


David L. Lawrence Convention Center (DLCC)

 **PITTSBURGH, PA**

Project at a Glance:

Project: David L. Lawrence Convention Center (DLCC)

Location: 1000 Fort Duquesne Blvd, Pittsburgh, PA 15222

Date of Completion: June 2020

The Challenge:

Located in downtown Pittsburgh, along the Allegheny River, the David L. Lawrence Convention Center (DLCC) became the country's first LEED (Leadership in Energy and Environmental Design) GOLD-certified convention center upon completion in 2003, according to the U.S. Green Building Council. This 1,500,000-square-foot exhibition, convention, and event space hosts upwards of 600,000- visitors spread across roughly 200 events in any given year.

A few years after the structure was completed, the roof terraces had been plagued with persistent leaks and water intrusion issues. Rather than repairing the damage, DLCC ownership took the opportunity to redesign the roof terraces. Over the next two decades, the focus shifted to the rooftop terraces, with ownership urging the building management to take decisive action. The goal was not only to resolve the issues but also to create an inviting outdoor space where convention attendees could step outside, connect with nature, and enjoy a biophilic break.

Siplast Products Used:

Pedestrian Traffic Coating System (Reinforced):

- Pro Primer T
- Terapro VTS Resin/Filler with Natural Quartz
- Terapro Base Resin reinforced with Pro Fleece
- Pro Color Finish

PMMA Flashing System

- Pro Primer W
- Parapro 123 Flashing Resin reinforced with Pro Fleece

SBS-Modified Bitumen System Over Rigid Insulation:

- Paradiene 30 FR TG Cap Ply
- Parafast Adhesive & Fasteners
- Paradiene 20 TG Base Ply
- Cover board
- Parafast Adhesive & Fasteners Paratherm Polyiso Insulation

Amenity Solutions:

- Hanover Concrete Pavers and Pedestals by Siplast
- Wausau Wood Tiles and Pedestals by Siplast

Vegetated Roof Solutions:

ParaGREEN Intensive Layered Vegetated Roof Assembly

- ParaGREEN Intensive Layered Vegetated Roof Assembly
- ParaGREEN Intensive Growing Media

ParaGREEN Agriculture Layered Vegetated Roof Assembly

- ParaGREEN Drainage and Retention Layer
- ParaGREEN Intensive Growing Media

Teranap SBS-Modified Bitumen

- Irex 40 Base Ply
- Parapro 123 Flashings
- Paradiene 20 TG
- Paradrain Drain Mat
- Teranap 1M Sand
- XPS Insulation

The Solution:

As the budget permitted, the DLCC staff collaborated with various architecture firms to systematically repair sections of the roof, initiating a process that has spanned the past two decades. For the rooftop terrace, in particular, Pittsburgh-based Indovina Associates Architects sought a highly experienced provider specializing in waterproofing, vegetated roofing, and roofing solutions. They needed a reliable partner with deep industry expertise who could serve as a single point of contact and navigate complex challenges throughout the extensive renovation. Siplast swiftly proved to be the ideal choice to fulfill these requirements.



Siplast's local representative had established a strong reputation in Pittsburgh as a trusted advisor for architects and installers seeking guidance on waterproofing, vegetated roofing, and amenity challenges. When invited to collaborate on this project, he promptly engaged. With Siplast's extensive and high-quality portfolio of vegetated roofing and amenity solutions, both the Siplast representative and the architect were confident that their combined expertise would provide an ideal, single-source solution for the building owner. Siplast is well-equipped to address a wide range of needs, including intensive vegetated roofs, amenity decks, high-traffic stairwells, and various other waterproofing and roofing applications.

Beginning in April 2019, the renovation involved a comprehensive range of solutions to address various challenges across the project, including waterproofing, roofing, vegetated and amenity systems for plaza decks,



conventional roofs, and stairways. Pedestrian traffic areas were upgraded with a reinforced traffic coating system, while a specialized flashing system provided an

effective gutter solution for water run-off. The service station roofs utilized a durable, modified bitumen approach for reliable protection (A). Siplast single-source overburden solutions, including concrete pavers, wood tiles, and vegetated roofing assemblies enhanced durability and aesthetics above the waterproofing membrane (B). Wood paver assemblies, which met stringent code requirements, ensured stability for the rooftop terrace, during high wind conditions. In vegetated roof areas, layered assemblies were installed to support agriculture and greenery (C).



By leveraging multiple solutions from one manufacturer and the expertise of a seasoned advisor, Siplast served as a one-stop solution for the project's complex waterproofing, vegetated roofing, amenity, and roofing needs. This streamlined approach eliminated the need for multiple suppliers and ensured seamless integration. By simplifying the process, Siplast helped enhance efficiency and allowed the DLCC staff to focus on delivering a high-quality, durable result that benefited the building owner, architect, and installers.

