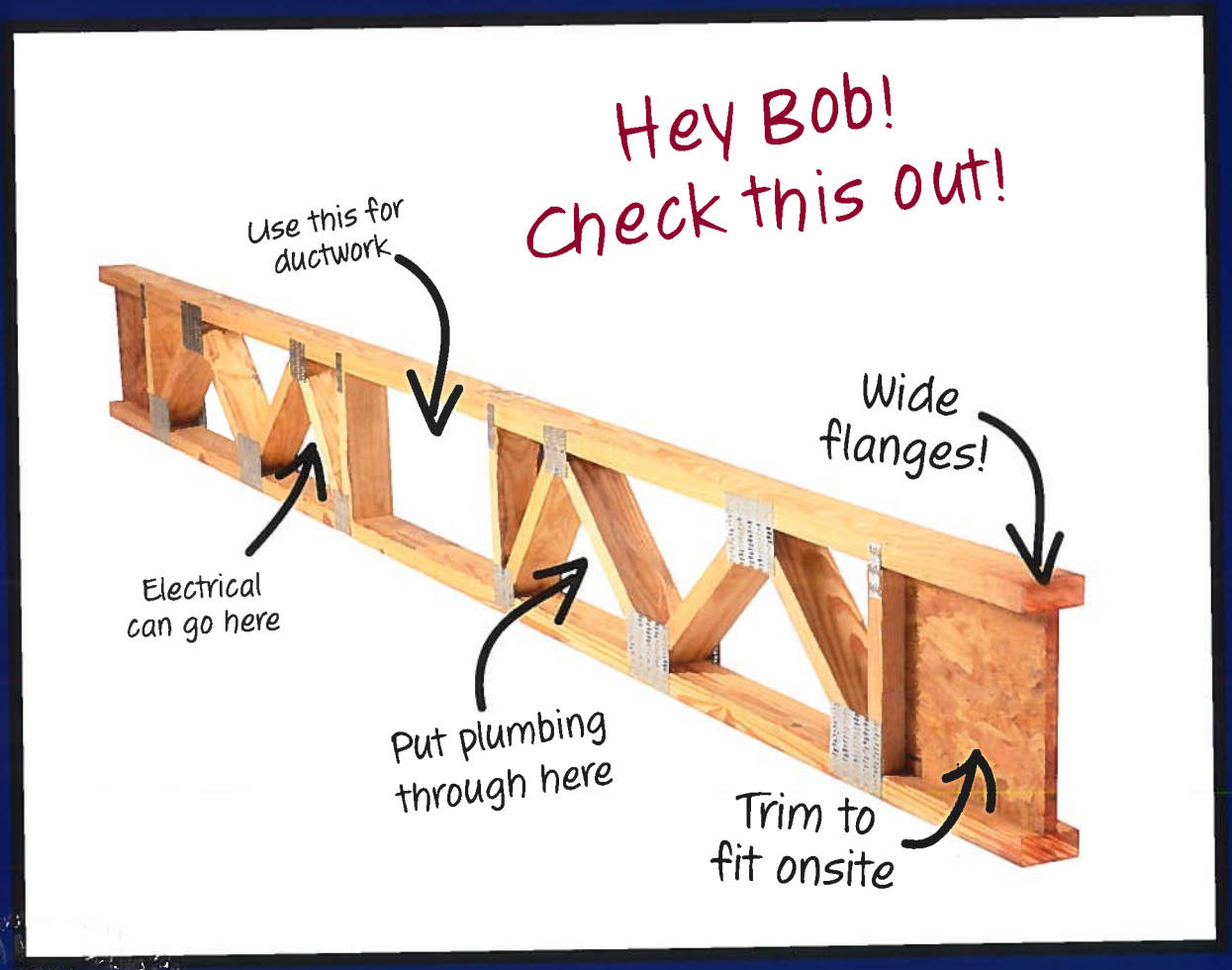
TrimJoist



If Bob tries TrimJoist, he'll find out why TrimJoist is the best choice for floor truss products.

IT'S CONTRACTOR-FRIENDLY.
The end sections can be trimmed onsite.

IT SAVES MONEY AND TIME.
With strut-webbing, there's no need for subcontractors to cut holes.

IT'S STRONGER.
You don't weaken the joist with holes.

IT HAS WIDE FLANGES.
With 3.5-inch flanges on the top and bottom, subfloor application is simple. Nailing and gluing are easier.

IT COMES WITH A TEAM OF ENGINEERS.
Just call our toll-free number for custom engineering.

TrimJoist
ENGINEERED WOOD PRODUCTS
1 800 844-8281
www.trimjoist.com

U.S. Patent 5,761,872 • U.S. Patent 6,139,667 • Additional Patents Pending

The *uniform load* span charts below indicate the maximum design spans (including a 1½" minimum bearing at each end) for each family of *Trim*Joist floor joists. Each chart is divided into columns which represent common design loadings and rows which show typical spacings. Most residential designs require a minimum of 55 psf loading. Floors used for heavy traffic and/or heavy floor coverings (e.g. Tile) should be designed at 60 psf minimum. All loads are broken down into *Live, Top-dead* and *Bottom-dead* components. For example, the 55 psf column is really 40 psf live plus 10 psf top-dead plus 5 psf bottom-dead for a total of 55 psf. Dead loads are the weight of construction materials and are always present for the whole life of the structure. Live loads, on the other hand, are transient and are never constant over the life of the structure. Select the appropriate column based on the *dead* loads of your construction materials. These charts are for *uniformly loaded, clear span, simply supported* joists. For special applications requiring concentrated loads, asymmetric continuous loads, cantilevers, or special bearing conditions please consult a *Trim*Joist representative or authorized dealer. The TPDS computer program can be used to analyze almost any loading and/or bearing condition.

11 ¼" Deep

Spacing	Loading 55 PSF (40/10/5)	60 PSF (40/10/10)
12	24′ - 0" L/589	24′ - 0" L/589
16	23′ - 1" L/455	23′ - 1" L/455
19.2	21′ - 9" L/454	21′ - 9" L/454
24	20′ - 5" L/461	20′ - 0" L/465

16" Deep

Spacing	Loading 55 PSF (40/10/5)	60 PSF (40/10/10)
12	28′ - 0" L/731	28′ - 0" L/731
16	28′ - 0" L/549	28′ - 0" L/549
19.2	28′ - 0" L/458	27′ - 5" L/486
24	26′ - 0" L/456	26′ - 0" L/456

14" Deep

Spacing		
12	26′ - 0" L/688	26′ - 0" L/688
16	26′ - 0" L/515	26′ - 0" L/515
19.2	25′ - 7" L/450	25′ - 7" L/450
24	23′ - 8" L/451	23′ - 8" L/451

18" Deep

Spacing		
12	30′ - 0" L/768	30′ - 0" L/768
16	30′ - 0" L/575	30′ - 0" L/575
19.2	30′ - 0" L/479	29′-10" L/488
24	27′ - 4" L/504	26′ - 5" L/579

Notes on Span Charts:

1. Spans are based on uniformly loaded joists and include allowances for repetitive use members.
2. Live loads of 40 psf are assumed, Additional dead loads should be chosen based on construction materials.
3. All *Trim*Joist floor joists have a TOP orientation and should not be installed upside-down.
4. Stiffness factors (L/xxx) assume a minimum ¾-inch span-rated subfloor that has been both *glued* and *nailed*.
5. Limit total reaction (per end) to that indicated in the Maximum Reaction Table at the right.
6. Do not apply center supports, cantilevers, concentrated, or asymmetrical continuous loads without first consulting a *Trim*Joist representative.

Maximum Reaction Table

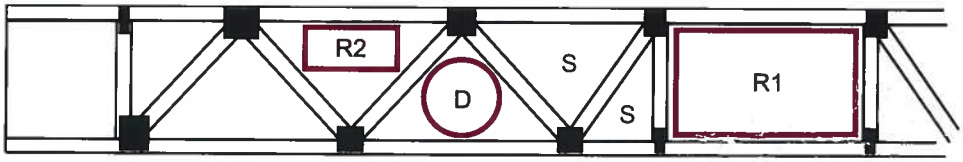
Width	1½	3½	5½
Max	3000	3500	4000

Width is the width of the loaded wall above, or the bearing wall width whichever is less.

A Note About Floor Stiffness: Floor performance is greatly influenced by joist stiffness. Experience has shown that a floor system designed to minimum code acceptance may not meet the expectations of discerning owners. *Trim*Joist Corporation strongly recommends that floor spans be limited to those indicated in the charts above. The numbers in these charts far exceed minimum code requirements and are based on both gluing *and* nailing the subfloor. In cases where the subfloor is nailed only, spans remain the same, but the stiffness must be reduced by 20%. For optimal performance use screws in lieu of nails.

Opening Sizes

	J12	J14	J16	J18
H	11¼"	14"	16"	18"
D	5"	8"	9"	10"
R1	8x16	10x24	12x24	14x24
R2	4x9	4x10 6x6	4x12 6x8	4x14 6x10 8x8



1. All sizes given are in inches and denote maximum expected clearance.
2. Rectangular opening (R1) is provided at centerline of stock length.
3. Only opening D available in 4' stock length (one opening only).
4. Only opening R1 available in 6' and 8' stock length.
5. Openings R2 & D not applicable in shaded areas (s).

J.M. Allen
Sept. 1, 2006

Good Framing Practice...

DO Install *Trim*Joists right side up. TOP is stamped on the top of each joist.

DO Make sure that each *Trim*Joist bears on the bottom flange beneath the *Trim*End section or beneath the first metal plate if the *Trim*End section has been removed.

DO Use strongback stiffeners. Although not required for structural performance, strongback adds additional resistance to impact loadings.

DO Provide appropriate bearing width at each end of the *Trim*Joist. The required width can be found in the Maximum Reaction Table above. Use vertical web stiffeners where reactions exceed these values.

DO Use *Trim*Joist approved hangers for flush-mounted bearing conditions. These may be purchased from your local *Trim*Joist dealer.

DO Use an appropriately rated sub-floor that has been both glued and nailed/screwed to the top flange of the *Trim*Joist.

DO Consult your *Trim*Joist dealer or representative about special loading or bearing conditions not addressed in this Application Guide.

DO NOT cut any part of the *Trim*Joist except for the *Trim*End sections which are specifically designed to be field cut.

DO NOT remove, cut or alter any metal plate connector on the *Trim*Joist without first consulting a factory engineer.

DO NOT install the *Trim*Joist upside down without first consulting a *Trim*Joist factory engineer.

DO NOT use a *Trim*Joist as a header or beam except as may be instructed by a *Trim*Joist engineer.

DO NOT allow the *Trim*Joist to be supported by the top flange. All support must be from under the bottom flange.

DO NOT depend on "toe nailing" to provide adequate support capacity for flush-mounted framing. Consult your local *Trim*Joist dealer or a *Trim*Joist factory engineer for proper hanger selection.

DO NOT apply special support or load conditions without first consulting a *Trim*Joist representative.