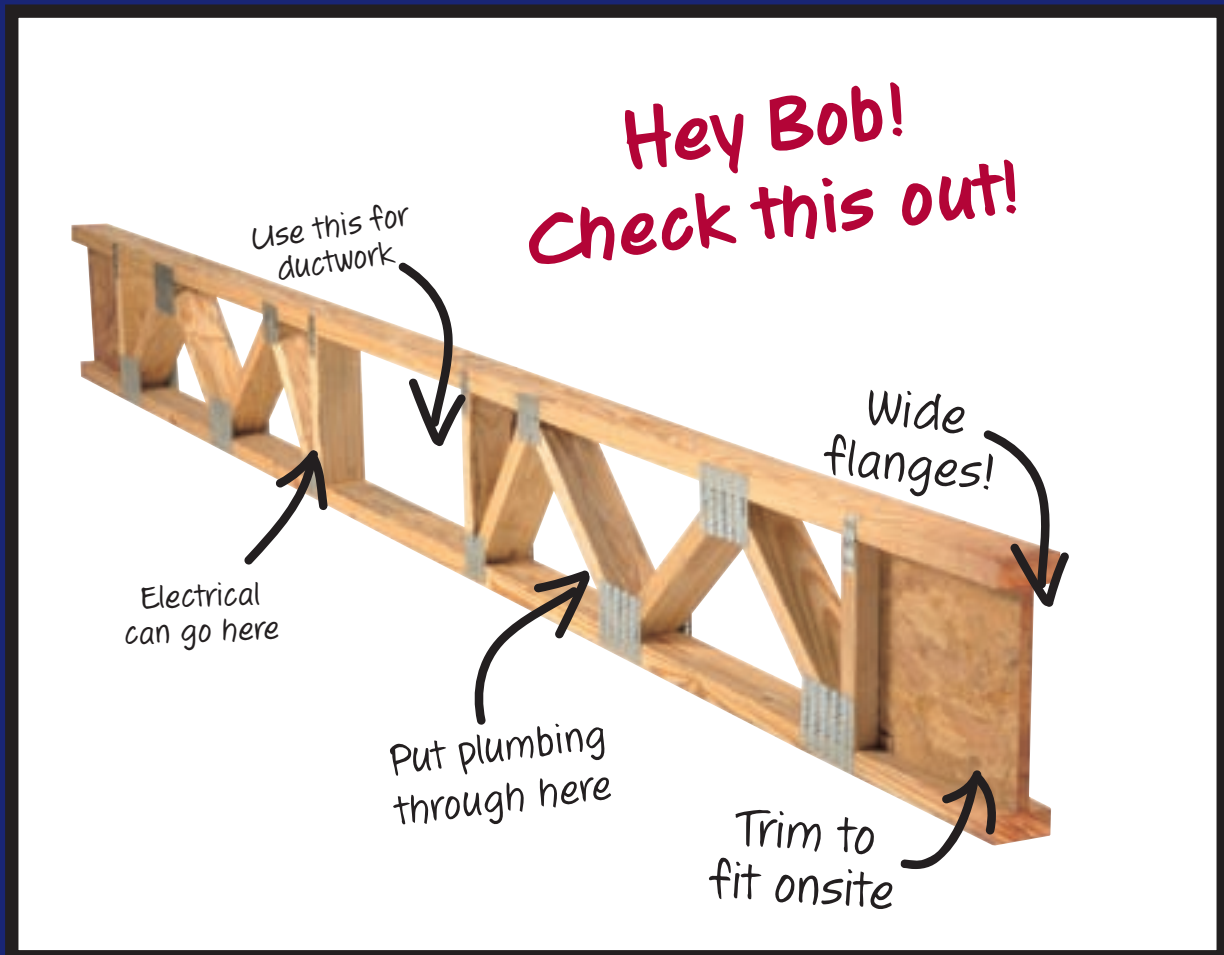


TrimJoist®

ENGINEERED WOOD PRODUCTS



Wood truss joists that can be trimmed at the jobsite

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 GREAT TECHNICAL SUPPORT TEAM.

Just call our toll-free number for custom engineering.

1 800 844-8281
www.trimjoist.com

The *uniform* load span charts below indicate the maximum design spans (including a 1/4" minimum bearing evenly trimmed) for each family of *TrimJoist* 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 *TrimJoist* representative or authorized dealer. The TPDS computer program can be used to analyze almost any loading and/or bearing condition.

11 7/8" Deep	Loading		55 PSF (40/10/5)		60 PSF (40/10/10)	
	Spacing	12	24'- 0"	L/580	24'- 0"	L/580
		16	23'- 8"	L/453	23'- 8"	L/453
		19.2	22'- 3"	L/453	22'- 3"	L/453
		24	20'- 8"	L/451	20'- 8"	L/451

16" Deep	Loading		55 PSF (40/10/5)		60 PSF (40/10/10)	
	Spacing	12	28'- 0"	L/730	28'- 0"	L/730
		16	28'- 0"	L/548	28'- 0"	L/548
		19.2	28'- 0"	L/456	27'- 5"	L/486
		24	26'- 0"	L/456	26'- 0"	L/456

14" Deep	Loading		55 PSF (40/10/5)		60 PSF (40/10/10)	
	Spacing	12	26'- 0"	L/685	26'- 0"	L/685
		16	26'- 0"	L/514	26'- 0"	L/514
		19.2	25'- 6"	L/454	25'- 6"	L/454
		24	23'- 8"	L/451	23'- 8"	L/451

18" Deep	Loading		55 PSF (40/10/5)		60 PSF (40/10/10)	
	Spacing	12	30'- 0"	L/765	30'- 0"	L/765
		16	30'- 0"	L/574	30'- 0"	L/574
		19.2	30'- 0"	L/479	29'- 10"	L/486
		24	27'- 4"	L/503	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 *TrimJoist* floor joists have a TOP orientation and should not be installed upside-down.
4. Stiffness factors (L/xxx) assume a minimum 3/4-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 *TrimJoist* representative.

Maximum Reaction Table

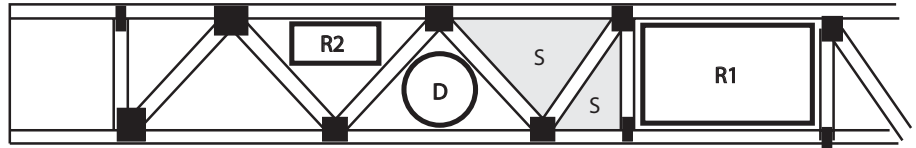
Width	1 3/4"	3 1/2"	5 1/2"
Max	3000	3500	4000

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. *TrimJoist* 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	11 7/8"	14"	16"	18"
D	6"	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).

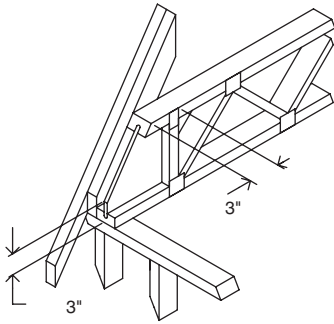
see us at
Sweets.com

Good Framing Practice...

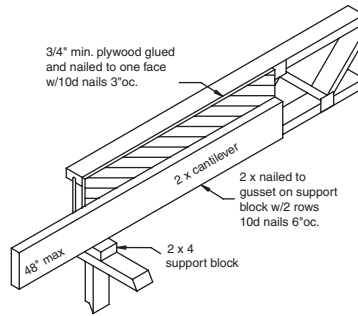
- DO** Install *TrimJoist* right side up. TOP is stamped on the top of each joist.
- DO** Make sure that each *TrimJoist* bears on the bottom flange beneath the TrimEnd section or beneath the first metal plate if the TrimEnd section has been removed.
- DO** Use strongback stiffeners. Although not required for structural performance, strongback adds additional resistance to impact loadings.
- DO** Provide appropriate bearing width at each end of the *TrimJoist*. The required width can be found in the Maximum Reaction Table above. Use vertical web stiffeners where reactions exceed these values.
- DO** Use *TrimJoist* approved hangers for flush-mounted bearing conditions. These may be purchased from your local *TrimJoist* dealer.
- DO** Use an appropriately rated sub-floor that has been both glued and nailed/screwed to the top flange of the *TrimJoist*.
- DO** Consult your *TrimJoist* dealer or representative about special loading or bearing conditions not addressed in this Application Guide.

- DO NOT** cut any part of the *TrimJoist* except for the TrimEnd sections which are specifically designed to be field cut.
- DO NOT** remove, cut or alter any metal plate connector on the *TrimJoist* without first consulting a factory engineer.
- DO NOT** install the *TrimJoist* upside down without first consulting a *TrimJoist* factory engineer.
- DO NOT** use a *TrimJoist* as a header or beam except as may be instructed by a *TrimJoist* engineer.
- DO NOT** allow the *TrimJoist* 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 *TrimJoist* dealer or a *TrimJoist* factory engineer for proper hanger selection.
- DO NOT** apply special support or load conditions without first consulting a *TrimJoist* representative.

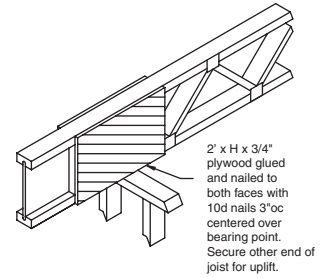
Installation Details Available in CAD format at trimjoist.com and sweets.com



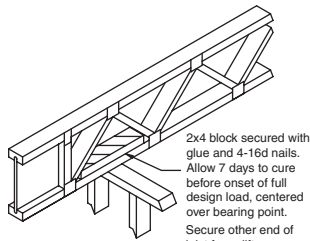
D1 RAFTER/FIRE CUT



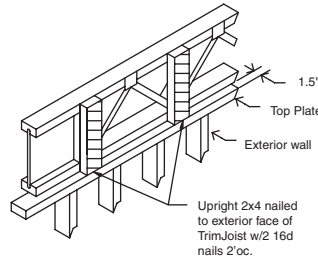
D2 DECK CANTILEVER



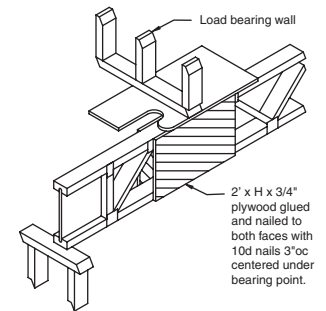
D3 CANTILEVER



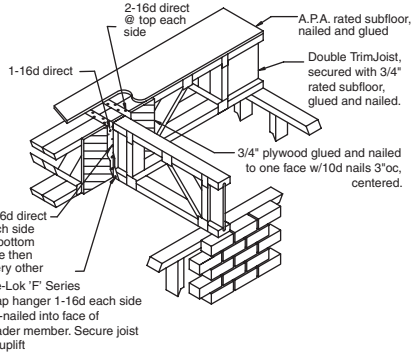
D4 CANTILEVER



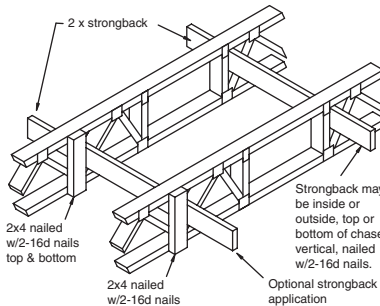
D5 EXTERIOR KNEE WALL



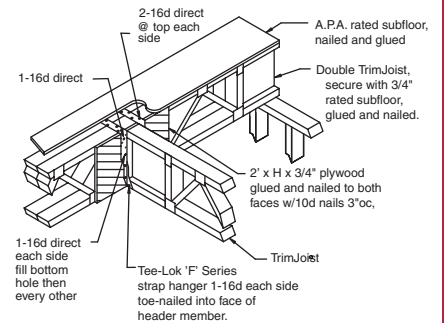
D6 POINT LOAD APPLICATION



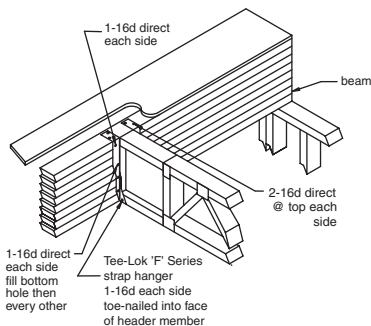
D7 HANGERED CANTILEVER



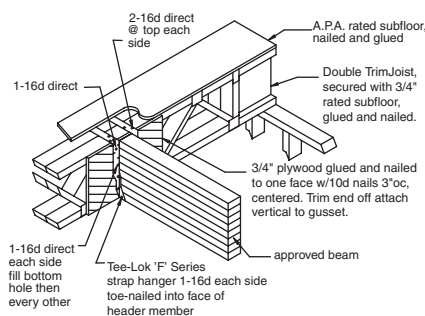
D8 STRONGBACK APPLICATION



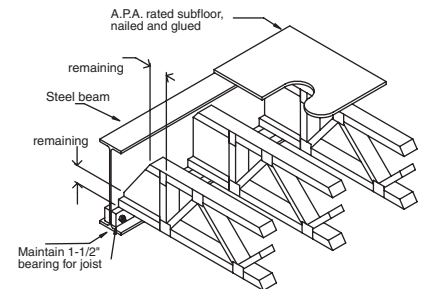
D9 HANGERED/ JOIST TO JOIST



D10 HANGERED/ JOIST TO BEAM



D11 HANGERED/ BEAM TO JOIST



D12 FLUSH TO STEEL BEAM



SILENCE. The TrimJoist® provides a full 3-1/2" wide surface for the proper nailing and gluing of subfloor materials. By providing such a wide surface, the TrimJoist® allows the builder to use subfloor framing tolerances that will prevent squeaks. The wide surface also allows for the application of sufficient glue to make the TrimJoist® and the subfloor truly act as a unified system.

QUALITY. The TrimJoist® addresses product consistency and product quality from three key perspectives:

DESIGN. The TrimJoist® was initially designed using the most capable structural engineers and computer software systems available from both inside and outside the forest products industry. This includes the PPSA system from Purdue University as well as Rasna finite element software from Parametric Technology.

MATERIAL CONTROL. All raw material components are structurally rated by various independent agencies such as the Truss Plate Institute (TPI), Southern Pine Inspection Bureau (SPIB), American Plywood Association (APA), American Society for Testing and Materials (ASTM), and of course ANSI. In fact, all TrimJoist® floor trusses now conform to the new ANSI/TPI-2002 standard. In addition, all lumber components of the TrimJoist® are subject to a strict "cull" process where questionable pieces are discarded before entering into the production process.

PRODUCTION TESTING. In addition to the rigorous testing performed on prototype units during the development phase of the TrimJoist®, all production runs are subject to periodic, random tests. These tests are conducted to the standards of the Truss Plate Institute (TPI) Test Truss Specification. No other production floor truss is subjected to such ongoing scrutiny and improvement.

ENVIRONMENT. The TrimJoist® design allows for the utilization of lumber from plantation-grown trees, thus sparing the "old-growth" forests that are necessary to produce all traditional wide-board joists. In addition, our engineered strength allows for longer spans and greater on-center spacing. This not only reduces construction costs, but can reduce the board footage of wood fiber required by up to 12% over traditional joists.

By design, approximately 40% of the TrimJoist® material content is from recycled sources. In addition, our manufacturing process recovers over 97% of its generated waste.

INNOVATION. The TrimJoist® is produced in stock lengths that range from 4' to 30', in standard 2-foot increments. Because each joist has 12-inches of trim at each end, a continuous range of spans is possible. Complex angled walls? No problem for the TrimJoist®.

The open web design of the TrimJoist® allows for the utilization of that valuable floor cavity space. It's now practical for duct work, wiring, and plumbing to be contained within this cavity. This eliminates unsightly and expensive furring. Free access to the floor cavity requires no cutting or notching that can severely impair the structural integrity of other joists products of inferior design.

SERVICE. Put simply, the TrimJoist® is the superior product for floor joist applications. To aid architects, building designers, and contractors we offer toll-free access to a TrimJoist® representative. By simply calling (800) 844-8281 you can gain immediate assistance with your question or framing issue.



WARRANTY TrimJoist® Corporation warrants its products to be free from defects in material and workmanship as generally accepted in the industry. Said products are further warranted as to adequacy of design, provided products are used in strict accordance with TrimJoist® Corporation's then currently published design limits and are installed in a workmanlike manner. Said warranties do not apply in the event products are altered in any way other than intended by design. TrimJoist® Corporation's obligations under this warranty shall be limited to the replacement or repair of those products demonstrated to be defective. Such remedy shall constitute Customer's sole and exclusive remedy and customer, through the use of this product, agrees that no other remedy (including, but not limited to claims for INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, OR ANY CAUSE, LOSS, ACTION, CLAIM OR DAMAGE, INCLUDING LOSS OF TIME WHATSOEVER, OR INJURY TO PERSONS OR PROPERTY OR ANY OTHER CONSEQUENTIAL DAMAGE OR INCIDENTAL OR ECONOMIC LOSS) shall be available to customer whether said claims be asserted on the basis of warranty, negligence, strict liability, or otherwise. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. ALL OF SUCH OTHER WARRANTIES BEING HEREBY EXPRESSLY EXCLUDED.



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