

REAL ESTATE, TITLE INSURANCE & CONSTRUCTION LAW

Construction Defects: Who Is Responsible for What?

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A construction defect occurs whenever finished or partially completed construction fails to perform as required by applicable contract documents or accepted standards. It is the bridge whose cables flex and snap, the concrete that is understrength or structurally deficient, the roof that leaks, the adhesives that do not bond and the paint that peels, to name only a few examples.

Obvious vs. Latent Defects

Construction defects can be obvious or latent. Defects such as undersized beams, understrength concrete or coatings failures usually are apparent during construction when liability is clear and the cost of correction is relatively minimal.

Frequently, however, defects are latent. A latent defect exists at the time of construction but is

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undetected until after (sometimes years after) construction is completed and the structure and its systems are in use. An example would be a structural beam that meets the specified size, color and grade requirements, but is understrength. Latent defects also can be progressive—that is, over time the defect gradually becomes worse as the structure or its systems are subject to wear and tear or natural forces. Examples include concrete that progressively deteriorates over several freeze-thaw periods, pavement that gives way due to gradual loss of supporting subgrade, and leaking roofs that over time cause damage to building components and mold growth.

Defect vs. Manifestation of Defect

A defect often is different from the manifestation of the defect, although generally both must be corrected. The manifestation is the apparent condition of the structure, a component or the materials that is caused by the construction defect, and which provides evidence of a deeper problem. For example, although a stucco crack may appear to be the

defect, it is just the manifestation of the defect. The underlying defect might be inadequate structural support, improper materials, improper subsurface preparation or inadequate expansion joints. Similarly, movement of the supporting structure, the foundation or the underlying earth may be manifestations of underlying defects such as inadequate foundation reinforcement, soil compaction or shear wall attachment.

It is essential to identify both the manifestation of the defect and the defect itself, because correcting only the symptoms will not correct the problem.

Types of Construction Defects

In a broad sense, a construction defect is any element of a structure that fails to (a) perform as intended, or (b) conform to the contract requirements. There are many types of construction defects, including:

- *Deviations from plans and specifications.* Every construction project is built based upon drawings and specifications that tell the contractor what to build and the quality of the materials

to use. Construction project drawings include plans prepared by the architect, surveyor and consulting engineers (site plans, structural plans, mechanical plans and electrical plans) as well as more detailed drawings prepared by the contractor, subcontractor or supplier (shop drawings) that are submitted to and approved by the project design professional. The specifications—typically supplied by the project design professional with the plans—provide even more detail not evident from the drawings that identify the materials to be used, the performance requirements for aspects of the project and the methods of application to be employed.

Any material deviation from the plans or specifications is a defect, no matter how well the work was performed, even if the structure and all of its systems perform properly

• *The project or a component does not work as intended.* A construction defect exists where the structure or any of its systems do not work as intended. This includes the failure to meet performance criteria (such as specifications requiring windows to have a minimal resistance to wind-driven rain or concrete to have a specified strength), the sudden failure of a part of a project (such as a cracked concrete deck, foundation failure or catastrophic collapse), or any aspect of a project that simply does not work as it should (such as

roof leaks, foundation leaks, plumbing leaks or excessive settlement).

• *Building code violations.* All construction must comply with construction and safety standards imposed by law. Failure to comply constitutes a defect in the design or the construction work, or both, even if the structure or systems function as expected. For example, aluminum wiring may work but violate the electrical code. Inadequate space on a landing for building egress may “work” (in the sense that people can leave the building) but still violate the fire code.

• *Premature deterioration.* Premature deterioration of a project element may be the result of a construction defect. An example would be a roof intended to last 20 years which starts deteriorating after five. However, the same condition may or may not be a construction defect, depending on when it occurs in the life of a building, system or component. For example, a crack in a stucco wall completed six months earlier most likely would be a manifestation of a construction defect. But if the same crack appeared 10 years after the wall was completed, it likely would not be a defect but the result of normal wear and tear and poor maintenance.

Liability for Construction Defects

• *Contractor liability.* The construction contractor is responsible

to perform the construction work needed to complete the project. The contractor hires the subcontractors who carry out the work (such as ironworkers, plumbers, electricians, carpenters, masons, etc.) and purchases the materials needed for construction. He also must choose how the construction will be performed—what methods or techniques will be employed to ensure complete, timely and safe completion of the project. The contractor’s obligations are defined by the construction contract, which provides the basis for liability if the contractor fails to perform as required.

The contractor is required to perform the work fully in accordance with the plans and specifications and in a good and workmanlike manner. Most construction contracts will state these duties explicitly, but even in the absence of specific contract provisions, the law generally implies these duties into every construction contract.

Although a contractor who complies with plans and specifications generally is not responsible for construction defects, an important exception is where the contractor actually knew that a plan or specification was defective. A contractor who knows or should know that compliance with plans and specifications is likely to result in a defect or failure has a duty to bring that

deficiency to the owner's attention before performing the work.

- *Designer liability.* The project designers (architect and engineers) may be engaged for some or all of a bundle of services, ranging from total control over and responsibility for the project to a limited role involving merely preparing a design program or preliminary design scheme. The designers may remain involved throughout the construction process or merely prepare plans for others to execute.

Whatever the designer's role, a design professional who fails to exercise reasonable care and judgment in performing his or her duties may be liable for resulting construction defects. An obvious example is a structural engineer who miscalculates the loads that will be imposed on finished construction, leading to a structural failure, who will be responsible for that failure and its consequences. Also, design professionals who are contractually required to inspect work for compliance with plans and specifications may be liable for failing to discover defects in construction that could or should have been detected through a reasonable investigation.

- *Owner liability.* Owners typically consider themselves immune from liability for construction defects or failures. The owner's view is that the designer is obliged

to produce plans and specifications that are sufficient for their intended purpose, and the contractor is responsible to build the project in accordance with those plans and specifications. However, the owner may be responsible for construction defects in certain circumstances.

For example, an owner who provides project information represents (either explicitly in the construction contract or implicitly as imposed by law) that the information will be accurate. Thus, an owner who inaccurately reports the condition of the building site is responsible for that information in the event that a building failure results.

Also, an owner who utilizes the finished construction in a manner not contemplated in the design cannot complain if that use results in a failure. Typical is the situation where an owner overloads a finished structure with, for example, machinery, storage or other unusual loads. In such cases, the owner's misuse of the structure or systems may be the cause of any failure, and may bar recovery against either the contractor or designer.

Finally, an owner has a duty to maintain finished construction to prevent failures that might result over time from neglect of finished construction.

- *Manufacturer liability.* Construction defects also can result

from a product failure. Adhesives fail, water sealants do not always prevent water intrusion, pipes leak, boilers explode and sprinklers sometimes do not sprinkle. All are construction defects that may result from a product defect or failure.

Where a product defect or failure causes a construction defect, and that defect causes personal injury or property damage, the product manufacturer will be liable in tort for the resulting harm. Where a construction defect causes only economic losses (such as lost revenue from a project or damages for construction delays caused by the defective product), claimants may seek remedies under the Uniform Commercial Code, which generally allows the owner to seek economic damages from the manufacturer for breach of both express and implied warranties that the product will function as intended.

Conclusion

Construction defects can affect completed projects in ways ranging from poor aesthetics to catastrophic collapse with tragic human toll. When a defect, failure or collapse occurs, the contractors, designers and owner each may be exposed to liability, depending upon how each one carried out its responsibilities during the construction process. ■