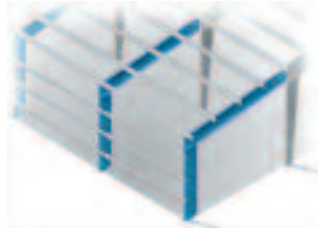


Lean-to Frames

A lean-to frame typically has a single slope profile (no ridge) and straight sidewall columns. It must be supported by the attachment to another frame.

Primarily used for expansion or extension of a building, lean-to frames can provide additional space very economically. They are commonly used to provide additional office or storage space for a larger building.



Single Slope, Straight Column Frames

- H: 15' - 60'
- Clear span widths up to 60'



Lean-to frames used for office area

Photo courtesy of Jason Staller

Long Bay System

When you need to maximize interior space, Robertson's Long Bay System is the solution. This innovative steel roof framing product provides large areas of open floor space using solid web primary frames and pre-punched open web purlins (roof secondary structural members) to provide bay sizes up to 65' — the longest in the industry!

It's the perfect answer for manufacturing plants, vehicle dealerships, warehouse/distribution facilities and large retail stores since it requires fewer interior columns. This strong yet lightweight roof framing system provides all the benefits of engineered building systems including superiority over conventional construction methods.

Choose from tapered columns for economy or straight columns for aesthetics and clearance. For buildings that include completely load-bearing walls, sidewall columns may not be necessary.

To achieve the lowest life-cycle costs, Robertson's Long Bay System may be ordered with a standing seam roof in your choice of single-slope, double-slope or offset ridge profiles with slopes from 1/4:12 to 1:12. Alternatively, Long Bay can also be used with B-deck for a built-up or single-ply roof. The Long Bay System works well with a wide variety of compatible wall systems including tilt-wall or pre-cast concrete, EIFS and curtain wall assemblies, masonry, brick and insulated or single-skin metal wall panels.



Long Bay Steel Roof Framing System

Framing Systems...

Every Robertson frame is designed to meet your specific building requirements. Robertson has the engineering expertise to design interiors with wide-open spaces, unusual

ceiling heights and extreme load requirements. Our frame design can accommodate cranes, monorails, mezzanines and other custom requirements. Robertson framing systems are separated into four main categories:

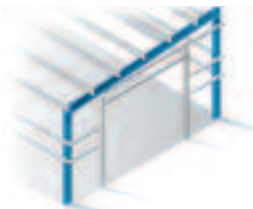
- Clear Span Frames
- Multi-Span Frames
- Lean-to Frames
- Long Bay Systems

Clear Span Frames

Clear Span frames are most often used in buildings where unobstructed interior space is required. Common uses include aircraft hangars, arenas, tennis centers, soccer centers, riding arenas, manufacturing facilities, warehouses, offices and retail stores. A building designed without interior columns can also provide the space required for material handling and crane systems.

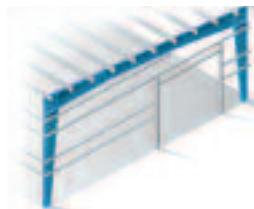


Clear Span frames



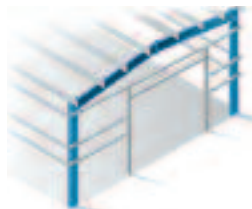
Single Slope, Straight Column Frames

- W: 15' - 80'
- H: 10' - 60'



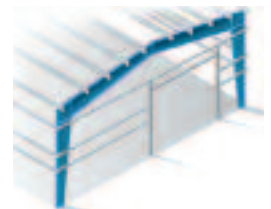
Single Slope, Tapered Column Frames

- W: 15' - 150'
- H: 10' - 60'



Double Slope, Straight Column Frames

- W: 15' - 80'
- H: 10' - 60'



Double Slope, Tapered Column Frames

- W: 15' - 150'
- H: 10' - 60'



Multi-Span frames

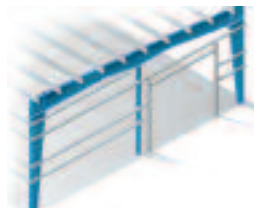
Multi-Span Frames

Multi-span frames are commonly used for building layouts that permit interior columns. The spacing between columns can be consistent or varied to meet customer requirements. Large open floor spaces are accommodated by using the minimum number of columns to allow large open spaces and easy movement of fork lifts, etc. Common uses include manufacturing plants, warehouses, truck terminals and retail stores.



Single Slope, Straight Column Frames

- W: 15' - 600' • H: 10' - 60'
- Interior column spaces from 10' to 100'



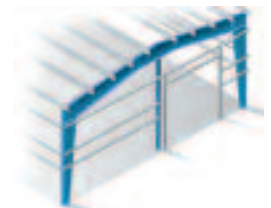
Single Slope, Tapered Column Frames

- W: 15' - 600' • H: 10' - 60'
- Interior column spaces from 10' to 100'



Double Slope, Straight Column Frames

- W: 15' - 600' • H: 10' - 60'
- Interior column spaces from 10' to 100'



Double Slope, Tapered Column Frames

- W: 15' - 600' • H: 10' - 60'
- Interior column spaces from 10' to 100'