



Journal of architectural
technology published by
Hoffmann Architects, Inc.,
specialists in the rehabilitation
of building exteriors.

Journal

Standard of Care: Evaluating Professional Conduct

John J. Hoffmann, FAIA and Alison B. Hoffmann

In a case where a building element fails prematurely, owners want to recoup their expenses and resolve the problem. But how to know what constitutes negligence on the part of the designer; contractor; engineer; or consultant? Where responsibilities among these parties overlap, who has ultimate responsibility? In short, where to lay the blame?

The answer lies in the subtle definitions and interpretations of what is called “standard of care.” If a building

owner suspects that members of the project team have acted with negligence and have failed to adequately perform their professional duties, that owner may choose to file a legal claim. This guide is intended to help both building owners and design professionals better understand and navigate standard of care disputes—and, ideally, avoid them.

Defining the Standard of Care

In professional liability cases, the burden of proof often falls more heavily on the defendant (the architect or engineer) than on the plaintiff (the party suffering a loss). That’s because it’s up to the design professional to define the relevant standard of care, and then to demonstrate that he or she has met or exceeded that standard.

According to the American Institute of Architects (AIA) Owner-Architect Agreement, the standard of care is set forth as follows:

“The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.” (AIA B101-2007 § 2.2)



▲ Designers, consultants, owners, and contractors should discuss any inherent risks and assume shared responsibility for project outcomes.

John J. Hoffmann, FAIA is president of Hoffmann Architects. Active in developing and applying professional practice standards, he has provided litigation support and expert witness services to building owners, construction managers, attorneys, and design professionals. Alison B. Hoffmann is editor of the JOURNAL.



▲ A tale of two cities: the standard of care may be different in New York than it is in Miami.

Let's break this down:

Consistency

First, we have "...services consistent with the professional skill and care ordinarily provided by architects...." Here, the wording is important: the designer is not expected to be the very best in the field; he or she must provide competent professional practice that is on par with the average. Anything below this constitutes negligence.

Locality

Next, we find the qualification: "practicing in the same or similar locality under the same or similar circumstances." The architect of a shopping plaza in the southwest would not necessarily be expected to provide the same level of professional services as one who designs urban high-rises on the eastern seaboard. This is not to say that in one case shoddy work is acceptable, whereas the other must be detail driven. Rather, it implies that different industry standards prevail in different locations and circumstances, and we must be sensitive to those differences when judging professional practice. Building materials, for example, that will corrode irreparably

after a single winter in New England might last decades in the dry climate of the Arizona desert.

Efficiency

Finally, we have a statement as to the project schedule: services are to be performed "as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project." As with the previous statements, this language is open to interpretation. How to appropriately balance good workmanship with efficiency is the sort of question to which there are as many answers as there are architects. Here again is where the idea of consistency comes into play. It might save time to cut down on the number of site visits during construction, or to skip documenting observations during those site visits, but if common practice dictates otherwise, the architect can be held liable should problems arise that might have been avoided with more diligent oversight.

Scope of Services

The section of the Owner-Architect Agreement cited above is preceded by a statement that can have bearing on standard of care considerations:

"The Architect shall provide the professional services as set forth in this Agreement" (AIA B101-2007 § 2.1). At first blush, this seems self-evident, but the implications of this qualification can limit the liability of the architect. In principle, the designer need only perform the work as laid out, and is not responsible for problems that arise outside that scope of services.

In practice, however, the issue is a bit murkier. Let's look at an example: an architect is retained for a limited investigation of a single facade, during which she discovers a potentially unsafe condition at another, adjacent facade. Even though the hazardous area is outside the contractual scope of services, the architect still has a responsibility to inform the owner and recommend emergency action. In cases of safety, professional obligation may carry beyond contractual services.

Furthermore, the statement regarding scope of work limits the reach of the contract language that follows, in that an architect cannot perform fewer services than are listed in the agreement, even if standard practice in the community would permit less. That is to say, for example, that while review of certain contractor submittals might not be commonplace for a given location and building type, if the contract stipulates that such drawings, samples, and documents will be reviewed, the architect is bound to do so despite the prevailing standard of care.

Expert Witnesses

If standard of care is so hard to pin down, how then is professional negligence determined? The most common method is through expert witness testimony. Preferably, the expert should have first-hand experience in

This article is for informational purposes only. Hoffmann Architects does not purport to offer legal advice and is not responsible for practices adopted on the basis of information provided herein. Before taking action that could have legal repercussions, consult an attorney.

the exact discipline in question. However, it is only required that the expert be acquainted with the procedure or practice, due to the sometimes limited availability of professionals with direct experience in highly specific technical areas.

Expert selection is critical, as it is on the basis of professional opinion that breach of standard of care can be established or refuted. Each side of a dispute will select their own experts, and where these professionals disagree, it is up to the judge, jury, or arbiter to decide who to believe. Straightforward presentation of evidence and conclusions, sound credentials, and in-depth documentation are all factors in establishing a witness' reliability and in reinforcing the accuracy of his or her assessment. Referencing guidelines from trade publications, insurers' caveats, or standard design

guides lends credence to professional opinion.

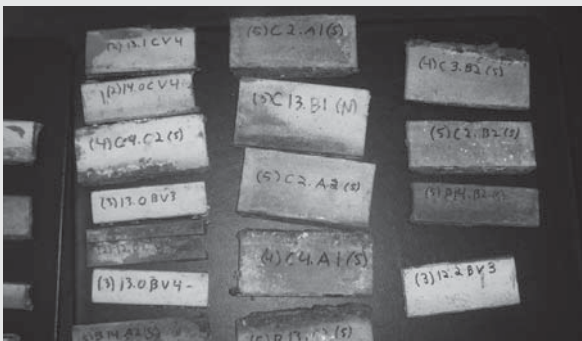
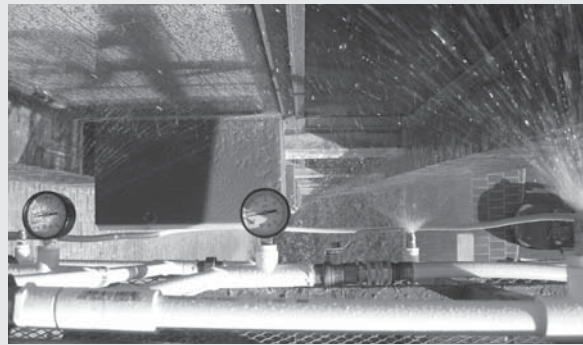
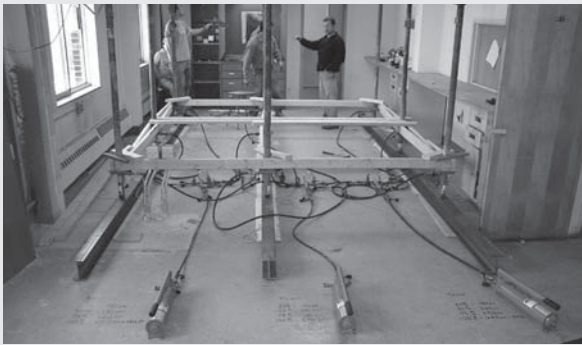
An architect or engineer with a specific practice in the field at hand may be at an advantage as an expert witness, as his or her credibility is bolstered by specificity of expertise. For example, premature failure of a thin stone wall cladding system would be best addressed by a building envelope specialist, while an under-performing ventilation system would be better evaluated by a mechanical engineer.

However, proficiency in failure analysis and forensic investigation may not be enough when it comes to establishing the standard of care. An expert witness must also demonstrate familiarity with current codes, recommendations, and manuals, as well as possess varied industry experience. Architects and engineers who assume leadership

roles in professional societies and industry associations, such as the Construction Specifications Institute (CSI), the American Institute of Architects (AIA), or the American Society of Civil Engineers (ASCE), are in a better position to evaluate the prevailing standard of care than are their less involved peers.

Emerging Technologies

From innovation in document preparation to new sustainable design systems, up-and-coming materials and methods mean architects and engineers must keep current on product performance, regulations and standards, and accepted practices. In addition to review of trade publications, manufacturers' guidelines, and other literature, design professionals can stay up-to-date by attending educational seminars, maintaining active participa-



▲ Appropriate evaluation, appropriate care. Clockwise, from top left: floor load test, water penetration test, roof test probe, weld samples for laboratory analysis.



▲ When new technologies are used, owners must be active participants in the decision-making process. Pictured here, from left: a green roof at Yale University, the Smithsonian National Museum of the American Indian's undulating facade, and a Mediamesh® screen at the Crowne Plaza Times Square.

tion in professional organizations, and seeking peer input from others in the industry.

Failure to stay on top of state-of-the-art standards and practices can be disastrous for both the owner and the designer should any aspect of the project approach prove unsuccessful. Even where the vast majority of the work is competent, a single lapse in judgment or knowledge can constitute breach of standard of care.

Evolving Standards

Keeping abreast of current practices, changing standards and codes, and product developments is critical for architects and engineers, both to minimize the possibility of substandard work and to protect the well-being of building users. Specifying a product or practice when it has been demonstrated inadequate or even harmful carries a grave risk. As the saying goes, "ignorance of the law is no excuse." Professing to be unaware of the hazards of asbestos, for example, did little to defend any designers who continued to specify it after research confirmed its carcinogenic properties.

Often, designs are held to industry standards even where contract documents dictate otherwise. Let's say, for example, that a designer specifies more stringent wall tolerances than is standard, but the contractor builds the walls to comply with customary tolerances. In the event of a failure, the designer could argue that the walls were not constructed as specified. However, the contractor can counter that the design defied industry standards and so was not buildable. Keeping sight of design standards, and discussing openly any deviations from those standards, is essential to meeting standard of care obligations.

Novel Materials and Procedures

The green building industry is host to a deluge of relatively untried innovations in design strategy, materials, and procedures. While creativity and invention are valued in architecture, if the new technology fails to perform as anticipated, the architect or engineer may be accused of negligence. How, then, to continue to advance in the direction of environmental sustainability while minimizing potential conflict?

Through open, honest risk-benefit discussions among the design professional, the contractor, and the owner or developer. The architect or engineer should stay current with manufacturers' literature and industry standards and understand the material properties and anticipated behavior of any product he or she specifies. Contractors and consultants need experience, if not with the precise system or process in question, at least with similar construction design and relevant methodologies. As an informed consumer, the owner should understand the potential consequences of applying a technology for which a standard of care may not yet exist.

Informed Consent

Where new technologies are employed, particularly in green building projects, design professionals and owners need to discuss any risks inherent to experimental materials, assemblies, or systems. The owner needs to be an active participant in the decision-making process, particularly for emerging and untried technologies. Informed consent enables architect and

owner to experiment with creative solutions and new materials with full knowledge that should those systems not perform as expected, both parties consciously agreed to the risk.

With technologies constantly being developed and refined, design professionals may find that the best product for the job is one with which they have little or no experience. Being forthcoming about that fact is crucial to protecting professional integrity and allowing clients to make appropriate choices.

As an example, parking structure and bridge deck expansion joint covers, which are subjected to deformation and thermal cycling, are notorious for frequent failures. A new joint cover purports to improve performance, and product data points to positive results. Before forging ahead with the new material, though, the design professional would do well to visit installations of the covers with the client, as well as discuss potential benefits and drawbacks, to facilitate an educated product assessment.

Innovation in design, engineering, and materials is as important as it is exciting. It is through the willingness of developers, building owners, and design professionals to try new systems and strategies that significant strides are made in the performance, durability, and sustainability of today's built structures. However, novel methods come with some measure of risk. When all parties are kept up-to-date with current codes, standards, research, and procedures, both the benefits and the potential risks can be appropriately evaluated, avoiding potential standard of care disputes down the road.

Avoiding Disputes and Resolving Claims

Litigation is expensive and time-consuming, and it creates ill will among

Who Is Accountable?

Where responsibilities overlap among various consultants and professionals, issues can arise when each assumes the other is providing oversight. For example, it has become commonplace for developers to hire both an architect and a construction manager, both of whom have duties pertaining to field observation. In such cases, it must be clear from the outset who bears ultimate responsibility for what.

Even if another consultant is overseeing a particular aspect of the project, the design professional may not be exempt from liability. A contractual obligation to observe construction must be fulfilled regardless of the actions of other parties. Just because someone else is also responsible for oversight doesn't necessarily mean the architect is not. ■



parties. How then to avoid negligence suits altogether or, where that's not possible, to resolve claims efficiently? Moreover, how can we avoid the blame game and focus our attention where it's needed most: fixing the problem?

The simple answer is to build it right the first time. But with the complicated building systems of today, which demand integrated efforts from countless contractors, consultants, and specialists, in practice there is much room for error. For both rehabilitation and new construction projects, common sense measures can keep lines of communication open and help safeguard against avoidable failures:

- **Apply current codes and standards.** Building and administrative codes in many cities have undergone substantial changes in recent years, particularly in regard to energy efficiency and green building requirements. Common standards, such as those from ASTM International and the American Concrete Institute (ACI), evolve as new developments

and data emerge. Applying outdated codes or standards, such as those for wind resistance or fire protection, can constitute negligence should building elements fail.

- **Consider interdependent building systems.** As building components grow increasingly complex and disciplines become more fragmented, fewer design and construction teams attend to areas where these technologically advanced systems intersect. Thus, connections between roof areas, facade and roof intersections, penetrations, and openings are at high risk for leaks, cracks, splits, and other catastrophic failures. Assigning a member of the project team the express task of monitoring such trouble spots can reap dividends by preventing distress and resultant litigation.
- **Define roles on and off site.** With so many consultants and sub-consultants involved in everything from waterproofing to window design, it's critical to delineate

the boundaries of responsibility from the start. Otherwise, when problems arise, it will always be the other guy's fault.

- **Identify third parties affected by the work.** Economic loss, injury, inconvenience, and environmental hazard are just some of the damages a third party might claim. Inform building users, contractors, suppliers, insurance companies, and other potentially affected parties of decisions that could impact their property, well-being, or financial interests.
- **Assess informed consent liabilities.** Even reasonable action on the part of an engineer or architect can result in liability if potential outcomes aren't communicated to the owner: What about inherent risks? Discussing the likelihood and possible consequences of negative results allows all parties to take responsibility for decisions—and outcomes.
- **Evaluate documents and methods through peer review.** Architects and engineers have special skills,



▲ Providing services consistent with common architectural practice is critical to meeting the standard of care.

but they're not infallible. That's why peer review is so important. General practice firms often engage the services of a building envelope or MEP (mechanical, electrical, and plumbing) consultant to review drawings, specifications, and construction progress, applying specialized knowledge and experience.

Materials usage, installation procedures, code stipulations, and adherence to program requirements are just some of the many areas for which peer review can be invaluable to avoiding costly mistakes.

- **Choose the right expert.** If, in spite of your best efforts, a failure does occur and litigation ensues, it's critical to retain an expert who can identify the causes of failure and, just as importantly, communicate findings clearly and concisely. Beyond quick dispute resolution, such precision is crucial to resolving the building failure.

This last item underscores a larger point: laying the blame won't solve the problem. Even after a claim is settled, the failure that precipitated the dispute is still there. The final step in a standard of care case is, then, restoring proper building function. Ideally, the lessons learned from the dispute resolution can be applied to remediation work, addressing errors or omissions in the original design and construction.

Unfortunately, though, hours spent in a courtroom or arbitration hearing don't translate into hours saved in the field. In some cases, hapless



▲ Building intersections are susceptible to leaks. Paying extra attention to these vulnerable areas during construction is critical to failure prevention.

building owners and developers have untangled one mess only to become entrapped in another. As an example, a roof assembly at a prominent financial institution was installed using the incorrect adhesive, and the system failed. Construction began again, only to fall prey to new shortcomings in design and workmanship. At long last, the beleaguered owner retained a building envelope architect to provide peer review services to the prime architect, and the additional administration provided the guidance necessary to see the project to successful completion.

Professional Standards for Professional Practice

Architects and engineers must meet two basic criteria: they must deliver the services in their contract, and they must perform those services in accordance with the professional standard of care. The former is fairly straightforward: failure to deliver contractual services is breach of contract. The latter, however, is subject to interpretation, as we have seen. Standard of care is embodied in tort law, which considers negligence and liability. An

(continued on page 8)

representative projects



Standard of Care

As building enclosure experts, Hoffmann Architects' professionals often serve as expert witnesses. Active in industry organizations and versed in current standards, our architects and engineers provide the documentation necessary to establish standard of care and evaluate professional conduct. We support building owners, design professionals, and construction managers alike through arbitration, mediation, and litigation.

Our clients for standard of care consultation include:

Attorneys

- Donovan Hatem
- Garcia & Milas
- Gibbons
- Gordon, Muir & Foley
- Harter Secrest & Emery
- Heilmann, Ekman & Associates
- Jackson & Campbell
- Jones, Glenn & Robinson
- Law Offices of Steven M. Basche
- McCarter & English
- Michelson, Kane, Royster & Barger
- Pryor & Bruce



▲ Failure investigation, remediation, and litigation support at a state facility.

Sivin & Miller
Suisman Shapiro
Updike, Kelly & Spellacy

Owners

- Aetna
- Elizabethtown Gas
- Fairfield Public Schools
- Foxwoods Resort Casino
- M&T Bank
- Seneca Niagara Casino & Hotel
- State of Connecticut
- Swig Equities
- University of Connecticut
- Wakefern Food Corporation

Design & Construction Professionals

- Engineering Management Group
- Fletcher Thompson
- Fusco Corporation
- Gilbane Building Company
- Kaestle Boos Associates
- Newman Architects
- Petra Construction Corporation
- Tai Soo Kim Partners
- The Lukmire Partnership
- URS Corporation

Our services for litigation and claim support include:

- Advisory consultation
- Claims mitigation
- Code and contract compliance investigation
- Constructability review
- Defense of professional conduct
- Design flaw and construction defect resolution
- Errors and omissions evaluation
- Expert testimony
- Forensic investigation



▲ Exterior investigation, rehabilitation, and expert witness services for an office complex.



▲ Litigation support relating to roof design and installation errors at a primary school.



▲ Defect evaluation, remediation, and expert witness services for a hotel parking garage.

Hoffmann Architects, Inc.
 2321 Whitney Avenue
 Hamden, CT 06518

ADDRESS SERVICE REQUESTED



(continued from page 6)

architect or engineer might perform contractual services, but do so in a way that fails to meet the degree of care ordinarily practiced in that location and discipline.

Because the standard of care is defined in a relative, rather than absolute, way (i.e. architects are compared with others in their profession and geographic area), it can be confusing, both for building owners and for design professionals. What's important to

understand is not so much the precise definition of the standard as used historically by courts, but the ways in which designers, consultants, contractors, owners, and developers might facilitate communication, improve accuracy, and assume shared responsibility for any risks. Through cooperative effort, the project team as a whole can shoulder the burden of blame for technologies that fail—and share the glory of successful innovation. ■

JOURNAL is a publication of Hoffmann Architects, Inc., specialists in the rehabilitation building exteriors. The firm's work focuses on existing structures, diagnosing and resolving problems within roofs, facades, windows, waterproofing materials, structural systems, plazas/terraces, parking garages, and historic and landmark structures. We also provide consulting services for new building construction, as well as litigation and claim support.

For address changes, free subscriptions, or information on the topics discussed in this issue, contact our Marketing Coordinator at 800-239-6665, news@hoffarch.com, or:

2321 Whitney Avenue
 Hamden, CT 06518
 203-239-6660

1040 Avenue of the Americas, Ste. 14C
 New York, NY 10018
 212-789-9915

2611 Jefferson Davis Highway, Ste. 200
 Arlington, VA 22202
 703-253-9800

www.hoffarch.com

Editor: Alison Hoffmann
 Production: Cari Tate



JOURNAL now offers AIA/CES Learning Units

Earn Health, Safety, Welfare and Sustainable Design (HSW/SD) continuing education credit for reading the JOURNAL. To learn more, visit www.hoffarch.com.