



Photo by David Troyer

Shane Homes YMCA at Rocky Ridge | Calgary, AB Canada
2018 North American Copper in Architecture award winner features 62,000 square feet of copper.



Aerial view – Shane Homes YMCA at Rocky Ridge
courtesy of Thermal Systems, Canada.



Pre-curved trusses set parapet geometry of the
YMCA's undulating façade.

Project Team:

Design Architect: [GEC Architecture](#)

General Contractor: [PCL Construction](#)

Architectural Sales Rep: [Exterior Technologies Group](#)

Specialty Contractor: [Thermal Systems](#)

Parapet Design & Fabrication: [Radius Track Corporation](#)

Advanced Design and Collaboration Deliver Complex Façade to Roof Transition

“The number one reason we contacted Radius Track Corporation for curved framing design and fabrication for the Shane Homes YMCA project is because of the positive experience we had with them on the [Edmonton International Airport Combined Office and Control Tower](#),” said Simon Ross, Thermal Systems Major Accounts Manager.

As a leading building envelope, mechanical insulation and daylighting subcontractor, Thermal Systems chooses to work with partners and suppliers they have confidence in and who add value to their team.

The 23,330 m² (251,122 ft²) YMCA is wrapped by a façade and parapet of undulating curves that met expansion and contraction requirements of the largest timber roof in North America. Radius Track provided BIM Modeling for the roof, parapet, and soffit surfaces with panel outlines. Design via advanced 3D models generated the data for precise CNC fabrication of the light-gauge components. The series of 543 unique truss assemblies accurately shaped the complex geometry and provided the transition from façade to roof while replacing the structural steel originally planned for the parapet.

“To ensure we delivered the best product and value to our client and the owner, we depended on Radius Track for parametric modeling, clash detection, CFS parapet framing design and fabrication, and collaborative processes that effectively phased and sequenced truss and component delivery for rapid installation,” said Ross, “Success comes down to collaboration with dependable partners, technology, and planning to execute on a job this complex. Radius Track is fantastic to have on the team.”

Bridge the gap from complexity to constructability.

Radius Track Corporation collaborates with your team to design, engineer and fabricate sub-systems for curved and complex surfaces. We develop fully-engineered solutions that anticipate and resolve issues on roofs, walls, ceilings and façades.

Our expertise focuses on the elements between the structure and the skin. We design sub-framing to set the surface geometry and receive your choice of finish material. Our advanced 3D modeling and system integration assimilates trade partners' constraints and as-built conditions. Each trade partner receives installation guidelines to ensure accurate, clash-free installation.

We collaborate with pre-construction teams to define the sub-system from the start. For issues identified post-ward, we collaborate to review the reality of an existing design and develop a value-driven, constructable solution to deliver the design intent.

RADIUS TRACK DESIGN SERVICES

Standard processes don't apply
to complex surfaces.

CONTACT US

for a complimentary consultation
with our Design Team.