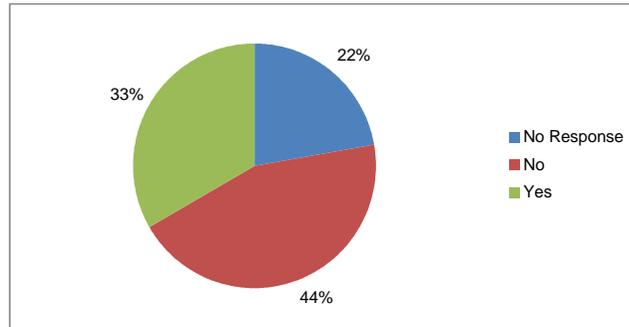
Blue Guide	7	39%
Drawer	1	6%
In kitchen cupboard or drawer	4	22%
Internet	1	6%
With other manuals	1	6%
No response	4	22%



**Is there anything additional which you think this guide should have included?**

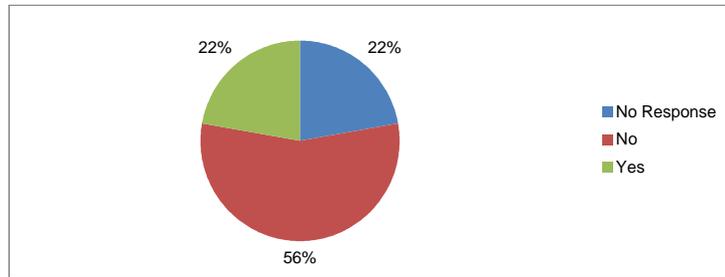
No Response	4	22%
No	8	44%
Yes	6	33%

- It should have included looking after the house in cold weather
- Notes on cleaning paving; maintaining fencing; outside taps; maintaining garage doors; gutter cleaning; replacing spotlights; staining on brick work; sealant on bath and showers
- Cable and plumbing routes
- More detailed information on hot water system
- Where water cut off is. How to turn off smoke alarm
- Other ways to reduce electricity bills



**Are there any parts of the guide which you did not understand or were not clear?**

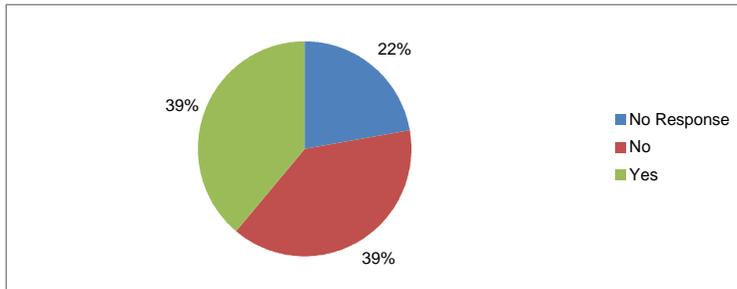
No Response	4	22%
No	10	56%
Yes	4	22%
Thermostat and hot water setting		



**Do you have any other ideas about the Home Starter Guide:**

No Response	4	22%
No	7	39%
Yes	7	39%

- Scottish Water boundary of pipe ownership
- Guide must arrive shortly after moving in
- Can't think of anything- there is plenty in the guide to read
- It should be the exact house or can be confusing
- Information about vents in windows was good.
- Got to be given when you first move in or it is no help
- Maybe Housing Officer should go through it when moving in



## Home Starter Guide (HSG)

When a company produces an internally developed report on some aspect of their business, recipients will digest the report with a degree of healthy scepticism. Readers will expect the report to be favoured towards the authors business and solutions.

Working with an independent and respected partner, such as the Glasgow School of Art - MEARU (Mackintosh Environmental Architectural Research Unit), has enabled us to present to the market an independently and professionally produced report on the Home Starter Guide (HSG). MEARU's ability to research the home 'quick start guide' has ensured objectivity and an inquisitive approach to the delivery of the study.

MEARU displayed great leadership in the design and development of this study and lead in managing both Glasgow Housing Association (GHA) and Ogilvie Homes.

[www.homestarterguide.co](http://www.homestarterguide.co) (new web site to be launch in August which will have a specific section on the Home Starter Guide).

## Home Log Book

Home Log Book's main focus has been the capture, storage and presentation of property information for the benefit of an owner (private new homes), a tenant of a RSL and the landlord of RSL properties.

Once a digital Log Book has been created for a property, it stays with the property for ever thus benefiting any resident or owner of the property. This ensures that there is no more lost information and guarantees lifetime access to the information for the benefit of all. Combined with this, empirical evidence highlights that people do not read handover manuals or tenant packs, which are provided by new build developers and RSL's.

2011 research clearly highlighted the changing ways in which new home buyers want and interact with their property information. 'Home Sales and Handover: A good practice guide for home builders and 'How Occupants Behave and Interact with their Homes' both published by the NHBC Foundation.

As developers, RSLs and local authorities come under increasing pressure to build new homes and refurbish new homes to higher sustainability levels, this creates a greater burden on occupants to understand how their homes have been designed and meant to operate and to manage these properties in the future.

The key is to present information to a resident in a staged process in a format they want and a level of detail appropriate to the stage in which they settle into a home.

## Why a Home Starter Guide?

The HSG related directly to Section 7: Sustainability which came into effect on May 1<sup>st</sup> 2011.

"The introduction of section 7 is the next step in encouraging the sustainable design and *construction* of all new *buildings* within a broader context of sustainable development.

Aspect Silver 5: Optimising Performance

a) Quick start guide: Provide guidance to the occupants on the ways in which the specific *dwelling* is intended to function and how to optimise its performance on the scope, format and contents of the guide for occupants.



This is additional to the written information to be provided to occupants under section 6."

The Home Starter Guide is the beginning of the journey for a new occupant of a home enabling them to quickly access good quality simple information enabling them to settle into their new home, without being over burdened with too much information. Once settled into the home the occupant is directed to more detailed information within their digital Home Log Book allowing them to access and digest information far more quickly and effectively. In some instances, occupants are also able to access their Home Log Book via digital TV and their smart phones.

Consequently, the Home Starter Guide enables developers and RSLs to meet both business and customer care objectives by producing the Home Starter Guide – meeting the requirements of Section 7 and delivering more easily digestible information to their customers. Furthermore, the total cost of producing a Home Starter Guide is more than 70% less than the costs associated with producing large handover manuals.

### **Developing the Home Log Book Solution**

Home Log Book identified quite early on that whilst we were managing home information electronically there is still a need for some form of quick start guide for an occupant of a home. When we looked at the wider market place it was noticeable the many products and services sold did not come with large cumbersome manuals any more, such as IKEA, tablet pcs, mobile phones, printers, BT Vision, Sky and even some cars. These are complex products with incredible functions and features yet manufacturers are increasingly only providing some form of quick start guide, with reference to further information on the Internet.

The development of the Home Starter Guide has filled a gap that Home Log Book was unable to fill at the time. The HSG will enhance our service offering to both existing customers and new prospects.

Home Log Book has presented the Home Starter Guide to a number of English based RSLs and developers and initial responses have been extremely positive

Once the final report has been published, we will use the report as part of our wider communications and sales strategy to the UK residential market place. We have approached Homes for Scotland (HfS, representative body of the Scottish new build sector) and the Chartered Institute of Housing (CiH) to facilitate informing their respective market sectors to the business benefits and objectives of the Home Starter Guide.

We have also presented the Home Starter Guide to one of the UK's largest local authorities (66,000 homes) who are exploring how they can phase out their large beautifully designed A4 plastic folders, 'Tenant's Handbook – including your repairs guide', to replace this with the Home Starter Guide and supported by the Home Log Book, available via the Internet, interactive digital TV, Nintendo Wii and smart phones.

The Home Starter Guide will become part of the Home Log Book suite of products, nationally.

