

Deck Coatings and Their Care

By Bill Leys

Waterproof deck coatings and apartment buildings seem to go hand in hand in California. It seems that every apartment complex has decks or walkways, either over a living space or attached off the building. Tenants love them because their decks are often used as another “room” of the house and provide a private outdoor area; owners and managers of income property usually detest them because of the problems that seem to always be associated with decks-cracked coatings, ponding water complaints, leaks and worse, dry-rot.

As a former manager, I saw how ignoring the maintenance needs of waterproof deck coatings could be very expensive. The cost of a new coating isn't cheap, but the cost of repairing dry-rotted framing is a lot worse. A contract for resurfacing eight decks in Pismo Beach turned from \$8,000.00 + dollars into over \$100,000.00 in dry-rot repairs. The owner had deferred the maintenance required for several years beyond the recommended maintenance schedule, allowing the surface to degrade and water was able to penetrate into the framing and rot it from the inside out.

Inspections

The key to preventing your decks from becoming a problem is by performing inspections. Often times the manager will walk the property for physical inspections. As water proofed decks are typically on the second or third floor, they usually are never inspected. Access through the apartment is difficult to arrange with tenants and what manager is going to climb a ladder?

Yearly inspections will help eliminate problems. A basic inspection isn't difficult to do; there are many things to look for that a layman can spot pretty easily. Digital cameras can be used to provide photo documentation of the conditions found, allowing the manager and owner to get an exact idea of the problems that they may be facing.



Indoor/outdoor carpet-not good!

Warning signs to look for on your deck inspection include cracks in the deck coating, nails popping through the coating from the subsurface, delaminating paint and bubbles in the coating surface. Any of these items found is a sign that the waterproof surface has been compromised. Metal

Indoor/outdoor carpet-not good!

flashing can be checked for signs of rust, pulling loose from the deck coating or if it is bent or broken. A simple check of the condition of the substrate underneath can be achieved by using your foot to check for soft/rotted plywood. Be careful, it may be so soft that your foot could go through the deck in a worst-case scenario!

Another thing to check for when performing inspections is to look at what is on the deck. For instance, deck.table legs, grills, sharp objects and high heels can damage soft deck coatings. Plants in direct contact with the surface need to be raised up to allow air to dry off any water.

Indoor/outdoor carpet is often put down on a deck by an uninformed tenant, usually to cover over an ugly deck surface. This is the worst thing that one can do to the deck as it locks in any moisture trapped underneath, attacking the painted finish and may allow dry-rot to set in.

Charcoal grills can drop hot coals onto the surface, burning through the waterproof layers of the deck coating. Grease from gas and charcoal grills will stain the deck, if not cleaned off soon after spilling. Tenants should place pans under the grill to catch hot coals and grease.

Maintenance

Maintenance is the key to a long lasting deck coating. I have seen deck coatings that should last 25-30 years with proper care, ruined beyond repair within 5-10 years after being installed due to ignoring or delaying the maintenance it needs.

Just like a car, deck coatings need to be cleaned. A good cleaning will rinse dirt away that can wear down the coating. Your deck needs to be painted/resealed on the schedule recommended by the manufacturer. All waterproof coatings sealant needs to be renewed, sometimes as often as every two-three years. The topcoat is a specialized paint/sealer, formulated to protect and seal the under layer (which is where the waterproofing material is). The topcoat is usually applied at the rate of about 8-10 mils thick, by brush, roller or spray. UV (sun) rain and foot traffic will wear this protective layer away at a rate of 3 mils per year.

As a general rule, soft deck coatings (urethanes, elastomeric's and floating systems) will need more frequent maintenance than hard, concrete based deck coatings. Soft deck coatings also have a greater chance of failing prematurely if they are not maintained as recommended. Concrete based systems are usually more forgiving if not maintained according to the manufacturer's schedule. Consult with the manufacturer or deck coating installer if you are not sure what you have. If you know what brand or who the manufacturer is, contact them for instructions on maintenance, cleaning and resealing schedules.

Selecting a New Deck Coating System

At some point or another, the deck coating system you have on your decks or walkways may be in line for replacement. To assist owners and property managers in getting the best deal for their money, here are some ideas to put into use when bidding for new coatings on your property.

When replacing your deck coatings with new ones, you should look for a deck coating that offers very high resistance to UV degradation, tables and chairs, use and abuse from tenants, has a low risk of leaking and is easy to maintain by your staff.

Try to get at least 2-3 vendors to bid your job. Arrange a site visit where all bidders can come at the same time and review the job, they can ask questions that all of them can get the same answer to. Having their respective manufacturer's sales representative review the job will be beneficial too. The sales representative should write the work specifications for the contractor to use to bid on.

Ask the installer to provide you with the manufacturer's information, including their name, address and telephone number. Call the manufacturer and speak with that firm's sales representative. Ask them to make a site visit, write the specifications for the work necessary, then review the work during and after the installation and provide you with a written warranty.

When selecting your deck system, there are a lot of choices available. Since it is usually difficult to get an "apples to apples" bid with 2 or 3 contractors all bidding the same system, the problem is compounded when you are comparing different coating systems. Each system may offer advantages and disadvantages over the other. What works great on concrete decks may not work so well over a plywood/OSB* substrate deck.

** Some manufacturers will not warranty their product over OSB, which is not recognized as suitable substrate by the International Conference of Building Officials (ICBO). Be sure to ask your bidders whether this is the case with their product. Others may grant a special exemption if conditions warrant.*

Urethanes, elastomeric's, floating systems and lightweight acrylic systems are commonly heard terms in describing deck-coating systems. Understanding what you are buying is critical to your project's success. Many coating products can have long curing times, necessitating keeping the decks closed for a long period of time, sometimes for 24 hours. Does your property have residents who would be adversely affected by being locked in or out of their home, sometimes for days while a new system is being installed? Some may have strong, even objectionable odors associated with the curing and application process, odors that may be from toxic chemicals. Do you have residents that might suffer from these smells? Urethane deck coatings especially are notorious for strong odors associated with the curing process. Ask your contractor about access to the house, especially if the decks they will be working on are entryways into the house.

A question you want answered is whether your maintenance staff can provide future maintenance to the deck or if the deck installer must provide those services. Some manufacturer's warranties might require that only an authorized installer renew the topcoat. Others may not have that requirement. Is your property set up with onsite maintenance personnel or an outside source that could reapply sealer?

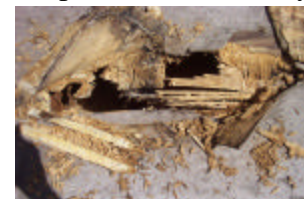
Other Items to Consider

While deck coatings are one thing to consider, there are other items to consider that can cost quite a bit of money too. Flashings for instance; generally there are two types of flashings to be found on the deck. They are L metal flashings that look just like an L and drip edge flashings. Each plays a key role in waterproofing your decks.

L metal flashing is found at the wall to deck junction. It is sometimes hard to spot as it may have been painted over. It keeps water out at this very critical area. Drip edge flashing is the second type of flashing usually found on decks. It is found at the outer edge of the deck. A small bend on the bottom lip will kick water away from the deck as it runs off.

You need to know if your flashing is compatible with any new coatings you are considering. Removal of L metal flashing can often be expensive, involving removal of stucco or wood siding to access it. Repairs by other trades may be required to your siding. Drip edge flashing is usually not as expensive to remove and replace as it is usually pretty accessible, however, working around railings, posts etc. can push the cost up if access is difficult. Are costs of replacement included in your bid? Beware of bids that don't include these items or assure you that the flashings meet specifications for the coating you are applying. Beware the contractor who, after entering into an agreement with you, may then tell you that they "need a change order as your flashings don't meet specification." Ask the manufacturer's representative to address this in their scope of work.

Replacement or repair of substrate under the deck coatings is another item that can quickly add up, often exceeding the cost of the coating work itself. A thorough inspection can usually find any soft spots under the coating that indicate weak rotted plywood/OSB board. A good estimate will include allowances for replacement of plywood, eliminating most surprises. What no one can predict without destructive testing is to what extent does the damage go? Soft plywood is one thing, rotted framing supporting the deck is entirely another.



Dry-Rotted substrate

Maintenance Cost Considerations

Before you decide on a deck coating, you will want to find out what all your costs of ownership really will be. There is today's cost of purchasing the product and there is tomorrow's cost of future maintenance to think about as well. Selecting a high maintenance deck coating can impact your profit margins for years to come. For example, if a coating required a clean and reseal every 2-3 years to maintain your warranty, how much would that cost each time and multiply that over the expected life span. A low price on installation could easily turn into a high cost maintenance nightmare for the next 20 years.

Ask the contractors bidding on your work to provide you with a "at today's costs, how much would it cost to clean and reseal your coating, based on the square footage we have at our complex?" Compare each different coating's costs to clean and reseal it and multiply that factor out over its expected life. The deck system you select should have a 25-30+ year life expectancy, just like most roof systems. Compare the difference and decide for yourself where you want that money to go-into your bottom line or to your contractor.

Important Considerations When Choosing a Contractor

When it comes to qualifying the contractor to install the deck system you've selected, it is critical that you review their qualifications carefully. Often times an owner or manager will select the least expensive bidder. That could backfire on you if that contractor is not properly

licensed, insured and bonded and an accident occurred while the contractor's staff is on the job site at your property.

Any contractor who bids your work should have a contractor's license issued by the state of California, general liability insurance, workers compensation insurance and have a bond covering their license. Ask your contractor to provide you with this information and check it! Call their Insurance Company as listed on the form they have provided. Look up on the web site of the California Contractors State Licensing Board at www.cslb.ca.gov for their license status and class, bonding and workers compensation information.

Ask them to name you and your management firm as an additional insured on their liability insurance. Note; if they can't name you as an additional insured, their insurance carrier may not insure them when working on multi-families. Ask for a copy of their insurance policy, particularly the exclusions portion. While you can't be named as an additional insured on workers compensation, you can be named as a party in interest and be informed if any changes occur to their workers comp policy. Consult a risk manager or an attorney for further information on protecting your self and your property against possible claims.

Whatever you do, don't let any contractor onto your property to work until you have all their information in place and verified!

References. Your contractor should be willing to provide references for work similar to yours that they have completed recently. You should also ask if you could visit the jobs that are on the reference list. Talk to the manager, the residents or the general contractor who ran the job about the firm you are considering using.

You should also ask to look at jobs that are several or more years old. This will let you see how well the coatings they applied have held up. Ask the manufacturer's sales representative about the firm you are considering and what their experience has been with the contractor.

Summary

Once you as a manager or owner know what to look for, you needn't fear the worst when it comes to your decks. Proactive is the key word, performing the necessary maintenance before the deck becomes a problem. Just like the rest of the buildings components, incorporating the decks into a regular maintenance schedule will save you heartache, time and money.

Bill Leys was the General Manager and estimator for several deck coating and waterproofing firms before joining West Coast Waterproofing Services. For comments or questions please email us at wcvservices@sbcglobal.net, call (866) 777-0042 or visit www.westcoastwaterproof.com. Thanks to Dave DiBaggio for his input and support.