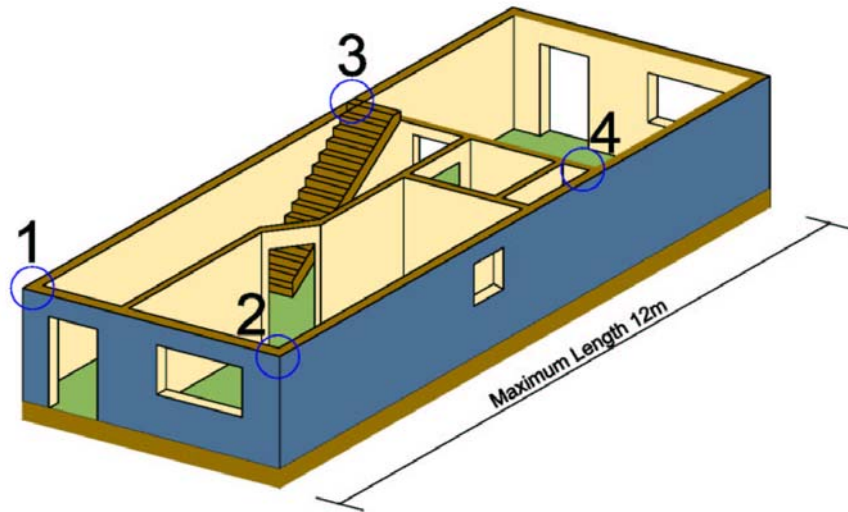




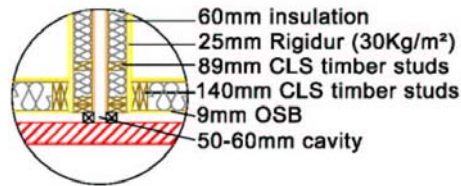
**Exceptional Homes
delivered by
Volumetric
Off Site
Manufacturing**



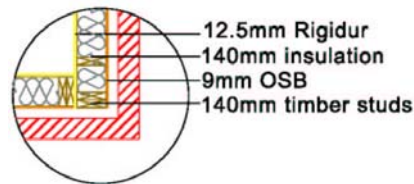
Hunter Off-Site Limited Standard Detailing



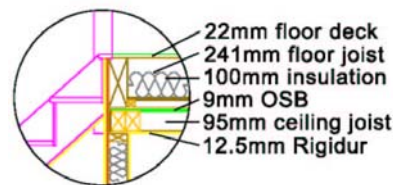
1=Party Wall Junction



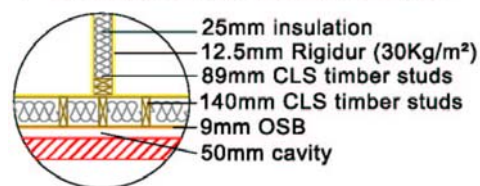
2=External Wall Connection



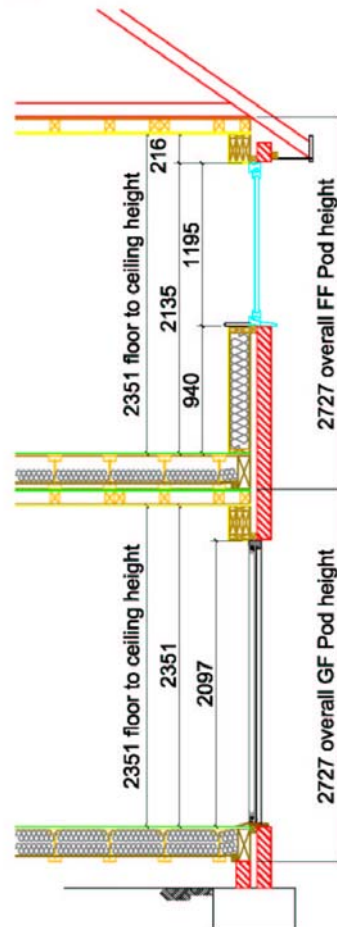
3=Stair Connection



4=External/Internal Wall Connection



Typical Section



An Introduction to Hunter Off-Site Limited

World Class Volumetric Off Site Manufacture



Hunter Off-Site Limited (Hunter) is the UK's most innovative timber frame house manufacturer, supplying conventional homes to the affordable housing market using Modern Methods of Construction (MMC). We offer outstanding flexibility and foresight, and are committed to making the manufacture and supply of our homes easy for our clients. We operate to the highest standards allowing us to give firm price and programme assurances at the earliest stages.

Hunter delivers high specification homes using the process called Volumetric Off Site Manufacturing (V-OSM).

Our profound understanding of both construction and manufacturing allows us to deliver diverse and bespoke designs and specifications. From our production line, we are able to deliver a single house, or a number of homes or flats, offering almost unlimited specification and design flexibility. Quality is constantly monitored by our production staff ensuring every home is commissioned and defect-free prior to leaving the facility.

We manufacture to conventional industry details and standards thus allowing the Hunter V-OSM system to be accepted by all warranty bodies. We use timber because we believe clients and residents are more comfortable buying, funding and living in conventional timber-frame homes, with its' proven and accepted track record.

Our commitment to V-OSM is founded on our background of house building, traditional off-site manufacturing and project management. Previous experience is as diverse as nuclear power stations, operating theatres and off-shore oil rigs, as well as prestigious city apartments. We mention these because, although they are set at a distance from V-OSM, they are not low or casual quality industries, but industries where a lack of quality and attention to detail clearly brings a multitude of serious and unacceptable risks. We have good commercial and innovative judgement, and an unwavering belief that if we do not consistently give our clients the very best service, someone else will.

Most of all, we are a World-Class organisation.

World-Class is not a reflection of size or number of employees, it is to do with attitudes and a belief in World-Class values, such as flexibility, innovation, service, integrity and strength of character. One day most homes will be delivered by World-Class manufacturers committed to friendly, helpful and flexible service; but for the moment there is only Hunter.



About Volumetric Off Site Manufacturing

V-OSM brings unique benefits in providing high quality homes which are unachievable when using traditional building techniques

Hunter delivers high specification homes using the process called *Volumetric Off Site Manufacturing* (V-OSM). The phrase *Off Site Manufacturing* indicates that the homes are built away from the building site, in a controlled factory environment. The prefix *Volumetric* indicates that individual modules leave the factory as complete units, with walls, floors and ceilings in place, kitchens and bathrooms installed, services fully commissioned and all interiors finished. A dwelling will consist of more than one module, how many will depend on its' size and layout.

Fully understood and implemented, V-OSM is flexible enough to produce bespoke projects without the need for mass production.

Off-site manufactured components are already used within most construction projects - windows, roof trusses, kitchen units and the like, but this still leaves the principal activity, the construction, to be site based and subject to all the traditional problems and difficulties.

Even the most untrained eye can see at a glance that a traditional building site - open to the elements and with piles of materials lying around - is not conducive to fault-free high-quality homes. The process is comparable to building high quality cars; few people could be convinced that having a car built in the open-air by operatives standing up to their ankles in mud would automatically ensure a high quality, fault free product - so why are homes built in this way!

An innovative and efficient V-OSM production plant allows continual monitoring of quality, workmanship, cost and programme. Fully understood and implemented, V-OSM is flexible enough to produce bespoke projects without the need for mass production.

Key benefits of V-OSM:

- Significant reductions in overall construction programme, site overheads, waste and environmental impact.
- Dramatic improvement in predictability, efficiency, quality and workmanship.
- Overcomes current skill shortage.
- Use of sustainable resources benefits the environment.
- Improved technical performance.

Using Timber In Volumetric Off Site Manufacture

The well known benefits of using timber for constructing homes equally apply to V-OSM



Quality

Relocating traditional site construction works into a controlled manufacturing environment allows us to maintain exceptionally high levels of quality during manufacture. Our homes and materials are not affected by environmental conditions therefore eliminating rework and defects.

Thermal performance

Timber is a highly efficient insulating material even before insulation is installed. Timber framed homes can far exceed current building regulations in the UK allowing a reduction in life cycle costs.

Noise transmission

Timber walls and floors inherently have exceptional resistance to noise transmission. Manufacturing our homes volumetrically allows Hunter staff the opportunity to work in areas considered inaccessible with traditional building methods. We can ensure all noise transmission routes are effectively sealed.

Progressive collapse and affect by fire

Timber has good resilience when exposed to great heat. Although timber will char and burn when exposed to fire, it retains its structural integrity longer than steel and brick which tends to buckle and crumble earlier. This characteristic coupled with attention to design detailing reduces the risk from progressive collapse.

Eco friendly

V-OSM dramatically minimises construction waste and increases recycling awareness, whilst conventional buildings and their materials such as concrete and blocks have an extremely high impact on the environment. Conventional processes to deliver and fix traditional materials produce extremely high levels of carbon emissions which is not the case with V-OSM.

Sustainability and use of renewable materials

Timber is a sustainable and renewable product: more trees are planted each year than those felled. Hunter only buys timber with assured full chain of custody from approved suppliers.

V-OSM -v- Traditional build

We supply homes quicker than traditional builders, of higher quality and on fixed lump sum contracts. V-OSM dramatically reduces waste and is a better environment for the promotion of innovation, value engineering and partnering.



Specification: Hunter V-OSM Homes

Hunter gives careful attention to design
detailing and specification

Maximum single unit size:	4.8m wide x 12m long.
Floor to ceiling height:	Multiple units form larger dwellings Typically 2350mm, up to 2650mm
Typical floor construction:	U-value: up to and can exceed 0.16W/m ² K Project specific Thickness = 263mm
Typical external wall construction:	U-value: up to and can exceed 0.15W/m ² K Project specific Thickness = 162mm – 172mm
Typical internal wall construction:	Thickness = 114mm – 125mm Wall performance project specific
Separating wall construction:	Robust Detail E-WT-02. Acoustic performance, typically +8dB
Air tightness:	<3m ³ /h.m ²
Energy:	Exceptional thermal performance
Code for Sustainable Homes:	Substantially contributes to Code Level 4 and above

Finishes and Materials

Internal finishes:	Client project specification
Kitchen and sanitary ware	Client project specification
Windows & doors:	Client project specification
External finishes:	By others: site applied

Supply Chain

Timber:	Sustainable from managed resources: FSC/PEFC
Preferred suppliers:	ISO 9001:2008, ISO 14001:2004
Waste management:	Full recycling programme

Programme

Design:	8 weeks for manufacturing drawings and long-lead items
Manufacture:	Subject to project requirements For example: 10 houses = 9 weeks manufacture
Delivery:	In-house technicians can install 4 dwellings per day depending on site logistics

Site Works

Foundations:	All traditional trench, strip, slab and piled foundations
External cladding:	Independent: Brick, rendered block, tile block Module fixed: Brick slip, rendered board, tile hung

Industry Compliance

Warranty	NHBC and others
Building control	LABC 'Systems' approval and others
Frame and building detailing	TRADA member Robust Details HCA Design and Quality Standards Code for Sustainable Homes Lifetime Homes

Compliance: Hunter V-OSM Homes

Hunter gives careful attention to complying with all appropriate industry requirements



Building Control

Hunter has LANTAC (Local Authority National Type Approval Confederation) systems approval. It is the only organisation in the UK which specialises in developing fast track routes through the regulatory procedures for building systems.

Warranty

Hunter's manufacturing process is recognised by NHBC and others. Our homes are timber based and we work to current specifications and industry standards allowing traditional build warranties. Such bodies understand that the use of timber in V-OSM conditions reduces the risk of post-completion warranty claims.

Design and Quality Standards

The Hunter system offers clients design flexibility, this coupled with our understanding of delivering the requirements of RSLs, we can ensure compliance with all current standards.

Timber Details

Our typical timber frame details are recognised by TRADA. We are a registered member of TRADA.

Party Details

We understand the importance of party conditions and work to better the standard Robust Details.

Code for Sustainable Homes

It is the performance of the overall project that is considered when calculating the Code for Sustainable Homes level; the use of Hunter units significantly contributes towards this score. We can calculate ratings for our units once they have been adapted to meet the clients design requirements, and can therefore greatly assist in achieving **Code Level 3** and above.

Energy Rating

Our system offers exceptional SAP ratings.



Our Values and Beliefs

Hunter is proud to be a World-Class Organisation firmly in the vanguard of V-OSM

Our belief in World-Class values include:

Accessibility

Everything is possible; we are easy to deal with and whilst offering unbiased help, advice and assistance we are committed to satisfying our clients.

Innovation

A crucial role within our business is the continual research of innovative manufacturing and building techniques. Hunter is in the vanguard for innovation, although this will never jeopardise high standards.

Pricing

Our pricing is highly competitive; although essential we do not choose to compete solely on price as we have a number of other great values including flexibility, innovation and an understanding of what clients are trying to achieve.

Quality

Exceptional; In-house technicians monitor our high quality ensuring every product is commissioned and defect-free prior to leaving the facility.

Sustainability

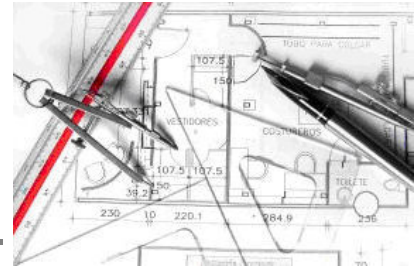
We must leave this world a better place or be accused of betraying the generations yet to come. We must use sustainable sources of supply wherever possible. We must build homes that cause minimum impact on the world around us as they are built and be economic on their use of our scarce resources during their life.

Strength of character

We will not bear false witness. We demand of ourselves and our clients the highest integrity. We are not afraid to tell a client that we cannot do their work or that a design is not suitable, no matter how important the circumstances.

Standard House Plans? We Don't Have Any

To meet competitive market demands, clients require unprecedented flexibility



We pride ourselves in offering clients unprecedented design flexibility. We do not have any standard house types as we have coupled our understanding of V-OSM with our innovative manufacturing process to offer flexibility. We see no need for project designs to be amended just to suit the Hunter system.

The Hunter system lends itself to all projects from traditional design to contemporary architecture. When using Hunter, clients can retain their own particular style, specification and internal layouts therefore homes can be designed to meet individual client and site requirements.

Our experienced in-house designers convert clients' project and architectural information into full manufacturing drawings (+/- 1mm tolerance) using state-of-the-art computer design software. We offer various procurement routes allowing clients to drive design to the level they deem necessary. Of course, involving Hunter early within the design process ensures greater benefits and cost efficiencies when using V-OSM.

Hunter has produced a number of illustrative layouts based on the Homes and Communities Agency's Design and Quality Standards; these are available upon request.

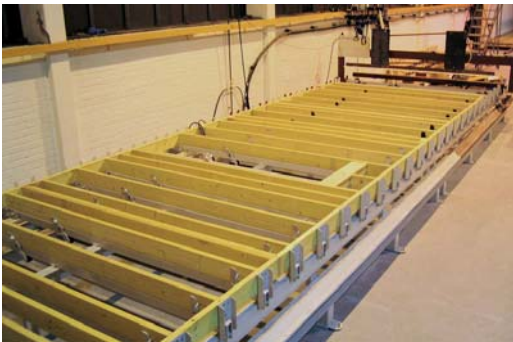
Snapshots



The Site

One of the major benefits of V-OSM is the reduction of traditional site based works. Relocating these works to a controlled factory environment drastically reduces time on site and disruption to local communities.

Photo shows a typical infill site.



The Factory

Materials are cut and prepared prior to components being assembled on one of our specifically designed assembly tables. Our machines allow enhanced attention to detail and improved efficiency.

Photo shows a 12m long wall being manufactured on an assembly table.



Manufacturing

Manufacturing in a controlled factory environment allows the use of many techniques that are difficult or unavailable on site and allows continual monitoring of quality, workmanship, cost and programme.

Photo shows walls and ceilings in our spray paint shop.



Module Assembly

Units are fully assembled, internally fitted-out and finished including services fixed and tested and signed off prior to being dispatched to site. Finishing specifications are project and client specific.

Photo shows a module on our assembly line.

Snapshots

Transportation

Hunter has vast knowledge and experience regarding the transportation of larger loads on the highway; we deal with all aspects of highway logistics.

Photo shows a module being transported to site.



Delivery

Scaffolding is normally partially pre-erected to assist with site assembly. Hunter has extensive experience in the movement, lifting and positioning of exceptional loads.

Photo shows a module being located onto site.



Installation

Hunter have innovated the manufacturing process involved and not the material specification, this remains identical to traditional timber frame construction, allowing approval from all parties and standard industry warranties.

Photo shows a first floor module being positioned.



Completion

Facing materials such as brick or tile are applied on site. Modules can be engineered to take façades direct.

Photo shows houses fully finished and ready for occupation.



