

National Expertise.

Local Commitment.

CASE STUDY

Advanced & Industrial Manufacturing



Siltech Manufacturing Facility

Fort Erie, Ontario



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OVERVIEW

The Siltech Manufacturing Facility in Fort Erie, Ontario is a highly specialized silicone production plant designed and constructed to support complex industrial processes within a safe, resilient, and efficient environment.

The project includes a 157,000-square-foot warehouse, three dedicated production wings, R&D and quality control laboratories, and a two-storey office component, all integrated into a single, purpose-built facility. The project reflects Maple Reinders' ability to deliver advanced manufacturing environments where technical performance, containment, coordination, and safety are essential.

CHALLENGE

Siltech required a facility engineered well beyond typical industrial standards.

The building had to safely support volatile materials, specialized production requirements, and tightly integrated owner process equipment, while maintaining durability, operational efficiency, and a refined built form. The structure features a 400 psf steel frame, advanced fire protection systems, and fully contained production and warehouse environments. The building envelope combines insulated metal panels and stained precast concrete to provide both durability and architectural quality.

A major challenge was designing and coordinating the facility's approach to firewater and spill containment. The building required recessed production floors, warehouse slab depressions, high-capacity trench drainage, and a 30,000-gallon oil interceptor system, all integrated into the broader facility design and construction approach.

CHALLENGE HIGHLIGHTS

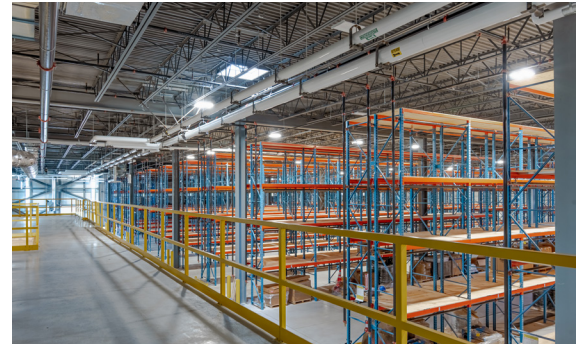
- Highly specialized silicone production requirements
- Containment and safety systems beyond standard industrial design
- Integration of process equipment with building systems
- Need for resilience, durability, and operational efficiency

SOLUTION

Maple Reinders delivered the Siltech facility through meticulous planning, close collaboration, and detailed technical coordination.

Extensive use of BIM coordination supported the successful integration of base building systems with owner-supplied process equipment. The project also incorporated explosion-proof electrical systems, gas detection, and custom material-handling solutions tailored to the needs of the operation.

A defining feature of the project was the innovative firewater and spill containment strategy, which was embedded into the structure and floor design to support safe management of volatile materials and strengthen the facility's environmental protection measures.



IMPACT

The completed Siltech facility reflects a strong commitment to safety, environmental protection, and construction excellence.

By combining specialized structural design, advanced containment systems, and detailed coordination across disciplines, Maple Reinders delivered a complex industrial build that supports efficient operations while meeting a high standard for resilience and performance.

The project was completed with zero lost-time injuries during construction, underscoring Maple Reinders' disciplined approach to safety on technically demanding industrial sites.

PROJECT OUTCOMES

- Highly specialized purpose-built manufacturing facility
- Seamless integration of process and base building systems
- Advanced containment and safety infrastructure
- Durable, resilient, high-performance industrial environment
- Zero lost-time injuries during construction



Planning a Complex Manufacturing or Industrial Project?

Connect with Maple Reinders to learn how our team delivers technically demanding facilities with practical solutions, collaborative leadership, and a strong commitment to safety, performance, and long-term value.

[Contact Our Team](#)

TYPICAL CONSTRUCTION MANAGEMENT PRE-CONSTRUCTION PROCESS

Your involvement is important, and Maple is with you every step of the way

Proposal is submitted, design team is assembled, and a contract with Maple Reinders is signed. Owner input/approvals are solicited to work toward site mobilization and construction start.

Maple handles all permits and approvals to keep the project moving

Following preliminary regulatory consultation, Maple Reinders manages the Site Plan Approval and Building Permit processes.



REGULATORY PROCESS



OWNER INPUT / APPROVALS



PROJECT VISION

PRE-CONSTRUCTION TIMELINE



MAPLE REINDERS STARTS CONSTRUCTION



DESIGN PROCESS

We work with you and the consultant team to realize your vision

Design is refined from concept up to 100% construction drawings, which will also inform the budget.



BUDGET PROCESS

Refining and value engineering as we go, Maple delivers the project at the best price

Maple Reinders prepares iterative budgets (Class D to Class A) sharpened from +/- 20% variance up to final tender and fixed price.



FOOD & BEVERAGE



SELF-STORAGE



ADVANCED MANUFACTURING

OVER 50 YEARS OF INTEGRITY IN BUILDING EXCELLENCE

DESIGN

CONSTRUCT

MANAGE

OPERATE

FINANCE

MAINTAIN

CAPACITY TO MAKE IT HAPPEN

150+

Projects delivered

Maple Reinders has expertly completed over 150 Construction Management projects.

\$1B+

Worth of Projects

Maple Reinders has built more than a billion dollars worth of projects under the CM model.

130

National Accounts

Whether through CM or another delivery model, our clients trust us to get it done.

Building and Civil Expertise

Commercial | Food & Beverage | Industrial & Advanced Manufacturing | Institutional | Multi-Residential | Organics Waste Management
Process Mechanical | Self-Storage | Transportation | Water/Wastewater Treatment | Waterway Structures & Hydro Power



Get Us Working for You

To learn more about the many ways we've helped clients realize their vision, please give us a call.

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