



Sustainable Shell Homes is a Sheffield company was set up by engineer and academic researcher Peter Waldron and architect James Norton to allow more people the opportunity to live in and take part in the design (and if they want construction) of their own, low energy, contemporary home.

Our homes are beautifully designed detached houses in great locations, each with two private parking spaces and generous gardens. The houses are built above modern standards with exceptional levels of insulation, complete with PV solar panels (and so very low energy bills), and are also protected by a 10 year Warranty.

Our Meersbrook sites have unparalleled connections to both the Peak District and the city centre, and the construction means a quiet, comfortable, healthy internal environment, so you can sit and enjoy views of Houndkirk and Burbage Moors.

Best of all, for most of our houses our award-winning team of our two registered architects can help you design the perfect internal layout and we will build it for you. Sarah and James have over 3 decades of combined experience designing beautiful homes as well as helping people to get the best out of their existing ones - just check out James' website: www.jamesnortonriba.co.uk for some examples.

However, if you want more of a challenge, we can help you complete the internal fitout yourself to create a home perfect for you that you can be rightly proud of.



Unlike most UK houses that are cold, draughty, sometimes damp and hard to heat, these houses are built using the most modern materials and methods to create a "super insulated" building. Along with PV panels generating free electricity, this means low bills but also a very comfortable internal environment, with draught free construction, triple glazing to block out sound and continuous fresh filtered air.

On the different sites there are a range of sizes of house with enough space to create the perfect bespoke layout for you, either completed by us to your design, a prefinished house or to complete yourselves.

Some of the benefits of our properties include:

- A healthy comfortable internal environment with no draughts or cold spots, great daylighting and filtered fresh air.
- Weathertight high specification shell, so ready for internal fit out immediately.
- Total internal personalisation in layout, décor, fixtures and fittings, kitchens and bathrooms, number of bedrooms, renewable technology additions etc. There's no need to live with something that's 'not you' or pay for a house with either a space you won't need or the wrong layout.
- High insulation standards for lower energy bills.
- As all of the floors are self-supporting with integral steelwork, there's no need to provide additional support so your walls can be put where you want them and altered in the future easily as your needs change.
- Ducting for an EV charging point to one of the two allocated parking spaces allows future proofing for electric vehicles.
- PV panels already installed to significantly decrease energy bills.
- With a Shell unlike a refurbishment project no hidden surprises, square walls and brand new, high quality materials throughout,.



In the UK the majority of the housing stock is quite poor quality construction, with solid walls and minimal resistance to moisture and damp. These older houses were "designed" to be heated intermittently to high temperatures with solid fuel and actually needed to be quite draughty to allow for ventilation.

As we modernise these houses, reduce these draughts and have a more continuous but moderate heating regime, damp can be an issue - cold spots are almost taken for granted.

That combination leads to poor "thermal comfort" as already ineffective buildings have to be made even warmer to be acceptably comfortable.

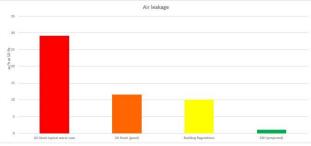
In a low energy home, the building is insulated up to 15x more than a standard house, and up to 2x more than the applicable Building Regulations - with moisture ingress limited so that the building can be designed and built with no draughts at all.

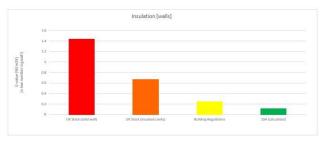
However after trying so hard to kept that warm air in we don't want to just let it out in the winter through the windows, so we use a whole house ventilation system with heat recovery that retains the heat from the extracted air and delivers fresh filtered incoming air 24/7.

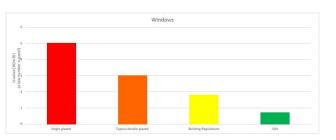
Along with the generous triple glazing, this creates a home with an intangible quality of internal comfort that you'll wonder how you ever lived in a normal house before.

And of course, all of this along with the PV solar array on the roof means much lower energy bills overall.









We are all aware of the crisis of greenhouse gases and resource depletion. We know this is already affecting our climate in the UK, but in less well-off areas of the world the consequences could be dire.

We think it's therefore vital to act, however no matter what your views on climate change, we also can't ignore that we are running out of accessible fossil fuels and increasingly dependent on sources we'd rather not rely on.

The world's buildings are responsible for around half of greenhouse gas emissions, and over half of that is down to heating. So, whilst it may not be as glamourous as green roofs and wind turbines, if you're serious about climate change you simply have to address the huge impact your poorly insulated, leaky house has on the environment.

Our commitment to this through our properties can be demonstrated in the graphs opposite. Our properties (green) go above and beyond the requirements already put in place by the Building Regulations (yellow) for air leakage, insulation levels and u-values of windows. Existing housing stock (red and orange) is far away from meeting any of these standards.

All of these elements combine together to create a house that requires minimal heating (and thus less fossil fuels) and provides a great environment for living. To assist with the electrical requirements of the home further the PV panels on the roof can also provide up to 4kWp peak output depending on the property.

CONSTRUCTION TYPES





Another way we can improve the country's housing stock is through the choice of the materials — both to conserve resources and also by building with integrally better insulating materials.

One of the best ways to maximise insulation and maintain high standards of performance and workmanship is to use a timber frame. To improve further still on that we use a proprietary Structural Insulated Panel (SIP) timber frame system manufactured off site with Modern Methods of Construction.

The Kingspan TEK system is one of the best regarded systems available and guaranteed by the suppliers and manufacturers.

The SIP system reduces dramatically the "cold bridging" of timber members and is inherently draught free even before we enhance them further on site.

We then add even more insulation internally with a sealed and vapour resistant inner layer, and a weather resistant ventilated outer layer, all protected by a proprietary flexible silicone render system, traditional brickwork, UK grown timber cladding or colour coated aluminium accent panels.

The buildings are also fire protected internally and externally with fire resistant building boards.







We have 3 sites in Sheffield and north east Derbyshire. Burbage View is in Meersbrook, Sheffield where we are currently offering 7 houses for sale. We also have our Rother Valley site with Planning for 9 houses, and finally our second Meersbrook site; Houndkirk View, coming soon.

BURBAGE VIEW

Situated in Meersbrook, Sheffield S8, our flagship development of 7 properties is located at the top of Newsham Road, Meersbrook Avenue and Woodbank Crescent, with great views out to the Peak District and across Sheffield.

Just 5 minutes walk away from Chesterfield Road, with local café's even closer, you can reach the city centre in 10 minutes or the M1 in 20 minutes by car and the Peak District in 15 minutes.

Each property is provided with 2 private, off road parking spaces (one of which can have EV charging), as well as a share of a number of visitor spaces.

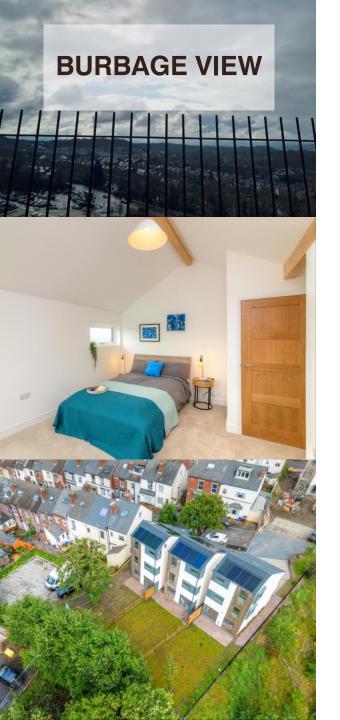
We are able to provide site visits, but these need to generally be outside of normal working hours as it is a working building site.

On this site we have five, 3 bedroom properties, one 3-4 bedroom property and a smaller 2 bedroom property with a large garden. However, with some careful design of the internal spaces there are lots of ways to add an additional bedroom / study space into the 3 bedroom houses.

The standard 3 bedroom units are 86m², the larger property 115m² and the smaller one 60m². All the units have a minimum of 60m² garden, but generally around 70m².







Plot 1, 86 Meersbrook Ave: SOLD

Plot 2, 88 Meersbrook Ave: £350,000 as a finished house only

One of our first 3 shell properties to be completed, 88 Meersbrook Avenue is ready for someone to put their mark on it. Plot 3 focusses on wide, light open plan and double height spaces. Whilst the layouts upstairs have been set, there's flexibility to design your ground floor and plenty of possibilities for customisation.

Unit 2 is in the centre of the site, in a sheltered spot between units 1 and 3. Large windows at the rear look out towards the Moors, and an angled window on the front has a superb quarry view.

Plot 3, 90 Meersbrook Ave: £375,000 as a finished house only

90 Meersbrook Avenue is a finished property. This means that the layout has been chosen, electrics, plumbing and ventilation installed, flooring, kitchen, bathroom and ensuite installed and the rest of the property painted white, but you can still add some customisation with décor, lighting and finishes!

The ground floor has a kitchen at the front, WC and an open plan living / dining space opening out to the garden. The first floor has a generous family bathroom, large bedroom at the rear with impressive window seat and bedroom with mezzanine area at the front. The second floor comprises a large bedroom with window seat and an ensuite with shower.

Unit 3 is on the centre of the site, with amazing views across to the Moors, from both the house and the garden.



Plot 4, 34 Newsham Road: £355,000 as a custom build

32 Newsham Road is available as a custom build for someone to finish to suit their requirements. Why not speak to us to see how the layout could be designed to meet your specific needs?

Forming the end property of the next three houses, this plot benefits from a side garden with climbing planting on the gable, as well as large rear garden. Large windows at the rear look out towards the Moors, and an angled window on the front has a superb quarry view.

Plot 5, 36 Newsham Road: £280,000 as a shell

Occupying a sheltered spot between units 4 and 6, 34 Newsham Road will be constructed soon, and will be available as a shell for someone to finish to suit their requirements.

Large windows at the rear look out towards the Moors, and an angled window on the front has a superb quarry view.

Plot 6, 38 Newsham Road: SOLD SUBJEC T TO CONTRACT

Plot 7, 27 Newsham Road: £230,000 as a shell / £295,000 as a custom build

27 Newsham Road is the only 2 bedroom property on the site and will be available as a shell or custom build soon for someone to finish to suit their requirements. With the majority of the rooms facing the quarry, the views in this unit are pretty spectacular.

Whilst unit 7 is smaller internally, it has the biggest garden on the development, so great for an avid gardener or someone who wants a secluded garden office. A green roof also adds extra biodiversity to this plot.



Adjacent to Burbage View, our next development of 7 properties is located between Derbyshire Lane and Scarsdale Road, with unobstructed views out to the Peak District and a lovely woodland setting is coming soon, subject to Planning Permission.

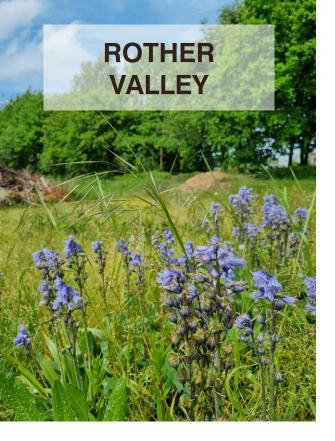
Just 10 minutes walk away from Chesterfield Road, with local café's even closer, you can reach the city centre in 10 minutes or the M1 in 20 minutes by car and the Peak District in 15 minutes.

Houndkirk View has a different range of properties, with three 3-4 bedroom properties with window seats at one end secluded behind an area of woodland, 4 bedroom and 5 bedroom larger properties at the centre with spacious roof terraces facing the views, and 2 3 bedroom 2 storey houses at the other end with space for additional bedroom or study downstairs.

All the properties are shielded from the main road by established trees and open up to the views across to the moors.

Each property is provided with a minimum of 2 private, off road parking spaces (one of which can have EV charging), as well as a share of a number of visitor spaces. The two larger properties have space for 3 cars.

Units 1 to 3 are 118m², Unit 4 207m², Unit 5 210m² and Units 6 + 7 115m². All the units have a minimum of 60m² garden, but generally around 70m² of lawn space plus some woodland area.



Our Killamarsh site is perfectly located only a 10 minute walk to Rother Valley Country Park and close to Crystal Peaks Shopping Centre and connections to the M1 is coming soon.

Despite its accessible location, the group of 9 properties is hidden from the main road on its own tree lined private access, with generous gardens and parking for each property in close proximity.

With local shops just a few minutes walk away, it's an excellent sustainable location.

All the properties at Rother Valley are our standard 3 bedroom properties of 86m², though with all the different potential layout options there's ways of adding an additional bedroom if that's required, or something different like a home gym or studio. The bedrooms are all a generous size, with the smallest one featuring our signature double height space.

Each property is provided with a minimum of 2 private, off road parking spaces (one of which can have EV charging), as well as space for visitors to park.





SSH was set up to build contemporary low energy homes to a weather tight shell stage for customers to complete as self-build projects with their own sweat equity. This makes the dream of such a home more affordable, while developing the essential skills in our team to build a new green economy. These properties are considered **Shell Homes**.

However, we also want anyone to be able to live in a low energy home and take part in its creation whatever their construction skill level, so we also have options for customers to move into a fully finished home – through either our **Custom Fit Out** or **Architect Designed** options.

Each of the options starts with a shell, which comprises a fully watertight, super insulated 3 storey building, completed externally, with triple glazed windows and roof windows, and options for additional insulation inside. It has internal floors and basic stairs. The ground floor is insulated with underfloor heating pipes already laid in a concrete screed. It has incoming gas, electricity and water, and is fully connected to the surface water and foul water system. Each home has a garden in excess of 60sqm and 2 private parking spaces with room for an EV charger. The properties also all have solar panels to reduce bills further (generally 4.5kW). We have also obtained planning permission for a garden office / storage space for each home.

Whilst designing the layout of your own low energy home is an amazing dream for most of us - it is also quite a daunting prospect. That's why we offer an enhanced architectural support package delivered by an award-winning team of our two registered Architects to help you decide on your layout, and depending on the option provide additional advice and support.

We have summarised the process for the **Finished Home or Shell** options below.



The option for those not quite as adventurous as the shell home buyers, or those needing to move in sooner.

It starts with a shell and has the same layout planning service, but after contracts are exchanged a deposit is paid and SSH build that layout for you. The property is handed over at completion as a complete home, with simple finishes and kitchen / bathroom, ready for you to move in and put your own stamp on the interior and garden.

The detail of what included and what isn't in each option is described in detail in our "Shell + Fitout standard Specification"

There are plenty of ways to configure the inside of the properties, some of which can include:

- Open plan or separate kitchen / dining and living spaces on the ground floor
- A ground floor bedroom [or lift]
- Family bathrooms, shower rooms or ensuites
- Smaller bedrooms / study spaces
- First floor living spaces
- Dividable spaces
- Storage or bed platforms
- Additional or fewer bedrooms
- Different rooms like gyms or studios or annexes

We also have planning permission for garden offices, which can help fulfil your work from home or additional storage needs.

Finished properties can be arranged through a traditional mortgage route.



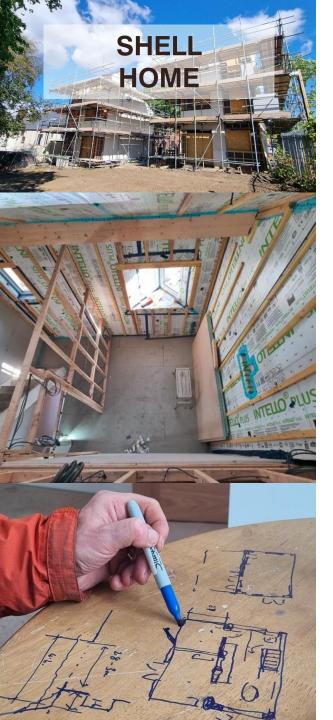
If a finished house is more your thing but you still want the benefits of our shell properties, all of our sites also have one or two houses per site that we fully fit out as a demonstration or show home.

These include flooring throughout, kitchens and bathrooms, a white paint finish and finishes to any bathrooms / ensuites, but there's still plenty of scope for you to add your own style with paint colours, wallpaper and furnishings. Externally a front deck provides level access to the front door, and a rear garden has a simple patio and lawn ready for you to add your own planting.

Our architects have designed a variety of great internal layouts, that show you the full range of how we can cleverly use the space. The ground floor plans are either open or broken plan living, kitchen and dining zones, with a hall and downstairs WC. They generally have 3 generous bedrooms and a family bathroom upstairs, with some properties benefitting from window seats and ensuite shower rooms.

These houses are also for sale so you can move straight into a beautiful, low energy home.

Finished properties can be arranged through a traditional mortgage route.



This is for people who really want to take control of their build and make some savings by rolling up their sleeves, taking part in the process and living the dream of building their own home! The price is set so that there's enough scope to manage tradesmen to fit out your low energy home or do it all yourself.

Once you have purchased the shell noted above, internally you (or a contractor of your choosing) will need to provide:

- Internal walls, ceilings and doors
- Optional additional insulation + air / vapour barrier
- Electrical, plumbing + ventilation installation (heat pump or combi boiler plus ventilation unit)
- Plaster boarding and plastering
- Kitchens and bathrooms
- Finishes [painting / wallpaper / tiling etc]
- Garden

Essentially this is the same as a big refurbishment project but with lovely square walls, no unwelcome surprises and you'll be able to reclaim the VAT from HMRC whilst working to a timeframe that suits your budget constraints. The weathertight shell allows you to fit out parts of the house at a time and potentially move in earlier.

SSH support you from offer stage with a layout planning service, and then at Exchange onwards a full architectural support package to help you design, cost plan and procure the work including electrical and mechanical drawings and acting as your Building Regulations agent.

Our shell properties require either cash or a "self-build mortgage" such as one from the Ecology Building Society as a specialist in this type of project. A self-build mortgage is secured on the land and work to date, and funds are released as you add value to the home. You can of course transfer to a more conventional mortgage at a later point.

