



# FLOOR SYSTEMS

4 X 2 Floor Truss Systems are custom built pre-fabricated floor components that have been used in Canada for over 30 years. Regions such as Lethbridge, AB have been using the floor truss for many years with an estimated 75% of residential units using them.

Architects, engineers and contractors alike are choosing floor truss systems to create high quality, smartly constructed structures with the added benefits of reduced framing time, waste and callbacks.

Electrical, plumbing, and heating materials will fit within the webs of our floor trusses without any drilling or cutting of the joists, adding a huge advantage for today's building systems.



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### Features & Benefits of 4x2 Floor System:

- Many hangers typically used in an I-joist system are eliminated by incorporating top chord bearing details into a floor design.
- Extremely friendly to mechanical trades - no cutting required.
- Longer spans allow for more efficient use of bearing walls/beams.
- Wider nailing surface for floor sheeting.
- Fast installation and less waste.
- Floor truss details are very flexible depending on design/customer requirements (dropped floor areas, hidden beam details, built-up block).
- All trusses are engineered for loading requirements and vibration control.

### Bottom Line Cost Savings:

- Removal of Footings
- Removal of Columns, Bearing Walls & Beam Supports
- Easier Finish for Drywallers as there are no bulkheads
- Simplified Plumbing, HVAC & Electrical Runs
- Reduced Basement Exterior wall height to achieve finished clear height

### Estimated Savings Breakdown

*based on an average 1,400sq ft home*

|   |         |
|---|---------|
| Interior Structure: Footings, Bearing Walls, Beams, Columns | \$2,000 |
| Exterior Structure: Foundation Wall Heights, Beam Pockets   | \$1,800 |
| Building Services: HVAC, Plumbing, Electrical               | \$2,500 |
| Finishes: Drywall, Trim                                     | \$800   |

**Estimated Savings: \$7,100**



### Design Criteria for the 4 x 2 Floor System:

- Maximum span to depth ratio of 1 to 20 (example - 14" truss should not exceed 23'-4" span - spacing may be adjusted to accommodate longer spans)
- Maximum 24" duct chase on flat-wise trusses
- Minimum duct chase offset from the bearing is  $\frac{1}{4}$  of the span
- Maximum cantilever is  $\frac{1}{4}$  of the total span
- Maximum cantilever without a concentrated load at the end of the cantilever is 4 times the depth of truss.
- Maximum cantilever with a concentrated load at the end of the cantilever is 2 times the depth of truss.
- 2-ply girder trusses maximum

Get a quote from our Design Team for your next project:

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