E.S. Fox Limited Commercial Construction



E.S. Fox Limited — Commercial Construction www.esfox.com

905-354-3700 x1210

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Founder - Edward (Ted) Fox

SERVICES

- ENGINEERING
- FABRICATION
- STRUCTURAL DESIGN
- STRUCTURAL STEEL ERECTION
- BRIDGE ERECTION
- MILLWRIGHTING | RIGGING
- BOILERMAKING
- MECHANICAL
- ELECTRICAL
- SHEET METAL
- REFRIGERATION
- HVAC



HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com

E.S. Fox Limited

CORPORATE OVERVIEW

Since 1934, E.S. Fox Limited (ESFL) has set the standard for safety and quality in the fabrication and construction industry. ESFL is a privately owned, Canadian, multi-trade company, providing a single source for Industrial, Institutional, Commercial, and Power Generation projects. With over 3.0 million direct-hire man-hours last year, we self-perform Structural Steel Fabrication and Erection, Mechanical, Electrical, Sheet Metal, HVAC, Refrigeration, Millwright / Rigging, and Boiler Making.

The strength of our company stems from the vast experience of its people, the integration of a variety of skilled trades, and dedication to total control of construction through computerized planning and monitoring techniques.

ESFL has established a reputation for high quality workmanship, operational flexibility, efficiency, and timely project completion.

CONSTRUCTION CAPABILITIES

As a fully integrated, multi-trade construction firm, E.S. Fox Limited provides clients with a single source solution for their detail engineering, fabrication, construction, and maintenance needs. We are a solutions based provider that delivers a superior level of service from "cradle-to-grave," as we offer multi-trade, service oriented solutions for all your ICI and Power Generation projects.

FABRICATION CAPABILITIES

E.S. Fox Limited is proud to operate three state-of-the-art fabrication facilities across Ontario. At our main fabrication facility in Port Robinson, we offer over 83,000 square feet of production space. We work to the highest standards to produce Pipe Spools, Modules, Cryogenic Cold Boxes, and Pressure Vessels. With over 800 weld procedures and 40 quality certifications including nuclear, E.S. Fox Limited continues to be a leader and a symbol of Canadian strength and tradition in the supply of Quality Fabrication Services for the Industrial. Commercial. Institutional. and Power Generation markets for over eight decades.



E.S. Fox Limited Environmental Health and Safety

SAFETY CULTURE

At ESFL, employee safety, protection of the environment, and work quality are the main focus of our safety culture. Both management and employees work together in an effort to further advance knowledge of safety and incident prevention. Together we work to ensure a safe work environment for all. Our employees believe in the fundamental principle that safety is everyone's responsibility.

One of our core values is to "Prevent the Event." Incident prevention is the integral part of every job, with the safety and well-being of each individual the <u>number one priority.</u>

SAFETY PROGRAM KEY ELEMENTS

- Corporate Safety Manual
- Site Specific Safety Plans
- Orientation and Training
- Incident Investigation
- Lessons Learned Bulletins
- Job Safety Analysis
- Workplace Inspections
- Senior Management Review

- Safety First Attitude
- Trending and Analysis
- Setting Objectives and Targets
- Safety Workshops
- Mentoring Program
- J.H.S.C.
- Strong Communication
- Accountable Supervision
- Safety Meetings



HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



E.S. Fox Limited Quality Assurance

	pages (sugar	and the second second
REG		MIR S
nruu		UND

	11111	
ISO	CSA	ASME
 ISO 9001:2015 ISO 14001 ISO 18001 CWB Structural Steel CWB W47.1 Div. 1 Structural Aluminum CWB W47.2 Div. 1	 CSA N285.0 Nuclear Cla 1,2,3, & 4 Parts, Components & Support (Shop & Field) CSA N285.0 Nuclear Material Supply Ferrous Non-Ferrous (3 Locations CSA N286-12 Nuclear CSA N286-12 Nuclear CSA N299.1 – 2016 CSA B51 Boiler, Pressur Vessels & Pressure Pipir Repairs (Shop & Field) CSA B51 Category A, B, E & H Type Welded Non- Welded Fittings (Shop & Field) CSA B51 Hot Tap & Line Stopping (Shop & Field) CSA Z7396. 1-17 Medica Gas Pipeline Systems Participal (Shop Rest) 	for ASME Section III, R, VIII (Shop & Field) • ASME Section III, Division 1: N, NPT, NA, NS and • ASME Section VIII, Division 1 & 2 Pressure Vessels (Shop & Field) • ASME U, U2, S, & PP Stamps (Shop & Field) • ASME U, UM Stamps: Edmonton Division (Shop & Field) • ASME B31.1 Power Piping (Shop & Field) • ASME B31.3 Process Piping (Shop & Field) • ASME B31.5 Refrigeration Piping (Shop & Field)









STANDARDS

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



E.S. Fox Limited Locations & Facilities

Head Office: Niagara Falls, ON -240,000 square feet

Branch Location	Сара	bilities	Square Footage
Darlington, ON	Construction		
Hamilton, ON	Construction	Fabrication	3,000 sq. ft.
Kingston, ON	Construction	Fabrication	17,000 sq. ft.
Port Robinson, ON		Fabrication	83,000 sq. ft.
Sudbury, ON	Construction		
Thunder Bay, ON	Construction	Fabrication	5,000 sq. ft.
Tiverton (Kincardine), ON	Construction		
Vaughan (Toronto), ON	Construction		
Oshawa, ON	Construction		
		Total Fabrication	108,000 sq. ft.



HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



E.S. Fox Limited Capabilities

CONSTRUCTION CAPABILITIES

As a fully integrated, multi-trade construction firm, E.S. Fox Limited provides clients with a single source solution for their detail engineering, fabrication, construction, and maintenance needs. We are a solutions based provider that delivers a superior level of service from "cradle-to-grave," as we offer multi-trade, service oriented solutions for all your ICI and power sector projects.

We provide the following construction services:

- Piping
- Electrical
- Structural Steel
- Ironworkers
- Millwrights
- Boiler Making
- Sheet Metal

- HVAC
- Instrumentation & Controls
- Operating Engineering
- Insulation
- Carpenters
- Labourers
- Refrigeration



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



E.S. Fox Limited Capabilities

FABRICATION CAPABILITIES

At our main fabrication facility in Port Robinson, Ontario, we offer over 83,000 square feet of production space. We work to the highest standards required to produce Cryogenic Cold Boxes, Pipe Spools, Modules, and Pressure Vessels. With more than 800 weld procedures, we fabricate:

Modules and Vessels

- Process Modules and Equipment Skids
- Cryogenic Air Distillation Columns for: Oxygen, Nitrogen, and Argon
- Air Liquefaction / Separation
- Hydrogen Purification
- Catalyst Reclamation
- Oil / Water Purification

Pipe Fabrication

- Stand alone contracts & support of field projects and other fabrication projects
- Area of expertise is high alloy materials: Stainless Steel, Aluminum, Titanium, Chrome-Moly
- Carbon Steel up to 84" Diameter
- Victaulic—Roll Grooved Piping up to 48" Dia.
- Jacketed Pipe



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



E.S. Fox Limited Capabilities

PORT ROBINSON SHIPPING

We are unique in that we have access to the Welland Canal at our Port Robinson facility. This includes our own loading docks, where we can ship oversized modules from up to 800 tons to any water accessible location in the world.

Transportation Access & Dock Facilities

- 1/2 mile from Highway 406 extension providing direct access to Queen Elizabeth Highway
- 1/4 mile from Canadian National Railroad line
- Heavy Barge Roll On/Roll Off Loading Dock extending into the Welland Ship Canal turning basin providing 10' draught and 400 ton capacity
- Heavy Lift Dock of 800 ton capacity, dock face 475 ft. draught 25 ft. The dock can accommodate maximum Seaway length vessels
- The site incorporates 5 acres of level, well compacted, crushed stone assembly area



HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Ripley's Aquarium Life Support Systems

Client Scope

Ripley's Entertainment

- ESFL was contracted for the supply and installation of all components associated with the Life Support Systems for the new Ripley's Aquarium at the base of the CN Tower in Toronto.
 - Due to its location, deliveries of materials and equipment had to be meticulously coordination as there was limited space for staging work.

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





The Britt Condos

Scope

- ESFL was contracted for this 16 level structural steel addition to the top of an existing 31 floor concrete condominium
- Consisted of approximately 1200 tons of structural steel
- Located in Downtown Toronto on Bay Street

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





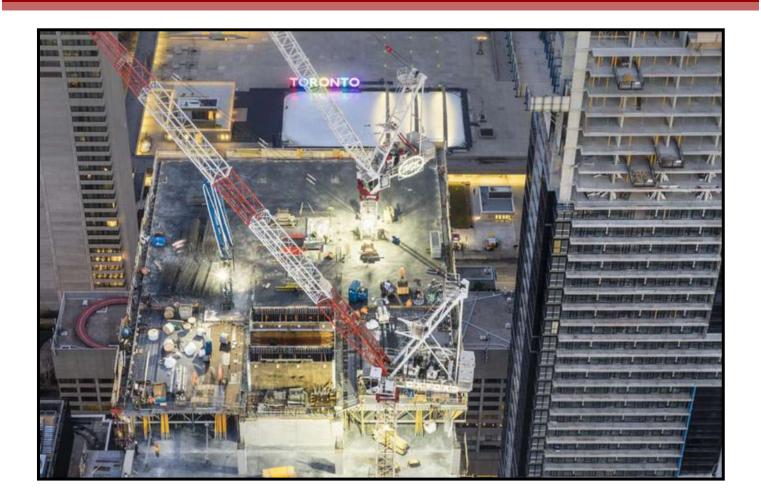
Embassy Suites Elevator Shaft

Client	Fallsview Group
Scope	 A new 48 story (500' high, 150 ton) high speed elevator shaft added to the existing hotel while in operation
	No road disturbance or pedestrian traffic restrictions occurred during operation

• A portable crane was erected on the roof of the hotel for hoisting purposes

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





100 Adelaide Street West

Scope

- 1200 tons of architecturally exposed steel starting at the 550' elevation for penthouse
- This project required a high-level of coordination with all mechanical equipment installation, jumping, and removing of tower cranes
- The BMU's were used to complete the steel erection

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Atlantis Water Park

Client	Niagara Falls Hotels
Scope	 A new water park over an existing 7 storey parking garage
	 One piece columns, over 100' long, were lowered through the occupied parking garage to support the structure above
	Query Q QQQ target of standards and standard for Endows the supersultaneous standard E QQQ

- Over 2,000 tons of steel were erected in 5 days, the overall tonnage was 5,000
- ESFL installed all of the ride equipment and slides

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





McMaster Innovation Park

Client	McMaster University
Scope	 A new concrete and steel framed structure housing shops, teaching and lab areas for metals research and testing
	 The two main areas of structural framing are a High Bay c/w crane runways and a mechanical penthouse consisting entirely of sloping surfaces
	 Also included was an architecturally exposed atrium area with two elliptical column sections supporting a "fin" feature at the top (60' long x 5" deep made of 2" thick plate)

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Toronto Pearson International Airport Expansion

Client Scope

Greater Toronto Airports Authority

- An "airside" expansion to an existing and occupied terminal adjacent to live operations
- Reinforcing was also included at the Customs area on an off-shift
- The schedule was 1 year long with an overall tonnage on the project of 2,500 tons

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Niagara Health System Health Care Complex & Walker Family Centre

Client	Infrastructure Ontario
Scope	 Erection of approximately 1,600 tons of structural steel framing for various portions of the new hospital with a very aggressive schedule
	 ESFL erected around the clock with 3 tower cranes

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Canada's Wonderland Yukon Striker

Client Canada's Wonderland

- Scope
- Largest dive coaster in the world, overall drop of 245" at 90 degrees, reaches 80mph
- Offloaded, assembled, and erected components of roller coaster (3,625' long)
- Included all station members, transfer station, column, track elements, setting of equipment and trains
- Logistically sensitive site, 4 cranes simultaneously used

HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com

