The Case for Invasive Transition Inspections

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ransition from sponsor to association board management is a process every association must go through. Designed to identify departures from the sponsor's public offering statement, defects in construction and improper equipment installation, transition is the last chance for associations to get the building and its systems "right" before taking on responsibility of full ownership.

Too often transition is viewed as an expense to be minimized. Engineers and attorneys are expensive. New association boards are cautious with limited availability of funds. Many board members do not fully understand the transition process. After all, the buildings are new, exterior and interior finishes are sparkling. There is still a warranty on everything. What could go wrong?

The answer is, plenty. Construction practices in the last 10-15 years have changed. Yes, there are better engineered materials, more attention to insulation, quality windows and doors. Sealants and waterproofing are more durable. Unfortunately, skilled trades and, most importantly, knowledgeable supervision is not up to the task of modern fast paced construction.

The most difficult to observe details in construction are related to the building envelope, i.e. roof, siding, windows, doors, and balconies. Defects in execution of all the details in construction are opportunities for water entry, rot, possible structural damage and damage to interior finishes. Unfortunately, many of these defects take years to manifest themselves. Often that is long after transition has taken place and the sponsor has made good on any transition settlement.

Associations should consider authorizing engineering inspections during transition to confirm details are executed according to manufacturer's recommended installation instructions and architectural plans. When making this request, the association board should expect strenuous objection from the site builder and sponsor. The association's transition attorney will probably need to become involved. Remember you are trying to confirm the building is constructed according to building codes. Building codes are the minimum standard of performance and specify building waterproofing and that manufacturer's recommended installation instructions be followed.

What to look for

Water is the enemy of buildings and in New Jersey it attacks buildings in many forms; windblown rain; snow drifting and ice dams; high humidity and condensation. Where, in particular, will it take invasive inspections to find the water problems?

Manufacturers of windows provide very explicit instruction on installation. Each siding type has slightly different details on how the window is flashed. Vinyl siding is a different flashing detail than brick or "Exterior Insulation Finishing System". Known as EIFS, it is often called Dryvit which is the name of one of the manufacturers. All of the different flashing details have several commonalities. Flashing should direct water to a drainage plane on the outside of a water resistant barrier that protects the wood or *CONTINUES ON PAGE 20.*

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DensGlass[®] sheathing. It should be lapped with an upper sheet terminating on top of the sheet below and joints between materials and layers should be sealed tight and waterproof. Almost none of these details can be observed once the finished siding is installed.

Doors have all the same issues as windows. In addition, there is that pesky sill that becomes even more problematic when the door opens to a balcony or deck. There, the door sill flashing has to become part of the balcony waterproofing to provide a continuous path for water to escape. End and back dams can prevent water sneaking under the sill. Fortunately a back dam can usually be observed without too much difficulty. But if you don't want to do an invasive inspection, just wait to see if that expensive hardwood floor behind the dams starts to buckle and discolor instead.

Virtually all siding should be installed with a drainage plane, a waterproof barrier under the siding that continues to the base of the wall to allow any water that penetrates the siding to escape out of the building. Brick, vinyl, wood, stucco and EIFS all have specific drainage plane requirements and details. Developed in Europe, EIFS installation in the United States initially had well documented problems. Current EIFS installation recommendations specify a waterproof drainage plane and very careful attention to all penetration flashings. It is a much better siding as a result. Still, we see recent construction of the old problem plagued "barrier" EIFS even though codes call for drainage plane systems and therefore it should not be installed.

Specialty trim, weep screeds and other devices are manufactured for each type of siding. The drainage plane must be continuous, seams must be sealed and integrated into flashing. It sounds simple, staple some house wrap in the building and start siding. But it is not. Ignore the details and expect siding damage, water entry, interior finish damage and more.

Penetrations come in many forms and all need special attention. This includes outdoor lighting fixtures, receptacles, balcony railing and post attachments, laundry and bathroom vents, furnace, boiler and hot water heater vents. Again, manufacturers of siding products have developed flashing and trims for these installations. Details are available from trade organizations like the EIFS Industry Members Associations and Vinyl Siding Institute. Architects usually do a good job of specifying these details and use of products. But does that mean the builder installed them as specified?

Some contractors or sponsors take a proactive approach to construction quality. They retain an independent engineer to examine the entire construction process, to document that things were done correctly usually supported with thousands of photographs and frequent reports. When construction errors are discovered they are corrected and documented. If available, those reports can be a valuable asset during transition and later. The association should ask if they exist and retain them in a permanent archive.

It would be a radical departure from current practice to include invasive inspections in transition studies. Our experience is these are needed at times and it is the responsibility of the association's engineer to recommend them in cases of suspected faulty construction. The longer term financial health of a community could be in jeopardy as a result of premature failure of components that should have been constructed better. Transition is the time to catch it. ■



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