



Lightweight Sustainable Drainage Solution
for Urban Green Roof

The Tannery Roof Garden



🔍 Sector: Commercial 📍 All Saints Road, Leicester, LE3 5BJ 🔧 Contractor: Afan Landscapes

Project Overview

As part of an ambitious £250 million Waterside Regeneration scheme near Leicester city centre and De Montfort University, The Tannery development comprises 415 en-suite rooms and 47 studios aimed primarily at students and business office users.

A signature feature of the project was the creation of a sustainable roof garden over the garage/parking area incorporating paving, bespoke planters, and lawn space.

Challenge

The project required a lightweight yet durable drainage solution to support a green roof structure capable of managing sub-soil water storage and drainage effectively.

The roof garden needed to accommodate multiple landscape elements, including paving, lawn, and specially designed planters, with a reliable drainage layer approximately 30mm thick.

Innovative Solutions:

Roofcell emerged as the ideal product to meet these demands. It is a lightweight, high-strength interlocking module engineered to provide outstanding sub-soil drainage and water retention for green roofs, planters, and landscaped decks.

◆ Effective Water Management:

The modular Roofcell units delivered excellent drainage and water management while reducing the overall weight on the roof structure.

◆ Onsite Support:

Onsite advisory support ensured precise installation by Afan Landscapes and subcontractor Keyline.

◆ Supporting Vegetation Health:

Once installed, Roofcell was covered with Turftex geotextile to retain soil and support vegetation health.

◆ Enhanced Visual Appeal:

Bespoke metal planters supplied by **Logic Manufactured Bespoke** were strategically placed on the Roofcell drainage layer, filled with soil, and planted to enhance visual appeal and biodiversity.

◆ Functional & Sustainable:

The landscaping was completed with a grass lawn area and concrete paving, combining functional, sustainable, and aesthetic goals.

Key Achievements:

1

Lightweight yet robust drainage:

Roofcell provided reliable drainage and water storage without imposing excessive load on the structure.

3

Customisation:

Integration of bespoke metal planters allowed flexible, attractive green features.

2

Sustainability:

Effective water management supports plant health and reduces stormwater runoff.

4

Collaborative installation:

Onsite advice ensured high-quality, efficient build aligned with design intent.

Impact

For green roof and landscaped deck projects seeking lightweight, high-performance drainage systems integrated with bespoke planting solutions, contact Geosynthetics Ltd to explore how Roofcell can deliver sustainable, beautiful roof gardens for urban regeneration developments.

