

Designerless Roofs

Who Has Liability for Faulty Design?

By Paul E. Ridley

From time to time, IIBEC chooses to republish articles from its archive that have continued salience in our changing industry. This article, published in 2005 when IIBEC was known as the Roof Consultants Institute, remains relevant specifically to building owners, contractors, and manufacturers in its discussion of the importance of hiring independent designers for building projects.

INTRODUCTION

It is a fact of life that the commercial roofing industry is in a constant state of change. Building owners' expectations for the performance of roof systems continue to increase over time. Manufacturers frequently introduce new products or change their existing products in an effort to meet the evolving demands of the marketplace. The adoption of new building code provisions and other legislation has imposed new energy efficiency and "green roof" requirements on the industry. These and other developments have increased the importance of roof design specialists who keep current on the constant changes in roofing technology, building codes, and performance requirements and limitations and who can provide building owners with informed, objective advice, free from conflicts of interest. A factor that further enhances the roof design professional's value to building owners is the code of ethics to which they are bound, either through professional state licensure or membership in RCI.

Notwithstanding the substantial value that independent roof design professionals can add to projects, many owners do not retain such specialists to design their roofs. This may be due to a lack of knowledge of the availability or value of an independent roof designer, or a conscious decision based on a short-term perspective that the cost exceeds the benefits.

Building owners may be persuaded by a contractor or manufacturer that an independent designer is unnecessary because the contractor or manufacturer is capable of providing "turnkey" design-build or design-procure services at no (apparent) additional cost to the owner. It is thus likely for the foreseeable future that some commercial roofs will be constructed without the benefit of independent professional design.

It would overstate the case to say that every roof installed without the benefit of

independent professional design is doomed to premature failure, or that every roof designed by an independent roof design professional is guaranteed to perform within or exceed expectations. However, it has been demonstrated that utilizing a qualified independent roof design professional greatly increases the likelihood that the roof will meet the owner's immediate and future needs related to leak-free occupancy, minimized maintenance costs, and long-term service.

When a building owner forgoes use of an independent design professional, he increases the risk that the roof will not meet his requirements concerning performance, cost, appearance, or longevity. This is because critical choices of materials and design of details will be made by someone whose principal role or financial interest is selling materials or installing a roof, not the provision of design services.

These observations about the importance of independent professionals in roof design set the stage for the principal issue addressed in this article: When no roof design professional is involved with a roof that fails prematurely, who has liability for any design defects that cause or contribute to the failure? The answer, as with so many issues in life, is "it depends." The answer will be affected mainly by the roles of the different parties involved with the roof and the scope of their agreements. In examining this issue, the author will separately discuss the legal issues relating to each of the principal parties involved in the typical roofing project.

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THE OWNER

The owner's decision not to use a design professional can have at least two consequences. First, the owner loses a strong advocate for his interests, thereby increasing the chance that his expectations for the roof will not be met as discussed above. The second consequence is that allocation of legal liability and recovery of damages for design errors become more complicated and less certain. This is because there may be no single party who has clearly assumed responsibility for the roof design.

With or without a professional designer of record, the owner will bear the first-line liability to third parties who are injured or damaged as a result of faulty roof design. For example, if roof leaks or complete failure of a roof due to a design defect lead to water damage to contents, structural collapse, or injury to occupants or bystanders, the owner (simply by virtue of owning the building), will be legally liable to those third parties.

The owner or his insurer can and frequently will seek indemnification for such claims from the parties who were responsible for committing the design errors. If an independent roof design professional was involved, the liability for any design errors will clearly rest with him. In that event, the owner will have recourse against the designer for damages the owner must pay to third parties, as well as his own damages. A designer will frequently have errors and omissions (E&O) insurance coverage to pay such claims.

However, where no independent design professional was involved, the owner will first have to determine who is responsible for the faulty design, and then seek recourse against him or her. Moreover, if an independent design professional was not involved, E&O coverage will likely not be available as a source of recovery for the owner.

THE CONTRACTOR

In the absence of a designer of record, design responsibility may be unclear. It may rest with the contractor, manufacturer, or both. If a contractor is hired to install or replace a roof with no clear designation of design responsibility, the contractor nonetheless will likely be deemed to have assumed responsibility for the suitability of the materials installed and the design of the roof details. Because in law, liability follows responsibility, the contractor will have liability if the roofing materials selected are unsuitable for the application or if roof details are substandard, in addition to the contractor's customary liability for installation flaws.



*A roof consultant views an interesting protection arrangement in this leaking building.
Photo courtesy of Fincastle Engineering.*

THE MANUFACTURER

The liability equation becomes more complicated, however, when the role of the roofing manufacturer is considered. If a manufacturer issues a traditional "material-only" roofing warranty, the contractor will likely continue to have liability for design errors with one possible exception. The manufacturer may have liability for suitability of the product if it recommended a particular product with knowledge of the intended application.

If a manufacturer issues a no-dollar-limit ("NDL") warranty covering installation and roofing materials, design liability may shift entirely to the manufacturer. Acceptance by the manufacturer, particularly after inspecting the completed roof, can constitute acceptance of responsibility and thus ultimate legal liability for the quality of the installation, suitability of the product for the particular application, performance of the roofing materials, and adequacy of the design.

However, when a roof covered by an NDL warranty prematurely fails and design defects not discovered during the pre-warranty inspection are found, the manufacturer may deny the claim on the basis that its warranty has been voided by the contractor's use of improper, nonstandard details. To avoid this sort of dispute, the wise contractor should obtain the manufacturer's advance approval of any nonstandard details. Absent such a step, a legally murky situation may result in which liability is hotly contested between the contractor and manufacturer. The dispute can become even more factually complex if it is unclear whether the roof failure resulted from substandard installation, material failure, or design flaws.

Once the manufacturer inspects and accepts the roof by issuing an NDL warranty, it will have a heavy burden to establish that it did not, by virtue of issuing its warranty, accept all design aspects of the roof. Even if the manufacturer contends it could not have discovered the



Dimensionally unstable foamed plastic insulation resulted in a failure investigation at this plant in Michigan. Photo courtesy of Roof Engineering Inc.

particular design flaw by inspecting the finished roof, unless it convinces the trier of fact that the design flaw was fraudulently concealed, it runs a high risk of being determined to have assumed the risk of even hidden design flaws and thus found liable to the owner.

Even if a manufacturer is successful in contending that the contractor is liable for design defects, it will still have a second hurdle to surmount. That is the burden to prove the extent and materiality of such design defects. This requirement is illustrated by an Oregon case, *Amfac Foods, Inc. v. Fred A. Snyder Roofing and Sheet Metal Corp.*¹ In *Amfac*, when the roof leaked, the roofing subcontractor defended a claim for breach of warranty by contending that the owner had voided the warranty coverage by installing rooftop equipment without prior notice to the subcontractor as required by the warranty. The court ruled that the roof subcontractor was required to prove the occurrence and extent of such modifications to the roof and that the installation of such equipment was a material cause of the leaks. A court will likely hold a manufacturer to the same burden to prove the extent and materiality of the design defects as the cause of roof failure (as distinguished from substandard installation or material failure).

CONCLUSIONS

Involvement in a legal battle over ultimate liability for roof design is usually not in the owner's best interests. The typical owner is better served by a roof that performs to expectations

rather than becoming enmeshed in expensive litigation with multiple finger-pointing parties. Reliance solely upon even the best NDL warranty can thus be short-sighted.

A much better method of reducing the risk of poor performance is to prevent roof failure in the first place through proper design and material specification. For if roof leaks result from use of unsuitable materials or substandard details, the owner is likely to incur costs that no roof manufacturer's warranty will cover, such as damage to other building components (including insulation, roof deck, and ceilings), damage to contents, and interruption of operations. Such risks will not be covered even by NDL warranties because they typically exclude consequential damage to other building components or contents. Also, should the roof fail prematurely, the owner bears the risk that the installer or material manufacturer is no longer in business or cannot be identified as a result of loss of records.

Before deciding to forgo the services of an independent roof design professional, the building owner should carefully weigh the benefits of such services against the increased risk of premature roof failure and potentially

complicated issues of legal liability for design flaws in the absence of a designer of record. 

REFERENCE

1. 143 OR. App. 107, 602 P.2d 321 (1979).

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