

Resisting Uplift

Thanks for the excellent article by Andrew DiGiammo on a simplified method for framing a gambrel roof (September/October 2007). I am wondering whether the detail could be simplified even further by eliminating the steel strap across the ridge. It would seem that the double plywood gusset across the rafters that meet at the ridge acts to provide the same resistance to uplift as does the strap. If the gusset is inadequate by itself, why not just make it slightly larger, with enough fasteners to resist the uplift forces?

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Clayton DeKorne responds: Thanks for the close read, and for paying attention to the critical details. The point you are drawing attention to reflects

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an oversight on my part. The label on the illustration indicating the need for a metal strap should have been suggested as an alternative uplift restraint for a gambrel frame with a conventional ridge *instead of* the uppermost gusset. You are correct that having both the strap and the gusset is redundant. The revised illustration below includes the label as it should have appeared initially.

Site-Built Gambrel Truss

Alternative: If ridge is used, tie rafters together with metal strap (instead of gusset) to resist uplift

