# CASE STUDY

Arnot St. Mary School Terracotta coping stone replacements with Leca® Uno

#### PROJECT OUTLINE

We were contacted by Liverpool Council / Kier to ask to tender for the Arnot St. Mary School Project, a listed building. Liverpool Council, are being advised by Kier throughout the project's duration.

For over three years, the classrooms at Arnot St. Mary School have suffered from leaks and internal plaster damage at the base of each apex. This initiative aims to prevent any further water intrusion and to repair all internal damage.

The project involves replacing the existing terracotta coping stones with Leca® Uno, a material known for being easier to move into position and fit compared to a heavier filling material

The project will be executed by a skilled team from Quadriga Ltd, in collaboration with Kirk Scaffold and Darwen Terracotta. This collaboration is crucial for ensuring that the work meets the high standards expected by the council while ensuring minimal disruption to the school's activities. By taking these measures, the project promises to enhance the structural integrity of the school buildings.

#### **PROJECT DETAILS**

Project Name: Arnot St. Mary School

resapol

Location:	Liverpool
Start Date:	21 <sup>st</sup> April 2025
End Date:	Est. 6 <sup>th</sup> June 2025
Customer:	Quadriga Ltd
	Liverpool Council
	Kier
Contractors:	Kirk Scaffold
	Darwen Terracotta

#### **Product Requirements**

- Lightweight
- Fill replacement sections of roof terracotta
- Easy to maneovre on site



#### THE SOLUTION

All the terracotta coping stones will be replaced, except for the top decorative fleur-de-lis, and a damp proof course (DPC) installed underneath to prevent future water ingress. Leca® Uno is being utilized to fill the sections where terracotta was replaced, as it is a lightweight filler. This makes it much easier to manoeuvre and fit the terracotta compared to using a heavier filling material.

The use of advanced materials like Leca® Uno not only facilitates easier handling during the restoration process but also underscores a commitment to sustainability by reducing the carbon footprint associated with transportation and installation. By selecting materials and methods that prioritise both functionality and environmental responsibility, the team is setting a benchmark for future projects.

Additionally, this approach reduces the overall weight on the structure, minimizing the risk of further damage over time. The team has also ensured that all replacement sections match the original design in both color and texture, maintaining the aesthetic integrity of the building.

This meticulous attention to detail and commitment enhances the building's resilience against the elements. The project exemplifies a harmonious blend of traditional craftsmanship and modern engineering solutions, showcasing how listed buildings can be repaired to withstand the test of time.





# **PRODUCT IN FOCUS**



## **LECA® UNO**

### PRE-MIXED CONCRETE

Leca® Uno is a lightweight concrete applied in a single layer for filling and levelling. Each bag weighs 15-17kg and requires mixing with 5 litres of water. Suitable for application in new construction and rehabilition works, in thicknesses from 4cm (min thickness). Exclusively distributed by Resapol.

## **Product Uses**

- Lightweight concrete for filling and leveling internal and external floors; execution of pendants on roofs, terraces and balconies; single layer application.
- Improves the thermal and acoustic behaviour of floors.
- Suitable for application in new constructions and rehabilitation works, in thicknesses from 4 cm. Each 25kg bag weighs 15-17kg.
- The coverings that can be applied directly to Leca® Uno are ceramic, natural stone and laminate flooring. Other coverings – linoleum, vinyl, etc. - consult Leca® UK for other tasks before application. Waterproofing systems can also be applied directly.