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BPA INTERNATIONAL

JLC's

Letters

Housewrap and Siding

I read Henri de Marne's comments about housewrap in the July *JLC* (*Letters*). I feel that there is not enough evidence presented to blame the housewrap. Installing roofing felt instead is definitely not the answer. Also, the rain screen detail is more expensive, especially on a renovation or re-siding job.

I would be interested in hearing others' experience and comments on this subject.

Will Stanton
from the *JLC* Online Forum

Why Not Felt Paper?

I too read de Marne's remarks on housewrap, and intuitively agree with him. Why install a "barrier" that allows moisture to pass — in either direction? Even if, as the literature suggests, it allows excess interior moisture out, where is it going? Behind the siding to create mischief.

Plywood or other panel sheathing surely prevents air infiltration as effectively as housewrap, and why not use asphalt paper to provide a bulkhead to keep moisture from migrating around the structure. If you are generating moisture, deal with it at the source.

The only benefit I see to housewrap is ease of application. I hardly think trading off performance is worth it.

Chris Black
from the *JLC* Online Forum

Housewrap Contradiction?

To the Editor:

The July 98 issue of the *Journal of Light Construction* contained two excellent discussions regarding the use of housewrap behind siding. When considered alone, each discussion was logical and apparently accurate. However, when compared with each other, the discussions could be considered contradictory. The contradiction intrigues me since I frequently debate the best method to protect against rain that moves behind vinyl siding. I believe the two discussions in the July *JLC* best describe the basis for the arguments of "wrap" or "don't wrap." Due to the horror stories emanating from moisture trapped behind acrylic stucco in EIFS exteriors, there is great concern that moisture that finds its way behind vinyl siding not become trapped.

Visit *JLC* on the Web Oct 15!

We're hard at work tackling the punch list on our newest creation: JLCONLINE.COM. Starting out, our web site will feature online forums, an archive of selected articles, a full-service bookstore, and customer service information. Over time, we hope the site will grow into a lively online community where contractors can go directly to their colleagues for insight, information, and inspiration. In addition, we hope you'll use the site to bring your concerns and questions directly to us, and that we can use the technology to communicate more effectively with you. That's the spirit of this exciting new medium, which we feel is a perfect fit for our mission of helping contractors learn from contractors. We hope you'll participate and especially look forward to your feedback and suggestions for making the site a success for all of us. See you on site — the Web site, that is.

— The Editors

The discussion by Henri de Marne (*Letters*) describes the condition where housewrap in direct contact with siding can allow moisture to pass through. It is an interesting analogy that housewrap may behave like a tent…it doesn't leak until you touch it. Conversely, Paul Fisette (*On the House*) proposes housewrap as cheap insurance. While protecting the building shell from weather, it helps save energy.

Perhaps the answer is simple. Don't use housewrap behind and in direct contact with "hardboard" type siding for the reasons described by Henri de Marne. Conversely, since vinyl does not rot, housewrap can be safely used. But what about OSB or plywood sheathing behind housewrap? Since these materials can rot and are "touching" the housewrap, why are they not in jeopardy with "tent-like" leakage of housewrap?

I appreciate any information and direction you can offer.

Mike Sullivan
Warranty Technician
M/I Homes, Raleigh Division
Raleigh, N.C.

Henri de Marne responds:

I see no problem using housewrap behind vinyl or aluminum siding, as they do not absorb moisture and are hung loosely to the house walls to allow for movement. They are not in contact with the housewrap and there is enough ventilation behind them to dry whatever gets through the cladding.

I also think that some of the housewraps may be okay if the wood siding installed directly over them has been treated with a water-repellant coating on all surfaces prior to installation. This should prevent wicking of moisture behind the siding by capillary attraction, a problem I have frequently seen when the siding was applied raw.

But, from my observations, I would vote for felt paper under these conditions, as I have yet to see damage to the substructure where felt was used. From my experience investigating a number of houses and condominiums with serious siding problems brought about by a variety of conditions, I still believe that the best way to avoid them is to use the rain screen.

I hope this clarifies what appeared to be a contradiction between Paul's and my comments.

Tyvek Not the Problem

To the Editor:

In Henri de Marne's letter of response (7/98), he expresses his concerns about housewraps. I can only speak for Tyvek HomeWrap (because other housewraps perform differently from Tyvek) in answering three points that should be clarified.

First, the statement that Tyvek is not designed to be subjected to constant wetting is not correct. Tyvek is a plastic material made of breathable polyethylene fibers and therefore does not absorb water, does not rot, and does not lose water repellancy with continuous exposure to water. Building papers and felts, however, do absorb substantial amounts of water, experience property changes, and have been reported to deteriorate when exposed to water.

Second, if significant water is getting behind siding, the wall system has a problem that is most likely caused by a combination of improper wall component installation (for example, windows, flashing, siding), poor design, or other factors. If a wall will be exposed to high levels of water penetration due to climate, building site, or severe weather exposure, a rain screen or air space is a good building practice that makes the wall more forgiving to water penetration. However, Tyvek performs under wood siding with or without an air space.

Third, attributing the failure to the so-called "tenting" phenomenon is the author's opinion and is not supported either by DuPont lab or field research or, to our knowledge, any other independent research. Tyvek is and has been performing successfully behind all types of wall cladding for many years on millions of homes around the world.

Tom Schuler, Business Manager
DuPont Construction Products
Wilmington, Del.

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Corporate Mailing Address:
Builderburg Group, Inc.
932 West Main Street
Richmond, VT 05477
802/434-4747

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Grease Fires in Kitchen

To the Editor:

In the article, "Using CPVC for Fire Sprinklers" (7/97), there is an excellent photograph showing the results of a home cooking accident. The caption refers to "fire in a kitchen exhaust hood." This caption is misleading. In my position at Broan over the last 26 years, I have never seen a fire or the results of a fire in a residential kitchen range hood (commercial hoods are very different). On the other hand, we have seen the results of too many cooking accidents and the photo clearly tells the story of a cooking accident on the left front burner.

Broan has intentionally ignited a number of residential cooking fires for research. Although common cooking oil does not ignite until about 700˚F, it can reach that temperature very quickly when conditions are favorable. In less than 10 minutes, starting from room temperature, grease in a pan can ignite and cause much greater damage than shown in the photo. One minute after ignition the fire can produce a plume of flame that reaches the ceiling.

Each year, home cooking accidents result in about 100,000 fire department calls. It is estimated that another 300,000 home cooking fires are extinguished without aid. Almost all these fires involve cooking oil and a lack of attention.

If you have a grease fire, do not use water. A violent steam explosion can spread burning grease instantly. Instead, call 911. The best way to extinguish a grease fire is to place a lid on the pan.

David W. Wolbrink, Vice President
Broan Manufacturing
Hartford, Wis.

Temp Power Tips

To the Editor:

As a floor finisher, Sean Kenney's comments concerning flooring contractors and marginal electrical hookups did anything but "raise my hackles." Like other building trades, we too have to work with what we are given (in terms of power hookups) and often under extreme time constraints. Let me toss out some ideas for consideration:

Along with installing 20-amp 110-volt circuits on the various levels, go ahead and install the 220 electric dryer outlet if one has been specified. You might also want to add a temporary one even if it isn't on the list. All you need is a pigtail with the appropriate plug for the dryer outlet and a twist-lock connector for your cord and you have a safe and simple hookup point that avoids all the hazards and gives you the necessary protection for all parties. If possible, increase the amps to 50 instead of 30 just to make sure the machines keep humming.

Also, flooring contractors should invest in a simple power booster or power station. You bring your 220 power (or as close to 220 as you can get) to these units from their source and the units will automatically give you a 15% boost. The supply side of the booster then provides you with up to 230 volts for your big machine and a two-outlet, 20-amp, 110-volt service to boot. Not only does this eliminate the low voltage strain on your big sander, it allows you to run edgers, buffers and vacuums — simultaneously! The real icing on the cake is you now have your own designated power supply and you don't have to compete with the other trades for power or wear your legs out resetting breakers and replacing fuses. The one I use, the Power Station, made by Bona Kemi (800/633-1121), has a 20-amp thermal breaker to stop things if they are getting too warm. It can be reset when things cool down. They are reasonably priced — about one-fourth of the cost of a 5-horse, 220 motor for a big sander.

Michael Purser
The Rosebud Company
Atlanta, Ga.

Safety Policy From the Trenches

To the Editor:

In response to Mr. Guerra's letter (8/98), my disciplinary action for a crew member not wearing safety glasses while using a pneumatic gun is not a policy born of some "political bosses," but comes from the belief that the people who work for me are my most valuable asset (as well as my friends and neighbors). They deserve the value of my experience and the value of learning they are not invulnerable to that one time using a nail gun — after using it hundreds of times before — when they can be blinded in less than the wink of an eye by a tiny piece of plastic or a 10d nail. These guys deserve my, and any other caring employer's, best efforts to allow them to leave the workplace with eyesight as good as when they showed up to work. They deserve to know we don't want them hurt while under our watch.

I have found through the nearly 30 years I have been in this business that, unfortunate as it may be, carpenters tend to "hear" better when they think their wallets are being threatened than when I try to get across the concept of why safety should be practiced. How do I explain to a young apprentice that losing his sight is a tragic, horrible thing without instilling how important it is to me?

While I agree that the safety issue, as a political point, has become overly repressive and does seem to be run by bureaucrats who have very little knowledge of what the job site is really like, I also believe that it is of tantamount importance for those of us that have put ourselves in charge of other people's work situations to speak out for the health and safety of our employees. I also believe that it is even more imperative when that "boss" comes from the ranks and has critical, firsthand knowledge of what can happen when speed, comfort, or machismo is pushed over safety.

A final note: I don't let my employees smoke on the job, either. Now that ought to generate some mail.

Robert Van Peer
Van Peer Construction
Fort Bragg, Calif.

Trusses & Rafters: Another Perspective

To the Editor:

I'd like to make some points regarding the article "Trusses vs. Rafters" (*By Design*, 7/98). The article states, "Using trusses puts someone else on the hook for engineering." The question that this brings up is, "On the hook for what engineering?" The limit of the scope of engineering by the truss designer is the individual truss element as defined by the scope of work statement on the truss design drawing. If there is no design professional preparing construction design documents, then there is no complete engineering of the structure being performed.

The article also states, "...if you want real, flexible attic space that's well insulated, too, you're better off with rafters." If the author is suggesting that it is easier to change a roof-framing plan from rafters to include attic space as a field modification, the statement is absolutely true. If, on the other hand, attic space is designed into the plans on the front end, then attic trusses can easily be designed and built to suit any space requirements.

Finally, the article states that rafters allow more options than trusses do when it comes to skylights. This is true when the original plans do not call for skylights, since trusses do not like to be cut. If there is good roof design planning on the front end, trusses can be used to add virtually any realistic skylight condition one would desire. Girder trusses provide for great flexibility in laying out a roof framing method to accommodate specific design features.

For most projects, upfront planning is the key to a smooth result. Trusses do require good planning, since they depend on precise information to meet the application needs and are manufactured off-site. In any project that does not have good plans or where one suspects a myriad of field changes to be made, conventional framing will be the best way to go. The goal of all truss manufacturers is to provide the builder or designer with the best economic approach to building construction. They will even suggest which areas of the building are good for trusses and which should be stick-framed.

Kirk Grundahl, Executive Director
Wood Truss Council of America

Steel Framing Training

In the article "Steel Industry Funds Energy Study" (*Notebook*, 9/98), we reported that the American Iron and Steel Institute (202/452-7202) has developed an apprenticeship training course. They offer no course, just a training manual, the *Residential Steel Framing National Training Curriculum*, for $155.

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