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# **Survey of Insurance Costs for Multifamily Buildings Constructed with Wood-frame and Concrete**

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# Survey of Insurance Costs for Multifamily Buildings Constructed with Wood-frame and Concrete

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## Executive Summary

The objective of this study was to collect insurance premium quotes for builder’s risk insurance (during construction) and commercial property insurance (during occupancy) for a Reference Building built using combustible construction (wood-frame) and non-combustible construction (concrete) in five Reference Cities to estimate the difference in insurance premiums for these types of construction. The Reference Building is a 100,000-square-foot, 4-story apartment building with 15 one-bedroom apartments and 8 two-bedroom apartments per floor. The Reference Cities are Edgewater, NJ; Towson, MD; Orlando, FL; Dallas/Fort Worth, TX and Los Angeles.

Insurance rates are quoted as dollars of annual premium per \$100 of estimated building replacement value. The rates varied widely, depending mostly on local geographic risk factors. Different regions of the country have various levels of risk from common hazards and some disadvantage one material more than the other.

All quotes showed the concrete building less costly to insure than the wood-frame building. For builder’s risk insurance, the greatest difference found in the quoted cost of insurance at any location was 72% less for the concrete building and the smallest was 22% less. For commercial property insurance, the greatest and smallest differences found were 65% and 14% less, respectively. The summary of results is shown in Figures 1 and 2.

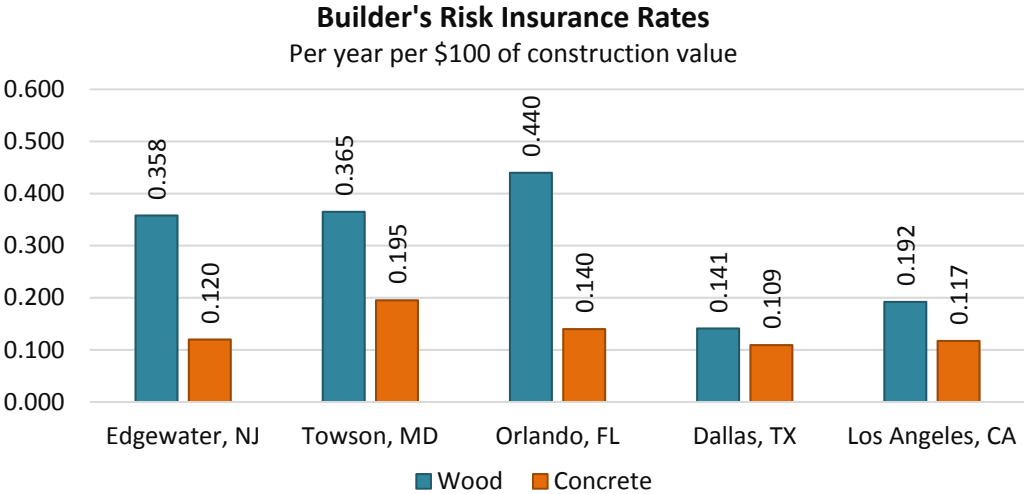
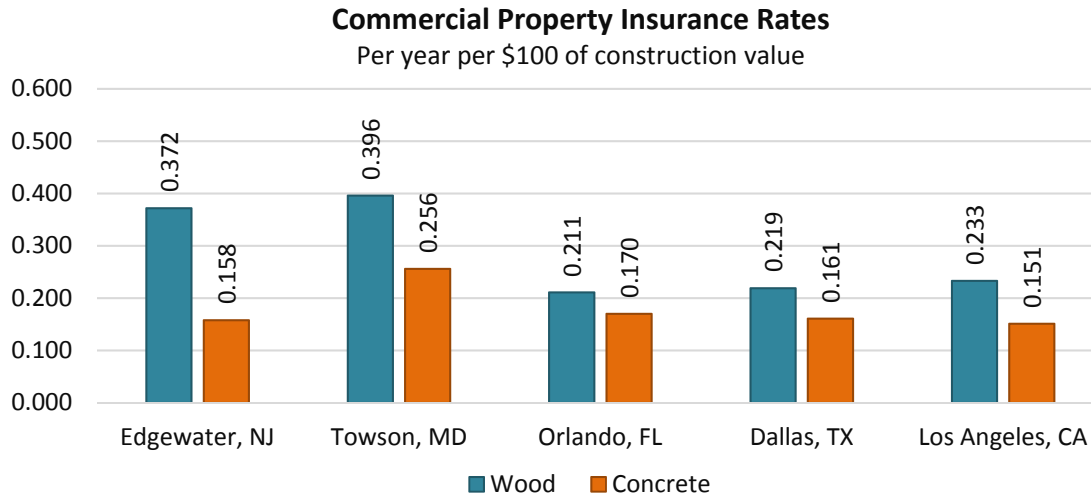


Figure 1. The average quotes for builder’s risk insurance for the Reference Building in five Reference Cities



**Figure 2. The average quotes for commercial property insurance for the Reference Building in five Reference Cities**

In practice, final insurance rates are frequently adjusted for strategic business reasons. This adds unpredictability to the rates charged, since they are influenced by the business goals of the insurer, not solely by the characteristics of the building and the relevant risks. For example, many insurers will set rates somewhat lower for regular customers or types of buildings that they have decided to pursue as a matter of business strategy. This study implicitly assumed no such strategic adjustments to rates. Agents were asked to estimate premiums based solely on the construction material of each building and the mathematics of risk in the local area.

The investigators sought insurance agents to participate largely through chains of referrals. These chains started with individuals with whom they already had a relationship, including business professionals local to the target cities and insurance industry executives. Interviews covered general procedures used in setting building insurance rates and quotes for the Reference Building in both wood-frame and concrete.

In each area, for each type of insurance and each construction material, the investigators secured quotes from two different insurance agents. The pairs of quotes are intended to serve as a check on the reliability of the estimated savings found for buildings constructed with concrete. With few exceptions, the percentage savings across different insurers were within 10 percentage points of one another.

In the course of the interviews, some agents volunteered their views on the future of insurance rates and practices for different building materials. They suggested that the gap between rates for wood-frame and concrete is likely to grow in the future and that a growing number of insurers are declining to serve as sole insurer for wood-frame apartment buildings. Additionally, insurers of such buildings are increasingly requiring that the insured take extra measures to protect against loss and especially fire loss.

## **Introduction**

Multifamily residential buildings are built using a variety of construction types, methods and materials. Developers and building owners of multifamily buildings must insure these buildings during construction (builder's risk insurance) and during occupancy (commercial property insurance). The objective of this research is to determine whether there is a difference in the cost of insuring these buildings depending on the construction type, method and materials used to build them.

Historically building code classification of construction type is based on the combustibility of the construction materials used. Because combustible construction carries higher risk of fire, wind, water damage, etc., than non-combustible construction types, it is suspected that buildings built using combustible materials will cost more to insure than will those built with non-combustible materials.

There are many risks to property and occupants of multifamily residential buildings including fire, water intrusion, extreme weather and other natural disasters. Consequently, with the rising cost of construction, reduction of these risks has been a significant goal for developers, achieved through property insurance to limit their exposure. However, there is a lack of reliable, market-specific insurance cost data to allow developers to make informed decisions about the construction type, methodology and materials they use for multifamily residential projects to minimize risk and the cost of insurance.

The objective of this study is to investigate insurance rates for buildings built with wood-frame and concrete to determine whether there is any difference in insurance rates. To accomplish this, quotes for insurance rates and premiums for builder's risk insurance and commercial property insurance were gathered for a Reference Building built using combustible construction (wood-frame) and non-combustible construction (concrete) in five Reference Cities.

## **Definitions**

### **Multifamily Residential**

Multifamily residential includes traditional apartment buildings, condominium buildings, hotels, student housing and elderly housing.

### **Combustible Construction**

Wood-framed construction including wood stud wall framing with floors built with dimensioned lumber or engineered wood products meeting building code requirements for Type V construction.

### **Non-combustible Construction**

Concrete and/or masonry construction including cast-in-place concrete, precast concrete, insulated concrete forms and load-bearing concrete masonry meeting building code requirements for Type I, II or III construction.

## Reference Building

The Reference Building is a 4-story multifamily residential (apartment building) structure encompassing approximately 25,000 gross square feet per floor for total area of 100,000 gross square feet. The Reference Building comprises 15 one-bedroom apartments and 8 two-bedroom apartments per floor. See Figures 3, 4 and 5 for drawings of the Reference Building including building elevation, floor plans and wall sections.

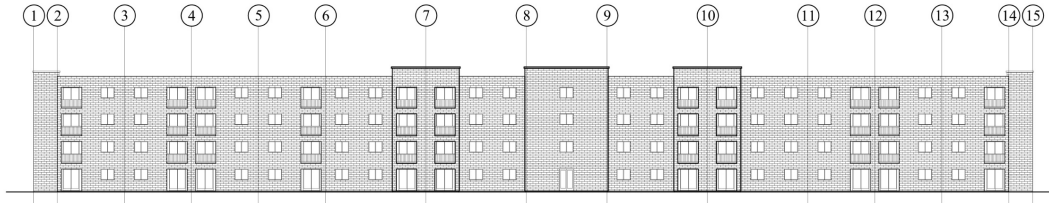


Figure 3: Reference Building elevation

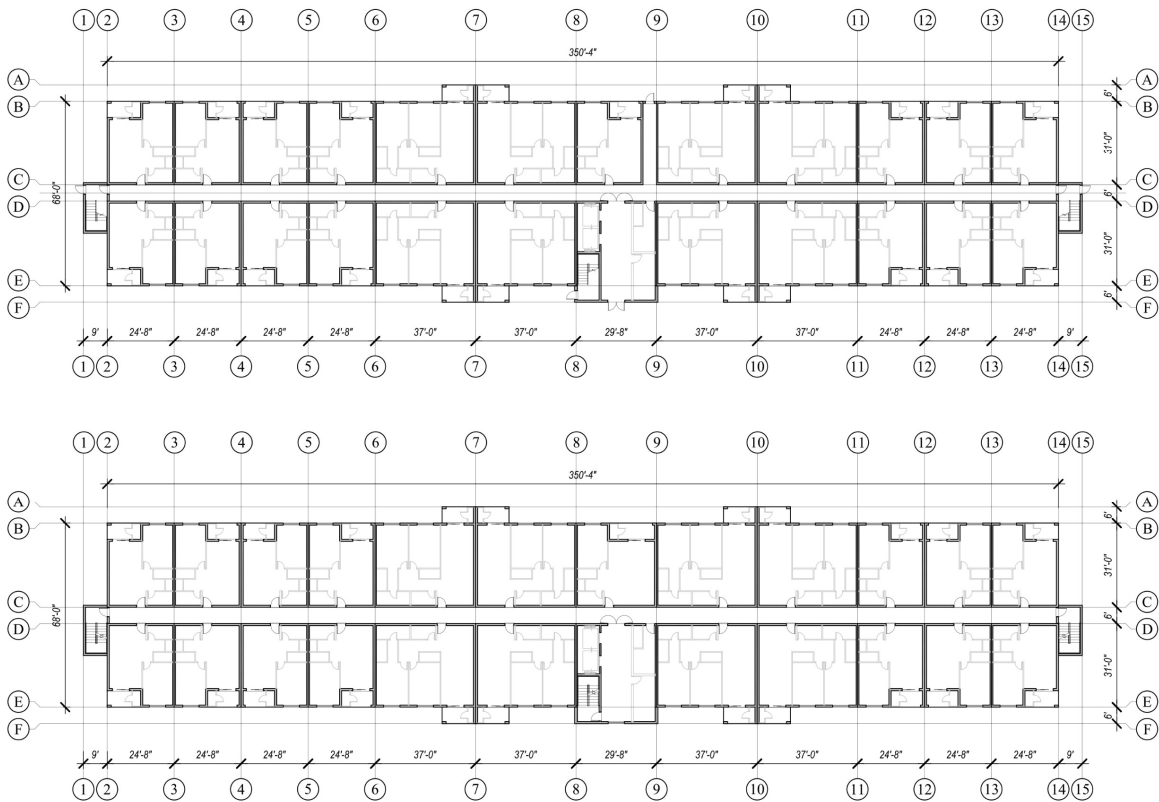
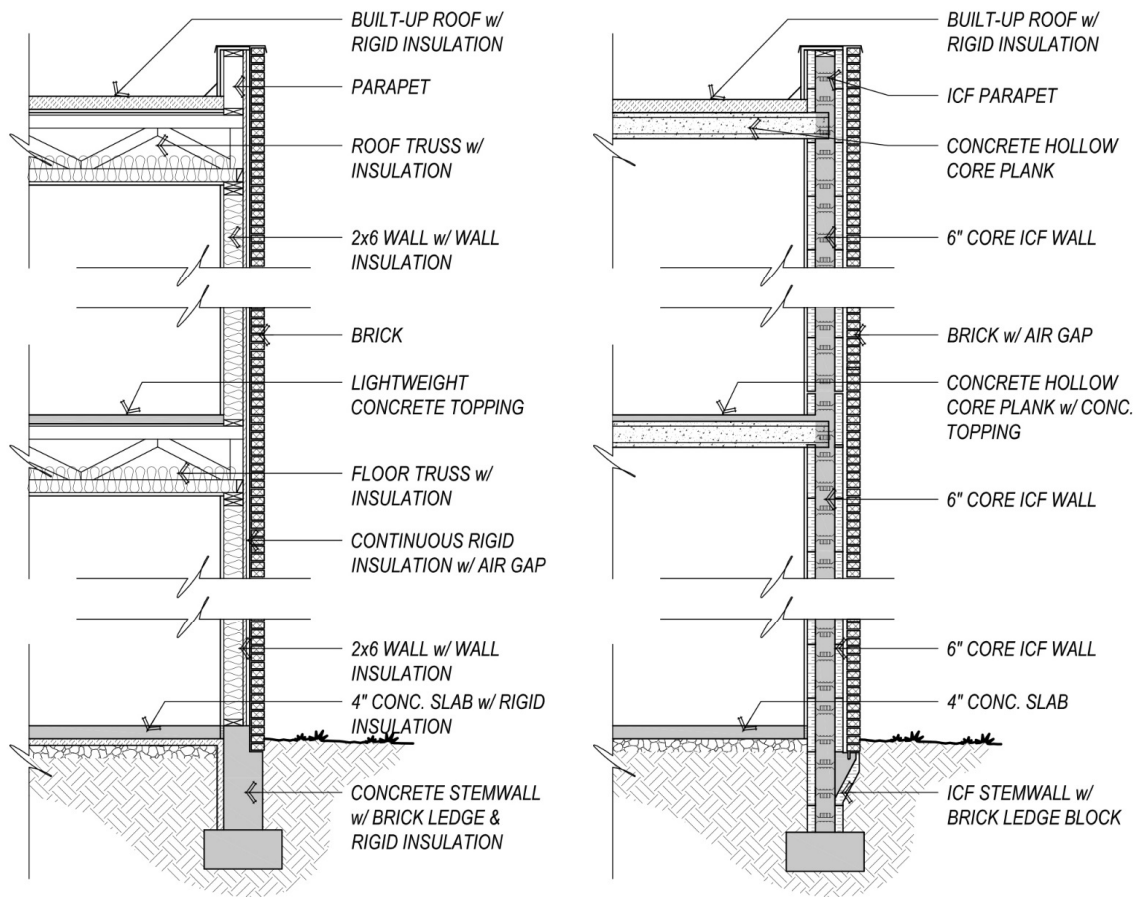


Figure 4: Reference Building floor plans



**WOOD-FRAME**

**CONCRETE**

**Figure 5: Reference Building wall sections**

## **Reference Cities**

The Reference Cities were selected to encompass locations that are subject to different hazards to capture differences in insurance rates in different regions of the country. Reference Cities are:

- Edgewater, NJ
- Towson, MD
- Orlando, FL
- Dallas/Fort Worth, TX
- Los Angeles

## **Methodology for Gathering Insurance Rate Information**

The investigators sought insurance quotes from insurance agents opportunistically. For each Reference City they asked locals with whom they have had prior relationships for referrals to agents who handle multifamily building insurance. They simultaneously asked insurance industry executives they had a relationship with for referrals to agents in the target locations. If these methods failed to identify enough candidates, they contacted agents listed in a directory with a potential connection to the investigators or simply called appropriate local agencies cold and asked for someone who might be willing to contribute to a research study.

Each interview moved from the general to the specific. First came questions about how building insurance rates are set in general. Then came questions about how the structural building material influences rates and finally came the request for specific insurance quotes for the Reference Building.

Some interviewees ultimately would not or could not provide insurance rate quotes. In these cases, the investigators sought another local agent to provide quotes.

## **Reference Building**

The investigators instructed the agents to provide rate quotes for a four-story apartment building with 15 one-bedroom apartments and 8 two-bedroom apartments occupying 25,000 square feet of floor space on each floor, for a total of 92 apartments and 100,000 square feet of floor space.

Whenever questions of building details other than materials arose, they instructed the agents to assume whatever is most common local practice. However, even with this approach the interviewees felt they needed guidance in some specifics. The first of these was whether one should assume that the buildings would be outfitted with fire-suppression sprinklers. Agents were told to assume that the Reference Building was indeed so outfitted, since modern building codes would require them.

The other questions of building construction arose in Florida. It appears that in Florida most multistory “wood” buildings are built with a first floor of concrete, with the higher stories constructed with wood-frame. The investigators therefore told all agents in Florida to assume this configuration. This type of



construction is typically called podium construction. In some cases, such as Florida, it may be standard practice to build the bottom floor with concrete. In other cases, in Florida or otherwise the lower floor is a different occupancy (retail, office, etc.), which would require non-combustible construction in the building code and the upper floors (residential) for which the code permits combustible construction.

As a separate matter, agents asked whether they should assume that the roof of the concrete building would be concrete or wood. The investigators told them to assume concrete.

About half of the agents interviewed created a new set of quotes specifically for this exercise, assuming the building as described. The other half adapted previous quotes. Typically, this meant taking the quotes made for the most similar recent building on which they prepared a policy and adjusting them to best fit the Reference Building.

### **Type of Insurance**

In a few cases one of the sets of quotes for builder's risk insurance and one of the sets of quotes for commercial property insurance in a city came from the same insurance agency. However, some firms do not provide both types of insurance. In these cases, quotes for builder's risk insurance came from one company and quotes for commercial property insurance from another.

### **Type of Material**

For any one type of insurance in any one location, the quote for the wood-frame and concrete versions of the building came from the same agent in the same insurance firm. For example, commercial property quotes in Edgewater for both the wood and concrete versions of the building came from Ms. Jones at ABC Corporation. The investigators considered this necessary to control for all factors other than material: assumptions of risk characteristics, any minor details of building construction, precise location, corporate policies, etc. The agents were told to assume no differences across the quotes except for the structural material of the building.

### **Metropolitan Area**

In all cases where the agents raised the question, they were told to assume the same physical location for the building for all quotes. It was also to be within the metropolitan area (Reference City) stated or as close as possible.

### **Second Quotes**

The investigators sought two quotes in each area from different agents at two different agencies. For example, in Los Angeles one of the quotes for builder's risk insurance might come from DEF Corporation and the other from GHI Corporation.

## The Process of Developing Building Insurance Quotes

Multiple parties are involved in the determination of both builder's risk insurance and commercial property insurance premiums. Industry data warehouse companies supply extensive statistics on historical damage and insurance payouts for all types of buildings. Analysts insert these data into mathematical models to produce recommended insurance rates for specific properties. They provide these rates to underwriters who may adjust them and have final say in the rate to quote for a building. The underwriters may add strategic business factors and personal judgment from experience into their determination of the final rate.

The insurance rates are most often expressed as a number of dollars per year per \$100 of building replacement cost. This permits rapid recalculation of the total premium as the estimated cost of the building changes. The total premiums are, unless stated otherwise, annual amounts.

Although the replacement cost of a building may vary from the original construction cost, the two figures are typically close. It is common to estimate the total annual insurance premium by multiplying the underwriter's insurance rate by the construction cost.

### Recommended Building Insurance Rates

Recommended building insurance rates are calculated by analysts based on the risk and probable amount of damage from various building perils such as fire, wind and water. Other hazards such as earthquakes, mold and acts of war are not insurable (see Commercial Property Insurance section). Both the risk and probable amount of damage from any peril vary per the risk characteristics of the specific building under consideration. Risk characteristics might include factors such as the building materials used and the proximity and quality of local fire protection, for example. The set of risk characteristics considered can be large and somewhat different from insurer to insurer.

Data on risks and damage amounts are provided by separate service companies that collect and consolidate data from the industry, then sell it to insurers. The insurer's analysts use these data to create a model of the total insurance premium. These models are typically some variant on the form:

$$\text{RATE} = \text{COI} + \text{FIRE} + \text{WIND} + \text{WATER} + \text{THEFT} + \dots$$

where:

**RATE** is the recommended insurance rate for the building, usually expressed as dollars of premium per hundred (or sometimes thousand or ten thousand) dollars of total estimated replacement cost of the building.

**COI** is the cost of insurance, which is fixed regardless of which perils the policy covers, in the same units as RATE.

**FIRE** is the charge for fire coverage in the same units as RATE. WIND, WATER, THEFT, etc. are analogous to FIRE.

The cost of insurance is determined by “fixed” factors such as the costs of preparing and administering the particular policy.

The charge for any of the perils is determined by historical data on the risk of damage from the peril and the typical claim amount. The risk of damage may vary widely with geography. The risk of wind is typically much greater along the coast, for example, driving the cost of the wind insurance higher there.

The charge for any one peril may also vary sharply because a peril’s coverage may vary in breadth. For example, water coverage may or may not include water damage from flood and hurricanes. It may also include only the replacement cost to the physical building or a range of indirect costs such as construction delays and lost rent.

Policies may cover more or fewer perils by contract between the insurer and the insured. Of course, the charge for perils not covered is zero.

Data on historical risks and claim amounts come from independent research firms that insurers subscribes to. However, individual insurers may modify these numbers based on their own research.

The insurance agents interviewed generally agreed that the models created by insurers and the recommended rates calculated with these models are usually similar from one insurer to the next, assuming coverage and the building’s risk characteristics are held constant.

### **Final Building Insurance Rates**

The analysts provide the recommended premiums to specialists called underwriters. The underwriters are ultimately responsible for the profitability of an insurance company’s policies. They have the authority to adjust recommended premiums up or down, and even to refuse to sell insurance for a building altogether. An underwriter may adjust a premium if his/her judgment suggests the risks are different from what the model assumes. Or the underwriter might adjust it for strategic business considerations separate from the mathematics of risk. Some commonly cited strategic factors include:

1. The insurer wishes to provide favorable rates to certain good customers;
2. The insurer is eager to expand in select types of insurance or buildings, and therefore offers more favorable rates for policies in the desired areas;
3. The insurer already holds many policies for similar buildings, is concerned about a potential concentration of risk, and therefore is uninterested in insuring another similar building unless the holder is willing to pay a high premium.

Such adjustments are peculiar to the situation of the insurer at the moment. They are difficult to predict and create differences in offered rates across insurers even for identical buildings.

Interviewees suggest that in practice the final rate will rarely deviate from the recommended rate by as much as 20%, and usually will deviate much less than that. They suggest however that it is common

for underwriters to refuse to enter into a policy for specific buildings for any of the above reasons, or simply because they consider the risk or the potential amount of a claim for a particular building to be too high.

### **Builder's Risk Insurance**

Builder's risk insurance protects the insurable interest in materials, fixtures and/or equipment being used in the construction or renovation of a building or structure should those items sustain physical loss or damage from a covered peril. The policy can be taken out by either the contractor or the owner of the property.

Builder's risk policies usually include similar coverage. The industry norm is that a builder's risk insurance policy covers the perils fire, wind, lightning, explosion, vandalism, and theft. Some other perils are covered in the standard policy in some areas of the country. However, the increment to the premium varies widely, reflecting the variation in risk from these perils from location to location. The most common of these perils are wind and hail. In places where coverage for these is not standard, it may be added to the standard policy as a so-called extension at an appropriate extra charge for each peril. However, they may not be available even as extensions in some areas.

A few other perils are almost never standard, but are frequently available as extensions. The most common of these are earthquake, flood, back-ups from sewers and drains, and damage to equipment and materials in transit to the job site. Some perils are routinely expressly excluded from coverage with no option for an extension. Chief among these are employee theft, weather damage to property left in the open, war and government action.

A policy is usually written to cover 100% of replacement cost. In the event of a claim on insurance, the insured is to record all damages and how they occurred, the cost of replacement and submit a written note to the insurer. The insurer will make a "hard and soft" cost valuation. "Hard costs" are the costs to replace a material loss, while "soft costs" are the costs accrued due to relocation, loss of time, legal counsel, architectural and engineering services, and other new or extended costs due to the incident.

Underwriters and insurance agents are highly interested in the on-site safety practices and the loss history of the contractor while determining the rate for a builder's risk policy. On-site smoking, carelessness with fire torches and other flame equipment are large contributors to fire damage. Policy rates may be adjusted should precautions be found lax.

### **Commercial Property Insurance**

Commercial property insurance provides financial reimbursement to the owner of a building that is in operation or occupied. The determination of commercial property insurance rates is mostly the same as it is for builder's risk insurance rates, with some differences in details.

The coverage of commercial property policies varies more than the coverage of builder's risk insurance policies and rates tend to vary more as a result. A typical commercial property insurance policy covers the perils of fire, wind, hail, lightning, theft, vandalism and some types of water

damage. Water damage caused by floods, tsunamis, drain backups, sewer backups, groundwater seepage, standing water and many other water sources do not come standard, but are frequently purchased as extensions. Mold, earthquakes, and nuclear events and acts of war are normally expressly excluded with little or no opportunity for extension.

Filing a claim is similar to the process for a builder’s risk policy, but coverages will be organized around the real property loss, personal property loss, business interruption (the costs to cover lost rent or other income that was lost as a direct result of the damage), extra expense (costs to continue business on a temporary basis elsewhere) and increased cost of construction (due to changes such as new building codes or inflation).

The protection class (a measure of how prepared a structure is to fight a fire, the proximity to a fire department, the percent of the building that is sprinklered and the like) and the proximity to known catastrophic weather such as forest fires and hail are considered the most influential factors for determining the premium for a property policy. Fire is the largest cause of damage to multifamily structures and, as such, rates will correspond largely to the amount of fire risk on the property.

### Insurance Rate Quotes for the Reference Building

Below are the insurance rate quotes obtained from insurance agents interviewed for the Reference Building in the five Reference Cities. All quotes are in dollars per year per \$100 of building replacement cost.

#### Edgewater, NJ

Builder’s Risk	Quote 1	Quote 2	Average
Wood	0.388	0.328	<b>0.358</b>
Concrete	0.111	0.129	<b>0.120</b>
Percentage savings	<b>71.4%</b>	<b>60.6%</b>	<b>66.5%</b>

Commercial Property	Quote 1	Quote 2	Average
Wood	0.333	0.411	<b>0.372</b>
Concrete	0.117	0.198	<b>0.158</b>
Percentage savings	<b>64.9%</b>	<b>51.8%</b>	<b>57.7%</b>

Comments from agents:

- Rates in the state are highly sensitive to the construction of the roof.

## Towson, MD

Builder's Risk	Quote 1	Quote 2	Average
Wood	0.450	0.280	<b>0.365</b>
Concrete	0.290	0.100	<b>0.195</b>
Percentage savings	<b>35.6%</b>	<b>64.3%</b>	<b>46.6%</b>

Commercial Property	Quote 1	Quote 2	Average
Wood	0.610	0.182	<b>0.396</b>
Concrete	0.400	0.113	<b>0.256</b>
Percentage savings	<b>34.4%</b>	<b>37.8%</b>	<b>35.2%</b>

## Orlando, FL

Builder's Risk	Quote 1	Quote 2	Average
Wood	0.600	0.280	<b>0.440</b>
Concrete	0.170	0.110	<b>0.140</b>
Percentage savings	<b>71.7%</b>	<b>60.7%</b>	<b>68.2%</b>

Commercial Property	Quote 1	Quote 2	Average
Wood	0.205	0.218	<b>0.211</b>
Concrete	0.152	0.188	<b>0.170</b>
Percentage savings	<b>26.0%</b>	<b>13.8%</b>	<b>19.7%</b>

### Comments from agents:

- Roof construction can account for up to 30% of the total insurance premium, due to high wind risk.
- Insurance rates rise rapidly as the location approaches the coast, beginning at about 1000 feet away.
- Flood insurance is not standard, but may be available by extension. "Flood" is defined as rising water.
- Hurricane damage is covered standard, but with a high deductible. To qualify, a named storm must have been declared to have made landfall in the area.

## Dallas/Fort Worth, TX

Builder's Risk	Quote 1	Quote 2	Average
Wood	0.103	0.180	<b>0.141</b>
Concrete	0.078	0.140	<b>0.109</b>
Percentage savings	<b>24.4%</b>	<b>22.2%</b>	<b>23.0%</b>

Commercial Property	Quote 1	Quote 2	Average
Wood	0.195	0.243	<b>0.219</b>
Concrete	0.142	0.180	<b>0.161</b>
Percentage savings	<b>27.0%</b>	<b>26.0%</b>	<b>26.4%</b>

Comments from agents:

- Wind and hail are among the highest-cost perils in the area.
- Insurance rates are highly sensitive to roof construction, especially in declared high risk areas.

## Los Angeles, CA

Builder's Risk	Quote 1	Quote 2	Average
Wood	0.220	0.164	<b>0.192</b>
Concrete	0.125	0.110	<b>0.117</b>
Percentage savings	<b>43.2%</b>	<b>33.0%</b>	<b>38.8%</b>

Commercial Property	Quote 1	Quote 2	Average
Wood	0.271	0.195	<b>0.233</b>
Concrete	0.168	0.134	<b>0.151</b>
Percentage savings	<b>38.0%</b>	<b>31.4%</b>	<b>35.3%</b>

Comments from agents:

- Earthquake is not covered in standard policies. It can be purchased separately, but has high deductibles.

## Other Findings

Although this was not the focus of the study, some of the agents interviewed provided their views on future trends in insurance rates that are relevant to the topics of the study. Notable among these are the following observations:

- Because of the high incidence and cost of fires in wood-frame multifamily buildings in recent years, the difference in insurance cost between apartment buildings constructed with wood and with concrete is likely to increase over the next 1-2 years.
- A growing number of general underwriters (defined as insurance companies that sell insurance for a range of building types, in this case a range wider than simply residential) are deciding that they will act as the sole risk holder for wood-frame multifamily buildings less often than in the past. Instead, they increasingly require that they be merely one of multiple underwriters for such a building. Some general underwriters now have a policy that they will never serve as sole underwriter for such buildings.
- Special lines (insurance companies that provide policies only for a narrow range of building types, in this case something like apartment buildings) are still generally willing to act as the sole risk holder for wood-frame buildings that lie within their specialty.
- Companies that provide insurance for wood-frame multifamily buildings increasingly do so only if the policy includes certain subjectivities. Subjectivities are special measures the insured must undertake to mitigate losses. In the case of apartment building coverage, common subjectivities are having guards on duty 24/7, erecting fences surrounding the building, and having and executing a detailed fire prevention plan. Failure to adhere to the specified subjectivities could lead to voiding of the coverage.

No interviewee stated that any insurance companies now refuse to cover any wood-frame apartment buildings as a matter of blanket policy. However, the investigators did not specifically ask about this in the interviews.

In general, these comments were unsolicited and came from a small number of the interviewees. As such they should be considered merely suggestive. They are not general findings of the study or in any way to be considered scientific or systematic.

## Estimating Insurance Premiums for the Reference Building

Given the insurance rates quoted in this report, it is possible to estimate insurance premiums for the Reference Building used for this study. A 100,000-square-foot apartment building would cost approximately \$14,000,000 to build. This would vary by city, but for the purposes of this example we will assume the cost of construction is constant. The building would take 15 months to complete.



BUILDER'S RISK PREMIUM = RATE x CONSTRUCTION COST/100 x CONSTRUCTION MONTHS/12 total

COMMERCIAL PROPERTY INSURANCE PREMIUM = RATE x CONSTRUCTION COST/100 annually

To calculate insurance premium for Edgewater, NJ:

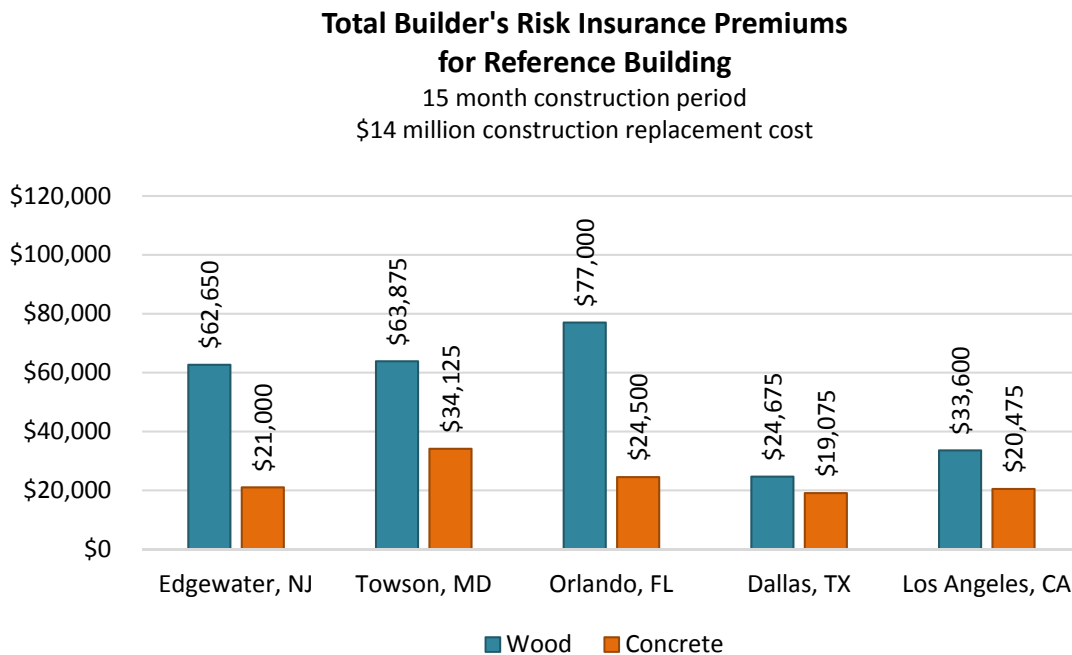
BUILDER'S RISK PREMIUM (Wood) =  $0.358 \times \$14,000,000/100 \times 15/12 = \$62,650$  total

BUILDER'S RISK PREMIUM (Concrete) =  $0.120 \times \$14,000,000/100 \times 15/12 = \$21,000$  total

COMMERCIAL PROPERTY INSURANCE PREMIUM (Wood) =  $0.372 \times \$14,000,000/100 = \$52,080$  annually

COMMERCIAL PROPERTY INSURANCE PREMIUM (Concrete) =  $0.158 \times \$14,000,000/100 = \$22,120$  annually

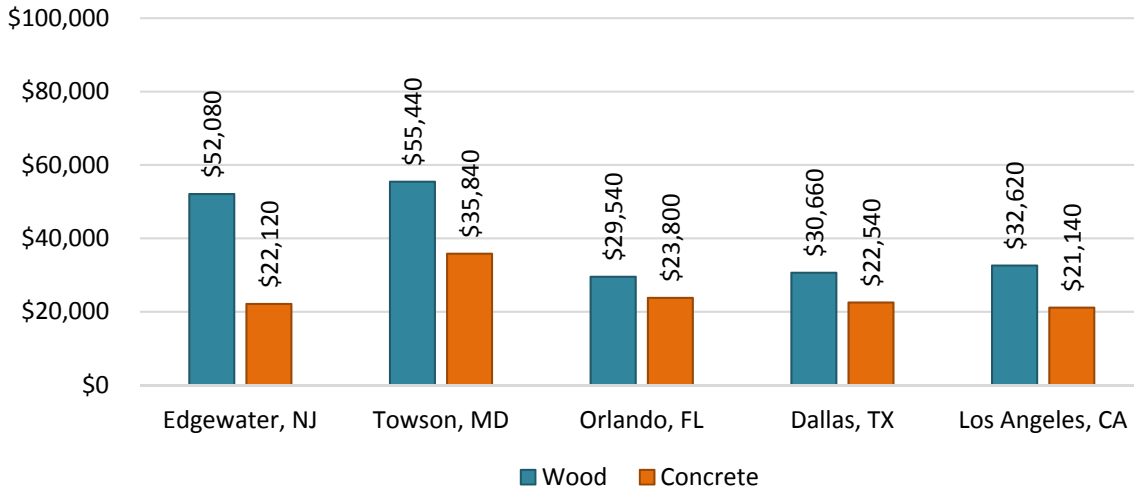
A summary of builder's risk insurance premiums and property insurance premiums for the Reference Building in all five Reference Cities are shown in Figure 6 and 7, respectively.



**Figure 6: Estimated builder's risk insurance premiums for the Reference Building in five Reference Cities**

### Estimated Annual Commercial Property Insurance Premiums for Reference Building

\$14 million construction replacement cost



**Figure 7: Estimated commercial property insurance premiums for the Reference Building in five Reference Cities**

### Estimating Insurance Premiums for Other Buildings in Other Cities

For the purposes of roughly estimating insurance rates for other buildings in other cities across the United States, one could select rates from this report for cities that have similar hazards. For example, insurance rates for a 150,000-square-foot condominium building in New Orleans could be assumed to be similar to rates for a 100,000-square-foot condominium building in Orlando, FL, since both cities are subject to hurricane risks and both buildings are similar in function. One would simply have to adjust the estimated construction cost and time of construction to obtain an estimate of insurance premiums for the New Orleans building.

Similarly, a long-term care facility in Tulsa, OK, could be assumed to have similar risks and insurance rates to Dallas/Fort Worth since both are at risk for wind and hail damage. A building in Seattle could be considered to have similar risks as a building in Los Angeles since both are in earthquake prone areas. That said, it is always advisable to contact insurance agents in a specific city to obtain accurate rate quotes for a specific building.

## Conclusions

The empirical data presented in this report suggest that building insurance rates will be lower for mid-rise apartment buildings constructed with concrete instead of wood-frame. This result appears to hold for both builder's risk and commercial property insurance and across a wide range of regions of the United States.

While the extent of the insurance savings for a concrete building varied widely for builder's risk insurance quotes, it was within the range of 22-72% for all regions. For commercial property insurance, the quoted savings were within the range of 14-65%.

Comments from insurance agents interviewed for this study consistently point to differentials in the cost of the fire portion of building insurance as the largest determinant of these savings. However, in select cases the cost of insurance for other perils may also heavily favor building with concrete. A common example is the cost of wind insurance for buildings very close to an ocean or sea coast.

Those agents expressing an opinion expected the difference to grow over the next few years. They felt that the large number of expensive fire insurance claims made in recent years for wood-frame apartment buildings would increase insurers' estimates of fire risk for these structures. This should lead them to increase rates on the wood-frame buildings. It might also lead more of them to refuse to insure at least some wood-frame apartment buildings or insist that they not be the sole insurer on such a property. Those actions would restrict the supply of insurance, potentially further increasing rates. Separate from the cost of insurance, the fire concerns might also lead insurers to require that the insured take extra, potentially costly precautions, such as 24-hour guards and detailed fire prevention plans.

NRMCA Publication Number 2PR01

## **National Ready Mixed Concrete Association**

Founded in 1930, the National Ready Mixed Concrete Association is the leading industry advocate. Our mission is to provide exceptional value for our members by responsibly representing and serving the entire ready mixed concrete industry through leadership, promotion, education and partnering to ensure ready mixed concrete is the building material of choice.



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