



## **Guide to Planning a Home Addition**

One of the home remodeling strategies that can add enormous value to your property is building a home addition. To achieve these financial benefits you are required to do a great deal of planning and preparation. This remodeling strategy begins with developing an understanding of the financial feasibility of such a project, while studying the impact of various options on your future home value and current monthly household budget.

### **Developing a Lifestyle Need into a Design Plan**

The home addition process begins with defining a lifestyle need. If you require more space for a growing family or expanding an area for a well deserved private space, home additions begin with a defined purpose. Since home / room additions are more expensive than repurposing existing space, you want to carefully consider if you can first repurpose existing space instead.

There are a few basic primary steps to evaluate before you get to deep into the analysis of verifying that your project is feasible. The first step is to evaluate what type and geometric shape your home addition will take. Are you going to build vertical or horizontal with the addition? Once determined, you need to see if there are any legal or physical restrictions, like building codes, setbacks or areal easements that will prevent you from moving forward with a design. These types of restrictions can stop you cold in your tracks.

If you are building horizontal it is a good idea to stake out the corners and run a string to simulate the structure. You can determine if you need fill dirt and accurately measure distances from property lines and other structures such as trees and fences. If you are building vertical you can attempt to visualize possible interferences and how the roof lines will merge. The point is the more you can anticipate potential issues the better you can prepare.

### **Home Addition Feasibility Study**

After developing the general addition dimensions and creating a rough construction concept budget, it is time to create a conceptual feasibility analysis. This includes the total cost of the project, the projected added footage and the projected current home value both



before and after improvements. This analysis can be fairly simple in its mathematic calculations or it can get extremely complicated as you begin to compare historical neighborhood sales data.

The objective of this exercise is to understand the financial investment sanity to this project. If you are increasing the additional living square footage by 3,000sf, that results in your home being the largest home in your neighborhood by 2,500sf, you may not be likely to retrieve your investment when you sell. Each project is a unique situation and must be evaluated individually measuring the particular matrix that have an impact on the ending value.

If you are financing this project, your lender will welcome a well developed feasibility analysis proofing the financial merits and contribution to the property value. A well developed analysis will also provide you a good budget foundation to use as the addition design plans near finalization. You can anticipate that as you complete your design plans and product selections, the total construction cost will typically exceed the initial budget.

## **Develop Your Design Plan**

The design process is by far the most fun for the owners of all the major remodeling project tasks. It also is the easiest way to create problems and errors if not carefully prepared. The design plan goal is to create an adjoining space that does not look like it was added after the fact. The goal is a seamless blending between the existing space and the new space. We will discuss some of the specific items to consider achieving design continuity.

- *Transition New to Old Inside*- The continuity and natural transition of the design theme and materials is essential in creating a new space that does not look like it was a afterthought. The appropriate transition of roof lines and ceilings can be the challenging aspect of designing an addition. Forcing the design will ultimately look like you added a home addition.
- *Build Out or Build Up* - Determining if you should build horizontally or vertically depends on many factors. This primarily depending on what the additions primary purpose is. If the ultimate purpose for the addition can be accommodated building up or out, then the defining factor in choosing may be the construction cost. As a general rule it is more cost effective to build up then it is to build out.
- *Bump Out Room Space* - A bump out space is an expression that refers to cantilevering a new space over a existing space. This can be an effective strategy



when it comes to requiring more space than the foot print below allows. As a general rule you can cantilever a structure up to 5 ft or 1ft for every 3 ft directly anchored.

## **Hire Your General Contractor**

Hiring a qualified professional general contractor as your trusted adviser is one of the most important tasks you will do to assure yourself of a successful project. A qualified general contractor should be your advocate throughout the entire design and construction process. Selecting the general contractor is the first step in staffing your design team. The design team consist of a general contractor, engineer and a home designer. Each professional brings a balanced approach in designing a structurally sound home that blends creativity with continuity between new and old.

Your general contractor is much more than a guy that you hire to get a bid and build your project. They are the centerpiece of the design team and expediter of quality construction standards. If your addition requires an engineer, your general contractor will facilitate this process. If your budget is escalating through the design process, your general contractor should initiate a value engineering exercise to bring the budget back in line.

The design and construction process is filled with landmines and potential adversity. If you do not have the skill sets to navigate the entire process, it is in your financial and mental interest to surround yourself with an expert. If in doubt, you need to ask yourself if you were being audited by the IRS would you hire a expert tax attorney or go it alone?

## **Selecting Your Materials & Products**

One of the most important components of providing effective design and budget control is selecting the priority level materials and products before or during design. This does not mean you need to purchase them but rather make the selection decision. First priority materials and product selections are those items that reflect either the greatest expense to the budget and are critical to the details of good design.

An example of one of these items would be conventional wood floors versus tile floors. Conventional finished in place wood floors typically require the finish slab elevation to be 1-1/2 inch recessed more then the tile floor. This can affect structural door openings and finish counter top heights, which in turn effects the clearance of under counter appliances, ect...



Another reason for early selection of materials and products is to confirm their availability for construction. Too often folks will design around the idea of a specific priority product or material and when they go to buy it, the product is no longer available or is backordered for an extended period of time. In addition, although not common, if there is an problem with the product or materials and requires to be returned for replacement, the product may not be readily available.

### **Preparing to Build - Critical Construction Planning Details**

We have our design, plan documents and construction team in place. At this point we are eager to get this project started. Deservedly so, but before we start tearing up your home and yard there are some additional matters to consider;

- *Prepare Construction Access for the Home Addition* - There are a large number of logistic matters to consider when planning a major addition project. One of those items is how you are going to get access to the project. Although the driveway provides some options for material deliveries, the project will commonly have some special needs during construction like foundation concrete placement, dumpster location and large equipment placement.
- *Attaching the Existing Foundation to the New Foundation* - The design team engineer will typically specify these requirements, but it is worth some discussion. The mechanical attachment details are critical to stabilizing the two independent structures to avoid unsightly cracks or future differential settlement. These details will be different for a post tension foundation versus a conventional slab on grade. They are still very different for slab on piers.
- *Drying In the Structure* - Weatherizing the new structure is essential before opening it up to the new structure. The addition should be water and air tight before exposing the new area to the existing area.
- *Utilities and MEP Systems* - The utilities and their connections will normally be planned out during the design process. The point of presenting these special considerations is that when it comes to specifically the plumbing waste lines, the logistics of connecting to existing waste lines can present multiple challenges. Will you connect with the existing waste lines or will you connect to an existing yard line.



This also goes to your HVAC system as well. Will you design additional capacity into the mechanical system for the new addition or incorporate your heating and air conditioning needs into the existing systems capacity?

### **Finalizing Home Addition Plans**

It should be clear to you at this point of this article that the more effectively you plan for a home addition or any major remodeling project, the greater the chances of a successful and uneventful project you will have. Project preparation will always pay dividends and will lessen the likelihood of change order expenses.

The plans will also need to incorporate the notes of the structural engineer, the energy calculations and an updated site plan to secure a building permit. To help expedite the construction process the finish schedule should also be complete.

### **Finalizing the Budget**

At the completion of the home addition design plans the general contractor can finalize the construction budget with a high degree of accuracy. If the products have not all been complete your general contractor will provide you allowances for these items. The construction budget is a product of the products selected and the design of the addition.

### **Managing Insurance Risk**

When you are planning on a home addition project it is a prudent decision to measure and mitigate your risk with the proper insurance. Your general contractor will have general liability insurance and will require insurance of the subcontractors that he hires.

Your homeowner policy is not sufficient to cover many of the inherent risk associated with a major remodeling project to your home. It would be a good idea to have a conversation with your insurance agent about the purchasing of a builders risk policy for the duration of the project. Builders risk insurance will bridge the gaps of hazards effecting your home and property during construction, that might not be otherwise.

In conclusion, the planning of preparing a home addition is a demanding and complicated process. In your best interest of producing an addition that fits your needs and is produced cost effective, you should surround yourself with a design build general contractor.