

Website Content: Trusses

Trusses 101 (Information on what a truss is to someone who might not know)

A truss is a manufactured component that acts as a structural support. It is composed of triangular units because of the structural stability the shape provides. Trusses can be manufactured or built on site with wood and metal plates, engineered wood products or steel.

Benefits of buying preassembled truss components:

At Turkstra Trusses, we design, manufacture and deliver high quality roof trusses for residential, farm and commercial applications, designed in conformance with the Ontario Building Code.

- Turkstra Trusses are delivered to the jobsite preassembled and ready for installation. This ensures less waste at the jobsite as well as reduces clean up time and costs.
- To ensure high quality and accuracy in our product, Turkstra Trusses are engineered in a modern, computer-equipped manufacturing facility.
- With pre-engineered trusses, expenses can be better monitored by predetermining material needs, reducing theft and damage as well as loss from mis-cutting and errors.
- Less, on-site, skilled labour requirements are needed, as trusses are installed easily and 3-4 times faster than traditional framing.
- Open web design allows for easy installation of plumbing, wiring and heating/cooling, speeding up time and costs of the construction project.
- Turkstra truss engineers are available for consultation for special design requests, where designers can produce any aesthetic and functional specifications required.
- Our Trusses have the ability to be built with longer spans, which give the design professional more space to work with inside the building. As well, larger spans require fewer internal load-bearing walls.

Wood roof trusses

Metal plate connected wood trusses offer a low-cost product, with fast and easy installation, and can be used for virtually any roof or ceiling. Turkstra Trusses use a minimum of 2 x 4 for all residential products, and agricultural trusses use at least 2 x 6, up to 80 feet long.

- Residential
- Commercial
- Agricultural

Typical Truss Shapes:

- **Common**
- **Hip**
- **Mono Hip**

- **Mono**
- **Mono Scissors**
- **Sloping Flat**
- **Scissors**
- **Hip Scissors**
- **Vault**
- **Gambrel**
- **Double Pitch**
- **Flat**
- **Pitched Flat**
- **Attic**
- **Porch**
- **Camber**
- **Polynesian Hip**
- **SY42 Floor**

Typical Heel Conditions:

- **Plumb Cut**
- **Square Cut**
- **Double Cut**
- **Special Angle Cut**
- **Horizontal Cut**
- **Raised-heel** trusses can be utilized for greater volumes of cheaper insulation. This helps to reduce the cost of insulation and provides a more effective building envelope and a greener home.

Floor trusses

Turkstra Floor Trusses are designed for custom fit and length, with optional trimmable ends, which allows for flexibility in the joist positioning. Our floor trusses are manufactured to ensure long-term stability and are designed to accommodate humidity and heat. These manufactured floor truss systems are quicker and easier to install than traditional floor joists, and are less likely to twist or warp in the manufactured setting.

Wood trusses and engineered wood products offer a wider nailing surface for floor decking. Floor trusses can be customized to accommodate almost any application and the open web designs allow for easy installation of utilities. Manufactured floor trusses ultimately save time and money and allow for a more efficient and reliable product.

Fan configuration and *Warren configuration* are the most popular web style, floor truss designs.

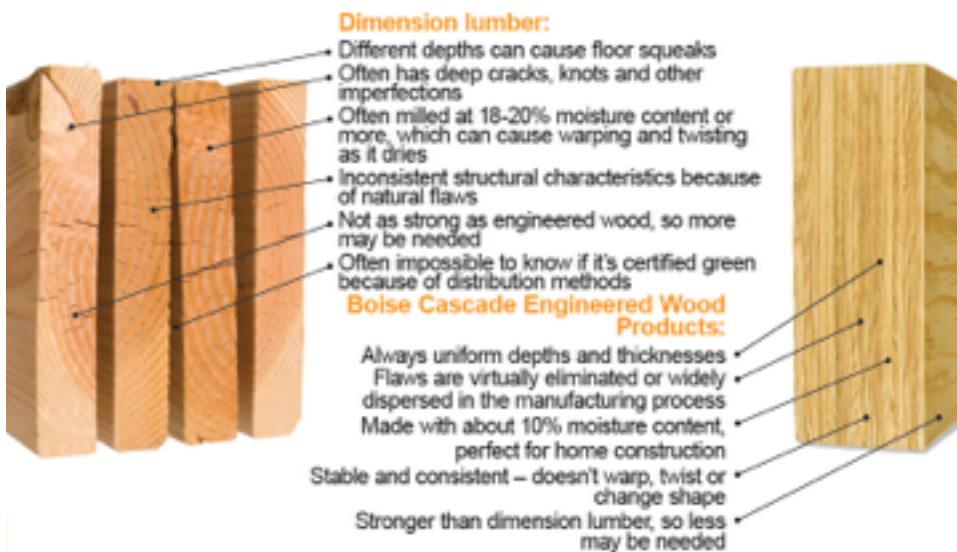
Engineered Wood Products (EWP) (Floor Joists Depths and Frame Sizes)

Engineered products consist of wood derivatives that are manufactured by binding veneers and boards together with adhesives to create composite materials. Engineered wood products can be used in a variety of building applications including commercial and industrial areas.

EWP offers larger structural spans with greater carrying capacity. Often EWP exceeds building codes because is it structurally superior, with little shrinkage, deflection and vibration.

Dimension lumber vs. EWP:

| Dimension Lumber | EWP |
|--------------------------------------|--------------------------------|
| Different depths cause floor squeaks | Uniform depths and thickness |
| Deep cracks, Knots and imperfections | Flaws are eliminated |
| 18-20% moisture can cause warping | 10% moisture |
| Not as strong, more will be needed | Stable and consistent |
| | Stronger than dimension lumber |



(from Boise PP)

Boise- Cascade

APA (Engineered Wood Association) Product Report Boise Cascade

http://www.apawood.org/level_b.cfm?content=prd_rept_main#LSeries

Turkstra Lumber is a certified supplier of Boise-Cascade engineered wood products including LVL beam/columns/studs, I-joist, and glulam. These wide ranges of structural framing materials offer a strong, reliable and cost effective solution to framing needs.

Boise-Cascade Products:

Solid sawn flange I-joists

- depths ranging from 9-1/2" to 24"
- 2x3 and 2x4 black spruce solid sawn MSR flanges ranging from 1650Fb to 2400Fb stress grades

Complete program of LVL flange I-joists

- depths ranging from 9-1/2" to 16"
- LVL flanges, ripped to efficient sizes, in various stress grades ranging from 1.8E to 2.0E

Complete program of LVL products

- depths ranging from 3-1/2" to 24"
- grades ranging from 1.7E to 2.0E
- thicknesses 1-1/2", 1-3/4", 3-1/2", 5-1/4" and 7"
- highest quality Southern Yellow Pine (SYP) and Douglas Fir (D-Fir Larch) veneers in the industry

OSB Rimboard

- 1-1/8" OSB Rim
- depths ranging from 9 1/2" to 24"

ALLJoist AJS I-joists

- 2x3 and 2x4 black spruce solid sawn MSR flanges ranging from 1650Fb to 2400Fb stress grades

Building Design Considerations

Full Design Capability for all engineered products

Turkstra Lumber is fully equipped with professional design staff to help with your EWP application. We have full design capability for all engineered products as well as roof and floor trusses.

Light gage steel trusses

Light gage steel trusses offer a lightweight product that is easy and makes for fast installation. These steel trusses are generally used for light commercial and industrial use because of its higher fire rating. This engineered product can be used in almost any application with straight ceilings and ceiling attachments.

Sheds

Start your shed project at Turkstra Lumber where you can get all your materials in one place. We can design a variety of sizes, shapes and barn lumber options to accommodate your backyard storage.

Permit Packages Region Specific

Turkstra Trusses offers a region specific permit package for all trusses and engineered wood products. Each package is tailored to the specific requirements of each municipality that may include layouts and truss drawings. *

*Ask us about our region specific permit packages

Free delivery/Delivery Services

At Turkstra Lumber, all of our truck drivers are an integral part of our team. We believe that the experience and professionalism of our driver is a crucial component to providing outstanding customer service. Turkstra Trusses can be delivered to your jobsite on our professionally designed roll off trailers to ensure safety and on-time delivery. By using our delivery service you can save on truck rental costs and time and labour on your jobsite.

“Upload your plan”

“FAQ”

Is it OK to move a floor truss?

What is the difference between conventional framing and trusses?

Is it okay to cut a truss on the job site?

What is the difference between temporary and permanent bracing? Do I have to do both?