

# Claims Study

## LIVING WITH HABITABILITY CLAIMS

According to our statistics from 1999 - 2003, all forms of habitability projects represented just over 16 percent of the income reported by CNA/Schinnerer policyholders. But these projects represented *42 percent* of all claims.

Claims involving habitability projects involve all design disciplines, including surveyors, engineers, and architects. Below are some figures and examples of the types of claims we have paid on behalf of our policyholders.

## **Single-Family Residential Projects**

Whether houses or townhouses, this project type is of great risk for smaller design firms. While the average paid claim was roughly \$75,000, the top quartile of claims cost an average of more than \$210,000. The top ten percent of claims resulted in payments averaging more than \$850,000. Smaller design firms often think that because of their lesser fees on "smaller" scope projects, they are immune to major claims. But of the top 20 paid claims, eight were made on behalf of firms in our small firm program. Those payments averaged almost \$750,000.

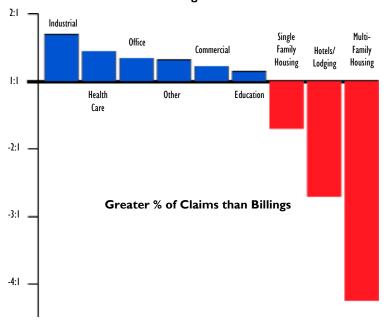
## **Case Study**

To save money, the client limited the number of site visits the architect was allowed to conduct for a "high-end" house. The client and interior designer made modifications throughout the house, including changes to a third floor fireplace. The fireplace was constructed incorrectly with brick holes venting heat into the house instead of up the chimney as originally designed. In addition, the client added built-in wooden bookcases adjacent to the brick and removed a concrete subfloor, substituting a marble floor over wood. The architect was unaware of these changes since they were not obvious during his limited site visits.

Five years after completion, the house was completely destroyed by a fire that was traced to the fireplace. Damages exceeded \$2 million. Although all the parties agreed that the fire was directly attributable to the changes made by the client and poor construction, the claim against the architect was based upon negligent contract administration services. The architect's poor file documentation made it impossible to defend against allegations regarding the agreed upon level of construction services. After several mediation attempts, the other defendants settled for \$1.2 million, leaving the architect as the only defendant in a state with joint and several liability. If the architect were later found to have

### CLAIMS VS. BILLINGS

#### Greater % of Billings than Claims



Comparing the Percentages — One way to look at projects as being profitable is to look at the percentage of claims generated by the project type compared to the percentage of reported billings for that project type. Profitable projects have a ratio where the percentage of billings is greater than the percentage of claims. Unprofitable projects have a ratio where the percentage of claims exceeds the percentage of billings.

any fault, there would have been exposure for the entire amount of any award. A settlement was finally reached with a payment on behalf of the architect of \$400,000 plus \$50,000 for expenses.

## **Multi-Family Residential Projects**

These projects are the prime example of where the risks faced by design firms greatly outweigh the fees. Claims from multi-family residential projects, while always a problem area in terms of professional liability, now threaten to drive insurance rates skyward and more firms out of business.

Reported billings from multi-family residential projects represented less than 4.5 percent of the total reported income from our policyholders. Claims from these projects, however, represented almost 20 percent of all claims. The ratio of the percentage of claims to the percentage of billings—over four-to-one—is astounding. And the risk is not just confined to architects and MEP firms. From surveyors and landscape architects to structural and civil engineers, multi-family residential projects are high-risk commissions.

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#### Case Study

A surveyor discovered inaccuracies on FEMA maps that showed that significant portions of a site were within the 100-year flood plain. FEMA agreed to amend their maps after conducting their own investigation, which subsequently removed the subdivision from the 100-year flood plain. After the homes were built, the area flooded. Thirteen plaintiffs alleged that there was substantial information available to alert the surveyor of errors on FEMA's amended maps. They argued that the surveyor should have recommended an appropriate flood study evaluation and analysis in accordance with the customary standard of care. The \$1.9 million claim was primarily for the diminished value of the homes. The claim was settled on behalf of the surveyor for \$438,000 with an additional \$153,000 in expenses.

Another claim involved a small civil engineering firm that provided site design services for a development of upscale singlefamily residences. The site was considered sensitive as a portion of the area bordered a creek and was prone to flooding. To accommodate this sensitivity, houses in certain locations were set back from the creek, especially those located at bends in the creek bed. Both the geologist and geotechnical engineer retained by the developer agreed that the design would not cause erosion.

Several years after construction, extremely heavy rain over a two-year period resulted in erosion of the creek bank. The homeowners alleged that it would cost \$1.3 million to fix the problem and prevent further erosion. While the civil engineer had minimal exposure, the geologist and geotechnical engineer had no insurance and the developer had a gap in coverage. In addition, the civil engineer had "touched" the geologist's work product by redrafting the geologist's letter to the county. The civil engineer paid more than \$500,000 in indemnity costs plus \$125,000 in expenses.

#### **Condominiums**

Condominium projects are the most severe project type from the standpoint of claims. Condo projects represented the absolute worst project type. Even firms experienced in condo design, those that worked with reputable developers on projects where construction quality was not compromised, suffered. Although most claims were against architects, there were many structural and mechanical engineering claims. The average paid condo claim was about \$190,000, with the top ten percent averaging more than \$820,000. The top 25 percent averaged about \$540,000 in defense and indemnity costs. As with single-family residential claims, small firms were hit especially hard by condo claims. Of the top 25 paid claims, seven were on behalf of firms in our small firm program. These seven claims averaged close to \$670,000.

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#### Case Study

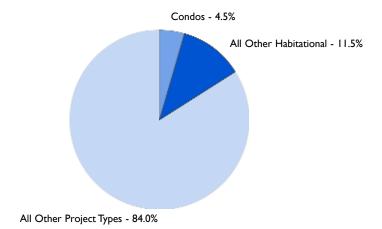
A mid-sized architectural firm provided design for an upscale high-rise condominium project. The firm's contract was for design and shop drawing review, but no construction site visits. Soon after the building was occupied, water intrusion (one of the most common

claims on condo projects) was discovered—primarily through windows and balcony doors. Experts retained by the condo association identified a number of design and construction deficiencies and estimated damages at \$30-45 million. Allegations against the architect involved approval of EIFS, balcony slope issues, and negligent approval of shop drawings. The architect's exposure was significant in view of the size of the claim and the low policy limits of several co-defendants. The claim settled after several mediation attempts, with \$1.7 million being paid by the insurance carrier on behalf of the architect with \$450,000 in expenses.

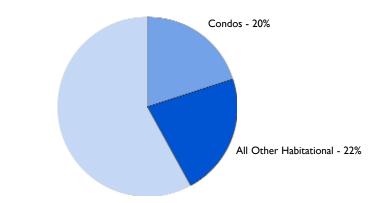
A large architect/engineering (A/E) firm provided design and construction contract administration services for a high-rise condo. Due to the complexity of the project, the A/E firm had a representative on-site on a daily basis. Almost ten years after construction, the brick masonry veneer exterior wall system began spalling, cracking, moving, and falling off in some areas. Repair costs were estimated at \$8-13 million. While it was determined that damages resulted because the contractors had not followed the plans and specifications, the A/E's on-site presence provided exposure for the A/E firm. With projected costs of \$500,000 to defend the claim through trial, the A/E's insurance company agreed to settle the claim for \$2 million. Expenses of \$265,000 were also paid.

An engineer performed a "due diligence" evaluation of a condo project, including the parking garage. The scope was limited to noninvasive, visual inspection only. The same engineer had performed a more thorough inspection for the prior owner several years earlier, finding significant problems with the post-tensioning cables in the garage. Repair costs at that time had been estimated at almost \$2 million. During the visual inspection, the engineer noted freshly painted walls with no signs of cracking. The building engineer assured the client's engineer that necessary repairs had been done. There was nothing to indicate that the recommended repairs were not undertaken. After further problems developed, the engineer's client for the "due diligence" inspection filed suit, alleging \$8 million in damages. Although liability was minimal, the danger of judgment in excess of the \$1 million policy limit already eroded by expenses and a previous claim convinced the engineer to agree to a settlement of \$800,000 with \$60,000 in expenses.

## PERCENTAGE OF FEES



## PERCENTAGE OF CLAIMS



All Other Project Types - 58%

#### **Hotels and Motels**

Although temporary habitation projects do not have the same issues of constant occupation and emotional attachment of permanent residences, they are still risk-prone projects. Structural and mechanical engineers are especially at risk. Over half of the top 25 claims were paid on behalf of engineers and these averaged more than \$615,000. While the average paid claim was roughly \$220,000, the top ten percent cost more than \$850,000 each. The top quartile payment for claims was above \$580,000.

While the average paid claim for hotels was roughly \$220,000, the top ten percent cost more than \$850,000 each.

## **Case Study**

A structural engineer was retained to provide design and limited construction contract administration services for a small hotel. A local engineer was to provide "threshold site observation" and the county was to provide regular on-site inspections. When the project was 20 percent complete, the design professionals realized that there had been no inspections performed by the county. The county inspector was then called. The inspector discovered a discrepancy between the permit set of plans and the "as built" construction. The project was stopped while the contractor arranged to have the plans revised by the structural engineer.

During a subsequent inspection, the county inspector concluded that the shear wall design was deficient and that lateral stress calculations were of concern, resulting in the project being put on hold again. The contractor eventually filed a \$1.5 million claim for delays and extra costs, alleging that the design was incomplete and inadequate for purposes of construction. There were also allegations of failure to account for wind pressure in the design of the foundation and incorrect calculations regarding roof trusses. The engineer settled for \$595,000 and the architect contributed \$105,000. Legal expenses totaled \$84,000.

The largest claim relating to a hotel involved an architectural firm retained to provide design and construction contract administration services on an 850-room hotel. Three years after completion of construction, an advocacy group for the disabled filed suit against the hotel, alleging that the door openings to the bathrooms in more than 800 rooms did not meet ADA mandated standards. The bathrooms had been designed with a 28-inch wide door between the sink area and the toilet/bath area. The designers interpreted the 32-inch wide code as applying to entry doors, not the private doors within a room. The courts agreed with the plaintiffs and ordered that the doors be widened. The client's claim against the architect included \$1.5 million for the costs of remediation plus attorney fees, fines, and penalties. The claim settled with the expenditure of the insured's \$250,000 deductible for defense and indemnity costs. The insurance carrier paid \$935,000 in indemnity and an additional \$4,000 for expenses.

#### The Issue of Mold

Lastly, no summary of habitability projects

would be complete without a claim involving mold. Mold claims against design professionals insured in the CNA/Schinnerer program have remained relatively flat. At present, less than two percent of our total book of claims are pure mold claims, meaning that property damage and bodily injury due to mold exposure are the primary allegations.

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## **Case Study**

An architect was retained to provide design and construction contract administration services for the renovation of an historic hotel. Shortly after completion, a problem developed with condensation within the walls. Mold and mildew were discovered in more than half the rooms. An independent expert concluded that poor construction and the mechanical engineer's design caused the problems. The architect had vicarious liability for the mechanical subconsultant as well as independent liability for failure to detect the construction defects. The client, with \$40 million in yearly revenues at stake, wanted remediation performed on a fast-track basis before an increase in mold might force closure of the hotel. If the hotel closed, the \$2.5 million remediation damages could have increased to tens of millions of dollars for lost revenues and diminution in value due to the negative publicity. The claim closed with a payment on behalf of the architect of \$950,000 plus \$170,000 in expenses. The mechanical engineer and the contractor also contributed equal amounts to the settlement.

For more information on mold claims, please *Claims: A Symptom of Mold* at www.PlanetRiskManagement.com/claims.html.

## Risk Management Guidance

Habitability projects represent a significant amount of service opportunities for CNA/Schinnerer policyholders. They also represent an increased source of claims. Although there are no magic bullets to prevent these claims, here are some suggestions to help limit these exposures.

## **Habitational Project Checklist**

- Select clients based upon their experience, ties to the community, financial strength, and emphasis on quality in design and construction.
- Select projects that have a realistic budget and time frame, especially in relation to their degree of complexity of design and construction. Take into account the contractor selection process.
- Select subconsultants who are experienced and adequately insured.
- ✓ Be wary of providing limited or no construction contract administration services.
- ✔ Be proactive on maintenance issues. This is especially important on condominium projects. Try to convince the developer to establish a contingency fund for testing, maintenance, and repairs. Arrange to be put on retainer to work with the homeowners' association. Offer to prepare a maintenance manual as part of your scope of services. Have your client write into the by-laws of the association that required maintenance will be the responsibility of the homeowners.
- Include a mediation clause in your contract. In the case of condominiums, ensure that a mediation clause is part of any sale, binding all future homeowners to agree to mediation prior to litigation.
- Review or have input on promotional material.
- ✓ As with all projects, pay appropriate attention to the quality of the design, continuously manage the expectations of your clients through timely and consistent communication, and have a systematic, objective documentation process in place to document all relevant activity.
- Use professional services agreements that fairly allocate risks to the party in the best position to manage those risks.

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