



THE JOURNAL OF LIGHT CONSTRUCTION

A Builderburg Group Publication

Editor	Sal Alfano
Managing Editor	Don Jackson
Senior Editor	Clayton DeKorne
Assistant Editors	Joe Stoddard Peter Young
Editorial Assistant	Sharyn Minnick
Copy Editor	Cindy Hoffman
Contributing Editors	Michael Byrne Henri de Marne David Dobbs Paul Fiset Carl Hagstrom Kathleen O'Brien Bill Robinson
Columnists	Jamie Fisher Robert Randall Quenda Behler Story
Art Director	Theresa A. Emerson
Graphic Designer	Barbara Nevins
Illustration	Tim Healey
Photography	Carolyn Bates Bill Lorenz
Sales Director	Alicia R. Cipollaro
Sales Representatives	Tami Svarfvar Don Alter Glenn Dunning
Sales Operations Manager	Laurie Fielder
Advertising Coordinator	Katina Walters
Expo Coordinator	Donna Ladd
Exhibit Sales	Carol Fielder
Circulation Director	Paul Ruess
Circulation Manager	Colleen Murphy
Direct Marketing Manager	Kevin Spaulding
Customer Service Supervisor	Angela Packard
Customer Service	Joyce-Marie Birdsall
Editorial Director	Steven Bliss
Publishers	Michael Reitz Steven Bliss
Controller	Debbie Moore
Operations Manager	Randa Wright
Administrative Assistant	Carol Grassano

The Journal of Light Construction (ISSN-1050-828X; USPS-001-659) is published monthly by Builderburg Partners, Ltd., 1025 Vermont Ave. NW, Washington, DC 20005. Periodicals-Class Postage paid at Richmond, Vt., and additional mailing offices. Postmaster: Send address changes to The Journal of Light Construction, 932 West Main Street, Richmond, VT 05477. Copyright 1998 by Builderburg Partners, Ltd. All rights reserved.



JLC's

Letters

Galvanized Hardware

To the Editor:

The item on galvanized fasteners (*On the House*, 2/98) was informative to a point. After comparing three galvanizing processes with zinc coatings ranging from 0.14 mils to 6.0 mils thick, with two of the three processes producing coatings less than 0.3 mils thick, the graph shows service life expectancy starting at 0.4 mils. Since some common fasteners (electroplated and mechanically galvanized) have less than a 0.4-mil coating, should we expect those fasteners to have no service life? And why would a suburban exposure be more severe than a tropical marine exposure? I'd have thought the tropical marine area to be one of the worst.

John P. Callen, P.E.
Hilo, Hawaii

Suk Lee, of the American Galvanizers Association in Aurora, Colo., responds:

The graph you refer to covers a broad range of steel construction materials, from screws and nails to architectural railings and heavy structural beams. The thicker the steel, the thicker the coating of zinc that will metallurgically bond with it. Thus a steel beam might have a coating 6 to 10 mils thick. Fasteners such as screws and bolts are generally hot-dipped galvanized and centrifuged so that excess zinc is removed from the threads. A typical hot-dipped lag screw might have a zinc thickness of 1.5 to 3 mils.

Since fasteners are usually protected by the material they are inserted into (a bolt in a wood post, for example), corrosion is slowed down considerably. This means fasteners may have a longer service life than indicated by the chart. Still, the chart is accurate in reflecting that a hot-dipped galvanized fastener will generally have a longer service life than, say, an

electroplated one, given the same service conditions.

As for your second question, suburban atmospheres are more corrosive than tropical marine areas because of the presence of sulfurous compounds, which react with the zinc coating to form zinc sulfates and sulfites. These zinc sulfates and sulfites are water soluble, and will wash off the galvanized surface, thus degrading the coating. In tropical areas, the salt in the air causes the formation of zinc chlorides, which are less corrosive.

Rain Screen Flashing Detail

To the Editor:

In the article "Rain Screen Siding Retrofit" (4/98), I feel the window head detail incorrectly shows the flashing directly behind the rain screen. The air space serves two purposes: It provides an air space for the siding, as mentioned in the article, as well as allowing for any water that penetrates the rain screen to drain by gravity to the outside via flashings and weeps. A better solution would have been to run the flashing behind the strapping. As it is shown, any moisture that penetrates the siding will run down the sheathing and right behind the window.

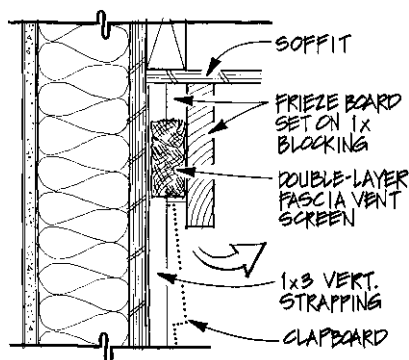
I have also recently heard some reports about housewrap losing its water repellancy if it's installed directly behind wood siding. JLC may want to look into this.

Jeff Stetter, AIA
Montpelier, Vt.

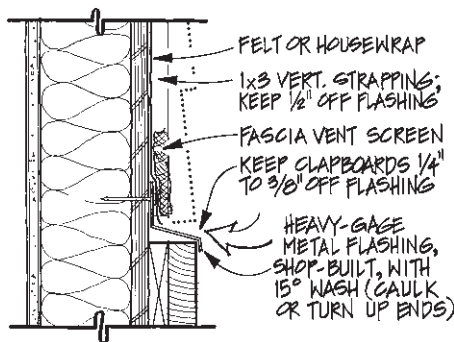
Henri de Marne responds:

You are right: The rain screen illustration should have shown the head flashing installed against the sheathing and its top flange covered with felt paper or housewrap. The correct detail is shown above, including the addition of GAF Cobra

Rain Screen Venting at Soffit



Venting at Window Head or Skirt Board



fascia vent as a screening device for insects and mice.

I can corroborate your concern about housewraps. I have investigated a number of cases where sheathing and framing were rotting severely, apparently because they were subjected to constant wetting from water trapped between the housewrap and the back of the siding. The source of the water might be vapor from inside the house but is more likely rain-water driven behind the siding by the wind or drawn by capillary attraction. In any case, without an air space, there is no way for the housewrap to dry. By contrast, I have not seen any damage in similar circumstances behind 15-lb. and 30-lb. felt.

In a telephone conversation with a Dupont engineer, I learned that their product, Tyvek, was not designed to be subjected to constant wetting. Housewrap

seems to behave like a tent: It doesn't leak as long as you don't touch the material. Where the housewrap is in contact with the back of the siding, it eventually lets the moisture through and trouble begins.

In light of this field experience, I only specify felt, but recognize that housewraps may perform well with the rain screen approach as there is no direct contact between housewrap and siding.

Likes Construction Master

To the Editor:

My company specializes in the framing of very intricate remodels, which involves a lot of experience and knowledge. It is very important to us that we use the best tools and solutions to complete our tasks; therefore I was surprised and disappointed to read the article "Building Rake Walls"

(4/98). First, buying a "cheap" calculator because it falls out of the bag does not show proficiency. There is a calculator on the market called the Construction Master IV, built and sold by Calculated Industries, which retails for about \$80. After reading the article, I asked my wife to calculate the same numbers as in the article using the Construction Master IV. She was able to do the same calculations in under four minutes, and check her results. My wife is a college graduate, but has no clue about math or construction.

Our trade is complicated enough as it is; please, let's not make things worse. Using a scientific calculator and converting to decimals, and re-converting to feet, etc., will only result in costly mistakes and wasted time, which in itself is expensive. This is the same mentality as not using a power saw or a pneumatic nail gun.

Marc Armstrong
Austin, Texas

Down in the Valley

To the Editor:

Tom Brewer's article on valley flashing (3/98) places the emphasis on preventing leaks, and the details shown should be very effective. However, two other points should be made. The author states, "In an open valley, the

JLC Information Directory

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

Subscriptions/Customer Service: Call 800/375-5981 to order a subscription or 800/784-0290 for customer service assistance. Or you can e-mail us at cs@bginet.com, fax us at 802/434-4467, or mail us at the address above, Attn: Customer Service. Subscription rates for qualified readers in construction trades: \$39.95/1 year, \$64.95/2 years; \$89.95/3 years. Canada and International: add \$15 per year. Non-qualified readers: \$59.95 per year. Appropriate sales tax included. Group rates available on request. Back issues/single article requests: \$5 each plus \$5 s&h per order.

Editorial: We welcome letters and article submissions from readers. Keep copies of all original materials. Contact us by mail at the address above, Attn: JLC Editorial Dept, or via e-mail at jlc@bginet.com.

Advertising: For rate information, call the JLC Advertising Dept. at 800/644-4596 vm. ext. 300, fax to 802/434-4467, e-mail to aliciac@bginet.com, or mail to the address above, Attn: Advertising Dept. For custom reprints of articles (quantities of 500 or more) call 800/552-1951 ext. 136.

Conferences & Seminars: For information about attending a JLC conference or seminar call 800/261-7769; for exhibitor information call 800/552-1951 ext. 144.

JLC Bookstore: To place an order or obtain a free catalog, call 800/859-3669, fax us at 802/434-4467, mail us at the address above, Attn: JLC Bookstore, or visit us online at <http://www.constructionbookstore.com>.

shingles stop short of the valley centerline, leaving the flashing exposed. I'm not sure why open valleys are used so often." I am. An open valley is repairable. Valleys are always the first part of a roof to erode, usually well before the end of the service life of the rest of the roof. With a closed or woven valley, the repair must be made with never-quite-matching shingles, or else turned into an open valley.

Mr. Brewer also recommends using a single width of a self-adhering waterproofing membrane in the valley. Good idea, but maybe not enough

JLC E-MAIL FORUM

To participate in this free discussion group, send an e-mail message to **JLCforum@bginet.com**. All questions and comments about construction-related topics are rebroadcast weekly to the entire group.

against ice dams. Ice dams love valleys. I suggest the waterproofing membrane be used under the entire design snow drift area, which may require more than a single width.

William Rose
Building Research Council
University of Illinois
Champaign, Ill.

Retrofitting Plywood Clips

To the Editor:

Here's another technique for retrofitting plywood clips (*On the House*, 3/98). Rather than crawling around in the insulation in a hot attic, I retrofit clips from the top side. In the area of the sag, carefully remove a row or two of shingles and underlayment to expose the plywood. If no space has been left between the rows of plywood, run a circular saw along the joint to provide a gap to slide in a clip. Midway between rafters, use a jigsaw to make a hole just large enough to

slip the clip in. Place your weight on the offending area while sliding the clips over. I usually place a clip on each side of the hole.

I have used this procedure successfully many times, even over large areas. The secret is carefully removing and replacing the shingles. Of course, the best time to make the repair is just before reroofing.

John Kouka
J.K. Builders
Champaign, Ill.

KEEP 'EM COMING! Letters 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*, 932 West Main St., Richmond, VT 05477; or e-mail to 76176.2053@compuserve.com.

