

2020

# Desborough Library Northamptonshire

LOCATION

Desborough, Northamptonshire

CLIENT

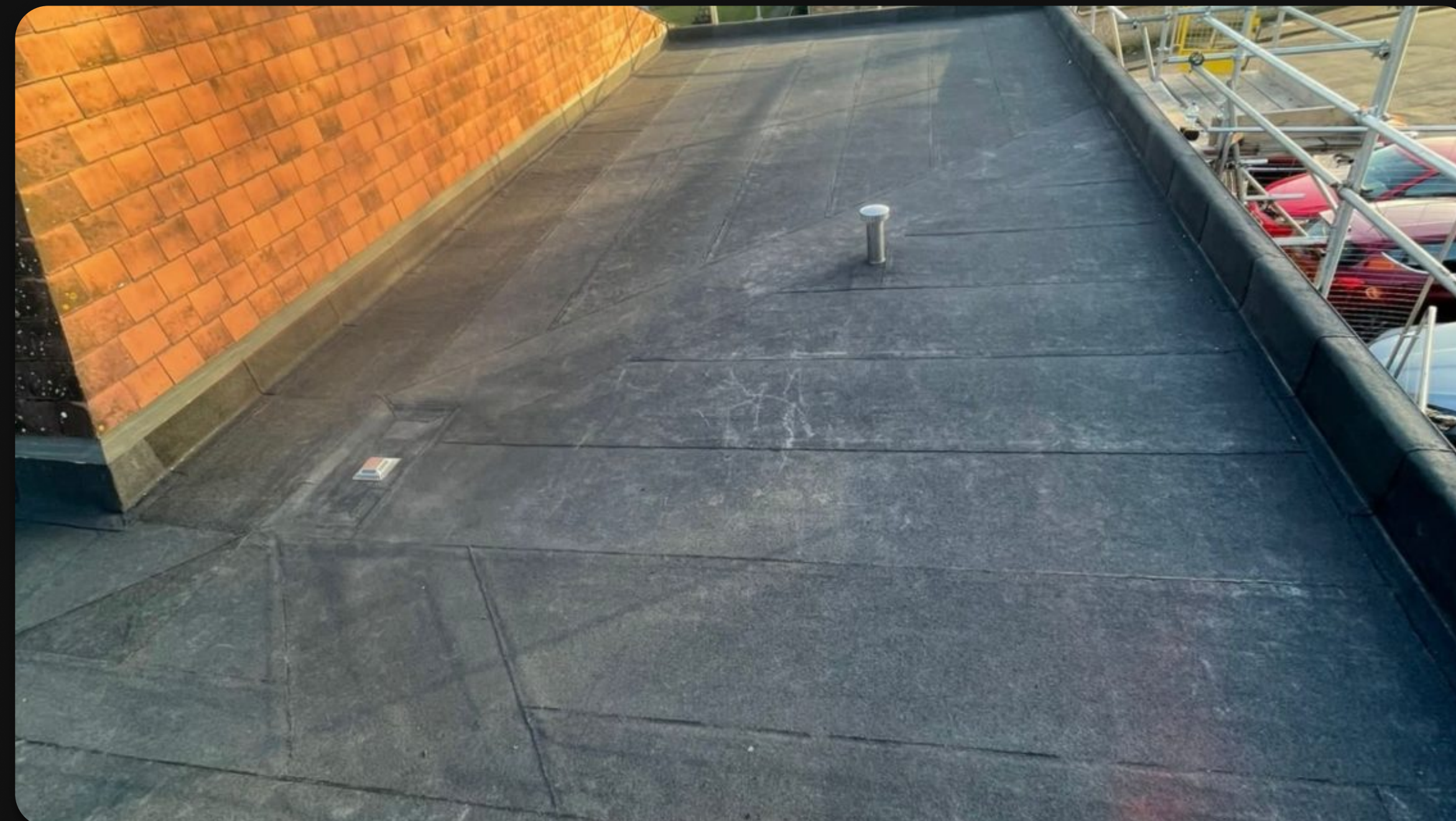
Desborough Library and Community Hub

SECTOR

Education

PROJECT TYPE

Refurbishment



Accredited Installer

Empire Roofing Systems Ltd

Roof Area

**250m<sup>2</sup>**

# Project Overview

Axter Ltd and Empire Roofing Systems Ltd were engaged by the library directly to upgrade the existing roof covering which was underperforming thermally and in terms of drainage falls.



Above Before works

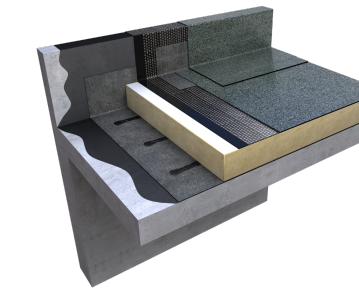
**Desborough Library and Community Hub took over responsibility for the running of the library service in Desborough in 2020. With that came the maintenance of the library building itself. Over time, certain parts of the building had deteriorated. There were leaks and sections of standing water across the 250 square metres plus of flat roofing that forms part of the roof structure.**

The client applied to The National Lottery Community Fund for a grant that would be used to refurbish the roof area. The Library and Community Hub were fortunate enough to obtain the necessary funding for the work to go ahead.

An overlay of the existing system was proposed to utilise the current build up, including a cut to falls insulation scheme to comply with Building Regulations Parts L & H, and BS 6229:2018. Safe2Torch principles were followed throughout with some creative detailing agreed between the contractor and manufacturer due to combustible elements and areas of asbestos.

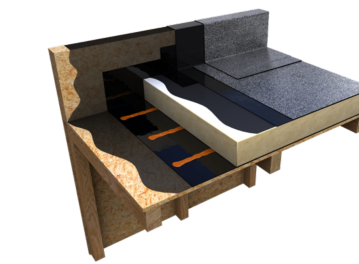
An excellent finish was achieved within budget and in a timescale of 3 weeks.

## AXTER systems used



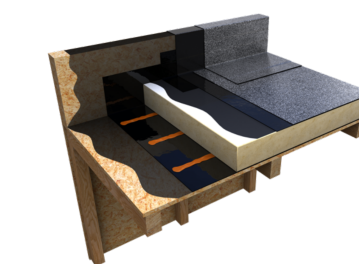
### Hyranger®

Cityflor warm roof living roof systems are robust SBS polymer modified bitumen membranes for use in extensive and intensive green, biodiverse brown and modular green roofs, as well as protected terrace, podium and balcony applications.



### Neo-Bitumen® Flame Free

A new bitumen material with unrivalled flame free installation performance. Neo-Bitumen waterproofing systems include built-up multi-layer warm roofs and multi and single layer inverted roofs. They can also be combined with living roof, blue roof and sustainable roof system finishes, and are all installed 100% flame free without the risk of hot works.



### Starcoat® PMMA

A flame free and rapid cure, two component polymethyl methacrylate (PMMA) resin waterproofing system that provides a fully adhered waterproofing layer.

## Challenges

Axter were brought in following initial core sampling that was completed by Empire Roofing Systems. The roof area was assessed, and a robust solution was proposed which would alleviate the standing water seen across the roof area, while also improving the thermal performance of the building up to a 0.18 U-Value to comply with Building Regulations: Part L.

The existing system was in fair condition but had reached the end of its guaranteed life with no leaks reported and core samples returning dry. There was a noted lack of maintenance across the roof area and significant challenges apparent in terms of detailing due to fire risks and asbestos present.



Above Before works

## Solutions

Based on the condition of the existing system we were confident that an overlay would be the most cost-effective option. Our Hyranger® multi-layer RBM system was installed using gas driven torches to fully bond the AVCL and capping sheet.

The underlayer was installed over a tissue faced PIR and therefore needed to be self-adhesive to reduce the risk of fire, complying with Safe2Torch guidelines. Our hot air applied Force® Neo Bitumen system was installed in the areas of fire risk, and our cold applied Starcoat® PMMA liquid system was installed in areas where a hot air application would be problematic.

A cut to falls scheme was designed based on our onsite survey, allowing water to flow freely to the outlets. This alleviated the risk of water buildup and thermal degradation caused by ponding water.

Axter's quality assurance team regularly attended site and were in constant communication with Empire Roofing's operatives. This was to ensure that the system was being installed correctly and to the expected standards, in order to achieve the Silvershield guarantee required by the client. To achieve the Silvershield guarantee level, all materials and workmanship had to be installed as per the Axter specification. The installation of the roof area was completed to exceptional standards, leaving the client very impressed with the workmanship.

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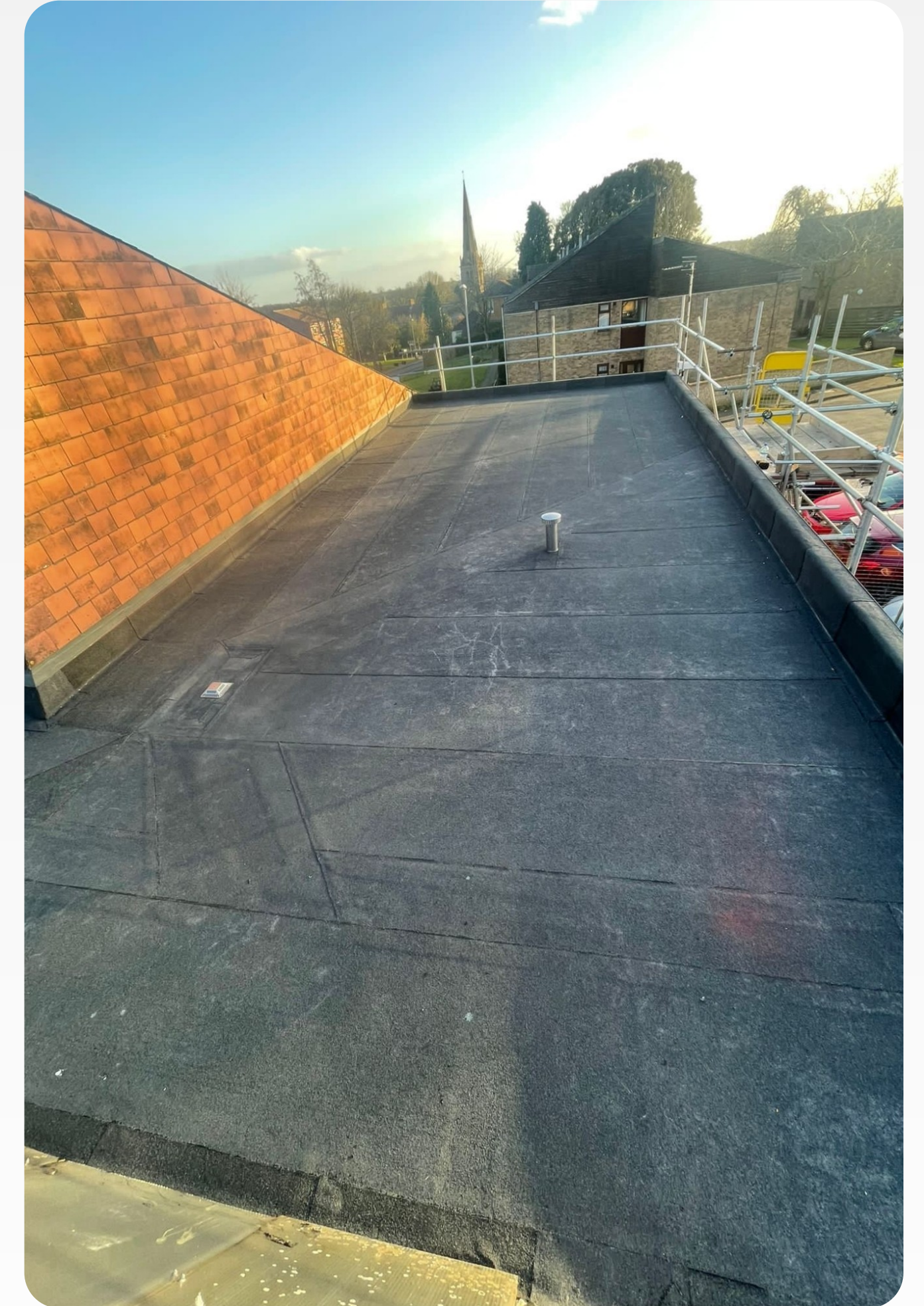
# System and Products

Axter's Hyranger® system was used across the main roof area. The system is fully BBA and Broof T4 compliant, and comes with a single point 20 year Axter Silvershield guarantee that covers materials and workmanship. This was signed off by our Quality Assurance Team who audited throughout installation.

Safe2Torch principals were adhered to throughout. Our Neo-Bitumen® Flame Free system was predominantly used on any areas of fire risk, as well as our Starcoat® PMMA for the tricky details where a comprehensive weld may not have been possible.



*Above After works*



*Above After works*

“ ”

We knew of Empire Roofing Systems from another good job they had completed for us on a separate part of the building, and asked them to quote for repair of the troublesome flat roofing. Empire and Axter came up with a plan to make the roof drain properly and we went ahead with their quote. The work went ahead on schedule and to plan without any disruption to the running of the Library and Community Hub and took around two weeks to complete.

The guys worked hard and were always helpful and polite when we asked any questions about the work in progress. We had an issue with a blocked internal drainpipe which was quickly and effectively dealt with by Jim and his team from Empire. We are delighted with the end results and have the assurance that the work has been inspected by technicians from Axter themselves and comes with their written guarantee.

GIL, DESBOROUGH LIBRARY

For more information, get  
in touch with **our experts:**

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