

Pre-Engineered Buildings

JNE Pre-Engineered Buildings

JNE Consulting Ltd. has been involved in pre-engineered buildings for various industries with a variety of end-uses. Although most pre-engineered buildings are typical and only differ subtly from each other, the cost-effectiveness of their construction and efficient planning by JNE to meet end-user needs set these buildings apart.

JNE has worked on buildings with cost and schedule constraints as well as unique parameters, such as maintaining traffic flow during construction or allowing existing production facilities to continue operating during construction.

Design-build and full engineering services are also provided as required. JNE is able to develop a project from feasibility to occupancy or any stage in between, and deliver a package that meets the customer's needs. Below are a few examples of recent pre-engineered buildings provided by JNE:

The **No. 2 Tube Mill Warehouse** is located on Dofasco Inc property (see photo). The 125,000-square-foot building was erected in an unused coil yard to store tubes from No. 1 and No. 2 Tube Mills. The warehouse is a pre-engineered steel building system with a mono-slope roof and a humidity control system for product protection. A roadway through the old coil yard was still being used during construction, so construction was phased to accommodate traffic. Upon completion of the north half of the warehouse, the road was diverted and the south half of the building was completed.



When **Laurel Steel** expanded its Burlington, Ontario, facility, JNE provided design-build services for the plant/warehouse expansion, as well as the office/employee facility expansion.

The warehouse expansion was a 40,000-square-foot pre-engineered steel building with a sprinkler fire protection system and a 65-foot high-bay section for the automated "High-reach Storage and Retrieval System". The warehouse included an under-slung 10-ton pendant crane, shipping conveyors, depressed shipping area, separate partitioned product storage area and skylights.

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JNE Pre-Engineered Buildings (continued)

JNE's scope of work included project management, site and underground services (including parking and landscaping), construction engineering, foundation floor slab, structural steel, architectural details, mechanical/electrical services and building permits.

JNE provided preliminary and detailed engineering for a 56,000-square-foot building expansion for **Velcro Canada Inc.**, a just-in-time manufacturer for the automotive industry in Brampton, Ontario. Part of JNE's scope of work included providing new services to the building expansion, including a new transformer, while maintaining service to the existing production facility.

The scope of JNE's engineering also included general arrangement plans, sections, elevations and detailed foundation design. Electrical drawings were provided for feeder supply cable routing, power distribution and interior and exterior lighting. Mechanical design was provided for building HVAC, fire protection and sanitary drainage.

Engineering was also provided for two two-storey office structures within the new and existing building envelopes, consisting of offices, labs and a training complex.

A design-build package for **Mitsui Auto Steel Canada** of Cambridge, Ontario, included engineering services for a 128,000-square-foot coil storage and office building, including detailed design for the foundation for this pre-engineered building complete with site services engineering, including storm water management and site grading and drainage.

More JNE Pre-Engineered Buildings:

McCabe Iron Works

30,000 ft² coil storage building

CFF Specialty Metals

18,000 ft² production and warehouse building.

Philip Services

4,000 ft² truck weigh station

3,500 ft² waste storage building

Dofasco Inc.

4,000 ft² control building for MISA project

3,000 ft² weigh station for marshalling yard

3,000 ft² control building for 56" plate mill

Canadian Gypsum Company

1,000 ft² utility building

Praxair

1,000 ft² MCC control building

Ontario Power Generation, Bruce Nuclear

Various buildings for storage