Presidents Corner

“Changing times”

As all should be aware by now the times have changed. The local and national news is extremely fluid relative to the Covid 19 pandemic and I encouraged each and every one of our members to whether by TV, radio or the newspaper, to stay personally informed.

As an organization with many senior individuals we, in most cases, need to take extra precautions if we continue to provide a service to home buyers in need. I have and continue to speak at length to numerous members regarding their thoughts regarding the state of the industry. Many have chosen to take a pause and take advantage of that pause to reflect and refit for the spring market waiting to explode. Home projects previously put on hold are getting done. Others continue with the grind doing various versions of the social distancing dance with clients and home owners. Whatever your choice, choose to be safe.

As president please know the board is working to come up with alternatives to getting continuing education credits. A number of ideas have been mentioned and information will be posted when available.

Finally take an opportunity to reach out to people, specifically the elderly, confined at home, that you may have not spoken with in a while. Depression, which often shadows solitude, can be devastating. You will not regret the call and will benefit from the time spent in lifting another’s spirit. It is a small act of kindness that will likely make a large difference in someone else’s life.

“Care for and hold family close”

Best

Dan Kristiansen
President
InterNACHI® and COVID-19

Concerning the Corona Virus, I have been listening to Governor Lamont. In addition, I have received advice from multiple sources. Here is what InterNACHI sent me.

Alan:

At this point you’re probably tired of the constant flow of COVID-19 update emails. I sure am. But I also know that many InterNACHI® members have questions, so I’m going to skip the “these are unprecedented times” bit and jump straight to what you need to know:

- InterNACHI® has developed a brand-new course on COVID-19 Safety Guidelines for Home Inspectors. This course is free and available to all home inspectors (not just InterNACHI® members). I encourage you to take it as soon as possible to help protect yourself and your clients.

- If you don’t have time to take the course right away, check out our recent article on basic safety precautions you can take to protect yourself.

- We’re working hard to develop new resources for InterNACHI® members to take advantage of during the corona virus crisis. The first is a live webinar on Saturday, March 28th, with Ben Gromicko, where he’ll walk inspectors through our new COVID-19 guidelines. We’re also planning a live Q&A session with Nick Gromicko that will be announced in the next few days.

- Everything InterNACHI® offers online is operating normally: online courses and exams, the forum, webinars, etc.

- Our entire staff is working remotely, so you’ll receive the same level of support that you’ve come to expect from InterNACHI®.

- Our corporate HQ and all House of Horrors® locations are closed until the end of April at the earliest. All classroom training is postponed until further notice.

Many members have reached out and told us that they’re still busy working. If that’s you, please take some time to check out the links above. If you’ve decided to slow down or pause inspections, now is a perfect time to focus on improving other parts of your business.

We’ll continue to post updates on the forum and “what’s new” — so make sure to check back regularly as the COVID-19 situation develops. In the meantime, stay safe and take care of yourselves and your families.

Regards,

Chris Morrell, CEO
InterNACHI®
The following has been published by ASHI as guidance for the home inspection in the new era of the Corona Virus.

**For Home Inspectors:**

- Reschedule the inspection if you feel sick, or if you exhibit symptoms of a respiratory illness.
- Bring your own anti-bacterial soap, towel, hand sanitizer, and shoe covers.
- Use hand sanitizer before entering the home, and wash your hands as recommended before and throughout beginning the inspection.
- Wear disposable shoe covers when entering the home.
- Do not shake hands, bump fists, or touch elbows.
- Avoid touching your face.
- Wash your hands after inspecting each bathroom and the kitchen.
- Wipe bathroom and kitchen fixtures and toilet handles with a sanitizing wipe after inspecting these areas. Be sure the wipe instructions allow use on the fixture or handle.
- Wipe door handle/knob inside and outside the home as you enter and leave the home.

**For Buyers and Real Estate Agents:**

- Do not attend the inspection. If you wish to attend, do so only at the end of the inspection.
- Do not bring children, relatives, contractors, and others to the inspection. Reschedule the inspection if you wish to attend, and if you feel sick, or if you exhibit symptoms of a respiratory illness.
- Use hand sanitizer before entering and before leaving the home.
- Touch as few things in the home as possible.

**For Sellers:**

- Reschedule the inspection if anyone in the home feels sick, or exhibits symptoms of a respiratory illness.
- Do not attend the inspection. Make arrangements for children, relatives, and others to be out of the home during the inspection.
- Wipe bathroom and kitchen fixtures, toilet handles, and doorknobs with a sanitizing wipe before the inspection. Be sure the wipe instructions allow use on the surface.
How Important Is Indoor Air Quality To Your Health?

Indoor air quality is critical to our health and well being. We Americans spend on average 90% of our time indoors, with the majority of that time being spent inside our homes. Shockingly, the air we breathe inside of our homes and offices can in fact be more polluted than the air we breathe outside. The US Environmental Protection Agency has found that certain harmful pollutants are 2x to 5x more concentrated inside when compared to the air outdoors.

Given we are spending so much time indoors, it is important to look at indoor air quality and examine the impact it is having our health, comfort and bank accounts.

The Importance Of Indoor Air Quality

When we say indoor air quality, we are talking about the quality and condition of the air inside of a building, for example our homes, offices and schools. The quality of the indoor air has a direct impact on the satisfaction and well-being of those that live or work inside of that building. Not only does good quality air provide positive health benefits, but in an office, it can also create a better, more productive work environment. Conversely when you have poor quality indoor air, it can start a cycle of health issues that can negatively affect those living and working in the building.

As most people spend much of their time inside, and with increasing concentrations of pollutants found indoors, you may be familiar with some of symptoms. Even short-term exposure can lead to negative side effects. Some pollutants can cause cold- and flu-like symptoms including fatigue, headaches, irritated eyes, and coughing. You may even notice that when you leave the building, your symptoms disappear or lessen. This was certainly the case for me when I was living in a mold and mildew filled college dorm many years ago. I began to realize that my persistent cold-like symptoms would disappear when I went home for winter and summer breaks.

Other pollutants can have a more serious impact with longer term exposure. This can include respiratory diseases, cancer and lung disease. Everyone reacts differently to indoor air pollutants, so it is important to make sure that you have good air quality at work and at home to help reduce your risk of health issues.

This video talks about the dangers of indoor air pollutants in more detail:

Sources Of Pollutants In The Home

There are several potential sources of indoor air pollution. Typically, you can trace indoor air pollution back to inadequate ventilation, humidity levels, or to the release of gases / particles.

Here are a few of the main common causes of indoor air pollution:

• Chemicals and odors from household cleaning products
• Cooking and fuel-burning combustion sources
• Tobacco smoke and environmental / secondhand tobacco smoke
• Pets
• Home improvement activities such as painting, sanding, etc.
• Personal care products and air fresheners
• Old building materials including deteriorated insulation which may contain asbestos
• New building materials including upholstery or carpet
• Outdoor pollutants such as radon or pollen which can be carried indoors

Common Household Pollutants

Typically, when you imagine pollution in the air, you think of exhaust coming out of cars or pollution coming out of factory smokestacks. It’s hard to imagine that an even more dangerous pollutant could be hiding inside of your home.

Below is a list of some of the most common household pollutants.

Mold
Mold is a type of fungi that grows both indoors and outdoors and thrives in damp environments. Problems arise when the mold creates microscopic spores which are released into the air we breathe. These mold spores can trigger allergic reactions, including skin irritation, headaches, wheezing, coughing, swelling, throat and eye irritation, and nasal stuffiness.

Volatile Organic Compounds (VOCs)
Volatile Organic Compounds are commonly found in household cleaners, paints, glues and air fresheners. VOCs include chemicals like formaldehyde, benzene, methylene and chloride, and they can cause damage to your health when these chemicals evaporate at room temperature.

Pet Dander
Pet dander is shed from animals with fur, and it is very tiny and therefore difficult to remove from the air. Pet dander can be a major trigger for allergies and asthma. Common symptoms include itchy eyes, eczema, rash, sneezing, congestion and coughing.

Dust Mites
Dust mites are microscopic living particles that are too small to be seen. They are tiny animals (or mites) that thrive in bedding, carpets, stuffed toys and upholstered furniture and they thrive in damp environments. Dust mites are one of the leading causes of asthma, allergies and eczema.

Biological Contaminants

Biological contaminants include viruses, bacteria, dander, dust, mites, cockroaches, and pollen. These tend to be carried by people and animals into the home, and they thrive and multiply in damp environments. You can keep biological contaminants under control by controlling the humidity levels in your home. The ideal humidity level for a house is somewhere between 30% – 45%.
Secondhand Smoke
Also known as environmental tobacco smoke, secondhand smoke is the smoke produced by burning tobacco products. Tobacco smoke contains more than 7,000 chemical ingredients, hundreds of which are toxic and some which can cause cancer. Even short-term exposure can cause throat, nose, and eye irritations. Long term exposure can lead to lung cancer, bronchitis, pneumonia, and wheezing, similar to what you can develop if you were the smoker yourself.

Carbon Monoxide (CO)
An invisible and odorless gas, carbon monoxide is created by an incomplete combustion of fossil fuels, for example from fuel burning appliances. When you are exposed to carbon monoxide, it can cause breathlessness, increased heart rate, confusion, nausea, dizziness, headaches, and tiredness. With a high enough concentration of carbon monoxide exposure can lead to death, even with just a short-term exposure.

Radon
A colorless and odorless gas, radon can be found everywhere at low levels. Radon occurs naturally when uranium in the soil or water breaks down. Exposure to high levels of radon can cause a persistent cough, wheezing, shortness of breath, chest pains, and can increase your chances of developing lung cancer. In fact radon is the second leading cause of lung cancer.

Nitrogen Dioxide (NO2)
Nitrogen dioxide is a corrosive and toxic gas. Not to be confused with nitrous oxide, the laughing gas administered by a dentist. The primary source of nitrogen dioxide in the house is improperly vented combustion appliances, like a gas stove. Nitrogen dioxide can irritate your respiratory tract, nose, eyes, and throat. When you have high exposure to nitrogen dioxide, you can develop a lung injury or pulmonary edema, which is a possibly fatal buildup of liquid in the lungs. Even mild exposure can cause chronic or acute bronchitis, while a low-level exposure may impair lung function for anyone already at risk like asthma sufferers and children.

Lead Particles
The soft and natural metal called lead is actually very lethal if you ingest it. Widely used in paint, lead was banned in 1978. If your home still has paint with lead in it, it can be a dangerous pollutant for your indoor air if lead dust and particles become airborne. Lead exposure can damage your red blood cells, kidneys, nervous system, and your brain. Children that are exposed to lead can experience delayed growth, lower IQ levels, behavioral problems, and short attention spans.

Asbestos
Found unsafe in 1971, asbestos is a group of minerals that are naturally found all over the world. It is actually not a hazardous material when it is intact, it is when the fibers are disturbed that they become airborne and can enter your lungs. With long-term exposure, asbestos can cause breathing problems, permanent lung damage, and diseases like cancer.

Other Factors Affecting Indoor Air Quality
Outside of the normal contaminants you may find in your home, other things can pop up over the
years. If you plan to do any remodeling, be prepared for possible air pollutants as a byproduct. Any time you remodel your basement, put in new flooring, hang new cabinets, scrape off paint, or remove wallpaper, you can create a significant source of indoor air pollutants.

Organic solvents like trichloroethane, chloroform, toluene, xylene, benzene, formaldehyde, and asbestos as well as lead dust can be released during a remodel. You have to be extra careful if your house is built before the 1970s, as you could have added environmental problems due to the use of asbestos and lead in construction.

The weather can also have an impact on your indoor air quality. High humidity can cause damp conditions which can lead to mold and mildew growth. This is a very common trigger for allergies and asthma. In contrast, dry air can lead to dry eyes, dry skin, nosebleeds, and cause cracks in furniture and wood floors. So, it is very important for your comfort, health and your belongings to keep humidity levels under control all year round.

**Effects Of Indoor Pollution On Our Lives**

**Health Problems**

At home, your family can suffer from health problems caused by indoor air pollution. The very young and very old tend to be the most susceptible, as they spend more time indoors.

Common symptoms caused by indoor air pollution can show up after just a single exposure and include headaches, fatigue, dizziness, and irritated eyes, nose, skin and throat. You might also suffer from allergic reactions, sinus congestion, coughing or wheezing. Certain indoor air pollutants are asthma triggers. These include dust mites, mold and mildew, secondhand smoke, and pet dander. Asthma is alarmingly on the rise in the US, with 750,000 new reported cases of asthma every year.

With high concentrations or extended exposure, indoor pollutants can lead to pneumonia, Chronic Obstructive Pulmonary Disease (COPD), lung disease or cancer.

Research is also being carried out into the impact of poor indoor air quality on student and employee performance. Studies show that your mood, energy level, and concentration can all be affected by poor indoor air quality. If your office or child’s school has issues with air quality, attendance rates and productivity can decline.

**HVAC Problems**

Your HVAC system’s air filter can also get dirty faster with large amounts of pollutants, which can reduce airflow. Worse, when you have a problem, the HVAC system may actually spread mold, dust, and dirt as well as other contaminants to other areas of your home.

Pollutants will also accumulate in your ductwork reducing airflow. Breakdowns can happen when dirt and dust get into the HVAC system’s inner parts like the compressor and air handler causing you to pay for expensive repairs or even replacements of your system.

**Higher Electric Bills**

When your ductwork is blocked or your air filter is clogged because of pollutants in your home, your
HVAC system will have to work overtime to keep your home at a comfortable temperature. This can affect your electric bill, so make sure to check your ductwork and air filter periodically.

**How To Improve Your Indoor Air Quality**

Improving the air quality in your home will help you to stay healthy and free of allergies and asthma attacks. While you can’t get rid of all pollutants in your home, you can easily reduce your exposure to many of them with a few simple changes. Here are a few ideas to help you improve the air quality inside your home.

**Clean Frequently**

A clean house can really cut down on animal dander, dust, and mold. I recommend cleaning with non-toxic, no- or low-VOC cleaning products. It is very important to regularly clean areas which are prone to mold (bathrooms, kitchens, basements). It is also important to vacuum all area rugs and carpets one or two times a week using a vacuum with a High Efficiency Particulate Air (HEPA) filter.

Also, it is a good idea to clean your bedding regularly, along with drapes and anything else that allergens can cling to. Using dust mite–proof covers on box springs, mattresses, and pillows will also reduce your exposure to allergens when you sleep.

**Ventilation**

It is very important to increase ventilation in your home by circulating fresh air brought in from the outside. Simply opening windows for a few minutes each day can help improve ventilation in your home. Even when it is cold outside, it’s important to encourage fresh air movement throughout the house by opening some windows. This is especially important when cooking or showering. This can help to remove any odors in the home and to improve stuffy rooms.

**Air Purifiers**

An air purifier may be a great way to help you if you are allergic to indoor allergens. It is important to purchase a machine with a strong filtration system and a true HEPA filter to effectively target tiny particles in the air. I talk about the benefits of air purifiers and what to look for when shopping in this post.

**Dehumidifiers / Humidifiers**

A dehumidifier can help stop mold growth by removing excess moisture from the air. I discuss the importance of maintaining ideal humidity levels and rank some of the best dehumidifiers in this post. Basements and bathrooms are susceptible areas for mold growth, so make sure you ventilate them well and remove any visible mold that can collect on the walls or fixtures.

On the other hand, when the air is too dry you could experience discomfort from dry skin, eyes, and nasal passages. Dry nasal passages can make you more susceptible to colds, asthma and allergy flare ups. So, it’s equally important to ensure your house has enough moisture, especially in the winter months when we turn on the heat which can dry out our air. During these times it’s helpful to add a humidifier to maintain the optimal humidity levels inside your home. I discuss the benefits of installing a whole house humidifier here.
**Change Filters Regularly**  
Anyone with a forced-air heating system will want to change the filters frequently. These filters will help to guarantee that airborne irritants like dust will get trapped instead of finding themselves traveling throughout the house. You may also want to consider having your ducts cleaned to remove dust that might be trapped.

**Air Purifying Plants**  
Studies show that indoor plants can help to purify the air by removing some chemicals from the air. However, it is very important to not over water your houseplants. This can lead to mold growth, which can trigger allergic reactions.

The following video talks about some more solutions to improving your indoor air quality.

**Conclusion**  
Improving your indoor air quality will save you money and your health. When you are exposed to smoke, mold, mildew, dust, and dirt, it is going to have a negative effect on your health. Make sure to take steps to reduce your exposure to contaminants in your home to not only improve your lifestyle but also to reduce your bills.

Hi There! I’m The Air Control Guy.

I’m John – the Air Control Guy – and I’m passionate about comfortable and clean living. I believe that starts with eliminating the toxic pollutants found in all of our homes and taking actionable steps to improve the quality of the air we breathe every day.
Joist Hangers for Decks
Choosing the right hangers and fasteners and installing them properly is trickier than it looks
by Mike Guertin

Joist hangers are not the most visible part of a deck, but they are one of its most important components. If they aren’t sized correctly and installed properly with the right nails or screws, the deck won’t have the necessary load support, uplift capacity, and lateral rotation resistance. But hangers don’t come with printed installation instructions; you need to search through a maze of technical notes, installation notes, load tables, product information, fastener information, and more to uncover everything you need to know in order to select and install joist hangers—and the joists that rest in them—properly and safely.

Or, you can read this article, in which I’ll cover the basics.

Choosing the Right Hanger
Joist hangers are sized by joist depth, and run about ½ inch shorter than the nominal size of the joist (you can size deck joists by referring to Table R507.6 in the 2018 IRC, which lists spans for deck joists sized from 2x6 to 2x12). For example, a 2x8 joist hanger is about 6 5⁄8 inches tall. Usually, the hanger size is the same as the joist size, but you can use a hanger that is one dimensional size less than the joist depth—a 2x6 hanger can be used with a 2x8 joist, for instance. Keep in mind that the load capacity of the smaller hanger needs to be adequate to support the load on the joist. In the instances I looked at, the load capacities for the shorter hangers exceeded the live, dead, and snow loads required for the deeper joists, provided the joists didn’t have large gaps between the ends and the ledger or beam. If you try to buy joist hangers for 2x12 joists, you’ll find that the common 18-gauge hangers used for deck construction top out at the 2x10 size (Figure 1).

The end joists on a ledger need a hanger just like the rest of the joists, but using a regular joist hanger with out-turned flanges presents a problem: The outside flange extends beyond the ledger. Extending the ledger an extra couple of inches beyond the end of the deck so you have something to nail the flange to is one solution. Others include attaching the joist to the ledger with toenails (a practice not permitted by the IRC); installing an angle bracket on the inside...
face of the end joist; or smashing the outturned flange of a regular hanger over onto the end of the ledger and nailing it (a practice definitely not supported or approved by manufacturers).

Fortunately, several years ago hardware manufacturers introduced “concealed flange” (in-turned flange) hangers, on which the ledger flange is bent inward towards the joist pocket and concealed by the joist when it is installed. Unlike regular hangers that can be installed after the joists are placed, concealed-flange hangers must be installed first and the joists dropped into them. To account for the thickness of the hanger flanges and fasteners, you need to trim the joists that rest in concealed-flange hangers slightly shorter. I usually install these hangers with connector screws, so to account for the extra thickness, I trim the joists short by 1/4 inch.

Concealed-flange hangers are also handy for the deck joists where lateral load hardware will be installed. The flanges on regular joist hangers interfere with the bolts used to install 1,500-lb. lateral load tension ties and the screws used to install 750-lb. lateral load tension ties. By installing concealed-flange hangers on those two or four joists, the tension-tie bolts or screws can be run through the ledger without flange conflict. If the design calls for concealed- or in-turned-flange hangers, Simpson Strong-Tie only makes two sizes in its LUC product—one for 2x6 and 2x8 joists, and a larger size for 2x10 and 2x12 joists. Mitek/USP makes one for each joist size between 2x4 and 2x10 (the one for 2x10s also works for 2x12s) in its JLIF product.

**Hangers and Corrosion**

All deck hardware is subject to corrosion because it’s used outside and in contact with pressure-treated lumber, which can have corrosive effects on steel and galvanized coatings. Hangers with thicker, G-185 galvanization offer better corrosion resistance, but some building material dealers may only carry joist hangers with G-90 or G-60 coatings, which are less expensive but are intended for interior use only. When purchasing hardware, check the stamp or label for the level of galvanization (Figure 2).

![Image A](image1.png)
![Image B](image2.png)
![Image C](image3.png)

**Figure 1.** Hangers can be used with both their matching nominal joist size and the next size up—2x10 hangers are approved for use with 2x10s and 2x12s, for example (A). Concealed-flange hangers (B) are designed for use at the end of a ledger (C) but can also be used to avoid conflicts with lateral load hardware.
Joist Hangers for Decks

Fasteners for Hangers

When you purchase a joist hanger, the fasteners required for installation in each hole on the hardware aren’t listed anywhere. To know, you have to dig into the manufacturer’s load tables, but nail diameters and nail lengths for metal connectors can be confusing. Sometimes, the required nail size is listed by penny size—8d, 10d, or 16d—while other times the size is listed by diameter—0.131 inch, 0.148 inch, 0.162 inch—and by length—1 1⁄2 inches, 3 inches, 3 1⁄2 inches. Sometimes, the diameter is indicated by penny size, and the length is listed by inches.

Even G-185-coated hardware may not be suitable for all locations. Stainless steel hardware is a better choice near salt water, alongside roadways on which salt chemicals are used to melt snow and ice in winter, for decks and landings on which the owners may apply ice-melt chemicals, and in regions that receive acid rain.

Stainless steel hardware is expensive, so when owners don’t want to spring for the extra cost, you can reduce some of the corrosive factors by installing an isolation membrane to separate the joist hanger from the treated lumber. Applied to the end of the joists and over the ledger or beam where hanger flanges touch the wood, staple-on and self-adhering membrane will break the galvanic reaction. This method won’t solve exposure to salt from coastal proximity, ice-melt products, and acid rain, but it can help (Figure 3).

Always use fasteners that are the same metal or have the same coating as the joist hangers. Avoid mixing metals; for example, don’t use stainless steel fasteners with G-185 hardware, or galvanized fasteners with stainless hardware. The less-noble metal (steel with zinc coating) will corrode rapidly in contact with stainless steel.

Figure 2. G-185 hangers can be identified by the brand name Triple-Zinc and the letters “TZ” on Mitek/USP products, and by the brand name Zmax and the letter “Z” on Simpson Strong-Tie products (A). After just a few weeks of exposure to salty air, corrosion is visible along the edges of a G-185-coated hanger (B). Stainless steel hardware (C, at right) is the best choice in a coastal environment. Always use fasteners of the same metal as the hanger.

Figure 3. Applying a staple-on isolation membrane or a self-adhering membrane to joist ends (above left) and the ledger (above right) reduces the rate of galvanic reaction between the treated lumber and the metal hanger.
If you use a smaller diameter or shorter length fastener than a connector requires, then you have to apply a load reduction. If you use a larger diameter nail than a hole requires, you will end up either deforming the hardware or stripping the galvanized coating off the nail. Your best bet is to check the manufacturer’s hardware table—as confusing as it may look—and select the right nail for each hole (Figure 4).

Luckily, it’s pretty simple to size joist-hanger nails. The nails that penetrate through the ledger or beam flange are listed as 10d diameter (0.148 inch) x 3 inches long. The diagonal nails that enter through the side of the joist and penetrate into the ledger or beam are the same—10d diameter (0.148 inch) x 3 inches minimum. If you’re installing the joists to a single-ply ledger (1 1/2 inches thick), the 3-inch-long nails will poke through the wall. When the ledger is in direct contact with the wall sheathing, this may not be a problem. But if you space the ledger off the wall by 1/2 inch [as permitted in the Deck Ledger Connection to Band Joist - Table R507.9.1.3(1)], then you may want to use only 1 1/2-inch nails—which is what most installers use.

Technically, using 1 1/2-inch-long nails from the hanger flanges into the ledger or beam instead of the required 3-inch nails means you should reduce the gravity/download capacity of the hanger by 0.64. But I ran a few tributary load calculations with allowable maximum joist span and live/dead/snow load combinations, and the down-load on any hanger never exceeded one-half of the hanger capacity. So even if we do multiply a hanger load by 0.64 to come up with the reduced load, there’s still enough load capacity to handle deck joists framed to a single 2-by ledger.

Instead of nails, you can now use metal-connector screws made specifically for use with hardware. Keep in mind that metal-connector screws are brand-specific; you can’t use one brand’s screws with the joist hangers from another company. Nor can you use a screw not intended for use with hardware.

Metal-connector screws come in different diameters (#9, #10) and lengths (1 1/2 inches, 2 1/2 inches), and in most cases, the load capacities of connector screws are similar to those of nails. You might think that substituting a 2 1/2-inch screw for the 3-inch diagonal shear nail on a hanger would result in a load reduction, but the opposite is the case: There’s usually increased capacity. Connector screws are more expensive than nails but can be faster and easier to install, especially in tight quarters where swinging a hammer or maneuvering a metal-connector nailer into position is difficult.

Hanger Installation

I like to install hangers on the beam or ledger before placing joists, because I think it’s faster to install the fasteners and roll the joists into place that way. But there’s a downside: If the joists are of inconsistent depth, the surface of the deck framing will vary, which can especially be a problem with more-flexible composite decking. So before I set the hangers, I check the depth of the joists; usually, there are just a few that are more than 1/8 inch deeper or shallower than...
the rest. I either position the hangers for those joists to adjust for the difference of depth from the norm, or I cluster those joists near the middle of the deck and graduate them up and down so the crown in the deck that results from the tops of the joists being slightly higher than either end of the deck is blended and less noticeable.

To ensure all joists are set at the same position, I install the hangers using a “T” jig that has a top leg to ride the ledger and a 1 9/16-inch-wide upright whose length is equal to the depth of the joist. A couple of tack nails hold the “T” in place while I fasten the hanger to the ledger or beam (Figure 5).

Figure 5. The author prefers to install joist hangers prior to hanging joists, using a site-built T-jig to quickly and accurately place the hangers. When using this method, be sure that the joists are uniformly sized.

Tight or Loose Fit?

Any gap greater than 1/8 inch between the end of a deck joist and the ledger or beam results in load reduction for uplift capacity and down load (gravity load). Simpson Strong-Tie’s load table doesn’t deduct anything from the rated hanger load values for gaps up to 1/8 inch but lists specific allowable loads for gaps between 1/8 inch and 3/8 inch. For gaps that exceed 5/8 inch, there is no load data and the company doesn’t support the installation. Mitek/USP’s technical bulletin USP#990 has load reduction multipliers in 1/16-inch increments, starting at a gap of 1/8 inch (1.00 or 100% of maximum load capacity). Two USP tables outline the two main loads: gravity loads and uplift loads. Gravity load multipliers for common joist hangers allow for up to a 3/4-inch gap with a 0.40 multiplier. The uplift load multipliers end at a 1/2-inch gap with a 0.35 multiplier (essentially one-third of the maximum uplift capacity).

While the gravity/down load capacities don’t suffer as significantly for gaps up to 3/8 inch, the uplift capacities do. In part, this is due to the diagonal shear nails that penetrate through the end of the joist and into the ledger or beam. Once the gap is greater than the set-back position of the fastener hole, the fastener no longer captures the end of the joist (see photos, below). So when a deck is framed with a cantilever, there isn’t any uplift capacity for joists with wide gaps, and the joists could lift out of the hanger when the cantilevered end is loaded.

Rotation is another issue. The side flanges on joist hangers stabilize the joists from rotation when a load is applied on top. If the decking boards are nailed or screwed to the top of the ledger board or rim beam and the top of the joists, then the joists are stabilized by the decking. But when hidden fasteners are used to install decking or the deck board isn’t adequately fastened to both the deck joists and the ledger or beam, then the sides of the hangers have to do the stabilizing work. With a wide gap, the joist is no longer fully retained by the side flanges.

On concealed-flange hangers, the fasteners are driven perpendicular to the joist. With no diagonal shear fasteners, there is no uplift load reduction and the minimal down load reduction won’t exceed the maximum live/dead load for a given joist depth and maximum span for gaps up to 3/8 inch.
Joist hangers can also be installed after the joists have been toenailed in place. The challenge is sinking the toenail heads so they don’t interfere with hanger installation. The advantage to installing the joists first is the tops can be flushed with the ledger if there is a variation in depths.

Whichever method you choose, make sure the seat (bottom) of the hanger is square and tight to the bottom of the joist, the side flanges are snug to the joist, and the side flanges are flat against the ledger or beam.

**Tool-Driven Connector Nails**

Metal-connector nailers speed nail installation but can be tricky. Some tools have a probe nose, while others use the tip of the collated nail to index the nail with the hole. In either case, it’s critical to make sure the hanger is securely in place before triggering the tool, as the impulse of the nailer can shift the hanger out of position. Also, make sure the force you apply to the tool is in line with the direction of the nail. If you force the tip of the probe or nail in the direction of the magazine, the nail may not hit the hole. Misplaced nails are not permitted by the manufacturers, so if you misdrive a nail, you should remove it and discard the joist hanger (Figure 6).

Most nailers will only drive 1 1⁄2-inch or 2 1⁄2-inch nails, so you won’t be able to drive the diagonal shear nails (3-inch minimum length required for nails). You’ll still need to hand drive those nails or use connector screws. Or you can use a palm nailer to drive nails individually. Make sure to adjust the depth of drive so the nails don’t overdrive and deform the joist hanger. Check all the nails driven with a nailer to see that they are seated as well. It may take a hammer blow to finish off a proud nail or two.

Mike Guertin is a remodeler in East Greenwich, R.I., and leads the Deck Workshop demonstrations at JLC Live and Deck Expo. Follow him on Instagram @mike_guertin.

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Mike Guertin is a remodeler in East Greenwich, R.I., and leads the Deck Workshop demonstrations at JLC Live and Deck Expo. Follow him on Instagram @mike_guertin.
Q Do wall-mounted handrails need returns?

Victor Staley, a building official in Brewster, Mass., responds: The short answer is yes, but let's first take a look at what the code requires for basic wall-mounted interior handrails. The Handrails section, R311.7.8, of the 2018 IRC requires a handrail on at least one side of any stairway with four or more risers. The handrail must be between 34 and 38 inches measured vertically from the nosing of the stairs—that is, the sloped plane of the stairs—and must be a minimum of 1 1/2 inches from the wall. There are also specific regulations for the graspability of the handrail.

Reading on in the code, we come to Section R311.7.8.4, Continuity, which relates more specifically to your question: “Handrail ends shall be returned or shall terminate in newel posts or safety terminals.” The term “safety terminal” is a catch-all phrase and does not indicate a specific handrail design or component.

My interpretation of this section is that both the top and bottom ends of a handrail must be constructed so that clothing, handbags, and the like are less likely to snag on the ends of the railing when a person walks up or down the stairs. A handrail return is the easiest and most common way of creating a so-called “safety terminal.” Most returns I see are made by turning the railing 90 degrees and making it square to the wall. On rare occasions, I’ve also seen designers or builders make handrail returns greater than 90 degrees as a decorative element (see photos, below).

Small Business Owner’s Guide to the CARES Act

CARES - Coronavirus Aid, Relief, and Economic Security (CARES) Act

The CARES Act was just passed by Congress and is intended to assist business owners with whatever needs they have right now. The following pages are a PDF guide which provides information about the major programs and initiatives that will soon be available from the Small Business Administration (SBA) to address these needs, as well as some additional tax provisions that are outside the scope of SBA.

Click HERE If you would like to go directly to the website where all indicated links will be live.
The Small Business Owner’s Guide to the CARES Act

The programs and initiatives in the Coronavirus Aid, Relief, and Economic Security (CARES) Act that was just passed by Congress are intended to assist business owners with whatever needs they have right now. When implemented, there will be many new resources available for small businesses, as well as certain non-profits and other employers. This guide provides information about the major programs and initiatives that will soon be available from the Small Business Administration (SBA) to address these needs, as well as some additional tax provisions that are outside the scope of SBA.

To keep up to date on when these programs become available, please stay in contact with your local Small Business Administration (SBA) District Office, which you can locate here.

Struggling to get started? The following questions might help point you in the right direction. Do you need:

- **Capital to cover the cost of retaining employees?** Then the Paycheck Protection Program might be right for you.
- **A quick infusion of a smaller amount of cash to cover you right now?** You might want to look into an Emergency Economic Injury Grant.
- **To ease your fears about keeping up with payments on your current or potential SBA loan?** The Small Business Debt Relief Program could help.
- **Just some quality, free counseling to help you navigate this uncertain economic time?** The resource partners might be your best bet.

Already know what resources you’re looking for? The table of contents can direct you to more information about the program or assistance product you need.

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Paycheck Protection Program (PPP) Loans

The program would provide cash-flow assistance through 100 percent federally guaranteed loans to employers who maintain their payroll during this emergency. If employers maintain their payroll, the loans would be forgiven, which would help workers remain employed, as well as help affected small businesses and our economy snap-back quicker after the crisis. PPP has a host of attractive features, such as forgiveness of up to 8 weeks of payroll based on employee retention and salary levels, no SBA fees, and at least six months of deferral with maximum deferrals of up to a year. Small businesses and other eligible entities will be able to apply if they were harmed by COVID-19 between February 15, 2020 and June 30, 2020. This program would be retroactive to February 15, 2020, in order to help bring workers who may have already been laid off back onto payrolls. **Loans are available through June 30, 2020.**

### FREQUENTLY ASKED QUESTIONS

**QUESTION:** What types of businesses and entities are eligible for a PPP loan?

**Answer:**
- Businesses and entities must have been in operation on February 15, 2020.
- Small business concerns, as well as any business concern, a 501(c)(3) nonprofit organization, a 501(c)(19) veterans organization, or Tribal business concern described in section 31(b)(2)(C) that has fewer than 500 employees, or the applicable size standard in number of employees for the North American Industry Classification System (NAICS) industry as provided by SBA, if higher.
- Individuals who operate a sole proprietorship or as an independent contractor and eligible self-employed individuals.
- Any business concern that employs not more than 500 employees per physical location of the business concern and that is assigned a NAICS code beginning with 72, for which the affiliation rules are waived.
- Affiliation rules are also waived for any business concern operating as a franchise that is assigned a franchise identifier code by the Administration, and company that receives funding through a Small Business Investment Company.

**QUESTION:** What are affiliation rules?

**Answer:** Affiliation rules become important when SBA is deciding whether a business’s affiliations preclude them from being considered “small.” Generally, affiliation exists when one business controls or has the power to control another or when a third party (or parties) controls or has the power to control both businesses. Please see [this resource](#) for more on these rules and how they can impact your business’s eligibility.

**QUESTION:** What types of non-profits are eligible?

**Answer:** In general, 501(c)(3) and 501(c)(19) non-profits with 500 employees or fewer as most non-profit SBA size standards are based on revenue, not employee number. You can check [here](#).
QUESTION: How is the loan size determined?
Answer: Depending on your business’s situation, the loan size will be calculated in different ways (see below). The maximum loan size is always $10 million.

- **If you were in business February 15, 2019 – June 30, 2019:** Your max loan is equal to 250 percent of your average monthly payroll costs. If your business is a seasonal employer, the max loan is equal to 250 percent of your average monthly payroll costs between February 15, 2019 – June 30, 2019; you can also opt to choose March 1, 2019 as your time period start date.

- **If you were not in business between February 15, 2019 – June 30, 2019:** Your max loan is equal to 250 percent of your average monthly payroll costs between January 1, 2020 and February 29, 2020.

- **If you took out an Economic Injury Disaster Loan (EIDL) between February 15, 2020 and June 30, 2020** and you want to refinance that loan into a PPP loan, you would add the outstanding loan amount to the payroll sum.

QUESTION: What costs are eligible for payroll?
Answer:

- Compensation (salary, wage, commission, or similar compensation, payment of cash tip or equivalent)
- Payment for vacation, parental, family, medical, or sick leave
- Allowance for dismissal or separation
- Payment required for the provisions of group health care benefits, including insurance premiums
- Payment of any retirement benefit
- Payment of State or local tax assessed on the compensation of employees

QUESTION: What costs are not eligible for payroll?
Answer:

- Employee/owner compensation over $100,000
- Taxes imposed or withheld under chapters 21, 22, and 24 of the IRS code
- Compensation of employees whose principal place of residence is outside of the U.S.
- Qualified sick and family leave for which a credit is allowed under sections 7001 and 7003 of the *Families First Coronavirus Response Act*

QUESTION: What are allowable uses of loan proceeds?
Answer:

- Payroll costs (as noted above)
- Costs related to the continuation of group health care benefits during periods of paid sick, medical, or family leave, and insurance premiums
- Employee salaries, commissions, or similar compensations (see exclusions above)
- Payments of interest on any mortgage obligation (which shall not include any prepayment of or payment of principal on a mortgage obligation)
- Rent (including rent under a lease agreement)
- Utilities
- Interest on any other debt obligations that were incurred before the covered period
<p>| QUESTION: What are the loan term, interest rate, and fees? | Answer: For any amounts not forgiven, the maximum term is 10 years, the maximum interest rate is 4 percent, zero loan fees, zero prepayment fee (SBA will establish application fees caps for lenders that charge). |
| QUESTION: How is the forgiveness amount calculated? | Answer: Forgiveness on a covered loan is equal to the sum of the following payroll costs incurred during the covered 8 week period compared to the previous year or time period, proportionate to maintaining employees and wages (excluding compensation over $100,000): |
| • Payroll costs plus any payment of interest on any covered mortgage obligation (not including any prepayment or payment of principal on a covered mortgage obligation) plus any payment on any covered rent obligation plus and any covered utility payment. |
| QUESTION: How do I get forgiveness on my PPP loan? | Answer: You must apply through your lender for forgiveness on your loan. In this application, you must include: |
| • Documentation verifying the number of employees on payroll and pay rates, including IRS payroll tax filings and State income, payroll and unemployment insurance filings. |
| • Documentation verifying payments on covered mortgage obligations, lease obligations, and utilities. |
| • Certification from a representative of your business or organization that is authorized to certify that the documentation provided is true and that the amount that is being forgiven was used in accordance with the program’s guidelines for use. |
| QUESTION: What happens after the forgiveness period? | Answer: Any loan amounts not forgiven are carried forward as an ongoing loan with max terms of 10 years, at a maximum interest rate of 4%. Principal and interest will continue to be deferred, for a total of 6 months to a year after disbursement of the loan. The clock does not start again. |
| QUESTION: Can I get more than one PPP loan? | Answer: No, an entity is limited to one PPP loan. Each loan will be registered under a Taxpayer Identification Number at SBA to prevent multiple loans to the same entity. |
| QUESTION: Where should I go to get a PPP loan from? | Answer: All current SBA 7(a) lenders (see more about 7(a) here) are eligible lenders for PPP. The Department of Treasury will also be in charge of authorizing new lenders, including non-bank lenders, to help meet the needs of small business owners. |</p>
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<tr>
<th>QUESTION:</th>
<th>How does the PPP loan coordinate with SBA’s existing loans?</th>
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<td>Answer:</td>
<td>Borrowers may apply for PPP loans and other SBA financial assistance, including Economic Injury Disaster Loans (EIDLs), 7(a) loans, 504 loans, and microloans, and also receive investment capital from Small Business Investment Corporations (SBICs). However, you cannot use your PPP loan for the same purpose as your other SBA loan(s). For example, if you use your PPP to cover payroll for the 8-week covered period, you cannot use a different SBA loan product for payroll for those same costs in that period, although you could use it for payroll not during that period or for different workers.</td>
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<tr>
<th>QUESTION:</th>
<th>How does the PPP loan work with the temporary Emergency Economic Injury Grants and the Small Business Debt Relief program?</th>
</tr>
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<tbody>
<tr>
<td>Answer:</td>
<td>Emergency Economic Injury Grant and Economic Injury Disaster Loan (EIDL) recipients and those who receive loan payment relief through the Small Business Debt Relief Program may apply for and take out a PPP loan as long as there is no duplication in the uses of funds. Refer to those sections for more information.</td>
</tr>
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</table>
Small Business Debt Relief Program

This program will provide immediate relief to small businesses with non-disaster SBA loans, in particular 7(a), 504, and microloans. Under it, SBA will cover all loan payments on these SBA loans, including principal, interest, and fees, for six months. This relief will also be available to new borrowers who take out loans within six months of the President signing the bill into law.

FREQUENTLY ASKED QUESTIONS

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<th>QUESTION</th>
<th>Answer</th>
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<tr>
<td><strong>Which SBA loans are eligible for debt relief under this program?</strong></td>
<td>7(a) loans not made under the Paycheck Protection Program (PPP), 504 loans, and microloans. Disaster loans are not eligible (see p. 7 for more information on these).</td>
</tr>
<tr>
<td><strong>How does debt relief under this program work with a PPP loan?</strong></td>
<td>Borrowers may separately apply for and take out a PPP loan, but debt relief under this program will not apply to a PPP loan.</td>
</tr>
<tr>
<td><strong>How do I know if I’m eligible for a 7(a), 504, or microloan?</strong></td>
<td>In general, businesses must meet size standards, be based in the U.S., be able to repay, and have a sound business purpose. To check whether your business is considered small, you will need your business’s 6-digit North American Industry Classification System (NAICS) code and 3-year average annual revenue. Each program has different requirements, see <a href="https://www.sba.gov/funding-programs/loans">https://www.sba.gov/funding-programs/loans</a> for more details.</td>
</tr>
<tr>
<td><strong>What is a 7(a) loan and how do I apply?</strong></td>
<td>7(a) loans are an affordable loan product of up to $5 million for borrowers who lack credit elsewhere and need access to versatile financing, providing short-term or long-term working capital and to purchase an existing business, refinance current business debt, or purchase furniture, fixtures and supplies. In the program, banks share a portion of the risk of the loan with SBA. There are many different types of 7(a) loans, you can visit this site to find the one that’s best for you. You apply for a 7(a) loan with a bank or a mission-based lender. SBA has a free referral service tool called Lender Match to help find a lender near you.</td>
</tr>
<tr>
<td><strong>What is a 504 loan and how do I apply?</strong></td>
<td>The 504 Loan Program provides loans of up to $5.5 million to approved small businesses with long-term, fixed-rate financing used to acquire fixed assets for expansion or modernization. It is a good option if you need to purchase real estate, buildings, and machinery. You apply through a Certified Development Company, which is a nonprofit corporation that promotes economic development. SBA has a free referral service tool called Lender Match to help find a lender near you.</td>
</tr>
<tr>
<td><strong>What is a microloan and how do I apply?</strong></td>
<td>The Microloan Program provides loans up to $50,000 to help small businesses and certain not-for-profit childcare centers to start up and expand. The average microloan is about $13,000. These loans are delivered through mission-based lenders who are also able to provide business counseling. SBA has a free referral service tool called Lender Match to help find a microlender near you.</td>
</tr>
<tr>
<td><strong>I am unfamiliar with SBA loans, can anyone help me apply?</strong></td>
<td>Yes, SBA resource partners are available to help guide you through the loan application process. You can find your nearest Small Business Development Center (SBDC) or Women’s Business Center here.</td>
</tr>
</tbody>
</table>
**Economic Injury Disaster Loans & Emergency Economic Injury Grants**

These grants provide an emergency advance of up to $10,000 to small businesses and private non-profits harmed by COVID-19 within three days of applying for an SBA Economic Injury Disaster Loan (EIDL). To access the advance, you first apply for an EIDL and then request the advance. The advance does not need to be repaid under any circumstance, and may be used to keep employees on payroll, to pay for sick leave, meet increased production costs due to supply chain disruptions, or pay business obligations, including debts, rent and mortgage payments.

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<tr>
<td><strong>QUESTION:</strong> Are businesses and private non-profits in my state eligible for an EIDL related to COVID-19?</td>
</tr>
<tr>
<td><strong>Answer:</strong> Yes, those suffering substantial economic injury in all 50 states, DC, and the territories may apply for an EIDL.</td>
</tr>
<tr>
<td><strong>QUESTION:</strong> What is an EIDL and what is it used for?</td>
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<td><strong>Answer:</strong> EIDLs are lower interest loans of up to $2 million, with principal and interest deferment at the Administrator’s discretion, that are available to pay for expenses that could have been met had the disaster not occurred, including payroll and other operating expenses.</td>
</tr>
<tr>
<td><strong>QUESTION:</strong> Who is eligible for an EIDL?</td>
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<td><strong>Answer:</strong> Those eligible are the following with 500 or fewer employees:</td>
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<tr>
<td>• Sole proprietorships, with or without employees</td>
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<td>• Independent contractors</td>
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<tr>
<td>• Cooperatives and employee owned businesses</td>
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<td>• Tribal small businesses</td>
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<td>Small business concerns and small agricultural cooperatives that meet the applicable size standard for SBA are also eligible, as well as most private non-profits of any size. See below for more info on size standards.</td>
</tr>
<tr>
<td><strong>QUESTION:</strong> My private non-profit is not a 501(c)(3). Is it still eligible for an EIDL and a grant?</td>
</tr>
<tr>
<td><strong>Answer:</strong> Yes, if you are a private non-profit with an effective ruling letter from the IRS, granting tax exemption under sections 501(c), (d), or (e) of the Internal Revenue Code of 1954, or if you can provide satisfactory evidence from the State that the non-revenue producing organization or entity is a non-profit one organized or doing business under State law. However, a recipient that is principally engaged in teaching, instructing, counseling, or indoctrinating religion or religious beliefs, whether in a religious or secular setting, or primarily engaged in political or lobbying activities is not eligible to receive an EIDL. If you are uncertain whether you qualify, please consult with legal counsel to determine whether your organization meets program criteria.</td>
</tr>
<tr>
<td><strong>QUESTION:</strong> Who is eligible for an Emergency Economic Injury Grant?</td>
</tr>
<tr>
<td><strong>Answer</strong> Those eligible for an EIDL and who have been in operation since January 31, 2020, when the public health crisis was announced.</td>
</tr>
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<td>QUESTION: How long are Emergency Economic Injury Grants available?</td>
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<td>QUESTION: If I get an EIDL and/or an Emergency Economic Injury Grant, can I get a PPP loan?</td>
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<td>QUESTION: How do I know if my business is a small business?</td>
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<tr>
<td>QUESTION: How do I apply for an economic injury disaster loan?</td>
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<tr>
<td>QUESTION: I am unfamiliar with the EIDL process, can anyone help me apply?</td>
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</table>
Counseling & Training

If you, like many small business owners, need a business counselor to help guide you through this uncertain time, you can turn to your local Small Business Development Center (SBDC), Women’s Business Center (WBC), or SCORE mentorship chapter. These resource partners, and the associations that represent them, will receive additional funds to expand their reach and better support small business owners with counseling and up-to-date information regarding COVID-19. There will soon be a joint platform that consolidates information and resources related to COVID-19 in order to provide consistent, timely information to small businesses. To find a local resource partner, visit https://www.sba.gov/local-assistance/find/.

In addition, the Minority Business Development Agency’s Business Centers (MBDCs), which cater to minority business enterprises of all sizes, will also receive funding to hire staff and provide programming to help their clients respond to COVID-19. Not every state has a MBDC. To find out if there is one that services your area, visit this site.

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<th>FREQUENTLY ASKED QUESTIONS</th>
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<tr>
<td><strong>QUESTION:</strong> Do I have to pay for counseling and training through SBDCs, WBCs, and MBDCs?</td>
</tr>
<tr>
<td><strong>Answer:</strong> Counseling is free and training is low-cost with these partners. The additional funds that Congress provided will help keep this possible. Mentorship through SCORE is always free.</td>
</tr>
<tr>
<td><strong>QUESTION:</strong> What is a SBDC?</td>
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<tr>
<td><strong>Answer:</strong> SBDCs are a national network of nearly 1,000 centers that are located at leading universities, colleges, state economic development agencies and private partners. They provide counseling and training to new and existing businesses. Each state has a lead center that coordinates services specifically for that state, which you can find by clicking the link above. To find out more about SBDCs, visit <a href="https://americassbdc.org/about-us/">https://americassbdc.org/about-us/</a>.</td>
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<tr>
<td><strong>QUESTION:</strong> What is a WBC; is it only for women?</td>
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<tr>
<td><strong>Answer:</strong> WBCs are a national network of more than 100 centers that offer one-on-one counseling, training, networking, workshops, technical assistance and mentoring to entrepreneurs on numerous business development topics. In addition to women, WBCs are mandated to serve the needs of underserved entrepreneurs, including low-income entrepreneurs. They often offer flexible hours to meet the needs of their diverse clientele. To find out more about WBCs, visit <a href="https://www.awbc.org/">https://www.awbc.org/</a>.</td>
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<tr>
<td><strong>QUESTION:</strong> What is SCORE?</td>
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<td><strong>Answer:</strong> SCORE provides free, confidential business advice through our volunteer network of 10,000+ business experts. You can meet with a mentor online. Find out more here.</td>
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<tr>
<td><strong>QUESTION:</strong> Who do MBDCs serve?</td>
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<tr>
<td><strong>Answer:</strong> MBDCs are a good option for minority-owned businesses (including those owned by Black, Hispanic, Asian American/Pacific Islander, and American Indian business owners), especially those seeking to penetrate new markets — domestic &amp; global — and grow in size and scale.</td>
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Contracting

If you are a government contractor, there are a number of ways that Congress has provided relief and protection for your business. Agencies will be able to modify terms and conditions of a contract and to reimburse contractors at a billing rate of up to 40 hours per week of any paid leave, including sick leave. The contractors eligible are those whose employees or subcontractors cannot perform work on site and cannot telework due to federal facilities closing because of COVID-19.

If you need additional assistance, please reach out to your local Small Business Development Center, Women’s Business Center, SCORE chapter, or SBA District Office. You should also work with your agency’s contracting officer, as well as the agency’s Office of Small and Disadvantaged Business Utilization (OSDBU).

Employee Retention Credit for Employers Subject to Closure or Experiencing Economic Hardship

This provision would provide a refundable payroll tax credit for 50 percent of wages paid by eligible employers to certain employees during the COVID-19 crisis. The credit is available to employers, including non-profits, whose operations have been fully or partially suspended as a result of a government order limiting commerce, travel or group meetings. The credit is also provided to employers who have experienced a greater than 50 percent reduction in quarterly receipts, measured on a year-over-year basis.

Wages of employees who are furloughed or face reduced hours as a result of their employer’s closure or economic hardship are eligible for the credit. For employers with 100 or fewer full-time employees, all employee wages are eligible, regardless of whether an employee is furloughed. The credit is provided for wages and compensation, including health benefits, and is provided for the first $10,000 in wages and compensation paid by the employer to an eligible employee. Wages do not include those taken into account for purposes of the payroll credits for required paid sick leave or required paid family leave, nor for wages taken into account for the employer credit for paid family and medical leave (IRC sec. 45S).

- The credit is not available to employers receiving assistance through the Paycheck Protection Program. The credit is provided through December 31, 2020.

Delay of Payment of Employer Payroll Taxes

This provision would allow taxpayers to defer paying the employer portion of certain payroll taxes through the end of 2020, with all 2020 deferred amounts due in two equal installments, one at the end of 2021, the other at the end of 2022. Payroll taxes that can be deferred include the employer portion of FICA taxes, the employer and employee representative portion of Railroad Retirement taxes (that are attributable to the employer FICA rate), and half of SECA tax liability.

- Deferral is not provided to employers receiving assistance through the Paycheck Protection Program.
1. **Light Composite Decking**
A new decking profile from Fortress Building Products, the Infinity-I Series, uses a bamboo capped-composite formulation to provide strength, durability, and performance. The boards feature slip resistance, heat dissipation, and moisture resistance, according to the manufacturer. The decking is available in a selection of earth-tone colors and is dual-embossed for variation in grain pattern. Pricing ranges from $2.80 to $3 per lineal foot; contact a local distributor for more accurate pricing. fortressbp.com

2. **Modern Bar Pull**
Top Knobs unveiled three new hardware collections at the Kitchen and Bath Industry Show: the Ellis collection of knobs, pulls, and appliance pulls; the Ryland collection of decorative hooks; and the Amwell series (shown), a new entry in the Bar Pull Collection. The Amwell Series consists of 56 pieces, each with a unique knurled design, in four finishes: ash gray, honey bronze, flat black, and brushed satin nickel. Contact a local distributor for pricing. topknobs.com

3. **Smart Water Sensor**
The new Flo by Moen Smart Water Detector is a stand-alone sensor that can be placed anywhere in a home to alert users via push notification if it detects moisture, a change in temperature, or a change in humidity. Users can place one or more sensors in areas deemed high risk, such as the basement, laundry room, or attic. These sensors may be used in conjunction with the existing Flo by Moen Smart Water Shutoff, which actively identifies leaks and automatically shuts off the water when a leak is found. Pricing starts at $50, or $130 for a pack of three. meetflo.com

4. **Earth-Friendly Plank Decking**
MonaDeck, a new line of decking from Monarch Technologies, is manufactured using a proprietary bio-based resin system to bind recycled FSC-certified wood fiber and bamboo fiber into a sustainable, wood-simulating composite that has a hardness rating that rivals ipe, says the company. Resembling century-old wood, this decking is produced in 12-inch widths and has a Class-A fire rating. Contact a local distributor for pricing. monarchtechnologiesllc.com
5. Polymer-Based Water Screen
The LP WeatherLogic Water Screen consists of a matrix of polymer-based filaments held in place with a felt-like scrim. Designed to create a gap between the exterior sheathing and cladding, the screen can be used either with OSB and a WRB housewrap or in conjunction with an integrated panel, like LP WeatherLogic Air & Water Barrier, to provide ventilation and drainage behind the cladding. The screen is lightweight, easy to install, and mold-resistant, according to the manufacturer. Contact a local distributor for pricing. lpcorp.com

6. Code-Listed Post Bases
Simpson Strong-Tie’s MPBZ line of column and post bases were designed to provide moment resistance by encapsulating the bases with an overlapping sleeve to resist rotation at the base. Available in 4x4, 6x6, and now 8x8 sizes, all three are code listed under ICC-ES ESR-3050 for uplift, download, and lateral resistance, as well as for allowable moment in reinforced concrete footings. The MPBZ-reinforced concrete footings provide higher load values for the connection, giving designers more flexibility. Pricing ranges from $100 to $200. strongtie.com

7. Folding Glass Wall
NanaWall Systems recently launched its SL84 aluminum framed system. With its slim frame profile intersection of just 3 7/8 inches, SL84’s four-fold and six-fold panels can reach a maximum height of 11’-6” and a maximum width of 3’-7”. Available in inswing or outswing configurations, the system offers three sill options—hybrid, low-profile saddle sill, and flush—and can accommodate open corner designs. Contact a local distributor for pricing. nanawall.com

8. Wind-Resistant Shingles
GAF’s new series of Timberline shingles, Timberline HDZ, incorporates the manufacturer’s LayerLock technology to mechanically fuse the shingles’ common bonds. The shingles create a dual-phase, shingle-to-shingle seal when used with GAF’s DuraGrip sealant, as well as an asphalt-to-asphalt monolithic bond. In addition, the new StrikeZone nailing area is up to 600% larger than the nailing area of Timberline HD shingles, providing better nailing accuracy and faster nail fastening during installation, according to the manufacturer. Contact a local distributor for pricing. gaf.com
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The Licensing Board meetings are held at 9:30 am
Dept of Consumer Protection 165 Capitol Avenue. Hartford
The public is always welcome.

Published by: Larry Ruddy
Larryhp@cox.net