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I have a passion for home improvement and new home construction. This year I finished building my 5,000 square foot brand new Dream House. Since I'm certainly not a professional in the Construction Business, this process involved a great deal of learning for me. These kinds of projects can be very confusing, and I quickly discovered that there is no single source of information to help guide homeowners through the entire construction process. Realizing how valuable my own experience might be for others who are considering remodeling their house or building a new one, I decided to share what I'd learned in this book.

I've learned many practical strategies that help to simplify all of the complexity: how to decide whether to remodel your house or to completely rebuild it; what homework the owner should do before beginning the construction process; how to avoid common painful mistakes; how to make a rough estimate of the project cost; how to hire a general contractor; how to insure the project, and much more.

This book has been written for fellow Dream House builders. I hope you can learn from my experiences, and soon you too will be enjoying your own Dream Home.

Getting Started

New Construction vs. Remodeling

We all know that the American Dream is a Dream House. I was thinking about this for a while and finally concluded that when you buy a house you are trying to fit your dream into one specific spot. To truly be your Dream House, there are basically only two options: buy an existing house and remodel it, or buy a new home and have it custom built to your specifications.

There are so many considerations you have to keep in mind when you pursue your own American Dream. I scoured the bookstores but I didn't find any complete book or source that can explain the whole process to you. That's why I've written this book, to describe my own experience on the way to my Dream Home. I want to share with you the lessons that I've learned.

For the past 10 years we lived in a relatively expensive neighborhood in the heart of Silicone Valley. We initially began work on our Dream House project in 2000, but the economic situation in the US forced us to postpone our plans for four years. In 2004 I got back all my papers and contracts and started the whole process all over again.

I will try to give you some basic ideas I was thinking about during this complicated process.

The first question that you need to consider is whether it would be better to remodel or to start a new construction of your house. To make a conclusive decision you need to collect and analyze some data, most of which is available from Internet sources.

* * *

Think about the house you currently own in terms of Market Analysis (the house's age, condition, its quality, single family house vs. part of an association, location, current market price of similar houses around, current market price of new house construction, current market price of nearby remodeled houses, land cost in your area, etc.).

Explore Internet resources in determining your current house value and talk to real estate agents and brokers about value of both remodeled and newly constructed houses in your area.

It would also be very useful to visiting some open houses and houses for sale in your neighborhood.

Make a list of things you don't like about your current house, like you need more space, you would like to see the higher ceiling, you need some additional bedrooms, or storage, bathrooms or kitchen upgrade. Think about your lifestyle. Would you like guests in the house and you need some extra space for them, or you like to watch movies and are dreaming about home theater, etc.

What is your current home style, do you like it, and what kind of home style would you like to have?

Building your Dream House is a relatively long process, which involves the interests of all family members. You can dream together – this is a huge socializing family process.

Ask everybody in the family to make a list of wishes they would like to see in a new house, think, even, about your pet's need. I have a dog and during the nighttime he sleeps in a crate. It was very hard to accommodate his crate in my old house and so we created a special space for the dog's crate, so it wouldn't be in the way anymore.

Keep in mind how long you will still live in an upgraded house before you place it on the market. If ever. Will this be the home you will spend the rest of your life in? If so, take into account certain considerations that might become important during your retirement years. For example, if the house has more than one level, make sure that downstairs you have a bedroom

and bathroom with accommodations for people with disabilities.

Compare the features of your home as it is now with your "wish list" and evaluate the difference. Can the changes be done within the same structure? Would it be easy to add space to an existing home? Don't afraid to talk to professionals: contractors, builders, and handymen.

This is potentially a big investment, maybe the biggest in your life, so don't be afraid to "bother" anybody. Try to get at least 3 professionals to estimate new construction vs. remodeling. Go back to the numbers you had compiled in the beginning and compare them to the numbers you receive from construction professionals. It is vital to do your homework now – it will pay impressive dividends for you later.

Check with your local Tax Assessor's Office to find out if you might be eligible for any property tax exemptions or relief programs.

For example, in our Santa Clara County, Proposition 60 allows homeowners who are 55 or older TO TRANSFER the base year value of their principal residence to a newly purchased or build-up residence, providing that certain requirements are met. There may be similar opportunities where you live...but you will never know unless you ask.

Conclusion

Knowing and understanding all of your options is the best way to guide you into making the right decision, save money, and put yourself in an excellent position to afford your Dream House.

Choosing an Architect

House Plans

Now that you have your "game plan" in mind (for example, a new house because you need more space) it's time to get down to some specifics.

How many stories will this home have, how many bedrooms, bathrooms, etc. There are also all kinds of particulars regarding the layout of the kitchen, family room, dining room, and the rest of the house.

The next step is to arrange all of your wishes into a precise FLOOR PLAN configuration. One easy way to start the process is to go to any local store and purchase one of those "Dream Home" books and begin browsing through its pages in search of inspiration. Chances are good that you will find something that strikes your fancy and motivates you to strive for something similar in your own new home.

Let me share with you some tips that will help you to make some important decisions.

Go to your City Planning Department and get the dimensions and the configuration of your lot. Is it a corner lot? Does it allow you to create a circular driveway? Answering these and other simple questions will save you a lot of time and frustration as eliminate options you may have seen in a book, but in reality will not fit your lot.

Do you know where North and South are on your lot? This is important to know before you start building your house. I would suggest that you consider orienting your bedrooms in terms of the location of the sun. Do you want to wake up with the sun glaring in your eyes? D you want your bedroom, or other bedrooms in the house, to be hot or cool in the daytime? Do you dream about a warm and cozy bedroom, or a cool and clear one? If you address these questions BEFORE you start your new house planning, you maximize the chances that the end result will be very close to your expectations of a Dream Home.

Once you've figured out on which side of the house the bedrooms will be, think about bathrooms as well. First of all, how many will you need? Are you going to provide each bedroom with a personal bath? To help you decide, consider the level of luxury you expect for this house to have. If you live in an expensive area, it makes more sense to provide every bedroom with its own bathroom. Bathrooms are expensive, but you get what you pay for. On average, people live in the same house for about seven years, so it's likely that eventually you will sell the house and having a few extra bathrooms could ultimately lead to a bigger return on your investment.

When selecting the location of your Master Bath specifically, make sure the bathroom window doesn't overlook the street. My neighbor just finished building his new house. During the planning procedure he didn't pay any attention to these details (he has a corner lot) and as a result he now has his Master Bathroom with a 3-pane window looking out over the street. Because this window is so big and because of its proximity to the street, he couldn't put a tilt-wash glass on it, therefore he is having troubles with the privacy in his own bathroom! Try to plan your big private windows so that they look into either the back or side yards, if possible.

What elements would you like to have in a house? Formal Living Room, Dining, Family, Kitchen, Closets and a whole bunch of bedrooms and bathrooms? Those may be the first items that come to mind, but the list doesn't end there. For example, would you consider a Home Theatre or Guest Quarters or additional living space for your small baby's nanny? The great idea I have (everybody has there own "great idea") is to combine two bedrooms with one bathroom/two sinks and having some extra space for kids playing area. Like me, you need to do a little dreaming too.

All these simple considerations bring you to the point where you now have at least a basic idea of your house plan. Now let's get into more detail. Do you have any particular style in mind? If you do, you are a lucky person because you can NAME it to your Architect. Most often house owners (and I include myself in this category) do not have any idea just how wide a variety of home styles are available. But be careful. When it comes to the PROFESSINAL area property owners might not be familiar with professional terminology. We (property owners) usually only have some vague feeling or murky vision about our future home.

So how to find the right professional who can help to make our dreams come true? Choosing the right professional is not easy. I've tried a few ways, so hopefully you can learn from my experience. First of all I spent a lot of time looking at existing newly constructed houses and asked myself if I liked them. Then, I talked to few Architects and tried to find out what they can offer. Unfortunately, after our conversations I felt that they didn't understand my expectations and I couldn't trust them to build my house.

Then one day a friend of mine called and invited me to house warming party. She had just bought the house from some Architect. When I looked at the house it struck me that this is the style I might like. It was a tastefully done combination of good traditional style along with some contemporary elements. I liked it so much that I called this guy and made an appointment.

I came well prepared to this fist appointment. I had my sketch with each room's location and I explained to him that I needed someone who could put a spirit into my drawings. It was easy to communicate with this Architect. I simply told him that I wanted this and these details, like in his former house, and we both understood that we are talking about the same things.

Another way to express your wishes is to collect a lot of style details about the house and show them to an Architect. Hopefully, he will be able to pick up on these details and come to a full and thorough understanding of your ideas.

Finally, when selecting an Architect, one of the best bits of advice I can offer to you is to get REFFERALS from people you trust. If he did a good job for them, chances are he can do a good job for you as well.

What to expect from an Architect.

Your work with an Architect will progress through various phases. At the very first meeting you will sit together and you will explain exactly what it is that you are looking for. The ideal Architect should have some experience working with the city you are building. Each city is different and each one has its own set of guidelines that new construction must conform to. The Architect will most likely suggest to you WHAT IS COMMOM for this area in terms of under or over-building. He will direct your attention to the

neighbors' houses where you can pick up some ideas for your own house's appearance.

Following the initial discussions, an Architect will produce an outline of the scope of the proposed project. You can expect a very rough estimate coming based on the best of his knowledge for the amount of square footage you will be building. This will give you with at least a rudimentary budget to construct your new home.

The Architect will provide the schematic design and you should expect few meetings back and forth until you are fully satisfied with the feeling and design of your house. I would suggest putting as much concentration as possible into these meetings and do your homework, analyzing the sketch and design. It is very easy to make any paper changes; later on it is so costly to make any changes in construction itself.

Keep in mind that an Architect is not the only professional you must deal with during the preparation stage of your project. He will also refer you to a Soil Engineer to get a soil report for your land. Soil Engineers carry out detailed analysis of the soil prior to construction and the report they will provide to the Structural Engineer will be the base point of structural calculation.

You will also need the services of a Civil Engineer, who will explore water resources, drainage, and environmental issues.

Your Architect will gather together this information and will come up with detailed drawings and finalized plans, showing actual sizes and shapes for rooms. After these plans are approved by you the owner, the Architect prepares the document set for the City Planning Department to seek official approval.

A few month later the City Planning Department will revise your plans, give you some comments and corrections and after some modifications your plans will be approved by the City.

When this happens you can consider yourself in the construction business and we will congratulate you for finally beginning the construction of your Dream House.

We then come to the second stage of your plans. The Architect has to work with the Structural Engineer, who will calculate your house's structure, and according to this calculation the Architect will design certain structural supports for the house. He will also include an outline of the construction specifications, listing the major materials to be used. By now your drawings are ready to travel to the City's Building Department and this process will result in getting building permits.

Estimating The Project

Soft Cost Estimation

As we discussed previously, there is a soft cost which is based on the Architect Cost, Structural Engineer Cost, Soil Testing and Civil Engineer cost.

The Architect Fee schedule can be set up in two different ways: hourly payments or a lump sum amount based on the size of the property you are building. Personally, I would suggest you to agree to a lump sum amount because it is easy to handle the cost estimation process, and it helps you to be in a control position all the time. You will need to sign a contract Agreement with your Architect where he will list the services he will provide for a negotiated fee. Make sure that he will mention his responsibility to perform all the changes according to City requirements until the documents will be approved. By definition an Architect is responsible for making sure that the construction should proceed according to the approved design, so an Architect's fee often also includes a few visits to the construction site later on.

The Architect and other professionals' fees will depend on the state you are in and can vary a lot. So without pretending to have the absolute numbers, I can give you at least some idea where to start from.

Soft Cost	\$ per Sq.F
Architect Cost	~\$7.50
Structural Engineer Cost	~\$2.00
Soil Testing	~\$0.85
Civil Engineer	~\$0.85
City Plan Check Fees	~\$0.80
Permits Fee	~\$1.60

There are also some other fees included as part of these "soft costs". They come from the City and again may vary, so just consider them as something you need to check on.

Soft Cost	Amount
Legal - Contract	~\$2,000.00

Builders Risk Insurance School Fees Field Survey Builder's Risk Insurance ~ 2% from Construction estimated cost Apraisal Fee - Construction Loan

Power Tricks

~\$3.000.00

~\$6,000.00

~\$4,700.00

~\$1.300.00

There are some dependencies in getting all permits in place, which you, as a first time owner builder, might not know.

First of all, the demolition permit won't be issued unless all gas and electric disconnections will be approved by authorized PG&E personnel.

Prior to construction time all PG&E services (or whoever the local utility company is) must be terminated and a timeframe of four to six weeks must be assigned for PG&E meter removal.

One friend of mine was so concerned about this delay that he set the meter removal procedure at the same time he submitted drawings to the City Building Department. As a result, he got all PG&E services disconnected but didn't get approval on the drawings for another ten months. During all this time his house was in non-livable condition and he had still to pay the mortgage for the house. Therefore, he was not being able to rent it out. He thought he could turn the PG&E service back on again but this was not possible because in order to turn on the service you have to have a structure with all electrical work done according to current code and, of course, the old house wouldn't pass the test.

It was very hard for my friend to carry this additional mortgage on an unoccupied house and he was thinking of selling it and giving up on the construction. But he couldn't sell the house because it was in an unlivable condition, so he waited out the 10 months and then finally started the construction.

What is the point of this sad story? If my friend had known ahead of time about all of the milestones he would get with the City, he wouldn't rush with disconnecting an energy line. The old saying is true: make sure you look before you leap.

Hard Cost Estimation

In order to get a bidding process in place, I would suggest you to talk to at least three contractors when your blueprints are approved by the City. The most complicated part in bidding is to get back comparable information. The problem is that every one of bidders, even though they used the same blueprints, will estimate the job in a different way and you will have trouble comparing and analyzing data.

I would suggest using not only the same blueprints but also the same table, which every bidder has to fill in. Here below I have the most detailed spreadsheet I personally used during my construction process. I found the way data is presented in this table fully understandable even for a non-professional such as myself.

NO.	WORK ITEM
GENERAL CONDIT	TIONS
1007	Plans/Architect Revisions
1008	Site Engineering & Other Surveys
1009	Soil Testing
1010	Permits
1011	Fees & Assessments
1900	Inspection fee
1006	Soft Costs
1006	Soft Costs: Copying
106	Temporary Utilities (electricity & water)
107	Miscellaneous Rentals (power pole, toilet, scaffolds)
108	Guard Service (Fence Rental)
109	Cleanup
SITE WORK	
110	Demolition (only Asbestos Survey included)
111	Rough Grading
112	Erosion Control
113	Foundation Drinage
114	Utility Trenching
115	Install Sewer Line within owner's property only.
116	Install Water Line within owner's property only.
117	Curb, Gutter, Sidewalk & Driveway
118	Asphalt Paving
119	Fencing
120	Finish Grade
121	Landscaping including Irrigation System
122	Street Lights
123	Street Signs
CONCRETE	

	124	Reinforcing Steel
	125	Foundation/Footing -Slab
	126	Walks & Driveways
	127	Lightwell Concrete
	128	Struc Slab/Columns & Beams
	129	Tilt-up Walls
MASONRY		
	130	Block Walls
	131	Veneer
	132	Fireplaces
METALS		
	133	Rough Hardware
	134	Steel Beam
	135	Row Iron Stairs & Railings
	136	Stone Fireplace
	137	Metal Doors & Frames
	138	Metal Service Doors
WOOD & CA	RPENTR	Υ
	139	Panelized Roof Structure
	140	Glue-lam Beams
	141	Wood Siding
	142	Trusses
	143	Rough Lumber
	144	Rough Carpentry
	145	Finish Carpentry
	146	Finish Lumber
	147	Wood Doors
	148	Cabinets
THERMAL &	MOISTU	RE PROTECTION
	149	Waterproofing
	150	Roofing
	150	Sheet metal Gutters & Downspouts and Roofing Flashing (allowance)
	151	Insulation
	152	Skylights
	153	
WINDOWS 8		
	154	Store Front/Sash Glazing
	155	Windows & Sliding Glass Doors
	156	Mirrors
	157	
FINISHES		Shower Door Enclosures
	137	Shower Door Enclosures
	158	Plaster/Stucco
	158 159	Plaster/Stucco Drywall
	158 159 160	Plaster/Stucco Drywall Painting
	158 159 160 161	Plaster/Stucco Drywall Painting Formica
	158 159 160 161 162	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance)
	158 159 160 161 162 163	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance) Ceramic Tile
	158 159 160 161 162 163 164	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance) Ceramic Tile Resillent Flooring
	158 159 160 161 162 163 164 165	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance) Ceramic Tile Resillent Flooring Wood Floors
	158 159 160 161 162 163 164 165 166	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance) Ceramic Tile Resillent Flooring Wood Floors Carpeting
SDECIAL TIE	158 159 160 161 162 163 164 165 166 167	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance) Ceramic Tile Resillent Flooring Wood Floors
SPECIALTIE	158 159 160 161 162 163 164 165 166 167	Plaster/Stucco Drywall Painting Formica Marble & Stone (allowance) Ceramic Tile Resillent Flooring Wood Floors Carpeting

	169	Finish Hardware (allowance)
	170	Bathroom Accessories (allowance)
	171	Luninus Ceiling
EQUIPMENT	-	
	172	Built-in Appliances
	173	Fire Estinguishers
SPECIAL CO	NSTRUC	TION
	174	Elevator
	175	Pool
	176	Solar
MECHANICA	NL	
	177	Plumbing
	178	Ventilation
	179	Heating & Ventilation
	180	Air Conditioning
	181	Fire Sprinklers
ELECTRICA	L	
	182	Electrical
	183	Fixtures (allowance)
	183	TV & Antenna
	184	Structured Wiring; Computer Networking; Home Theater Audio, TV; and Security System (allowance)
OVERHEAD	& PROFI	Γ
	800	Contingencies
	200	Overhead
	200	Supervision
	200	Profit
MISCELLAN	EOUS	
	801	Bank contingency

TOTAL CONSTRUCTION COST

When you fill in this table with bidding information from a few people, you will then have a better understanding of how much this project will cost you.

Financing

Now you are pretty much ready to start looking for your project financing. There are a few options available:

- 1 Cash financing could be done either out of pocket or via an equity loan on some property
- 2 Non-convertible loan which must be paid off in 12 months.
- 3 Convertible construction mortgage which after construction converts

into an ordinary loan.

What are the advantages and disadvantages of these financial options?

Cash Financing

- 1 You are fully in charge of your money.
- 2 The interest rate is higher on equity lines.
- 3 You are one to one with your contractor and money.
- 4 If you do something wrong, and it is very easy to do something wrong because you are not a professional in the construction business, you might spend money and not finish the construction.

Would you imagine how could this be possible not to finish the construction at all? Easy...

The booklet "What You Should Know before Hire a Contractor" says that you shouldn't make a down payment that exceeds the legal limit (10% or \$1,000, whichever is less).

When I was looking for contractor, my friend introduced me to one very nice, very established contractor. His references were outstanding, and some home owners whom she spoke to about his past projects highly praised him.

I gave my blueprints to him for an estimate. A few days later I got them back and the numbers didn't look scary. I spoke to the guy and he said that he charges \$20,000 upfront for materials to start the project. I hadn't read the booklet at that time, nor had my friend did. His requirement sounded reasonable because to start the project he obviously needed money to get supplies. I was not ready at that moment to start construction because my blueprints were not approved yet, but my friend made her mind up and had started the construction with this guy.

She didn't plan to build a brand new house; she just did some interior remodeling and planned to finish everything in a few months. I met her about ten months after our first meeting with the contractor and asked about her project. She told me a very sad story about her construction project.

She had paid him the requested \$20,000 deposit upfront. The result was

that this whole project was pre-paid upfront and the contractor even didn't show up on site unless he got paid upfront for the next job he didn't do yet.

The quality of his work was very low; he hired some people who didn't speak English at all and it was not possible to explain to them that they were doing a poor job. So my friend said that she would like to get off the hook; she didn't want to pay upfront anymore and the contractor stopped showing up because wasn't getting paid.

Somehow they finished this project in 15 months. They lost a lot of money with this contractor, rented another house all this time, paid the mortgage on the constructed house and paid on the equity line, as well.

I would never feel secure with this kind of construction financing. And I would imagine that you would not either.

Non-convertible loan which must be paid off in 12 months

- 1 The construction loan is provided by the bank to you, not to your contractor.
- 2 Banks are quite conservative about their money and will not release any money upfront for construction work.
- 3 You probably will have monthly inspections from the bank to verify funds utilization on a construction site.

Sometimes it happens that the contractor billed you for some amount of work he didn't do yet, and you, as a non-professional, didn't notice that. The bank is on your side. They will not release money to you and you won't pay money to the contractor until he finishes what he is supposed to. Because of this, some contractors don't like you to have a construction loan, and will try to persuade you to get an equity line, rather than dealing with the bank.

We all plan for good, not for bad. But life is life and we never know for certain what may happen next. So, be just aware of these conditions.

Take, for example, what can happen with some construction loans. They may have small payments in the beginning of construction and big payments with a bigger interest rate at the end. The construction loan pays off your original mortgage for the house.

For 12 months construction you may choose not to pay any interest at all; it

will be paid off when you do refinance. The interest rate is adjustable and is related to some major market indicator. So, if generally an interest rate is growing you will end up with a huge payment, and in order to get a lower rate you need to refinance in as soon as 12 months.

Legally the loan can be extended for 6 more months but this will cost you a lot of money. The problem is that your house might not to be finished in those 12 months and it would be very hard to find a bank to refinance this mortgage when the house is not finished yet.

Convertible construction mortgage which after construction converts into an ordinary loan when the house is done.

This loan works pretty much the same way as a construction loan and has the same advantages when it comes to working with a contractor. From my perspective, the less flexible part is that you are obligated to get the specific loan with a certain interest rate upfront for your construction.

Moreover, I found that the interest rate on a converted mortgage for this loan was much higher than I was able to get 12 month later when I did refinance. To save some money I ended up with an interest only mortgage but this convertible loan didn't have an interest only option at all.

Project Details

Even though you are now done with your Architect, you still need to imagine a lot of details you wish to implement. The more you prepare the better results you will get from the construction itself because you could get a more precise estimate, at first, and get some additional features later on.

Here is a list of questions you can ask yourself before you get close to budgeting and construction itself:

- 1 Are you a computer man and need to have a home networking?
- 2 Would you like to listen to music?
- 3 Would you like to have the ability for music to flow from room-to-room?
- 4 Are you a TV-show person? Would you like to implement surround sound in your Family Room? Would you build a special place for a Home Theater?
- 5 Do you plan your house to be big enough to have an intercom option?
- 6 Are you allergic to dust and would like to have an alternative heating option vs. a gas heater?
- 7 Would you like your water to run hot almost immediately in any location of your house?
- 8 Have you consider a tank less water heater?
- 9 Would you like warm floors and towels in your bathrooms?
- 10 Would you like to have a water softener in the house?
- 11 What about drinking water: would you like to have filtered water in your house?
- 12 Did you ever consider a hot water dispenser in your house?
- 13 If your house is built in multi levels, would you like to have a dumbwaiter?
- 14 Have you ever considered an appliance elevator in the kitchen for your heavy duty food processor?

You will likely extend this list by the time you think about the many various features you wish to implement in your house. Some of them are costly, some – not all -- are just a matter of thinking about all of them at the right moment BEFORE your construction has started.

You will express all your wishes to your General Contractor and get an appropriate bid.

From my personal experience I would like to share some considerations you might find helpful.

Home Networking

Even if you are not a computer fan, I would suggest you to build the house with computer use in mind. These days it's very easy in implementation because you do CAT5 wiring through the house and basically simultaneously get your computer networking done, plus all your telephone lines, plus all your cable needs done in one wire. You just need to think where in a house you would like to have outlets for any kind of equipment. Keep in mind that the telephone sets you will be using all need a power supply, so it's a good idea to keep the CAT5 wiring as close as possible to the electrical wiring.

Structured Wiring

When it comes to remodeling or new home construction, it's easy to do low voltage wiring for your home theater or surround sound. You may even plan to fully implement the whole system later on but need to put wires into walls now, as it's much cheaper to do this stuff during construction time when all walls are still opened.

You probably need to plan for some space or closet to accommodate all your wires in one place, which will give you flexibility to maintain your connections in the future.

If you have structured wiring subs, keep in mind that they MUST provide you with all wires LABELED, so even a non professional could reconnect them at some point in the future. With my own lack of experience I didn't know what to expect from these guys and after they were gone I found myself in a position when I'm scared to get even close to all these wires because I didn't have any idea where they were going. Even cleaning becomes an issue because I'm afraid to interrupt the connection and possibly cause big trouble.

Intercom Tip

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I would say that today it is not necessary to plan for a special intercom system. The wireless telephone systems are able to provide intercom features being plugged in to the regular outlet, and you can use room labels to call to a specific location in the house.

House Heating

I personally do not feel comfortable with the gas heater. I always turn it off at night time because otherwise I can't breathe with this dry air. The same applies to air conditioning; we are lucky people living in the Bay Area where we can allow ourselves this luxury on turning them on and off.

So, I was thinking about getting some heating without blowing. The best solution comes from floors that are heated with hot water, and it's especially good if you have tiled or stone floors. In terms of a price, the heating system costs about the same as a gas heater with all ducts...

But there is a problem if you need to have air conditioning done, as well. So you still need to pay on ducting system.

Having a different heating system incase you need to have an air conditioner as well will double your expense for this feature.

So based on your budget, you decide whether to have the traditional system where old heaters have a feature to implement the air conditioning inside the heating system, and the same ducts are used to supply both the heated and the cool air.

Re-circulated water supply

A re-circulated water supply is one of the features that you will not find very often in spec houses on the market. It is a small thing which makes your life a little bit nicer.

The tiny pipe gets together with the regular pipes and the hot water circulates in a circle throughout the house. Special timing options can be set up to save some money by not having it run during the night.

As a benefit you always have a hot water anywhere in the house without

waiting.

Tank or tank-less water heater

We all used to have a tank full of hot water to use in a house. But these days there is the option of having a tank-less water heater.

The advantage of this is that first of all it doesn't take any space at all and can be accommodated on the wall, either within the house, or even outside.

This small device heats water on demand, so if the house is small enough, you don't heed to keep the tank hot all the time; the necessary amount of water will be heated at the time of use, which will eliminate the need for a re-circulated water supply and the hot water will always be at your convenience.

Warmed Floors

I found that it is very efficient to have heated floors in bathrooms.

You can use a special wired pad put down under the regular tile or marble floor. There is a special timer and heat control to optimize the temperature and power use. The whole bathroom is heated and becomes warm during cold winter mornings and it is so pleasant to step down on a heated floor.

Drinking Water

The drinking water filtration system fits under the kitchen sink cabinet and, combined with a hot water dispenser, will provide you with excellent hot or cold drinks at any time.

Dumb waiter

I was at an open house for sale. The house was built in 1930 by some well known architect. I was amazed when I saw a dumb waiter that connected the laundry room with the second floor hallway. What a great idea I thought, and then I installed a dumbwaiter in my own house connecting the kitchen and basement. My basement is an entertainment place in the

house. We hold parties there and now it is very convenient to bring food back and forth from the kitchen to the basement.

Heavy Duty Appliance Lift

The small, pleasurable thing in the kitchen called a Heavy Duty Appliance Lift is used to bring small kitchen appliances up to the counter level.

* * *

Now, when you have made up your mind about big and small nice features you want to have in the house you may think about getting a General Contractor, who will help you to put all of these things together and help to make your dream come true.

General Contractor

How to choose GC?

Before I even start talking about General Contractors I would like to refer you to the book developed by the Contractors State License Board of California.

The beauty of this booklet is realized when you read it BEFORE you sign up with your General Constructor because it will help you to prevent 90% of all mistakes you possibly might make.

Nevertheless, this booklet called "What You Should Know before You Hire a Contractor" cannot completely prevent you from making costly mistakes. The booklet provides advice for consumers about selecting a licensed contractor, negotiate a clear contract, and prevent disputes with the contractor and resolve disputes if they arise.

How to check up on a contractor?

The easiest way is to verify his contractor's license. In California, anyone who contracts to perform work for more than \$500 must maintain a license.

Sometimes people would like to save money by getting contractors without the license. That is understandable, but this kind of saving can bring them costly troubles.

If the person maintains a current license he is assumed to be aware about construction code requirements. Some of my friends did small additions to their old house and decided to change windows. There are special double windows on the market suitable to replace the old ones. These windows fit into the existing opening.

If you do a new construction you must use windows for new construction and these windows have a different installation technique.

My friends didn't know that and the non-licensed handyman who did new addition to the house didn't know about that either. So, they put identical

replacement windows into the old and new walls and finished everything up.

When the construction was finished they had an inspection from the city to close the construction permit. They were very upset with the news that they needed to redo all their new walls: open the sheetrock, remove posts, install new windows and repeat again the same in the back order!

Who was responsible for the damages in this case? Only the owners, because the guy who was not licensed was just a stranger from the street and couldn't be responsible for anything.

Let me share with you another story.

A person I know hired a licensed tile contractor. The guy did a very poor job. When the owner asked him why he did such a low quality job the response was: what would you expect for this money? I understand that this response is totally unprofessional. The contractor received money, HE asked for this job and because he is a LICENSED professional he is obligated to perform his job according to the construction code. It was a conflict and my friend called to the contractor's Licensing Board and won this case. The contractor returned all the money he received for this job plus the cost of demolishing his tile.

A Licensed Contractor must keep his license number on his business card and on his estimates. To check the validity of the license you can go to http://www2.cslb.ca.gov/CSLB_LIBRARY/License+Request.asp and put his license number in the box "Contractor's License Number" and Click the button, "Check License". You will see all current information about this contractor including his bonding information and his Worker's Compensation Insurance.

After you're done with checking on licensing, it is a very good idea to see some references. You need to do this not because you don't trust your selected contractor but just because you want to see the quality of his work. I personally attended the construction sites of five or six contractors. I became a non-professional expert in construction quality. In some houses I saw that this guy likes some heavy bulky materials and this kind of construction didn't please me. At another site I saw that the basement was full of water and when I asked the contractor, he said wouldn't worry too much about this matter. I was very concerned about this water and we

stopped our conversation after that.

The book "What You Should Know Before You Hire A Contractor" suggests to get at least three bids for the work you need to do and then analyze the cost difference.

Again about the budget

Going through the same process of selecting a General Contractor myself, I got the impression that something was wrong with the way contractor provides an estimate for the construction cost.

The way it works here in California, the General Contractor estimates some lump sum amount the construction should cost to the consumer. We all understand that no contractor will pay anything out of his own pocket for our construction. We also can assume that it is very hard to estimate such a big project like a new residential house upfront, based on drawings.

Looking back I can assure you that it is not possible at all. There are some unexpected issues, which nobody can predict while doing an estimate.

So, what happens in reality is the following:

The General Contractor while doing an estimate for the project wants to protect himself and his pocket. He gets in touch with other subs to get a more or less clear picture of how much this project may cost. Then he adds his profit on top – which he wouldn't lose and to be sure of some unexpected issues to come up he will add at least another 15% of the project cost on top of his estimate.

If during the construction he wouldn't use all the money, that's OK with him because you already sign up with the amount the construction will cost to you.

Do you think he will return any extras left back to you? You are right, he will never do this.

Do you think you will build your project for the amount you sign on for? You are wrong; it will cost you much more!

Where is the catch, you ask? The lump sum amount you accepted doesn't cover 100% of the project.

I will give you an example of some unexpected losses I had to carry during my construction. At the time we had started to pull out a lot of dirt, and we had in our budget about \$1,500.00 for its disposal. But suddenly we discovered that our dirt was polluted with pesticide.

Nobody ever can predict and calculate this expense. So, we had to pay for this dirt disposal \$17,000.00, which was \$15,500.00 more than we had budgeted.

Here is another example.

Our old house was connected to a PG&E line from the backyard and the pole was located on my land. There was only 25 feet from this pole to the house. According to the new construction code all new electrical wiring should be done underground, so we thought that we needed to dig a trench through the ground only about 25 feet long.

But PG&E didn't think so. They said we must get the power from the opposite side of the street from the pole, which was 150 feet away from the house, and stay on the opposite side of the road...a road that is covered by asphalt.

This small project cost me \$25,000.00 and I couldn't do anything about it because PG&E is an energy supply monopoly in our area.

So, all together it came to \$40,500.00 in unexpected losses on my project.

Would you think that in a case of lump sum your General Contractor will cover this loss? Not at all!!! He will come to you, showing his estimated budget and claiming that this unexpected loss was not covered in his estimate, so, who should be paying? That's right: you.

If you have ever seen what an estimated construction bid looks like, you have probably noticed that there are some lines marked with something like "allowance" to the owner.

That basically means that the General Contractor used some amount, say

for kitchen cabinets construction, for an estimate understanding that you probably wouldn't find any kitchen cabinets for this much, so you are obligated to pay off whatever is more expensive than the allowance you received.

Yes, this can be a very tricky business.

I was trying to plan my construction ahead as much as possible because I was told that it is very costly to implement any changes during the construction cycle.

Think about this: your General Contractor gave you an estimated bid based on your drawings. If you change anything, his estimation is not good anymore, and again he doesn't want to lose money. So, you are going to spend a lot of money on CHANGE ORDERS and your General Contractor might ask ANY price for changes – you are not ruling the boat anymore.

I brought all this information to you to illustrate that there is a deep conflict of interest between your General Contractor and your project. Your General Contractor worries about HIS expenses first (so he will choose cheaper supplies to save money) versus quality and cost of YOUR construction.

What should the owner do? Is it a right decision to get rid of any General Contractors at all and run the project by yourself? Would it be less costly to the owner?

Sometimes, yes, sometimes, no depending on your experience in the construction field and time availability.

Contractors are not always favorable to you. So if you hire subcontractors by yourself, it is now your responsibility and liability for the construction process in general. There are so many areas in home construction where different people are working apart. If the whole process doesn't work, how would you find the responsible party? Each sub will finger-point at someone else and you might get stuck with some big problems.

Being your own contractor brings up some other issues as well. You need to maintain your own general liability insurance because you are responsible for construction and if you hire any one contractor as your

employee, you will be required to buy Workers Compensation insurance.

If you plan to get financing as a construction loan, the bank would never release funds to the person who doesn't have a contractor's license. The bank wants to be sure that its funds are secured by a construction professional, not just an owner.

When I started my construction process I was very scared of the possibility of getting into a conflict situation. I found a General Contractor who would agree to work for a fixed fee amount.

In my situation we had an unpredictable budget because we agreed that I would reimburse everything on top of the fixed contractor's fee. We also agreed that every time we needed to get a subcontractor we would do three bids and select the best one. Prior to this final decision with the General Contractor I had a few estimated bids from some other lump sum general contractors, so I had an approximate idea of how much any particular job in my project might cost.

Today I would say that this is not a bad idea to have, like a General Contractor-Manager who will take the responsibility and liability of the whole project on one hand, and stay on our side of the road on the other.

Having such an agreement I was able to make changes to the original project because I didn't have anything estimated before and we gave to our subs changed drawings. In addition, I was fully in charge of any finish materials I wished to use in the project, and all savings were my savings.

Working with a General Contractor

When you found the person you think you can trust, it's a time to get the Contractual Agreement done.

I was shocked when one contractor offered to me a one page Contract document which said something like, Contractor X is responsible to build the house for home owner Y for the amount Z.

Generally speaking, it looks OK because he offers to build the house for certain amount. But it is tricky because in any conflict situation he might

point to our estimated budget, which is a part of the Construction Agreement, and prove that a certain item is not covered by his estimate.

I was so scared to miss something while was working on my budget because I didn't understand some terms and conditions. And I was completely confused when one day we were so close to finishing the deal with General Contractor and signing the papers he came up with an extra \$80,000.

I was trying to understand what this money was for and couldn't get any reasonable answer regarding what had been changed in our estimation since our last meeting. The guy smiled widely and asked, how much would you counter offer on that? I was so confused. I couldn't understand what he was asking for, and we stopped our relations for good.

The point is you must understand exactly everything in your agreement that you are signing for.

So, after a while I decided I needed an Attorney to help me to protect myself and my investment. I paid big bucks for this Agreement but it was worth it.

The Construction Agreement was clear and described in great detail what each party would do in a particular situation.

Another point which deserves consideration is the 10% security deposit. You need to specify in your contractual agreement with any contractor that 10% of the contractor's compensation will be paid off only when the house passes the final inspection and you, as the owner, are satisfied with the work done.

It doesn't mean that you might not to pay the remaining balance if you are not satisfied with your construction, it means only that the list with all the weak points has to be made and your contractor has to make all the necessary corrections.

Legal Consideration

For a large remodeling or new home construction project that involves many subcontractors and a substantial financial commitment, you should protect yourself from liens against your home in the event the contractor does not pay subcontractors or suppliers.

It is a good idea to add a release-of-lien clause to your contract, requiring the contractor or subcontractors and suppliers to furnish a certificate of a waiver of lien.

If you are financing your project, the bank or lending institution may require that the contractor, subcontractors and suppliers verify that they have been paid before releasing funds for subsequent phases of the project.

Preliminary Lien Notices

Shortly after your job commences, you will probably receive preliminary lien notices from subcontractors and material suppliers.

Don't panic! This does not mean that a lien has been filed against your property. The law requires you to be furnished with these notices to alert you that those persons have worked on or have supplied materials for your job and expect to be paid. These persons may have what are called mechanic's lien rights.

Mechanic's Liens

The law provides that those who furnish labor or materials to your home can record a "Claim of Lien" or "Mechanic's Lien" against your home if they are not paid.

Even if you have paid your general contractor in accordance with the contract, but he fails to pay any subcontractor or materials supplier who performed work or supplied materials in connection with your project, you still run the risk of having a mechanic's lien filed against your home.

You could be required to pay a bill twice to keep from losing your home in a foreclosure proceeding.

You can protect yourself from unwarranted liens by identifying subcontractors and materials suppliers in your written contract and getting a signed conditional lien releases from the subcontractors and suppliers. After you've made a payment for work or materials, get signed unconditional lien releases.

Conclusion

I realize that no one book can provide you with all of the answers to the many questions you will inevitably have when you set out to build your Dream House.

However, I do believe and hope that this book has provided you with a solid foundation (just like you need for a sturdy house!) to help turn your thoughts and imagination into reality.

Being armed with the facts, and guided by my own experiences that I've shared with you, I'm sure will set you off down the right path.

Always remember, anything worthwhile will undoubtedly present a challenge. And building your Dream House is one of the most exciting, most fulfilling projects you will ever undertake.

So when the obstacles come, don't despair. They are par for the course. One day you will look back with satisfaction and recall all of the hard effort and careful planning that went into building your ideal home.

Was it all worth it? You bet it was! And now you have the rest of your life to enjoy the fruits of your labor.

Any comments are highly appreciated. I can be contacted via e-mail lana@zaliv.org