



# GLULAM BEAMS OFFER SIMPLE SOLUTION FOR GARAGE DOOR HEADERS

**STRONG AND STABLE, GLULAM IS HIGHLY SUITABLE FOR CREATING LONG, STRAIGHT TWO- AND THREE-CAR OPENINGS.**

Glulam beams' ability to span long distances, their dimensional stability, and cost-competitive value makes them an ideal option for garage door headers, particularly for larger two- and three-car openings. In fact, garage door headers are one of the most popular applications for stock glulam beams in residential framing.





## BENEFITS FOR GARAGE DOOR HEADERS

Builders and architects turn to glulam for these applications for a number of reasons, including:

- Glulam is available in widths that match standard 2x4 and 2x6 wall construction, so there's no need for furring when you connect headers to end walls. A common width of glulam garage door headers is 3-1/2 inches, which fits conventional 2x4 wall construction. For 2x6 wall construction, a 5-1/2-inch-wide glulam beam provides the perfect fit.
- Glulam is supplied with zero or minimal camber, ensuring a level garage door opening with no sag.
- Glulam headers are routinely inventoried by local lumber dealers.
- Glulam headers come as a single piece, eliminating any need to nail together header materials.
- Glulam is dry, straight, and dimensionally stable. Because it won't warp or twist, it's easy to frame a straight garage door opening.

- Because glulam is manufactured under strict industry-wide quality control standards, every piece performs as intended.
- Glulam is stronger than lumber headers, allowing wider openings with smaller members.
- Glulam can be supplied in long lengths, so it's simple to extend the header over narrow end walls to gain added lateral strength at little additional cost.

## NOTCHING AND DRILLING

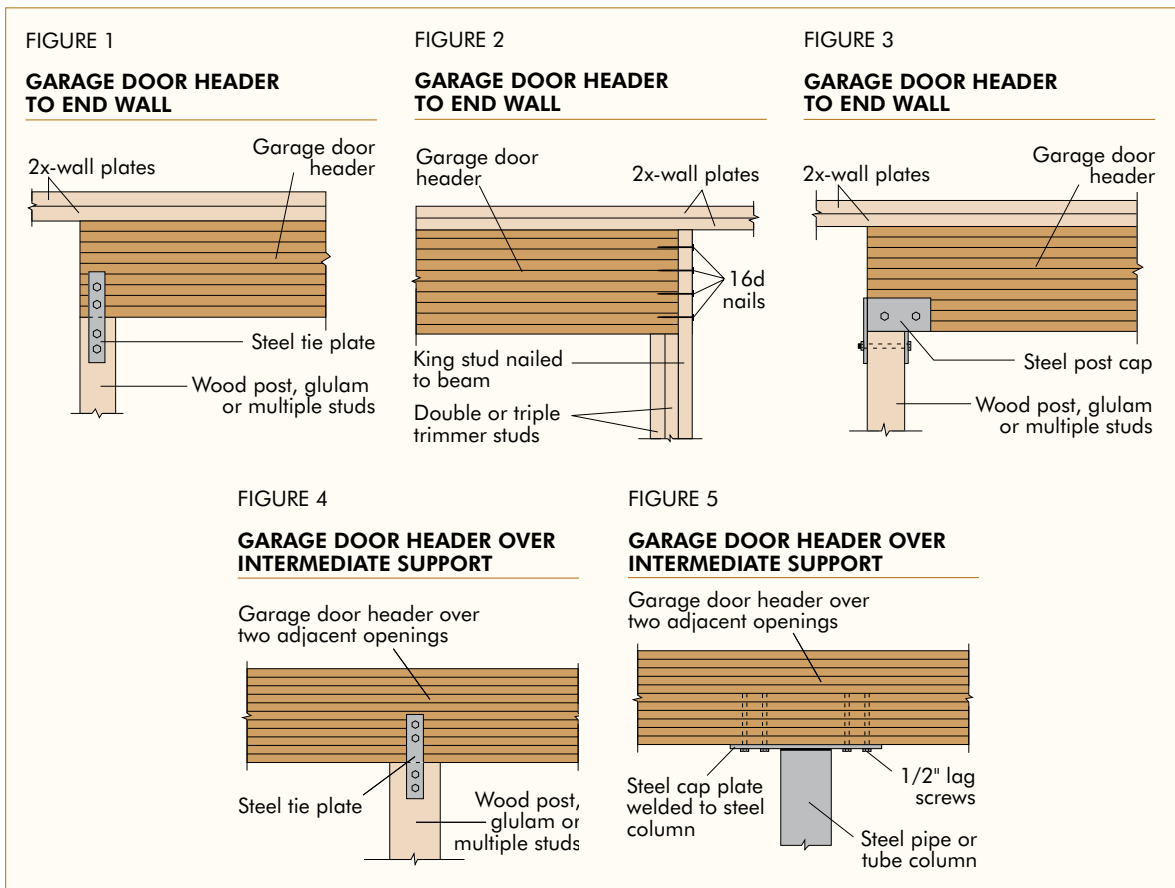
Glulam is manufactured from specially selected and positioned lumber laminations, designed to optimize strength and performance in the structural members. As with all engineered wood products, any holes, notches, or tapered cuts should be approved by the design professional of record and detailed on shop drawings. Improperly placed notches or holes may have an adverse effect upon the load-carrying capacity of the glulam beams.

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When field notching, or drilling a glulam beam is required, consult the engineer of record before making any cuts. In some instances, these modifications can be made in areas of the glulam that are not highly stressed and therefore have minimal effect on the structural capacity of the member. To address these specific conditions, APA offers the Technical Note, *Field Notching and Drilling of Glued Laminated Timber Beams*, Form S560.

## CONNECTION DETAILS

APA-trademarked glulam beams are supplied with either zero camber or a very flat factory built-in camber, which makes it easy to connect glulam with other wood frame components. Figures 1 through 5 illustrate some of the many simple connection details that can be used with glulam in residential garage door framing.





## NARROW WALLS

For the narrow wall adjacent to the garage door opening, often one of the most challenging areas of the wood-frame design, APA has developed the Narrow Wall Bracing Method. This construction method enables builders to meet code bracing requirements while reducing wall bracing segments to as narrow as 16 inches next to window and door openings.

In the Narrow Wall Bracing Method, the glulam header typically extends over the top of the narrow wall segment, next to the garage opening. Glulam beams are readily available in the long lengths that are needed to extend the header over the adjacent narrow walls. The wood structural panel sheathing in the wall segment overlaps the glulam header and is attached with nails in a specified grid pattern. At the base of the wall, a hold-down connector attaches the

wall segment to the foundation. These two moment-resisting connections, combined with the bending capacity of the vertical segment and glulam header, provide the lateral resistance normally facilitated by shear walls or braced wall sections of a substantially greater width.

For more information on wall bracing systems and the Narrow Wall Bracing Method, download APA's *Brace Walls with Wood*, Form G440.

## SPAN TABLES

APA provides span tables for single- and two-story garage applications, as well as glulam equivalents for sawn lumber and built-up lumber. To view these tables, download *Glulam Garage Door Headers Offer Design Options*, Form C410 and *Substitution of Glulam Beams for Steel or Solid-Sawn Lumber*, Form S570 at [www.glulambeams.org](http://www.glulambeams.org).

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