

# Shanette Steel Frame Houses & Extensions

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### WHY SHANETTE?

Introducing Shanette Steel Frames – Your trusted steel building manufacturer for over forty years.

#### **Our Team and Expertise**

At Shanette Steel Frames, our team is made up of talented engineers, designers, logistics professionals, production managers, and assembly and installation specialists. Together, we deliver smart, structural solutions tailored to your projects, from residential to large-scale industrial builds.



Using cutting-edge 3D CAD software and modern methods of frame production, we manufacture premium off-site solutions for the residential and construction industry. Our advanced metal forming machinery allows us to produce certified, high-quality steel-framed structures and components that meet the highest industry standards.

#### **Tailored Solutions for Every Project**

From custom residential designs for homes and extensions to larger-scale developments, we bring the same unwavering commitment to excellence.

#### Light Gauge Steel Frame (LGSF) Systems

Our LGSF systems are fully designed and certified structural panel solutions, ideal for the rapid construction of buildings. By saving time and labour, they offer significant value to residential, commercial, and industrial projects.

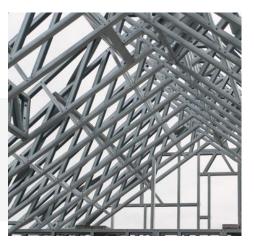
#### **Key Features:**

- Engineered C profile LGS studs designed for optimal axial capacity.
- CE EN 1090 certification for the execution of steel structures.
- Flexibility to meet project needs with options including singlesection components (stick form), pre-assembled steel frames, or complete pre-assembled panels.

At Shanette Steel Frames, we combine innovation, precision, and customer focus to deliver outstanding results. Let us help you build with confidence and efficiency.









### **PRODUCTS & SERVICES**



Welcome to the future of construction with steel frame solutions. Experience the strength and reliability that sets us apart. Contact us today, and let's make your next project a success.

### WHAT WE MANUFACTURE

- EXTERNAL WALLS
- FLOOR CASSETTES
- ROOF TRUSSES
- ANGLE TRIMS
- ACCESSORIES
- CUSTOM FABRICATION



### 1 | Self Assemble Frames

Ideal for Modular Building Contractors, POD Manufacturers, and Self-Builders who need a reliable supply of pre-engineered steel products to feed their assembly line or building project. Also known as stick form or sticks. All of our frame pieces and parts are individually ink-jet marked with ID numbers and accompanied by detailed assembly drawings. Self-assembly is quite straightforward.

## 2 | Pre - Assembled Frames for Collection or Delivery

With this option, Shanette assembles all parts into complete frames at our manufacturing facility, which are then loaded on stillages ready for collection or delivery. Once on-site, the frames are simply bolted together into complete structures. We supply preassembled frames that form complete structures to clients who then fit-out according to their own project specifications.

### 3 | Pre-Assembled Frames with On-Site Construction

With this option, Shanette assembles all parts into complete frames, which are then brought to the site and fully constructed by our installers. This method saves a huge amount of time for building contractors or one-off house builders.

### **OUR PROCESS**

#### **Contact & Initial Consultation**

Discuss your plans with us, and we'll gladly provide guidance on the options available.









### 1 Planning

Whether you're a building contractor or a selfbuilder, our experienced team is here to guide you towards the ideal steel frame solution.

- Wall Type Finishes: We offer multiple exterior wall finishes—including brick, masonry, or external render—that your chosen builder will install on-site once Shanette has completed the steel frame structure.
- Insulation Build-Ups: You and your engineer can choose between several different insulation build-ups to suit your project's needs. We offer two main choices, Hybrid Frame and Warm Frame.
- Energy Efficiency: We can advise on Uvalues for each wall type, helping your building achieve the best possible energy rating.

For more in-depth information on specific wall and insulation build-ups, please see our wall build up page.

### 2| Design

Our skilled engineering team will collaborate with you, your architect, and your engineer to design the perfect steel frame system for your specific requirements.

- Expert Collaboration: We address technical queries promptly.
- Detailed Drawings: We produce 2D and 3D drawings to keep you informed at every stage of the process.

#### 3 Production

Manufacturing takes place at our facility in Kilbeggan, Co. Westmeath.

**Cold-Formed Steel**: Using modern manufacturing techniques, we produce high-quality, CE-marked steel frame building solutions.

**Rigorous Quality Control:** Our production processes ensure consistent excellence.

### 4| Delivery & Installation

Our pre-assembled frames are manufactured off-site at our quality-controlled facility in Kilbeggan, then loaded onto custom trailers for transport to your site.

- On-Site Assembly: Panels are bolted together in sections with the aid of truckmounted cranes.
- Supply-Only Option: For supply-only customers, frames can be collected using returnable stillages or delivered directly to the site by our fleet of trucks.

### WALL BUILD UP OPTIONS

When designing a steel frame home, selecting the appropriate wall build-up is crucial for optimising thermal performance, structural integrity, and compliance with building regulations. We have a variety of exterior wall options, including brick, masonry, or external render, all of which will be installed by your chosen builder on-site, after Shanette have built the steel frame structure of your project. You and your Engineer can choose between several different insulation build-ups to suit your project's needs. We offer two main choices, **Hybrid Frame** and **Warm Frame**.

### **Key Differences**

The primary distinction between hybrid frame and warm frame systems lies in the location of the insulation:

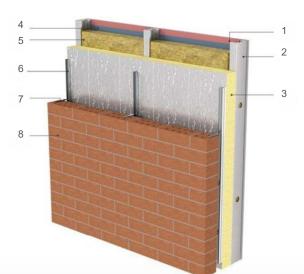
- 1. **Hybrid Frame:** Insulation is installed both within the 100 mm steel frame (to be fitted on-site by others) and on the external face of the frame, which is factory-fitted. Common external insulation materials include foil-backed PIR boards, Rockwool mineral wool, or metal-faced insulated sandwich panels—each offering unique advantages depending on project needs.
- Warm Frame: All insulation is installed on the exterior face of the Shanette steel frame, creating a continuous, uninterrupted thermal layer.

### **Energy Efficiency:**

We can advise on U-values for both warm and hybrid wall types to help your building achieve the best possible energy rating.

#### 1. External Wall with PIR Insulation and Masonry Outer Leaf – Hybrid Frame

The hybrid frame combines external PIR insulation with additional insulation placed within the steel frame. This approach balances thermal performance with cost-effectiveness, making it a versatile choice for various designs.

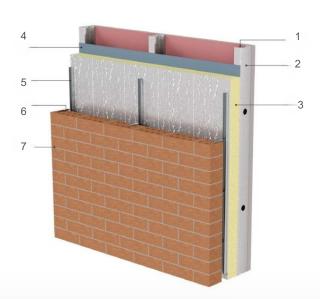


- 1. Type F plasterboard lining to provide adequate protection to the steel frame, installed by others
- 2. Shanette Steel Frame Panel
- 3. PIR Insulation board
- 4. AVCL layer, installed by others
- 5. Mineral wool insulation fitted between studs by others
- 6. Stainless steel wall tie channel
- 7. Stainless steel wall tie, installed by others.
- 8. External masonry outer leaf, installed by others

Figure 1. External Wall with PIR Insulation & Masonry Outer Leaf – Hybrid Frame

#### 2. External Wall with PIR Insulation and Masonry Outer Leaf – Warm Frame

This build-up features a brick masonry exterior for a traditional yet durable finish. The external PIR insulation maintains a seamless thermal barrier.



- 1. Type F plasterboard lining to provide adequate protection to the steel frame, installed by others
- 2. Shanette Steel Frame Panel
- 3. PIR Insulation board
- 4. AVCL layer, installed by others
- 5. Stainless steel wall tie channel
- 6. Stainless steel wall tie, installed by others
- 7. External masonry outer leaf, installed by others

Figure 2. External Wall with PIR Insulation & Masonry Outer Leaf – Warm Frame

#### 3. External Wall with PIR Insulation and Rendered Masonry Outer Leaf – Warm Frame

This system positions all insulation outside the steel frame, creating a continuous thermal envelope. By minimising thermal bridging, it ensures superior energy efficiency and a consistent interior climate.

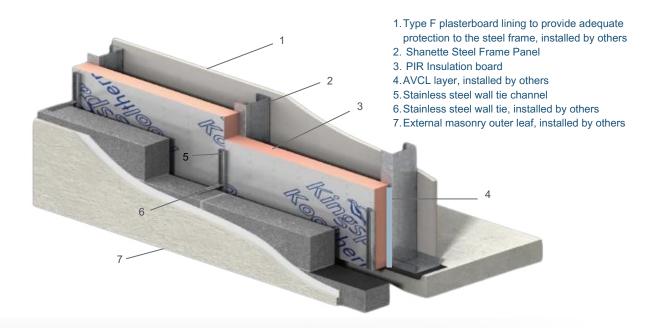
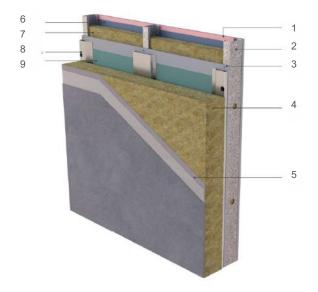


Figure 3. External Wall with PIR Insulation & Rendored Masonry Outer Leaf – Warm Frame

### 4. External Wall with NSAI Agrément Certified External Wall Insulation Façade System - Hybrid Frame

This advanced system uses an NSAI Agrément-certified external wall insulation façade, such as the Kilsaran External Wall Insulation (KEWI) system. It layers insulation externally and within the steel frame, delivering exceptional thermal efficiency and compliance with stringent building standards.



- 1. Type F plasterboard lining to provide adequate protection to the steel frame, installed by others
- 2. Shanette Steel Frame Panel
- 3. Exterior Board as per NSAI Agrement Certified External wall insulation system specification
- 4. Exterior Mineral Wool insulation as per NSAI Agrement Certified External wall insulation system specification
- 5. External render as per NSAI Agrement Certified External wall insulation system specification
- 6. AVCL layer, installed by others
- 7. Mineral wool insulation fitted between studs by others.
- 8. Render systems vertical rails as per NSAI Agrement Certified External wall insulation system specification
- 9. Breather membrane as per NSAI Agrement Certified External wall insulation system specification.

Figure 4. External Wall with NSAI Agrément Certified External Wall Insulation Façade System - Hybrid Frame

### **MASONRY WALL FOUNDATION DETAIL**

- 1. External masonry outer leaf, installed by others
- 2. Stainless steel wall tie channel
- 3. External insulation board
- 4. Shanette Steel Frame Panel
- 5. DPC layer
- 6. Radon barrier, installed by others
- 7. Thermal block, installed by others
- 8. Mineral wool insulation fitted between studs, installed by others
- 9. AVCL layer, installed by others
- 10. Type F plasterboard lining to provide adequate protection to the steel frame, installed by others
- 11. Ground floor concrete slab, installed by others
- 12. Ground floor insulation, installed by others

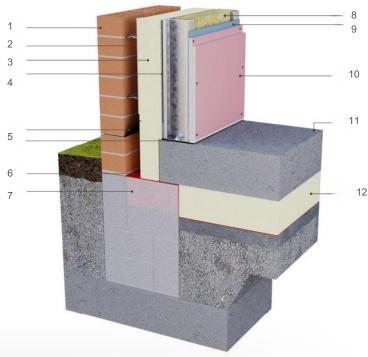


Figure 5. Masonry wall foundation detail

# **FINISHING OPTIONS**

While masonry-based wall build-ups remain the most popular choice, we also provide additional options to achieve distinctive aesthetics and improved functionality. These include seamless cladding for a sleek, contemporary finish; external insulation systems with acrylic render finishes that enhance both thermal performance and design flexibility; Fortex PVC foam board; and burnt larch for a unique, rustic charm. With this extensive range of finishing options, your steel frame home can be tailored to your vision, delivering bespoke architectural appeal that truly stands out.













### STEEL FRAME BENEFITS

#### WHY STEEL FRAME?

- Planning & Design Flexibility
- · Fast Production Time
- Structural Integrity
- Reduced Labour Costs
- Off-Site Manufacturing

Steel Frames offer significant advantages over traditional construction methods:



Our experienced team guides you through the process, offering a wide range of design possibilities. We work with you to create a bespoke solution that meets your exact needs, providing 2D and 3D drawings to visualise the final product.

### 2 | Faster Production Time

Prefabrication and off-site construction at our Kilbeggan facility significantly reduce on-site construction time, allowing you to complete projects faster and meet deadlines with ease. This minimises disruption and accelerates your return on investment.

### 3 | Superior Structural Integrity

Steel frames provide exceptional strength, stability, and durability, ensuring your building withstands harsh conditions and meets stringent safety standards. Our modern manufacturing processes and CE-marked steel guarantee high-quality, long-lasting structures.



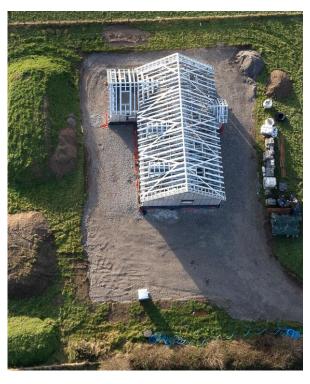


### 4 | Reduced Labour Costs

The precision engineering of our steel components enables efficient on-site assembly, minimising the need for extensive on-site labour and resulting in significant cost savings.

### 5 | Off-Site Manufacturing

Pre-assembled frames are manufactured off-site at our facility. Once on-site, the frames are simply bolted together. Pre-assembled frames can be collected on returnable stillages or delivered directly to the site by our fleet of trucks.



# **PORTFOLIO**

In the following pages, you can explore our projects, which range from house extensions (both outward and upward) to some of our most recent new builds. If you'd like to explore more, check out our website. If you have any questions at all, don't hesitate to contact us at our headquarters in Kilbeggan or Dublin 12.



### **DORMER - CLONASLEE**

This large dormer bungalow, built in Co. Laois with a floor area of 297m² (3,200ft²), was completed in just eight working days. The project featured CE-certified welded steelwork to support the first floor and roof structure. A custom Shanette-manufactured steel frame staircase further showcased the adaptability of our steel frame solutions for both structural integrity and design flexibility. The external walls were built using System 1 of our wall build-up options: an external wall with PIR insulation and a masonry outer leaf – Hybrid Frame.









### **BUNGALOW - KILBEGGAN**

This  $19.2 \text{m} \times 10.7 \text{m}$  steel-frame house, with a floor area of  $205 \text{m}^2$  (2,206ft²), was built in Westmeath using System 4 of our wall build-up options. The external walls were finished with an NSAI Agrément Certified External Wall Insulation System – Hybrid Frame.

Manufactured at our Kilbeggan headquarters, the prefabricated components ensured efficient on-site assembly while maintaining exceptional quality. This project highlights the durability and energy efficiency of our steel frame systems, meeting the highest standards of modern construction.











### **RAISING THE ROOF IN MEATH!**

This project was completed in two phases. Phase one involved a 21m x 5m ground-floor extension to the original bungalow. The exterior featured a combination of standing seam façade and Kilsaran KEWI render. Internally, walls divided the space into a large dining room, kitchen, utility, and sitting room, with outdoor space designed for summer use.

In phase two, the old bungalow roof was removed by the building contractor, and a pre-cast hollow core slab was installed to support a 15m x 8m steel-framed first-storey extension. This extension included three bedrooms, an en-suite, a bathroom, and a storeroom. The complex steel roof design incorporated trusses, three dormer windows, and a rear flat roof. Additional features included a vaulted ceiling with roof lights over the stairway.

The external walls combined masonry with PIR insulation and the Kilsaran render system. Thanks to prefabrication at our Kilbeggan headquarters, on-site construction was completed in just four days.















### **HIPPED ROOF BUNGALOW - GALWAY**

This hipped-roof bungalow, with a floor area of 215m² (2,314ft²), was constructed in just four days. Pre-insulated, off-site manufactured exterior wall panels with an A2 energy rating ensured exceptional energy efficiency. The interior walls were bolted into place, ready for plasterboard installation.

This project employed System 1 of our wall build-up options: an external wall with PIR insulation and a masonry outer leaf – Hybrid Frame. Manufactured to CE EN1090 standards, our panels delivered top-quality results. The efficiency of off-site prefabrication enabled swift completion, allowing the site to be handed over to the builder for final finishes.













# HOUSE EXTENSION WITH LINK CORRIDOR - ATHLONE

This stunning house extension in the Midlands featured a 13.5m x 6m steel-framed structure with a mezzanine office area over the utility room and a custom link corridor to the main house. Vaulted ceilings in the kitchen and dining area enhanced the sense of space.

Installed on-site in just two days, the exterior walls were insulated and finished by the builder with Burnt Larch charred timber cladding. The design combined functionality with aesthetic appeal, creating a modern and elegant addition to the home.















### **STANDING SEAM EXTENSION**

This contemporary 5.8m x 4.9m kitchen extension was completed using Shanette's steel frame system.

The exterior was finished with modern standing seam cladding, creating a timeless look.

The interior featured a vaulted ceiling, adding to the spaciousness of the kitchen and dining area.

Prefabricated off-site in sections, the extension was constructed quickly with minimal disruption to the family, delivering a fast and efficient project.







### **HOUSE EXTENSION KILBEGGAN**

This 5.8m x 4.9m kitchen extension was completed using Shanette's modern Standing Seam Extension system. Prefabricated off-site, the extension was weathered into place with minimal disruption to the family, ensuring a fast and efficient installation.













# OUR CERTIFICATION AND COMMITMENT TO EXCELLENCE

Shanette are the original, Off-Site, Sectional Built, Steel Buildings manufacturer in Ireland. Established in 1983, we are the largest & longest established CE certified manufacturer of Sectional (Panel form) LGS frames for steel buildings in Ireland. We provide a professional service with a proven, reliable track record.

Our certification and commitment to excellence are the pillars that support our vision for innovative and quality-driven steel building solutions. We proudly hold two essential certifications.

Figure 1: I.S. EN 1090 - 1:2009 + A1:2011 (EXC 2) Certification:



Figure 2: I.S. EN ISO 9001:2015 Certification:



Figure 3. Declaration of Conformity



1. I.S. EN 1090 - 1:2009 + A1:2011 (EXC 2) Certification:

This certification ensures that our steel buildings meet the highest safety and quality standards established by European regulations. In simple terms, it means our structures are built to last, ensuring your peace of mind.

### 2. I.S. EN ISO 9001:2015 Certification:

ISO standards are internationally recognised as a mark of quality management. To achieve ISO 9001 certification, a company must undergo a thorough evaluation by an accredited certification body. At Shanette, it signifies our unwavering commitment to continuous improvement in our design, manufacturing, and supply processes, as we constantly strive for excellence.

## THESE CERTIFICATIONS MATTER TO YOU?

Our commitment to quality is evident in our CE-marked and certified materials. Every stage of design, manufacturing, and supply is expertly managed by our skilled team.

We use an integrated system that prioritises quality, environmental sustainability, and health and safety across all projects. Our structural-grade steels meet EN standards, offering exceptional strength to withstand heavy snow loads and deliver superior wind resistance.

### **All Ancillary Certs provided by Shanette**



(Ancillary Design Certificate) Ancillary Certificate of Compliance: Design Commencement Notice | 7 Day Notice





Ancillary Certificate of Compliance on Completion (Ancillary Completion Certificate) Design of the works





**Ancillary Certificate of Compliance on Completion** (Ancillary Completion Certificate) Inspection Plan





Ancillary Certificate of Compliance on Completion

Certificate signed by sub-contractor | Specialist Contractor | Specialist
assigned by the builder | Main contractor on completion





Ancillary Certificate of Compliance: Design

Commencement Notice | 7 Day Notice To be completed by a specialist or unregistered consultant





Ancillary Certificate of Compliance: Design

(Completion)

To be completed by a specialist or unregistered consultant





Ancillary Certificate of Compliance on Completion

(Ancillary Completion Certificate - Inspection)
To be completed by a specialist or unregistered consultant



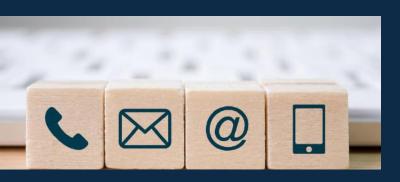












### Ready to build? Get in touch!

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