

Reconstruction versus New Construction

With the changes in the insurance regulations and with the rising insurance costs, many individuals are looking for ways to ensure that their homes are protected while also reducing their insurance costs. However, what they may not realize is that some of the ways to reduce their insurance costs may also put them at risk.

Today, there are many reasons an individual is required to get a property valuation. Some reasons include home re-financing, a new mortgage, home equity line of credit, establish a selling price, and for insurance purposes. However the way a property valuation is calculated can vary depending on its ultimate use and methodology.

Whether properties are insured adequately depends on the type of replacement cost estimate they depend on, the coverage they purchased, and that magic ratio, Insurance to Value (ITV). The property ITV estimating methodologies are designed to calculate property estimates that represent the fullest exposure an insurance carrier may experience in the event of a loss.

An insurance carrier is concerned with the cost to “Reconstruct” the individual home in the event of a loss.

Why Reconstruction Usually Costs More Than New Construction

- **Economy of Scale** – When a contractor has many homes under construction at once, materials can be purchased in large quantities for delivery as needed – everything from framing lumber to plumbing fixtures. If you buy a large number of bathtubs, for example, suppliers will compete for your business and offer price discounts. When you buy just one bathtub, and it must be a match for one that’s been destroyed, it will nearly always cost much more than if it had been part of a larger purchase. This holds true for almost everything that goes into a home and this factor alone can push the cost of rebuilding thousands of dollars higher than the cost for comparable new construction.
- **"Top-Down" vs. "Bottom-Up"** – New construction begins at the foundation and builds upward. Repairing a house that isn’t totally destroyed often means removing the roof and rebuilding from the top down, a far more time consuming and labor-intensive procedure.
- **Demolition and Debris Removal** – New home construction normally begins on open ground, perhaps with some brush removal and grading and other minor site preparation. Rebuilding begins with a partially or totally destroyed structure occupying the building site. Parts of the structure may still be standing but unusable, requiring demolition and removal. The site may have to be extensively cleaned – after an intense fire, for example, the soil may be contaminated. The foundation may have been damaged beyond repair. A lot of work is usually required before the first cement can be poured or the first nail hammered in.
- **Use of Labor** – When a new home builder has several houses under construction, even if they aren’t all in the same area, work can be scheduled for the most efficient use of carpenters, plumbers, electricians, and other workers. If one house isn’t ready for wiring, the electrician can probably work on another.

When only one home is being built, the same kind of efficient scheduling is rarely possible. Labor normally accounts for the largest share of home-building costs.

- **Access to the Worksite** – When new houses are under construction, there is usually no landscaping, allowing easy access to the site. Materials can be driven directly up to any side of each structure as needed. When a house is being rebuilt among existing homes, there are trees, shrubs, lawns, flowerbeds, fences and other obstructions limiting access. Materials often have to be off-loaded further away and hand carried to where they're needed. This factor is compounded if the building site is on sloping ground. The impact on labor costs can be significant.
- **Special Features & Unusual Materials** – Older homes and homes that have been extensively remodeled often have customized features or include materials not commonly found in homes being built today. These features and materials can be very expensive, if not impossible, to duplicate. Examples include slate or tile roofs, lath & plaster walls, coved ceilings, wainscoting, solid (instead of hollow core) doors, custom ironwork, ornamented fireplaces, exposed beam ceilings, stained glass or other leaded windows, curved staircases, slate or tile floors, and other items.
- **Building Code Changes** – Most older homes and many newer homes were built during times when building codes were less strict than they are today. If you are rebuilding or restoring your home you may need to meet the newer and more demanding building codes. Even undamaged parts of the structure may have to be rewired or replumbed to meet current codes. Building codes may also require you to replace windows with safety glass or replace roofs with fire-retardant materials. Building code changes can add thousands of dollars to the cost of restoring a damaged home.
- **Construction Costs Rise After Natural Disasters** – In the wake of a disaster affecting a wide area, i.e., hurricanes, wildfires, etc., the costs of building materials and contractor fees nearly always rise sharply in response to the sudden surge in demand. Even without deliberate profiteering this would normally be true because when local supplies are quickly exhausted, materials have to be brought in on an emergency basis, often from mills or factories at great distance. This may require more expensive modes of transportation and a lot of overtime pay. When several homes have to be repaired or rebuilt at the same time, the cost for each will be higher than normal or sometimes much higher.
- **Undamaged Parts Of The Home and the Contents Must Be Protected** – Once the fire is out or the windstorm has abated, all parts of the property not destroyed must be protected from further damage or looting. This can involve covering a damaged roof, missing window glass, and holes in the walls with plastic sheeting and placing surviving personal property items in temporary storage for safekeeping.

Because Reconstruction Cost is more comprehensive than Replacement Cost New, it is a better representation of what a carrier may expect to pay following a loss, and thus the most reliable valuation method for determining Insurance to Value at policy inception or renewal. The square foot or unit count valuation methods applied in the cost approach are unable to gather or process the amount of building detail and complex algorithms required to calculate Reconstruction Cost valuations. Only automated, component-based estimating methods can analyze unique building characteristics and calculate risk-specific estimates based on localized building codes, structural considerations, labor and material costs. The Cost Approach as stated above also promotes that the appraiser apply depreciation to the building, which again establishes a different value than that which an Insurance carrier is interested in developing.

The distinctions between Replacement Cost New valuations and Reconstruction Cost valuations are important to understand because a carrier's goal is to provide the homeowner with an equitable and fair settlement. Additionally, because policy and settlement terms are frequently subject to negotiation and court interpretation,

it is essential that carriers receive premiums based on the fullest exposure on each building – the building’s Reconstruction Cost.

The total component tools used by Insurance companies must focus on gathering localized risk specific characteristics for the individual homes or commercial building to establish the reconstruction cost for that particular building. These tools do not rely on class and quality but on the facts for the individual building being evaluated.

Research shows that the actual cost to reconstruct a building after a total loss is on average greater than Replacement Cost New (Appraisal). This is because Replacement Cost New valuations do not include costs arising out of current building codes or from a variety of costs and fees which were presented above and these are commonly present in total losses.

In contrast, Reconstruction Cost provides the cost to construct, at current prices, an exact duplicate or replica of the building, using like kind and quality materials, construction standards, design, layout and quality of workmanship. Because it might be impossible, impractical or unacceptable to use the materials or methods used in the original construction, “equal quality and utility” may be substituted where necessary for “like kind and quality.” Reconstruction Cost also includes site-specific and process-related costs and fees not included in Replacement Cost New valuations, such as:

- **Valuation Methodologies and Reconstruction Cost**

MSB recognizes the distinctions between Replacement Cost New and Reconstruction Cost with component-based or “total component” valuation and claims estimating technologies. Our total component estimating technologies calculate Reconstruction Cost by using formulas and databases to analyze and select detailed component parts of buildings. Estimates are then assembled in a risk-specific manner using local building codes, structural considerations and local material and labor costs.

- **Residential**

MSB’s Residential Component Technology™ (RCT) home valuation application is a total component application. Based on the age of a home, **RCT for main street homes’** knowledge tables select building costs associated with materials and construction methods used when the home was built. Because the home must be built to today’s codes, other knowledge tables factor in costs associated with current building codes for glazing, electrical, plumbing, etc., all localized to the U.S. ZIP Code and the Canadian Postal Code.

MSB understands that unless a building has a historic designation, it is quite unlikely that repair or replacement will be completed using century-old materials and methods. Yet it is still important that carriers know the Reconstruction Cost of the building. Why? Because, as previously mentioned, carriers often have to settle a loss for more than what was valued when methodologies other than Reconstruction Cost were used.

Market Value versus Reconstruction Cost

The price paid for a home, the appraisal value, and the mortgage being carried are all irrelevant when it comes to determining how much insurance coverage should be maintained.

What one really needs to know is how much it will cost to rebuild after a total loss, and that could be significantly more or less than any of the above figures.

Insurers should make sure they are not insuring the value of land, which usually runs about 25% of the average home price, but could spike to over 50% in expensive high-worth markers, like Orange County California, New York, San Francisco, Key West Florida, Hilton Head South Carolina and Aspen Colorado to name a few.

As we all know, we certainly wouldn't use *market value* as the value basis for establishing the insurable value of a residence. Market value is utilized when a residence is being bought or sold, in most cases it has little to do with the cost to build/rebuild a home, and it includes the cost of the land on which the home is built. Likewise, we wouldn't use *assessed value* either as it also includes land costs, plus site improvement costs and other taxation considerations. Each of these *value bases* have an intended purpose, and if done properly will generate "correct" values for those purposes.

There are a number of value bases that can be used for insurance purposes and each basis will generate a different "correct" value. Most of us are familiar with replacement cost new (RCN). RCN has long been the valuation standard of the insurance industry. Our model-based legacy products such as cost guides, brochures and automated systems provided the user with a RCN. There is a good chance that most of our users only know of the RCN value basis, and may never have heard of reconstruction cost.

The successor to our legacy products is RCT (Residential Component Technology), and the successor to replacement cost is reconstruction cost. Reconstruction cost needs to become the next insurance industry valuation standard. It is more comprehensive than RCN, and it is a much better representation of what a carrier may expect to pay out following a loss.

Let's take a look at the definitions of each value basis and compare them:

- **Replacement Cost New**

The cost to replace, at one time, an entire building of equal quality and utility. The prices used for labor, materials, overhead, profit, and fees are those in effect immediately *prior* to the occurrence of the loss. The replacement residence employs modern materials and current methods, designs, and layouts. Replacement cost does not take into consideration improvements necessary to conform to revised building codes, demolition, debris removal, site accessibility or site work, re-use of building components or services, extraordinary fees, premiums for materials or other contingencies.

- **Reconstruction Cost**

The cost to construct, at current prices, an exact duplicate or replica of the building, using like kind and quality materials, construction standards, design, layout and quality of workmanship, and embodying all the subject's deficiencies, super adequacies and obsolescence. Reconstruction Cost also includes a number of site-specific and process-related costs that are experienced when rebuilding *after* a loss. These additional expenses are outlined below.

By analyzing thousands of actual total losses paid by insurers (Platelines), we were able to identify the factors that contribute to the difference between Replacement Cost New and Reconstruction Cost. First, we were not surprised to learn that restoration contractors handle most total-loss rebuilds. These experts usually charge more than new homebuilders for their services because there are more risks and unknowns associated with reconstruction. These contractors must often estimate the cost of reconstruction before the debris has been removed, making it difficult to foresee the complete scope of the work that lies ahead. Because the costs are less predictable, restoration contractors increase their estimates to protect their interests. Also, restoration tradesmen tend to command higher wages than their new-construction counterparts.

Another added expense of reconstructing a residence has to do with limited site mobility and access. When a loss occurs, contractors almost always have to work around existing improvements. They must take care not to harm existing driveways, landscaping, overhead and underground utilities, and neighboring properties with equipment or building materials. Working around these obstacles adds time and expense to the project.

Two other items that add cost to reconstruction have to do with the insured. First, in servicing insured's that have lost the use of their homes, there is a time impetus to immediately begin work to correct the damage done. Each day the homeowner is in temporary housing it's an Additional Living Expense (ALE) that insurance companies would like to mitigate. Restoration contractors must be available and be prepared to move quickly, and incur additional costs in providing this service. Second, reconstructing a residence with the homeowner's involvement takes longer to complete than a home that is speculatively built and sold after the construction is complete. The involvement of the homeowner delays the project due to change orders and indecisiveness. Rebuilding for an insured will surely include a great deal of homeowner involvement because they are the only ones who know exactly how the home was originally built.

Are these two value bases for insurance purposes going to generate different values? Yes, definitely. Which one is "correct?" They both are, as long as the values generated represent that which has been defined. One basis is going to provide a value to "replace" the subject residence with one of "equal quality and utility, using modern materials and methods." The other is going to generate a value to reconstruct an exact replica of the subject using "like kind and quality." One basis does NOT include all of the expenses that a carrier and/or homeowner would obviously experience at time of loss, the other basis does. Is one basis better than the other? Yes, reconstruction cost is more comprehensive and it better represents what a carrier may expect to pay out following a loss.

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