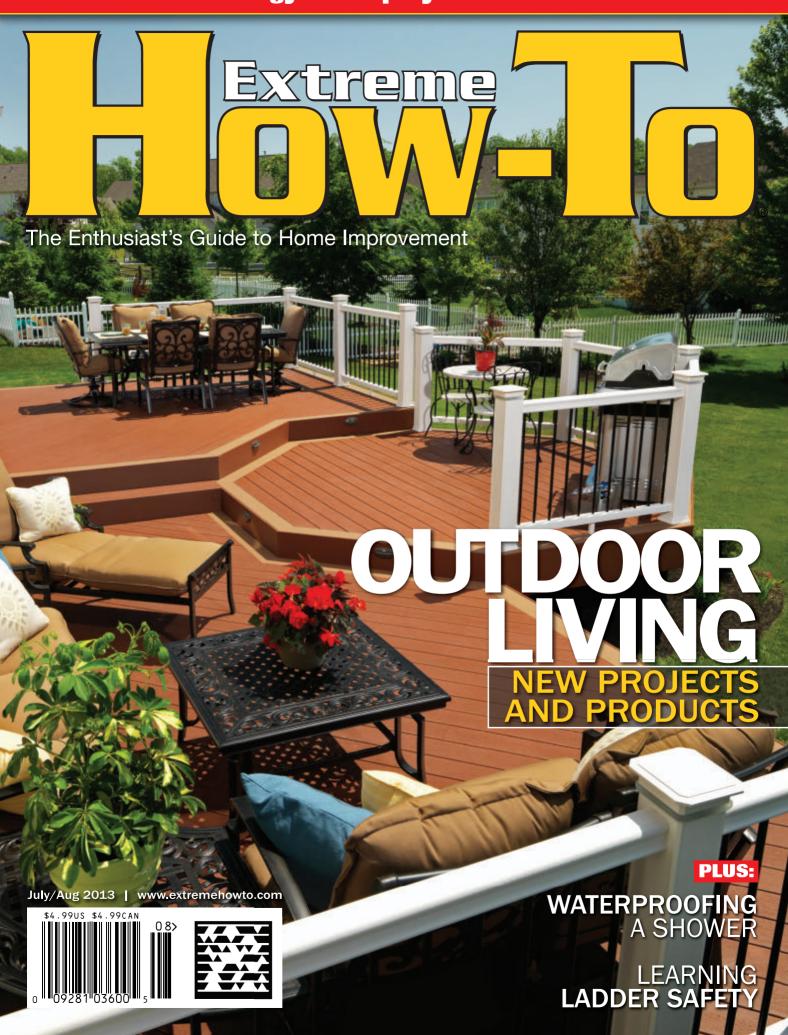
Save Energy with Spray Foam Insulation





135° Split Point start from Contact 3-flat shank, less chuck slippage



www.MyTGTools.com 1-800-687-4122

Here's Our Crowning Achievement







NEW E•Z Pro™
Crown King
helps you create seamless,
perfectly mitered interior
and exterior corner joints.
#880

Now you can make it yours!

Cutting crown molding has never been so easy. The **E•Z** *Pro*™ **Crown King** allows you to cut precise joining angles without tedious trial and error process, *right out of the box*. With just one base unit, an insert, and your miter saw, you can create interior and exterior joints for the three most common crown molding spring angles: 38°, 45°, and 52°. It doesn't matter if you're a professional or a DIYer, you should check out this new addition to General's E•Z *Pro*™ line. Whether it's for ceiling and wall corners, decorative elements for cabinetry and furniture, or enhancements for doors and windows, General's Crown King produces crown molding joints that are affordable, yet fit for a castle!

For more information on General's new Crown King and the rest of our line of E•Z *Pro*™ products, visit: **generaltools.com/ckandjigs**



General Tools & Instruments

Precision, Specialty & Innovation...since 1922



Visit Us at Booth 4990



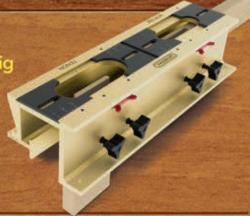
JULY 24-27, 2013 LAS VEGAS CONVENTION CENTER LAS VEGAS, NEVADA WWW.awfsfair.org

General Tools & Instruments 80 White Street, New York, NY 10013 | tel 800-697-8665 | www.generaltools.com

Meet the Joint Chiefs



The E•Z Pro™ Mortise & Tenon Jig lets you make perfectly matched mortise & tenon joints with one jig. #870





The E•Z Pro™
Dovetail Jig
lets you make
dovetail and box
joints – through
or half-blind.

#861





The E•Z Pro[™]
Pocket Hole Jig
has everything you
need to make flush,
corner and angle
pocket hole joints.





The E•Z Pro™

Doweling Jig

lets you make perfectly aligned dowel joints every time.



#850



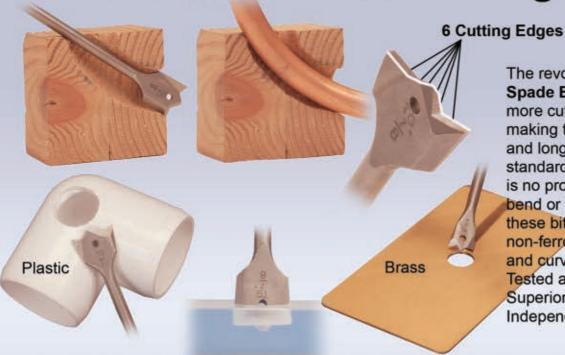


135° Split Point start from Contact 3-flat shank, less chuck slippage



www.MyTGTools.com/kik1.php 1-800-687-4122 T6 Tools • 1010 Cedar Ave. • St. Charles, IL 60174 • ph 800-687-4122 • fax 630-584-4722

We Put a KIK® in Your Boring Tasks!



The revolutionary KIK® Spade Bit has over 30% more cutting surface making them much faster and longer lasting than standard spade bits. There is no protruding tang to bend or break allowing these bits to even bore non-ferrous sheet metals and curved holes too! Tested and Proven Superior by an Independent Lab.

6 Cutting Edges

Acrylic



KIK® HS Brad Point

Independent Lab Tested and Proven Designed for Drilling Sheet Metal, Wood and Plastic Faster, Cleaner with Longer Life and no Walking on the Surface.

In Wood:

- Approximately 100% Faster Compared to Common Brad Point
- 40% Faster Compared to Standard Drill Bits

In Sheet Metal:

- 50% Cleaner Entry
- Consistently Round Hole
- 20% Less Walking

In Acrylic:

- No cracking Drilling Acrylic
- 150% Faster Compared to Standard Drills
- 690% Faster Than Other **Brad Points**

KIK® Forstner Bit

Proven Superior by an Independent Lab Cleaner Entry and Exit

- Bores through Hard Woods 100% Faster Compared to Standard Forstners

- Cuts

3 on Each Blade

9 Cutting Edges

- Titanium Coated
- 3-Flat Shank Open Head Design for no Clogging Easy Drilling and Direction Control

- Bores
- Mills
- Routes
 - Channels

Curved Paths

Bores

 Bores Through Acrylics Cleanly Without Melting Able to Bore 90 Degree Curved Paths

www.MyTGTools.com/kik1.php

1-800-687-4122

T6 Tools • 1010 Cedar Ave. • St. Charles, IL 60174 • ph 800-687-4122 • fax 630-584-4722

Best earting at 894 sq.ft Highest Quality The longest warranties on the market Biggest Selection 340+ varieties to choose from Expert **Advice** Flooring experts in every store Morning Star - Golden Zebra Strand Bamboo

LUMBER LIQUIDATOR\$ www.lumberliquidators.com 1-800-HARDWOOD

CONTENTS

July/August 2013





FEATURES

36 Rain Ready

Build a Patio Cover for Wet Weather—Plus, a Look at New Outdoor Products.

50 Foam Facts

SPF is Quickly Gaining Ground as a High-demand Insulating Material. Plus, an Update on New Energy Saving Equipment for the Home.



Touch 'n Foam sealant products actually pay you back by keeping heat and A/C in the house where it belongs. SEAL YOUR HOME WITH



ELIGIBLE

- · Fills gaps and cracks
- · Stops drafts and energy loss
- · Indoor and outdoor applications

Use smartphone scan or visit www.touch-n-foam.com for energy saving tips, to calculate your potential payback, and to find a retailer near you.





CONTENTS

EVERY ISSUE

8 From the Editor

COLUMNS

10 Q&A

14 Tool School It's Not the Fall, It's the Sudden Stop

28 Do-It-Yourself
Natural Stone Landscape Edging

Project NextKeeping Water Where You Want It





Cover photo courtesy TimberTech, www.timbertech.com







DECKINGTEAM

Most people say "a screw is just a screw." Clearly, those folks haven't used GRK. Choose GRK FASTENERS'™ DECKING TEAM when you select your hardware for your new decking project. After using 4 styles of high end GRK Fasteners in your deck, surely you'll say 'There are screws, then there's GRK!"

RSS™

For the structural components of your deck. From ledger boards to the posts and joists, this powerful fastener does not require pre-drilling and puts lag bolts to shame!

R4™

The multi purpose fastener that can take on almost ANY project! Use this for your deck boards, joists, stringers, railings or anywhere you want a secure connection! Fact: You'll never find a wasted R4™ on the ground at a work site!

KAMELEON™

Going the composite decking route? Be sure to use this! Available in today's most popular colors of composite decking, this fierce fastener is loaded with custom features designed to make your job much easier!

FIN/TRIM™

With one of the smallest heads on the market today, this finishing screw is perfect for capping and all of your trim work!





From The Editor-In-Chief

ven the handiest of homeowners have a threshold where they decide it's smart to forgo doing the project themselves and instead call in a professional. Whether it's a matter of experience, equipment or just available time, recruiting a contractor often makes a lot of sense. But the task of securing the right person for the job can pose its own challenges.

To help grease the gears, the National Association of the Remodeling Industry (NARI) advises homeowners of some "top tips" to prepare for a remodel:

Research your project. Taking time to research projects on the Internet and NARI.org will provide a good sense of what is involved such as price, scope of work, return on investment and new product or material options. Also, research property values in your neighborhood to make sure your project is in line with other homes in the area.

Use advanced search for professionals. The online world makes it easy to gather information about strangers. Ask friends, family and neighbors for referrals and then spend time researching that person online. Professional remodelers take their reputation seriously and hold credentials beyond licensing, such as certifications, memberships in trade associations and additional training. Look for examples of press coverage or involvement in industry presentations or events. Check online reviews and social media to see how they interact with past clients and peers.

Ask the right questions. Time and cost are important, but getting the right information requires the right questions. Ask your professional remodeler about his educational background, training, specialties or past issues with clients.

Set your budget. Deciding on a realistic budget and arranging finances to support your project are essential. This number needs to include everything—the project, products, contingencies, etc. Don't be afraid to share this with your remodeler. A true professional will be respectful of a client's budget and will create a plan around it, not over it.

Review contracts word-by-word. A remodeling contract protects you and your remodeler. Homeowners should review this carefully. Professional remodelers have done this before, and know what should go in a contract. Homeowners are not as familiar with remodeling and should ask about terms if they don't understand. Pay attention to details about change orders, payment, additional fees, timeline and

responsibilities. If it's not in the contract, it doesn't exist.

Not all contractors are as scrupulous as one would hope, so it's very important to vet the remodelers who you invite into your home. For more helpful tips on hiring a professional, visit us at blog.extremehowto.com for the NARI's Top 10 Steps to Prepare for a Remodel.





EDITOR-IN-CHIEF Matt Weber

mweber@latitude3.com
ADVISORY BOARD

Monte Burch Rob Foster Kathy Ziprik Mark Clement

CREATIVE DIRECTOR Wesley Glassco

CIRCULATION Jennifer Pentecost

PUBLISHER

Jeremy Hollingsworth jhollingsworth@latitude3.com

SENIOR ACCOUNT EXECUTIVE

Jan Logan jlogan@latitude3.com

ADVERTISING SALES

Martin Smith msmith@latitude3.com

Jonathan White jwhite@latitude3.com

Jason Holsomback jholsomback@latitude3.com

ONLINE MEDIA ASSISTANT

BUSINESS MANAGER Dusty Statham

,

SUBSCRIPTIONS Customer Service 888-587-8911

PRESIDENT

Trent R. Boozer

EXECUTIVE VICE-PRESIDENT Chad Gillikin

EXECUTIVE VICE-PRESIDENT

Val Carrier

Extreme How-To is published by LATITUDE3 MEDIA GROUP, LLC

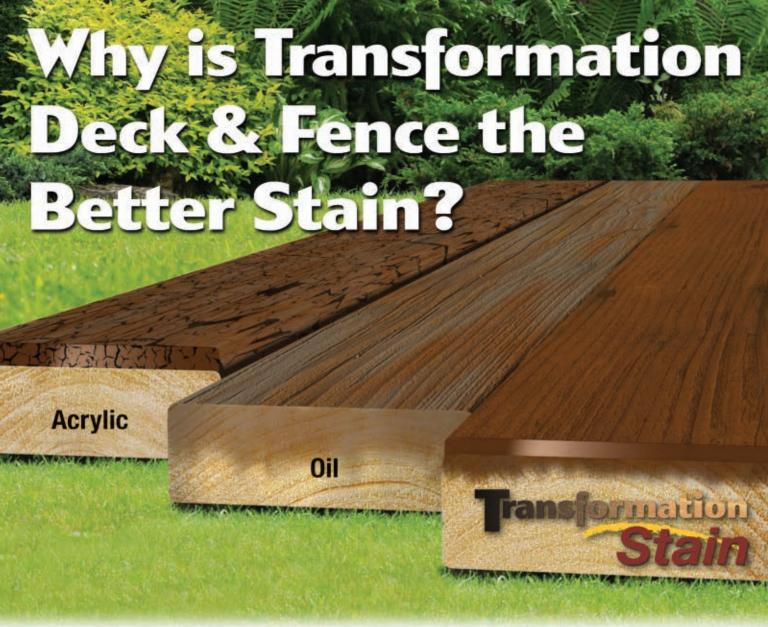
1111 Edenton Street Birmingham, AL 35242 Phone 205.949.1600 • Fax 205.949.1601 www.extremehowto.com

Extreme How-To (ISSN 1540-5346) is published and distributed monthly to DIY home improvement enthusiasts by Latitude3 Media Group, LLC, 1111 Edenton Street, Birmingham, AL 35242 (executive and editorial offices). All rights reserved. Neither this publication nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without permission of Latitude3 Media Group, LLC. Subscriptions: U.S. and possessions: 1 year (9 issues - \$18.97); foreign, 1 year (9 issues - \$32.50) U.S. funds only. POSTMASTER: Send address changes to: Extreme How-To P.O. Box 4320, Oregon, IL 61061. SUBSCRIBER SERVICE: To order a subscription or change your address, write to Extreme How-To P.O. Box 4320, Oregon, IL 61061, or call 888-587-8911, or E-mail to

ehtw@pubdmgroup.com; or visit www.extremehowto.com. To order back issues, call (205) 949.1603.

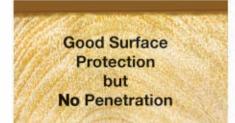
To order back issues, call (205) 949.1603.

The information in Extreme How-To's editorial content is intended to explain and simplify home-improvement tasks. Tools, products, materials, techniques, building codes and local regulations change; therefore, Latitude3 assumes no liability for omissions, errors or the outcome of any project. The reader must always exercise reasonable caution, follow current codes and regulations that may apply, and is urged to consult with a licensed professional if in doubt about any procedures. Printed in the USA



It's the Best of Both Worlds:

Acrylic Deck Stains



Oil Deck Stains



Transformation Stain

Protects
AND
Penetrates!







Get the free mobile app at http://gettag.mobi



S. A Got-

Questions About Home Building, Remodeling? Have Your Own How-To Tip? Visit our blog at **blog.extremehowto.com** and click on Ask Our Experts.

• I'm considering investing in a rental property, and the home inspector pointed out an attic ventilation problem, saying the attic may get hot in winter and lead to ice dams. How can heat lead to ice problems?

• Ice dams can pose a real problem in colder climates and can usually be prevented with proper attic insulation and ventilation, as well as waterproof shingle underlayment on the roof deck. Insulation and ventilation keep the roof cool in the winter when you're heating your home. However, if these systems aren't functioning properly, then the accumulated heat in the roof can melt snow in the winter. The water from the melted snow runs to the eaves, where it then refreezes to form an ice dam because the eaves are not heated. As the ice builds up, the melting and refreezing water backs up the roof, working into nail holes and between seams in the shingles. As the dam melts the water can then leak into the house and damage the walls and ceilings.

• I'd like to cover my deck shade with clear polycarbonate panels.
• Do they handle snow loads in the winter?

• Your local building codes should provide the details for design loads that you will have to follow for your deck cover. But generally speaking, both the structure as well as the polycarbonate sheet should be suitable for the extra weight of the snow. Keep in mind that a wide range of polycarbonate sheets are available and are engineered differently, some with multiple thin walls while others have a single thick wall. For example, Palram Americas, a leading manufacturer of polycarbonate sheets, recommends single-wall corrugated polycarbonate glazing for snow-bound areas. Another factor is the method of installation regarding sheet spacing, clamping and fastening. Consult with the manufacturer rep about your chosen product's specific snow-load recommendations.





Do it the hard way, or the HYDE® way.

Suck up drywall dust with your wet/dry vac, not your lungs, with a HYDE® Dust-free Drywall Sander. Watch the video at YouTube/HydeTools.



For a better finish, start with HYDE:

hydetools.com · 800-872-4933



S. Got-

Questions About Home Building, Remodeling? Have Your Own How-To Tip? Visit our blog at **blog.extremehowto.com** and click on Ask Our Experts.

• When installing a tiled shower, should I use grout or caulk at the joint where the tile walls meet the tub?

• For tiled showers, grout goes in the joints between tiles that are on the same plain (walls, horizontal • shelves, etc.). However, waterproof caulk/sealant should be used in any expansion joints, such as the

SHELVES # SLIDE

Custom Made for Your Cabinets

Kitchens • Pantry • Bathrooms

Limited Lifetime Warranty

Baltic Birch Construction

100 Pound Capacity

1-800-598-7390

www.shelvesthatslide.com

Order On-Line

Custom pull out shelves and Kitchen cabinet accessories









Call or email for a free catalog

90-degree angles where the tub meets the tile, because it is more flexible and helps to absorb movement. Make sure the caulk/sealant you use is formulated to resist mold and mildew.

What is the best way to cut fiber-cement siding?

 Because fiber-cement contains silica, which is considered a carcinogen, you should avoid breathing the dust that can be generated from cutting the material. The most preferred method is to cut with powered handheld shears, or to score and snap the siding. If you must use a high-speed power tool (circ saw, grinder, etc.), then you should work outside, preferably with a HEPA vacuum extraction and certainly with a dust mask. Make the cuts with a special fiber-cement blade, which has fewer teeth that generally create larger dust particles, thereby reducing the amount of smaller, breathable particles. **EHT**



Real Cedar turns the outdoors into the great outdoors.



Real western red cedar is the ideal building material for decks, gazebos, shade shelters and virtually any other outdoor project. It's naturally beautiful, sustainable, and most of all affordable, which means you'll spend more time outside with your family, and less money at the supply store.

REAL CEDAR is the building experts' material of choice for outdoor structures. It's extremely long lasting, structurally sound and its natural good looks blend in beautifully with almost any landscape.



What's more, REAL CEDAR is a sustainable, renewable resource and is far more environmentally friendly than treated lumber or wood-plastic composites. Spend more time in your yard by turning your outdoors into something great with the rich, natural beauty, versatility, and durability of REAL CEDAR.

Ask for real western red cedar at your supply store, and for outdoor projects plans and ideas visit www.cedar-outdoor.org.





www.wrcla.org

It's Not the Fall, It's the Sudden Stop

Respect Your Ladder when Working at Heights.



By Matt Weber

f you want to see acrobatic feats of bravery from death-defying heights, just watch a roofing crew when there is no safety inspector around. Fall restraint ropes? What a nuisance. Safety harnesses? Those things chafe! A roof ridge becomes a balance beam, and ladders are treated as stilts or even vaults. I'm not condoning this behavior. It only takes a single misstep to end in tragedy, and that reckless confidence suddenly looks like a stupid idea. The trouble is that with years of experience many people get too comfortable working off the ground and lose respect for that stubborn force called gravity.

Never make that mistake. The Consumer Product Safety Commission (CPSC) annually reports that over 100,000 people are treated in hospital rooms and doctors' offices as a result of falls from ladders. Most of the injuries are cuts, bruises and fractures, but more than 300 annual fatalities occur from ladder-related injuries.

It should go without saying that a rickety ladder which sways or leans should be avoided. Are parts loose or missing? That's probably a red flag, too. And of course you should avoid ladder work if you're feeling tired or dizzy (or, let's be frank, hung over). However, even the most seasoned ladder veteran can overlook some simple safety issues that may pose a problem.

Ladder use in high winds or rainstorms should be avoided. A common mistake of storm-wary What goes up must come down, and safe ladder usage will ensure that you do so in an orderly fashion. (photo © Werner Ladder Co.)

homeowners is that as soon as a downpour slacks up, they run for a ladder to check for roof damage. Not only does rain make the ladder rungs slippery, and working atop one may tempt fate as a human lightning rod, but homeowners often overestimate a ladder's stability in the face of straight-line winds that can topple them to the ground.

According to the American Ladder Institute (ALI), when climbing a ladder, it is safest to use Three Points-of-Contact because it minimizes the chances of slipping and falling from the ladder. At all times during ascent or descent, the climber should face the ladder and have two hands and one foot, or two feet and one hand, in contact with the ladder cleats and/or side rails. In this way, the climber will remain stable even if one limb slips during the climb.

When working, rather than reaching of leaning too far to one side, a good rule of thumb is to keep the center of your belt buckle between the ladder side rails (or within the width of the cleats). It's also smart to use towlines, a tool belt or an assistant to convey materials and so you're hands stay free when climbing.

ALI also stresses the importance of proper footwear. Wear only slipresistant shoes preferably with heals and heavy soles to prevent

Give your wood a MAKEOVER



Amber Stain on teak and PT pine

Photo courtesy of Beth and Rod of See Dirt Run!

Professional grade yet homeowner friendly

ARMSTRONG'S WOOD STAINS

Long Lasting, Easy to Apply and a Breeze to Maintain

Manufacturers of VOC-Compliant, Oil-Based Wood Finishes

www.armclark.com • (800) 916-8211

TOOL SCHOOL

foot fatigue. Clean the soles to maximize traction and avoid leather soles since they're not considered sufficiently slip-resistant.

CHOOSING A LADDER

Ladders are built from one of three basic materials; wood, fiberglass and metal (aluminum). If you're working near a source of electricity, a metal ladder should be rejected since aluminum conducts electricity. Your body can complete an electrical circuit between the electrical power supply, the ladder, and then to the ground in the event that you contact a live wire. An electrical shock on a ladder can trigger a fall or cause your heart to stop. However, if there are no electrical power sources in your work area, then aluminum has a significant portability advantage: It's the lightest weight material when compared to fiberglass or wood.

Next, the proper ladder length is important. It is not safe to use a ladder that is too short or too long. It must be long enough that

Multipurpose ladders offer a versatile solution for handymen and homeowners alike. By articulating like an A-frame and also extending and collapsing as an extension ladder, a multipurpose ladder can serve as an A-frame ladder, an extension ladder or a 90-degree ladder (photo © Werner Ladder Co.)







ARKE MAKES BUYING AND INSTALLING A SPIRAL STAIR CASE EASY WITH THE FOLLOWING KEY FEATURES:

- ALL-IN-ONE COMPLETE UNITS: TREADS, LANDING, BALUSTERS, HANDRAILS, HARDWARE AND ACCESSORIES INCLUDED
- NOTHING TO PAINT, WELD, STAIN OR SEAL
- IN STOCK FOR IMMEDIATE DELIVERY

TOOL SCHOOL

the climber does not have to stand on the top rung or step. Standing on the top cap (or step below) of a stepladder increases the likelihood of losing your balance. Likewise, when using an extension ladder, the top three rungs are unsafe for climbing. On the other hand a straight ladder is too long, for example, if ceiling height prohibits the ladder from being set up at the proper angle (roughly 75 degrees). Likewise, an extension ladder is too long if the ladder extends more than 3 feet beyond the upper support point. In this case, the portion of the ladder that extends above the upper support point can act like a lever and cause the base of the ladder to move or slide out. Safety standards require a label on the ladder to indicate the highest standing level.

The ladder you select also must be the right size for both your body and the job at hand. In other words, the Duty Rating of the ladder must be greater than the total

Little Giant Ladders builds on the solid reputation of the company's wide range of multiladders by designing its latest Xtreme Type 1A (300-lb. capacity) to be easier to store and carry than any comparable model.



"Restore It - Don't Strip It!"

For Use On:
Kitchen Cabinets
Antiques
Paneling
Any Wood Finish



Eliminate white heat rings, water marks, sun fade, oxidation, smoke damage, etc.

- Blends Out Scratches
- Restores Color & Luster
- Blends Out Blemishes
- Eliminates White Heat Rings
- · Removes Water Marks
- · Revives Faded Finishes
- Revives Minor Crazed Finishes
- Neutral, Maple-Pine, Golden Oak, Walnut, Cherry, Mahogany, Dark Walnut, Dark Oak, and Ebony

www.HowardProducts.com • (800) 266-9545



Walnut



TOOL SCHOOL

weight of not just the climber, but also their tools, supplies, and any other objects placed upon the ladder. Climbers often forget to account for the weight of their equipment, and if the total load outweighs the ladder's maximum capacity, the ladder could feasibly collapse.

There are five categories of Ladder Duty Ratings:

- Type IAA (Extra Heavy Duty) 375 pounds
- Type IA (Extra Heavy Duty) 300 pounds
- Type I (Heavy Duty) 250 pounds
- Type II (Medium Duty) 225 pounds
- Type III (Light Duty) 200 pounds

The Duty Rating of your ladder can be found on the specifications label. Safety standards require the sticker to be placed on the side of

Ladders come in all shapes and sizes, such as this wooden kitchen ladder from Putnam Rolling Ladders, which allows convenient access to overhead storage cabinets.







YOUR RESIDENTIAL SAFETY CONSTRUCTION SAFETY SOLUTION



Guard Railing has developed a quick and easy safety railing that installs quickly, is neat and tidy, and offers max fall protection. Developed to meet safety regulations when installed properly, made of

durable steel construction and painted bright orange, the 4B System is quickly becoming the railing of choice for residential construction sites. Have the peace of mind knowing that when you have the 4B System installed, your trades, site supers, inspectors and potential

home owners doing walk throughs are safe.

USE FOR:

SAFETY RAILINGS

HAND RAILS ON INTERIOR STEPS

TEMPORARY DECK RAILS

INTERLOCKING TEMPORARY
STEPS FOR SAFE ACCESS
INTO THE HOME











Guard Railing & Ramp Rentals and Sales Ltd toll free 855-527-7230 sales@guardrailingramp.com

sales@guardrailingramp.com www.guardrailingramp.com

TOOL SCHOOL

every ladder. Do not assume that a longer ladder has a higher weight capacity. There is no relationship between ladder length and weight capacity.

LADDER TYPES

Your work environment, including the physical size restrictions, is probably the most important factor in determining the type of

ladder to use for a given job. Many purpose-built ladders are available for specific jobs. For example, Putnam Rolling Ladders offers track-mounted ladders for lofts and home libraries, while Stokes Ladders offers "tripod" style ladders for tree-level work on the uneven ground of fruit orchards. However, the versatility of the ladder can be a major consideration, especially for the wide variety of tasks around the home.

Multipurpose ladders such as those manufactured by Little Giant Ladder and Werner Ladder offer a versatile solution for handymen and homeowners alike. By articulating like an A-frame



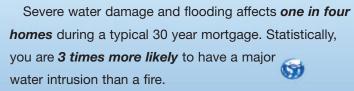
Materials matter. Little Giant Ladder's new SelectStep FG stepladder is made from nonconducting fiberglass for working safely around electrical lines.



PROFLEX HYDRA SEAL







Often times there is little that can be done to prevent a flood or water intrusion. But you can take steps to protect surfaces from water damage and to minimize structural repairs after the water is gone.

PROFLEX™ HYDRA SEAL is a semi-fluid applied product designed for waterproofing and moisture control applications.

HYDRA SEAL can be applied to concrete and exterior grade wood surfaces, and will adhere to a variety of irregular forms such as base flashing and walls.

Ideal for use in showers, steam rooms, bathrooms, and areas requiring positive waterproofing.

PROFLEX HYDRA SEAL

B. Gies,

877-PROFLEX (877-577-6453) **www.proflex.us**

- APPLIES EASILY WITH BRUSH OR NAP ROLLER
- CRACK ISOLATION TO 1/4"
- POSITIVE WATER-PROOFING PROTECTION
- **EXCEEDS ANSI 118.10 REQUIREMENTS**
- EXCEEDS ASTM C-836-89 REQUIREMENTS









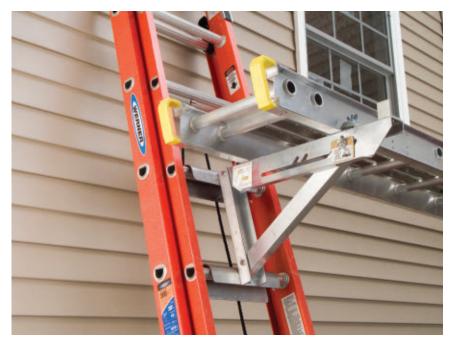






(5)

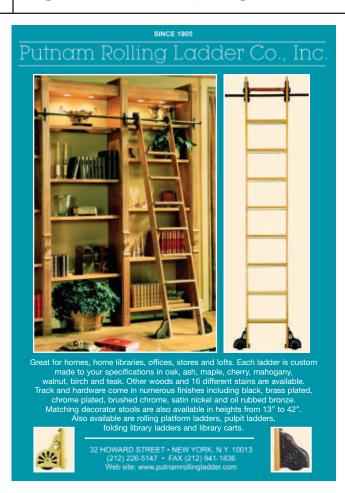
TOOL SCHOOL



A wide range of accessories are available to increase a ladder's versatility. The Werner Ladder Jacks mount onto the rungs to enable use of planks or stages between two ladders, providing a horizontal work platform.

and also extending and collapsing like an extension ladder, a multipurpose ladder can serve as an A-frame ladder, an extension ladder or a 90-degree ladder (for getting close to walls). By adjusting the length of each side independently when in the A-frame mode, a multipurpose ladder can also provide access over uneven ground as well as staircases.

Another recent trend in ladder design is the addition of adjustable side rails. When resting a ladder on uneven, sloped terrain, workers in the past have had to dig a trench in the ground beneath a ladder rail on the high side of slope, so the ladder could be rest on an even foundation without leaning. To eliminate the digging, the adjustable rails on some newer extension ladders can extend independently on each side of







THIS IS PAINT-SPRAYING TECHNOLOGY SO ADVANCED, YOUR BACKYARD FENCE WON'T KNOW WHAT HIT IT.



INTRODUCING THE REVOLUTIONARY NEW ALL-PURPOSE FLEXIO SPRAYER.

The Wagner FLEXiO™ Sprayer delivers a smooth, professional coat to almost any surface, from garage doors to bathroom walls, from fences to living room ceilings. You can spray almost any paint or stain, including unthinned latex, with enough control for detail work. Say goodbye to old-fashioned brushes and rollers. It's time for a smarter way to paint.

View a video at WagnerFlexio.com



PAINT SMART.



TOOL SCHOOL

the ladder to accommodate the uneven terrain.

In fact some ladders, such as the Little Giant SumoStance, take the adjustable-rail design a step further. The use of adjustable outrigger supports that extend from the sides of the ladder create a wider base for superior lateral stability when

Simple rail cap covers protect siding and finished surfaces from ladder damage. (photo © Werner Ladder Co.)

METALCEILING Express.com
Tin Ceiling Tiles | Nail-up | Drop-in | Snap-Grid | Backsplash | Crown Moldings

Authentic Tin Ceiling Tiles | Factory Direct
32 Patterns | Hand Faux Finished Tiles
Fast Deliveries | Top Quality

1650 12th St East | Palmetto, FL 34221
MetalCeiling Express.com | 941.723.2288

working at considerable heights.

Also, when selecting a ladder, take a look at the many accessories currently available. Ladder Stabilizers attach arm-like extensions to the top of the rails that protect the gutter, provide access to windows and add extra mounting stability. Attachable Work Platforms provide a handy storage surface for tools and materials, some of which even have magnetic plates to hold nails and screws. Extension Ladder Covers are designed to "snap" over the rail ends to prevent damage to siding, window trim and other support surfaces.

The right choice in ladders and accessories can provide a reliable off-the-ground setup for all manner of pro-grade and homeowner projects. Just remember that what goes up must come down, and safe ladder usage will ensure that you do so in an orderly fashion. **EHT**

Special thanks to the American Ladder Institute for help with this article. Visit www.americanladderinstitute.org.



Ladder stabilizers are among the most useful accessories by helping to secure the ladder, protecting the house and allowing easy access to windows for cleaning and maintenance. (photo © Werner Ladder Co.)



Natural Stone Landscape Edging

Using Rock from a Creek Bed to Enhance a Flagstone Home



By Matt Weber

n an effort to shape up the curb appeal of one of our project houses, we decided to line a small rock garden with natural stone edging to match the flagstone walls of the home. The old garden border was a combination of black plastic landscaping border and the most unconvincing faux "brick" I'd ever seen.

Most of the plastic brick had long ago disappeared, leaving only a sad little fragment sticking from the ground like a sore thumb. So my first move was to use a pair of Channellock's to pull up the old edging.

I collected a selection of flat(-ish) flagstones from a creek bed. They

ranged in size roughly from 7 to 12 inches long. I was looking for a variety of browns, reds and grays to match the color scheme of the home's existing flagstone. Choose stones of an approximate shape and size that will best fit the land-scape plot, bearing in mind that at least half the stone will need to be buried below grade in order to keep the border sturdy. If you don't have access to a creek bed, many home-improvement outlets and landscaping supply centers sell natural stone.

It's best to have the dirt work of the garden plot completed before installing the edging, otherwise the gardening activity may loosen or unearth the border stones. To prepare the garden plot, we had pulled weeds, covered the area with landscaping fabric and secured its perimeter with metal stakes. We then cut a few strategic slits in the fabric to plant shrubs and flowers and then covered the fabric with cedar mulch.

I cleaned all the mud and moss off what would be the exposed edge of the stones using a reciprocating saw equipped with a special wire-brush attachment (ReciproTools.com).

I laid the edging in a dry run next to the garden to determine stone placement for the best visual design. I then used a narrowbladed weeding spade to dig a trench approximately 7 in. deep and 3 in. wide for the stones to be placed on edge. When digging I used a 2×4 board to guide the blade of the spade and protect the edge of the concrete driveway from damage. If you don't have a weeding spade, a narrow hand trowel will do the job (just more slowly).



I ventured into the great outdoors to procure my landscape stone.

Decorative Structural Wood Connectors













Ornamental Wood Ties (OWT™) are the ultimate statement of style and strength. OWT™ hardware produces strong connections and enhances your project design. With a wide range of connectors and components, you can use your imagination to build a project that is uniquely your own.







DO IT YOURSELF



I pulled away the old edging with a pair of Channellocks.

Prepare the garden bed before installing the edging. I pulled all weeds by the root, covered the bed with landscape fabric, staked it down with metal ties, and then covered it all with cedar mulch.

As expected, I was unable to find enough stones of perfect size and shape for my border, so I had to cut some to fit. To cut the stones I (mis-)used a 10-in. tile saw from Rigid. This is the company's latest model wet saw (Model R4090), rated "best-in-class" and nicknamed The Beast—and The Beast made a meal of a nearly 3-in. thick slab of limestone, so I'd say it earns its name. In some

cases I had to cut large stones so I could bury the bottom section and have only 2 to 3 in.

of the top half exposed above the soil. In other cases, I used the wet saw to shear off jagged edges so the top edge of the border would be blunt—a safety precaution since children often played near the rock garden.

To set the stones, I drove them into the ground along the driveway with a rubber mallet and backfilled with topsoil, compacting it firmly at the base. For a sturdy installation, more than half of the stone should be buried below

RIDGID R4090 TILE SAW—"THE BEAST"

Ridgid's new "best-in-class" 10-in. tile saw (Model R4090) has been dubbed "The Beast", an appropriate nickname for this monster saw that should offer tile professionals everything they could want in a high-capacity cutting machine. It features a variable-speed motor to adjust for the material, such as glass and porcelain. It offers the largest cut capacity of any tile saw currently on the market (34-in. rip; 24-in. diagonal; 3-3/4-in. depth). The multi-position cutting head tracks left and right along a guide arm, expanding cut capacity and ensuring the best position for the table to support the tile. The sliding table expands along two guide bars to support the largest of tiles. The cutting head can be adjusted to any angle between 0 and 45 degrees.

A removable table extension provides work support for straight cuts in tiles up to 34 in. (in front position) and diagonal cuts for tiles up to 24 in. (in rear position).

The whole system rests on Ridgid's Wet Saw Utility Vehicle (WS-UV), which is an integrated mobile stand that collapses with single-point release for easy portability on 8-in. semi-pneumatic wheels, and then sets up in seconds as a sturdy work platform.

Not only did The Beast slice through tile after tile without a hitch, but it cut natural stone up to 3 in. thick. With its remarkable work capacity, multiple features and exceptional quality of cut, and the EHT staff looks forward to using "The Beast" on many tile projects to come. Visit www.ridgid.com/thebeast.



I scrubbed the mud off the stones with a wire brush attachment from ReciproTools.



A trial run of stone helped to determine the pattern that looked best.



When digging the trench I used a 2x4 to guide the spade and protect the driveway's edge.



Cepco Tool

800-466-9626 www.cepcotool.com

SIMPLY PLACE THE BOWRENCH® DECKING TOOL ONTO A JOIST, SWING THE HANDLE, AND LET GO.

The BoWrench® straightens boards to make decks, docks, floors, ceilings, walls, and tongue-and-groove installation easy and fast.

FREE YOUR HANDS!

DO IT YOURSELF

grade. I tucked the landscaping fabric tightly against the stones to prevent weeds from sprouting.

Once all the stones were in place, I filled the joints around the stones with sand to tamp down the topsoil and help reduce mud during rain showers.

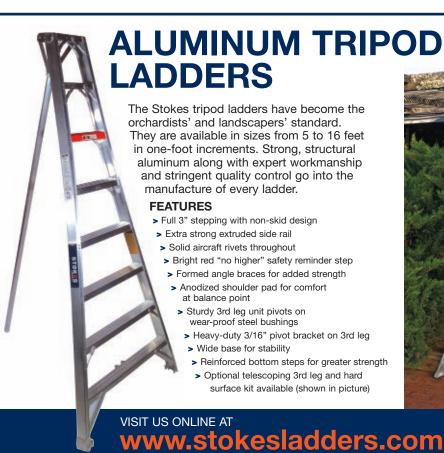
I had to cut some of the stones to size and shape.



SLAB CONCRETE REPAIR CAULK

While working near the home's flagstone wall, I took the opportunity to patch up some cracks using Sashco's Slab concrete crack repair caulk. This is probably the best caulk-type concrete repair product that I've found. It combines superior adhesion and elasticity for awesome durability. The caulk is gray to match aging concrete and has a high-bodied granular texture, so the repair actually looks like a cementious product once it dries. Slab's water-based formula is easy to apply and clean up—and most importantly, it stays where you put it. Visit www.sashco.com.











DO IT YOURSELF

The end result was a marked improvement over the plastic debris that had been lining the garden, and the natural stone worked well as a sensible accessory for the flagstone home. **EHT**

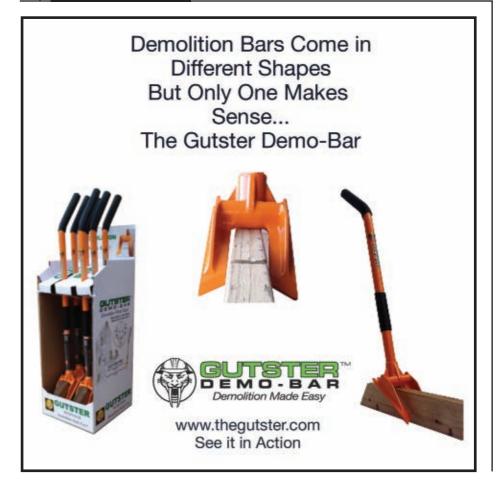




More than half the stone should rest below grade. Backfill around the stones and pack the soil firmly.



Finally, I packed the joints with sand to help prevent garden soil washing onto the driveway when it rained.



MORE STORIES ONLINE

Check out the official Extreme How-To website for free access to more than a thousand home-improvement articles and videos, including a companion piece to this article in which I create a stacked garden border from natural stones. Just visit www.extremehowto.com and search for "Available Stones."



Extreme 5

Do-it-Yourselfers want the best for their backyard. That's why we're offering an <u>exclusive</u> package just for Extreme How-To readers featuring our extremely durable swing seats and hardware!



Extreme Swing Bundle

- 4 x Commercial Swing Hangers
- 4 x Spring Clips w/ Lock Nut
- 2 x Commercial Belt Swings with 8'6" Plastisol Chain *

REG \$196.82 \$17995 WITH FREE SHIPPING

* Choose optionally to change one belt swing to a bucket swing for just \$40 more

ORDER ONLINE AT swingsetmall.com/extreme

Use coupon EXTREME25 at checkout to save \$25 on ANY order over \$175







By Larry Walton, Photos by Tim Walton

t rains a lot where I live in Oregon, and for the most part we carry on with sporting events, yard work, hikes and graduation ceremonies in the rain. However, we don't mind a little shelter from the rain when relaxing on a patio. We do not, however, want that shelter to interfere with the bit of sun we get between July and October.

That's the story behind this patio cover project. Handle the rain while maintaining an open air feel. The plan: Install polycarbonate corrugated sheets high enough to allow for unobstructed views, for plenty of light and for air movement.

Simply attaching to the vertical surface of the wall or even to the fascia board would not be nearly high enough to accomplish these goals. That's why we looked to SkyLift for hardware that would enable us to securely mount the patio cover structure well above the rain gutter level and slope it for rain runoff without obstructing the view at the lower portion. (Skylifthardware.com)

SkyLift accomplishes this by providing a vertical riser with a flat plate that penetrates the roof and attaches to the top plate of the exterior wall. The top of the riser accepts a saddle designed to support a beam, which supports the house end of the patio cover. A corresponding beam set on posts supports the other end of the patio cover framing.

There are several advantages to the SkyLift design. First, it attaches to the wall framing without interfering with the roof support system. Second, it seals with a standard pipe jack flashing just like the vent pipes you see on most roofs. Third, it provides a way to set the roof beam into place one end at a time. Fourth, it holds the beam securely while allowing lateral adjustments to get the structure square before lag-bolting the beam in place.

Here's how we built our patio cover, which is now ready for our summer rain.

First we selected a polycarbonate corrugated roofing material that let in light but also provided UV protection. We saw that the sheets were about 12 ft. long and laid up to 24 in. wide (after overlap). We figured a 12-by-12-ft. cover would



be about right for the space so we picked up six sheets along with the supporting corrugated moldings.



After carefully exploring for irrigation pipes, we determined locations for two 4x4 posts just outside of the patio slab. We dug the post holes 8 ft. apart and made each 2 ft. deep.



We dropped the 4x4 posts into the ground and drove stakes so two 2x4 braces per post could be set with one parallel to the house and the other perpendicular to the house.



We mixed up a batch of Sakrete to set the posts.



We used our 4x4 posts to estimate locations for our two SkyLift roof riser brackets. We removed two pieces of composition shingle (one above the other) at each location for the SkyLift hardware.



We drilled two 1-in. holes through the roof sheeting (one for

Redwood. Not Just Another Pretty Face.

DURABLE, EASY TO MAINTAIN.

Redwood is undeniably beautiful, but there's more to redwood than meets the eye. Sustainably grown, natural redwood is resistant to fire, easy to maintain and affordable. It's the natural choice for your decking, fencing and outdoor living projects.

An independent study has compared the use of redwood with plastic composites and redwood stands tall in comparison. Examine the differences and decide for yourself.

REDWOOD

Uses renewable resources that biodegrade and can be recycled.

Trees and lumber absorb and store more carbon, reducing greenhouse gases that drive climate change.

Uses solar energy to grow trees and biomass to power mills.

PLASTIC

Relies on nonrenewable resources and does not biodegrade when disposed.

The manufacturing process produces and releases greenhouse gases with no natural offset that captures and stores carbon.

Uses 10 times as much energy as it takes to harvest, mill, and transport redwood decking for an equal area of decking.



The California Redwood Company manufactures and distributes high-quality redwood and Douglas-fir lumber products for use in outdoor living.

SPECIALIZING IN:

DECKING • FENCING UPPER GRADE KILN DRIED LUMBER CONSTRUCTION HEART TIMBERS **GARDEN ACCESSORIES**



Find a retailer in your area at californiaredwoodco.com















a flashlight, the other for an eyeball). We used a 2-ft. section of arrow shaft to move the insulation so we could see where we were.

We used a torpedo level to make sure our arrow shaft was

straight up and down. At our first location we could see that we were just inside the top plate, so we planned our opening just down the hill accordingly. We had no objects interfering with our hardware.





The base of the SkyLift hardware was the template to mark the opening.



We used our Porter Cable cordless jigsaw to cut out the opening.



We used two ratchet extensions and a socket on our impact driver to lag the SkyLift base to the top plate. We centered the base plate



Learn more at:

SkyLiftHardware.com

Made in USA

(inside to outside) on the wall's top plate. The left to right positioning as you look at the house is not that critical because the beams are cantilevered on the hardware.



We slipped a standard pipe jack flashing over the riser column with the top tucked under the roofing above it and the bottom overlapping the lower roofing material.



We replaced the composition shingles that were removed earlier, notching for the pipe jack flashing as needed. We were careful to use roofing tacks only in areas that were not exposed to the weather.



After laying out our roofing material on the lawn using the corrugated molding strips along one edge, we saw that

the sheets would be about 145-5/8 inches in both directions. We decided our rafters should be 143-by-143-in. to allow for overhang and a trim strip along the outside edge. We left our 4x6 beams at full length and cut a little chamfer out of the bottom corner of each for looks.



We found that leaving the saddle on the SkyLift riser unbolted allowed one guy to place the end of a beam in the saddle and climb a ladder with the other end. The saddle spins to follow the beam. Nice feature.



We used a straight rafter to level across from the roof hardware to a 4x4 post. After allowing for 18 in. of fall for water runoff, we marked and cut off one 4x4 post. We leveled over to the other post to mark and cut it to height. We set our one 4x6 beam on the posts and secured by toenailing screws into the posts.





We positioned one rafter with our preferred overhang and used a level to mark the vertical line for a bird's mouth joint at the outside beam. We used a 3/4 strip on top of the beam to mark the horizontal line. We decided not to cut bird's mouth joints for the house beam for a couple of reasons, the primary being that the beams were not exactly parallel.







We used a jigsaw to cut out the bird's mouth notch in each outside rafter. A cardboard template made a great tool to lay out the notches for the remaining rafters.



We cut the rafters to 140 in. long. With a header across both ends of the rafter tails, this netted the 143 inches we needed for the frame.



READY



After setting the outside beam, we placed the two outside rafters on our 143-in. layout and toenailed them to the beams. We then squared the structure by measuring diagonally and shifting the roof beam side to side in the the SkyLift saddles to get the diagonal measurements to match.



The SkyLift saddle attaches to the riser with the supplied nut and bolt.

The SkyLift saddle fastens to the roof beam using the supplied lag screws. An interesting SkyLift design is that the holes on one side of the saddle are offset from the other side, which prevents the lag screws from colliding in the middle.





After setting the remainder of the rafters on the 24-in. layout, we made 24-in. layout marks down the two outside rafters and snapped chalk lines to set the 2x2 purlins, which run on top of and perpendicular to the rafters.

We nailed corrugated molding on top of the 2x2s, watching the peaks and valleys at the rafters to make sure they were lined up.

We loaded all six sheets of the polycarbonate roofing onto our structure, working from one end to the other.

After lining up the sheets with a consistent 1-in. overhang, we predrilled and fastened each with screws equipped with washers and rubber gaskets along the lower edge of the roof.





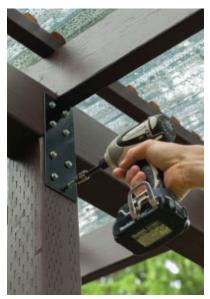




We pre-painted all of the framing lumber with primer and two top coats before we installed it on this project. Be sure to paint the end grain as well, which helps to protect the wood from moisture.



We spanned over at least three purlins at a time with plywood to distribute weight so we could screw off the remainder of the sheets. We spaced fasteners at 1-ft. intervals across and 2 ft. up and down, being sure to include the overlaps which fasten down the edges.

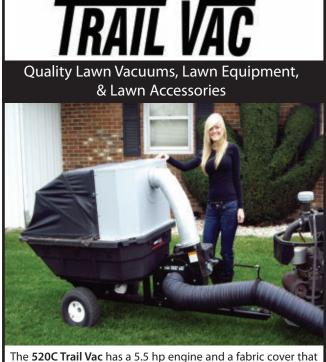


We attached the 4x6 beams to the 4x4 posts with custom made 1/8-in. steel straps cut at 3-by-9 inches.



It didn't take long for our Oregon climate to bring us a rain shower to test our roof. No leaks—thanks to SkyLift's bright idea of using pipe jack flashing.





The **520C Trail Vac** has a 5.5 hp engine and a fabric cover that assures long life. It expands collection capacity to 20 cubic feet.

For more info call:

Palmor Products, Inc.

1-800-872-2822 or visit us on the web at www.trailvac.net

OUTDOOR LIVING

HOT PRODUCTS FOR OUTDOOR LIVING

BIG GREEN EGG XXL

The Big Green Egg XXL is the largest capacity high-performance ceramic grill in production today. Although the Egg is currently offered in five popular and versatile sizes, the introduction of the prototype "EGGzilla" several years ago made the company aware of demand for an even larger model. The XXL is large enough to roast a whole hog, 20 racks of ribs or 40 burgers. The stainless steel cooking grid measures 29.25 inches in diameter for a whopping 672 sq. in. of cooking area. Like all grills in the Big Green Egg family, the XXL can handle virtually any cooking need, from cooking low and slow for hours to flash searing at ultra high temperatures. Its patented components and state-of-the-art ceramic technologies provide the best cooking results and will not deteriorate over time. Another notable feature of the XXL is the new patent-pending hinge design that allows easy one-handed operation of opening or closing the distinctive green dome.

The XXL will be made available as a Limited Edition in 2013 at selected dealers around the world. Big Green Egg XXL will be available in full distribution in 2014. Learn more at www.biggreenegg.com.



TWILIGHT MODERN FIREPLACE

At this year's International Builders' Show (IBS) in January, the Heat & Glo Twilight Modern indoor/outdoor gas fireplace received top honors from the National Association of Home Builders (NAHB) as the winner of the Best of Show Award in the Outdoor Living category. The Twilight

Modern is a two-sided gas fireplace that combines two megatrends; contemporary design and outdoor living. The see-though design provides impressive fireside views from both inside and outside

the home, doubling the ambience and enjoyment from one fireplace. It features sleek contemporary styling with flames that rise through modern media and reflect on a black porcelain firebox. Because it's a closed system, the Twilight Modern provides a safe environment for enjoying fires within an arm's length on outdoor patios, decks or terraces. The Twilight Modern uses Direct Vent technology and innovative engineering to deliver a unique fire-side experience—and a powerful 38,000 BTUs. The unit splits the exterior wall of a home and can be installed flush with the inside or outside wall. It's rated as a fireplace and exterior window and requires no additional flue or vertical venting, simplifying installation. Learn more at www.HeatnGlo.com.



SUPERDECK.
SOLID COLOR
STAIN
SELF PRIMING

9601 - PASTEL BASE

wood stains and finishes for maximum protection of wood siding, decks, fences and more. The ease of use and longevity of Superdeck coatings have made it a DIY and contractor's favorite for over 20 years!

SUPERDECK

TRANSPARENT

1910 - NATURAL



SUPERDECK.COM 1-800-825-5382

OUTDOOR LIVING



EARLY BLOOMER GREENHOUSE

Green thumb homeowners can now grow your own locally produced organic food all year. The Early Bloomer Greenhouse is a durable and affordable starter greenhouse kit for anyone who wants to enjoy year-round growing. Measuring 8 ft. wide and 8 ft. long, the Early Bloomer Greenhouse offers plenty of room to grow everything from heirloom tomatoes to salad greens, and it fits nicely in even small yards. The center height of 6 ft., 3 in. is ideal for tall plants or even small fruit trees. The greenhouse features a Solexx brand corrugated plastic covering that diffuses light to create ideal inside growing conditions and prevent leaf burn. The covering also provides the highest insulation available in hobby greenhouses. The extremely strong base along with the Solexx corrugated plastic greenhouse covering makes the Early Bloomer Greenhouse sturdy enough to withstand powerful winds—unlike many small greenhouses. Learn more at www.greenhousecatalog.com.

RAGUHNER LIGHT COLUMNS

Raguhner light columns from W.S. Tyler are sources of outdoor light—but also objects of design in their own right. During the day they are contemporary decorative sculptures, while at night they provide soft indirect light, creating a pleasant ambience. Light reflection on the body of the semi-transparent structure, which is made from high-quality stainless



steel architectural mesh, creates Moiré pattern effects that vary depending on the viewing angle. The stainless steel base has an integrated light source, which is suitable for installation in gravel, patios, terraces and most other landscapes. Learn more at www.weavingideas.com.

ROBOREEL WATER HOSE REEL

Great Stuff Inc. offers the innovative new RoboReel Water Hose Reel to provide a level of convenience and safety never seen before in a hose reel. Designed to eliminate frustrating kinks and replace manual winding hose reels that tangle hoses and break after a couple of months. The RoboReel Water offers One-Touch Retraction, in which it winds your hose neatly and automatically at the touch of a button on the unit, or on the remote at the end of the hose. It rewinds the hose utilizing a back-and-forth motion, preventing kinks. The One-Touch Water feature starts the flow of water as the RoboReel's valve and remote can manage all on/off water functions. The RoboReel also rotates 360 degrees continuously so you can water any area within a 200-280 ft. diameter, depending on which hose size you choose. With



its durable motor and rugged UV-, chemical-, and impact-resistant polycarbonate shell, RoboReel can withstand heavy weathering and exposure to the elements. Great Stuff stands behind their product with a four-year or 4,000 wind warranty. Learn more at www.roboreel.com. **EHT**



GutterBrush™ Simple Gutter Guard



CLOGGED GUTTERS CAN CAUSE EXPENSIVE DAMAGE TO HOMES: Water damage to interior walls and ceilings, rotting fascia boards, ice dams, cracked foundations and wet basements. Paying for regular gutter cleaning is expensive and climbing a ladder to clean them yourself is dangerous!

- GutterBrush is Simple! A cylinder shaped brush that fills your gutters blocking leaves and debris while allowing water to flow through. Just slide 3 ft. sections end to end into your gutter... Install it yourself, or get help from any contractor, handyman, or friend with a ladder!
- GutterBrush Works! Prevents clogged gutters, reduces gutter cleaning and eliminates the expensive property damage associated with gutter problems.
- GutterBrush is Affordable! The average home will only cost you \$250 \$300 to do it yourself or a little more to have it installed for you. Either way, you will save thousands over most gutter guard alternatives.

GutterBrush is backed by our simple "Happy Customer" Money Back Guarantee -

> If you don't like it, send it back for a refund!



Buy Direct and Save!

15% Discount with Coupon Code:

EXTREME

GutterBrush is Proudly Made in the U.S. 888-397-9433

(Valid Through August 31st. 2013)

www.gutterbrush.com





FACIS

By Matt Weber

SPF is quickly gaining ground as a high-demand insulating material. Here's why.

n increasingly popular method of home insulation is Spray Polyurethane Foam, commonly called Spray Foam or SPF. Although pioneering work on polyurethanes was conducted as far back as 1937 in Germany, it was not until the early 1970's that 2-pound/cu. ft. closed-cell foams were used in the U.S. for perimeter wall insulation. In the mid 1990's, 1/2-pound/cu. ft. open-cell foams were brought into the market for interior wall insulation as seen in many of today's new homes

Spray Foam is a spray-applied insulating foam plastic that is installed as a liquid and then expands many times its original size. As home insulation, the concept is similar to living inside a sealed Styro Foam cooler. The foam can be adjusted to have many different physical properties depending on its intended use. For example, the same basic raw materials that can make insulation foam semi-rigid and soft to the touch also creates high-density roofing foam that withstands foot traffic and water.

OAVFACTS



Specialized equipment is used to apply the SprayFoam, and proper training is important in order to get the best results.

As an insulating material SPF can provide high levels of R-value, while providing air barriers and moisture control in buildings. For roofing, spray polyurethane foam insulates and eliminates thermal bridging through fasteners or gaps in decking.

Spray foam is available in two versions; low-density/open-cell SPF and medium-density/closedcell SPF. The low-density/open-cell SPF refers to a generic Spray foam that weighs between 0.4 to 0.6 lbs. per cubic foot when fully cured. It is spray-applied as a liguid and expands about 100-150 times its original volume to form a semi-rigid/flexible, non-structural SPF insulation. The low-density SPF has an R-value around 3.5 per inch.

Medium-density/closed-cell SPF used in interior applications refers to spray foam that weighs between 1.5 to 2 lbs. per cu. ft. when fully cured. It is also sprayed as a liquid onto a substrate and expands about 35 to 50 times its original volume to form a rigid, structural

Spray foam is available in two versions, low-density and medium-density. The product is a spray-applied insulating foam plastic that is installed as a liquid and then expands many times its original size.



Self Contained • E-84 Fire Rating • Air Sealing • Increase Energy Efficiency • Mold & Moisture Resistant

Tiger Foam™ Insulation helps strengthen your structure, reduce your utility bills, and has one of the highest rated R-values in the industry. Our kits are easy to use, require no other machinery and are completely recyclable.

100% Recyclable Easy to Use Kits





WWW.TIGERFOAM.COM

24 Hr Technical Support 100% guarantee against defects

Toll Free (866) 240-7622

International (001) +1-732-927-2090

www.tigerfoam.com

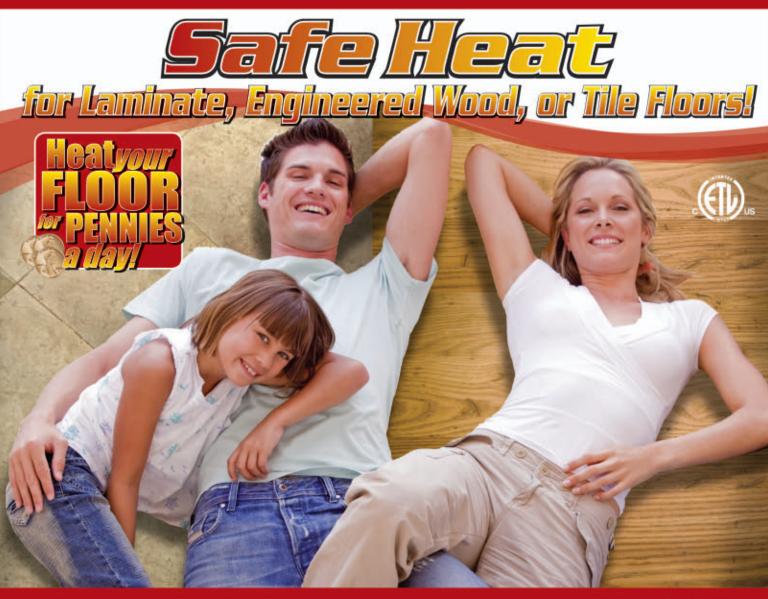












RADIANT HEAT UNDERLAYMENT

Floating radiant heat panels ideally suited for floating laminate, and wood flooring Can also be used with other hard surface flooring like tile and glue-down wood Much easier to install than most other systems, no need to bury components in thick concrete The perfect compliment to SnapStone or Avaire Tile Systems

Check out our complete line of flooring underlayments!



Insulayment®
Acoustic Underlayment for Glue-down & Nail-down Wood Fix



FOAN/FACTS

SPF insulation with a compressive strength between 15 to 25 PSI. The SPF has an aged R-value of around 6.0 per inch.

BENEFITS OF SPF

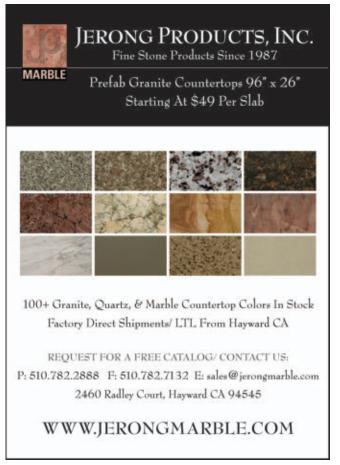
Spray foam offers a number of benefits for residential construction. SPF is durable, maintains its physical properties over time (won't sag), and for the "green" thinking consumer it contributes little to the waste stream. Plus, depending on the formula and project, a single product can take the place of three or four other products, including insulation, air barriers, sealants, vapor retarders and weather barriers.

"While there is a higher upfront cost for the installation of the foam, SPF can really cut down on energy bills in the long run,"



Special training, extensive safety gear and expensive equipment are required for a whole-house application.





THE MANY USES FOR SPRAY FOAM—FROM OUR HOMES TO OUR TROOPS

Tiger Foam SPF has a wide array of uses, even for the U.S. military overseas.

"The product is very versatile," says Jamie Rawlinson, technical director at Tiger Foam, which has one of the highest R-values in the SPF industry with a rating of R-7 per inch. "It's ideal for use as residential or commercial insulation, but a lot of people have used it for boats, wine cellars, and coolers for food storage as well."

The Tiger Foam product is supplied in two versions: a fast rise fire-rated formulation for new construction, and a slow rise formulation for retrofitting interior space. Plus, it is sometimes used as a component in multi-product insulating systems. "You can actually use foam in conjunction with other insulation materials," says Rawlinson. "Our product has an air sealant factor, so people might use it for that purpose and then add rock wool or fiberglass or whatever else they might want. So if you have areas that might only get an R-11 with fiberglass, using it together with Tiger Foam takes them to an R-18." Tiger Foam can also be used for insulating exposed pipes; for roofing systems and crawlspaces; to fill interior voids on concrete; and for use as an asbestos encapsulant.





Tiger Foam has even supported our troops overseas. "We shipped a ton of product over to Afghanistan and Iraq for insulating tents so they could run air conditioning to the tent to help the soldiers cool down," explains Rawlinson. "One of the most important things for a lot of end users is the fact that this is a very portable product. It can be used just about anywhere, where the big professional rigs cannot."

For more information, call 800-664-0063 or visit www.tigerfoam.com.





says Ron Brown of Thermetix, a professional installer of SPF systems throughout Alabama. Although the initial cost of installation could be 3 to 4 times the cost of installing standard fiberglass batts, in as few as five years the homeowner can recoup their investment and enjoy lowered utility bills throughout the life of the house. SPF also has no food value to attract insects or rodents.

"Spray foam is also helpful for people who suffer from allergies," says Brown, explaining that the seamless, continuous layer of insulation provides superb air quality and reduces pathogen growth.

Furthermore, according to the Spray Polyurethane Foam Alliance (www.sprayfoam.org), closed-cell SPF adds structural strength by "gluing" a building together, thereby making it more resistant to racking events, such as hurricanes and high winds. SPF also reduces noise from outside by air-sealing the building.

DIY OR HIRE A CONTRACTOR?

The specialized equipment to apply SPF is a complicated system that is generally transported by truck or trailer. The equipment requires special training, is very expensive and is typically owned or leased by the contractor (and unavailable for consumer rental). A whole-house application is a contractor job that is typically performed during new home construction.



An installer uses a long reciprocating blade to cut the expanded SPF flush with the wall studs.



An effective, affordable **interior insulation** for existing **single** and **double pane** windows.



EnergSavr Window Inserts reduce outside air infiltration and create an insulating air space that cuts heating and cooling costs.

- Greatly increase occupant comfort and allow for greater flexibility in furniture placement due to the reduction of room draft and cold spots.
- Easy to install, they slide easily into the interior window sill, frame or trim opening of your
 existing windows. They install firmly in place by a compression fit, for a clean non-intrusive
 appearance.
- Used in residential, business and commercial applications, and are helpful in historic
 preservation where replacement of existing windows are not an option.



Using a strong frame and a clear high strength film glazing, they are lightweight, durable and will not shatter. Window Inserts are long lasting with minimal maintenance.



Find EnergySavr Window inserts at www.WindowInserts.com



However, for room additions and small-scale renovations, a serious doit-yourselfer should explore the products offered by companies such as RHH Foam Systems or TigerFoam, which offer DIY kits that are both portable and disposable. For instance, the Versi-Foam kits from RHH are available in a variety of sizes and types, including opencell, closed-cell, high-density and slow-rise foam insulation for a wide range of applications. You can find options for do-it-yourself SPF kits at www.rhhfoamsystems.com and www.tigerfoam.com.

For more information on spray polyurethane foam insulation, including the latest technological developments, visit the SFPA at www.sprayfoam.org.



The Versi-Foam kits from RHH Foam Systems are available in a variety of sizes and types, including open-cell, closed-cell, high-density and slow-rise foam insulation for a wide range of applications.



DIY kits for applying SPF insulation are available for renovations and room additions.



EVERO'S AVERS

NEW PRODUCTS FOR ENERGY-EFFICIENT HOMES

TOUCH 'N FOAM SEALANTS

For "spot" home insulation applications, Touch 'n Foam insulating sealants help control airflow

in and out of homes by filling empty spaces in the home's exterior or "shell". Air-sealing the home means you're better able to maintain a consistent temperature year-round while enjoying lower utility bills. Ready to use in handheld spray cans, the foam products expand to fill gaps and



cracks, creating an effective barrier against the loss of heated (or cooled) air. Touch 'n Foam sealants are also great for blocking moisture, dust, sound and insects, and a variety of product options help ensure you choose the right type for the job. Learn more at www.touch-n-foam.com.

INGRAM'S SOLAR T-KITS

Supplement your home's energy supply with power from the sun. Choose an Ingram's T-Kit to make sure your home solar system is as easy, simple and reliable as possible. Each pre-configured kit







Small Duct High Velocity Heating, Cooling, and Indoor Air Quality Systems

Looking for Superior Indoor Air Quality in Every Room?





New! Zoning-Ready HE-Z Series

- Quiet Operation
- Energy Smart VFD Motors
- Eliminate Hot and Cold Spots
- . Easy Installation & Maintenance
- Zoning Capable right out of the Box!
- · Space Saving Small Diameter Ducts
- · Draft-Free Even Temperatures
- · New and Retrofit Applications
- · Residential or Commercial



Our attractive Metal, Wood and Plastic Vent Plates blend in with their surroundings, and can be painted or stained to match with any color scheme.





Perfect for **Retrofit Applications**, the Hi-Velocity Small Diameter Duct System fits in confined areas with **no major remodelling!**

Manufactured by Energy Saving Products Ltd. - Celebrating 30 Years in Business!

1-888-652-2219



ENERGY SAVERS

is optimized and designed using the highest quality components, such as premium Talesun modules and high-efficiency Kaco Blue Planet inverters. The T-Kits are available in a multitude of system sizes to fit your energy needs. Plus, free monitoring is included for systems over 1kW to save you both time and money. Learn more at www.ingramswaterandair.com.

ENERGYSAVR WINDOW INSERTS

EnergySavr Window Inserts are an effective, affordable interior insulation product for existing single- and double-pane windows. Window Inserts reduce outside air infiltration and create an insulating air space that cuts heating and cooling costs. The inserts greatly increase occupant comfort, and even allow for greater flexibility in furniture placement due to the reduction of room draft and cold



spots. Using a strong frame and a clear, high-strength film glazing, the EnergySavr inserts are lightweight, durable, will not shatter, and require minimal maintenance. They're also quick and easy to measure, order and install. The inserts slide easily into the interior window sill, frame or trim open-

ing of your existing windows. They install firmly in place by a compression fit for a clean, non-intrusive appearance. No extra hardware or tools are needed. Learn more at www.Windowlnserts.com.

BIG STRETCH SEALANT

When it comes to workability and stretchability, it's hard to top the Big Stretch caulk from Sashco. It spreads as easily as mayonnaise and is ideal for filling large gaps where acrylic latex would normally shrink and pull away from the joint. In fact, Big Stretch can span gaps as wide as 2 inches (with a backer rod), and its superior adhesion and flexibility means it will stay in place. Instead of cracking, it compresses and stretches, capable of expanding more than twice its original size. Big Stretch is 100-percent acrylic latex, high-performance caulk that will absorb just about any movement a home can dish out, stretching up to five times the original joint size





Guaranteed Lowest Prices!





HEATING & AIR CONDITIONING:

Air Conditioners, Geothermal Heat Pumps, Split System Heat Pumps and more! **WATER EQUIPMENT:**

Water Softeners, Water Coolers, Faucet Mount Filters and more!

AIR PURIFICATION:

Electronic Air Cleaner, Low Micron Media Filter, Humidifiers, Portable Air Units and more!

INGRAM'S OFFERS:

FRIENDLY SERVICE.

We are a friendly, family-owned business that enjoys getting to know our customers. Your concerns have our utmost attention.

LOWEST OUT THE DOOR PRICE.

We guarantee to have the lowest out the door price. This is after shipping cost, special handling fees, insurance, and etc.

FAST SHIPPING.

All HVAC shipments are easily monitored from our door to yours. We strive to save you additional money on freight cost, call us for the lowest available shipping quote.



EVERO'S AVERS



without cracking. Big Stretch is paintable and stainable, perfect for many interior and exterior applications, including: windows, doors, siding, vents, soffits, eaves and trim. Learn more at www.sashco.com.

HI-VELOCITY SDHV SYSTEM

The Hi-Velocity SDHV (Small Duct High Velocity) System is an energy-efficient, high-pressure air delivery system that can be designed to provide home and

office with heating, cooling, filtration, ventilation, humidification and dehumidification. With the use of a high-pressure area to low-pressure area, room air is mixed continuously, creating even temperatures from floor to ceiling. Because the plenum duct is pressurized, dust buildup within the duct work is eliminated. Small diameter flexible duct makes it very easy to install inside existing walls with minimal remodelling. The duct fits inside a typical framed wall without having to disturb the drywall. Modular fan coils fit easily in mechanical rooms, closets, attics, crawlspaces, anywhere, and the small footprint makes it the right choice for both new construction and retrofits. The Hi-Velocity System can remove up

Clamping Technology | Cutting Technology | Precision Steel



For 120 years now, whether it is clamping, cutting or steel technology, BESSEY® offers superior innovation, customer service and product quality.

Make the most of our innovative edge and accumulated experience and see for yourself why BESSEY® is..."Simply Better".

Join us on...

YouTube http://www.youtube.com/user/BesseyTools Facebook http://www.facebook.com/BesseyToolsNorthAmerica E-Newsletter http://eepurl.com/erGnk Website http://www.besseytools.com For information call - 1-800-828-1004

RAPID ACTION CLAMP

The Rapid Action Clamp comes with a double spindle mechanism (for accelerated clamping action) and a guided clamping bolt for very direct pressure.

A robust tool to enhance shop productivity.

BESSEY® Simply Better.

amp comes e mechanism mping

AV2 Video

AV2 SPACER

With adjustable settings (5-20 mm), durable construction and a wide contact surface area, the AV2 Floor Spacer is a big improvement over wedges or scrap wood for the laminate flooring professional.

BESSEY® Simply Better.

AUTO-ADJUST TOGGLE CLAMP

The BESSEY Auto-Adjust Toggle Clamp automatically adjusts to variations in work piece dimensions while maintaining constant clamping force from



BESSEY Tools offers two horizontal versions and an Inline version with new offerings coming Fall 2012.





to 30 percent more moisture from the air than conventional systems, leaving a constant and comfortable temperature on the skin surface, while saving money on monthly operating costs. Coming in 2013: the HE-Z Series with zoning capable right out of the box. Learn more at www.hi-velocity.com

STYROFOAM SIS STRUCTURALLY INSULATED SIDING

StyroFoam SIS Brand Structural Insulated Sheathing combines structural lateral bracing and transverse wind-load resistance, insulation, water-resistive barrier and air-barrier properties in one solution. The sheathing can be used as braced wall panels integrated with other rigid insulated sheathing. It can also serve as continuous structural insulated sheathing over the entire wall line. The SIS sheathing provides high R-value (R-3 at 0.5-in.; R-5.5 at 1-in.) and eliminates the need for wood structural panels (e.g., OSB) and housewrap, wood let-in bracing or metal T-bracing. In addition, SIS helps lower the installed cost



because it allows the builder to install structural support, insulation and a water-resistive barrier with one product and one less trip around the house. Learn more at www.oxpaperboard.com.



HOME AND PROPERTY PROTECTION ♦ STORM AND FLOOD PREPARATION

Order online: at www.quickdams.com

or call 888-761-4405

BSORBENT

PATENT PENDING

ENERCI SAVERS

RHEEM PRESTIGE SERIES HYBRID HEAT-PUMP WATER HEATER

The new Rheem Prestige Series Hybrid Heat-Pump Water Heater has the highest efficiency in its class (2.45 EF). This unit costs about \$16 a month to operate and it can save a homeowner \$329 annually (compared to a standard 50-gallon electric water heater). Instead of heating stored water directly with a conventional electric element, this water heater extracts available heat from the air, intensifies the heat and transfers the heat into the water. It also features a full-color, backlit, touch-screen—the only one of its kind found on any water heater. With the touch-screen, users can select from five operating modes based on their needs. The factory-installed setting is Energy Saver Mode, which predominantly uses the unit's heat-pump functionality, but—when necessary—it will employ electric heat to get the water to the desired temperature. Other modes include Heat-Pump Only, High Demand, Electric Only and Vacation. Learn more at www.rheem.com.





VERSI-BLOCK

Versi-Block is a one-component polyurethane foam sealant that inhibits the passage of smoke through residential utility penetrations. It is bright orange in color to allow inspectors easy identification of an approved fireblock. Versi-Block has excellent adhesion to most building surfaces including wood, glass, metal, masonry and plastic. This innovative low-pressure/low-expansion formula creates

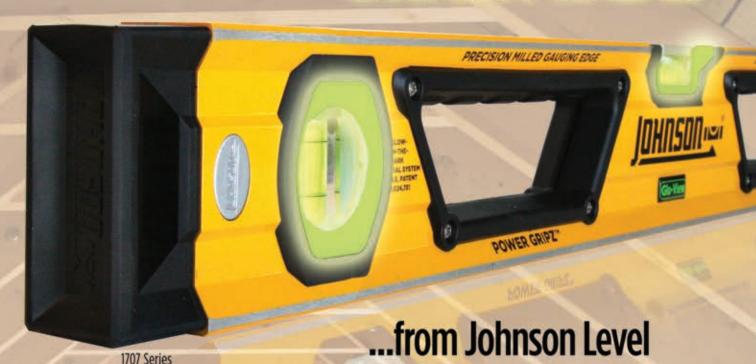


a durable, airtight and waterproof seal that stops air infiltration and provides high insulation value. It is typically used to fill holes in the walls where pipes go through and in chimneys to seal around wood. Versi-Block has been tested according to ASTM E814 (modified), NFPA 268, and

meets the requirements for fire blocking penetrations around wires, pipes, ducts, and other penetrating items in single-family residential construction. Learn more at www.rhhfoamsystems.com. **EHT**



Another BRIGHT IDEA...



Glo-View® technology naturally illuminates vials

for hassle-free leveling

Built JOB SITE TOUGHT for unbeatable durability

Domed level vial offers 360° visibility

Large "soft touch" comfort grip hand holes

Expect accuracy with a LIFETIME WARRANTY

For FREE tool giveaways, visit Johnson Level on

See our complete line of levels with Glo-View at www.johnsonlevel.com.





1708 Series available with:



Keeping Water Where You Want It

Liquid Waterproofing and Vapor Barriers for Tile Showers



By Rob Robillard

hen remodeling a shower, most people are more concerned with the aesthetic aspects—tile color, fixture selection, glass door style—and pay little attention to construction methods. They assume that the contractor will do things right. However, a lack of waterproofing measures is clearly evident in the many showers I remodel every year. Some contractors waterproof correctly, but most don't.

When folks get excited about choices in aesthetics, they often overlook how the contractor deals with water infiltration as well as the other hidden details needed to

ensure a long-lasting and quality job.

Over the past 20 years the tile industry has shown great advances in waterproofing tile-related products, especially with methods of constructing tile showers. Paint-on liquid waterproofing products now enable contractors and DIY'ers to waterproof a shower easily and efficiently. These paint-on systems, when combined with a copper shower pan and proper substrates, all work as a system to keep water in the shower and out of the wall cavity.

LIQUID WATERPROOFING

In my neck of the woods there are several liquid-based, "paint

on" waterproofing products available. Some of the more popular brands are Laticrete Hydo Ban, Custom RedGard and MAPEI AquaDefense.

My local tile store sells Hydro Ban, which comes in a gallon bucket and is applied with a paint roller or brush. Hydro Ban can be used over cement board, fiber-cement board, concrete, mud work, and other areas where you would be installing tile. It's a two-coat system and costs nearly \$100 a gallon, with 5-gal. containers being better priced.

Hydro Ban is a thin, load-bearing waterproofing/crack-isolation membrane that does not require the use of fabric in the shower wall field, coves or corners. The product is a single-component, self-curing liquid rubber polymer that forms a flexible, seamless waterproofing membrane and bonds directly to a wide variety of substrates. It also has an antifracture protection of up to 1/8 in. over shrinkage and other non-structural cracks.

WHERE TO USE IT

Liquid waterproofing should be applied to all surfaces in the shower area that meet water or moisture. I basically paint all of the surfaces that will receive tile in the shower, including horizontal areas exposed to moisture such as shower benches, shelving, halfwalls, niches and especially the shower floor.

When installing horizontal surfaces in a shower such as shelves, half walls and niches, ensure that these surfaces all have a slight pitch to the drain in addition to applying waterproofing. These surfaces are extremely susceptible to leakage, and the pitch ensures positive drainage while the liquid waterproofing prevents moisture from getting past the tile and grout.

Liquid waterproofing is an outstanding redundancy barrier to the tile installation and allows you to skip the plastic sheeting behind your substrate. (Note: I still recommend installing a vapor barrier behind the substrate, and if you plan on installing a steam generator, you will definitely need a vapor barrier.)

APPLICATION

Most of us hate reading instructions, but I highly suggest that you follow the manufacturer's instructions for the brand and type of waterproofing that you are using. With some waterproofing, the companies will want you to use a special fabric, along with the liquid, over the whole surface. Some will require the fabric to be used in all corners, while some don't require it at all.



The substrate should be tile backer board and recommended corrosion-resistant fasteners (typically 1-5/8" minimum).



Prior to installing the shower pan I cover the subfloor with Ice and Water Shield to protect the copper from the wood. I also wrap 4 to 6" up the walls to protect the pan sides.



PROJECT NEXT



There are all types of shower pans from acrylic to galvanized, rubberized membrane and copper.



A local sheet-metal company fabricates the copper pan.

You also need to pay attention to how many coats of the product are required and how thick those coats should be applied. Some products require three coats and some only two. (Hydro Ban is a two-coat system.)

Other manufacturers want their proprietary product to be applied to 30 mils thick when wet, and some only 20 mils. A wet film gauge comes in handy for measuring this if you choose that route.

SHOWER/BATH REQUIREMENTS

You will need to insulate all exterior walls, and consider installing pipe insulation to prevent the water pipes from sweating.

The substrate should be tile backer-board and recommended corrosion-resistant fasteners (typically 1-5/8-in. minimum). You will also need:

- · Alkali-resistant mesh tape
- · Copper, galvanized, membrane or other appropriate shower pan

- Thinset mortar
- Waterproofing material, enough for two coats
- 3-in, throwaway brush for cutting in edges and corners
- Paint roller / tray

THE SHOWER PAN

A well-constructed shower starts with a shower pan. There are all types of shower pans from acrylic to galvanized, rubberized membrane and copper. I use a local sheet-metal fabricating company to create the pan.

I prefer to use copper pans and a pitched mud job for the floor in all showers that receive tile. Prior to installing the shower pan I cover the subfloor with Ice and Water Shield to separate and protect the copper from the wood. I also wrap 4 to 6 inches up the walls to protect the pan sides.



Complete the shower enclosure substrate from top to bottom.



To create a shower floor from scratch, I use what is commonly called "dry pack mortar" or "deck mud", which contains three ingredients; Portland cement, sand and water. The mortar bed is pitched toward the drain.





WWW.B3CFUEL.COM/SAVE 843-347-0482

WATERPROOFING MEMBRANES VS. VAPOR BARRIERS:

Water vapor . . . What's that?

Water vapor is water in a gas form. In a shower situation you recognize it as steam. Steam stays in a gas form until it cools down or hits a barrier such as a shower door, tile, ceiling or a mirror.

Water vapor that gets behind walls or travels up through light fixtures or HVAC grilles into an attic will turn back into water when it cools off. Over time, this will present itself as unhealthy mold and rot.

One very important feature to any shower is a ventilation fan with a timer switch. This ventilation fan should be sized according to the size of the bathroom and installed to vent to the outside of the house. There is a right and wrong way to vent a bathroom, and care should be taken when choosing a CFM fan size as well as to make sure you are venting all moist air outdoors.

Waterproofing does not stop water vapor. This can be a tough concept to grasp. Waterproofing seals a surface so water doesn't pass through it but it does not always stop water vapor from passing through. Waterproofing a shower stops water in liquid form, and vapor barriers stop water in gas (steam) form.

In the case of water vapor you will want to consider installing a vapor barrier. Basically, any material rated at less than 1 perm is considered a vapor barrier/retarder. A perm rating is a standard measure of the water-vapor permeability of a material. The higher the number, the more readily water vapor can diffuse through the material.

Examples of different wall coating products and their perm ratings:

- · 6-mil plastic: 0.3 perms
- 15-lb, tar paper: 5 perms
- Laticrete Hydroban liquid waterproofing: 1.247 perms
 (2 coats, each 15-22 mils thick)
- Schluter Kerdi Waterproofing fabric: 0.75 perms
- Schluter Kerdi-board 1/2": 0.48 perms
- Noble Wall Seal sheet membrane: 0.22 perms

It's essential to take into account all forms of moisture when constructing a shower. For example, if you're planning a steam shower, waterproofing alone is not enough and you need a vapor barrier.





Apply mesh tape to all corners and seams and then apply a coat of modified latex thinset mortar over them.



Note the mesh tape in the corner which strengthens the joints and helps bond to the thinset.



For the project I used the Hydro Ban waterproofing product from Laticrete.

MUD FLOOR OR DECK MUD

To create a shower floor from scratch, I recommend using what is commonly referred to as "dry pack mortar" or "deck mud". Deck mud contains three ingredients: regular Portland cement, sand and water. That's it. A properly mixed and installed deck mud will create a shower floor that will last for years and years.

The ratio is very important to achieve the correct consistency and stability. You want 5 parts sand to 1 part cement. You want just enough water to dampen the mixture.

The easiest and most convenient way to get your mixture correct is to buy the Sand and Topping premixed bags which come already mixed at a 3:1 ratio. For a 60-lb. bag you need only add 30 lbs. of sand to get to the proper ratio.

DRAINS AND WALL PENETRATIONS

On mud floors the concrete covers all areas. Allow for a minimum 1/4-in. space between drains, pipes, lights or other penetrations and surrounding ceramic tile, stone or brick. To fill that gap, use a waterproof sealant and foam backer-rod to seal the space. Do not use grout, joint filler or thinset mortar as it will not last with expansion and contraction movements around the pipe.

APPLYING THE WATERPROOFER

Apply mesh tape to all corners and seams and then apply a coat of modified latex thinset mortar over them. The mesh tape strengthens the joints and bonds to the thinset.

Allow the thinset to dry completely.

Apply the liquid waterproofing material with a 1/2- or 3/4-in. nap roller or brush. Thoroughly brush

the corners to ensure complete coverage. Coat the walls completely. Then, coat floor to keep water out of the copper pan.

As I mentioned earlier I use the Hydro Ban product, and the first coat dries in 45 minutes. The second coat can be added after the first dries. One gallon covers 50 square feet for two coats.

APPLYING TILE

Once the waterproofing membrane has dried to the touch, ceramic tile, stone or brick may be installed with thinset.



Apply the liquid waterproofer with a brush or nap roller (1/2" or 3/4").



Thoroughly brush the corners to ensure complete coverage.



You can start at the top and work along the perimeter.



Complete the field of the wall. Hydro Ban is a two-coat product, and the second can be applied after the first is completely dry.

Allow the waterproofing membrane to cure for two hours at 70°F (21°C) and 50-percent relative humidity before covering with

concrete, thick bed mortar, etc.

Note: Do not use solvent-based adhesives directly on membrane, as it will dissolve the coating.

KEEPING WATER IN THE SHOWER

In the future, whenever you remodel a shower, make sure to take a few extra steps to water-proof your shower.

If you use a paint-on system, you can do 100 sq. ft. yourself for \$150 worth of materials and two hours of your time.

If you're paying a contractor, expect to pay \$150 plus a minimum of four hours of their time to purchase the materials, coordination into the project schedule, labor expense, overhead and profit. **EHT**

Editor's Note: Robert Robillard is editor of A Concord Carpenter. Visit www.aconcordcarpenter.com.



After the waterproofing is completed, the shower is ready for tile installation.

Advertisers

July/August 2013

Arke	
Armstrong Clark	
B3C Fuel	
Backwoods Solar55	
Bessey	
Bigfoot Systems	
Bucket Ape	
California Redwood Company	
Cepco Tool Company31	
Cozy Floors	(
Crown Master Mitre Box67	;
Dex SystemsIBC	:
Duck Tape	
Duckback	
Earthway	,
Energy Saving Products	
EnergySavr56	;
Evapo-Rust	;
Flood	;
FrogTape	;
Gardner	
General Tools	
GRK	
Guard Railing & Ramp	
Gutster Demo-Bar	
GutterBrush49	
Howard Products	
Hyde	
Ingrams Water & Air Equipment	
Jerong Products54	'
Johnson Level	1
Little Beaver	1
Lumber Liquidators /	,

Martin Della de Espara de	0
Metal Ceiling Express	
MP Global Products	
Nylodeck	. 27
Oneida Air Systems	. 60
OZCO Building Products	. 29
Pine Hall Brick	. 43
Proflex	
Putnam Rolling Ladder Company	. 24
Quick Dam	
SafeWorld International	
Sakrete.	
Sascho	
Shelves That Slide	
Skylift	
Stokes Ladders	
Summit	
Super Soundproofing	
SwingSetMall.com.	
TG Tools	,
The Nailer	
Tiger Foam	
Timberline	
Tjernlund Products	. 54
Touch 'n Foam	5
Trail Vac	. 45
Ty-Lan Enterprises	. 64
Viance	. B0
Wagner	
Western Red Cedar	
Yost Vises.	

Your New Stone or Tile Deck in 3 Simple Steps

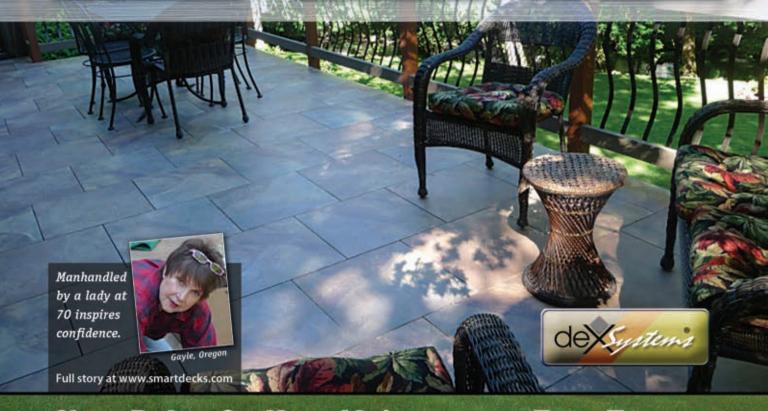


24" or 16" O.C.



and Fasteners





Now Relax On Your Maintenance Free Terrace



Enjoy More Deck Time



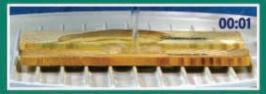
See the performance difference!

The Ecolife wood stabilizing preservative system protects and minimizes the effects of weathering for longer lasting beauty.

Scan OR code or go to Treatedwood.com

Scan QR code or go to Treatedwood.con to see the video demonstration.







treatedwood.com

Better Wood Decks

Saves Time and Money with reduced maintenance

- Factory built-in water repellent lasts up to 3 years
- Reduces cracking, checking and splitting by up to 50%
- Longer lasting natural beauty Easy to paint or stain
- Building Code Approved Meets stringent (AWPA) standards American Wood Protection Association
- Lifetime Limited Warranty



