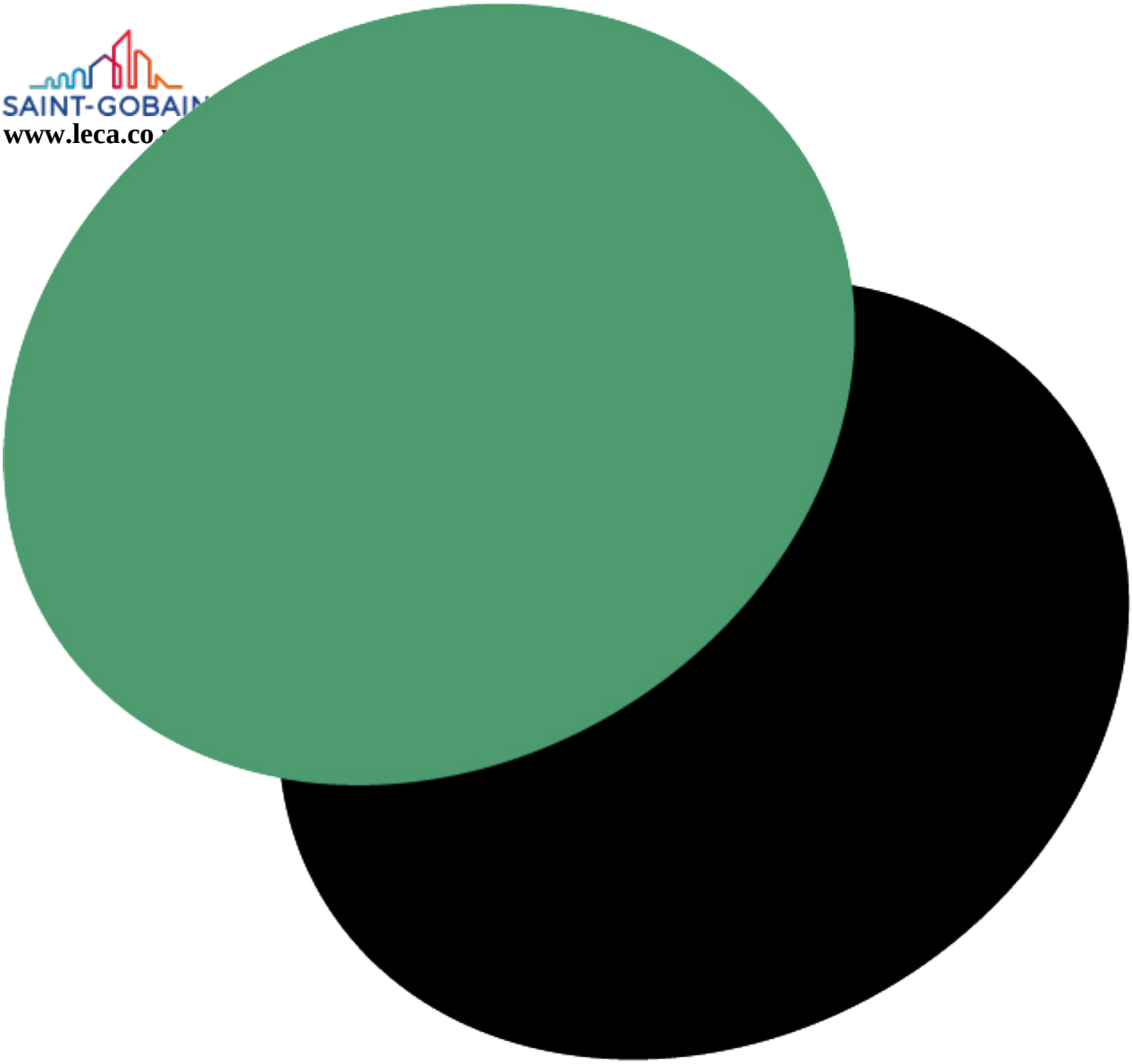

LONDON KING'S COLLEGE RENOVATION AND EXTENSION

The College of Social Science and Public Policy at London King’s College undertook a renovation and extension project along the busy stretch of Aldwych, Strand in London. The developers faced significant space constraints and needed a lightweight, efficient concrete solution to reduce the load on the mezzanine

structure. They specified Leca® Uno lightweight concrete to address these challenges.

The primary challenges for this project included:

Space Constraints: Aldwych is a bustling area with limited space for construction activities.

Structural Load: The mezzanine required a lightweight concrete solution to reduce the load and ensure structural integrity.

Logistics: Traditional sand and cement would have increased the number of pallets, complicating material handling in the restricted space.

FACTS

Product: Leca® Uno

Interesting Fact: Leca® Uno reduced the load on the mezzanine, ensuring structural stability

Delivery Method: Bags

SOLUTION

Leca® Uno lightweight concrete was specified to overcome these challenges due to its numerous advantages: Load Reduction: The lightweight nature of Leca® Uno reduced the load on the mezzanine, ensuring structural stability.

Material Efficiency: Leca® Uno required fewer pallets compared to traditional sand and cement, simplifying logistics and material handling.

Easy Application: The concrete was pneumatically pumped up to the mezzanine, facilitating quick and efficient installation.

Application Process Leca® Uno was mixed with water at a ratio of 5 litres per bag, resulting in a homogeneous mixture with a shiny appearance. This mixture was then pneumatically pumped to the mezzanine level, allowing for a seamless application in a single layer. The process ensured minimal disruption in the busy Aldwych area.

Benefits

Thermal and Acoustic Improvement: Leca® Uno enhanced the thermal and acoustic properties of the floors.

Versatility: Suitable for both new construction and rehabilitation works, with application thicknesses starting from 4 cm.

Efficiency: The lightweight nature and reduced pallet requirement streamlined the construction process.

Conclusion

The renovation and extension project at King’s College London’s College of Politics demonstrated the effectiveness of Leca® Uno lightweight concrete. By addressing the challenges of limited space and structural load, Leca® Uno proved to be an innovative and efficient solution. Its successful application

highlights its potential for future projects requiring lightweight, high-performance construction materials.