LETTERS

Brick Veneer Question

To the Editor:

Jim Cowie and Mike Wilson's informative and alarming report on the deficiencies of brick veneer on steel-stud walls ("Brick Veneer and Steel Studs: Performance Questions," 4/91) raises the question of whether such deterioration will occur in the much more common brick veneer on wood frames. Intuitively, it would seem that brick-on-wood is just as liable to suffer all the same problems as brick-on-steel. Is this the case?

Peter Samuel
Libertytown, Md.

Jim Cowie Responds:

The design requirements for both wood and steel stud walls are essentially the same. Wall ties must transfer lateral wind loads, studs must be supported to provide structural support for the veneer, a wall cavity must exist, and an adequate air/vapor barrier is required. Both types of wall are made from materials that do not stand up well to moisture; steel rusts and wood rots. However, the difference in the two systems lies in their application, the severity of their environment, and the structural load requirements.

The brick-veneer/steel-stud wall system is not suitable for the kinds of structural loads to which it is exposed in industrial, mid-rise, and high-rise applications. In addition, wind-driven rain, high wind loads, and high interior humidity often cause the walls to fail because they depend on perfect air tightness to achieve a lasting performance. Air tightness is a commendable goal, but it is poor design to rely on it to ensure performance.

Wood-stud walls are typically limited to low-rise or residential applications and, therefore, not exposed to the same conditions. They are also able to shed water without relying on the rain-screen principle, which can trap the rain water in the wall cavity, where damage could result.

Additionally, wood-stud walls do not have shelf angles. Windows are low and easily maintained by the homeowner. Finally, residential wood-stud walls have overhangs, eaves, and a limited number of openings for rain penetration.

Site-Built Glazing Source

To the Editor:

Your article "Installing Fixed Glass" (8/91) contained valuable information on fixed glazing. Unfortunately, Abundant Energy was not included in your list of suppliers. Our company pioneered the use of the "double batten" extruded aluminum glazing system and now jointly markets it with US Sky.

We originally developed the Sure-Seal glazing system to meet our needs as a sunroom builder. Its design incorporates a base and cap to ensure against leaks for the 20- to 50-year life expectancy of the glazing. A basic tenet in the glazing industry is to weep water out of a system. A leak in a cap-only system can cause immediate deterioration to the wood structure.

Condensate gutters are an integral part of this weep system and are especially important in sunrooms with a "hot tub." With an overlapping "cascade" gutter system, glazing units may be stacked one above the other.

With a properly designed system, contractors can confidently fabricate their own fixed glazing.

Ronald M. Hays, President
Abundant Energy Inc.
Pine Island, N.Y.

Bracing Technique Questioned

To the Editor:

I was alarmed by the comments on let-in bracing made by author Don Dunkley in "Fast & Accurate Wall Framing" (4/91). His speedy procedure, which "takes some practice and won't win any awards for safety," is not only incorrect, it is probably the worst thing a foreman can promote to his crew.

Metal wind bracing (let-in) is available that is easier, safer, and faster than the old 1x4 method. I lay a piece across the studs and tap the brace at each stud. I set my saw at about 1/2 inch and make two passes at each indentation, giving me a 1/4-inch-wide groove. This can be done safely in about a minute or less.

Dunkley should try this. It's a safer technique when using a power saw.

Adam C. Zengel
Bellbrook, Ohio

Don Dunkley Responds:

I am not surprised to get feedback on my procedure for cutting a let-in brace. It is a scary technique to the uninitiated. Still, thousands of West Coast carpenters practice this exact method on a daily basis, and it is not considered incorrect for either structure or safety.

California has one of the most stringent seismic building codes in the country, and let-in braces are acceptable for shear-resistance. In some counties in southern California, however, a 1x6 is required instead of a 1x4. Throughout the state, when the let-in bracing is not sufficient, a shear panel is required.

As for safety, only when a carpenter has demonstrated good skill and confidence with a power saw is he asked to learn the let-in procedure. We use worm-drive saws exclusively. A worm drive's in-line design makes the saw maneuverable and allows the operator to brace against kick-back. With any saw a similar method — without the dangerous step of cutting the bottom of the notch — can be used: Make several 3/4-inch-deep passes between the cut marks, and knock the remaining wood out with a few quick hammer blows.

Metal bracing may indeed be faster. As of yet it hasn't caught on in new residential construction on the West Coast. One reason for its lack of popularity is that you can't pre-set the nails in the brace, rack the wall plumb, then drive the nails home.

Design/Build Debate Continues

To the Editor:

As an architect licensed to practice in three states (Conn., Vt., and Penn.) you can imagine my concerns with some statements made in "The Perils of Design/Build" (5/91).

First, I think it is important for contractors contemplating engaging in design/build to know that some courts have held design/build contracts to be invalid. Such is the case in at least Connecticut and Arkansas. Pennsylvania and New Jersey also do not recognize design/build contracts as valid.

Second, a statement is made that the homeowners have paid for the plans and therefore the plans belong to them to build with elsewhere. This is very mistaken. Building-design drawings are copyrighted material and are the property of the designer. The homeowner has paid for services and is given the right to use copies of the drawings for the intended project and location. The homeowner has no right to use the plans in another location without the permission of the designer. Hence, the designer's responsibility does not go elsewhere with the drawings. This is clearly stated in the *Standard Form of Agreement Between Owner and Architect* published by the American Institute of Architects.

Third, the subheading, "Safety Not the Issue," does not address the fact that architects and engineers in most jurisdictions meet stricter qualifications than local building officials. Building officials often assume that information on drawings is accurate without the ability to do so, especially with regard to engineering. I have yet to see a remodeler who possesses a copy of the residential building code, let alone knows how to read the regulations, charts, and load tables and determine their applicability. Also, I have often seen building officials approve plans or construction that are clearly in violation of codes. For these reasons public safety is certainly an issue. Homeowners should know that builders who offer design services may not have the minimum competency required to provide good spatial and aesthetic design, to assure code compliance, and to design basic structural systems.

I am always disturbed by articles such as this that illustrate the dangers of having a little knowledge of a subject.

Milton Gregory Grew
Bethlehem, Conn.

Carl Hagstrom and
Toby Anderson Respond:

We both agree with Mr. Grew's first point. The purpose of our article was to alert designer/builders to such problems.

Concerning his second point, we doubt that most courts would prevent the customer from using plans at the original site, or at another location, assuming there is no architect in the picture, and no A.I.A. type of contract. We also assume that the designer/builder has been paid for his time in preparing the plans. Under these circumstances, the customer would probably have the right to take the plans to another builder, or another location. If the designer/builder wants to prevent that outcome, he could put a term in the contract saying that the plans remain the designer's property.

As for the issue of safety, our intent was to question why there are large loopholes in the architectural licensing laws, such as owner-designed buildings (which are later offered for sale to the general public) and single-family dwellings, which are exempted from the licensing requirements in most states. If the licensing laws are really intended as a safety measure, would such exemptions be permitted? ■

Keep 'em coming...We welcome letters, but they must be signed and include the writer's address. *The Journal of Light Construction* reserves the right to edit for grammar, length, and clarity. Mail letters to *JLC*, RR#2, Box 146, Richmond, VT 05477.