CAHL MONTHLY NEWS



Presidents Corner

Last month I attended my twenty first law seminar, ten that I had to attend and eleven that I attended because I was a board member. I know that it may appear that the content of the law seminar never seems to change. Quite frankly, it doesn't. The statutes and laws that were established in 2001 have remained the same ever since. We have procedure to become a licensed home inspector and a standard of practice that dictates how at a minimum we need to perform our inspection and write our report. There is generic contractual law that for the most part governs the entire process. With the exception of some change in grammar and punctuation, these things have remained relatively constant since 2001.

For many years I felt that it was a waste of time to go over the same information time and time again. It certainly didn't make you a better inspector. But then I had an epiphany. I began to realize that it's probably not a bad thing. Why you may ask? First of all, liability is the biggest threat to us as home inspectors. The second biggest threat is complacency, and complacency can lead to liability. So the review of home inspection law, as boring and tedious as it may be gives you an opportunity to review the laws, your contract, your reporting and inspection process and fine tune them all, essentially bringing them up to date. We all tend to get complacent and we need a shove to get back into reality.

The liability of our profession in my opinion is much greater than most others. It is imperative that you have your legal ducks in a row. Doing your job the best you can is not enough protection. Our work is not the type that can be evaluated visually. A home has to be moved into and lived in for a period of time to determine how well we performed our job. It's important that you have a well crafted inspection agreement to spell out many things including scope, pricing, limitations etc. A verbal agreement, while shorter regarding the statutes of limitation, is in my opinion like driving on bald tires or not buckling your seat belt. Potential inspection suicide. Knowing and following *Continued on pg 2*

MONTHLY MEETINGS – Details & Info

CAHI's regular monthly meetings are held at the Best Western located at 201 Washington Ave (RT 5), North Haven. Meetings are also broadcast via Zoom. Meetings are still free to members but RESERVATIONS are a MUST.

Reservations can be made at our CAHI website.

Most meetings are on the fourth Wednesday of the month from 7-9pm. Guests are always welcome! Guests may attend 2 free monthly meetings to experience our presentations, meet our members, and receive a CE attendance certificate. Joining CAHI may be done at anytime of the year through our Membership Page.

February 2021 Volume 14, Issue 02

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Meeting Dates!

Meeting Topics

February 24th

Basement Systems of CT

March 24th

Presidents Message Continued:

the state standards is also very important. It just as important that we all need to stay on top of our legal game as it is to stay on top of our inspection game.

As we ease into 2021 we will all be busy compiling tax info to pass onto to our accountants. I also take this time to pick out some past reports and review them. They can be a wake up call to how you may be becoming lax on the reporting process. I also go through all my tools and such to make sure I am equipped and prepared to take on the new year. I suggest you and or your attorney review your inspection agreement as well.

We also still need to be vigilant regarding Covid 19. We have a year under our belts and how we handle the situation has evolved, but not changed unfortunately. We cannot let our guard down. No matter what your feelings are about our current situation, we MUST act professionally for our safety and the safety of others and follow any and all guides lines set forth by the CDC, the state of CT and any other governing body.

Be well and stay safe!

Stan

"The best way to assess yourself is to base the assessment on the product you produce daily"

— Sunday Adelaja

Electric Component Warranty/Insurance

Who is responsible for repairs to components of the electric system? Or more commonly, who is responsible for removing a tree or damage on the exterior to an electric service? I never commit or try to answer these questions but tell clients to investigate further. This is an issue here in CT and other states.

An organization in the Florida Panhandle sees this as an opportunity to make some money by helping home owners. This is an advertisement that was included in my last utility bill from FL. Do we have anything like this here in CT? Is this a small slice of the more common "Home Owner's Warranty"? Your thoughts and knowledge are solicited.

See the pamphlet on the next page

KNOW YOUR RESPONSIBILITY

As a homeowner you own some of the exterior electrical system components that provide power to your home. An interruption to these

components can be inconvenient, stressful and lead to costly repairs.

If your exterior electrical system fails, finding help can be difficult and time consuming, especially at night

or on the weekends. Exterior electrical system breakdowns can be complex and expensive, often requiring a licensed electrician to complete repairs to code.

Basic homeowners insurance typically doesn't cover exterior electrical systems damaged due to normal wear and tear. Now you can get optional coverage to protect yourself from the covered cost to repair or replace components of this system.

Let Exterior Electrical Line Coverage from HomeServe help protect you from expensive repairs to the system that provides power to your home. You'll

have peace of mind knowing you have coverage in case of a covered emergency and a 24-hour Emergency Repair Hotline available to you 365 days a year.

Visit www.PlansforGulfPower.com Call toll-free 1-833-830-4969

THE BENEFITS OF COVERAGE

Your coverage benefits include:

- 24-Hour Emergency Repair Hotline
- · Priority Repair Status
- One-Year Guarantee on all covered repairs

• Priority Repair Status
• One-Year Guarantee on all covered repairs important Coverage Information: Eligibility: An owner of both a residential single structure that is not intended to be moved and the residential single structure that is not intended to be moved and the read is located on may be eligible for coverage. This includes single-family homes (inclusive of manufactured housing) and townhomes. Recreational whiches and properties used for commercial purposes are not sigible. You property is not eligible if you are aware of any preading contitions, defects or deficiencies with your extended that the properties will be a service and the service of the control of the session of the services of the control of the session of the services. It is shared with any trial party or covered by a homeowners, condomination of like association, then you are not eligible. Beneft Details: Coverage provides, up to the benefit amount, for the covered cost to repair or replace the following components of an overhead or underground centric electrical line, for which you have sole responsibility, from your utility's responsibility to the odernal well of your home, the component of line of the properties and service entrance conductor. In addition, we will arrange and pay for the repair or replacement of permanent wiring to ottached garages, and permanent wiring to detained garages, and permanent wiring to detained associated or interruption to the main electrical supply, transformed or interruption to the main electrical supply transformed and the activities of the properties of the properties of the properties of the properties of the properties. An activities of the properties of the properties. The properties of the properties. The properties of the properties of the properties of the prop

be removed from this making list, pease call 1-833-3830-9898.

HomeServe USA Repair Management (Briotia) Corp. ("HomeServe"), Forida License #W220955, with corporate offices located at 601 Mertitt 7, 61h Floor, Norwalk, CT GeSS, I offers optional carvice plans as an authorized representative of the service contract provider, SarvicePlan of Forida, Inc., Forida License Floor, Gastose Blad, Chicago, IL. 60604. HomeServe is an independent company separate from Gulf Power Company. These options pervice plans are not provided by Gulf-Power Company and are not regulated by the Florida Public Service Services.

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IOMEOWNERS EXTERIOR ELECTRICAL RESPONSIBILITIES **EXPLAINED**



Take the Worry Out of Repairs

Local, Licensed and Insured Contractors

24-Hour Emergency Repair Hotline

Exterior Electrical Line Coverage

EXTERIOR ELECTRIC EMERGENCIES EXPLAINED

The illustration shows repairs that are commonly performed on an exterior electrical system and how much a licensed and insured contractor would typically charge a homeowner to complete them. How would you cope if it happened to you?

With optional Exterior Electrical Line Coverage from HomeServe, it's not something you have to worry about; you'll benefit from a priority response and no bill to pay for covered repairs, up to \$3,000 per year.



under this plan, but it is covered by Gulf Powe



Replace Weatherhead **S266** Plan Members NO CHARGE



Replace Meter Base \$405 Plan Members

*National average repair costs within the HomeServe network as of March 2015. No charge for covered repairs up to your annual benefit

EXTERIOR ELECTRICAL LINE COVERAGE

Sign up for Exterior Electrical Line Coverage Today



Help protect your finances with coverage for your home's exterior electrical system.

For just \$3.99 per month for the first year, you can ensure that exterior electrical protection is just one phone call away.

With coverage you receive

NO BILLS TO PAY FOR COVERED REPAIRS

- . Don't pay any bills for covered repairs to your exterior electrical system, up to \$3,000 annually (30-day wait period includes a money-back guarantee).
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- · Priority response—an insured contractor will be dispatched to your home.
- Enjoy professional, reliable assistance from a locally licensed and insured contractor.

30-DAY MONEY-BACK GUARANTEE

Accept Exterior Electrical Line Coverage and, if in the first 30 days you decide that this coverage is not for you, you can cancel and receive a complete refund.

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All covered repairs are guaranteed for one full year against defects in materials and workmanship

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For more information go to



Decks Over Roofs Three proven methods for building durable, leakproof decks above living space

BY DOUG HORGAN

ur Washington, D.C., metro-area remodeling company is often asked to build decks above finished spaces, and we have several reliable methods that we can use, depending on the job. Most of the time, we install these decks over pressure-treated sleepers that rest on the roofing, tapering the sleepers to follow the slope of the roof. Another approach is to support the deck with adjustable pedestals that rest on the roofing. The roof details are similar in this case, but pedestals are more suited to square or rectangular finishes, rather than linear decking, and are easier to adjust for multiple roof planes. One of the cleanest methods is to use existing parapet walls to support joists that span above the roofing. It's rare we have a building where this will work, but when we do, it's inexpensive and reliable with few complications.

This article describes our preferred methods for building decks over living space, though there are other rooftop deck solutions, such as adhered walking-surface membranes, which we have installed for some clients. This article won't cover mortar-set stone or tile applications, either. These are challenging and expensive installations, and I've covered some key details about them in a previous article, "Repairing Stone Patios Over Living Space" (Jul/16).

ROOFING DETAILS

Regardless of the decking installation method, we've learned a few lessons about decking materials and roofing details. For example,

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DECKS OVER ROOFS





When installing decks over living space, the author adheres to a code-mandated minimum ¹/₄-inch-per-foot roof slope, which can be achieved by either sloping the roof framing or using a tapered insulation system. While uniformly deep 2-by "floating" sleepers laid across a sloped roof may be installed (1), most clients prefer a level walking surface, so sleepers are typically tapered (2).

some types of synthetic decking change size significantly with changes in temperature, and some manufacturers specifically recommend against installation over floating sleepers (we don't normally anchor our sleepers to the roof deck, so they are "floating" on the membrane below). The one time a client asked us to use a brand that says not to do this, they were not willing to take the risk. We weren't either, so we don't know for sure if this would actually cause a problem.

A problem we did create once was to install ipe decking over a shallow roof that didn't fully drain. The puddles of water made such a difference in moisture conditions that the decking cupped up after each rain. In retrospect, proper slope, wider spacing between boards to allow drying, or a synthetic decking would have avoided this issue.

Roof installation keys. For the roofing that goes under a rooftop deck, we've developed a set of installation procedures (see "Low-Slope Roofing Details That Work," Nov/19). First, we use a heat-seamed membrane—almost always TPO (thermoplastic polyolefin)—because the joints don't require regular resealing, unlike the glued joints of EPDM. We've seen a lot of premature EPDM roof failures, typically at seams and joints rather than in the middle of a sheet. Whether those are due to poor workmanship or material problems, it's not practical to remove a deck to fix the roofing, so we use roofing that doesn't need regular maintenance.

In addition, we always install the membrane with a minimum 1 /4-inch-per-foot slope. This is code, and a good idea. Even with this much slope, complicated seam buildups can sometimes pond water, which can lead to freeze-thaw damage, smelly biological growth,

and warped wood decking. One way to create the necessary pitch is to add tapered rips to the top of the framing before sheathing the roof (see Sloped Framing With Tapered Sleepers, page 34).

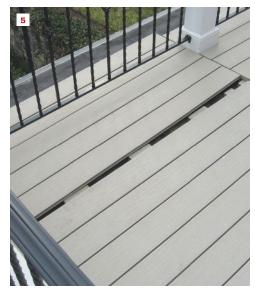
Another way to add the needed pitch is to install sloped roof insulation above the roof sheathing, which allows for simpler flat framing. Tapered exterior insulation can also be used to fix existing framing that doesn't have enough slope (see Tapered Insulation With Pedestal Supports, page 36). We typically use R-15 fiberglass-faced polyiso above-sheathing rigid foam, which is the code-recommended minimum in our climate zone, 4A (for other climate zones, see section R806.5 of the International Residential Code). From a building science perspective, this is a better assembly than rafter bays filled with fiberglass batts, and it's less expensive than using lots of spray foam under the roof sheathing. Our typical goal for total roof insulation is between R-38 and R-49, depending on the jurisdiction we're working in, but the approach we use also depends on the balance between air-permeable and air-impermeable insulation.

One wrinkle with common foam roof insulation, however, is that it is not strong enough for concentrated loads like sleepers. Our solution, which helps to distribute loads over a wider area, is to add strong high-density cover boards over the foam prior to roof membrane installation. I like the ½-inch-thick R-2 polyisocyanurate cover boards, such as GAF EnergyGuard HD, Carlisle SecurShield HD, and Firestone Isogard HD, that are available from our roofing suppliers. Gypsum-based cover boards are also available, such as Georgia-Pacific's DensDeck Prime, which has fiberglass facers that aren't mold food and a coating that the roof membrane adhesive

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Though not usual, sleepers may be fastened to 2-bys laid on the flat, which helps distribute loads over a wider area (3), particularly when a protection board is not installed between the roof membrane and insulation or when a roof insulation with a lower compressive strength is used. Removable access panels are recommended on the deck above both the high and low ends of the roof (4, 5), to provide access to the roofing membrane for maintenance.

readily adheres to. To counter uplift, the cover boards are glued to the foam insulation with a polyurethane adhesive applied in a zigzag, 9-inch-on-center pattern.

Fastener location. One trick to installing the cover board—and any multilayer insulation—is to fasten only the bottom layer, then use glue for the layers above that. This common method is familiar to most roofers, and can be cheaper, as it saves a lot in fastener cost. The most important benefit is that it keeps the fastener heads away from the underside of the roof membrane. When we add sleepers or pedestals on top of a membrane, it's best to not have a screw head right under it, because a sleeper could rub or punch down on the screw head and puncture the membrane.

Protection layer. Once the firmly supported heat-seamed membrane has been installed with the proper slope, the next step is to put down a protective layer to isolate the roof membrane from the movement of the sleepers. This movement is caused by temperature and moisture changes, as well as by people walking on the deck. There was a time we would cut strips of roofing membrane and put one under each sleeper, but now we roll out (without adhesive) EPDM over the whole area. The full coverage provides better protection during construction, plus the black color of the loose-laid EPDM membrane is less visible through the gaps between deck boards, compared with the light-colored TPO.

SLEEPERS

We typically cut sleepers from pressure-treated 2-by stock. Usually we taper these so the deck is level, rather than lay them flat

following the roof slope below. Leaving at least $1^1/2$ or 2 inches at the short end of the taper allows enough wood for the fasteners to grab, plus enough room underneath the decking to wash out debris later. Once the decking is added, the total height is around $2^1/2$ to 3 inches, which places the top of the decking roughly from $1^1/2$ inches below to flush with the threshold—we typically design our decks with a minimum of 4 inches of clearance from roofing to door thresholds. When sleepers are more than 4 inches high, we block between them to keep them vertical, leaving a space underneath the blocking to allow for drainage.

Guardrail posts. When the sleepers are tall and enough blocking has been added, they can be used to anchor railing posts. When the sleepers are not beefy enough, we've resorted to custom-welded steel angles. Anchoring posts to sleepers can be tricky structurally, but if our engineer can come up with a solution that meets the IRC's 200-pound load requirement (500 pounds after applying the required 2.5 safety factor), this approach prevents leaks at posts anchored through the roofing membrane to the house framing.

But we have also found TPO post sleeve flashing to be pretty reliable, so we're comfortable putting posts through the membrane when necessary. We definitely cover the entire post with a good WRB all the way to the top to prevent the classic "water leaked through a crack in the post" that can still happen with the best roofing job (for a post connection detail that will work with a raised parapet, see page 43 in "Low-Slope Roofing Details That Work," referenced above).

Removable deck sections. For clients to be able to clean out

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Sloped Framing With Tapered Sleepers Guardrail Removable access panel at Lineal decking installed level, Threshold drainable edge (and around fastened with appropriate any scuppers and roof drains) Min. 4" clearance length deck screws recommended. Access panel recommended decking screwed to 2x2 battens. **EPDM** protection sheet (gray) TPO membrane (red) 2x blocking, Tapered 2x min.1" gap Protection board PT sleepers. off roofing min. $1^{1}/_{2}^{"}$ at Roof sheathing high point Polviso secured with Tapered 2x Roof joists with screws through insulation PT sleeper tapered rip added fastening plates to top of framing (pitched 1/4" per foot) **EPDM** protection sheet, loose-laid Lineal decking : 1/2" high-density protection board adhered to poliso with polyurethane gel foam Roof sheathing Tapered 2x PT sleepers rest on roofing. Blocking Sloped framing typically achieved by recommended when sleeper adding tapered rips to top of framing members. height exceeds 4". Roof sloped min. $\frac{1}{4}$ per foot for drainage per code. TPO membrane. Posts typically attached to deck framing, Joist bays typically filled with fully adhered with posts flashed with TPO sleeve flashing Fiberglass-faced closed-cell foam and cellulose insulation heat-welded seams polyiso insulation, mechanically fastened

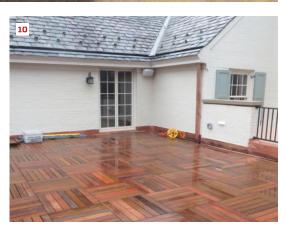
The scenario above shows the roof system adequately pitched for drainage via sloped roof framing. In any sleeper system, the design should accommodate proper clearances between door thresholds, decking, and roofing membrane. Here, a \frac{1}{2}-inch-thick protection board is installed to protect the TPO roofing membrane from the insulation fastener plates, while EPDM sheets are "loose laid" over the TPO membrane prior to the installation of the sleepers, to isolate the roofing membrane from the sleepers.











Pedestal supports are well-suited for roof systems with multiple slopes, including tapered roof-deck insulation sloping towards scuppers for drainage (6). Most pedestals are adjustable and are supplied by their manufacturers in varying heights depending on the roof configuration (7). Installation is a simple matter of following the manufacturer's layout and adjusting the pedestals so that they are level with each other (8) as each paver (9) or decking panel (10) is installed.

drains or scuppers at the low end of the roof, access to the roof membrane is crucial. But over the years, we've found that decking screws are challenging to remove: The coated ones rust and get stuck, while the stainless steel ones are too soft and snap or cam out.

So, instead of attaching all of the deck boards to the joists, we screw some of them to 2x2s set next to the joists, creating a removable section of decking of three or four boards. This keeps the spacing correct—with a ½-to ½-inch gap between boards for drainage—and allows the boards to be lifted easily. Don't make the mistake of making the removable section too large; when the materials are soaking wet, they can be quite heavy. I've struggled wrestling with 25-square-foot panels (they must have weighed well over 100 pounds each) and would recommend keeping them smaller than 10 square feet where possible. We like to make removable sections at the high end as well so we can stick a hose in to wash debris down the slope.

Fastener length. One detail I wouldn't have thought needed

to be mentioned is to use screws that are shorter than the depth of the sleepers. Yes, I watched with my own two eyes as a co-worker drove 3-inch screws through $^3/4$ -inch decking over $1^1/2$ -inch-thick sleepers. Yes, I paid the roofer to come fix the holes. Yes, that person kept working for us for years afterward, and he's still a friend—just one of those days, I guess.

PEDESTAL SUPPORTS

For clients who want a stone or tile deck over finished spaces, pedestal systems are a great alternative to traditional stone and tile assemblies. Mortared assemblies are expensive, requiring multiple layers of specialty materials and constant on-site vigilance during installation. They also build up to nearly 3 inches thick, which may not fit in a remodel situation—unlike with pedestal or sleeper systems, water can't drain through the walking surface of a mortared assembly and significant clearance has to be left under doors. Setting materials in mortar essentially

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Tapered Insulation With Pedestal Supports Threaded top with manufacturer-supplied shims (pedestals Parquet-style with tilting heads also available) wood decking Decking typically 18" to 24" square. Parquet-style wood decking (shown), ceramic, concrete and FPDM stone tile designed to span over Pedestal base Protection board protection pedestal bases. sheet (gray) TPO (red) **EPDM** protection sheet, loose-laid TPO membrane. Tapered polyiso fully adhered secured with screws Roof sheathing through insulation fastening plates Adjustable pedestal supports, preferable for deck installations over roofs with multiple roof planes Roof sheathing (easier to fine-tune level the deck) Roof joists ½" high-density protection board adhered to poliso insulation Joist bays typically filled with Tapered polyiso insulation used to direct runoff closed-cell foam and cellulose insulation to roof edge, drains or scuppers (as shown). Insulation sloped 1/4" per foot for drainage per code.

Here, tapered insulation panels are used to pitch the roof system towards scuppers (as shown) or roof drains. The ½-inch-thick protection boards installed over the insulation protect the TPO membrane from insulation fastener plates, while EPDM sheets isolate the roofing membrane from the pedestal bases. Especially well-suited for deck installations over roofs with multiple roof planes, adjustable pedestals allow for fine-tuning the deck to level.

guarantees efflorescence, which must be managed, and freezethaw damage is always a possibility with tile or stone set in mortar. Most clients don't like the tilted surface, which must be sloped 1/4 inch per foot for drainage. And, should a leak occur, it's a daunting task just to access it, usually involving a tile subcontractor, diamond saws, rotary hammers, temporary rain protection, and a mess.

Adjustable pedestal supports, which—like sleepers—can be set level, are available from a number of suppliers. They basically consist of two cylinders that thread into each other so their height can be adjusted. These suppliers also offer pedestal-compatible decking materials, typically in 24-inch-by-24-inch sections, including wood (in parquet-style pallets), ceramic tile, concrete, and natural stone pavers designed to span over the pedestal bases.

The pedestals install right over a normal low-slope roof (we use

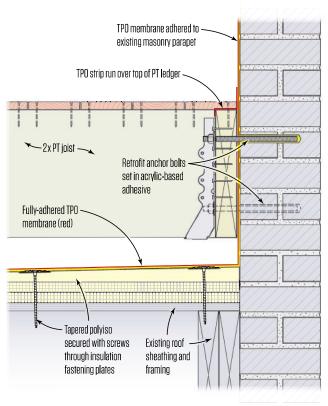
the same methods as for sleepers, with supportive cover boards under a heat-seamed membrane and a protection layer). If we ever need to fix a leak, we can just lift up the decking pieces and pedestals and get to work. Although the joints between the tile, stone, and concrete decking pieces aren't grouted, the installed walking surface looks like what most clients expect with a mortar-set assembly. Pedestal systems are much easier and less expensive than mortar-set materials, and much easier to live with later.

When we order pedestals, we work with a supplier and send it a drawing showing the slope(s) of the roof; the supplier works out the layout details and sends us sets of different types of pedestals, as they have a limited adjustment range and come in shorter and taller versions. We lay them out correctly per the plan, fine-tune the height, and drop the walking surface on top. Some pedestal systems need to be shimmed to account for the slope of the roof,

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Suspended Deck Detail



Where the roof deck is enclosed by a masonry parapet, ledgers can simply be bolted to the house framing and parapet to support standard deck joists (11). Ledger flashing is needed to keep water from penetrating the bolted ledger connections (12), which are typically specified by an engineer (see drawing, above right).

but we've also used pedestals with base levelers or threaded top sections that can be tilted slightly in lieu of shimming.

The sets we've used also include little shims that can be used to level any pieces that are different thicknesses, since the corners of four different pieces land on the pedestals. When the surface is wood, we usually install it ourselves (we have terrific carpenters), but recently we had a mason install a tile deck; their wet saw was the right tool to cut the 24-inch tiles at the deck perimeter, and they have a patient and careful guy who set the pedestals just right.

SUSPENDED DECK

When adding a rooftop deck to a masonry townhouse, we can often simply bolt ledgers into the masonry parapet walls and span joists all the way across, rather than install sleepers or pedestals. This is a simple solution, but it will work only on certain buildings. This makes for a clean install with little complication to the waterproofing and roofing. In fact, we often leave existing roofing in place when it's relatively new and doesn't seem to have any existing problems.

Depending on the wall construction, our engineers have provided us with bolted ledger connection details using various types of fasteners, lately specifying anchored bolts with acrylic-based adhesives for several types of wall. Apparently, epoxy adhesives lose a lot of strength when the temperature is high, so acrylic-based adhesives are preferred for rooftop applications that are exposed to the hot sun.

To reduce the chances of water flowing behind the bolted ledgers and penetrating the bolt holes, we flash the tops of the ledgers, typically with a TPO strip sealed to the wall and running over the ledger (see Suspended Deck Detail, above). Even though our fastener holes are not large, it seems prudent to try to keep the area behind the ledger dry.

Once the ledger and joists are installed, finishing goes a lot like any deck. Decking and railings (if needed) go in as they would on other types of deck systems. We do like to make accesses at the high and low points of the roof to make it easy to clean leaves and gunk.

Doug Horgan is vice president of best practices at BOWA, a design/build remodeling company in McLean and Middleburg Va.

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Sharpening Your Pre-Inspection Agreement

by Isaac Peck, Editor

As a professional home inspector doing your best to manage your risk, limit liability and avoid lawsuits, your pre-inspection agreement is unquestionably your first line of defense. Here are a few ideas on how yours may be improved.

First, realize how vital your pre-inspection agreement is to your business: it is your opportunity to clearly set expectations and outline exactly what your home inspection is, and what it is not. As I probably don't need to explain, most of your clients will have unrealistic expectations about what a home inspection is and what it covers. Many confuse a home inspection, which is a snapshot in time, with a home warranty, which is designed to "fix" covered items that turnout to be broken.

Homebuyers sometimes see a home inspection as an "insurance policy" or "guarantee" for the home they are buying, when in reality, it is neither. A home inspection is a non-invasive visual observation of a home's condition at the time of the inspection. It's not a guarantee nor a prediction of the future.

The old adage that a home inspector "can't see through walls," is often said in jest by those of us in the inspection community, but it needs to be said—in writing! Your pre-inspection agreement is your opportunity to do so. It should clearly define the purpose, scope, and limitations of the services you are providing to your client.

Here are some things to know about pre-inspection agreements.

Scope of Work and SOP

It's important to identify the scope of work of your home inspection as well as which Standards of Practice (SOP) you are inspecting to. If you are conducting your inspection according to the American Society of Home Inspectors (ASHI) standards, you must say so. You don't need to list all of ASHI's SOPs in your inspection agreement, but you could include a link to it in your agreement. In a world where most reports are digital, you might consider including whichever SOP you follow as an appendix in your inspection report.

Just as important as having a clear scope of work outlining what you are inspecting and what you are responsible for, it is equally vital to state which home systems are not included in the inspection report. If you are not doing sewer scoping or inspecting for mold, then that should be clearly stated in your agreement. All of this adds to your protection. Having a separate line item where the client initials and affirms their understanding of each of these points is recommended. Wording that the home inspection is not a "guaranty" or a "warranty" also is advisable.

Consider an Arbitration Provision

There are pros and cons to including a binding arbitration clause in your pre-inspection agreement. (Find the story *Binding Arbitration: What's the Deal? at WorkingRE.com*, search "Binding Arbitration.") One of the benefits of having an arbitration clause is that it can help get you

dismissed from a "catch all" multi-party lawsuit, in which anyone involved in the transaction is dragged in—whether they have liability or not.

Many inspection claims involve multiple parties, with the homebuyer filing suit against everyone involved. In these cases, if you have an arbitration clause, it can force the claimants' attorneys to either remove you from the lawsuit or litigate the case in two separate forums (court and arbitration). Sometimes where the home inspector is dragged in without any legitimate liability, the attorneys may find it wiser to dismiss them rather than go to the additional expense of arbitrating.

A sample home inspector arbitration clause from California reads: Any dispute concerning the interpretation or enforcement of this Agreement, the inspection, the inspection report, or any other dispute arising out of this relationship, shall be resolved between the parties by binding arbitration conducted in accordance with California Law, except that the parties shall select an arbitrator who is familiar with the real estate profession. The parties agree that they shall be entitled to discovery procedures within the discretion of the arbitrator. The arbitrator shall manage and hear the case applying the laws of the State of California to all issues submitted in the arbitration proceeding. The award of the arbitrator shall be final, and a judgment may be entered on it by any court having jurisdiction.

One of the downsides of arbitration is that it can be very costly. So if you decided on this route, be sure you screen the arbitration provider in advance and weigh the costs. Some arbitrators charge several thousand dollars just to open up a case. A claims adjuster from OREP's primary insurance program advises inspectors: "If you require mediation/arbitration make certain the provider is in business and is cost effective. Some of the contracts I have seen require AAA arbitration and it costs two or three grand just to get the process rolling."

Statute of Limitations

Including a provision that limits the statute of limitations to 12 months is another approach to help reduce claims. For example, in California the default time period is four years—within which a client would have to bring a claim against a home inspector. By contractually limiting the statute of limitations to 12 months, your client is agreeing that they have no grounds to bring a claim against you after 12 months from the date of the inspection. You want to be careful to make sure your wording is compliant with your state law, so do your research or consult with attorney beforehand.

While the majority of claims occur within the first year of the home inspection, a fair number are later than that, with some even arising many years later. Having a clearly defined limit or waiver of the statute of limitations is a good way to reduce these late-blooming claims.

Get It Signed

It should go without saying that it is vital to get the agreement signed! We know it is not always easy, but this is a discipline that should be adhered to if you want to decrease your chances of trouble. A rushed home inspector often will perform an inspection and deliver the report before and without getting a signed pre-inspection agreement from the client. But because your pre-inspection agreement defines the purpose, scope, and limitations of your home inspection, it is a vital part of your defense, should your client bring a claim down the road. This is why getting a signed agreement for every inspection should be routine. With many insurers, having a signed agreement is a condition of the E&O policy. So failing to get your agreement signed might jeopardize your coverage. If you can get it signed before the inspection, that is even better, in terms of your defense, because it shows that your client knew and agreed to the limits of your report before engaging you. Don't you want to know what you're buying before you buy it?

Limitation of Liability

If you live in a state where a limitation of liability clause is enforceable, it is potentially one of the most important aspects of the pre-inspection agreement. Typically, this section of your pre-inspection agreement seeks to limit the amount of damages to the inspection fee or some other nominal amount.

One example of a limitation of liability is the following:

The Inspector's total liability in the event of any breach of this Contract or of its obligations imposed by law or for any losses, damages, claims or demands arising out of the work and services performed under this contract, SHALL BE LIMITED TO THE AMOUNT OF THE FEE CHARGED FOR THE INSPECTION.

Some agreements limit the liability to the inspection fee, others to 1.5 times the fee, and still others use an arbitrary number, such as \$2,000, or \$5,000. In any case, the goal is the same: limiting the amount the home inspector is liable for in the event of a dispute with the client later on.

These clauses are not a substitute for E&O insurance, nor are they a fool-proof way to get out of trouble, but when they are enforceable, there is often no better way to put an end to a lawsuit.

Enforceable - Maybe

For those home inspectors who live in a state where a limitation of liability (LOL) has been upheld in court, or at least is *arguably* enforceable, the LOL is an excellent defense against potential claimants. The presence of this clause in your agreement can not only discourage disgruntled clients from bringing a claim in the first place, but it can also mean the difference between the successful defense of a claim and a large claim payout.

In states where LOLs are permissible, they are enforceable unless they are found by the court to be (1) against public policy or (2) *unconscionable*. Ultimately this comes down to state law and the state court's particular interpretation of the law. And while precedent is typically followed in these types of rulings, the enforceability of these provisions is subject to change under a different set of circumstances.

Some states, like Wisconsin, have restrictions on the use of LOLs in inspection agreements, while others like Massachusetts and California, prohibit them altogether. California law says that "contractual provisions that limit the liability of the home inspector to the cost of the home inspection report, are contrary to public policy and invalid."

Precedent already exists in most states about how these clauses are handled. State courts have different interpretations of what makes a contract "unconscionable," but it's widely understood in the legal community to refer to terms that are substantially unfair and one-sided. For example, South Carolina defines unconscionability as the "absence of meaningful choice on the part of one party due to one-sided contract provisions, together with terms that are so oppressive that no reasonable person would make them and no fair and honest person would accept them."

In the New Jersey case of *Lucier v. Williams* (366 N.J. Super. 485, 841 A.2d 907), for example, the court held that the LOL was "unconscionable, in contravention of public policy, and is therefore

unenforceable." The New Jersey court explained why such clauses are unenforceable in that state: "To be enforceable, the amount of the cap on a party's liability must be sufficient to provide a realistic incentive to act diligently... We can assume that the contract price here, a little under \$400, is typical of fees charged for this service. If, upon the occasional dereliction, the home inspector's only consequence is the obligation to refund a few hundred dollars... there is no meaningful incentive to act diligently in the performance of home inspection contracts."

Header, Bold, and Initial

For an LOL or any other vital clause to stand up in court, it helps that it be in a larger, bolder heading, and that an additional initial next to the line item be required. Even better is to put it in a separate box, with an extra-large, bold header, and require an initial next to it, according to the OREP risk management team.

This may seem trivial and over-the-top but the importance can't be overstated. Lawyers frequently attack vital contract clauses, especially ones between a "trained professional," such as a home inspector, and the consumer-public, as being concealed or "hidden amongst unrelated clauses," when the text for such clauses is not highlighted and distinct from the rest of the contract.

For example, courts in Texas require that any provision in a contract "used to exculpate a party from the consequences of its own negligence" must be "conspicuous," which under Texas law, means that "something must appear on the face of the contract to attract the attention of a reasonable person when they look at it."

In many cases, it is relatively easy for home inspectors to modify their pre-inspection agreements to make the vital clauses conspicuous, including the LOL. In so doing, you may greatly improve your liability defense. The importance of this point should not be underestimated. Here at OREP we have seen several cases where this was a critical factor in an inspector's defense.

OREP includes risk management services and pre-claim advice with its broad-coverage policy, specifically written for the unique needs of home inspectors. For more, call OREP toll free with expanded hours of 8 a.m. – 8 p.m. EST at (888) 347–5273 or visit **OREP.org** for a quote in under five minutes (most insureds).

About the Author

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An Airtight Attic Hatch Cover

BY EMANUEL SILVA

Oftentimes, taking on a remodeling project on one part of a client's house will lead to a completely different project on another part of the house. That was the case with the insulated hatch cover described in this article. I was in the process of fixing some rot-damaged garage framing and doors in my clients' 1960s split-level home when they mentioned that they also had a problem with the drop-down stairs leading up to the attic. Even though the stairs had been recently replaced, the ceiling opening was still very drafty. To block the cold air leaking into their upstairs hallway, they had tried cobbling together a hatch cover using rigid foam and scrap lumber, but this solution wasn't particularly effective. They were hopeful that I could cap the stairs with an insulated, airtight cover that wouldn't block access to the attic.

When I checked out the stairs, I saw that air-sealing the hatch cover would be complicated by the attic's uneven floor, which was sheathed with scrap pieces of plywood of various thicknesses. I had a good idea of how to build the hatch cover, since I'd recently built several of them for other clients, but I had to figure out a cost-effective way to even out the floor around the opening so that the hatch cover could close tightly against it.

Apron. My solution was to cover the opening with an apron cut from a single sheet of Zip System sheathing (1). Zip sheathing is flatter and more stable than regular CDX plywood and therefore easier to shim as needed to make it perfectly flat over the opening. Working in the homeowner's garage, I started by laying out cuts for the apron on the sheathing based on the size of the 22½-inch-by-54-inch rough ceiling opening required for the attic stairs. The apron was sized so that it would overlap the floor sheathing by 6 inches on each side (2).

After cutting out the opening with my track saw and trimming the apron to length, I had enough sheathing left over to cut out the parts for the 6-inch-high, 30-inch-by-60-inch frame for the insulated hatch cover that would cap the opening (3).

Hatch cover. I fastened the corners of the panels that make up the hatch-cover frame together with Simpson Strong-Tie angles and ¹/₂-inch-long #8 stainless steel pan-head screws. Next, I ripped a sheet of 1-inch-thick foil-faced rigid polyisocyanurate insulation into the sizes needed to complete the cap **(4)**. In general, 1-inch foam board is thin enough to easily cut with a utility knife, but I needed more precision for the tight fit needed on this project and instead

The author cut the hatch-cover sides (1) and apron (2) from a single sheet of Zip System sheathing, then joined the sides together at the corners with steel angles (3). All of the rigid foam used to insulate the assembly was cut from a single 4-foot-by-8-foot sheet of 1-inch-thick polyisocyanurate (4).

notos by Emanuel Silva













After fitting the foam top and sides (5) to the hatch cover, the author taped all the joints with foil-faced HVAC tape (6) and applied a gasket to the bottom edge of the cover (7). Next, he assembled (8) and installed (9) the foam jamb extension that lines the stair opening. Before installing the apron, he applied a zigzag bead of foam insulation to the floor of the attic around the opening (10).

made the cuts using both my track saw and a table saw, ensuring that the cuts were straight and the edges were square (5).

I joined the foam-board top to the Zip System sides of the hatch cover using Nashua 322 foil-faced HVAC tape, first marking reference lines on the sheathing for the tape with a Sharpie (6). This technique makes it easier to form straight, clean-looking taped joints, which helps prevent the tape from wrinkling. I've used this

particular tape for a number of different applications and found that it works well in a wide range of temperatures (I assembled the cover in a cold garage but expect that the attic will be very hot in the summer). It's also extremely sticky, so to avoid folds and make the process more manageable, I typically apply the tape in about 2-foot-long sections.

After I taped the foam top to the sides of the hatch-cover frame,

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The author shimmed the apron level (11) before screwing it to the attic floor, then sealed the gap between the floor and the apron with foam (12). Before installing the hinges, he screwed a pair of blocks to the apron (13) to allow the hatch cover to remain open without a separate prop (14) and to close snugly without pinching the gasket on the hinge side of the cover (15).

I added the remaining foam strips to the inside of the cap, taping all of the seams with foil tape. Finally, I applied a 1½-inch-wide gasket material (commonly used for weatherization projects) to the bottom edges of the cover (7).

Foam jamb extension. The final piece of the assembly is the foam jamb extension, an insert that fills the gap between the attic stair jambs and the framing for the opening. To create a gap-free fit between the apron and the extension, I cut the 1-inch foil-faced foam strips that make up the four sides of the extension so that the extension extends slightly above floor level **(8)**.

Before installing the insert, I filled any gaps between the wooden attic stair jamb and framing with low-expansion spray foam. I also applied spray foam to the insert before sliding it down into place (9). To keep the insert from shifting upward again while the spray foam cured, I taped the joints between the wood jambs and the foam jamb extension with the foil tape.

Apron installation. Then I installed the apron over the foam jamb extension, first applying more spray foam to the floor sheathing **(10)**. After taping the joint between the apron and foam jamb extension with foil-faced tape, I checked the fit around the perimeter of the apron, adjusting as needed with shims and using my spirit level as a straightedge to ensure that the assembly was level **(11)**.

Then I screwed the apron to the attic floor sheathing with coated deck screws and filled any small gaps between the apron and floor sheathing with more foam (12).

Final assembly. Before installing the hatch cover, I screwed a pair of blocks cut from sheathing to the apron in the locations where I planned to install the T-hinges that connect the hatch cover to the apron **(13)**. The blocks raise the bottom edge of the hatch cover by 1/2 inch, allowing the gasket to compress evenly around the apron instead of being pinched at the hinge locations.

Finally, I dropped the hatch cover into position over the apron and fastened the hinges to the cover with more 1/2-inch stainless steel pan-head screws. I also screwed a grab handle to the inside of the cover, to make it easier to raise and lower it without being tempted to push up on the foam cover. While the insulated cover fits down snugly over the opening, it is light enough to open easily from underneath as the homeowner ascends the stairs, and the blocking underneath the hinges ensures that the cover opens slightly past 90 degrees, so the cover remains in the open position instead of flopping back down over the opening **(14, 15)**.

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7 Ways to Encourage Home Inspection Clients to Read Their Reports

By Aubri Devashrayee

Clients in the home inspection industry are notorious for not reading their inspection reports. And, when they neglect to read their reports, they are more likely to complain and file claims.

Michael Ashburn from Ashburn Inspections, LLC in Pennsylvania can attest.

"People who call and complain about my inspection are usually the people [who] don't read the report," Ashburn said.

He isn't alone. Many other home inspectors have had clients assert that they missed something during the inspection when, actually, the defect was carefully outlined in the report.



By interviewing your fellow inspectors, we bring you answers to why clients don't read their inspection reports and what can be done to encourage them to do so.

Why Inspection Clients Don't Read Reports

There are a whole host of reasons why clients choose to not read their home inspection reports. However, according to our interviewees, we found the following reasons to be the most common:

- They don't understand the language used in the report and, therefore, don't have interest in reading it in its entirety.
- Clients feel like they are too busy to read their reports—especially during a real estate transaction.
- They don't want to receive bad news, so they put off reading the report.
- Real estate agents discourage home inspection clients from reading the report because they
 don't want the sale to fall through.

Ultimately, all of these reasons boil down to clients associating their inspection reports with stress in some form. Once you understand this, you can start to ask the right questions, like:

- How can I communicate the importance of the report?
- How can I make my reports easier to read?
- What can I do to help after I send over the report?

Fortunately, the inspectors we interviewed had some answers.

How to Encourage Inspection Clients to Read Reports

The following seven tips are proven methods to encourage clients to read their inspection reports.

Establish expectations.

As a home inspector, setting expectations is essential to helping clients understand that the reports are valuable to them.

Jameson Malgeri from Another Level Inspection in Massachusetts has found that when he establishes expectations about his inspection reports, his clients are more likely to read them.

"I take some time at the inspection to talk to about the report, what to expect [in it], and the importance of reading it entirely," he said.

In addition to communicating that inspection reports include crucial information about defects, Ashburn explains that he, the inspector, writes the report. By underscoring that he's the author, Ashburn helps his clients better appreciate the information and expertise in his reports.

"I tell my clients, 'I do the inspections, I generate the report—no outside help,'" Ashburn said. "People are astounded."

If clients understand that you have taken the time to thoughtfully convey findings that are key to keeping them safe, they will see the value in reading their reports.

Read more about the importance of establishing expectations in managing risk in our article "How to set home buyers' expectations".

inspection clients read reports

Include a summary.

Sometimes it isn't enough to just express how much work and key information go into your report. That's where an inspection summary can help. Almost every inspector we interviewed suggested having a summary in clients' inspection reports.

But not every summary is created equal. You need to do more than simply giving a brief description of how the inspection went. The strongest summaries clearly state the greatest issues of the inspected property. And, to help guide clients to the body of the report, Curtis Larson from Marigold Home Inspections in Minnesota links his summary items to their corresponding pages in the full-length report.

Finally, a complete summary reiterates that it isn't a substitute for reading the entire report. Larson says as much in his own summaries and in person.

"We create a snapshot [of the inspection] with our summary, but we also [state] that it's important to read the whole report," Larson said.

Get to the point.

After including a solid summary, encourage your clients to read the rest of your report by getting straight to the point. For example, you can cut out unnecessary fluff by writing about defects.

"We always [address] three things in every [defect's] description: what the issue is, why [the client] should care about it, and what [the client] should do about it," said Mike Leggett from The Brick-Kicker of Georgia.

Then, take the time to go back and review the writing in your report. Not only will you be able to cut out unnecessary wording, but you will also have the opportunity to be more direct and catch misleading phrasing, thereby mitigating your risk.

For additional best practices in writing reports, read our article "Inspection Report Writing: 8 Best Practices".

Cut down on jargon.

Another way you can be more direct and improve the clarity of your reports is by cutting down on industry-specific jargon. Clients are more inclined to read their reports when complicated terms are either explained or removed.

"I avoid [using] insider jargon. I use plain, simple text that the average homeowner would understand," said Brian Dyer from Dobbs Home Inspection in North Carolina.





- Names of systems, components, or structures: flashing, subpanel, joists, GFCI/AFCI, weep holes, etc.
- · Names of defects: alligatoring, EIFS issues, latent moisture, S-trap, etc.
- Tools used in the inspection: moisture meter, thermal imaging camera (IR camera), endoscope, etc.

Even if clients have heard of certain terms, they may not know what they mean in the context of your inspection. If you decide to use industry-specific terms, we advise that you explain what each term means and why it is significant to the inspection.

To learn more about writing a report your client can understand, check out this article.

Have plenty of pictures.

Even when cutting down on jargon, it can be difficult for clients to understand what you're referring to. Help clients visualize the defects and the systems and components you reference in your report by including plenty of pictures.

"Have quality pictures that they can see," said Todd Williamson from Fox Family Home Inspections in Georgia. "If it's a small [defect], make sure you can draw on [the picture] to highlight specific [issues]. Keep it simple."

When you include pictures that clearly outline the defects that are present, you provide an additional way for your clients to understand your findings.

To learn more about which kinds of pictures you should include in your report, check out our article "3 inspection photos you should take to manage your risk."

Give options for more information.

Unfortunately, it isn't possible to explain everything your client could have questions about in your report. And, since many clients don't have a background in the trades, they may need more background on various aspects of your report. That's why we recommend you direct clients to supplemental materials.

"I try to include links within the report that say: 'If you'd like more information about this [system or component], here's a link to a video we did or a link to a third-party website," said Matthew Query from Freedom Home Services, LLC in North Carolina.

Our only caution with this practice is to avoid including an unwarranted amount of links. Be intentional with the links you provide. Keep them pertinent and helpful. Look to industry authorities. By referencing helpful resources in your inspection reports, you also add to your credibility.



Follow up afterward.

Once you have a report that is easy to read, the inspectors we interviewed said they follow up with clients to see if they have questions about the report.

"With my inspection report program, I get an email when [clients] open the report," Williamson said. "If they haven't opened in a day or two [after I send the report], I'll call them to make sure they got it."

Garrett Scott from Abode Solutions in Alabama likes to email clients to see if they have any questions or concerns about his reports. And, if they do, he sets up a video call with them and their realtor.

"We set up a video conference that I host through my website," Scott said. "I'll go through everything [they have questions about]." In addition to it being great customer service, following up gives you a chance to dispel any confusion, thereby diffusing most complaints before they can arise.

Mitigate Risk by Helping Clients Read Reports

Although there is no hard-and-fast way to encourage your inspection clients to read their reports, there are some methods you can apply. Whether you're establishing expectations, improving readability, or following up, helping your clients read their reports will increase customer satisfaction and reduce your risk.

Interested in learning more about how you can diffuse complaints? Read about our pre-claims assistance program in our article, "Pre-Claims Assistance: The FAQs."

This article appears on the blog of the InspectorPro Insurance website. For more information or to view the original article with additional links click HERE.

Photos by Monmouth Vinyl and Fiberglass

EXIERIORS



Solid PVC and Composite Sidings A veteran installer rounds up the latest in premium polymer-based sidings

BY STEVEN LAPIETRA

inyl siding, like other claddings that have preceded it, has a finite life expectancy. We see this not only in terms of its performance on the wall but also in the larger scope of generational time: Siding materials come and go. As we look back, vinyl, aluminum, asbestos, beveled wood, and so on have all had their heyday. Changes from one "mainstay" to another are never clearly defined, but rather have overlapping periods. I think we are in the midst of just such a period right now.

While vinyl remains the biggest seller and cementious siding is seen as the "high-end" alternative—at least here in the Siding State of New Jersey—a new kind of siding has been making its way into the professional siding contractor's playbook. It's made of a mineral composite, cellular PVC, or a combination of inorganic materials, all of which share a key feature—they are solid materials. These new sidings are more stable and easy to handle. They cut and install much like a wood siding but have factory-applied finishes that are typically warrantied for 25 years. And they have rigidity that you just don't find in ordinary vinyl siding.

NUCEDAR SETS THE STANDARD

NuCedar Mills was one of the first cellular-PVC sidings to come to market in the mid-2000s. Its specialty (in my opinion) is the replication of shingles. Its shingles come the same way wood shingles do-individually sized in several widths, prefinished, with multiple exposures, and sold with the required accessories to match. The difference is in the upkeep. Because they are cellular PVC with

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SOLID PVC AND COMPOSITE SIDINGS









NuCedar shingles (1, 2) are so authentic looking, they can fool even the most experienced eye. Note that shingles can be butted against the casing and downboards, eliminating the need for "pocket installation" (J-channel or otherwise). The problem comes in finding color-matched trims—not only coil stock but also utility blocks, attic louver vents, and such. NuCedar also offers vertical siding (3). When installing long vertical panels, you need one person up and one down, and they need to communicate constantly to keep the panels aligned. These boards can be used for ceilings, too (4). Here, we cut the flange intermittently on the panels to allow for airflow and for any water from the small deck above to escape.

a "heat reflective industrial coating" finish (which is included in their 25-year warranty), they are virtually maintenance-free.

These shingles are a niche product though, given the cost of manufacturing so many individual pieces and the incredible variegated finish that each one has. But for clients who are looking for more than what a vinyl shake product can provide, without the upkeep required for finished cedar shingles, there is no better alternative.

Much the same can be said of the vertical sidings from NuCedar. The long, authentic cedar grain is unmatched in the industry and perfectly complements a vertical application. Vertical applications can be tricky, though. The problem is, well, gravity. You need one installer up and one down, and they have to be on the same page and

communicate constantly. This is so important, because if they don't communicate well, panels start to go wavy and it's going to show.

I believe the only reasons the NuCedar products haven't been more prevalent in the field are the cost of materials and the time required for a proper installation. Not many homeowners are willing to pay for this premium material. Nor are there many siding contractors willing to put in the time to learn how to properly install it. The photo on the previous page gives you an idea of part of what's involved: Shingles must be sorted by size, dabs of Flex-and-Fill applied to the bottom corners of each shingle, and stainless nails shot to apply. The photos above provide a little bit more detail.

Two things we run up against with all new solid sidings: First, it is imperative to find aluminum trim coil that will match, or





For a brief time, Marvin **(5)** made siding from pultruded fiberglass—the same material as in its Integrity windows. Azek **(6)** made a similar type of siding. Both companies offered 7-inch-exposure clapboards, for which there is high demand. This was a superior siding material most notably because boards could be butted to trim and no caulk was necessary when they were properly flashed. The look was perfection. Unfortunately, both products have been discontinued.

nearly match, the finish sidings. Manufacturers that provide color-matched coil stock are one step ahead. NuCedar is not one of these, so we have to work at the beginning of the job to find the best match and set client expectations accordingly.

Second, we always focus on water management. Under the siding and foam underlayment, we use aluminum trim coil at all inside and outside corners over the housewrap. We like to use a drainable housewrap with stand-offs or folds to help move the water out and away. This is especially important in our market along the Jersey Shore. (Remember Hurricane Sandy? We remind ourselves of this all the time.)

A FLEETING MOMENT WITH FIBERGLASS

For a time, NuCedar was the main player in this new field of siding materials. Then, in 2012, Marvin developed a siding made of the same material as in its Integrity windows—pultruded fiberglass. It was—and still is—the finest siding I've used. It was aptly called "Apex." We used it for several jobs, as I recognized it as the ultimate answer to all things "suspect" in the vinyl, fiber cement, composite, and engineered-wood categories. But, alas, it didn't take off, and when the product went off the market, we were disappointed, as we had just been gaining momentum,

with several jobs under our belt by then.

Azek followed Marvin with its own version of siding in 2016 that, I suspect, had some element of fiberglass in it, too. We did a job with it, hoping to continue our foray into this New World of sidings. But Azek pulled the plug on this one, too. (Azek has recently returned to the cladding market with a repurposed decking board formulated for open-joint and plank siding, but we have yet to use it.) I still think fiberglass is in our future. Just the fact that expansion and contraction are negligible makes the material a no-brainer. And best of all, no caulk is necessary when it's properly flashed, and no pocket or J-channel needed: The look is perfection.

ROYAL BUILDING PRODUCTS' CELECT

Sometime in 2014, I became fully aware of a new siding made by Royal Building Products. I say "fully" aware, because in 2011, a representative from Royal had visited me on one of my jobs to see what I thought of a new prototype siding. It was solid, and it had a shiplap interlock at the end of each panel. This would make it virtually seamless, which has always been a draw for me and my customers. (I believe I was contacted because of my membership in the "Seamless Siding Association," an organization in the 1990s and early 2000s that included siding contractors

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With Royal Building Products Celect siding (7), seams (butt joints) are shiplapped so each course moves in unison across the length of the wall. Note the double nails in the upper right corner. This is the center of the wall; the double nails "pin" the siding in the middle, so thermal movement happens evenly from the middle out in both directions. Because of the thermal movement, penetrations such as this vent outlet (8) require a deep-set pocket, which requires a wide trim. From the start, Royal has offered color-matched, heavy-gauge aluminum trim coil for detailed finish work. Here (9), the AC lines are capped with matching coil stock fabricated on site—much better than the usual white leader pipe. Instead of the usual mounting blocks, a plate made from coil stock overlays a narrow block, allowing the siding to move underneath.

from the New England and mid-Atlantic states who had exclusive areas to sell and install Royal's Suprema 40-foot-long vinyl siding.) I imagine it took some time to move the prototype into production, because it wasn't until 2014 that the material became readily available in my area. Once it was a viable alternative, we knew this was a special siding.

The product is well-thought-out, and the line includes all the required accessories. We did our first job with it in early 2015. From the start, Royal has offered color-matched, heavy-gauge coil stock, as well as a line of color-matched cellular-PVC trim stock, which has been very convenient.

We have continued to sell and install Royal Celect to those homeowners who seek the "best." Installation is slower than with regular vinyl sidings, as all cuts have to be made with power tools. No snips here. And no J-channels to hide the ends. Everything fits in a high-profile trim element or custom-fabricated (out of the matching color aluminum trim coil) receiver piece. At first, all penetrations

had to have a "receiver pocket," which we built following the manufacturer instructions by applying one 1-by-1 1 /2-inch furring strip, and then overlaying a 1-by-3 1 /2-inch trim piece. This created the 2-inch pocket that Royal calls for. Having spent many years in the seamless-siding world, I became very familiar with the required allowances for expansion and contraction. I also know that those allowances are relative to the size of the panel, or in Celect's case, joined-together panels. So, we are comfortable with having smaller pieces of siding end in 3 /4-inch pockets. Many times this will eliminate an otherwise obtrusive trim.

A couple of years ago, Celect introduced a shake profile. It is a single 7-inch panel, and it comes in two different molds, which eliminates the problem of a repeating pattern that we have found with other panelized shake sidings. And the window trim materials are varied enough to make several types of casing systems. These shakes are hard-nailed (the panel has no nail holes), so we can employ a siding nail gun, helping speed up the process.

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The Royal Celect line includes a shake profile in a 7-inch panel that comes in two different molds, which eliminates the repeating-pattern issue found with other shake sidings. These panels are hard-nailed (10) (the panel has no nail holes), so installers can use a siding nail gun. The window trim materials offered by Royal Building Products are varied enough to make several types of casing systems, including a Victorian look (11). The author's crew makes up the casing units using 2P10 adhesive and Kreg hidden screws, and installs the assemblies after the siding is done (12).

CHELSEA BUILDING PRODUCTS' EVERLAST

Chelsea Building Products (founded in 1975) has been a behindthe-scenes maker of specialty products in the siding market for some time now. Many major manufacturers marketed Chelsea products branded with their name for a number of years. In 2009, Chelsea introduced its own Everlast siding product in New England, and it has proven to be a viable option in this emerging sector of the siding industry.

Everlast is made of a polymer base with inorganic minerals. We especially like its authentic finish, and we also like that it has far

less expansion and contraction than most other sidings in this new genre. It calls for only a ³/₄-inch pocket for penetrations, so we can use standard utility blocks, such as those by Mid-America, and typical and readily available cellular-PVC trims, such as those from Azek.

Like Celect, Everlast also has a butt-joint seam; it's mechanically fastened by using a stainless steel bar that spans the panels in the upper, hidden nailing area. This bar must be double-screwed to each adjoining panel (four screws total), insuring that the seam will stay closed. The screws are short enough to allow the siding to move freely, without attachment to the wall. This becomes a bit laborious, but

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SOLID PVC AND COMPOSITE SIDINGS









Chelsea Building Products' Everlast line uses a stainless-steel bar for joining panels, and the panels have nail slots every 8 inches to help installers hit the stud layout (13). Everlast, combined with cellular-PVC fascia, corner boards, and brickmold casings, creates an authentic, zero-maintenance exterior. (14). Even with the sun directly overhead, shadow lines appear straight and even (15); this doesn't happen with ordinary vinyl. Using narrow, $4^{1}/2$ -inch panels means more panels to handle, more seams to join, and more nails to apply, making for a more expensive job (16). But the look closely matches old-style clapboards.

after a while, installers get used to it. Here in New Jersey, we often work on older homes that have fiberboard sheathing, which requires us to fasten the new siding to studs. The spacing of Everlast's nail slots every 8 inches makes this easy to do.

The siding is offered in two profiles, $6^7/8$ and $4^1/2$ inches, as well as in a relatively new board-and-batten panel with an 11-inch reveal. I believe Everlast has captured the look of wood with its finish. Because it is thick and not just a sheet material, the depth and character of the wood grain is much clearer than what we've seen in ordinary vinyl products. Everlast does not have as many as ancillary products as we would like. It doesn't offer color-matched cellular-PVC trim, utility blocks, or aluminum trim coil, although Chelsea does have an array of its own cellular-PVC trim materials in white, and we

have had luck in matching its colors to those of other vinyl manufacturers that offer a wide selection of coil stock. Chelsea does have some basics: corners, J-channels, and a 3½-inch casing in colors.

WOLF HOME PRODUCTS

Wolf is another brand of composite sidings we have used recently. Wolf Home Products is the marketer and distributor; Inteplast Group is the parent company. Regardless, the siding is fully backed and supported by Wolf, and is a well-made, solid panel. Best of all for us, it is offered in a 7-inch panel, which is in high demand today. It is also available in a double 4-inch panel, but we're not so sure there will be a call for double anything anymore, as it looks too much like ordinary vinyl.

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Wolf's Baltic Blue comes with matching coil stock for fabricating the many different details that come up on nearly every job, including a receiver channel at the chimney, a false bottom course, and a capping for an extended foundation (17). The Wolf system requires plates to join panel ends. These require you to apply pressure to help the adhesive cure (18). The result is an incredibly strong joint. This facade (19), on which the custom-fabricated gutter leader at right nearly disappears, makes a strong case for matched coil stock.

Wolf calls for a 1½-inch pocket and provides a specific line of cellular-PVC trims in white only. We're hoping it will start making trims in colors to match. Not everyone wants white, especially for corner posts. With Wolf products, we have to hunt for color-matched aluminum coil material.

Seams with Wolf are handled with a splice plate. As with Royal Celect and Chelsea Everlast, which also offer a secure butt finish, this results in stable butt joint. The Wolf system, however, is a little more involved, requiring you to place glue on the plates and apply some pressure to cure. This is only a small nuisance that quickly becomes standard procedure.

While more expensive, the new composites are making inroads into more and more siding markets because they can all be accented

with high-profile trims. This really sets them apart from standard vinyl sidings. No aluminum casings with unsightly J-channels clutter up the look. Solid 4x8-foot PVC sheathing panels can be used for window panels as well as the "board" area of a board-and-batten accent. Flexibility, as well as creativity, is unrestricted by the set sizes of vinyl materials. A specific width and a specific batten size are easily made with solid cellular-PVC material. All you have to remember is to seal any cut edges with acetone, to prevent them from darkening over time. And many types of moldings, even crown molding, are available. Most are available from each of the manufacturers covered here.

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