

# Provincial Partitions

## MEZZANINE STRUCTURES & STORAGE PLATFORMS



# Provincial Partitions



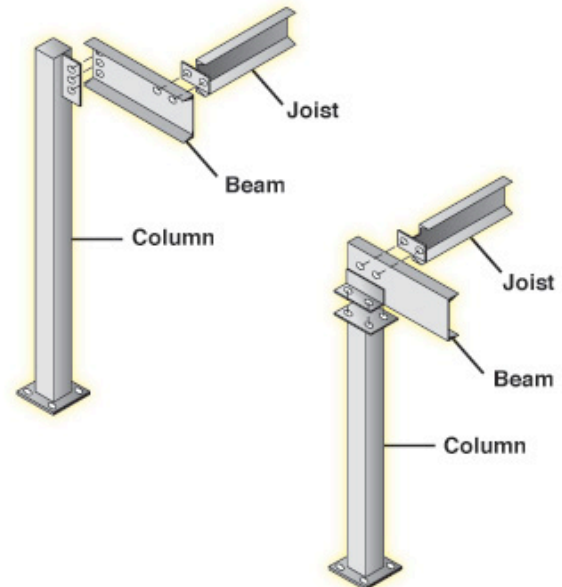
## The Right Connection...

Our unique high strength connection methods are ideal for mezzanine structures. These connections give you:

- **Strong connections...**eliminate the need to brace to existing structures – very effective on mezzanines exposed to seismic forces.
- **Rigid connections...**factory welded plate sections and angles reduce sway and simplify installation – makes the performance of our mezzanines ideal for in-plant office applications.
- **Compact beam-to-column connection...**eliminates restricted clearances-allows for more freedom for forklift travel, placement of shelves, racks and office walls.

We are one of the few manufacturers utilizing a structural connection similar to ones detailed in the AISC/CISC steel manual.

## GUSSET CONNECTION (used with System 40)



SEATED BEAM CONNECTION

## SAFE HANDRAILS

- **Two rail or three rail and a 5" kick plate...**  
complies to UBC, SBCCI, BOCA and OSHA, OBC codes for industrial applications.
- **Square tubing...**  
provides a safe and comfortable rail system.

## QUALITY STAIR ASSEMBLY

- **Factory assembled stairs...**  
stair stringers and treads are factory welded to maximize strength and minimize installation.
- **Stair treads...**  
solid tread open riser design is safe and versatile by utilizing skid resistant floor plate treads-other designs also available.
- **Handrails...**  
standard stairs have handrails on

both sides-34" min. rail height satisfies OSHA, BOCA, UBS, SBCCI and OBC codes.

## STRUCTURAL WIDE FLANGE BEAMS

- **Starting at 8", the most compact mezzanine possible...**  
maximizes the use of vertical space in the building.
- **Strong and simple connection...**  
this versatility makes custom applications very economical.
- **Safer, better performing systems...**  
compared to any other structural beam material wide flange sections have the most documentation, testing and engineering support available.

## INTEGRAL DECKING DESIGN

- **Designed to form a large shear plane...**  
ties the entire mezzanine structure

together and helps minimize horizontal movement.

- **Fascia encloses deck ends...**  
enhances mezzanine appearance.

## COMPREHENSIVE COLUMN DESIGN

- **Custom column centers...**  
designed to meet individual requirements.
- **4" min. square H.S.S...**  
results in greater column rigidity than equal weight sections with a smaller cross area.
- **Centered base plates...**  
uniformly transfer column loads to concrete floor or footings and minimizes sway.
- **Columns are fully enclosed...**  
providing a clean and finished appearance.



## Building Better Solutions...

- Our connection methods add strength and integrity to the entire structure.
- Your single source of all of your mezzanine, in-plant office and guardrail needs.
- Over 20 years of manufacturing experience.
- Local representatives provide on-site expertise in layout and installation.
- Unique design results in the fastest installation available in the mezzanine industry...saving your company time and money.
- Professional staff of design, engineering and manufacturing experts available for your specific application.

**Our mezzanines are available in a variety of standard colors. See your dealer for details.**



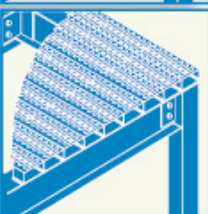
### Concrete Decks

Concrete Decks...the strongest and most durable mezzanine surface available. Ideal when high point loading and capacity is required.



### Bar Grating

Bar grating...a strong and economical alternative – allows for air movement, light, as well as water from overhead sprinklers to pass through deck surface.



### Plank Grating

Galvanized plank grating... lightweight and easy to install. Ideal for applications primary exposed to foot traffic.



### Plywood Deck

Tongue and groove plywood over rib steel decking...frequently used and very economical. This decking option can be ordered with a special poly overlay giving the plywood a high quality-wearing surface, which is ideal for applications involving rolling loads.

## SECTION 13145 MEZZANINE SPECIFICATIONS

### Sec. 13145.2.1 **General.**

The mezzanine shall be a free standing, custom engineered mezzanine. Mezzanine shall have a minimum recommended clearance above and below of 7'-0".

Sec. 13145.2.2 **Beam-to-Column Connections.** (a) Beam-to-column connections shall be capable of reacting column moments generated by eccentric and lateral loading. It must be shown to have adequate capacity to ensure structural stability without contribution of base plate connection.

(b) The connection brackets shall be positioned so that the shear center of the support beams coincide with that of the column. Acceptable connection designs shall be as per AISA manual under "Suggested Details – Structural Tubing and Pipe – Beam-to-Column Connections".

Sec. 13145.2.3 **Beam-to-Column Connections.** The beam reaction shall be transferred to the support by means of bolting the joist to a structural angle that was factory welded to the main support beam.

Sec. 13145.2.4 **Base Plate Connections.** Base plate shall be fully welded around the entire perimeter of the mezzanine column. Base plates as a standard shall be centered on the column to facilitate a uniform transfer of axial load to

the foundation. Centered base plates will also contribute to reducing sway and adding to the lateral stability of the structure.

Sec. 13145.2.5 **Mezzanine Handrail Design (Industrial Applications).** Handrail shall be 42" high. All railing shall be 1-1/2" tube. Handrail shall fasten directly to the support uprights to achieve maximum strength and rigidity; this also serves as additional bracing for the mezzanine structural framing. These uprights shall be bolted directly to the support beam. Clearance between railing and obstructions shall be a min. of 3".

Sec. 13145.2.6 **Stair Design (Industrial Applications).** Stair assembly shall have treads bolted to stringers. Stair width shall not be less than 36". Treads shall be closed design with open risers. Minimum run per tread shall not be less than 10". Stair shall maintain a min. headroom clearance of 6' - 8".

Sec. 13145.2.8 **Landing Design (Industrial Applications).** Depth of the landing shall not be less than width of stairs.

Sec. 13145.2.9 **Decking Fascia.** The ends of all decking shall be enclosed to give the mezzanine a finished appearance, painted to match mezzanine structural steel.





## Provincial Partition's Mezzanine Structures and Storage Platforms...**your one-stop solution.**

Provincial Partitions manufactures Modular Structural Steel Mezzanines and Storage Platforms to handle all your space management concerns...distribution centers, production offices, storage, equipment, or maintenance platforms.

In keeping with our company philosophy, all our structures are engineered to bolt together, allowing easy relocation or reconfiguration. Turn your unused air space into valuable floor space, at the same time accommodate the increase in either personnel or inventory. It makes good economic sense to install a PPL mezzanine structure. It costs a fraction of what a new building or expansion would.

Whether you require a standard off-the-shelf or customized structure, regardless of shape, size, height or existing building conditions, our in-house CAD design team will provide you with the assistance you need to ensure that your loading specifications are met.

We also offer a number of floor surface finish options to choose from. Combine these mezzanines with our other building product lines and you can achieve multi-level building structures for any storage/office combination that you envision.



### PROVINCIAL PARTITIONS LTD.

1283 Cornwall Road  
Oakville, Ontario  
Canada L6J 7T5

Tel: (905) 849-9255

Toll Free Tel: 1-(866)-551-9255

Fax: (905) 849-4400

Toll Free Fax: 1-(866)-551-9256

E-mail: [sales@provincialpartitions.com](mailto:sales@provincialpartitions.com)

Website: [www.provincialpartitions.com](http://www.provincialpartitions.com)



Complying with the requirements of the Certification of Companies for Fusion Welding of Steel Structures.

Distributed By:

Provincial Partitions is continually striving to improve its products. Specifications & modifications may change without notice.

11/05/2.5M