

# VALE GARDEN HOUSES MANUFACTURE AND APPLICATION STATEMENT

FOR THE BESPOKE ADDITION TO:

9, PILGRIMS LANE  
LONDON  
NW3 1SJ

MAY 2021



VALE  
GARDEN  
HOUSES

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## **Vale Garden Houses– Enhancement through application of design.**

When considered a heritage asset and an application to alter its visuals, we believe it is not only important to review the visual alterations to the site but also consider the approach, application and experience of the specific manufacturer that has been entrusted with undertaking the work. In this particular instance it is the client's wishes to utilise Vale Garden House's expertise within the field of sensitive development and restoration of heritage buildings. The purpose of this statement is to provide the reader with an insight into our general practice, manufacturing processes and our application of materials.

Vale Garden Houses is a family business founded nearly 40 years ago and has steadily grown, developing and refining its designs and ideas to be one of the most respected and established conservatory companies in the U.K., renowned within the industry for the work we do on heritage properties. We have also worked closely with the National Trust on numerous occasions, even forming a commemorative range of conservatories based on prestigious British property's such as Belton House and Hardwick Hall. The Morton family, that both run and founded the business, are still fully committed and work daily in the design and manufacture of our bespoke conservatories and orangeries. Something that has not only promoted fantastic work ethic within the business but also an uncompromising approach to each and every one of our projects. We now employ around 200 staff and openly encourage a teamwork approach throughout the business. The family are committed to being involved at every level, keeping a close eye on the designs, service and quality control of every product and department.

Each and every member of our experienced staff, play their own part in the design and build of our structures, involving over 70 people in each specific phase. We undertake a huge variety of work, not only in the UK but also across Europe, something that has only further assisted the development of Vale Garden House's obsession in creating architecturally correct and beautiful additions across both domestic and commercial buildings.

Vale Garden Houses is based in Lincolnshire – the heart of England, which provides good access to all parts of the UK. We are approximately an hour by train from Kings Cross London and are within easy distance from East Midlands, Doncaster and Birmingham airports. Our locality is seen as another key aspect of our success. We own four design and manufacturing sites in Grantham, each housing different divisions of Vale. The main site is our purpose-built factory, totalling approximately 90,000 square feet and is dedicated to production of conservatories and orangeries. Having our offices, showrooms and manufacturing facility all under one roof ensures an excellent co-ordinated and quality-controlled project. Three other sites bring our total manufacturing space to 150,000 square feet.

We firmly believe the essence to controlling quality is to carry out most manufacturing operations in-house. Our joinery department occupies a large part of our factory in conjunction with our glass, metalwork and painting department. In addition, all powder-coating, 'Protim' treating and pattern-making is undertaken in-house. I aim to expand on these elements over the following pages.

## **Vale Garden Houses – Site and Processes of Manufacture**

Vale Garden Houses has been able to establish itself as a forward thinking and specialist business, through its relentless desire to carry as much responsibility for the formation of each and every one of our structures that we can. This has been achieved by careful and measured re-investments into the business to expand our capabilities throughout the entirety of the processes that we undertake. The core of this process revolves around our offices, showrooms and workshops that are based in Grantham.



*Vale Garden Houses- Head offices and core manufacturing location*

Our current site, which features purposely built offices and workshop buildings, has expanded and grown since our ownership of the plot at the start of the millennium. Due to Vale's growth and desire for expansion of our practice, this site was identified as being sufficient to allow the business to develop and expand the quality of its heritage work. We freely welcome clients to visit and observe our site in person to truly understand the processes and dedicated methods that we undertake.

Vale's core site features a truly unique approach that is right at the heart of each and every one of our projects. This involves the complete erection of each and every one of our buildings in house, allowing for extensive manufacturing to occur on-site, resulting in vastly reduced time spent on installation, in turn reducing the risk of damage to the various heritage assets that we come into contact with on a regular basis. Furthermore, this also promotes a flawless execution of work and unparalleled levels of attention to detail.





*Vale Garden House's pre assembly hall.*

As the above image confirms, you can see the extensive area available within our main workshop hall to pre-erect all of our various projects. There is always an ever changing and evolving spectrum of work featured in this area and is fantastic example of Vale's uncompromising efforts to build constructions that deliver the level of quality that client's desire and their properties deserve.

Prior to arriving at this latter stage of manufacturing there are numerous areas of consideration and manufacturing that occur. The process commences post planning approval with an additional technical survey by one of our in-house technical surveyors to highlight areas of consideration and care required for the individual site. This same surveyor will also be responsible for forming a wide array of technical drawings not only for our own manufacturing specialists but also the project builder's undertaking the equally sensitive work in site. Once this work has been completed and all conditions set out by the conditions have been suitably addressed, we can proceed to start the expansive process of manufacture.

This begins with the cutting and preparation of the raw timbers. Our first preference for the manufacture of painted frames, windows and doors is vertical grain - Douglas Fir. This is one of the strongest and most durable timbers available. Vertical grain Douglas Fir carries a higher level of investment than many hardwoods. However, its superiority is worth the additional investment. Douglas Fir is extremely stable, it seasons well, dries evenly and remains straight and true with negligible checking or distortion. It also has the characteristic of having excellent longevity, even in its natural state.

At Vale we also subject our cut timbers to pressure treatment which impregnates the timber with an organic solvent and gives additional protection against rot and fungal attack. This is an essential process which ensures longevity of your timber. This is carried out in-house under strict quality control procedures.

In addition, we stock many different timbers, firmly believing that the correct timber for a particular application should be the first consideration, and therefore alternative timbers will be incorporated within certain aspects of the structure where needed.

All joinery is constructed in the traditional proven way with mortice & tenon joints. The characteristics of these traditional joints are strength, flexibility, and appearance. In the areas where your design incorporates a glazed window panel, we utilise a traditional true-divided light construction, achieved with a 26mm glazing style housing individual double glazed units. We balance our joinery work between traditional hand-crafted methods and modern, energy efficient technology. Furthermore, Vale remains committed to an environmentally responsible policy with the sourcing of its construction's timbers.



*Vale Garden House's extensive timber mill.*





*One of our traditionally skilled bench joiner's forming a window casement*

Whilst we are undertaking the required joinery work, that makes up a large portion of the manufacturing process, we also have a fully dedicated metal workshop that is responsible for the fabrication of all of our glazed roofs and the corresponding roof chassis frames and gutters. Whilst this work carries a sizeable overhead and a very different set of skills, we view it as being a crucial aspect of work to undertake ourselves. We have expanded this practice over the years to include more and more of the specialist work, so much so that we even now possess two carefully regulated acid baths used for the treatment of aluminium ahead of powder-coating, which again is performed by our own in-house specialists.

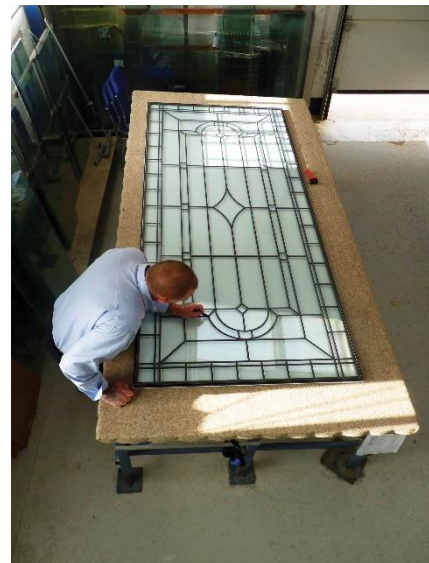


The link roof in this particular project, will be constructed utilising Vale's unique roof system which has been recognised within the industry for its technologically advanced and brilliantly engineered fabrication. It will combine the virtues of both timber and aluminium, creating a roof of enormous strength. The system has been specifically developed for its compatibility with and the restoration of listed and period properties and recreates the slender appearance of the single glazed period conservatories without compromising the thermal efficiency of the design.



*An example of one of our bespoke aluminium roofs, constructed fully in house.*

In addition to our metal and timber manufacturing processes we have also heavily invested in other areas of the process of constructing these bespoke additions. One of these areas is the fabrication of our own double-glazed units, a vital consideration if you want to produce reliable and delicately proportioned window casements. We have a dedicated team working under highly controlled conditions to cut, position and fabricate the various casements required in our installations. This has long been appreciated by the business as an integral part of the process to achieving the highest level of quality in our installations.



*Our in-house glass shop for highly bespoke applications*



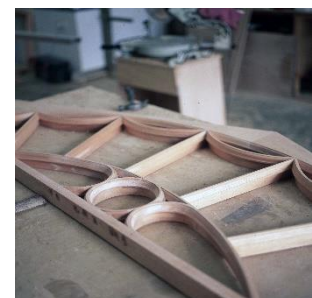
On a final note, it is also worth highlighting the various skilled lead workers that we utilise for all of our work on site. We place great importance on sealing our installations and correctly securing it to the host building, as it carries great consequences if not done properly not only from the point of view of water ingress but by also visually damaging the installations quality and potentially harming the heritage asset. We therefore like to take full responsibility for this process.



All lead work is prepared for the dressing of your conservatory roof using traditional and time-served methods of working. Most of the lead for the ridge, hips and valleys is prepared here in our workshops and brought to site towards the end phase of the installation.

Copings and construction of fully mop and roll leaded roofs is carried out solely on site, as is any lead welding that may be required on a project. We will apply various types of flashings at the house abutment depending on the fabric of the adjoining building and we are used to working with many types of stone, brick, timber and render whether in the UK or abroad.

In summary, I hope we have sufficiently demonstrated not only our passion for constructing beautiful and architecturally considered additions, but also our place in the industry as being diligent and dedicated servants to the preservation and protection of heritage buildings through our careful and considered application of design. If any further insights or information is required then please make direct contact with Vale Garden Houses as we are always more than happy to discuss our work and work alongside individuals and councils that are passionate about heritage preservation and enhancement.



## **Details of External Materials**

### **ROOF STRUCTURE**

The main hipped rooflight element of the roof structure will be constructed from lead. The roof will be designed and manufactured using a cold roof construction method. Timber rafters, with insulation cut between, allows a 50mm ventilated air space above the insulation. Timber rafters support insulation board and 18mm plywood decking which is then covered with a Code 5 mop roll lead finish to form an insulated and vented cold roof construction.

The garden room also incorporates a lean-to glazed link, this is constructed using Vale's unique roof system. The glazed roof aspect incorporates high performance double glazing supported by fine glazing rafters. The glass rests on structural aluminium glazing rafters and immensely strong integral frame. Externally, an aluminium glaze cap with attractive mouldings, secures the glass in position. This cap is powder-coated ensuring the longevity and low maintenance of the roof.

The roof glass is 6mm float, 16mm Argon filled cavity and a 6.4mm laminate. Furthermore, there is a tinted, low emissivity internal coating applied to the roof glass. This configuration offers superb thermal efficiency and the laminated glass will remain intact in the unlikely event of damage from falling tiles etc. Therefore, eliminating the need for immediate replacement when compared with a toughened glass equivalent. The laminate layer also provides a high level of UV protection.

The garden room is designed to incorporate a traditional classical eaves detail with a typical ogee style gutter. Rainwater will expel into aluminium downpipes.

### **SIDE STRUCTURE**

Main frames, doors and windows are manufactured in a combination of painted Grade 1 Douglas Fir, Sapele and other timbers where appropriate all on hardwood cills. Side frames, doors and panels receive Protim pressure treatment, where appropriate, for long life and protection against rot and fungal attack. All timberwork is traditional mortice and tenon jointed and enhanced with decorative moulded edges and profiles.

The orangery incorporates one set of double doors and a single side access door. All door thresholds are fitted with a unique Architectural Bronze water-bar sitting on a large hardwood sill, stained in Walnut. The timber extension will sit upon a rendered base to match the existing property.

Side units are double glazed with an inner leaf of 4mm soft coat Low E glass, with an Argon filled cavity of 12mm, and an outer leaf of 4mm. All side glazing is a combination of standard float, with toughened units where required by Building Regulations.

The high walled area of the proposed orangery would be utilised as a 'living wall' to provide public benefit. It is also proposed that a water conservation system is installed (in this same area) to collect and re-use surface rainwater, drained from the proposal's gutter system.

It is proposed that an external extractor fan, for the kitchen, will be positioned within the high wall, the high of this external extractor is to be located below that of the boundary wall shared with No.7.