



IMPERITEK
Advanced Seamless Technologies

LEISURE CENTER ROOFING

Case Study

Project Type:

New Roofing & Waterproofing

System Installed:

IR-26 Polymer Resin

Project Size:

91,000 Square Feet

Sector:

Education



PROJECT INTRODUCTION

A major new leisure and recreation facility was developed to provide a modern, high-quality community environment with a strong focus on energy efficiency and long-term building performance. The facility incorporated an eight-lane, 25-meter swimming pool, learner pool, large multi-purpose sports hall, fitness center, and group exercise spaces.

A key component of the project was the insulation and waterproofing of more than 91,000 sq. ft. of low-slope roof area, incorporating both insulated roof assemblies and protected membrane roof areas.



CHALLENGES

The size of the roof and phased construction schedule required a waterproofing system that could be installed efficiently while providing dependable protection throughout construction.



The roofing specification also had to accommodate multiple roof assemblies, extensive parapet conditions, and a substantial insulation package. The insulated roof areas incorporated insulation thicknesses designed to meet applicable local building code and project-specific thermal performance requirements, while other areas required the waterproofing membrane to be installed directly over prepared concrete or screed substrates.



With an extended construction schedule and multiple trades working throughout the project, membrane durability and resistance to construction-related damage were important considerations. The system also needed to accommodate large and complex roof areas while minimizing seams, joints, and other potential points of water intrusion.

THE IMPERMITEK SOLUTION

An Impermitek roofing specification incorporating the IR-26 liquid-applied waterproofing membrane was selected to provide a durable waterproofing solution across the project's low-slope roof and parapet areas.

For the insulated roof assemblies, the specification incorporated a high-performance vapor barrier and bonded insulation system. Insulation joints were reinforced and sealed prior to installation of the waterproofing membrane. The roof assembly also allowed temporary weather protection to be established at multiple stages, helping reduce the potential for moisture intrusion and weather-related delays during construction.

The IR-26 waterproofing membrane was liquid-applied directly over the prepared insulation surface, creating a continuous, seamless waterproofing layer. In protected membrane roof areas, IR-26 was applied directly to the prepared and primed concrete/screed substrate before installation of the overlying roof assembly components.





The cold liquid-applied system provided an effective solution for complex roof details, transitions, penetrations, and parapets while maintaining continuity across large roof areas. Rapid curing characteristics supported efficient installation, while the durable membrane provided resistance to the demands of an active construction environment.

The completed Impermitek roofing assembly featuring IR-26 provided a durable and versatile waterproofing solution across more than 91,000 sq. ft. of roofing, supporting long-term moisture protection and building envelope performance.