



GUIDE · SYSTEM OVERVIEW

CONVENTIONAL STEEL. CUSTOM ENGINEERED. BUILT FOR GENERATIONS.

Portex Building System makes custom conventional-steel portal-frame buildings for manufacturing, distribution, agriculture and aviation, engineered, detailed and fabricated in Strathroy, Ontario. Every building uses conventional steel and custom engineering rather than pre-set templates.

This guide explains what a conventional portal frame is, how it compares with a standard pre-engineered building, where Portex buildings are used, and how a project runs from the first conversation to erection support.

MANUFACTURING · DISTRIBUTION · AGRICULTURE · AVIATION

CALL
519-518-0246

VISIT
1 Industrial Road, Strathroy, ON N7G 4J5

WHAT IS A CONVENTIONAL PORTAL FRAME?

A portal frame building is held up by a row of rigid steel frames. Each frame is a pair of columns joined to roof rafters with stiff connections, so the frame can carry the roof across a wide, open span.

Portex frames are made from conventional wide-flange steel with bolted and welded connections. Each building is engineered for its own size, loads and use.

A standard pre-engineered building is built to the manufacturer's standards and pre-set templates, with fixed limits on size, column spacing and design.

Portex uses conventional steel and custom engineering instead, so you get the building your project needs, with more design freedom and better long-term performance.

PORTEX PORTAL FRAME VS STANDARD PRE-ENGINEERED

PORTEX PORTAL FRAME	STANDARD PRE-ENGINEERED
Custom heights to suit your needs	Heights limited to manufacturer standards
Flexible layouts with fewer interior columns	More interior columns at set spacing
Architectural flexibility to match your plans	Limited design options
Stronger, more durable conventional steel	Lighter gauge limitations
Easier to modify or expand later	Difficult and costly to modify

DESIGN FREEDOM. ENGINEERED STRENGTH.

Because Portex is custom engineered, the building is designed around your operation, today and as it changes.

CUSTOM BUILDING HEIGHTS

Height is set by what goes inside, not limited to manufacturer standards.

FEWER INTERIOR COLUMNS

Large clear spans keep the floor open for equipment, vehicles and flexible layouts.

MULTIPLE ROOF PITCH OPTIONS

Choose the roof pitch that suits the building and the site.

CRANES, MEZZANINES AND HEAVY LOADS

Conventional steel makes it easier to design them in from the start.

YOUR LAYOUT AND OPENINGS

Custom layouts, door openings and architectural features, from a simple warehouse to a complex facility.

ROOM TO EXPAND

A conventional frame is more straightforward to modify or extend as your operation grows.

BUILT FOR THE WORK YOU DO

From a simple warehouse to a complex facility, a Portex building is designed around your operation. The system is used in four main areas.

MANUFACTURING FACILITIES

Buildings engineered around your process, not a pre-set template.

- Flexible layouts with fewer interior columns, planned around your equipment and workflow
- Custom clear heights, rather than a manufacturer's standard sizes
- Easier to build in cranes, mezzanines and heavy loads
- Conventional connections make future expansions simpler

AGRICULTURAL BUILDINGS

EQUIPMENT STORAGE · SHOPS AND PROCESSING

Durable, low-maintenance space for hardworking Canadian operations.

- Large clear spans give open floor space to move and store equipment
- Engineered for harsh Canadian weather, to stand strong for decades
- Conventional steel strength with low-maintenance durability
- Easier to modify or expand when the operation grows

WAREHOUSING AND DISTRIBUTION

WAREHOUSING · DISTRIBUTION WAREHOUSES

Efficient space today, and room to grow tomorrow.

- Large clear spans keep the floor open for storage and handling
- Dock-ready layouts, with doors and heights engineered around how goods move
- Fast, efficient erection support and project support
- Easier to modify or expand when you need more space

AIRCRAFT HANGARS

Clear-span hangars engineered around your aircraft and your operation.

- Clear-span designs keep the hangar floor open, with room to move your aircraft
- Heights and openings engineered, so the door is sized for what you fly
- Clearances set to your aircraft, not a manufacturer's standard sizes
- Easier to expand if you need room for more aircraft

BUILT FOR LONG-TERM PERFORMANCE

Conventional steel framing gives proven strength and durability, and a low-maintenance building made to last for generations.

- Proven structural strength and durability
- Robust bolted and welded connection options
- Practical, familiar erection methods
- Low-maintenance structures built for demanding Canadian conditions

ONE TEAM FROM CONCEPT TO COMPLETION

One coordinated team takes your project from concept to completion: engineering, detailing, fabrication, delivery and erection support.

1

CONSULT

We talk through what the building is for, and help with budgeting and planning early.

2

DESIGN AND ENGINEERING

We design and engineer the structure around your project requirements.

3

DETAILING

Every member is detailed in-house before it reaches the shop floor.

4

FABRICATION

Fabrication in our Strathroy shop, with precision fit-up and quality control.

5

DELIVERY

Steel and materials arrive on site, ready to build.

6

ERECTION AND SUPPORT

Erection support as the portal steel frame, metal roof and siding go up.

WHAT WE SUPPLY

PORTAL STEEL FRAME

Conventional steel, engineered for strength, efficiency and long clear spans.

ENGINEERED DESIGN

Custom design of the structure, tailored to your project.

METAL ROOFING

Metal roofing systems built to perform and last.

METAL SIDING

Durable metal siding for a clean, professional finish.

Local manufacturing. Local support.

Every Portex building is engineered, detailed and fabricated by our team in Strathroy, Ontario, in our own shop on Industrial Road. Engineering, fabrication and project support all stay close to home.

- Ontario-based engineering and fabrication
- Conventional steel portal frames built to your requirements
- Better coordination from design through erection
- Reliable quality control and responsive project support
- A local team that understands your market

TELL US ABOUT YOUR BUILDING

Tell us what the building is for, roughly how big, and where it will go, and our estimating team will take it from there. Call **519-518-0246**, or use the Request a Quote form on our website. Our companion guide, "Planning your steel building", lists what to have ready.