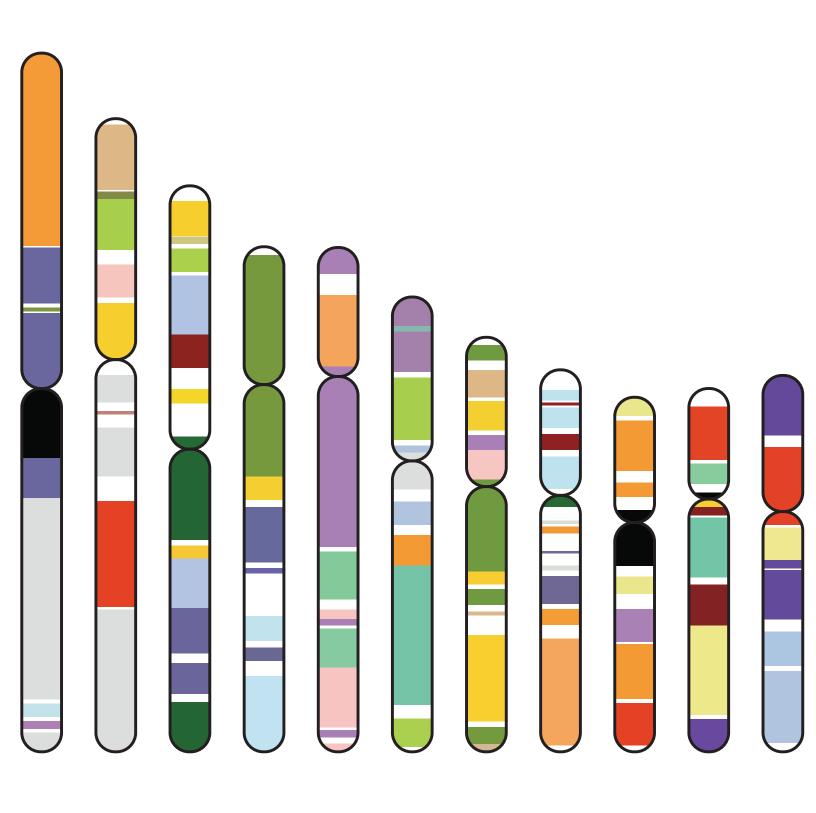
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# ARCHITECT'S PROFESSIONAL LIABILITY RISKS IN THE REALM OF GREEN BUILDINGS

Helena O'Connor, CAU-RJ, LEED AP BD+C, helena.oconnor@perkinswill.com

#### **ABSTRACT**

Buildings are defined as "green" when specific measures are incorporated to provide healthier environments for their users and mitigate their negative impact on the environment. The practice of green building has caused significant changes in the construction industry, exposing architects to new legal liabilities. The objective of this paper is to investigate, identify and clarify the understanding of architects' professional liability risks associated with the design and construction of green buildings and how to manage those risks. By discussing information and resources gathered from journal articles, books, standard contracts documents, and white papers, this paper analyzes how architects' duties are effected by green building and certification standards, the new considerations to the Standard of Care, issues and potential liability risks, and new contract language. After discussing each potential risk, this paper provides ideas on what architects should do to mitigate these possible risks. This paper's conclusions indicate that architects must understand their roles, responsibilities, and potential liability when participating in the design and construction of green buildings to protect themselves against potential losses while practicing innovation.

KEYWORDS: architects, green building, risk management, liability, LEED certification

### 1.0 INTRODUCTION

A green building is one that is designed, constructed, and operated to minimize its negative impact in the environment. The U.S. Environmental Protection Agency (EPA) has described green building as "the practice of increasing the efficiency with which buildings and their sites use and harvest energy, water, and materials; [while] protecting and restoring human health and the environment throughout the building life-cycle".

Since buildings in the United States are responsible for 72 percent of electricity consumption, 38 percent of CO2 emissions, 38.9 percent of primary energy use, 13.6 percent of potable water consumption, and generate 136 million tons of construction debris², architects, construction professionals, owners, and government officials are taking this issue seriously.

Based on numerous studies about climate change and advocacy for a cleaner world<sup>3</sup>, green buildings have emerged as a solution to reduce energy and water consumption, promote better indoor air quality, and divert construction waste from the landfills. In short, green construction has "become increasingly difficult

to avoid"<sup>4</sup>, and it is reasonable to assume that it is here to stay.

In 2000, the United States Green Building Council (US-GBC) developed the Leadership in Energy and Environmental Design (LEED) Rating System, which "provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions"<sup>5</sup>. LEED has become the most widely used green building rating system in the United States and worldwide, and "is mentioned in the specifications for 71 percent of projects valued at over \$50 million and 55 percent for all projects by value"<sup>6</sup>.

Federal government agencies, states, and cities have been large contributors to the industry shift towards green building, in part, by requiring new government-owned or funded projects to comply with green building standards and often LEED certification. "Increasingly some states and municipalities are mandating compliance with Green Building Standards, mostly LEED Certification, for private development", and many jurisdictions are offering incentives for sustainable proj-

ects. Examples of such incentives include expedited or reduced permitting fees, tax credits and rebates, and even refunds on LEED certification costs.

Green buildings are a driving force in the construction industry. It is estimated that the green construction market has created 2.4 million jobs between 2000 and 2008, and that number is projected to increase to over 7.9 million jobs by 20138.

### 2.0 ARCHITECTS' DUTIES

#### 2.1 Architect's Basic Services

The scope of an architect's basic services<sup>9</sup> is defined in the professional services agreement negotiated between Owner and Architect. The American Institute of Architects (AIA) B101-2007 Standard Form of Agreement is the most common industry standard contract form.

Delineating between basic and additional services can be challenging. As of 2007, under Basic Services the architect is required to review and comply with laws, codes and regulations, and "shall discuss with the Owner alternative approaches to design and construction of the Project, including the feasibility of incorporating environmentally responsible design approaches" 10. Because many jurisdictions have adopted green building codes, architects may not have a choice but to follow green principles or even pursue green certification as a requirement. Therefore, whether following jurisdiction requirements or satisfying owners' wishes to build green, architects providing green services should define more precisely the additional scope of work in an additional contract, as discussed below.

### 2.2 Architect's Additional Services for Sustainable Projects

On a sustainable project, "it is important to outline a clear scope of services in the Owner/Architect Agreement regarding the Architect's sustainable design duties and those to be undertaken by the owner and its consultants" <sup>11</sup>.

AIA has developed the AIA B214 – 2004 Architect's Services: LEED Certification, "to help clarify a design professional's scope of services with respect to green building projects" 12. Below is a summary of services to be provided by the architect under this contract:

Determine Owner's Sustainable Objective - Architect shall conduct a predesign workshop with the owner and consultants to discuss the owner's in-

- tended use, goals and sustainable objectives for the project, and if certification is desired.
- Architect will develop a Sustainability Plan, according to owner's goals and objectives, that should include all the targeted points.
- Define Sustainability Measures necessary to achieve owner's Sustainable Objectives and identify project participants who are to be responsible for achieving each of them.
- Architect will manage the LEED documentation and certification process, including preparing online documentation, registering the project to be certified and providing clarifications required by LEED design and construction reviews.
- Architect shall include Sustainability Measures in contract documents, drawings and specifications provided for the project.
- Architect shall provide assistance to Owner and Contractor during the bidding and contract administration phases regarding LEED requirements or substitutions.
- Architect shall prepare a final LEED certification report.

### 2.3 Compensation

Architects may work on projects seeking green building certification or on projects intended to follow sustainable principles but not pursue certification. In all cases, architects should consider establishing a limit of what is included in their additional sustainable services. They should also establish compensation guidelines for contingent services arising during the normal course of the project, <sup>13</sup> since sustainable services may require multiple reviews of sustainability plan, additional unexpected meetings, and additional clarification responses to the Certification Authority organization.

### 3.0 STANDARD OF CARE CONSIDERATIONS

### 3.1 Professional Standard of Care

The Standard of Reasonable Care is the minimum expected of architects by law and "the most widely and generally accepted 'baseline' for evaluating the adequacy of design professional performance" AlA B101 defines this Standard as "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" Compliance with the Standard of Care is subjectively

determined based on what a reasonable architect would or would not do under similar circumstances, and in a dispute, compliance or non-compliance could be decided in court. Therefore, any architect who is shown to have failed to exercise reasonable care may be held liable for professional negligence.

Architects must be familiar with the practices, codes, and regulations of the jurisdiction where the project is located and should avoid making changes to standard of care language. Even though it can be modified by contract or conduct, architects should stick to its minimum requirements, otherwise they increase their exposure to liability. Architect's professional liability insurance may not cover liability when contractual language used to define the standard of care imposes a duty of heightened performance upon the architect.

### 3.2 Changes to the Professional Standard of Care

As a result of construction industry shifts toward green building practices and government entities' moves toward more green design regulations, architects assume a greater level of expertise and responsibility, which may influence the standard of care. In 2007, AIA incorporated the "standard of care" in its contract documents "as the contractual 'benchmark' for professional performance and compliance" although the standard of care was always applicable at law as the basis of determining professional negligence in comparison to the applicable norm of professional practice.

An increasing number of architects are becoming LEED Accredited Professionals (LEED AP) to understand the green building process and to prove qualification in that area as markets shift and competition increases. The LEED AP credential "provides a standard for professionals participating in the design and construction phases of high-performance, healthful, durable, affordable and environmentally sound buildings"17. This designation could become a new baseline for the standard of care for a professional who participates in sustainable projects. "It is not difficult to imagine that a design professional, who qualifies as a LEED Accredited Professional and touts itself as a green design expert in marketing or other promotional materials would be held to a higher standard of care"18. However, this could be problematic because insurance companies have yet to catch up with market changes. Many policies still often exclude coverage if an architect holds himself to a higher standard than the prevailing one. "Specifically-required performance objectives or warranty obligations regarding green/sustainable issues...may...exceed the customarily governing negligence-based professional standard of care...as well as pose potentially significant insurability concerns due to warranty exclusions contained in professional liability insurance policies" 19.

It is unclear what the Courts will do to determine the standard of care in a green building case. "No case law has definitely resolved the appropriate standard of care for such projects, but through analysis of existing common law and approved strategies for creating contractual relationships, a likely standard for court treatment begins to emerge" Carrying the LEED AP designation may be the minimum expected of a "green" architect, and the years of experience working with green buildings could be a reasonable determinant factor when comparing architects in terms of the standard.

"Certainly, it is difficult to find a comparative 'ordinary' performance for evaluation...in the current age of rapid innovation and evolution...Where these revolutionary and innovative products, processes, and performance criteria are part of a project, the standard of care must necessarily exist and be definable, but it is *not* 'business as usual'"<sup>21</sup>. As the industry changes, so will the standard of care. Sustainable design will likely become a basic service in the future, and therefore, the standard of care will eventually evolve to include this as a baseline. As a result, insurance companies will have no choice but to include green design as a covered design practice, since the new "sustainable" standard of care will constitute the new accepted baseline by the construction industry.

# 4.0 POTENTIAL PROFESSIONAL LIABILITY RISKS AND MITIGATION

Conventional buildings are designed and constructed to follow minimum requirements of the adopted building codes. Green building architects may design projects that incorporate features which exceed these minimum requirements, reaching for techniques and materials that are not necessarily the least expensive or common. Instead, they look for approaches that mitigate negative impacts of construction on the environment, even if these solutions are relatively new to the market. By extending their design efforts beyond minimal compliance with code, architects "may expose themselves to a number of potential pitfalls, thereby increasing their exposure to liability"<sup>22</sup>.

Although the industry has not yet seen many legal cases involving green buildings, and courts have yet to establish precedent regarding green building claims, several construction and law professionals have been investigating risks specifically arising out of green con-

struction. Their analysis of potential claims is based on how existing theories utilized in legal claims in the conventional construction setting might apply to the green building setting<sup>23</sup>. Studies have suggested that most claims would be based on breach of contract, fraud, or negligence<sup>24</sup>.

The following are common issues and potential risks associated with the design and construction of green buildings that architects should pay attention to when participating in this area of practice. Recommendations on how to mitigate those risks are also discussed.

### 4.1 Communication

Risks will always exist in any project, conventional or green. "The greatest risk management tool is reaching understanding and clear communication between the architect, owner and contractor"<sup>25</sup>. When everyone clearly understands the risks associated with processes and materials in green building design, the risks in achieving (or not) green building certification and the operations and maintenance of green building systems, fewer claims will arise.

### 4.2 Client Expectations

Green buildings may result in benefits to the Owner, such as monetary incentives, lower operating costs, and improved marketability. However, there is "significant risk and liability exposure for the design professional arising from disappointed client" because "the opportunities and benefits associated with green building also result in increased expectations... These failed expectations will result in disputes, claims, and litigations" 27.

Architects must clearly explain project team participants' roles and responsibilities to the Owner, and the architect's role regarding the achievement of sustainable performance standards and objectives. They must also explain that the success of a green building depends upon many factors, such as systems and products performance, on Contractor's utilized means and methods, on the selection of materials and systems, and on Owner's building operation and maintenance. Architects should seek to explain reasonably foreseeable impacts to schedule and cost and be diligent in documenting this process<sup>28</sup>.

Even though "long-term costs for green construction may be less than for conventional buildings due to more efficient use of and more durable building materials" green buildings can cost more initially than conventional buildings and architects should fully explain these potentially increased costs to the Owner and

what he is getting in return<sup>30</sup>. For example, to maximize sustainability goals, more expensive materials and systems might be used and construction waste is often recycled<sup>31</sup>. Green building planning process is longer and requires the addition of new project participants, such as sustainability consultants, energy modelers and commissioning agent, and during operations it may require more specialized maintenance professionals<sup>32</sup>.

Regarding LEED certification, the budget should account for LEED credit requirements, such as paying for Green Power, sensors for indoor air monitoring, lighting sensors, thermal controls, or individual lighting controls. "Problems arise when there are unrealistic expectations and a lack of education with regards to the certification process on the part of the various parties to a project"<sup>33</sup>.

Architects should also clearly distinguish "building performance" from "building certification", and the limitations of each. Some owners may wish to incorporate sustainable measures into the project without seeking any green building certification, while others may wish to pursue certification, no matter what level the final performance may be.

All budget and post construction impacts, such as building operations and maintenance, should be discussed with the Owner. The architect must clarify "how those building systems are intended to be operated... and explain the impact on building use and occupancy"<sup>34</sup>. Owners must be clear about every area of the project that will be impacted and how to make an informed decision when balancing overall cost, schedule and the quality of the project.

### 4.3 Lack of Qualified Professionals

Accepting a green project without having qualified professionals who truly understand sustainable design methodologies may expose the firm to unnecessary liability. Architectural firms need to spend time training their architects in green design approaches and hire others who already have this kind of experience. If it is not possible for a firm to acquire or develop the applicable expertise, then they should consider not taking the project or hiring a sustainable design consultant to oversee and provide proper guidance in green design throughout the project design, construction and certification.

### 4.4 Marketing and Performance Promises

"Misleading or overstated claims of unverifiable benefits or performance may lead to claims of misrepresentation or fraud in the inducement from an end user

who materially relies on such statements"<sup>35</sup>. Architects should refrain from making promises about the level of certification a green building will achieve; the amount of money in energy, electricity or water Owner will save, or a higher quality of indoor air that boosts employee productivity. These are objectives of green buildings, but systems may need to be adjusted for green buildings to perform as planned. Marketing materials could also "give rise to implied warranties or potential claims of negligent misrepresentation when the project fails to satisfy expectations created by those materials"<sup>36</sup>.

# 4.5 Performance and LEED Certification Guarantees

Architect should refrain from adding contractual provisions such as warranties, guarantees, and assurances that a specific sustainable objective or a certain level of LEED certification will be achieved. When an architect agrees to "warrant" or "guarantee" a service, he may be unintentionally assuming a risk not covered under his professional liability insurance. Errors and Omissions (E&O) professional liability policies "typically excludes coverage for express warranties and guaranties" and liability assumed under contract other than that which would be imposed in the absence of the contract. Instead, architects should consider adding affirmative acknowledgement language such as "the Architect does not warrant or guarantee that the Project will be granted LEED Certification by the GBCI"38.

Green building certification is handled by a third party and relies on that organization's review and approval of project compliance with its requirements. On LEED projects, upon project documentation submitted online, a LEED review team will review all documentation provided. Some credits will be anticipated, some credits may require clarifications in order to be awarded, and other credits may be denied. Even though there are clear requirements on how to achieve LEED credits, some architects or engineers may interpret those credits in a different manner than LEED reviewers. As a result, certification may not be awarded or may be awarded at a lower level than expected. Therefore, the award of such certification is out of architects' control.

# 4.6 Loss of Tax Breaks or Other Market Incentives for Owners

Incentives can potentially become a source for claims. Architects should consider adding contract language addressing tax credits, such as: "If the Owner's program includes goals for qualifying for energy related tax

credits, deductions, incentives, etc., the Owner recognizes that qualifying for such goals is subject to certification or decisions by third parties over whom the Architect has no control. Therefore, the parties agree that the Architect shall use reasonable care in its design to achieve such goals but makes no warranty or guarantee regarding qualification"<sup>39</sup>.

### 4.7 LEED Submittal Templates

Information is uploaded into LEED online system through form templates that architects, and other team members, have to fill out and submit "complete" implying that all requirements for that credit have been satisfied. So, it could be interpreted that the architect completing a specific credit is attesting accuracy of certain green components or systems, which would not be covered under his E&O policy. Architects should make all parties agree in writing that "the architect's signature on a LEED submittal template is solely for the satisfaction of the LEED rating system and does not constitute any warranty or guarantee on behalf of the signatory" 40.

### 4.8 Commissioning Agent

In green buildings, the commissioning agent plays an important role as a quality assurance professional. He can prevent "a good design [from] being destroyed by poor installation…and assist in the development of the O&M manuals for the building management, as well as the training of the maintenance staff"<sup>41</sup>.

### 4.9 Indoor Air Quality Issues

Improving indoor air quality of buildings to protect the health of occupants is one of the main objectives of green buildings. However, systems need to be properly commissioned, operated and maintained by the Owner, in order to perform as designed. Architects should require that owners hire a commissioning agent and "ensure that the building's management staff are properly trained to operate and maintain the building"<sup>42</sup>.

### 4.10 New and Untested Products and Materials

The rapidly growing green building market is increasing demand for new materials to maximize building performance and green certification points. Because of such demand, new materials are sometimes being used without proper analysis of their efficacy and long term performance. This can be dangerous to architects because "most building materials are subjected to the Uniform Commercial Code's four-year limitation on product liability actions" while architects' statute of limitation usually runs from six to ten years.

To limit liability arising out of material selection, architects should discuss untested products with the owner and explain any possible impacts on the project, including that product failure can lead to project failure in achieving a desired sustainable certification or performance outcome. Language should be added to the contract addressing the issue of risks of new materials to protect architects from claims, such as "the Owner will render a decision [about untested materials, and] ... architect shall be permitted to rely on the manufacturers' or suppliers' representations and shall not be responsible for any failure of the Project to achieve the Sustainable Objective as a result of the use of such materials or equipment"44. After disclosing to the owner which materials are new and untested, architects should "obtain a sign-off from the owner acknowledging this fact or obtain a waiver of liability for the use of the new product"45.

Finally, architects can "allocate resources to evaluate new materials and technologies" or hire independent laboratories to test and evaluate material performance<sup>46</sup>. Since testing is usually paid by the Owner, he should be aware of these additional costs.

### 4.11 Design Changes

Design changes during construction may have a profound impact on green buildings, since they utilize interdependent systems and materials that are affected by the performance of each system and their relationships to one another. For example, a simple change in a glass type may affect energy performance and lighting calculations. This "simple" change may cost several LEED points, and could even endanger LEED Certification. Architects should be careful regarding design changes, analyze reasonably foreseeable impacts in LEED certification that those changes may cause, and inform the owner, who may prefer a different glass, but not at the cost of the LEED certification. In addition, "a careful architect should require that the Owner contractually assume the risk of a lower level of certification – or loss certification – when changes are made"47.

### 4.12 Specifications

Instead of promising a certain level of certification in the contract, "specifications can provide that certain building components shall be used such that the use of those components will satisfy the requirements for that certification level" 48. Before listing new materials and products in the specifications, the availability of delivery to certain localities should be confirmed in order to avoid project delays and change orders that could ad-

versely affect the achievement of certain LEED credits. In addition to Product Data and Shop Drawing submittals, LEED submittal requirements should be added to the specifications, so that contractors, subcontractors and suppliers provide such data continuously during the course of construction. Manufacturers' information stating LEED requirements compliance should be compiled by the project team and uploaded with LEED template forms to prove credit compliance. If project teams wait until project closeout, collecting this information could be difficult, thereby jeopardizing available credits. Information from manufacturers' data sheets are crucial to credit compliance, including recycled content of materials, location of product harvest and manufacture, VOC content of paints and adhesives, and location of construction waste disposal<sup>49</sup>. Architects should also consider including contract language stipulating that Certificates of Payment will only be authorized after receipt of LEED product information needed for project certification.

### 4.13 Contracts

Many issues arise out of misunderstandings about responsibilities which could be mitigated by utilizing precise contract language. The contracting parties should clearly define and address in their contract: scope of work, "green" terminology, building performance expectations, certification expectations, and the allocation of risks, especially for new untested materials<sup>50</sup>. The contract should also delineate responsibility for compliance with green building requirements, responsibility for being the project administrator for LEED certification (or other green certification program), risk and consequences for failure to achieve certification, and project end date<sup>51</sup>; tax credits, timeline and documentation requirements, liquidated damages, and tenant's benefits and obligations<sup>52</sup>. The contracting parties need to "become familiar with the incentives available in the locality... [and] need to be aware of local building requirements and the mandatory compliance with Green Building standards they can impose"53.

Architect "shall discuss with the Owner alternative approaches to design and construction of the Project, including the feasibility of incorporating environmentally responsible design approaches" 54. Architects should keep written records of these discussions with the Owner, including Owners' decisions regarding whether to apply environmentally friendly design and construction methods to the project. It is important to maintain written records because since contractual duties may include a "discussion" regarding green design, or "con-

sideration" of green alternatives, and failure to comply with these duties may constitute a breach of contract<sup>55</sup>.

### 4.14 Substantial Completion

The date of Substantial Completion is when the work is "sufficiently complete in accordance with the contract documents so that the owner can occupy or utilize the work for its intended use" 56. This date will be affected by the flush-out requirement on LEED credit IAQ 3.257. Therefore, architects need to be aware of and inform the Owner about this limitation. Certification will be awarded after construction has ended and project has been occupied by the Owner, frequently several months thereafter. This delay applies especially to projects pursuing credits such as Measurement and Verification 58 and Enhanced Commissioning 59, where building will be assessed for its performance to comply with LEED credits after occupancy.

### 4.15 Consequential Damages

The agreement between owner and contractor, AIA A201-2007 General Conditions of the Contract for Construction, defines consequential damage as "damages incurred by the owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the service of such persons" Since the agreement between Owner and Architect, AIA B101-2007, does not provide a definition, "the management of this risk should be contractually accomplished through a mutual consequential damage disclaimer or waiver provision" in order to mitigate these unclear or unknown risks related to green buildings.

Consequential damages can be applicable under common law and may include loss of profits or underlying asset value, failure to qualify for a financial incentive or tax credits, failure to achieve certification, loss in worker productivity, or even lawsuit from tenants who leased spaces under green building promises<sup>62</sup>. Consequential damages "are not the direct byproduct of one party's breach, but rather those that 'flow' from the breach"63. However, in some cases it could be difficult to allocate liability for consequential damages in a green building case because more than one party could be responsible for failure to achieve a certain goal, and certain allegations such as loss in worker productivity could be difficult to prove. A waiver of consequential damages should be required in any design professional services prime contract, regardless if it includes "green design" duties or not.

### 4.16 Limiting Liability

Architects should include a provision limiting the maximum amount of damages owed if a claim arises. This amount can be the "available limits of its professional liability insurance policy" or "the extent of the design professional's fee" Limitations of liability may be enforceable (depending upon applicable law), but should always be clearly identified and set forth so that there is no ambiguity as to the intent of the parties.

### 4.17 Insurance Coverage

E&O policies cover claims related to bodily injury, physical damage to property, and claims for economic loss. Therefore, services rendered under AIA B214-2004 may not be covered under these policies, exposing architects to additional uninsured risks when providing LEED Certification. Architects should always confirm with their insurance carrier if these additional services are covered under their policies or consider adding a clause to the AIA contracts limiting "the amount of damages recoverable from the architect to the amount of compensation paid to the architect for services rendered"65. Coverage for failure to achieve LEED certification should also be confirmed. This issue is very important because many jurisdictions are adopting green standards and certification as a requirement, so failure to achieve certification might constitute a breach of contract and the architect could be liable to the owner<sup>66</sup>. It is unclear if architects who are only providing certification consulting services are covered by insurance if a project fails to achieve certification<sup>67</sup>.

Basically, parties should seek to obtain green building related coverage wherever available. "As the green building market develops, insurers are continuing to introduce new products and it appears that appropriate insurance protection will become increasingly available on the commercial market" 68.

### 5.0 LEGAL CASES

The first litigation case involving green buildings, *Shaw Development v. Southern Builders*<sup>69</sup>, related to the loss of a green building tax credit of US \$635,000 on a \$7.5 million project. The condominium project lost the tax credit because the Contractor failed to achieve the required LEED certification level and finished the project nine months later than scheduled, disqualifying the Owner from receiving the tax credit. This case was settled, preventing the Court from establishing a precedent.

Recently, in *Bain v. Vertex Architects*, the home owner filed a lawsuit against the architect for failing to achieve LEED certification<sup>70</sup>. This case has not been resolved yet.

In *Gidumal v. Site 16/17 Development*, condo owners of the Riverhouse condominium development in New York brought a lawsuit against the developer, alleging fraud and misrepresentation since, among other claims, the building's heating system did not perform as promised<sup>71</sup>. This case has not been resolved yet.

# 6.0 CONTRACT RESOURCES FOR A GREEN PROJECT

AIA B101-2007 "does little to assist in allocating the liability risks" and "did not solve the innovative evolutions within the design and construction industry" Therefore, the AIA recently developed AIA 503 – 2011, Guide for Sustainable Projects, which provides extensive model contract language that can be added to other construction contracts. It is a valuable resource that provides a thorough overview of the green building process. This document also defines Sustainable Objectives, Sustainable Measure, Sustainability Plan, Sustainability Certification, Documentation for Certification and Certifying Authority.

AIA B214-2004 is a standard contract for architect's services performing LEED certification. It defines the scope of work during all phases of design and construction. However, it does not address failure to achieve LEED certification, so contracting parties should add language to their contract "specifying consequences for the failure to achieve LEED Certification"<sup>74</sup>.

ConsensusDOCS is a series of contracts also widely used in the construction industry. One contract is the 310 Green Building Addendum, which address participants' roles and responsibilities, scope of work, risks, liabilities, and defines a Green Building Facilitator, who will be in charge of green building certification, including coordination of all documents for submission.

Many law firms have developed their own analysis of architects' liability risks and continuously offer ideas on how to mitigate those risks through conferences and private consultations. For example, the article "Green and Sustainable Design Part II: Contractual and Risk Management Recommendations for Design Professionals to Manage Risk and Minimize the Availability of Professional Liability Insurance" provides samples of contract language, such as waiver of consequential damages, waiver of subrogation, limitation of liability,

and other aspects addressing different legal issues.

#### 7.0 CONCLUSION

In this rapidly changing market for green buildings, architects may be exposed to additional risks and legal liability. Before agreeing to participate in a green building project, they must gain a clear understanding about green building strategies and approaches, and even consider partnering with more experienced professionals in that field when appropriate.

Although most risks analyzed are currently hypothetical and Courts have yet to provide precedent for green building claims, architects should be diligent, analyze reasonably foreseeable potential risks, and take reasonable precautions to minimize exposure to losses.

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