Project Report

Canada Summer Games Park, Thorold





Walker Sports and Abilities Centre at Canada Games Park in Thorold, Ontario, is a nearly 20.000 m² multiuse facility built for the 2022 Canada Summer Games.

Project Data

Area: ca. 3.300 m²

Construction Year: 2021

Architects:

MJMA Architecture & Design, Raimondo + Associates Architects

System Build-up: "Pitched Green Roof" with Floraset® FS 75, "Steep Pitched Green Roof" with Georaster®

Coordinates:

43°06'56.96"N 79°14'40.57"W

Conception

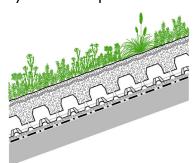
Walker Sports and Abilities Centre is a cutting-edge multiuse facility built for the 2022 Canada Summer Games. The games are held every two years and bring together up-and-coming athletes from across Canada. Since the 2022 games the Centre has been used by the nearby Brock University and the wider community. The Centre comprises three main sports halls an NHL-sized twin-pad arena and a glazed gymnasium - plus many more supporting spaces like a health and well-being centre, administrative offices, a parasport gymnasium and a combative sport centre.

The three sports halls are arranged in a triangle and covered by iconic sloped roofs, the largest of their kind in Canada, with a skylight over the central atrium stair. The overhanging roofs are equipped with extensive green roofs and provide shade and shelter for the partly glazed facades and the entrances. The green roofs have different slopes. Those with lower slopes between 10° and 25° were installed with Floraset® FS 75 whereas the steeper roof areas from 25° were realized with the suitable Georaster® elements.



In 2022, the building and outdoor athletic facilities were awarded the Niagara Biennial Design Awards for Outstanding Achievement in Architecture.

System Build-up



Pre-cultivated Vegetation Mats System Substrate "Rockery Type Plants" Floraset® FS 75 Protection Mat BSM 64 Roof construction with root resistant waterproofing



The sloped green roofs with different extensive system build-ups create also save havens for a large variety of species— this photo shows a killdeer.



The steel shear brackets Shear-Fix LF 600 provide essential support to withstand the shear forces exerted by the green roof and ensure the longevity and durability of the green roof.



The substrate is blown on roof. Floraset® FS 75 elements were chosen for slopes up to 25 dearees



The steep pitched areas were realized with Georaster® elements.



