



Time for a rural youthquake

Where did all the young people go? To the city to find fame, fortune, gigs, love, careers, creativity and oat milk. Cities offer many opportunities. The biggest is the chance to be whoever you want.

We believe the Lakes and Dales can make the same promise. How? By creating a new type of rural property. A flexible, affordable dwelling that connects young people to the countryside – and themselves.

Introducing 'The Flexstead'

New York's city lofts symbolise the modern work/live ethos. But the Lakes and Dales got there first – almost 200 years ago.

The area's iconic farmsteads were the original flexible dwellings. Inside a simple stone structure, the farmstead was a blank canvas for rural life. The rigid cellular interior of modern dwellings was unknown. Instead, space could be adapted to suit the owner, season and local economy. From a home, farm shop and office to cattle shed, hayloft and community centre.

Our design is a modern take on this fluid approach to rural living. We call it 'The Flexstead'.

Space to evolve

Youth is a time to explore, experiment and evolve. The Flexstead will give young people the freedom to create their own rural lifestyles – on a budget they can afford.

Inspired by local field barns and outfarms, our design centres round a generous two-storey stone shell with a simple (yet surprising) pitched roof. To connect residents to the countryside, views of Pen-y-ghent will be a fundamental feature of the home.

The roof will also connect them to their surroundings. From outside, it resembles a solid 19th century Dales construction. Inside, its secret is revealed. The roof is divided in two by a lantern light well that will bring the ever-changing Yorkshire light into the space. At night, residents can swap Netflix for their own Dark Skies Festival.

Viewed from a distance, on a train or local peak, it will be a new local landmark. Something you Instagram today – and visit tomorrow.

Super-fast ruralism

Horton is only 40 minutes from Leeds. But some people

believe every rural location is too remote. It's a question of psychology, not geography. To them, the countryside is 'the sticks' – a place disconnected from life. Moving in means missing out. We have a great opportunity to change this view.

The arrival of super-fast fibre broadband will connect residents to local life and the world. Combined with the Flexstead's flexible layout, Horton can become a new 'Symbiotic Cluster' with entrepreneurs who move to the place working with locals to boost the rural economy, and create new ways to improve life for the whole community.

A web designer working from their Flexstead home creates an online showcase for a Horton farmer. Her winning way with vegetables attracts attention (and custom) from a Leeds restaurant. It also inspires a keen local cook to develop the 'Horton Soups' brand in his Flexstead kitchen. The soups are sold online and at the new Horton Farmers Market. Modern ruralism in action.

Affordable excellence

A chronic shortage of affordable housing means many young people are priced out of their own rural communities. When they move away, vital services like schools and pubs follow. Villages suddenly lack the life, opportunities and diversity they need to attract young people.

The GP:LD area alone has 44% fewer 16–34-year-olds than the national average. Affordable housing for young people is part of the solution. Sadly, it is often (and rightly) perceived to be badly designed and constructed.

It's time for a revolution. Young people deserve housing that is affordable, optimistic and exciting. The Flexstead is designed to be affordable without compromising on the quality of construction. The flexible open-plan interior removes the need for unnecessary and costly fixed room construction. Instead, a simple system allows the space to be adapted with minimal cost. Everything is designed to inspire young people to make their future in the Lakes and Dales.

Room to create (or just bake)

The interior space is designed to be whatever you want it to be. Photographer's gallery. Graphic design studio. Vegan kitchen. Or simply a home.

A central spine of functional spaces is surrounded by a generous double height space that is open plan for maximum flexibility. Small uncostly adjustments to everyday building elements will transform the interior to suit your evolving lifestyle. Less live/work space. More lifelong space.

Great place to say hello

The entire property sits on a raised communal terrace made for socialising with neighbours. From growing food and throwing parties to exercising together.

The terrace also gives access to sunken gardens, bicycle storage and car parking. And when the next generation of Flexstead dwellers comes along, the terrace can be used to expand your home.

Pollinator paradise

The Flexstead's landscape will be a paradise for pollinators. Structural planting will enhance wildlife habitats and corridors, and slow waters from the Fells. Native woodland trees and hedging will ensure the gardens are rooted in the local landscape. Vernacular materials such as local stone and fallen trees will feature as paving, boulders and log bicycle racks.

Wildlife is welcome. Humans are too. Our universal approach to the landscape design ensures it can be enjoyed by the widest mix of people for the widest mix of purposes. Growing spaces will encourage self-sufficiency, plant-based start-ups and community spirit. Marrow growers of Horton unite!

Celebrating local talent and materials

Flexibility and functionality led our design. Celebration of the local area led our choice of materials. Evoking humble yet iconic local farm buildings, our home will be constructed by local craftworkers using natural stone and slate. Materials can easily be adapted to harmonise with different locations across the region.

Buildability

Use of modern methods of construction, including Structurally Insulated Panels (SIPs), have the potential to raise the bar for quality in rural house building. Enhanced precision and quality control are just two of the benefits. Modern methods can also increase the speed of delivery, improve cost-efficiency and reduce the number of working days lost to the unpredictable British weather.

For the wider community, innovative techniques mean less disruption and less noise as properties can be constructed off-site as prefabricated timber modular units.

Eco-thrifty future

Affordability goes beyond the 'For Sale' price. It also means creating rural housing that is affordable to run.

Rural energy bills are considerably higher than in urban areas due to poor insulation, extreme weather and alternative heating methods. Our homes will be as thermally efficient as possible to reduce energy consumption, costs and carbon footprint.

The Flexstead is sustainable – environmentally and economically. We designed it with a fabric first approach to energy efficiency – and a 'joy first' approach to economic efficiency. Young people should be free to spend money on their passions, not bills.

The Flexstead's eco-thrifty ethos will make this possible. By encouraging neighbours to socialise, harvest and feast together, the eco-thrifty ethos will also generate that vital natural resource: goodwill. We believe Horton will be a benchmark for affordable rural housing and modern sustainable living.

Human eco-system

Our vision of modern ruralism calls for diversity. The widest mix of people inspiring each other to create new ways of rural living. We designed the Flexstead to meet the needs of everyone, including people with disabilities.

Over 40% of young disabled people aged 16–24 live in unsuitable accommodation. Yet these young people are vital if we want to create a fair, diverse and sustainable rural future. Our concept's flexible design can be adapted to suit every need – so everyone can enjoy rural life to the full.

Replicability, Replicability, Replicability

The Flexstead's modular terraced design means it can be repeated in different locations, village or town, easily and cost-effectively. And because flexibility is central to the concept, each new development can be adapted to reflect its location. For example, with exterior cladding made from materials specific to its context – without changing the flexibility of the internal layout or structure.

We'd like to start with a string of developments along a local section of the Settle–Carlisle line with easy access to stations like Ribbleshead, Dent and Garsdale. Each development would have its own unique personality while sharing the Flexstead's distinctive split roof – a new architectural symbol for the Lakes and Dales.

Delivered as a standalone project or part of a wider development scheme, we hope our design will enable young people to create a dynamic new generation of rural community.

Phase 2 Enhancements

We've worked with our expert partners to make the following detailed enhancements to our phase 1 design concept.

Lifetime Homes

The Horton dwellings only need to meet Building Regulations M4 (1). Our updated design meets the Lifetime Home standard. This standard meets ALL of the Part M Building Regulations.

It also includes 16 additional design features that will ensure Horton homes will be flexible enough to meet the residents' needs over their lifetime – from a new baby or home-based career to caring for an ageing relative.

Good design is central to the Lifetime Home approach. The aim is to maximise utility, independence and quality of life without compromising on aesthetics or cost-effectiveness. Good value is essential too. Lifetime Homes are a common sense and affordable way to future-proof the local authorities housing investment.

For local communities, the long-term popularity of these flexible dwellings improves social cohesion as people no longer need to move away to meet their changing housing needs. They can simply adapt the home as their lifestyle evolves. The result is desirable places for young people to call home for years to come.

Specific enhancements

Accessibility

- Wide doorways, level access and more space for schoolbags, coats and wellies reflect the integral role of the outdoors in daily life.
- Outside, pathways and landscaping create seamless connections to local roads and bicycle sheds with trees providing natural shelter from the elements.
- Integral design features mean the entrance level area can be used as a temporary living space for someone with reduced mobility. For example, a sick child, pregnant mother or visiting grandparent.

General Design

- New modular bathroom design and staircase can be prefabricated to enhance quality, and reduce onsite assembly time and installation costs.
- Prefabricated services for easier and more cost-effective maintenance and replacement. With

improved predictability, clash detection and buildability.

- Adaptable roof light area can be reduced or removed to suit the budget.
- Repositioned staircase increases natural light to ground floor.
- Additional utility space maximises usable living areas.
- Dedicated laundry area for washing machine with potential to be enclosed to reduce noise.
- 'Mud Hubs' near front and rear doors provide extra storage for wellies, wet coats, dog towels etc.
- Kitchens can be open plan or enclosed to suit owners' lifestyle – both types enjoy natural light and garden views.
- Master bedroom has option of en-suite bathroom or dressing area with table and wardrobe.
- Roof space can be adapted to build extra storage or provide generous ceiling height.

Structure

- Given Horton's small scale and the slope of its plot, improved design has balanced cut-and-fill earthworks to create acceptable gradients.
- Structural Insulated Panels (SIPs) will be preferred to Cross Laminated Timber (CLT) to increase the speed of construction while still being built by traditional local contractors.
- CLT remains an option (with no impact on layout) but is more cost-effective for sites with a greater number of homes.
- At ground-floor level, we will use a timber floor to remove the need for concrete and make the structure even more sustainable and cost-effective.

Robust details + finishes

- Zooming-in means even the smallest details, doorknobs to post box, get the care and attention they deserve. Zooming-out means small details come together to enhance the overall design.
- Façade will be made by local craftspeople using local stone to add unique character and avoid the artificial look of prefabricated versions.

- Orton Scar limestone façades will match listed buildings in Horton-in-Ribblesdale.
- Natural dressed sandstone lintels and sills will also reflect local architecture. Designed to control water run-off and avoid staining.
- Stonework detailing was considered in collaboration with the Stone Federation and material specialist advice from ARUP façade engineering.
- Aluminium windows are factory-fitted into SIP wall panels for maximum airtightness and excellent soundproofing.
- Inside, plywood detailing is used for cabinet doors to enhance the bright and warm feel of interiors.

Eco-thrifty

- Building fabric will attain PassivHaus standards which improves Fabric Energy Efficiency (FEE) by 23%.
- Prefabricated construction makes it easier to attain this goal as testing is done by the manufacturer
- Optional PV panels on the flat roof will achieve 57% improvement over Part L.
- Optional PV panels on south-west pitch roof will achieve 97% improvement – making the home almost carbon neutral.
- SAP 10 carbon emission factors have been factored into the building fabric to future-proof the design from changes to Part L.

Circularity + Sustainability

- We have followed the Ellen Macarthur Foundation's guidance and case studies on Circularity in the Built Environment to ensure the Flexstead meets the environmental concerns of young people.
- The 6 key elements of circularity are: Regenerate, Share, Optimise, Loop, Virtualise and Exchange. For example:
- Optional PV panels on roof (Regenerate)
- Communal gardens and terrace (Share)
- Off-site prefabrication (Optimise)
- Modular, flexible interior layout (Loop)
- Optional smart home system to control energy

consumption (Virtualise)

- Recycled, recyclable or CO2 neutral plastic throughout (Exchange)

Smart technology for affordable housing

- By 2020, 50 billion devices will be linked via the Internet of Things (IoT) giving young people more smart ways to manage their homes, bills and budgets.
- We are exploring how to best incorporate smart technology into the fabric of our design to make the Flexstead even more cost-effective, energy-efficient and healthier to run. For example, smart thermostats and sensors to keep energy bills low.

Employment & training

- Today, new housing is often seen as more pressure on local services and a loss of open space. Horton can change this negative view by showing how new developments benefit the whole community.
- We are currently exploring innovative ways to create employment and training opportunities, and boost social cohesion, at a local level. For example:
- Working with construction partners to offer apprenticeship schemes for young people interested in modern eco-thrifty building techniques
- Upskilling young people by offering training on modular construction, off-site manufacture and affordable housing
- Promoting traditional skills by creating an online showcase of local talent – a Which? Trusted Trader for rural expertise, stone walling to hedging.
- Joining forces with York College's Stone Masonry course to encourage young locals to train for its NVQ Diploma.
- Creating an opportunity for students on the York College course to work on the Horton project, sharing insights and know-how with young locals
- Offering 'prototype workshops' for NVQ students and young locals, using the latest innovations to explore new possibilities with stone.
- Launching a landscape photography competition for young people to show how the new development enhances its surroundings.

