

Assessment & Design. Coating Solutions.



Determine condition and develop a plan

- Field assessment by professional staff.
- Focus on safety.
- Asset management including life-cycle cost analysis.
- Broad range of coating solutions for concrete and metal substrates.
- Chemical resistant coating systems.
- Heavy-duty industrial floorings.
- Site supervision during construction.

PROF&E is 100% Canadian owned company operating since 1991. Our coating systems were applied on wide range of projects from relatively small industrial tanks to large municipal infrastructure upgrades.

CONTACT US TODAY:



15 Allstate Parkway, Ste. 600 Markham, ON L3R 5B4 (647) 502-3127 (416) 850-5460 fax www.profe.ca

- Project Management
- Asset Management
- Condition Assessments
- Corrosion Analysis

- Planning
- Design
- Tendering
- Construction Inspection

Comprehensive Consulting Services

Whether a new or existing application, first we determine operating and environmental conditions that the future coating will be exposed to. Corrosion potential, range of temperatures, liquid vs gas exposure, UV resistance, moisture content of the substrate, required flexibility of the coating system and other factors are considered during selection process.



There are three key stages in the process. First step is selection of the right surface and substrate preparation that will ensure longterm adhesion of the proposed lining system. Next step is the selection of the right product for the substrate, environmental and operational conditions. Maintenance of adequate ambient conditions and quality workmanship during installation are the last key step in the process.

INDUSTRIAL FLOORINGS

Most of the facilities we designed are exposed to industrial traffic and direct contact with heavy process equipment. Typically we work closely with the manufacturers of flooring systems in finding the right technical solutions. In some cases we implemented full size accelerated aging dynamic tests to prove performance of the selected solution under given environmental and operational conditions.



Our expert staff was also involved in repair program of the coating systems that have failed where we had to deal with the contamination of the substrate and structural failures of the concrete structural floors before dealing with the new coating.

STEEL TANKS

Professional staff from PROF&E was involved with coating systems by working for the Owner. Consultant and Contractor. We prepared technical standards for coating maintenance for Municipalities, and we also designed and constructed various coating systems for steel elevated and on-ground tanks typically for portable water storage. We have also designed and supervised construction of new glass-lined steel tank for sludge storage for industrial application.

CONCRETE TANKS

Due to complexity and nonuniform structure of concrete, selection and installation of coating systems over concrete substrate is very complex process. In order to ensure water-tightness and/or gas-tightness of the concrete that cracks, the selection of the coating systems is usually limited to flexible liners that have limited corrosion resistance and do not adhere to substrate as well as epoxies do. However, we have tested several solutions for different applications.

PIPELINES

Depending on the size, type and location of pipelines, we were involved in internal and external coating systems for the pipelines. For internal coating we used different type of lining that we structural or non-structural in nature. Installation techniques also varied depending on site conditions, accessibility, size of pipes, flow conditions, etc.

OUR PROJECTS:

- Newmarket and Mount Albert Elevated Towers (new construction)
- Recoating of Glenway Reservoir (steel reservoir at grade)
- Revise and Update Recoating Specifications for the Region of York
- Brantford Digesters (rehabilitation and upgrade)
- Ashbridges Bay and Peterborough WWTP Digesters (re-lining of concrete digesters)
- Barrie Off-site Storage Facilities (concrete coating systems)
- Hamilton Interceptor Sewer Assessment and Rehabilitation
- Rebecca Str. Bridge Sewer Assessment and Exterior Relining
- Industrial Flooring for Barrie Sandy Hollow Maintenance Facility



Coating Solutions