

Customer: Rock Roofing Ltd.

Site: Industrial Re-cover & Refurbishment - UK

Date: 2021



MAIN CONTRACTOR / Industrial

Space Solutions

ROOFING SYSTEM / Imper Sintoplan

PROJECT SIZE / 19,000m²

LOCATION / Liverpool

COMPLETED / 2021

The Challenge

Originally, this project was specified as a patch and repair project, which was simply not possible due to the age and design of the building. The roof itself was a North Light design stepped and arranged on several different levels, while the client's available budget was insufficient to cover the extent of the repair work needed.

-  Critical Project Factor: Cost and Quality.
-  Logistically Challenging
-  Unique Specification

What's more, a sporadic repair approach to this type of roof design and age would present both logistical and integrity issues. On a building of this size and with the roof arranged on so many different levels, it would be very difficult to identify the best start and end points for the repairs themselves. The sporadic nature of the repairs would also risk future leaks because of the likelihood that not all weak points may get found, while other unpatched areas of the roof would remain open to failure because of the existing roof system's age. With this method, we would inevitably be going back for years to come as more issues with the existing roof system continue to arise.

This project tested our ability to provide sound advice on high-quality, alternative approaches to a very tricky project, so we could deliver the best possible quality without compromising on cost.

The building itself was situated on a working industrial estate with a railway line running through it, which presented a further challenge to logistics. The railway line severely restricted hoisting access, making it difficult for our cranes to get near enough to lift the roofing materials to their designated areas.

In order to make this project a success, we needed to find and advise on a suitable alternative approach to ensure the very best possible quality of finish, while finding a cost-effective solution that would not break the client's budget.

The Approach

Swapping patch repairs for a better-quality alternative. Understandably, with budget constraints and a concern over quality, the client was hesitant to adopt an alternative approach to the originally specified patch repair plan. However, with our reassurances of a cost-effective solution that would result in better quality overall, we were able to advise against sporadic patch repairs.

After all, this was an ageing building that needed much more care and attention. So we proposed a full roof refurbishment using the Imper Sintoplan roofing system – an incredibly high-quality, BBA-certified system used widely across Europe. Rock Roofing is the only UK-based roofing company currently using the system, which allowed us to provide a highly cost-effective rate for the superior-quality roofing system this building needed.

So, rather than patching over existing issues bit by bit, we provided a better-quality membrane for the entire 19,000m² roof area, complete with a full guarantee and without exceeding the budget.

Segmenting materials to avoid logistical issues To avoid the logistical nightmare of having to add or remove missing or surplus materials during installation, we took a proactive approach. By organising deliveries, measuring out and labelling up specific quantities of roofing materials for each roof section, we could ensure that each area of the roof had exactly the materials it needed before work even began.

This meant that we could organise for a crane to be placed in an optimal position to lift all the materials to their designated roofing section in one go. This was an essential

requirement given that we were only able to place the crane in this location for a very short window of time, due to the restrictions imposed by the location of the railway line.

By eliminating the need for repeated crane access to an already restricted site, we ensured the remainder of the project could go ahead smoothly and on schedule.

Induction-welded discs to keep installation moving. As this project was carried out predominantly over the winter months, we also needed to use the best possible installation approach to ensure the weather did not hinder progress or compromise the finished quality.

With this in mind we proposed the use of induction-welded discs, which allowed us to lay the roofing membrane quickly and almost in its entirety, before fully fixing it to the discs below using induction welding. This resulted in a semi-watertight roof in less time than traditionally-installed roofing systems, ideal during the winter months with colder, wetter weather and shorter days.

The Results

With the budget restrictions, the tricky roof layout and the additional challenges posed by the winter months and COVID-19, it was a proud achievement to hand over the finished project both on time and to such a high standard.

Considering the very poor state of the original roof, avoiding the sporadic patch repair approach has meant that the building is now fully protected and refurbished, saving the client premature future ingress issues and the high associated repair costs this would incur.

