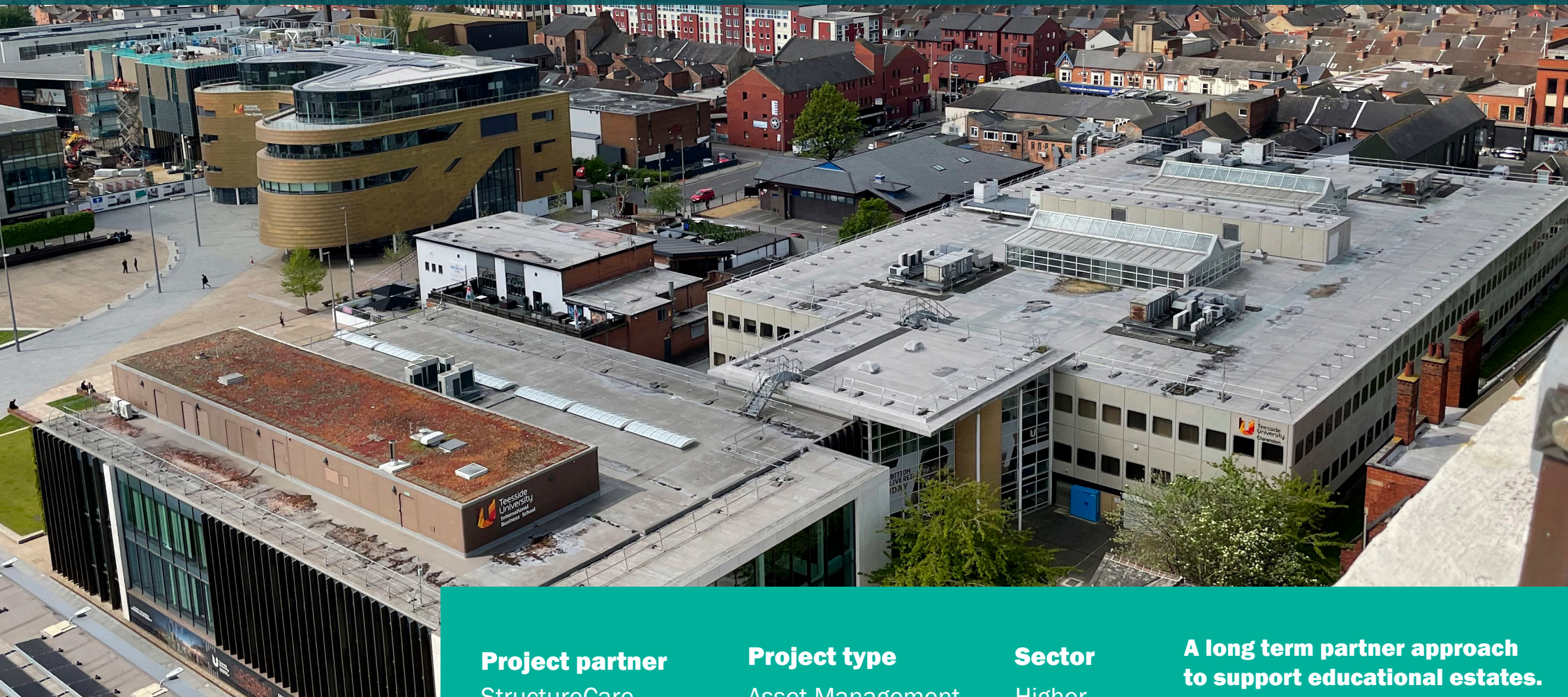


Case Study

University Estate



Project partner
StructureCare

Project type
Asset Management

Sector
Higher
Education

**A long term partner approach
to support educational estates.**



Managing your largest assets. Roofs.

Those managing multiple buildings, whether its one large estate or across a town or region, face countless challenges, especially when issues arise. Roofs in particular are one of the largest assets, and unfortunately when they fail, are one of the most expensive to repair.

When it comes to multiple building estates, such as universities, we take a long-term partnership approach to support with roof asset management. Initially our service includes a free roof survey across every flat roof. If issues arise, we recommend our roof diagnostics service to determine the exact location and severity of water ingress. We grade each roof area and refurbish the critical first within a tailored project plan. Once all roofs are brought up to sound condition we can asset manage your stock for years to come through Planned Preventative Maintenance (PPM).

First step | Roof condition survey

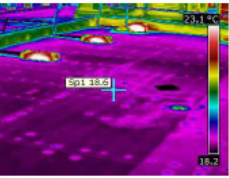
Understanding the condition of your roof(s) is vital, especially if you are experiencing leaks or there has been no known maintenance carried out. For free, Tremco can visually inspect each roof, alongside taking core samples to determine a) the roof system build-up and b) any water ingress. A free condition report is then created to detail areas of concern (if any). If areas have found to be wet, or there is any uncertainty, our recommendation is booking our unique Roof Diagnostics service.

At the university, Tremco carried out condition surveys on 10 roofs across the estate, some establishing water ingress. Roof diagnostics was recommended to determine exactly what is going on each roof.

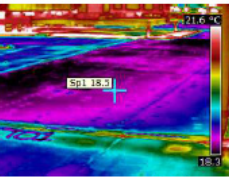
Second step | Roof Diagnostics

The aim with Roof Diagnostics is to catch problems early before they manifest into larger ones, we describe this approach as ‘the science of early detection’. A thermographic scan is taken to determine where moisture is present in the roof build-up and its severity, we recommend all building managers to undertake this service when the condition is unknown. This ensures the most informed data is gathered to create a cost-effective and less disruptive plan of remediation if/where required across the roof estate. The survey entails scanning every square metre of the roof to detect wet, wet areas outlined, and then a final verification is undertaken via core samples and Tramex equipment. Scaled roof drawings are created to show size and location of wet areas and thermographic images collated into a comprehensive report detailing recommended next steps.

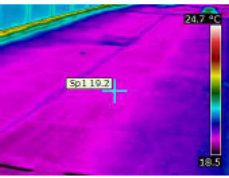
10 roof diagnostics surveys took place across each roof area, data collected and collated into a diagnostics report.



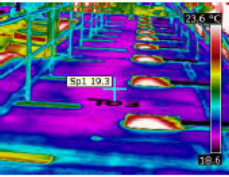
Thermogram T-21



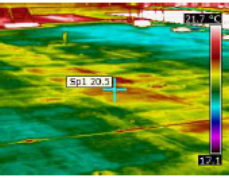
Thermogram T-01



Thermogram T-02



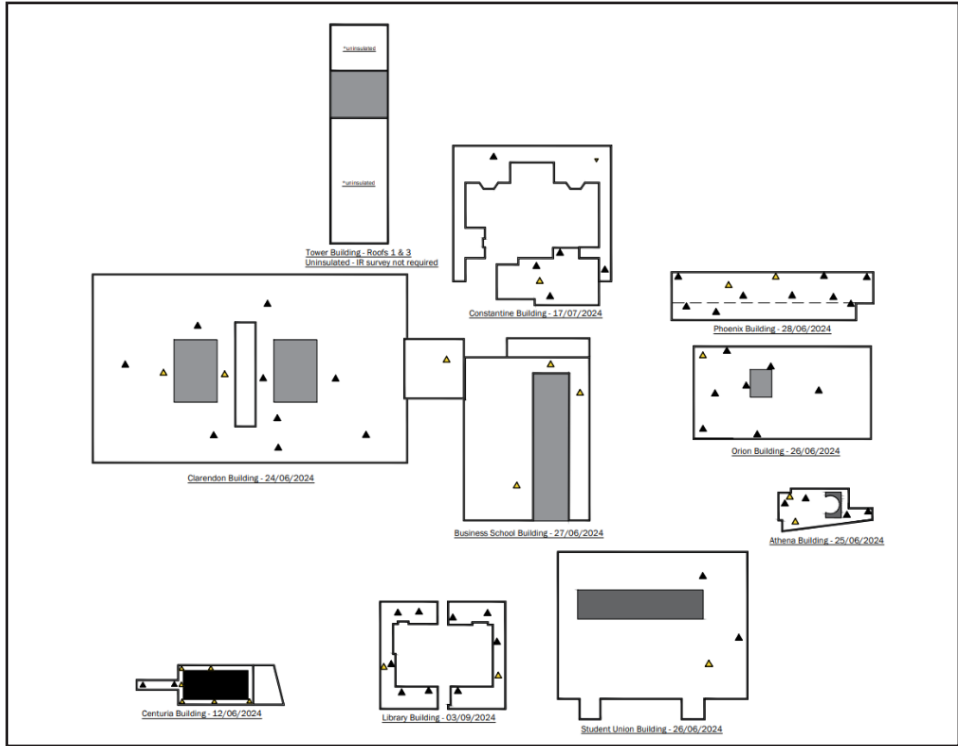
Thermogram T-03



Thermogram T-04

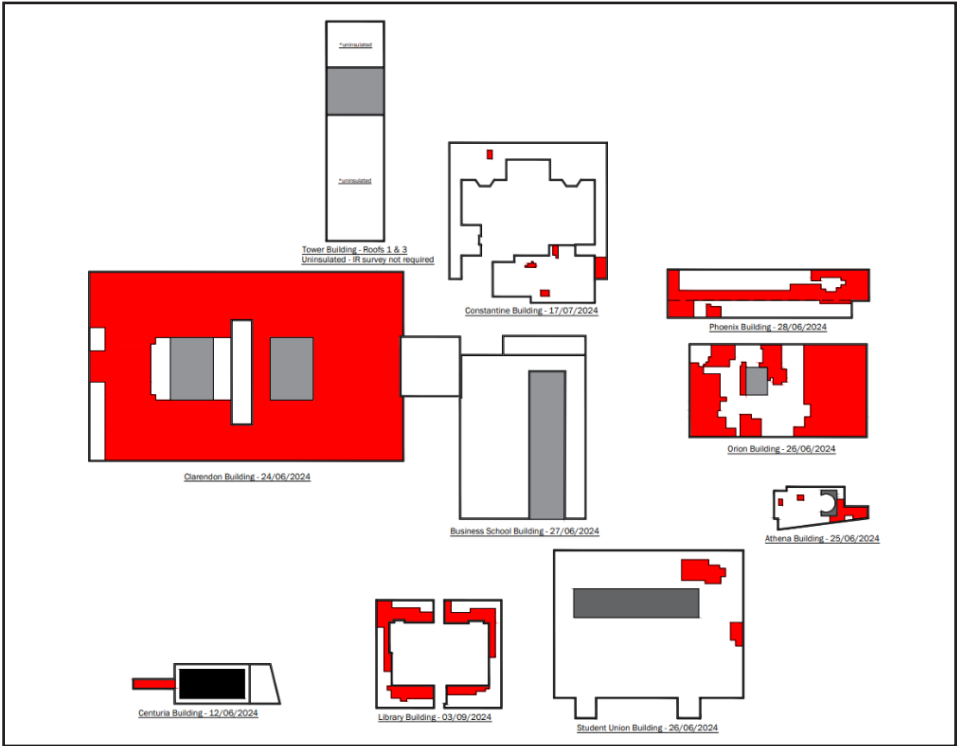


The Tremco difference



This image was created at condition report stage, determining the size/shape and core sample locations of the roofs at the university.

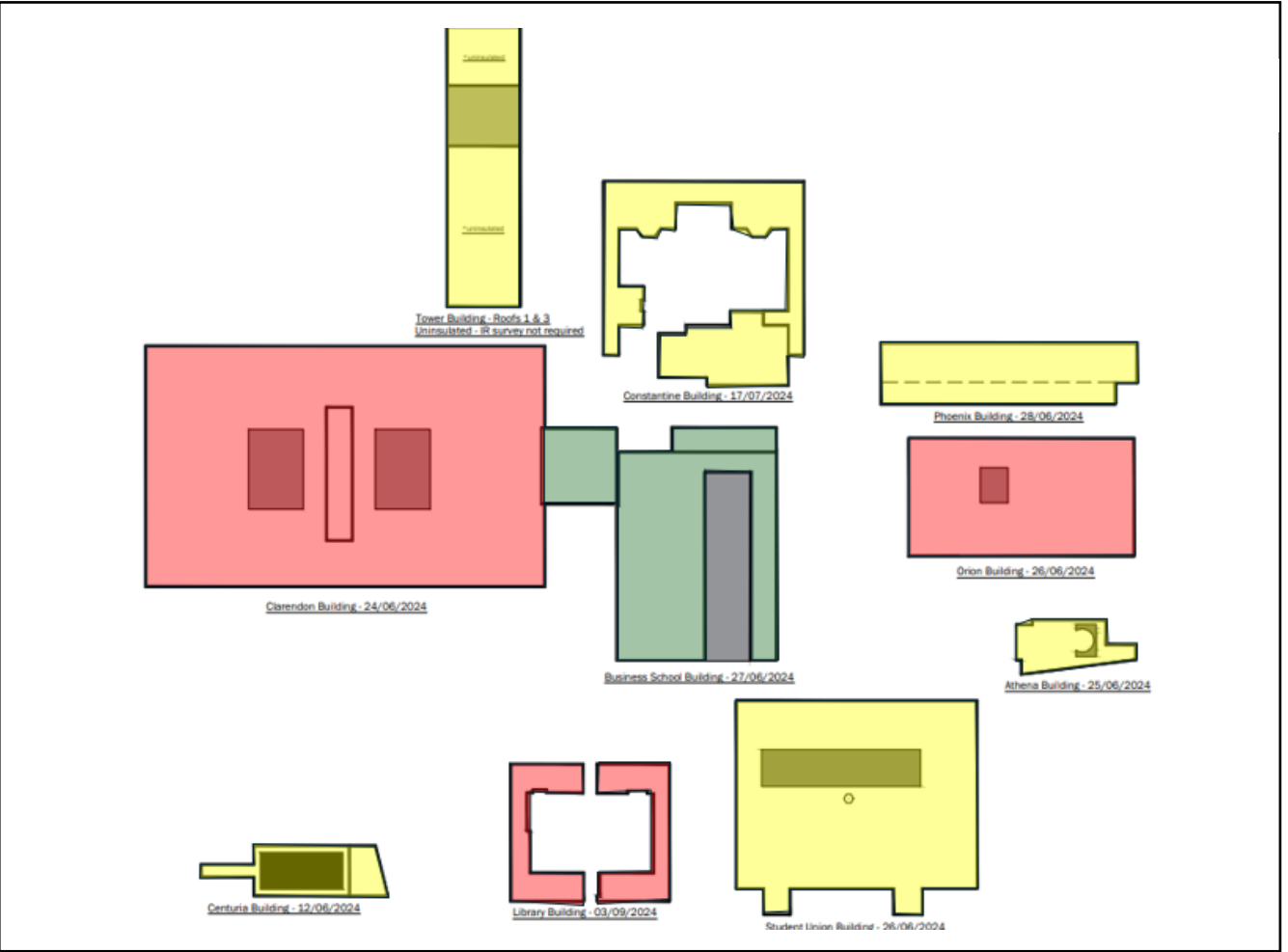
Roof suppliers/manufactures only typically take core samples, reliant on hitting where moisture is present. Data is left to assumption on where is wet, with occasions suggesting the roof to be completely replaced due to a number of wet cores. However, with more informed data a more cost-effective, less disruptive and less material to landfill solution can be achieved.



At roof diagnostics stage the outline is utilised to visually represent where moisture is present across the roof estate from the unique data collected from the thermographic survey. This data helps with understanding the critical roofs that require urgent remediation, compared to roofs that only need some repair.

The data confirmed that it encompassed roofs at varying conditions, two had no water ingress, a lesser percentage of moisture at 3.3% (low urgency and small repair) and with the highest (critical) at 80.4%.

Case Study | University Estate



This image demonstrates the roof grading approach after Roof Diagnostics at the university.

This data supports with both the bespoke project plan of remediation, and also asset management with Tremco's PPM programme. This grading will be updated to demonstrate when roofs change to green (functional) after being refurbished. Once green they can be maintained to ensure the longevity of the roof system to mitigate expensive repairs. This is an ideal approach for those that have capital funding, gaining sustainable long-term savings, opposed to reactive unforeseen costs.

Third step | Refurbishment

Following discussions about the recommendations and next steps, we then create a bespoke project specific specification.

When it comes to the refurbishment itself, the installation requires consideration of the existing roof, whether it's an overlay or a complete replacement. Roofing expertise is essential and that is why we vet and onboard a select few contractors in each region to install our systems, known as Tremco Trusted Partners. No one else can install a Tremco roof. This gives full peace of mind to our clients that the roof is installed correctly and in line with the specification.

Regular site visits from technical services are undertaken to ensure all works are being delivered in line with the specification. All information obtained during these visits is recorded and issued to the client as part of regular reporting. Once complete a warranty is issued.

We offer a single-point warranty, and also options for IBGs. Unlike some warranties that can include premiums driven by annual interest, our warranties are a single payment, that is factored into the project costs, ensuring your roof is covered as soon as the solution is installed. Another crucial benefit to our warranties is that it gives building owners ongoing protection regardless of the existence of the original contractor and whether the building changes ownership.

Refurbishment works at the university are to be carried out in stages to align with long-term budget plans and reduce disruption over a 5-10 year roof remediation plan.

Fourth step | PPM

Small roofing problems like leaks and debris can snowball into large, expensive issues. Fortunately, you can reduce the possibility of that happening with TremCare, and our tailored PPM packages. They help prevent premature deterioration and keeps your roofing assets in excellent.

We carry out 1-2 annual inspections, on inspection, we:

- Visual roof inspection and housekeeping including unblocking outlets.
- Preventative maintenance repairs on the roof membrane and laps, upstand details, metal and stone cappings, and outlets.
- Report will also detail cost-effective recommendations for reactive repairs, refurbishment and replacement within budget.

For roofs being refurbished at the university will either receive a QA warranty, Tremco's standard warranty, or a QA+ warranty that has an in-built PPM programme in place.

For roofs that require no works, the university has the option to add them to a PPM programme, where Tremco will monitor and manage their roof estate for years to come, avoiding costly and disruptive repairs.

360 service approach



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Managing multiple buildings across an estate cost-effectively, whilst minimising disruption is demanding.

Tremco's approach to asset management has allowed us to gain an in-depth understanding of our roof estate. Achieved through data gained by its unique thermographic scans. The data demonstrates exactly what is happening at roof level, and the recommended next steps, creating a comprehensive tool for our estates team to discuss with the wider university stakeholders. Catching the issues early on some of the roofs has avoided larger expensive repairs and university building closures down the line.

Tremco manage the full roof estate refurbishment too by supplying materials to StructureCare, a trusted roofing contractor partner, and issue a long-term warranty at the end of the project.

Not only this, they can support with proactive maintenance to avoid expensive refurbishment works in the future, giving us total peace of mind

- Facilities Manager



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