

Client: **Dover Trussed Roof Company**  
Contractor: **Calldene Structural Timber Solutions**  
Solutions: **Design, supply and installation**



## Calldene overcomes weather and site challenges to deliver complex roof expansion

Calldene Structural Timber Solutions has completed a complex roof expansion at its Dover Trussed Roof Company site in Canterbury, safely delivering the work through difficult winter weather while maintaining programme, budget and quality.

The project involved replacing the roof structure of an existing fabrication shed to create a more practical, weatherproof and usable space for truss assembly. Working around an older building, challenging site conditions and constant wet weather, the team carefully adapted the design and installation approach to keep the project moving safely and efficiently.

### The project

Dover Trussed Roof Company is one of two operational sites within Calldene Structural Timber Solutions, alongside Triad Timber Components in Lancing – supporting housebuilders, contractors and developers across the South East.

At the Canterbury site, Calldene identified a need to improve one of its existing fabrication sheds by replacing the old roof structure, increasing the building's roof height and creating a more suitable environment for manufacturing larger trusses as demand increases.

Rather than installing a standard metal shed roof, the team designed a timber roof structure that reflected Calldene's own expertise as a timber truss manufacturer.

Stephen Fuller, one of Calldene's lead designers, supported the project:

"We designed the roof structure to replace the old roof on one of the existing fabrication sheds at Dover Truss. As a trussed-rafter fabrication company, we didn't want to use a standard metal shed roof. We also wanted to raise the roof height and increase the height of the roller shutter door."

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## The challenge

The project presented several practical and technical challenges from the outset.

With demand growing across both Dover Trussed Roof Company and its sister site, Triad Timber Components in Lancing, the business needed to increase production capacity without compromising on quality or turnaround times.

The existing fabrication shed was large, old and not perfectly square, which meant the new roof structure could not be approached as a straightforward replacement. The team worked carefully with the existing building, making sure the design could be installed accurately while still achieving the required height.

One of the most important elements was the roller shutter door. To make the space work effectively, the door needed a 4.8m clear opening, with the motor and mechanism positioned within the trusses. This required careful planning to ensure the roof structure, door mechanism and internal clearances all worked together.

"The roller door was critical. Without the correct clearances, it simply wouldn't operate," explains Stephen.

"Because the motor and mechanism were positioned within the trusses to maximise the 4.8m clear opening, it required careful consideration."


The size of the roof also created additional design complexity. The girders were particularly large due to the span involved and had to be independently verified by MiTek before installation could progress.

The works also took place during a period of heavy rainfall, with flooding affecting parts of the surrounding area. Located in a rural part of Canterbury, where access relies on many country lanes, the site required careful planning around deliveries, movement of materials and safe working conditions.

On site, the installation was made even more challenging by poor winter weather. For much of the project, the team was working in wet and rainy conditions, creating additional risks when handling materials and working at height.

Jamie Howard, Foreman Carpenter, recalls how challenging it was:

"90% of the time it was wet and raining. Being extra vigilant when working at height in the poor weather conditions was critical."



## The solution

Calldene combined in-house design knowledge with practical site experience to keep the project progressing safely, despite poor weather conditions.

The design team produced fabrication drawings that gave the installation team the detail needed to re-roof the shed accurately. Stephen remained available throughout the works for support from a design perspective, but the installation team's understanding of the drawings meant the project could continue without unnecessary delays.

As work progressed, the team also had to adapt the design on site. Around halfway through the installation, a small workshop next to the main shed was incorporated into the roof design. Rafters were extended over the lower roof, creating a cleaner and more effective solution.

This adjustment gave the smaller shed a higher new roof, removed the need for multiple guttering systems and reduced the risk of water overflowing from one gutter onto the lower-level roof. It also improved the overall appearance of the building.

"We added rafters that extended over the lower roof," continues Stephen. "This gave the small shed a higher, new roof, eliminating the need for two sets of guttering and prevented the risk of water overflowing one gutter and cascading onto the old low-level roof."

The condition of the existing building also required the team to think carefully during installation. Given the building was not perfectly straight, the wall plate had to be adapted to keep it level and in line.

Throughout the project, safety remained central to the approach. The wet weather meant the team had to be extra vigilant when working at height, with additional care taken around access, footing, handling and order of work. By maintaining close communication between design and installation, the team was able to protect both safety and quality while keeping the programme and budget on track.



## The result

The completed roof expansion has transformed the fabrication shed into a more usable, weatherproof and efficient working space.

The new structure provides increased height, improved access and a better environment for fabricating larger trusses. It also protects both the workforce and key equipment from the elements, helping the site operate more effectively day to day.

“It provides a non-leaking, more aesthetically pleasing space where we can fabricate larger trusses than before. It also protects the new truss press and most importantly, the workforce from the elements,” concludes Jamie.

For Calldene, the project demonstrates the value of combining technical design knowledge with practical installation experience. Despite poor weather, an older building structure and changes required during the works, the team delivered a safe, high-quality roof expansion that remained on programme and on budget.

The finished building now gives Dover Trussed Roof Company a stronger, more reliable production space, supporting the wider Calldene Structural Timber Solutions offer across both its Canterbury and Lancing sites.

**“This project is a great example of what our team does best: combining technical design knowledge with practical site experience to solve a complex challenge. Despite difficult weather and the challenges presented by an older building, the team delivered a high-quality improvement that will support our production capacity and daily efficiency at Dover Trussed Roof Company as demand grows.”**

Les Fuller, Managing Director, Calldene Structural Timber Solutions



0207 046 0971 | [enquiries@calldene.co.uk](mailto:enquiries@calldene.co.uk) | [calldene.co.uk](http://calldene.co.uk)

Building 1063 Cornforth Drive, Kent Science Park, Sittingbourne, Kent, United Kingdom, ME9 8PX