

SEPTEMBER 2016

Rural Builder

The Business Management Magazine for Rural Contractors

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METALCON
SPECIAL PREVIEW!

**ROLLING WITH
THE COMPETITION:**
THE CHANGING
LANDSCAPE OF
ROLL FORMING
P. 20

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10

FEATURES [SEPTEMBER 2016]

METALCON PREVIEW / 10

The event returns to Baltimore

IN FOCUS / 14

- Maximizing the metal: Why "All Metal is Not Created Equal"
- Rolling with the Competition: The changing landscape of roll formers

PRODUCT PROFILE / 28

Big doors and the hardware to handle them

TIPS / 34

Moisture problems and solutions, Part 2
Protection from surface water

DEPARTMENTS

Editor's Note.....	4
Market Pulse.....	4
Industry News.....	6
Money Talk.....	24
Index.....	26
People in the News.....	37
Supplier News.....	40
Classifieds.....	41
New Products.....	33, 42
Calendar of Events.....	42

[ON THE COVER] Photo provided by Steel Dynamics.
Design by Nicole MacMartin. Related article on Page 14

28



42



OCTOBER PREVIEW

- Rural Builder Buyers' Guide
- Ventilation options



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Metal matters

What your mother never taught you

NOTHING WILL IMPACT THE FUTURE OF METAL MORE THAN THE END CONSUMER. If they are not happy with the building they just spent thousands of dollars to own, whether it is metal roofed or metal sided or both, their bad taste for metal could have a lingering effect.

Naturally a few unhappy people won't make much of a dent in an industry, but perhaps that individual is a member of the local city council with powers to help determine the future of metal construction in their community. Or, maybe the industry turns it's back on the issue of quality, sweeps it under the rug, and one by one, the discontentment grows. Now you start to have problems that can create headaches for an industry that is still in its growing stages.

If you are a builder that works a lot with metal, and most of you are, the two articles in this month's InFocus section of *Rural Builder* was designed for you. As a builder, you should know how to handle problems with metal, and better yet avoid them from the very beginning. That means understanding metal: what to look for; what to ask for; what to insist on.

"Maximizing Metal: Why 'Not all Metal is Created Equal'" is a primer on understanding metal. It offers the basics on gauges, paints, and coatings and emphasizes what every builder who works with metal should know.

Next I dive into a topic that is a bit controversial in the industry: regional roll formers vs. national roll formers. You may not realize it, but there has been a seismic shift in how you buy wall and roof panel, especially in the past 10 years. Regional roll formers have entered the scene to sell direct to builders, challenging old third-party distribution networks. This has resulted in lower prices overall, but also the introduction of some questionable quality, and not necessarily from the newcomers.

I discovered how complicated the issue is when I interviewed companies for "Rolling with the Competition: The Changing Landscape of Roll Forming." It looks at how two national companies are handling the challenge. Ideally I would have liked to have added the voices of additional companies, but for a variety of reasons was unable to do so. I open it up to further discussion, and encourage you to send me a note, preferably that I can share with readers. If you are more the social media type, you are welcome to post on our Facebook page (Construction Magazine Network). We seek only thoughtful discussion, however, and reserve the right not to publish any feedback that is derogatory of a particular company. **RB**



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MARKET PULSE

► ABC, AIA AND NAHB ECONOMISTS PREDICT INDUSTRY GROWTH IN 2017

Associated Builders and Contractors (ABC) Chief Economist Anirban Basu, American Institute of Architects (AIA) Chief Economist Kermit Baker and National Association of Home Builders (NAHB) Chief Economist Robert Dietz predicted continued growth for the construction industry in 2017 during a joint economic forecast in August.

"Nonresidential construction spending growth will continue into the next year with an estimated increase in the range of 3 to 4 percent," said Anirban Basu, ABC. "Growth will continue to be led by privately-financed projects, with commercial construction continuing to lead the way. Energy-related construction will become less of a drag in 2017, while public spending will continue to be lackluster."

"Our forecast shows single-family production expanding by more than 10 percent in 2016, and the robust multifamily sector leveling off," said Robert Dietz, NAHB. "Historically low mortgage interest rates and favorable demographics should keep the housing market moving forward at a gradual pace, but residential construction growth will be constrained by shortages of labor and lots, and rising regulatory costs."

"Revenue at architecture firms continues to grow, so prospects for the construction industry remain solid over the next 12 to 18 months," said AIA Kermit Baker, AIA. "Given current demographic trends, the single-family residential and the institutional building sectors have the greatest potential for further expansion at present."

The economists based their predictions on ABC's Construction Backlog Indicator (CBI), AIA's latest Architecture Billings Index (ABI) and Construction Consensus Forecast, and the NAHB/Wells Fargo Housing Market Index (HMI).

► HOUSING STARTS

Housing starts were up in the U.S. but down in Canada in July. Following is a regional summary provided by the Structural Building Components Association.

U.S:

- Northeast (+15.5%)
- Midwest (+2.3%)
- South (+3.5 %)
- West (-5.9%)

Canada:

- Atlantic Provinces (-13.7%)
- Quebec (-17.9%)
- Ontario (-14.4%)
- Prairie Provinces (+19.4%)
- British Columbia (-14.5%)

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■ OSHA updates silica exposure regulations

The U.S. Department of Labor's Occupational Safety and Health Administration announced a final rule to improve protections for workers exposed to respirable silica dust. It is the first update since 1971.

Primarily, the final rule reduces the permissible exposure limit for crystalline silica; limits exposure by requiring employers to use proper engineering controls, work practices and training; provides ease of compliance to construction employers without requiring exposure monitoring; and staggers compliance dates to assure that employers have sufficient time to meet the requirements.

The final rule is written as two standards, one for construction and one for general industry and maritime. Employers covered by the construction standard have until June 23, 2017 to comply with most requirements.

OSHA estimates that about 2.3 million men and women face exposure to respirable crystalline silica in their workplaces, including two million construction workers who drill and cut silica-containing materials such as concrete and stone. Most employers can limit harmful dust exposure by using equipment that is widely available, generally using water to keep dust from getting into the air or a ventilation system to capture dust where it is created.

■ Agreement targets worker misclassification

The U.S. Department of Labor's Wage and Hour Division and the Pennsylvania Department of Labor & Industry have signed a three-year Memorandum of Understanding intended to protect employees' rights by preventing their misclassification as independent contractors or other non-employee statuses. The two agencies have pledged to provide clear, accurate and easy-to-access outreach to employers, employees and other stakeholders; share resources; and enhance enforcement by conducting coordinated investigations and sharing information consistent with applicable law.

The division is working with the U.S. Internal Revenue Service and 31 other U.S. states to combat employee misclassification and to ensure that workers get the wages, benefits and protections to which they are entitled. Labeling employees as something they are not, noted the USDOL, such as independent contractors, can deny them basic rights such as minimum wage, overtime and other benefits. Misclassification also improperly lowers tax revenues to federal and state governments, creating losses for state unemployment insurance and workers' compensation funds.

■ MBMA announces new interior fire-rated wall assembly listing

The Metal Building Manufacturers Association (MBMA) announces a new fire-rated wall assembly listing, UL Design No. W447. The new fire resistance-rated, non load-bearing metal building interior wall assembly will be acceptable where one- or two-hour ratings are required by building codes.

The UL fire-resistance design listings enable higher occupancy for commercial, institutional, and governmental uses and can increase

■ Residential metal roofing market share jumps

According to a new study conducted by Dodge Data & Analytics, the residential metal roofing industry saw a big jump in market share last year, moving from approximately 8 percent in 2014 to 11 percent in 2015.

The independent survey shows that between 2014 and 2015, the total demand for metal roofing increased from 11.7 million squares to 17.7 million squares. This is the second time residential metal roofing has achieved double-digit market share in the re-roofing segment. Metal roofing is second only to asphalt shingle roofing in the remodeling market. Asphalt market share dropped 2 points overall, and is now 78 percent of the U.S. market.

Dick Bus, president of the nonprofit Metal Roofing Alliance (MRA) believes the organization's efforts have helped propel the momentum. "Our consistent effort to educate consumers about investment-grade metal roofing has helped to build this market, and we believe even more growth is possible," he said. When MRA's national campaign began in 1998, metal only made up 3.7 percent of the re-roofing market

Metal roofing in the remodeling market is showing strong growth overall, and several regions are much higher than the national average. In the East South Central region (Alabama, Kentucky, Mississippi and Tennessee), metal roofing reached 22 percent, a gain of eight points in a year. Other big gains occurred in the South Atlantic region (Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia), where metal now boasts 12 percent market share.

Overall, metal roofing gained an average of 3 to 5 percentage points in each region.

The top reasons homeowners provided in the study for why they chose a metal roof include: longevity (26 percent), strength/protection (22 percent), attractiveness (15 percent) and good investment/adds value (15 percent).

The most popular style of metal roofing is vertical ribbed panel with 71 percent, followed by metal shingle/shake/tiles with 22 percent. Copper roofing now holds a 5 percent market share.

Painted metal roofs are the most popular, with 53 percent of homeowners installing painted panels followed by bare metal at 32 percent and stone coated metal roofs are at 14 percent, up from 8 percent from last year.

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industry news

BY RURAL BUILDER STAFF

allowable floor area. The new UL W447 design consists of horizontal girts clad with furring channels and gypsum board on both sides of the wall. The girts are connected to columns or adjacent wall framing, and insulation can be added in the wall cavities.

Eighteen existing UL-rated assemblies for metal building applications are available on the Fire Protection page of the MBMA website, mbma.com. An additional resource is MBMA's "Fire Resistance Design Guide for Metal Building Systems," available at mbmamannual.com.

■ **Concrete group takes on wood**

A coalition of the National Ready Mixed Concrete Association (NRMCA) called Build with Strength has recently been building its case against wood buildings. This summer, the coalition released a new video expressing concern with cross-laminated timber (CLT) in construction. The video joins an ongoing effort by Build with Strength to inform the design/build and construction communities about the importance of utilizing strong and resilient building materials like concrete.

"Before designers and builders, and even legislators, proactively encourage the use of wood products in construction, especially in the low- to mid-rise residential sector, greater testing must take place," Kevin Lawlor of Build With Strength is quoted in a coalition press release. "There's no substitute for building with strength, and in the case of homes for families, the potential for disaster with CLT is simply too great at this time."

Also recently, the Ready Mixed Concrete Research & Education Foundation and Portland Cement Association sponsored the development of Break Even Mitigation Percent (BEMP) tool through the MIT Concrete Sustainability Hub (CSHub). The BEMP tool estimates the cost of weather hazards on a building. Using the tool, researchers compared a \$10 million non-engineered wood building with a \$10 million engineered concrete building as calculated for conditions in Galveston, Texas. Over a 50-year period, the engineered concrete building was expected to sustain \$165,000 in weather-related damages, while the non-engineered wood building was expected to sustain \$340,000 in weather-related damages.

The NRMCA has noted that it will continue to develop resources and tools to support its "competitiveness in the green building marketplace and the trends toward product transparency."

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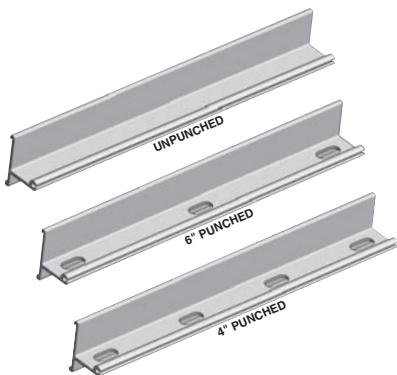
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METALCON heads to Baltimore

■ METALCON, the biggest event for metal construction, returns on October 26-29. While the backdrop is the historic city of Baltimore, the main focus will be technology and the future. A look at what's planned.

BEFORE THE SHOW

Two programs kick-off before METALCON opens. The first is a unique off-site tour on Oct. 25 at Intertek Building & Construction's testing laboratory in York, Pennsylvania. This is a once-a-year chance to see product testing first-hand and learn more about testing and certification.

The second pre-show program is the Metal Roof Certification Training Program, October 25 and 26. This 8-hour session will have practical, hands-on training based on the Metal Construction Association's *Metal Roof Installation Manual*.

GENERAL SESSIONS ON 3-D TECHNOLOGY

METALCON will feature two unique general sessions that will focus on 3-D technology. Roderick Jackson from Oak Ridge National Laboratory will present "Future Design and Technology Trends in Construction He will show where design, build and

energy efforts can take us.

Adam Kushner, founding principal of Kushner Studios will present "Castles in the Sand: 3D Printing in Construction." He will walk attendees through the application for one of his projects located in Gardiner, New York.

WORKSHOP SESSIONS

Following the general sessions there will be 45-minute workshop sessions. In addition to technology, topics will include ideas for better management, marketing, products and techniques to improve metal buildings.

Advances in drones and associated benefits for safety and accuracy on construction projects will be covered by Mark Sapp, chief technology officer of HoverStat Technologies in "Safety Above All, Thanks to Drones."

Tom Dyskiewicz of Crossing Partners LLC and Chris Hewson, National Account Manager for iRoofing, will discuss the future direction of roof technology and its impact on metal roofing businesses in "Roofing

Technology for Today and Tomorrow."

Ray Smith of AppliCad USA Inc., also takes on roofing technology with a session focused on the importance of planning before installing or upgrading software.

Technology and its value in marketing and sales' lead conversion are explained by Lance Bachmann of 1SEO.com Digital Agency in "Using Digital Marketing to Build Your Future in the Metal Industry."

Business success is covered in several sessions: "Grab the Future and Lead" with Frank Stasiowski, of PSMJ Resources, Inc., and "Emerging Trends for Contractor Success," with Dave Berry, a consultant with FMI.

Steve Yates of Optimum Safety Management will lead participants in how to develop a workable safety program in "Building a Safety Culture That Lasts."

Peter Gudmundsson of RecruitMilitary explains the facts and best practices for accessing the resources of U.S. veterans in "Understanding the Real Veteran Hiring Opportunity."

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There will be five challenges each day in the Championship Games. A minimum of \$250 cash will be awarded in each of the challenges.

Metal construction experts discuss best practices and attributes of metal roofs, windows, wall panels and building inspections. They will include Rob Haddock, Metal Advisory Group, “The Roof: The Greatest Asset (or pain-in-the-asset) to the Building;” Bob Zabcik of NCI, “Choosing Wall Panels for Sustainability and Energy Efficiency;” and Adam Verstraete of Wintech and Rick Kincy of Dominion Building Products, “Window Options for Metal Buildings Are Changing.”

The big picture for all metal building projects is presented in “Metal Building Inspection—Don’t Get Caught Off Guard,” an interactive session with an expert panel led by Dustin Cole of Ruffin Building Systems.

TRADE SHOW AND LEARNING ZONES

More than 300 exhibiting companies will show off their products at the trade show. Learning Zones also return, offering 15-30 minute complimentary education sessions on the show floor.

TRIUMPH AWARDS

For the second year, there will be the presentation of Triumph Awards to honor individuals who have been instrumental in advancing the metal building industry. The inaugural Industry Champion was presented last year to METALCON’s Show Director, Claire Kilcoyne, for spearheading the METALCON show for 25 successful years. This year, the awards will be presented at a special awards dinner.

MCA METAL ROOFING CHAMPIONSHIP GAMES

Contractors can compete for cash prizes in challenges such as Triangle Fastener Corporation’s “Screw Gun Challenge;” the Roof Hugger Inc. “Hug A Roof Challenge;” the New Tech Machinery and Drexel Metal’s “Standing Seam Challenge;” the D.I. Roof Seamers “Seam It Up Challenge;” and the S-5! “Let it Snow Challenge.”

CHARITY OF CHOICE

Every year, METALCON donates to a nonprofit organization in the host city. This year, donations will go to America’s Fund that provides financial, physical and emotional support to ill or injured veterans of the U.S. Armed Forces. **RB**

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Maximizing the metal

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YOU MAY BE THE BEST BUILDER ON THE PLANET, BUT IF YOU USE INFERIOR PRODUCTS YOUR STELLAR REPUTATION COULD ONLY LAST AS LONG AS THOSE PRODUCTS. Because the larger percentage of a post-frame and steel-frame building is metal, doesn't it behoove you to know a lot about it?

At Steel Dynamics, Don Switzer, sales manager and Dan Knight, marketing manager for construction products, believe so. Their presentation “Not all Metal is Created Equal” was well received back in 2014 at the Frame Building Expo, so *Rural Builder* recently caught up with them again to offer an overview of the topic.

Steel Dynamics is a major steel coil provider in the construction industry. Like builders, getting the right product to the customer to use for the right purpose is crucial to maintaining its reputation.

So what is it they want all builders to know?

Gauge is not a good gauge of quality

“At the start of the process is the steel, and it's making sure that the strength is correct, and making sure that the gauge is correct,” Switzer said.

There are four general grades of steel but in the rural builder industry, most common is Grade 50 used for trim and Grade 80 for building panels.

“All the product from a mill is certified from a strength level,” said Switzer, “meaning that when you order a panel, it has an 80,000 yield strength or it has a 50,000 yield strength. Wherever you order it from, it's important to ask your steel supplier for a test report.”

In addition to the strength of the materials, the test report will reveal how much coating is on the steel, the gauge and the width.

▼ The cause of this color variation was due to using mixed panels from two different paint systems. The fabricator was found to be at fault and left to correct the problem for the homeowner.



“

Builders should stop thinking in terms of gauge and start thinking in terms of actual decimal thickness.”





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Gage	Min.	Max.	Nom.	Min. lb/sf	Nom. lb/sf	Max. lb/sf	Nom kg/m(sq)	Min.	Max.	Nom.
30	0.0127	0.0187	0.0157	0.5143	0.656	0.759	3.2	0.3188	0.4783	0.3988
29	0.0142	0.20	0.0172	0.5755	0.719	0.820	–	0.3569	0.5169	0.4369
28	0.0157	0.0217	0.0187	0.6367	0.781	0.881	3.81	0.3950	0.5550	0.4750
27	0.0172	0.0232	0.0202	0.6979	0.844	0.943	–	0.4331	0.5931	0.5131

Gauge is where many problems arise. There is a legitimate decimal range of thickness that panels can be made within a given gauge. A Gauge 29 panel, for instance, might range from .0142 all the way to .020 in thickness, but most people are selling in the .0145 to .0152 range. The lower the gauge, the heavier (stronger) the panel.

“Some [suppliers] are always trying to be on the skinniest side of that gauge so they can still call it 29 gauge,” Switzer said.

There are legitimate uses for both ends of the range, yet builders should not be fooled into thinking that one-gauge-fits-all.

Switzer is a strong believer that builders should stop thinking in terms of gauge and start thinking in terms of actual decimal thickness.

But even then, it’s important to know that the measurement of thickness never includes the paint.

“When you measure thickness or gauge of a panel, you have to take away the paint,” Switzer said. “The paint doesn’t provide any structural value.”

An even better method than measuring thickness, is actual weight since weight leaves little room for exaggeration.

The importance of paint

While paint doesn’t provide any structural value, it certainly does add value to the end product. Unpainted panel still has a big audience, but painted coil is now more popular than ever and it’s what most customers see most clearly.

Dan Knight came up through the steel ranks via the paint industry and he explains the different types of paint.

There are three types of paint systems for metal that are commonly used here in the U.S.:

Polyesters: the least expensive, usually with a 10-year warranty on an exposed application.

“Polyesters are a very good workhorse but typically they don’t have the exterior durability that’s required on the warranted products,” Knight said. “So where you see them is on the low- or non-warranted systems such as interior liner panels, gutters, non-warranted or very low-warranted wall and roofing panels. There is always going to be a market need, some people call it shade-and-shelter. It’s located in the back 40 and it’s not expected to last 40 years.”

SMP (silicone polyesters): The most widely used, averaging a 40-year warranty on the film (but fade and chalk can occur over time).

“It’s basically a more durable exterior grade system. This is the workhorse in the rural builder’s market,” Knight explained. “This is commonly referred to as a 40-year paint system.”

PVDF (Polyvinylidene fluoride - trade names include Kynar and Hylar): the premium paint system, averaging a 25-year warranty, but with the best protection against fade and chalk.

“You see [PVDF] a lot in commercial buildings,” said Knight.

The thickness of the paint is important. The thicker the paint, the better the panel can weather the elements and protect the substrate.

For warranted material, the primer should be a minimum of .2 mils thick and the paint or topcoat at least .8 mils for a total of 1 mil thickness. Like steel, there is a range: for top primer the range is 0.2-0.3 mils; the top paint or coat is 0.7-0.8; and the bottom or backer with primer is 0.5-0.7 mils.

IS IT REALLY GALVALUME?

When Galvalume hit the metal industry, it was a true game changer. The mix of 55 percent aluminum and 45 percent zinc alloy allowed panel to hold its rust-inhibited beauty longer than any other product on the market. Twenty years of research went into its development by Bethlehem Steel and today its production under strict standards by a consortium of approved licensees around the world is maintained by BIEC International Inc.

As with any good product, especially one with monetary value, there are unscrupulous dealers waiting in the wings. Galvalume is no different. While there are now other good products on the market with a 55-45 mix of aluminum and zinc, the problem is when they are mislabeled as Galvalume, which is a licensed brand.

Much of this questionable product is currently coming from Vietnam.

“I have seen [the term Galvalume] used illegally,” said Don Switzer, of Steel Dynamics, a licensed Galvalume producer. “And I have seen people in this country buying the aluminum zinc non-Galvalume product, I’ve seen paperwork and it says 55 percent aluminum, 45 percent zinc, but by the time it gets to the consumer it is marketed as Galvalume. By the time it goes through the trading company to the reseller to the reformer, by the time it gets to the consumer at the end of that chain, it has been washed out and marketed as a Galvalume product.”

The BIEC is pursuing legal action. In the meantime, builders should ask for paperwork from their suppliers confirming they are buying registered Galvalume, with the Galvalume insignia clearly visible.

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BY SHARON THATCHER

Paint warranty

“This is where understanding the supply chain of the paint system is important,” Knight said. “What you have to understand is that the paint warranty only covers three facets:

Chalk: This is a degradation of the resin and the pigments over time. When you rub your hand on the coating, it leaves a white residue.

Fade: the depth of color difference, say when a dark brown paint turns to a light brown.

Film integrity: the ability of the paint to stick to the metal. “What is interesting, everybody says 40-year warranted paint but [with SMPs] the film integrity is 40 years, the chalk and the fade are 30 years,” Knight said.

In the U.S., the paint warranty comes from the paint company (an Akzo Nobel, a Valspar, a Duracoat) and is held by the company that applies it. No paint warranties are transferable. The paint warranty remains with the fabricator.

When there is a problem, it goes up through the chain to evaluate the cause of the failure and who will take responsibility, including the installer.

All roll formers should have available their agreements with the paint company, with the important facets of that language written into their own agreements as a protection for them-

selves and their customers.

Confused yet? To builders Knight noted: “I think it’s important to deal with a reputable roll former who has the depth to stand behind their product.”

Handle with care

Once off the production line and on the job site, it’s up to the builder to make sure the panel is handled correctly. Don Switzer offers these job site tips.

Job site storage: “I know you think, well it’s building panels, we can store it outside,” he said, “but building panels are built to be on a building, not to be in a stack ... In particular you don’t want water to get between the sheets so it causes the paint to delaminate. The pressure of the stack, and the water forces the water through the paint and makes it delaminate. Once they are on the building, and the water is hitting them, the water is just running off. But when you have the water trapped, that’s where you have a problem.”

Installation: “The key is that you don’t damage the surface,” he said. “The metallic coatings without paint (Galvalume or galvanized) or the metallic coatings with paint are not as hard as the steel substrates beneath those paints. So you want to make sure you don’t compromise the integrity of the painted or metallic surface. Again, once they’re up and they’re not scratched, you don’t have a problem. But if you scratch that product all the way down to the base metal, it’s going to rust because you’ve damaged the barrier placed there to protect it.”

More on warranties

The longevity of metal panels is a selling point but also can create an issue when warranties are involved. “You have these warranties for a long time, so do your due diligence,” said Dan Knight.

Knight recommends that builders have their suppliers walk them through the claims process. “If someone says ‘I have a 40-year warranty,’ understand what that means, and understand the remedy.”

What is covered for 40 years and what isn’t?

“Maybe the best thing to do is to say [to your supplier]: walk through the claims process with me. If I have this product for 10 years and I have a claim in 10 years, what happens? Whoever they’re buying it from should be able to tell them how it works.”

Also make sure you keep your receipts. Your bill of receipt will contain important coil numbers, batch numbers and paint code numbers. Assuming you are working with a legitimate company, all that information will help track down vital information about the coil’s production process and warranty details. Paint codes will tell you the type of paint and the years it is expected to last.

A note of warning: while there is a lot of good foreign steel there is also a fair share of cheap and poorly-made foreign steel. Getting satisfaction on a warranty from thousands of miles away, and across multinational lines, can get tricky.

Then there are the instances where a company is not legiti-

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mate. The guys at Steel Dynamics have seen it all. “What we find with off-shore steel in particular, they might mimic our warranty. It may be all misspelled, but they’ll copy it, except for the remedy. That’s important. The warranty may say ‘this warranty is only for the cost of the paint.’ So you just paid \$12,000 for metal and the paint cost is \$800. Or it may say ‘this warranty is not valid within a thousand meters of water, man made or otherwise; or not in areas of high humidity; or all claims are settled in Chinese court.’ So you have to really understand these things. And compare that to other warranties.”

Switzer has even seen bogus companies passing out Bethlehem Steel warranties and Bethlehem steel hasn’t been in business since 2002.

The victim is ultimately the building owner, but of course everyone along the supply chain are victims as well, from the roll former who purchased that problem steel, to the builder who bought the finished panel and installed it.

Understand the claims process and your level of risk exposure.

“It’s one thing to sell a building to someone with a 40-year warranty, but it’s another thing to have that person come back and discover there’s nothing behind that warranty. And you live in the same town and go to the same church. It’s going to be hard to tell him, ‘well, I can’t really fix this.’”

Unfortunately, the consequences may come when you least expect it. “Even a marginal product will last 10 years pretty much anywhere in the country. So what’s going to happen in 10 years, faster in the south, there’s going to be a day of reckoning, where the offshore stuff people buy, the red is going to turn pink, the green is going to turn white or yellow.”

Bottom line: “Just understand there is a lot of exposure to this. To replace or repaint a roof is considerably more expensive than the cost of the metal.” **RB**

Rolling with the competition

The changing landscape of roll forming

By Sharon Thatcher

THE EXPLOSIVE GROWTH OF REGIONAL METAL ROLL FORMING BUSINESSES IN THE U.S.

coupled with an influx of foreign raw material has had a significant impact on established companies that once exclusively supplied wall and roof panel for the metal construction industry. *Rural Builder* interviewed two established companies—McElroy Metal and Everlast Roofing Inc.—to see how they are competing in this tumultuous climate.

Identifying the competition

The issue of the influx of foreign raw material is complex but one important note from Craig Covell, co-founder and president of Everlast Roofing Inc., is the issue of how steel is made and governed elsewhere in the world as compared to the U.S.

“What happens globally, be it Australia, Europe, Canada, the steel mill is very much determining the specifications of coil stock. The steel mill controls the complete process. They specify the gauge and substrate right down to the paint systems and color palette. For example, where they offer a palette of 25 or 30 colors, they are the primary supplier in those markets, so those colors are the colors offered in the marketplace. In the U.S. market place, the OEM manufacturers determine what their specifications are: paint systems, colors, gauges and substrates, so it brings variability into the supply chain.”

That variability brings confusion to the marketplace, making it difficult for the consumer to determine which product will provide the maxi-

mum performance and longevity. With so many players in the game, price becomes a main selling point, while quality can vary widely.

“There are good steel mills domestically, and there are bad ones. There are good steel mills foreign, and there are bad ones. [In the U.S.] we’re making better products in the world on the high-end but we also have people ‘skinning’ down the product,” Covell said.

Regional roll-forming competition changing the industry

In the U.S., historically, a number of companies have taken the steel coil and fabricated their own products, then sold them through distributors who then sell to the builders.

About 20 years ago, regional roll-forming businesses began to spring up in the south, cutting out the distributors and going direct to the builders. The proliferation of those smaller guys during the past 10 years as they spread north, east and west, has made a major impact on the industry. Cutting out the middleman has lowered prices on end product, but has also challenged the old model of distribution.

Ken Gieseke, vice president of sales at McElroy Metal, has also been on the front lines of the change. McElroy is located in the south in Bossier City, Louisiana, in the region where the trend for regional roll formers began.

“The barriers to entry are not real high,” Gieseke said of the smaller start-ups. More and more affordable machines have made it possible and lower price points for the end roof and wall products have made it attractive to customers.

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BY SHARON THATCHER

"I can't paint a broad brush," Gieseke said. "Like any industry, when you have that many people doing something, you're going to have some that don't do it well. I would argue this even against my larger national competitors."

Covell takes it a step further: "You have regional roll formers that are educated, that really want to have a quality product and go out of their way to sell a quality product." He sees this as healthy competition.

But he also sees too many regional roll formers who don't know what they are selling. "Some of them think they're doing a good job, but they're not," Covell said. "They aren't asking the right questions." In essence, they don't know enough about the metal, the coatings and paint, and how to properly fabricate metal.

What bothers Covell equally, however, are those larger, established companies that have faced this newer competition of regional roll formers by lowering the quality of their own products and are now making a product less durable than some of their best regional competitors. In order to compete "some large roll formers have actually thinned their products up and lowered the quality of the top coats and substrates so they can get their product into the hands of [distributors] at a lower price," he said.

Caught in between is the consumer who must educate himself about what he needs versus what he is really buying.

Separating themselves from the competition

Covell has done his soul searching and has chosen his own path as a

national roll former. "We have to sell even higher-value products, that's our approach," he said.

That's not an easy path when price is such a focal point in the market. "I always say to ... my sales team, it's easy to make a decision of what you want your coil specification to be from a quality perspective. The difficult part is how you're going to take that to the marketplace at a higher price point and make sure that the customers perceive the quality you're offering," he said.

Proprietary products are naturally something that companies use to separate themselves from the competition. Both Everlast and McElroy have teams of engineers tasked with developing new ideas and improving established products. They can argue that their



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products are based on real science.

The paint system is important. “We use all-ceramic pigments,” said Frank Miklos, director of sales for Everlast. The competition may be using coil that has been coated with less expensive organic pigments that will break down over time.

McElroy uses a top-of-the-line PVDF paint system. “That’s the paint system that’s been used for decades,” said Gieseke. “And it’s our belief that PVDF paint systems should be just as important to post-frame buildings ... so we’ve made that available on all of our products.”

Another factor heavily emphasized by both companies is the thickness of their metal, the thickness and quality of the coatings, and the transparency in providing that information to the customer.

Inventory

Part of the affordability of small roll formers comes from the fact that they don’t have the overhead of inventory. Gieseke spins that in another direction, contending that the lack of inventory can mean a slow-down in the overall process when special orders are necessary, or even worse, the use of lower- or inconsistent-quality products.

One area in particular where unproven roll formers may not be properly prepared, Gieseke noted, is in the inventory of trim versus panel coil.

“There are different tensile strengths and we use a different tensile strength for trim coil than we do for panel coil,” Gieseke said. “The panel coil is typically harder and if you make trim out of it, a lot of times you can have cracks. A lot of people don’t invest in the inventories. We think it’s important to have trim coil that’s softer, that will be used specifically for trim and not one that’s a combination.”

Frank Miklos sees the importance of inventory as playing a key role in the consistency of the end product. If you need additional panel, is the inventory available from the same coil batch? Slight differences can be very notice-

able. There can also be issues down the road with fade variation.

“It can vary from shade to shade from supplier to supplier,” said Miklos. A roll former may “buy a coil from one coil supplier, and another one from another coil supplier. One may be one paint system and the other one another paint system and they have a shade variation. The biggest thing I see is that there’s no consistency.”

That lack of consistency may be fine if the building is a basic shade-and-shelter structure nobody sees, but not so fine if it’s on the customer’s house or garage.

Let the buyer beware

There are ways you can improve your chances as a builder in buying the quality of roof and wall panel you expect. It principally involves learning about metal, and learning what questions to ask your supplier. Beware when they can’t—or won’t—answer your questions.

Gieseke said that too many roll formers are not upfront about what their substrate coating is. “They’re basically selling painted metal,” he said. “In our case we always tell people, here’s your substrate, here’s your coating. We always encourage all our customers, and any end users, to make sure whoever is going to install their building, ask them what their coating is, ask them what their substrate is. If they won’t tell you that’s a red flag. They should know.”

Being able to determine quality based on what it looks like is difficult. “The big thing that we run into, the panels all look the same [when they’re new], you really can’t tell [quality] by looking at the panels,” Miklos explained. “... Sometimes you can tell because the profiles are not as crisp or strong, but looking at the metal it looks to be the same. And that’s the hardest thing for us to convince a customer, that there is a big difference. After time passes, then they see it. Ok, it was really cheap to get it ... but now they’re paying the price,” Miklos said.

Whether you are buying from a

regional roll former or a national company here are some important points to consider:

- The thickness of the metal does not determine the performance against corrosion. Pre-treatments, coatings and paint are what allow metal to perform against corrosion.
- Thinner metals can lead more easily to oil canning, waviness at overlap areas, and over-drilling of screws into the metal. The latter can lead to dimples and the early degradation of the paint.
- Instead of concentrating on gauge, learn to understand the importance of thickness and weight, not only of the metal, but of the coatings. What is the true base-metal thickness? What does this weigh per lineal foot? What types of metallic coatings, pre-treatments and topcoats are being used and how substantially are they applied?

Aside from all that, and not even covered here, are issues of roll-forming equipment and whether or not your panel is being roll formed properly.

It’s a dizzying array of things a metal builder needs to know, but a panel’s life is only as good as the weakest point, so wherever you cut it, scratch it, roll form it, penetrate it, that’s where the panel is going to break down first.

When it does break down, your reputation as a contractor may go with it.

Miklos concluded: “For contractors, it’s their reputation at stake. If they start selling a product that’s inferior, their reputation is going to get beaten up. We do a nice job of working with our dealers to get consistent ordering for contractors. That’s where we pick up most of our buyers, it’s the larger contractor that wants a consistent product because it’s their reputation.” **RB**

For more information circle 101 for Steel Dynamics; circle 102 for Everlast Roofing; circle 103 for McElroy Metal.

Dealing with troubled customers

What to do if a client is struggling to pay you

BECAUSE IT DOESN'T TAKE TOO MANY NON-PAYING CUSTOMERS TO CREATE TROUBLE, far too often a rural builder must be concerned not only with his or her operation's financial well-being, but also the financial situation of both customers and suppliers.

There are always customers that go out of business without warning—or without paying their bills. In these cases, it is often too late to collect anything. However, if the owner or manager of a building business is vigilant, many losses may be averted. There are also strategies for dealing with troubled customers before the dreaded final step of “firing” them.

It's far easier to take a proactive approach by avoiding the types of clients who usually spell trouble, staying alert to signs that long-time customers are having financial problems and taking quick action when their payments are slowing down.

Although a credit check is important, it's not fail-safe. Obviously, things can go south quickly, so minimizing exposure to a customer or potential customer's credit troubles requires every builder and contractor to exercise “due diligence.”

That can be as basic as paying attention to the comments of customers or potential customers whenever money is discussed. A customer or client who, for instance, begins negotiations by offering half of a proposed fee is not a good sign. Perhaps the customer or potential customer cannot afford the service, the quality of the service or the timing of the service.

Due diligence also means staying on top of paperwork. It is all too easy to fall behind on invoicing in the midst of big projects, but letting it slide for a month or two will put the building business at risk. Before you know it, a customer owes \$5,000, \$10,000 or more. To avoid this problem, establishing regular routines for billing customers that reflect their preferences, such as sending an invoice every two weeks, might be a good strategy. If customers start taking longer than usual to pay it, it becomes readily noticeable.

Staying alert for signs that customers' financial situations are changing can protect any business. Various indications of possible trouble include:

- Requests for price changes with or without changes in the number, frequency or types of services performed. A customer who doesn't understand the true value of the work performed is often reluctant to pay in

full, even if not in financial trouble, so these should be screened out from the beginning.

- Negative publicity or press, especially delinquent tax notices.
- Rumors, particularly those involving slow payments to others, sudden large payments to insiders, or poor cash management.
- Deteriorating market position relative to the customer's competitors.
- Employment of various types of consultants.
- Lack of focus by management or response to requests.

A number of strategies should immediately kick-in whenever financial troubles appear imminent including:

- Cashing checks promptly. And keeping records of when checks are received.
- Conditioning future business on payment for the new services or goods AND some reduction in the past-due amounts. Payments that are “contemporaneous exchanges” are immune from preference challenge by a bankruptcy trustee.
- Without evidence that payments were for the new goods or services, rather than the old balance, courts tend to apply payment to the oldest charges, exposing the payment to recapture.
- Selling C.O.D. is excellent protection against greedy bankruptcy trustees.
- Perfect any lien rights the building business may have.
- Don't let the threat of a customer filing for bankruptcy deter a lawsuit if the debtor is believed to have assets from which the claim can be satisfied.
- Talk to a collection attorney about your rights to a pre-judgment attachment.
- Don't hesitate to accept payment on account because of the possibility that the payment may be refundable as a “preference” if the customer files bankruptcy. It is not wrong to accept money genuinely owed to the business; neither is it wrong of the soon-to-be-debtor to pay it. It simply may be recoverable by a trustee.

Most builders and contractors are aware that contracts and payment terms should always be put in writing. Unfortunately, this alone may not protect the business if a customer runs into financial prob-



Mark Battersby has more than 35 years experience in small business issues, tax and financial matters. Contact him at 610-789-2480 or MCBatt12@Earthlink.net.

heed the signs

There are strategies for dealing with really troubled customers before the dreaded final step of “firing” them.

lems. Few troubled customers are likely to begin paying simply because there is a contract.

One or two customers can put any business at risk if payments from them slows or dries up. Even a builder or contractor whose plate is full might be well advised to continually look for new customers. Make sure there is a constant inflow of customers so, if one fails and isn't able to pay on time, potential problems are avoided. It also provides more time—and a financial cushion—to work things out with a troubled customer.

The first step to turning troubled customers into valuable assets is determining whether the relationship is worth saving. A builder or contractor who believes in holding onto every customer, no matter what the cost, may never see their business reach its maximum earning potential.

Before asking any customer to take his business elsewhere, efforts should be made at “reforming” the customer. There is no clear rule-of-thumb as each situation—and each customer—is different. If the problem is one of slow pay with a smaller customer, services can often be postponed or delivered on a C.O.D. basis until they've paid up.

The same approach may work for larger customers if the business has enough leverage. Alternatively, a price increase to offset the higher cost of extending credit might be called for.

Worried about the customer going elsewhere? Sometimes that's

a good thing. Troubled or problem customers become problems for competitors.

Often ignored by many builders and contractors is whether the best business decision may actually involve FIRING some of their worst customers. While this may seem like an illogical suggestion (particularly in a bad economy), having the wrong customers can be costing the business in unexpected ways and holding it back from real success over the temptation of short-term profits.

There's one thing that no business owner likes: trying to collect from customers who have run short of money. Unfortunately, wringing money out of deadbeat customers has become a common issue in today's slow-growing economy. In some cases, the only option may be hiring a collection agency or going to court to collect.

Diligent builders and contractors may be able to minimize their risk and bad debt by paying attention to a customer's payment habits, its' standing in the trade and potentially anticipating a customer filing for bankruptcy. Using various techniques to monitor a customer's payment practices, its standing in the credit community and other financial indicators can significantly reduce the financial headaches of any builder or contractor and contribute to a healthier bottom-line. After all, to stay in business means dealing with all customers, warts and all. **RB**



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300	Marion Manufacturing	38,41
306	Maze Nails Company	43
584	Metal Rollforming Systems	40
331	Metalcon	21
597	NFBA Heartland Chapter	35
378	National Frame Building Assn.	19,27
463	Nationwide Protective Coating Mfrs., Inc.	30
	Paint Valley Parts, LTD	41
350	Palram Americas	32
485	Petersen Aluminum Corp.	39
313	Plyco Corporation	7,39
	Power Lift Hydraulic Doors	41
503	Replications Unlimited	40
449	Rosko Fasteners	41
450	S-5!	11
414	Schweiss Doors	28,41
429	Sealtite Building Fasteners	29,38
540	Spectrum Brands HHI	17
375	Starwood Rafters, Inc.	42
552	Tamko Roofing Products	38
425	Triangle Fastener Corp.	37
	Unique Contractor LLC	41
301	VP Buildings, Inc.	42
374	Western Products of Indiana	34
511	Wick Buildings	26

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STORY RESOURCES

IN FOCUS

101	Steel Dynamics	14
102	Everlast Roofing	20
103	McElroy Metal	20

PRODUCT PROFILE

111	Entrematic	28
112	MWI Components	29
113	DBCI	29
114	Western Products	29
115	I-Beam Sliding Doors	30
116	Trac-Rite Door	30
117	Richards-Wilcox	31
118	Plyco	31
119	PowerLift Hydraulic Doors	32
120	Schweiss Doors	32

NEW PRODUCTS

122	Green Span Profiles	33
123	DeWalt	33
125	Schweiss Doors	42

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BY RURAL BUILDER STAFF

Big doors

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1. ENTREMATI^C / CIRCLE 111

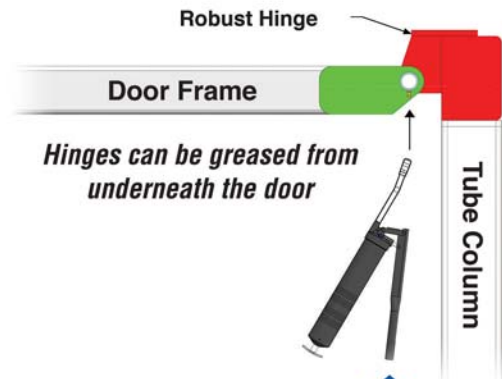
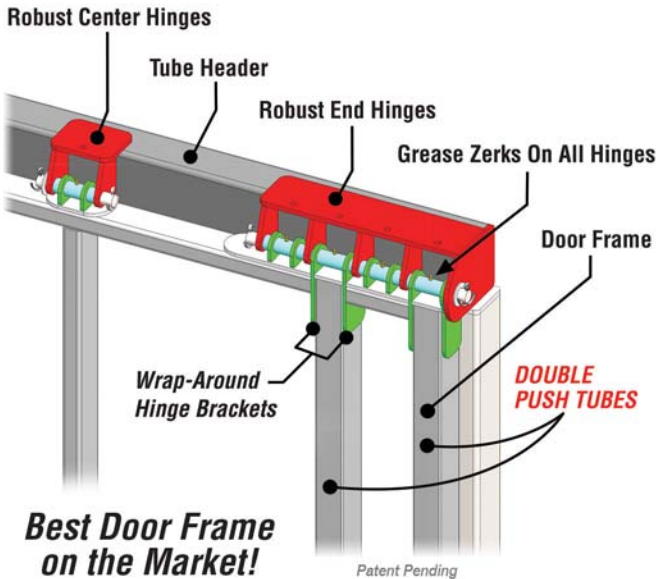
The heavy-duty Amarr 2742 is Entrematic's top-of-the-line, energy-efficient commercial door. With triple-layer construction (27-gauge steel exterior and interior layers with foam-in-place polyurethane insulation), this door has a 19.4 R-value, one of the highest R-values in the industry. Construction also features two continuous 20-gauge steel interior reinforcing strips on each section to ensure hinges are always anchored in steel for added structural integrity. The Amarr 2742 is available with an optional pass door and up to 40-foot wide (available beginning Fall 2016), making this door ideal for custom-fit programs.



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BY RURAL BUILDER STAFF

2



3300 series Bottom Rail

4400 series Bottom Rail

2. MWI COMPONENTS / CIRCLE 112

New in 2016, MWI has added the 4400 Series Super Rail to its track and hardware line. Seeing current trends moving towards greater door sizes, MWI is working in advance by offering a line of extruded aluminum rail that is much stronger than its 3300 Series Big Frame. All sidewalls of the 4400 Series Vertical Rails are thicker for increased strength and durability, making it two-times stronger; the 4400 Series Bottom Rail (shown) is four-times stronger with the added features. The new line is available in lengths up to 24-foot long.



3

3. DBCI / CIRCLE 113

A leading manufacturer of steel curtain roll-up doors, DBCI has more than 25 years of experience delivering light- and heavy-duty commercial doors, wind-rated doors, and a complete line of doors and accessories for self-storage applications. Field technicians and manufacturing and sales offices across the United States enable DBCI to efficiently provide superior products and services.



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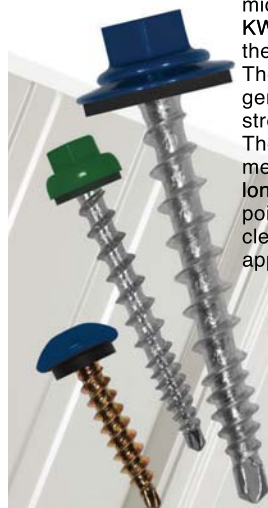
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product profile

BY RURAL BUILDER STAFF

5. I-BEAM SLIDING DOORS / CIRCLE 115

I-Beam sliding doors are heavy-duty, lightweight sliding doors that fit many needs. Made of aluminum, I-Beams are designed for doors up to 48 feet wide and 20 feet tall. All door kits come with all hardware, frames pre-cut, and pre-punched for ease of installation. It includes the I-Beam Ultra Glide Track & Trolley system.



6. TRAC-RITE DOOR / CIRCLE 116

Trac-Rite Door Models 988 and 988WL are popular choices for shipping docks, warehouses, auto body shops, machine shops, farm buildings, post-frame buildings, and dozens of other access applications. They fit almost any large opening, with door sizes ranging from 10 feet wide x 8 feet high, to 16 feet wide x 16 feet high in one-inch increments. The 988WL wind-lock system provides maximum wind resistance. Both the 988 and 988WL earn high marks for strength with solid 26-gauge, rigid-rib steel curtain and also score high for quiet operation and ease of installation. The 988 models feature a torque-tube assembly and heavy-duty springs, brackets and guides.





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7. RICHARDS-WILCOX / CIRCLE 117

Richards-Wilcox Specialty Door Hardware is so substantial it even holds massive doors weighing up to 5,000 pounds. Pictured is a 12x15-foot sliding wooden door mounted to Richards-Wilcox's heavy-duty galvanized box track that took 10 workers to install in this corporate facility in Ohio. Whether in powder coat, galvanized or stainless steel, Richards-Wilcox sliding door hardware can handle tough oversized jobs and regular ones too.



8. PLYCO / CIRCLE 118

Champion horse stall sliding doors may be customized to fit your customer's vision for their horse barn. The Champion slide door is designed to match the Equus Dutch Door in appearance to give your building that special professional touch. The Champion Slide Door is available in single- and double-leaf configurations with either double crossbucks or a crossbuck in the bottom of the leaf and a window in the top half.



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BY RURAL BUILDER STAFF

9. POWERLIFT HYDRAULIC DOORS / CIRCLE 119

PowerLift Hydraulic Doors is the largest hydraulic door manufacturer with more than 24 years of experience. PowerLift's manufacturing facilities build, deliver and install custom doors for aviation, industrial, agriculture and specialty projects, providing prompt local customer support.

10. SCHWEISS DOORS / CIRCLE 120

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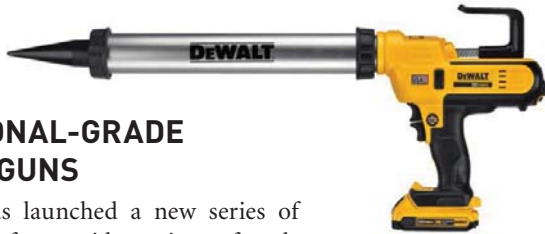
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Moisture problems and solutions

Because addressing present or potential moisture problems in a building is so critical, *Rural Builder* has teamed up with Joseph M. Zulovich, Ph.D, P.E., in a series of five articles that looks at the primary causes and cures of moisture problems and solutions. Part 2 addresses the first main moisture source—surface water. The series will continue in subsequent issues of *Rural Builder* and made available online at RuralBuilder.com.

Protection from surface water [Part 2]

→ Undesired surface water that can effect a building's integrity are most commonly caused by rainwater, surface water runoff and snow/ice melt. These precipitation-based sources cannot be eliminated so they must be controlled in order not to cause adverse impacts on a building system.

Several phases need to be followed to control surface water from impacting a building system. These phases include the following:

- 1. Site Selection** – where the building will be located determines much of what needs to be done to control surface water
- 2. Site Preparation** – proper site preparation has a significant impact on effectiveness of surface water control

3. Site Drainage – details need to be addressed so surface water drains off and away from the building on the finished site

4. Exterior wall and roof system selection – the selected roof and wall system, along with flashing transitions must be selected to ensure precipitation does not penetrate the exterior of the building

5. Construction process – attention to detail during the construction process must be done to ensure a well-designed wall and roof system is effective

The proposed site of a new building needs to be evaluated to determine not only how surface water will drain away from the site but also how much water potentially will drain onto the site.

+ ABOUT THE AUTHOR

Joseph M. Zulovich, PhD, PE, is extension agricultural engineer at the University of Missouri, Columbia, Missouri. He can be reached at zulovichj@missouri.edu.

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For example, there may be excellent drainage away from the proposed site but is located where a lot of surface water from up the hill will drain will down to it. In this example, the proposed building site may be located in a drainage path for a large watershed area. If so, can the proposed site be moved to some degree so that it is no longer located in the significant drainage path?

A second example of a potentially poor site selection is one that is located in a hole or depressed area where the surface water collects rather than drains away. Surface water should be able to drain away from the site at a sufficient rate so that it does not flood a building during rainfall events.

Site preparation is the phase to address any problems identified during the building site selection process. Sometimes, a new building site needs to be elevated to increase a surface water diversion capacity or to get the finished building elevation high enough so surface water can drain away. During site preparation is the time to ensure that surface water will adequately drain away from the building when construction is complete.

A building site located near the bottom of a hill will

require the construction of a surface water diversion with sufficient capacity so that surface water flowing to the site will flow around the new building site. Sometimes the building site elevation needs to be increased to ensure enough diversion capacity can be constructed. A site with naturally slow or poorly draining soils needs to use a similar clay type soil fill to increase the elevation under the building. This will prevent surface water from infiltrating into the fill and collecting under the building. A granular material like gravel or sand can be used to elevate the building base to a higher finished elevation. **Figure 1** graphically shows how low permeability fill should be placed to ensure infiltrated surface water does not collect under the new building base.

If the building fill base was all granular material, surface water in the diversion will infiltrate the fill base under the building, which can result in significant subsurface water problems. In this case, the source of the water is infiltrated surface water rather than a subsurface water source.

If the building example shown in Figure 1 had a basement with the floor below the elevation of the bottom of the surface water diversion, and the fill material was all

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tips & tricks

BY JOSEPH M. ZULOVICH, PH.D., P.E

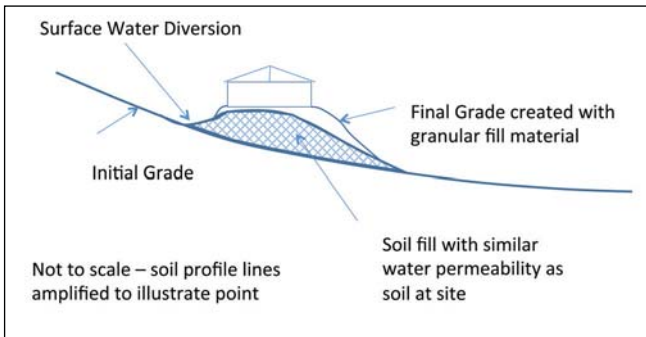


Figure 1: This illustrates how low permeability fill should be placed to ensure that infiltrated surface water does not collect under the new building base.

granular, a good chance exists that the basement could have moisture problems during wet weather periods.

The roof and exterior wall materials protect a building from precipitation of all kinds and types. Proper selection of materials, and the design of transitions between different roof and exterior wall surface components are critical to ensure the building is protected from liquid water throughout all temperatures the building is likely to experience.

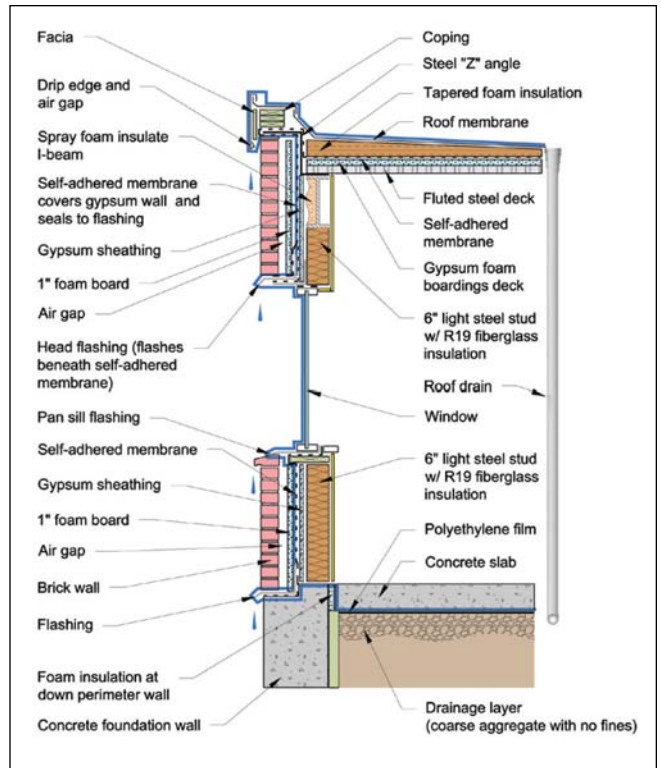


Figure 2: A "Pen Test" can help determine if the chosen design will protect the building from rainwater moisture penetration. This example is taken from "Moisture Control Guidance for Building Design, Construction and Maintenance" found at <https://www.epa.gov/sites/production/files/2014-08/documents/moisture-control.pdf>.

The building owner may be most concerned about esthetics and maintenance; however, the reliability of the chosen system over time also needs to be considered. A capillary break, which minimizes the movement of moisture from outside into the building structure, must be incorporated into the building system. A "Pen Test" can help determine if the chosen design will protect the building from rainwater moisture penetration. An example of this pen test is shown in **Figure 2**. This illustration has been taken from "Moisture Control Guidance for Building Design, Construction and Maintenance" which can be found on the U.S. Environmental Protection Agency website. This document is an excellent resource to understand and address moisture problems in buildings.

The construction process for a new building is the implementation of the material selection and transition design phase. Attention to detail is critical. The success from selecting best materials and developing sound transition designs will occur only if the building is built according to the design. **RB**



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Kansas, Arkansas, Oklahoma and Missouri. Young arrives at MWI with 22 years of building material sales experience.

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He comes to Mill Steel with more than 20 years of experience in the pre-painted coil and standing seam industry.

Mill Steel has also added two sales account managers, Jeff Goode and Mike Polansky, to its Building Products Division commercial team. The appointment of Goode and Polansky is a key factor in the company's expansion into the painted and corrosion-resistant entry-overhead door and canopy markets.

As part of this expansion Mill Steel will establish a commercial sales office in Atlanta, Georgia, and have the ability to service customers in the Midwest, Mid-Atlantic, Mid-South and Southern United States with the support of Mill Steel's network of processing and stocking locations.

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BY RURAL BUILDER STAFF

■ FABRAL CONTINUES TO EXPAND PRODUCTION CAPACITY

Fabral is expanding its flat sheet and slit coil program in the Mid-Atlantic and Northeastern U.S. with new slitting and blanking capacity at its Lancaster, Pennsylvania location.

Starting September 1, Fabral's complete flat sheet and coil offering is available through its Lancaster operation, complementing its total metal wall panel and roofing system product line.

This is the second major change for the company this year, but not its last. Earlier Fabral moved its Grapevine, Texas facility into a larger, more contemporary space in Ft. Worth. The company says it will also be further expanding its manufacturing footprint and operational capacity over the coming months "to enhance service, quality and product offering."

■ PPG, MILL STEEL EXPAND ACCESS TO DURASTAR ULTRA-COOL

PPG and Mill Steel have announced that Mill Steel will stock, market and sell Durastar Ultra-Cool silicone-modified polyester (SMP) coatings by PPG to building product manufacturers.

Brian Knapp, PPG director of coil and building products,

said the agreement leverages the strengths of both organizations and enables them to meet growing demand.

Durastar Ultra-Cool coatings incorporate infrared-reflective pigments that reflect solar heat to keep buildings cooler and reduce air-conditioning-related energy use. They can be used to meet cool roof requirements established by LEED, Energy Star, the Cool Roof Rating Council (CRRC), Title 24 and ASHRAE 90.1.

■ UNION CORRUGATING OPENS NEW FACILITY IN WISCONSIN

Union Corrugating has opened its first facility in the Upper Midwest, expanding their footprint in the metal roofing industry. The new 40,000-square-foot facility, located in Janesville, Wisconsin, will offer Union's complete product line to customers in the Upper Midwest.

Prior to opening its new Janesville facility, Union Corrugating has been manufacturing and distributing products from 10 locations across the Eastern and Central United States since 1946.

The new facility was set to be operational in August.



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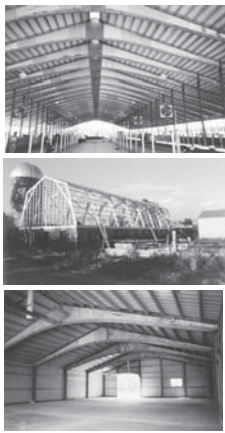
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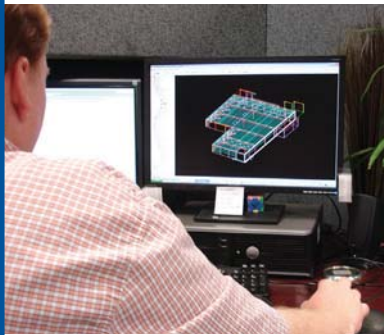
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new products

BY RURAL BUILDER STAFF



SCHWEISS DOORS INTRODUCES HYDRAULIC DOOR WIND PIN

Structural design of Schweiss Doors hydraulic doors now includes the application of hydraulic wind pins.

Wind pins lock the door to the building structure similar to the bolt in a standard door lock and are an integral structural link between the door and the building to resist negative wind loads.

Until now, locking in wind pins was a manual operation—you had to walk back to the center of the door and manually lift the wind pin out of the floor socket and walk back to the door control station to proceed to raise the hydraulic door. When the door closed, the operator had to again manually reset the wind pin into place.

Schweiss Doors streamlined this process. This innovative system allows the user to push the up/down control button or remote opener to open or close the door securely and set the wind pin in place.

The hydraulic-operated wind pin rises out of the floor socket and the door automatically opens, eliminating the task of having to walk back and forth to the center of the door to manually engage or disengage the wind pin. The wind pin is mounted to the interior frame of the door and extends down into the building floor. This also eliminates the chance of forgetting to raise the wind pin, which could result in damage to the door or floor socket.

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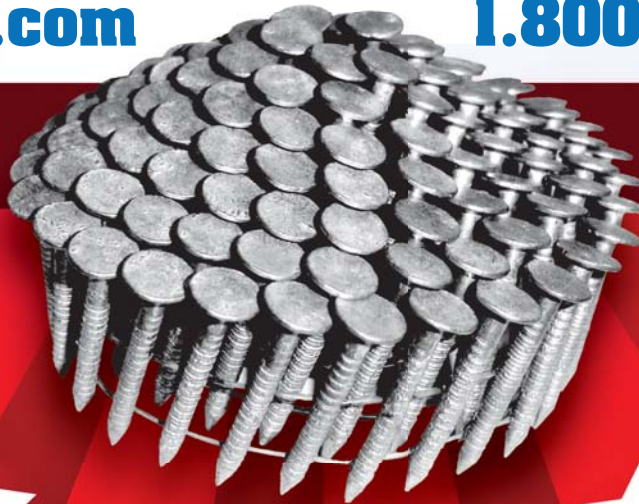
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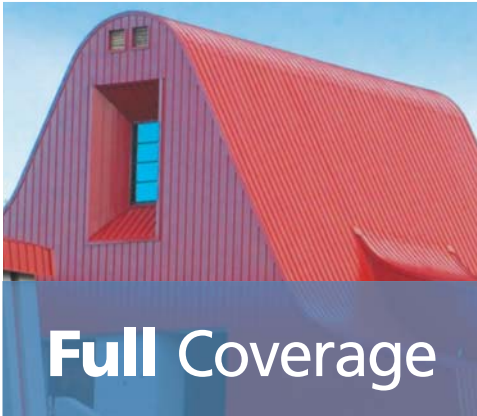
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