



DEBUNKING THE MYTH of COST PER SQ. FT.

What you really need to know about
Cost per sq. ft. BALL-PARK PRICING

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DEBUNKING THE MYTH OF COST PER SQ. FT. BUILDING QUOTES

What you really need to know about Cost per sq. ft. BALLPARK PRICING

This book is dedicated to my Father, who bought me my first power tool when I was only ten years old. I thank him for his trust in my construction ability at such a young age, and for the man I have become, thanks Dad, I miss you ...

by Greg Genereux & Landen Development Inc.

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Introduction

If you are considering building a new custom home, or a major renovation you will most likely need to know where to start. Unless you have been through the knothole of building a new home or major renovation before, and realize how challenging the process can be, you will then most likely want to know how much building a new home or major renovation will cost you up front. However, that question is not an easy one to answer! We get new clients that contact us, with the very first question being asked “*how much per sq. ft. can you build for?*” The short answer is a rhetorical question, “*How much a pound did you buy your last car for?*” Or “*How much is a fridge by the sq. ft?*”? In other words, if you don’t buy other major items by the pound or sq. ft. why then should you expect a builder to price a new custom home or renovation by the sq. ft.? This short ebook is dedicated to help you deal with the myth of per sq. ft. pricing, and fully inform you as to what to look out for when being quoted per sq. ft. pricing.

We know that you need to start somewhere, and that you need some kind of measuring stick to start with, and a rough price per sq. ft. is as good as any place to start. In this ebook we will show you that rough pricing per sq. ft. is just that, a very rough number. And we will show you why this should only be used as a very rough estimating method within this ebook.

We will be working somewhat backwards and leave the best for last. The last chapter in this eBook is dedicated to the topic of “where to start”. We put this information last, as we know from experience that most clients start out looking for a builder by asking the age old question of how much per sq. ft. they charge, so we first want to answer why you need to be wary of this pricing myth. Then, understand where to start the process and how to start the custom design process without costing you any money upfront in order to fully understand the potential build cost for your new dream home or renovation!

Notes to Reader: This ebook has been written based on the Alberta home building process and the construction laws that govern Alberta, however, it should not be considered or used as legal advice of any kind and the reader is hereby advised that they should also seek legal advice from their solicitor before engaging or entering into any contract of any kind.



"Price is what you pay. Value is what you want to get."

- Warren Buffett

About the Author



The founder of Landen Design, and Landen Developments, also known as Landen Design-Build, Greg Genereux has four decades of experience in custom home design and custom home construction. Designing well over a thousand custom home plans, and building many of Calgary and areas most prestigious homes over a 40 year span of construction experience. Many of Greg's clients coming back for their second, third, or even their fifth custom home.

Greg has won many best in class design awards, including several SAM awards, and won the coveted Golden hammer Award for 10 years of best in class service from the ANHW program. Greg also holds many design certificates in Drafting, CAD, Land Planning & Development. He is well experienced in residential structural design. Greg is also a fully accredited Red-Seal Journeyman Carpenter and Cabinet maker, who has experience and knowledge of all aspects of new home construction, including HVAC and other mechanical design and installation, structural design, electrical design & layout, and installation, with hands on experience in virtually all aspects of custom home building

Disclosure Notice to Reader

The ideas and concepts presented herein are for general conversation purposes only, and are based on the authors 40 years' experience on the subject matter and the ideas and opinions presented herein may differ from that of other experts in the field. Further, any costing data presented herein are based on averages for labour and materials that have been directly used by the author and or Landen Development Inc., and are based on 2019 rates for the Calgary and area market in Alberta. It should be noted that there may be other builders and or contractors that offer substantially different rates and price structures and that the author and or Landen Development Inc. assume no liability whatsoever for the use of the information contained herein. Further the reader should in addition to the information contained herein get an opinion and guidance from several other expert sources before making any financial commitment or entering into any contractual arrangement.

DEBUNKING the MYTH of “COST PER SQ FT”!

The number ONE per sq. ft. question:

“How much do you charge per sq. ft. to build a home?” Or, “how much do you charge per sq. ft. for home building plans?”

This is the one question that almost every new client asks of any home designer or builder, and like most custom home building processes this begins with a prospective client first reaching out to a number of home designers and builders in their area, to get a “feel” for cost and the first question asked is for a “ballpark per sq. ft. estimate” or “average cost per square foot”?



So where does this per sq. ft. idea come from?

Some of this thinking comes from people watching TV programs like HGTV or Mike Holmes, and this somewhat helps to start this uniformed fallacy. The second place that the per sq. ft. misconception comes from is the real estate home selling industry. This, because every Realtor out there uses the same “per sq. ft.” analyst to “guess” at the value of the home you want to sell. How they do this is by looking up all the area “comps” (comparable homes) sold in the same general area as the home you want to sell, and then total up all this previous sales data and then simply average the sales value per sq. ft.! With this formula it means that EVERY home in your area is somewhat treated the same no matter what is included for upgrades or finishes! **THIS IS NOT HOW REAL BUILDERS DO THIS!**

So why do builders/contractors offer up per sq. ft. numbers?

Most home designers and builders, although they will never tell their prospective client this, secretly loathe the per sq. ft. cost questions for which there is really no right answer for! In an attempt not to lose a potential client, these same designers or builders will spew out approximate per sq. ft. building cost figures to them, and the client then walks away with the idea that these are somewhat firm building costs! However, you should first know that NO builder does construction this way (*and if you find one that would, you should be very wary of their credentials as being a “real builder”*). As you may realize at this point in the early conversation, the situation becomes very problematic for both the home designer/builder and the client, this for two reasons. It leaves clients uninformed and uneducated and

puts the designer/builder in a “very” questionable per sq. ft. numbers game that inevitably comes back to haunt them.

No builder prices their projects purely based on cost per sq. ft. - at least not ones that know what they are doing!

As no one likes to venture into a six-figure custom home build or a major renovation project investment without “some idea” of what cost are involved in custom home design and the custom home building process, we have laid out the basics within this ebook to help smooth out some of the worries and provide much needed consumer education. We have, therefore, prepared this short guide to assist our future clients to navigate the cost of custom home building and design, so that they know up front what to expect and look out for.

Laying out the facts about ballpark figures & Cost per Square Foot

When asked the question of “*how much do you charge per sq. ft.?*” I usually respond with “*well, it’s like buying a car by the pound!*” It is true that most cars have four wheels, one steering wheel, and other standard car requirements like signal lights, brakes and so forth, BUT that’s where the direct comparison ends, from that point there are many “options” that affect the cost of a new car, never mind “brand comparison” of the car you want to consider! Pound for pound, most modern cars probably weigh about the same, give or take a few pounds. So ask yourself this question, how much a pound is a Lamborghini, verses say a Ford Fiesta? After this per pound pricing breakthrough I think you will get the idea that custom built homes are somewhat similar if you want to know how much a pound or cost per sq. ft. a custom home should be. You first need to understand, do you want “Lamborghini, or Ford Fiesta” per sq. ft. ballpark, or something in between.



Both Cars look good & both have some similar features. However the one on the LEFT would set you back substantially more than the one on the right, even though they both weigh about the same!

Building costs that are directly client related

The very first thing to understand and the whole point of a custom built home is that it is uniquely designed around “your” unique tastes and lifestyle needs. This means your custom home will be as unique as you are, and its silly to suggest that standard cookie-cutter like cost per square foot could even begin to accurately convey the cost of “your” personalized custom home requirements, otherwise you might as well have exactly the same home with all the same features as all your neighbours down the block!

While “ballpark figures” can have their place at the very preliminary design phase, they can also be very misleading. I am sure you know someone that has told you a few horror stories where they were initially excited with a builders up-front “*ballpark per sq. ft. figure*”, only to be left stunned with thereafter. After considering all of the client’s wants and lifestyle needs, the builder lays out before them a comprehensive construction proposal which will now cost many thousands of dollars more than the original ballpark figure.

Like the earlier car example, a custom built home contains many hundreds of thousands of price-affecting components and even the most reasonable of “ballpark figures” are not ideal. “Ball-parking” not only puts the builder in a bad light, if ball-parking to low, they then look silly when the real numbers come out, or alternately ball-parking to high and lose the client to another “low-ball” competitor. No matter the ballpark number, it becomes a risky predicament for the builder, as they also know that their competitors are also firing out “ballpark” numbers. This is where the builder has to consider - *should they “low ball” or “high ball”*; *this being the big question that you as a client needs to understand up-front.*

BEWARE: Definitions of “square footage” (sq. ft.) can vary wildly within the building industry where some builders offer “living space” in square footage that also include stairwells, open areas, etc. In some cases where developed basements are included, whereby a builder may “blend” these areas to indicate a “false” overall lower sq. ft. rate! This can also be the case with bonus rooms, attic areas etc.

So what composes the “price per square foot?”

Generally, the ‘rule of thumb’ is that larger homes tend to cost less per sq. ft. to build than smaller homes. The main reason, within a larger home foot print there is much more square footage to “dilute” the costs of more expensive materials and a wish-list of goodies, like bathrooms, kitchens, etc.

Certain clients will spare no costs when building a home and will have the best of everything, while others clients building the exact same sq. ft. of home are on a tighter budget and will try to save money

where they can. Some clients want to build an elaborate home, outfitted with the latest technology and luxuries, while others simply cannot afford this. Most often, clients are simply looking for a house that makes them content and meets their lifestyle needs. Because of the wide spectrum of clients, it's important to figure out what the customer goals are and what type of home they want to design and build, and then begin to create a preliminary estimate price based on the fulfillment of those goals.

Some of the biggest factors in home building costs can be site factors such as water table, slope, rock, design size, roof pitch, number of windows, and siding material. Appointments such as custom cabinets, granite counter tops, number of baths, stone, tile or marble flooring, and specialty rooms all add to sq. ft. cost to build. Our past history at Landen Design-Build indicates that our average home prices (as of 2019) have been between \$180 (at the low end) to over \$330 per square foot for higher end finishing, and in some cases, higher than that for very complex custom homes.

There is an old saying in the building industry when customers ask us to include all the goodies, but ask us to do so at rock bottom pricing! You need to ask yourself "Do I want cheap, or good quality?" You can't have both!

**“Can you please take these empty beer bottles
and fill them up with champagne
for the same price as BEER?”**

“The question of HOW you want a builder to price the construction of a home can make a big difference in upfront tenders and bids”

The type of contract you want to consider with your builder can also directly affect how a builder will price a home. If you ask your builder to give you a “FIXED” price they then need to budget for the “what-if-factor”. What this means is that a builder needs to forecast his building cost, way out there, in some cases up to a year from the date of the quote. A lot can happen in a year. There could be trade or material shortages, interest rates can go up, supply prices increase, labour rates increase, as well as unforeseen events like weather delays, permit and inspection delays, and even the inevitable “contractor mistakes”. This “what-if-factor” is budgeted as a line item called a “contingency factor” which can range anywhere from 5% to 15% depending on the build's level of confidence in the “future market.”

If the builder has “guessed high” on his contingency factor, and the job goes smoother than anticipated, the builder puts part or possibly all of this contingency factor in his pocket as added profit. If the job does not go so well and the builders crystal ball doesn't forecast all the issues, the builder then hopes

that the contingency factor will cover off any unforeseen issues so that they don't need to dip into profits.

Trying to eliminate the “what-if-factor”

So, how can you potentially eliminate the “what-if-factor”? One way is in how you structure the building contract. There are basically three ways to contract a home, or major renovation. One way is a fixed price contract, the second, a cost plus contract with a fixed percentage mark-up over all hard cost. The third way is project management, which is effectively cost plus, but has a “fixed project management fee” pre-agreed to as a “flat fixed fee” no matter what the hard job cost come in at!

Cost plus or fixed price?

Before we get ahead of ourselves, I believe it is important to touch on a crucial decision of your custom home purchasing experience: the choice between cost-plus pricing, fixed-pricing or project management pricing. While certain home builders have experimented with more exotic pricing structures in the past, these three options have long remained the standard in the industry to evaluate the cost of custom homes. This is for good reason. Each have their own weighty list of advantages and disadvantages, which I will briefly touch on in this book.

Fixed Pricing

Fixed Pricing is remarkably uncomplicated. It is simply an agreement to build a custom home at a fixed price, which includes all costs, profit and external cost. This type of contract is managed under a very strict set of building specifications and detailed building plans, which can only be altered with a customer signed change order. It should be noted that change orders is where a fix-price builder makes their largest profit, as you really have no choice but to use the fixed price builder, and they can somewhat set whatever profit margins they think they can get away with for change orders.

- **Pros:** While builders may be more restrained to enter a fixed price agreement, clients tend to favour the simple and predictable nature of such contracts (i.e. “this is how much we are paying and NOT one cent more”).
- **Cons:** Fixed pricing is not very compatible with added costs after the initial contract has been signed by the client and builder. Since the given fixed price may not have provided certain desired options, the price could potentially rise during the project – sometimes even beyond what is covered by the client's construction financing.

Cost-Plus Pricing

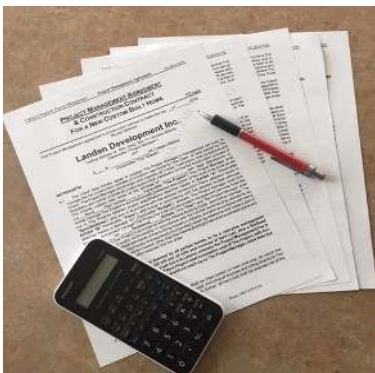
Cost plus pricing is exactly that: the cost of the entire custom home (labour, materials, permit, etc.), along with an additional builder's fee on top of it – usually designated as the “builder's pre-set profit” and based on a % of building cost (usually ranging anywhere from 12% to 20%).

- **Pros:** Although this agreement is especially favourable for the builder, clients also stand to benefit greatly with a cost-plus pricing agreement: the transaction is hyper transparent, and quality of craftsmanship is rarely cut quality-wise
- Eliminates the need for change orders
- **Cons:** Cost-plus pricing can be complex, as every component of the home still requires detailed specs and plans and have a comprehensive contract structure which provides cover for all contingencies that could arise. At the same time, cost-plus pricing is can be vague for the clients, as it does not provide any guaranteed maximum price for the home.
- To help avoid project overruns, there should still be a very detailed project budget estimate done, with this same budget designed to have monthly or even weekly reporting that indicates where the job is at, at any given time. This reporting should also track the proposed cost to complete, so that you as the client fully understands where the project costs are. Also, how upgrades and design changes to scope of work can directly affect the end project cost. This detailed cost estimating also helps with construction financing, as your banker will want to know that costs will be properly managed.

Project management most-plus with a fixed management fee

Project management is exactly that: the builder is paid a fixed fee to “manage the project” and all costs are directly paid for by the client for the entire custom home (labour, materials, permit, etc.), along with the fixed project management fee added on top of all hard and soft project costs – usually designated as the “builder’s fixed management fee”.

- **Pros:** Although this agreement is favourable for the builder, but not as favourable as cost plus, the clients gets the benefit of knowing that the builder’s fee is fixed and will not go up, no matter what the final building cost is. All building costs are passed onto the client at the builders discounted rates; there are no extra charges for change orders other than the hard cost of changes, and the builder cannot mark-up changes. The transaction is even more hyper transparent than standard cost-plus, and quality or workmanship is rarely a concern as the builder has no advantage to cut corners quality-wise. **Cons:** Project management - cost-plus pricing can also be a bit complex, as every component of the home requires mapping out in exact detail. It is of primordial importance to have a comprehensive contract structure on hand which provides cover for all contingencies that could arise. At the same time, building cost can still be a bit vague for the clients, and does not provide any guaranteed maximum price for the home.
- To help avoid project overruns, there should still be a very detailed project budget estimate done, with this same budget designed to have monthly or even weekly reporting that indicates where the job is at at any given time. This reporting should also track the proposed cost to complete, so that you as the client fully understands where the project costs are at and how upgrades and design changes to scope of work can directly affect the end project cost. This detailed cost estimating also helps with construction financing, as your banker will want to know that cost will be properly managed.



It should be noted that most of Landen’s clients choose “Project Management” with a FIXED management fee, as their preferred method of contracting with us.

This gives then gives our clients the peace of mind of knowing our fixed project management fee will not go up not matter what the building cost come in at. Effectively we have zero motivation to try and up-sell the client or try and have job cost and extras get out of hand in the name of making an extra profit.

This way the hard cost is the hard cost with NO further mark-up. This method of project management makes for a much easier process for any customer requested changes to plans and specifications as we go along with construction. This gives us a clear understanding of where the job costs are, at any given time, along with a detailed costs to complete at each stage of reporting. Further, all hard costs are passed on to the client along with our full builder contractor discounts!

What does it cost to build a home?

After looking at a number of new homes for sale, it should soon become obvious to you that homes with a similar number of bedrooms, bathrooms and square footage can vary greatly in overall price especially if trying to compare on a per sq. ft. cost basis. There are homes that have minimum specifications and features and others that have the latest designs and high-end materials and finishes which make it very hard for a builder to quote an exact cost or price if based only on a sq. ft. basis. This is especially true for custom built homes. In order to get to this stage you really need very detailed plans, building specifications, and building site details BEFORE a builder can give you accurate pricing. However, we can look at each of the main components to building a custom home which can help to explain how a house is priced. Here are some of the main factors involved:

- The shell of the house, which includes walls, windows, doors, roof, siding, and the style or elevation of the exterior will most likely account for 30% to 35% of the home's total cost.
- Interior finishes such as flooring, tiling, cabinets, counter tops, trim work, railings etc. tend to add up to 35% to 40% of cost or even higher for other custom upgrades.
- Mechanical systems, such as basic plumbing and heating, can account for around 13%. Adding items like in-floor heating, boilers, and other upgrades can push this number much higher.
- Kitchens and bathrooms are the most expensive rooms to build in a new home, especially with the cost for finishes like cabinets and counter tops. To put things into perspective, an average three piece bath takes up about 45 sq. ft. and averages about \$14,000 which works out to about \$311 per sq. ft. This is compared to the basic home area which may only run around \$180 per sq. ft. Therefore, the more bathrooms you add into this area the more you drive up the overall average home cost on a per sq. ft. basis.
- Architect and engineer drawings, are generally charged on a cost per square foot basis that include a limited number of revisions. If you're dealing with a new home builder like Landen Design-Build,

then these costs are typically included within the price of the home builders project management fees and additional customization will cost extra. Custom home designs will be charged at the design firm's standard rate, and the rate will vary depending upon the expertise and skill of the architect and/or home designer. On average (2019 prices in Calgary) averaged about \$1.35 per sq. ft.

An example of a Landen Design price break-down based on a 2,000 sq. ft. two story home, (you can also download this MS-XL calculator from Landen's web site):



Contact Greg Genereux 403-619-4734
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Standard Drafting & Design Rates

| Fee's schedule | Sq. ft. / quant | unit price | totals | options totals |
|---|-----------------|------------|--------------------|--------------------|
| Initial sit-down consultation with client | 1 | \$ - | | |
| Preliminary plan & basic rendering | 1 | \$ - | | |
| Base home plan main floor or bungalow | 1000 | \$ 1.35 | \$ 1,350.00 | |
| Base home plan second floor | 1000 | \$ 1.35 | \$ 1,350.00 | |
| Basement development | 1000 | \$ 0.75 | \$ 750.00 | |
| Added walkout detail (flat rate) | 1 | \$ 850.00 | \$ 850.00 | |
| Garage over 575 sq. ft. (2-car incl) | 350 | \$ 0.65 | \$ 227.50 | |
| Development over Garage | | \$ 1.35 | \$ - | |
| Site plan (flat rate) optional | 1 | \$ 375.00 | | \$ 375.00 |
| Electrical plans (optional) | 3000 | \$ 0.18 | | \$ 540.00 |
| Mechanical plans (optional) | 2000 | \$ 0.20 | | \$ 400.00 |
| | | | \$ 4,527.50 | \$ 1,315.00 |
| | | | | \$ 5,842.50 |

Other services

| Optional | per job | unit price | |
|----------------------------------|----------|-------------|---|
| Detailed Cost Estimating | 1 | \$ 775.00 | |
| Full bid / tendering process | 1 | \$ 2,200.00 | |
| Hourly rate for revisions | | \$ 75.00 | (Note: revisions are changes after final plans) |
| Site Visit (for design) + travel | hr. rate | \$ 75.00 | |
| Permit applications | | \$ 850.00 | (Note: not including planning authorities fees) |

NOTE: the above pricing does not include engineering, which "may" be required by the approving authorities.

- Excavation and foundation work to prepare the site for the building construction can vary greatly, especially if you are planning on an acreage build, which can add some \$35,000 to \$100,000 just for site prep and site services such as septic systems, wells, roads, site clearing and grading, and to bring in services such as gas and electrical hook-up. Trying to blend all these costs into a "per sq. ft. formula" would then throw out a number that would sound way out of whack with average inner city or city developer building costs per sq. ft.
- Municipal permits such as building permits and soil tests may be needed, and certain inspections and appraisals may also be needed to make your banker happy.

Is the Cheapest Price the Best Price?

Everyone wants to get a good deal, and everyone wants to make sure they are not getting ripped off, but there are pros and cons to using the cheapest guys, and in most cases more cons. In the movie Armageddon, there was one line that seems to address this question;

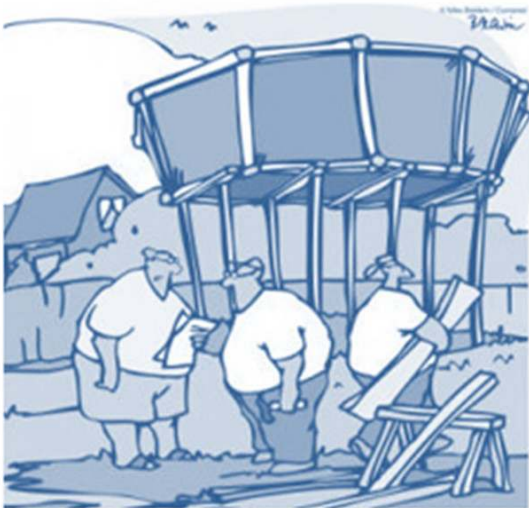
“How does it feel to be riding into space on something that has millions of moving parts, all built and assembled by the lowest/cheapest bid..!?”

There are a few rules of thumb to follow when looking for construction pricing for any major project, especially when looking at per sq. ft. pricing! The following are just a few rules to help you avoid a potential disaster:

RULE 1. Get at least three bids, then toss out the highest bid, and the lowest bid, and only deal with the middle guys!

RULE 2. DON'T get too many bids! The contracting industry is a small industry and most builders and contractors know each other. If they don't, they certainly will deal with the same suppliers and wholesalers and once the word gets around that you are getting dozens of bids, no one will want to take you seriously. They may not even want to bid the job, or alternately will simply give you the “go-away” price! Meaning, they will not spend much time on the bid and simply give you a very high price, and if you happen take it, then and only then, are they willing to do your project. A good rule of thumb is getting no more than four to five bids maximum!

Builders that know what they are doing should not have more than a 5% spread from their competitors, as the contracting industry tends to work off of an average of a 12 to 20 % mark-up which covers the contractor's overhead. So if you are looking for some guy that is way lower in price by getting a whole bunch of bids, you are probably doing yourself a major disfavor.



Are you guys sure you know what you are doing?
I know I wanted an above ground pool, but!

RULE 3. DO NOT deal with bids that are WAY TOO LOW! A bid that is way lower than the main pack of bids is definitely NOT the guys you want to deal with. This for a number of reasons, but the most important one is, do you really want to use a contractor that has made a mistake on their quote? Eventually, they figure it out and then need to “skimp” on your project, or worse, simply walk away when only half done! If you end up with a half done project, it is VERY difficult to find another contractor to finish off the job, and even if you can find one willing to do so, it will most likely cost you way more than if you had simply used the “right guy” in the first place. The illusion of Big Savings from a lower bid, can translate into REALLY BIG PROBLEMS later on.

Check out one of our testimonials on our website at landendevlopment.com, in particular a testimonial from Kristine & Norm. This client went through this issue, and then after getting only part way through the job with another “BAD Contractor” - came back to Landen to ask us to help them out of the mess of hiring the cheapest guy!

RULE 4. Make sure you have VERY detailed plans and specifications for bidders to quote on. This will make sure that there are no “games” being played by a contractor simply “omitting” certain specs or products from their bid in an effort to “appear” to be cheaper, and then you find out everything is extra!

RULE 5. DO NOT BOTTOM LINE a quote or bid. Make sure that when you receive bids in, that each has quoted exactly the same thing! Make sure that all bids have included the same specs, materials definitions, model numbers, and quantities, and that they are the same as have been outlined in the plans and detailed specifications. This is one area where contractor’s trying to “look-like” the best in price, can play games. One area where contractors tend to use “fudged numbers” in their quote is in the allowance category! Line items like appliance allowances, tile allowances, lighting and flooring allowances may be set very low in their bid, and in fact may be well below what you could ever find any product for. After engaging the contractor, you find out that these allowances are simply not enough to buy what you really want, and are then charged out as an “up-grade”. Therefore, looking only at the bottom line of a quote can be very deceiving even if the quote “states” that they are bidding the same specs as other bids! (*See also Landen’s free bid comparison service, if using our architectural planning services*)

Pros and cons of the cheapest bid

Unfortunately when you ask a contractor to bid your job you have no way to determine if they are a legitimate company just by looking at them, they generally don’t have a big red flashing sign that states “**Warning Bad Guy**”! So it becomes your job as the client to VERIFY the background and experience of the contractor/builders that you are looking to engage!



Pro- If you take the cheapest guy, and they IF they are “very reputable” they may complete the job for the low quoted price, even after they figure out that they have made a huge mistake in their bid, and finish the job even though they are losing money to do so. The ONLY reason they would do this is to keep a good reputation by not walking off the job!

Pro- Some contractors will bid very low so as to just cover-off their hard cost, “hoping” to make things up in change orders later on. If you are sure that you will not be making ANY changes, and you are sure that you will not have any hidden issues that may pop up, then you may get a “good-deal”. However, you should be prepared for a contractor that may be in a bad mood while doing your job for virtually no money.

Con- Contractors that have made a mistake will figure this out by the time they get part way through the job, and then need to figure out how to “save money” usually at your expense in quality or specification.

Con- Contractors that come in with low bids are “hoping” to make things up in change orders. In most projects there are two types of changes, especially in renovation projects. The first is customer requested changes, and the second unforeseen issues that come up. Once you have signed the main contract, you are then locked-in and have no choice but to use the same contractor for these changes, and this is where they “get-you” and make all their profit by overcharging you for changes.

Con- Most contractors that have bid way low, usually do so for any number of reasons. They may not have a contractor’s licence or have WCB coverage, they may not be Bonded, they may not be insured, or they may not be planning on paying their trades or suppliers - they may simply be planning on running off with your up-front deposit! All of these issues can and WILL come back to haunt you!

- In the case of no licence, this usually also means that they are operating without a permit, which is not only illegal, but can have future consequences for your homes resale.
- In the case of no WCB coverage, this could cost you way more than the possible saving in the low bid. If a worker gets injured or is killed on your job, you as the owner are 100% liable for damages. This can literally add up to millions of dollars in potential damages!
- In the case of no liability insurance, this could also cost you way more than the quoted saving. A small mishap like leaving a tap running, or a fire caused by the contractor could cause uninsured damaged or even totally destroy your home, whereby your personal insurance company could tell you “tough-luck you’re not insured” under your own policy, because you used a non-qualified contractor. A good contractor will provide you with verification of insurance, and should have at least \$2,000,000 in coverage.
- In the case of a contractor not paying their bills, this will cause liens to appear on your property from their sub-trades, even though you paid the main contractor. Now you have to pay “his” bills all over again to get the lien off your title. *(See also our Landen ebook on Lien rights and how to protect yourself from liens)*
- In the case of running off with your deposit, a good contractor (in Alberta) should be registered with the province as a “licensed pre-paid contractor” meaning that they should be able to provide you with a Certificate of Compliance that you can verify, and this way you have some recourse.

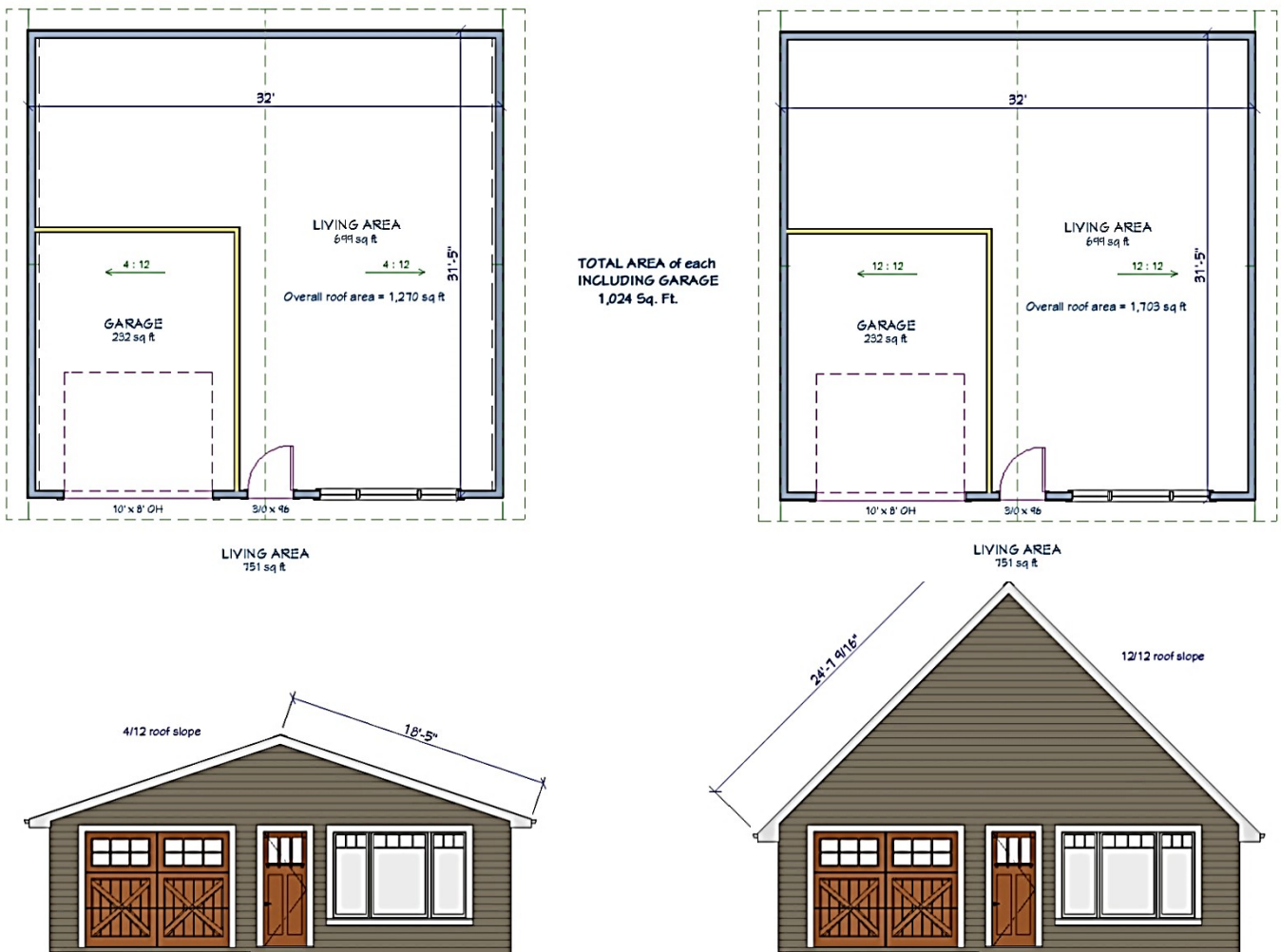
Con- Even if a contractor has all the correct licensing and insurance coverage, the quality of workmanship will most likely be much lower with a “cheaper bid”! It is human nature to want to make money and every contractor does, but if a contractor has bid too low they have two choices - offer less quality, or cut corners, both of which you may not become aware of right away until it is too late! There is an old contractor saying:

*“Do you want the highest quality, the cheapest price, delivered the fastest way?
Well you can have any two of the three! You can’t have all three”*

NOTE: We have another ebook on how to hire a good contractor; you can find it on our website at landendevlopment.com

Roof slope and how that affects the cost difference

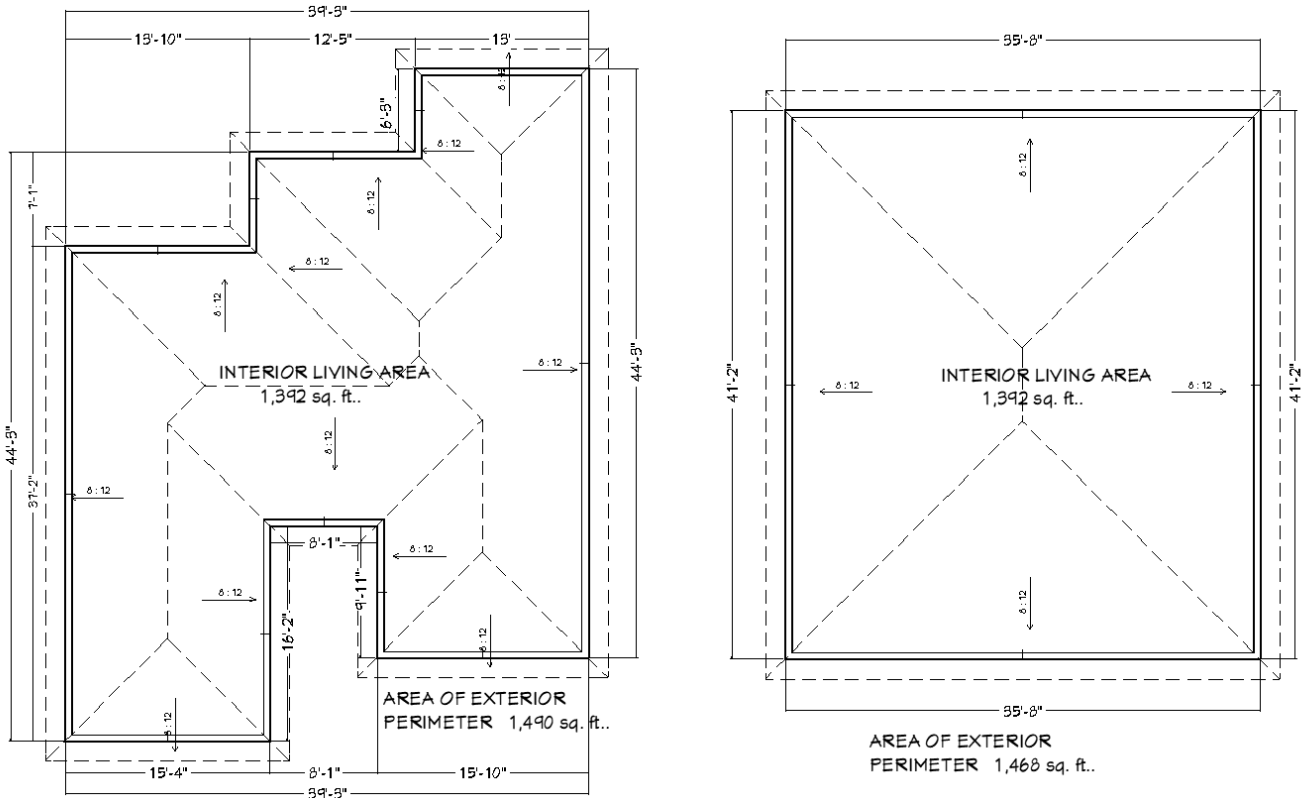
The slope of the roof, also known as the roof pitch can greatly affect your overall per sq. ft. building cost. The example below is that of a very simple house, the one on the left with a lower slope roof of 4/12 and the second on the right with a roof pitch of 12/12. You will note that both floor plans are identical other than the roof slope. The 12/12 roof adds more than a 35% increase in roof area, and also increases the wall/gable area by some three times. This adds to the soffit overhang area and fascia requirements, not to mention the extra labour that increases exponentially for steep roof construction. This all adds up in per sq. ft. cost as you need more shingles, more siding, more labour, and more costly roof structure/trusses to achieve the “look” of a high sloped roof design that covers essentially the same living area, and adds no extra life style living benefit.



Overall plan footprint shape and how that affects price per square foot

The diagram below is that of two identical “interior sq. ft. areas” the one on the left is a more cut-up design, using multiple corners, whereas the one on the right a basic box. You will note that if you add up all the wall lengths of each layout, that the one on the left adds up to 199 lineal feet of exterior wall, and the basic box layout on the right only adds up to 154 lineal feet, this for exactly that same interior area square footage. You will also note that the exterior area of each layout changes, meaning that the overall footprint needs to be (*in this example*) 22 sq. ft. larger for the layout on the left in order to achieve the same “interior area”. This sq. ft.. difference is due to the area of the “extra wall lengths”. What this means is that it takes another 45 lineal feet of exterior wall to achieve the same interior area of the basic box. Or put another way, a 30% increase in “extra wall cost”. Which then directly translates into extra framing materials, labour, drywall and siding cost. Not to mention the extra roof cost! The layout on the left has 2,146 sq. ft. of roof area based on an 8/12 pitch and the basic box on the right only needs 2,052 sq. ft. of roof area to cover the same living area, using the same roof 8/12 pitch . The same is true of needed ridge capping, gutter, soffit, etc.

The different shape as outlined below can directly affect per sq. ft. building cost of the main structure by as much as 40%, this without taking into account different room heights, such as 9’ high ceilings verses standard 8’ high ceilings, or vaulted ceilings or extra high ceilings open to above or open to below areas.



Open to below and open to above areas and how that can affect sq. ft. pricing

Where ever you have an open to above or open to below area adds cost to the overall home structural cost. These areas are not generally counted in the “living area”. But! These areas do cost money to build, and therefore need to be “*blended into*” the overall area per sq. ft. building cost. In other words, if you have two separate homes with identical “*living areas*”, but one has no open to below or open to above areas compared to the other home that does, then the two homes will have totally different “*per sq. ft.*” building cost even if everything else is the exactly the same building specification! Effectively, open to below or open to above areas cost very close to the same building cost structurally as the rest of the living area, the only difference is the “*floor structure is missing*”. The same basics of foundation, roof and wall areas are needed, BUT these costs are then generally allocated to the living area per sq. ft. calculation. In general, in the real-estate industry the quote is not “*supposed to*” include these open areas in the living area calculation, which directly effects the basic structure cost on a per sq. ft. basis of actual living area.

Decks, verandas, or covered porch and BBQ areas, and how they directly affect pricing

Another per sq. ft. item that is generally included in basic sq. ft. pricing is decks, verandas, or covered porch and BBQ areas. Again, this can have a huge effect on “main home” pricing per. sq. ft. This is especially true if you want a covered deck or veranda. Effectively, they can cost close to the same as the main home “structural cost” as they still need a foundation and roofing, whereby the only thing missing is exterior walls, of which is replaced by another railing cost. This is why most builders only include a very small deck in their basic pricing, and then want to charge you for upgrading to larger decks.

For example:

You build a 2,000 square foot home with a 100 square foot porch and a standard garage. Or, you build a 2,000 square foot home with 300 square foot porch and a three car garage. Even though both homes have 2,000 sq. ft. of living area, the second home will be much higher based purely on a per sq. ft. basis of the living area! This adds another \$6.50 per sq. ft. to the living area with zero difference.

| 2,000 Sq. Ft. home with 100 Sq. Ft. porch | Basic Sq. | | |
|---|-----------|-----------|-------------------|
| | Area | Cost | totals |
| Home living area | 2,000 | \$ 210.00 | \$ 420,000 |
| Porch area | 100 | \$ 65.00 | \$ 6,500 |
| Total home cost | | | \$ 426,500 |

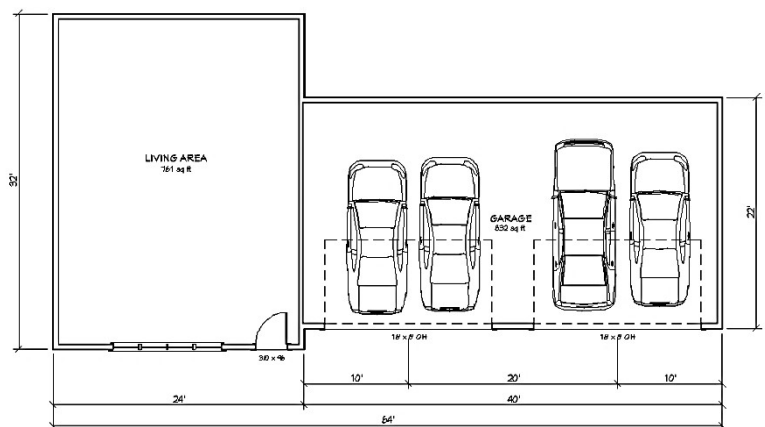
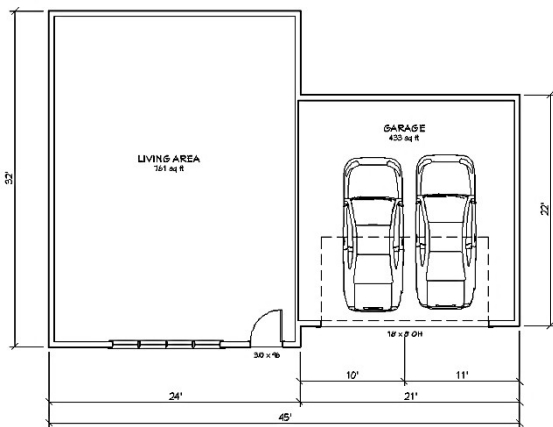
| 2,000 Sq. Ft. home with 300 Sq. Ft. porch | Basic Sq. | | |
|---|-----------|-----------|-------------------|
| | Area | Cost | totals |
| Home living area | 2,000 | \$ 210.00 | \$ 420,000 |
| Porch area | 300 | \$ 65.00 | \$ 19,500 |
| Total home cost | | | \$ 439,500 |

| | |
|------------------------------------|-----------------------|
| Difference of | \$ 13,000 |
| On a per sq. ft. basis more per sq | \$ 6.50 |
| Averaged over living area | \$ 216.50 per sq. ft. |

How attached garage areas affect overall price per sq. ft.

Another factor that drives the per. sq. ft. pricing, is the number of garage/car spaces and their associated cost that are generally included in the overall main house pricing. Most custom builders budget for a “standard” two car garage. That is generally sized to 22’x 22’. The reason for this standard garage size is because most “other builders” price this way. If a builder was to include say a 3 or 4 car garage in their “standard home” pricing and is competing against another builder who is only including a two car garage, then of course there is a big per. sq. ft. price difference! And not all clients figure this out right away, as the blended per. Sq. ft. price makes the builder including a four car garage “appear to be more expensive” on a per sq. ft. basis.

On average an attached home garage runs about \$80 to \$135 sq. ft. for a basic garage package, (*based on 2019 average build cost*) this of course can vary wildly depending on exterior and interior finishes, roof pitch, type of overhead doors, door openers, heated verses non-heated, etc.



Home "A" 2,000 sq. ft.

| | Units | cost per | totals |
|----------------------------|------------------|-----------|----------------------|
| Basic home structural cost | 2000 | \$ 210.00 | \$ 420,000.00 |
| Garage area 1-car 12x22 | 264 | \$ 75.00 | \$ 19,800.00 |
| | | | \$ 439,800.00 |
| Home cost | Per sq. ft. cost | | \$ 219.90 |

Home "B" 2,000 sq. ft.

| | Units | cost per | totals |
|----------------------------|------------------|-----------|----------------------|
| Basic home structural cost | 2000 | \$ 210.00 | \$ 420,000.00 |
| Garge area 2-car 22x22 | 484 | \$ 75.00 | \$ 36,300.00 |
| | | | \$ 456,300.00 |
| Home cost | Per sq. ft. cost | | \$ 228.15 |

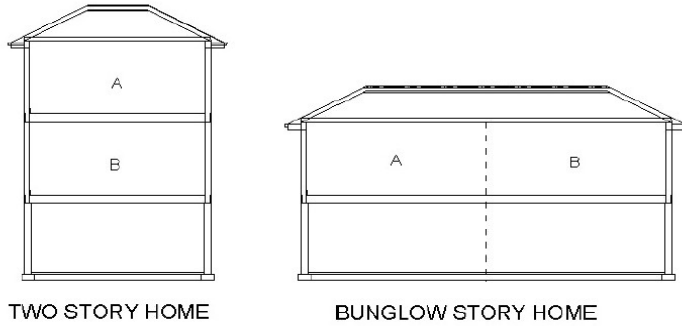
Home "C" 2,000 sq. ft.

| | Units | cost per | totals |
|----------------------------|------------------|-----------|----------------------|
| Basic home structural cost | 2000 | \$ 210.00 | \$ 420,000.00 |
| Garage area 2-car 24x32 | 768 | \$ 75.00 | \$ 57,600.00 |
| | | | \$ 477,600.00 |
| Home cost | Per sq. ft. cost | | \$ 238.80 |

Home "D" 2,000 sq. ft.

| | Units | cost per | totals |
|----------------------------|------------------|-----------|----------------------|
| Basic home structural cost | 2000 | \$ 210.00 | \$ 420,000.00 |
| Garge area 4-car 24x42 | 1008 | \$ 75.00 | \$ 75,600.00 |
| | | | \$ 495,600.00 |
| Home cost | Per sq. ft. cost | | \$ 247.80 |

Type of home bungalow verses two story, and how these cost per sq. ft. vary!



A typical 2,000 sq. ft. bungalow home as illustrated to the left, assuming that all 2,000 sq. ft. are on one level. This, compared to the same 2,000 sq. ft. area in a two story home on the far left. You can clearly see that the two story home needs much less roof and foundation to create effectively the same living area.

The 2,000 sq. ft. bungalow on the right would have 2,000 sq. ft. of foundation under it, and would have 2,000 sq. ft. of roof over it, where as a the same 2,000 sq. ft. two story home would only have say 1,000 sq. ft. of foundation under it and would have only 1,000 sq. ft. of roof over it. Further, if a bunch of that second floor sq. footage could be built out over the garage, it would also directly affect the overall sq. ft. building cost in a downward price factor.

The big takeaway here is that spec for spec, bungalows cost much more to build than do two story homes. This is purely a life style decision, as bungalows can be a more preferred lifestyle, especially for our aging population. On a side note: there is an in between option, whereby the master bedroom area is designed on the main floor level and “only” the secondary bedrooms are on a second floor, a good compromise between bungalow and a full two story home.

How the “GOODIE PACKAGE” affects overall per sq. ft. pricing

Let’s assume that you want to build say 2,000 sq. ft. of home and you want to compare effectively the same floor plan layout but with different “goodies” in them. One home has two bathrooms with 28 lineal feet of kitchen cabinets, with one furnace and one hot water tank, and an allowance of \$5,000 set aside for appliances. The other home has five bathrooms with a 54 lineal feet of kitchen cabinets, two furnaces, two hot water tanks, and an appliance allowance \$10,000. Even though both homes are identical in size, each will have totally different sq. ft. price outcomes, even if all other specs stay the same! This is another reason why “average” per sq. ft. pricing simply does not compute.

Home "A" 2,000 sq. ft.

| | Units | cost per | totals |
|----------------------------|-------|--------------|----------------------|
| Basic home structural cost | 2000 | \$ 210.00 | \$ 420,000.00 |
| Hot water heater | 1 | \$ 1,120.00 | \$ 1,120.00 |
| Furnaces | 1 | \$ 18,000.00 | \$ 18,000.00 |
| Bath rooms | 2 | \$ 14,000.00 | \$ 28,000.00 |
| Appliances allowance | 1 | \$ 5,000.00 | \$ 5,000.00 |
| Kitchen cabinets lin. ft. | 28 | \$ 310.00 | \$ 8,680.00 |
| | | | \$ 480,800.00 |
| Per sq. ft. cost | | | \$ 240.40 |

Home "B" 2,000 sq. ft.

| | Units | cost per | totals |
|----------------------------|-------|--------------|----------------------|
| Basic home structural cost | 2000 | \$ 210.00 | \$ 420,000.00 |
| Hot water heater | 2 | \$ 1,120.00 | \$ 2,240.00 |
| Furnaces | 2 | \$ 18,000.00 | \$ 36,000.00 |
| Bath rooms | 5 | \$ 14,000.00 | \$ 70,000.00 |
| Appliances allowance | 2 | \$ 5,000.00 | \$ 10,000.00 |
| Kitchen cabinets lin. ft. | 54 | \$ 310.00 | \$ 16,740.00 |
| | | | \$ 554,980.00 |
| Per sq. ft. cost | | | \$ 277.49 |

Building Cost that are Outside any Builder's Control



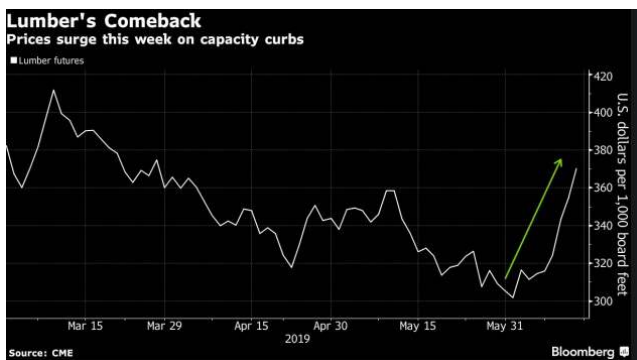
There are many factors and their related cost that are simply outside of any builder's control, for which a builder simply has to "guess at" when estimating job cost, in some cases a year or more ahead of the start date of construction! Many of these are items that can directly affect the homes "net" building cost, with NO way for the builder to predict these items; this because the overall building process of a custom home can take up to a year or more to complete. The following are just a few of these "uncontrollable building costs":

Currency Rates

As the currency rate differences between the USA and Canada (as well as other parts of the world) can vary considerably during any time of the year, many imports brought into Canada and then used in Canadian home construction will directly affect the building cost of a home. Unless your builder has a really good crystal ball, or has an unlimited ability to hedge these markets, they then have no way to accurately predict the future cost of many home components. This is only one area where a builder needs to build in a "fudge factor" or contingency factor into their "long-range" pricing forecast.

| | | | |
|---------|---|--------------|---------|
| 1.2626 |  | EURO | 1.0395 |
| 1.6888 |  | USA | 1.3947 |
| 12.7315 |  | SOUTH AFRICA | 9.9772 |
| 13.2175 |  | HONG KONG | 10.7869 |
| 162.29 |  | JAPAN | 130.37 |
| 1.8646 |  | AUSTRALIA | 1.5058 |
| 1.7278 |  | CANADA | 1.3924 |
| 1.8338 |  | SWITZERLAND | |

Commodities



Another big one is commodity fluctuations, especially in lumber, where lumber commodities can also have wild price swings. This can be due to labour disputes, wild fires, beetle bugs, or other unforeseen market conditions. Again, it is virtually impossible for a builder to predict lumber cost any further out than say 30-60 days.

Labour

Labour rates is another very unpredictable building cost item. They can be affected by any number of factors. Such as labour shortages, strikes, or government labour rule changes. Weather can also play a role in labour rates, for example, roofs cost more to put on in the winter time, framers charge more in the winter time, etc. If the market starts to boom, then labour rates go up; when the market tightens up, labour rates tend to go down. The problem for any builder is predicting boom or bust housing markets up to a year in advance.

Weather



A major factor much more controlled by Mother Nature that simply is not controlled by the builder, is weather. A long rainy season can directly affect building cost and completion time frame. Weather can affect all kinds of other things like material delivery rates, road bans, materials damage, etc. The start date of a project is also directly affected by weather or seasonal changes such as winter construction. Large dumps of snow directly affect building cost, labour rates and overall project progress.

Customer Changes

Another item that can directly affect building cost as well as possible project timing delays is customer changes to the scope of work. Not only can customer changes directly add to building cost, they can create major havoc with the builder's construction schedules. What may seem like a small change to a customer, can cause a huge chain reaction affect to a builder's schedule, which can then directly add to other building cost that may appear to the customer to have nothing to do with the customer's actual change order request. For example, the customer may want to change the type of tile on a kitchen back splash at the very last minute, the tile setter may already have ordered the tile, and now has a restocking charge to deal with. The delayed tile install adds more tile install labour charges due to added trips to the job site, and may also delay other trades such as the electrician who needs to install counter plugs and under counter lighting. Now he needs to come back another day, that then ricochets into other trades relying on the tile setter being out of their way on time, such as the flooring installation, appliance installations and so forth (that were pre-set in the builder's original schedule), now all need to be re-scheduled due to a simple wall tile selection change.

All rooms are NOT created equal

Some rooms are simply much more expensive than others. For example, kitchens contain lots of expensive stuff, like cabinets, appliances and counter tops. They often have more electric lights, power hook-ups, gas and plumbing connections, tile back splash, etc. Compared to say a bedroom, the kitchen area could end up costing on a per sq. ft. Basis, five to seven times as much, or more!

Bathrooms contain a lot of extra plumbing piping and fixtures, tile floors and walls, and are generally considered the second most expensive areas to develop on a per sq. ft. Basis Which makes kitchen and bathrooms the most expensive rooms in any house, especially on a per sq. ft. basis.

The least expensive rooms in your house will be the rooms that are built within the roof structure, for example, the attic truss construction. The next least expensive areas are ones that are built over the garage development or basement development. Also, the shape of a roof over any room that is to have a flat ceiling automatically creates an attic space that is going to be constructed whether you finish off the attic or not. Because most houses have a sloped roof, an attic ends up being a by-product. The steeper the roof, the greater the volume of space created within the attic. Finishing off attic space that is already there can be very economical to do. This is also true with a basement space. Finishing off drywall, paint, and a floor finish in the basement area can often be done for a much lower cost than the average cost per square foot of the rest of the house because the main structure is already there!

Bedrooms, if only based only on a per. sq. ft. Cost, would be minuscule compared to that of say a kitchen or bathroom sq. ft. comparison. A laundry room would cost more to build than say a den/office area, or the den/office area could cost much more than the laundry room, if the den area is to include custom built-in bookcases and a built-in desk area! A 12' high great room would of course cost more per sq. ft. than say an 8' high living room. There are several other things that affect the construction cost of your home without actually adding square footage. The type of construction can directly affect cost. The exterior wall surface materials cost can vary per. sq. ft. greatly and such things as appliances, cabinets, finishes, and equipment within the house, as well the building site are all big factors in coming up with a final per. sq. ft. cost.

- A house built with a 9' high basement, and 9' high main floor stud walls, with high vaulted ceilings with a slate/tile roof, high efficiency heating and air conditioning system, will be a lot more costly than one built on a standard 8' foundation with standard 8' high walls, an asphalt roof, and a basic mechanical system.
- A house built with radiant in-floor heat, clad/wood windows, and upgraded roofing along with plentiful amounts of cabinetry and mill-work detailing, will be a lot more costly than one built with a basic forced air furnace, vinyl windows, asphalt roof and a minimum mill-work details.
- A house with a full stone exterior is a lot more expensive than one with composite siding.
- A home with all Sub-Zero appliances and granite counter tops will cost more than one with a basic free-standing refrigerator and laminate counter tops.

- A house built on a steep slope will cost more than one built on flat land. All of these homes could be exactly the same size in square footage, but the constructions cost, and their cost per square foot, would vary wildly.

So what items are based on per sq. ft. pricing?

The building industry does have some things or tasks that “are” indeed based on a per sq. ft. basis, however, most of these items still start with a “base” per sq. ft. rate and then have a bunch of extras added to the task. The following are just a few examples:

Architectural home design rates

The “blueprints” for home construction are generally done on a per sq. ft. of living area rate for finished home plans. However, this can vary for different types of “living area”. For example, the main floors would have a different per. sq. ft. rate from that of say the basement level development. Garage areas may have a different rate from that of the main home. There would also need to be considerations for any plan “revisions”, these come along when the client changes their mind after the plans are mostly done. There are other design considerations, such as a site plan, septic system design, landscape design, electrical and mechanical planning, engineering and other related design and planning that is not based on a per sq. ft. rate.

The other main item, that can drive the design per. sq. ft. rate is the complexity of the design, for example, a simple two story box type design would cost much less to design and build than say an open timber frame complicated roof design. This is the reason most designers cannot give you a “solid design number” until after the preliminary planning phase. The good news is that we at Landen offer a no charge preliminary planning phase (*see also details of where to start later on in this ebook*).

Framing Labour

The structural framing labour is usually based on a per. sq. ft. of the home’s living area, however, this number is based on only having “basic framing” done. Basic framing is considered anything that is “standard framing” for homes with say standard 8’ high walls, with simple low sloped trussed roofs. As of 2019, the average “base rate” for a framing crew would be around \$9.00 per sq. ft. However, there are MANY extras to a framing contract, and here are just a few of them listed below. These can push the end framing per. sq. ft. rates way over \$13 to \$15.00 per sq. ft. depending on the complexity of the custom home plan:



- 9' high ceilings are extra, as well as 10' high or 12' high ceilings. This means the framing crew needs to custom cut wall studs, as most standard 8' wall studs come pre-cut 92-5/8" to allow for top and bottom plate framing.
- Vaulted ceilings are extra, again, because everything is custom cut to fit.
- Roof slopes over 6/12 are extra, this for a number of reasons. The higher the roof slope/pitch the more roof area that needs to be sheeted by the framing crew. Further, the higher the roof slope the more difficult it gets for the framing crew, as their men can only safely stand on a roof that is 6/12 or less, otherwise they require special rigging and much more time to complete the roof structure.
- Decks and covered decks with a roof over are extra.
- Homes with a lot of angled walls are extra.
- Homes with curved walls are extra.
- Extra-large garages are extra Typically a standard custom home includes a two car garage, and most custom home framing crews include a standard two car garage in their base per sq. ft. rate, and anything over this two car range is charged as an extra.
- Dropped ceilings or boxed in framing for mechanical work are extra.

Concrete Flat-work



Concrete flat-work (*Basement floors garage pads and driveways*) is typically based on a per. sq. ft. rate. However, like all per sq. ft. based rates these are based on “standard flat-work specs”. For example, a garage floor or driveway will cost much more per sq. ft. than say the basement floor for a number of reasons. First off, the concrete in a garage floor or driveway is very different from that of the basement floor because the garage floor needs to have a much higher MPa (strength).

This MPa is to withstand the weight of automobiles being parked on them. Whereas the basement floor can utilize a much lower MPa strength of concrete. Furthermore, concrete placement will cost more to pour and place if you have added in-floor heat, or if you want styrofoam insulation added to the underside, or want patterned, or coloured concrete, etc. The other item that will affect the concrete per sq. ft. rate is the time of year that this work needs to be done. Summer pours cost much less than winter pours, for two main reasons. First off the area being poured in the winter time would need to be tarped with a heater added to keep the concrete warm during the curing process Also, the concrete mixture

itself needs to have “winter additives” put into the mix which then makes the actual concrete product more expensive to make in the winter time.

Roofing

Roofing is also somewhat based on a per sq. ft. rate, BUT is not based on the main living sq. ft. area, but rather is based on the roof area, which depending on the slope/pitch of the roof, number of covered deck/porch areas, etc. can have a huge variance in per sq. ft. roof rates. Furthermore, the type of roofing materials available can range up to as much as \$20 per sq. ft. of the roof area. This makes it virtually impossible to tie in any correlation to “living area” per. sq. ft. cost.

Drywall and Insulation

Drywall is also based on a per. sq. ft. bases BUT, is not based on a living area sq. footage, but rather on the wall and ceiling areas. Furthermore, wall square footage rates are different from ceiling rates, as a ceiling requires a different type of drywall known a CD board.



With todays complex home designs and complex home floor plan layouts, calculating drywall is an art all in itself, which has zero correlation to the living floor area of a home. On top of that there are numerous extras to drywall, for example, flat painted ceilings require an extra step whereby a “Level Five” ceiling prep is needed, and this alone can change the drywall price dramatically. Adding round corner bead instead of square bead can be an expensive extra. Curved walls, archways and bathroom drywall are all extras, as special board needs to be used in wet areas, and so forth.

Other Items in a Home

that have zero correlation to per sq. ft. Cost

There are a number of construction items and the labour related to them that are based on lineal footage rates rather than per sq. ft. rates. Further, there are many items and their associated labour rates that are based on a per piece rate, all of which have no correlation whatsoever to a per. sq. ft. rate of the living area of a home. Here are just a few examples:

Finishing Carpenters



Almost all finishing carpentry is done on a piecework basis in new home construction. A typical finishing carpenter will get a pre-set rate for a standard passage door, bi-fold door or pocket door, and pre-set rate for window casing, closet shelves and so forth. However, there are once again MANY finishing carpenter extras that need to be accounted for when estimating a job. Such as, door headers, plinth blocks, types of passage door lock sets, and heights of doors as 8' high doors cost much more to install than say standard 6/8 doors. The size of the door and window casing will affect the finishing carpenters "base rate" as 2-1/4 standard casing is much less to install than say 4" door and window casing. The same is true of baseboards and other trim such as cornice molding, etc. A wide base board cost much more in labour to install than say standard 2-1/4" base trim.

Foundation Cribbing

Foundation work is normally based on a lineal footage basis and also has NO correlation to the main floor area. The Cribber (*Foundation forming guy*) will have a standard lineal foot rate for 8' high walls, and a higher lineal foot rate for 9' high walls, and for extra high walls such as 10' or 12' foot high - a price that would make the 8' high wall rate look cheap! Furthermore, the cribber would have a different rate for frost walls or garage walls that are say to be poured 4' high for frost coverage. PLUS, the Cribber will have an extra charge for every corner in the foundation, PLUS an extra charge for step footings (*this is where the excavation is dropped to accommodate say a walk-out foundation.*) They will also charge extra for sono tube work (*deck and garage slab supports*). Therefore, depending the complexity of a foundation design can have a huge variance when trying to tie all this foundation labour cost into a per. sq. ft. value based on the main floor over the foundation.

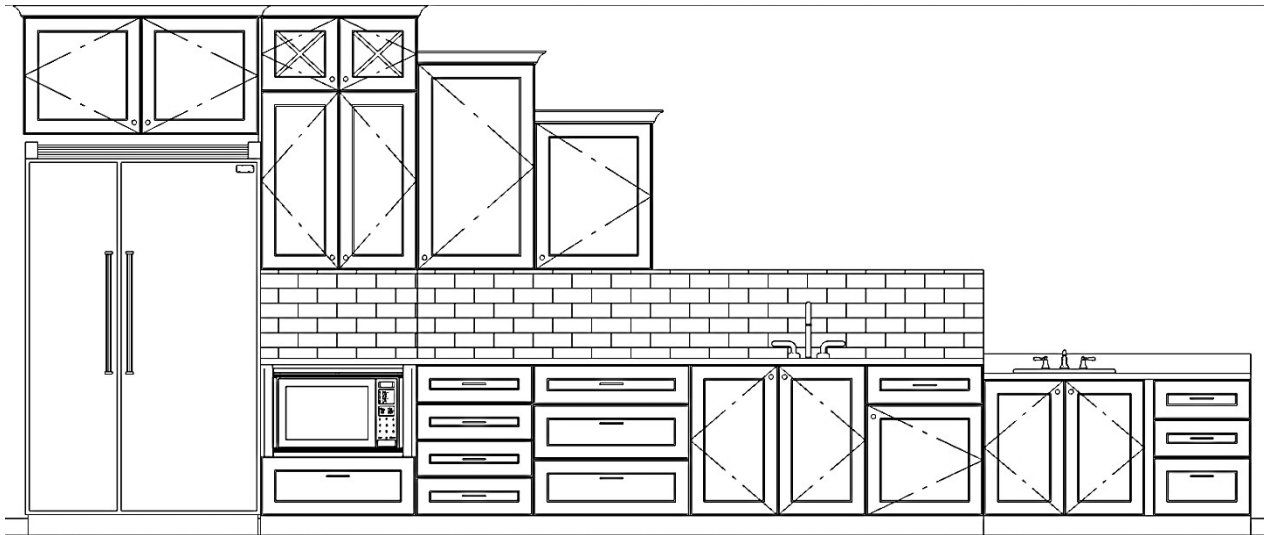
Foundation Concrete

The concrete being poured into the Cribbers form work also has NO correlation to per sq. ft. rates, as foundation concrete is poured on a cubic meter rate. To calculate the cubic meters required for a particular job, requires a complex mathematical calculation, whereby the volume of the wall or footing being poured is calculated by multiplying the walls height by its thickness, or in the case of footings, the width of the footing by its "average height".



Because homes now a days have a multitude of different wall heights and step footing elevation changes, it not only makes that calculation task a bit difficult, but also has zero relationship with floor areas of the home being built. Like slab work the foundation pour is also affected by the time of year as winter pours, of course, cost much more to do than summer pours. Furthermore, where the project is located can have a direct effect on foundation pour cost. In the spring time there are road bans on some roads that won't allow a full concrete truck to drive on them, which then requires the concrete truck to go to the job "half" loaded, which entails more trips, and more trucks. Furthermore, the distance from the batch plant can have an effect, and may need added travel time. Another cost to foundation pours is the concrete pump truck, which can have similar cost issues as that of concrete trucks due to road bands, travel time, and the time of year being used.

Cabinet Making



Generally cabinets are priced out on a lineal footage basis, and of course there are MANY different types of cabinets that all have different per lineal foot. rates. For example, a lower cabinet with no drawers will be much cheaper than say a drawer/door combination box, with even a larger difference with an all drawer cabinet box, and the more drawers you add, the greater the cost. Upper cabinets vary depending on their overall height. Standard 30" high cabinets being the "base lineal foot. rate" with full height to the ceiling cabinets being at an extra rate, especially if combining the upper cabinets into two boxes to achieve a small "window-box" overhead. This along with the unlimited OPTIONS for cabinet details and finishing make cabinet pricing on a per. sq. ft. basis IMPOSSIBLE to calculate cabinets this way, without having detailed cabinet specifications.

The type of finish for cabinets can have a huge effect on cabinet pricing. For example, cabinets built with MDF doors compared to solid wood doors would have a huge difference in price. Some modern designs with an automotive looking "shiny" surface can more than triple the standard cabinet rates. Furthermore, what the basic cabinet box is built out of can directly affect cost of the cabinets. Most

people do not know that melamine sheet goods come in two grades, one being “Cabinet Grade” and the other “Standard Grade” - the difference is the strength and density of the materials used in the sheet goods. Good quality cabinets use cabinet grade, and cheaper cabinets use the lower grade, with each “looking” exactly the same to the end client. There are also other tricks of the trade used, such as cabinet box material thickness; good quality cabinets use a full ¾” material, whereas cheaper cabinets use 5/8” thick material. High end cabinets use an all wood cabinet box of lacquered birch or maple, which of course is much more costly to use.

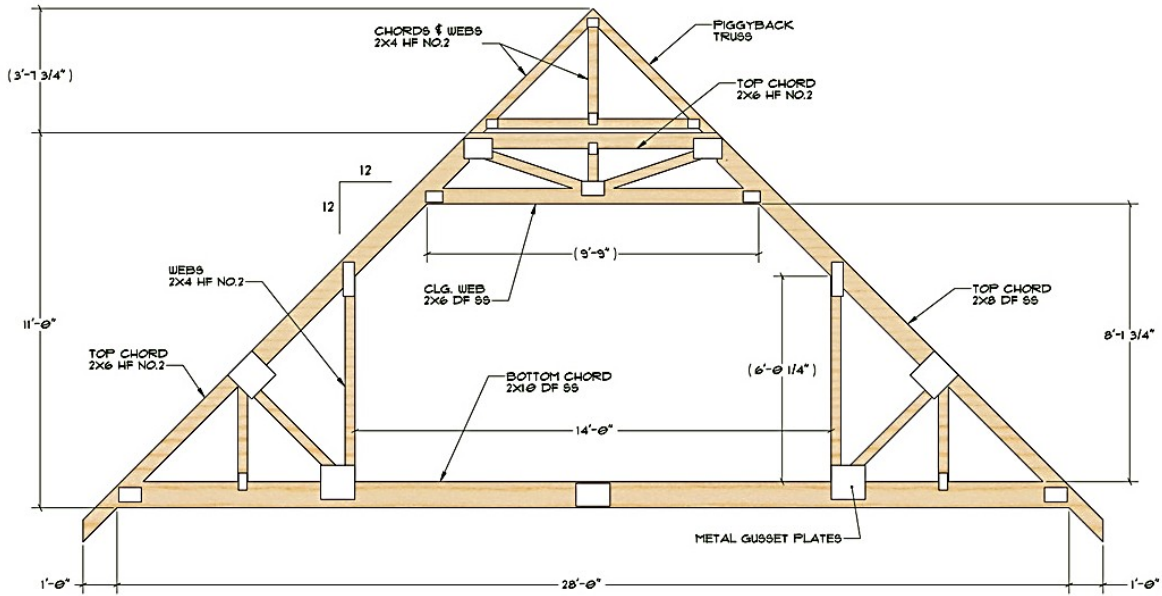
Keep in mind that the kitchen area is the most expensive area of ANY home, along with the wide spread in possible specifications, finishes, and upgrades, which makes it impossible to simply shoot from the hip for an average per sq. ft. of kitchen floor area price.

The least expensive areas of a home to develop (on a per sq. ft. basis)

Similar to the fact that rooms within the home are not treated as equal in cost per sq. ft., there are also more economical areas of the home to consider developing, such as the attic space, development in the basement level, or development over a garage. These alternate areas can be as much as two thirds cheaper to develop than say “main floor” areas. The main reason is that the basic structure of the home is already considered in the main floor area. For example, if you are developing the attic or space over the garage, these same areas already have included within them the foundation cost and roofing cost, and only need to add the “finishing-off” cost. There are of course MANY ways to achieve this extra space which could be investigated at the time of initial concept design.

Attic truss living area! (also known as a room in a truss)

When building a home, especially if building a bungalow, or building over a garage, the attic area can be substantial. In most “standard roof truss” systems this space is usually allocated to a big empty area, and in many cases you could “park” a substantial development area up there. Standard roof trusses however are NOT conducive to future development as the truss cords and roof bracing would make it impossible to develop this area “after the fact.”BUT, with a bit of foresight one could have the home designer incorporate a concept using ATTIC TRUSSES,. These are specially designed roof trusses that allow for “living area” within the roof structure. This could be for immediate development while building the main home’s structure or simply left for future development.



28' ATTIC TRUSS W/ FIGGYBACK

Attic trusses cost more than “standard trusses” upfront, but the development of these attic truss areas will come in WAY less than conventional development space. (See also our attic truss ebook)

A great place to consider attic trusses is over a garage. This can create a bonus room or nanny suit that would be way less in cost to develop than say a normal main floor per sq. ft. cost. There are other considerations when thinking about using an attic truss concept, such as plumbing and other mechanical work, all of which should be looked at in the initial design phase.

Basement Developments

By far the least expensive area of any home to develop is the basement level. One of the most common types of basement development in new homes is the use of a “walk-out” basement. With a walk-out concept it makes the lower basement level “feel” like upper level living, but at a fraction of the cost of the main floor. Again the main reason for this is that all major structural costs have already been included in the main home costing factors, such as the roof and foundation.

A walk-out foundation would cost more to build than say a conventional basement that is fully excavated, however, this cost is well worth the investment. A typical walk-out “extra cost” can run anywhere from an extra \$10,000 to as much as \$30,000 depending on the site work needed and the amount of windows that are to be included in the walk-out area. Basement development cost tends to run between \$60 to \$100 per sq. ft. This works out to about one quarter to one third the cost of the main floor cost. Basement bathrooms and other specialty rooms like saunas, bars, and media rooms, are an exception to “average” basement per sq. ft. development cost. For example, an average three piece basement bathroom measuring 5’ x 9’, will run anywhere from \$10,000 to \$15,000 depending on fixture

selection and finishes, pushing bathrooms more in the \$200 to \$300 plus range on a per sq. ft. basis. Media rooms can also add up if including some of the latest media toys.



Five additional per sq. ft. factors to consider

1. Local building permit costs and lay of land/property:

Depending on what municipality/region you build in, pricing for added building & development costs for site prep can range from as low as \$10,000 to \$30,000. For example, on a 1,800 sq. ft. home, this translates to an added difference of \$11.00 per sq. ft., just for cost that may relate to site prep or other added municipality cost.

Building a house on a low-grade property will most likely require extra work in regards to raising the grade and bringing in extra loads of fill. This will obviously increase the price per sq. ft. Moreover, a sloping building site may require a walkout basement which also adds to the overall home cost.

2. Style of home:

Typically, two storey homes are the cheapest house to build compared to their bungalow counterparts. The city mentality of ‘building up’ is cheaper than ‘building out.’ A two storey has a smaller foundation and thus, less concrete, not to mention less roof, as well as plumbing and mechanical work are more compacted on a two storey with shorter runs.

A one and a half storey home typically costs more than a full two storey. The difference in large is based on the amount of labour involved to frame the roof structure of a storey and a half. Additionally, storey and a half also have less “usable” space than a full two storey due to sloped ceilings and so forth on the second floor.

3. Shape simplicity:

Most people don't want to build a square box as their dream home. If the shape of the house is more complex, the roof structure then tends to be more dynamic and as a result, the framing can be more expensive. More angles and corners generally cost more, but these angles and corners can also add character and design. This can become a win-lose kind of situation.

4. Smaller is not always smarter:

Sometimes altering a house design in the name of 'cutting square footage' actually costs more per. sq. ft. If 'cutting' space creates jogs, which creates changes in roof and foundations, it could cost more money. Opposite of 'cutting' is adding square footage, which does not always mean adding that much more money. If pushing out an exterior wall 2'-0" creates the ultimate desired room, then we encourage it. Adding a space of 2'-0" in a typical cross section of a wall, usually requires only one extra truss, two floor joists and minimal amount of concrete, and usually has no direct effect on the big cost items such as kitchen cabinets, bath fixtures, appliances, doors and windows, etc. At the same token a large home with a tiny kitchen and practically no windows and very cheap appliances can also make for "cheap" square footage.

5. Hiring a home builder vs build yourself:

The most likely largest determining factor of the cost of your new home will be whether you decide to hire a builder or act as your own contractor. Hiring a builder seems like it will obviously cost you more money as they need to make a profit and cover their overhead. But there are many benefits to using a quality builder and having a builder involved. One major reason can be the advantage the builder has relating to their volume "builder discount." For homeowners with some past building experience and extra time, the savings can add up.

Some other factors used in pricing a house:

Other obvious pricing considerations include: overall size and square footage, quality of materials and finishing such as (laminated vs granite), type of exterior finish (brick vs siding), time of the year for the build, economic conditions, wood commodity rates, site conditions, drilling of a water well, etc.

Even if working with a fixed price contract and having a firm quote which seemingly provides security for the homeowner, it would be safe and wise to budget for the cost of 'extras' and other cost over-runs during the build that may require modifications (and any other potential roadblocks).

Most fully licensed home designers design homes of all sizes, shapes, and styles, and do so full time, but may not be able to figure out the construction/building cost right down to the last door stopper, so they budget for the “What-if Factor.” At the preliminary plan stage, most builders provide rough estimates based on their experience and communication with those in the building industry, and cannot give you a firm price until they have more detailed plans that can then be tendered out to trades, sub-contractors and suppliers. We always recommend you take your concept or preliminary floor plans and elevations when they are further along in the design process through to tender ready plans, and then submit them to the trades and sub-contractors to obtain firm quotes. If necessary, adjust the plan to fit the budget, and only then, proceed to the final permit ready house plans as needed to acquire a permit.

By now you should realize that it is difficult to estimate the price of the house until some decisions are made and more detailed plans are in place. You should realize that an estimate is just that: ‘an estimate or good guess’ until a clearer picture of what is being built, by whom, and where, is finalized.

Ten more questions that we get asked all the time related to per sq. ft. pricing

We have been in the design build business for some 40 years, and get asked the same questions over and over again. Here are the top ten that most often come up, this of course is not including the most asked question of how much a sq. ft. a home costs to build! Or:

The big one! “I found another builder that is way cheaper per sq. ft.”?

As the client you should first understand how much a builder really makes as profit. Many people think the builder is making a huge profit, and therefore has “lots of room” in their pricing. However, the reality is that if all builders were making so much money, why then do they need to keep building homes? They should simply retire after building only a few houses! The real answer is that most builders work off a percentage of the proposed building cost. This can range from 12% to 20%, and this number is “after” getting all materials and trade builder discounts, which can vary from 5% to 35% on different materials and supplies, and tends to average to about a 10% discount overall, which means a builder could be working off of a 2% net difference, meaning there is not a lot of room to maneuver.

If you have three to four builders looking at your project, there should not be much more than 2% to 5% difference in overall spread amongst all builders, and in most cases you will find the “spread” even tighter than 2%. The big difference in builder mark-up is usually based on the size of the builder. Bigger builders usually have higher overhead and administration, compared to smaller more custom “hands on” builders. Therefore smaller builders can possibly work with a smaller mark-up.

Further, it should be noted that this mark-up is not builder profit! The builder first needs to cover off their overhead and administration, and then what’s left over is their profit! Therefore, if you find a builder that is “way-under” the main pack of bid’s, then I would highly recommend NOT using the

cheapest guy! There are major consequences to using a builder that has made a mistake in their pricing, and if you really want to use the cheapest guy you should first read our other ebooks “**Understanding the Lien Process**” and “**How to Avoid a Bad Contractor**”.

If you are only at the preliminary stage of plans, and you are only getting “preliminary “ballpark” numbers, and only asking for rough per. sq. ft. pricing, then there could be a BIG spread amongst builders giving you upfront “ballpark” numbers. This, because there can be “lots of room” between the specification of each builder’s ballpark number, which can range wildly, however, the real final build number will also range wildly from that of the original ballpark number. Again, you need to ask yourself, do I want to work with the cheapest per sq. ft. builder?

2. What is included in your per sq. ft. price?

The simple answer is “nothing is included!” Before a builder can work out even a very rough per sq. ft. budget they need to know at a minimum some kind of specification, and have some kind of building plan to look at! Otherwise, you are back at trying to compare a Lamborghini to a Ford Fiesta by the pound! This is the reason we at Landen start off with developing a preliminary plan for our client, and this first step is done at no charge to the client. This way we then have “something” to start with to base our pricing on. Further, we provide a detailed specification, basically a “fill-in the blanks” template for our client to fill out, which further starts to nail down the details of a proposed build. If you don’t have a draft preliminary plan with some sort of detailed specification, how can you expect any kind of solid “ballpark” number? We do have a spread-sheet formula that we have developed for clients to complete that gives you a very rough break-down of cost, and this is solely based on “PRELIMINARY” sq. ft. numbers that were directly derived from the Alberta Appraisal Industry used to calculate construction draws for major banks. Ask us to email you this fill-in the blanks XL based spreadsheet formula. We would be happy to send it to you free of charge. Contact us at landengroup@gamil.com

3. “Why do per sq. ft. construction costs vary so much?”

- Generally the ‘rule of thumb’ is that larger homes cost less per sq. ft. to build than say smaller homes. The main reason, a larger home has much more gross square footage area to somewhat dilute the per sq. ft. costs of more expensive things like appliances, mechanical work, bathroom fixtures, windows/doors, kitchen cabinets, etc. into the overall average sq. ft. Area.
- Secondly, an overall home layout and configuration can have a large influence on cost per sq. ft., for example, bungalows cost way more to build per sq. ft. than do two-story homes. Also as mentioned earlier, the number of attached garage parking stalls, roof slope, and complexity of

building structure, size of decks and patios, etc. all have some effect on overall average cost per sq. ft.

- Further, customer preferences can directly affect the overall average per sq. ft. costing, for example, some clients will spare no costs when building a house and will have the best of the best in everything included in their home, while other clients on a tighter budget will try to tighten up specifications where they can, such as appliances which can range wildly in price from say using Wolf or Sub-zero appliances compared to say standard GE builder line. Also, some clients may want to build an elaborate home outfitted with the latest technology and luxuries while others simply cannot afford this. Then again, other clients may want to add the latest in energy efficiency above and beyond standard code requirements.
- Most often clients are simply looking for a home that makes them content, comfortable and meets their life style needs. Because of the wide spectrum of a client's wants and needs and the wide spectrum of products that a client can select from or ask for, it is therefore very difficult to nail down a "standard" average price per sq. ft. It is important to figure out what the clients goals, wants, and lifestyle needs are before any pricing or tendering is done, "up-front" in order to even start to create an estimated price to build, even if the clients target home size is already known.

4. Do bungalows cost more compared to a two story home?

- If you compare the many types of different home layout and configurations, and then have them all exactly specified the same, and have them all sized exactly the same in square footage of living area, and do a direct comparison in per sq. ft. cost, then bungalows flat out cost more to build per sq. ft. because they are mostly roof and foundation costs. Imagine a bungalow home of say 2000 sq. ft. - it will then also have 2,000 sq. ft. of roof on it and have 2,000 sq. ft. of basement/foundation under it. Now imagine a 2,000 sq. ft. two story home, with 1,000 sq. ft. of living area on each floor, this home will only have 1,000 sq. ft. of roof over it and would have 1,000 sq. ft. of basement/foundation under it. Even though both homes have the same living area and could have exactly the same specification for finishes, the one with less roof and less foundation would cost less to build.

5. Why do larger homes vs smaller homes per sq. ft. cost vary?

- For simplicity, imagine you are building two homes of different overall sq. ft. sizes, but are identical in specification and finishes, with each home having a \$30,000 kitchen, four bathrooms with exactly the same plumbing fixtures, two furnaces and two hot water tanks, and identical window packages, etc. The only difference is one home is 2,000 sq. ft. and the other home is

only 1,500 sq. ft. Which one do you think will have the largest per sq. ft. price tag? Of course you already know the answer, the 1,500 sq. ft. home will have a much larger per sq. ft. price tag, but would most likely still have an “over-all” lower building cost. The one issue that should be considered is resale value “per sq. ft.”

- This is why most builders plan their show homes “marketing size” for the “sweet-spot”! This sweet-spot is the size of home where the spec and size equate to what the market is expecting to pay “per sq. ft.” There is also the “sweet spot” in a neighbourhood for average home size, for example, if the average home size in a new community is 2,000 sq. ft., and you want to build 1,500 sq. ft., or alternately build say 3,000 sq. ft. you are most likely well out of the “sweet spot” zone, and may one day take a big hit on resale, based on a “per sq. ft.” value!

6. Does a building site affect the homes per sq. ft. building cost?

- Depending on what municipality/region you plan to build in, and any basic lot preparation cost if needed before starting the actual home build, the price can range from as low as \$5-10,000 to \$30-60,000 before the actual building itself is started. For example, on a 2,000 sq. ft. home, this can translate to a difference from \$2.5 per sq. ft. to well over \$30.00 per sq. ft. before you even start the actual home. These “varying cost” can be items like septic systems, roads/driveways, and site services like gas, electric, water supply or water-well requirements, soil conditions, and lot/site preparation, just to mention a few.

7. Does the style of a home change the cost per sq. ft. to build?

- Typically, two storey homes are the cheapest house to build compared to their bungalow counterparts. And the general rule for renovations of ‘building up’ is cheaper than ‘building out.’ A two storey home has a smaller foundation and thus, less concrete, not to mention less overall roof area, as well as plumbing and mechanical work end up being more compact in design on a two storey home with shorter mechanical runs.
- A one and a half storey house typically costs somewhere in between bungalows and a full two storey home. The difference is largely based on the amount of labour involved to frame the roof structure of a one and a half storey. Additionally, they can also have less “usable” space than a full two storey due to possible sloped ceilings on the second floor.
- Roof styles of a home can greatly affect overall cost to build, and of course directly affect per sq. ft. cost to build. For example, a lower sloped roof will cost much less to build than a high sloped roof for a number of reasons. First off, the greater the roof slope/pitch, the more overall roof area that is created that needs more lumber and shingles to cover over the same floor plan area as that of a lower slope roof. The labour cost on a per sq. ft. of roof area increases for steeper roof

itches. Other roof considerations that add additional cost are roofs over verandas, porches, and decks, as these added costs need to be blended into the average per sq. ft. cost.

- Exterior finishes like siding, masonry and other “style” details can have a huge affect on overall building cost per sq. ft. For example, cement board siding is more than four times the price of vinyl siding, real stone cladding is more than three times the price of cultured stone cladding, and a cedar shake or tile roof can be more than four times the price of asphalt shingles. California dash stucco is half the price of that for acrylic stucco, and the list goes on!

8. Does the shape or complexity change building cost per sq. ft.?

- A square box is the least expensive home to build, however most people don’t want to build a square box as their dream home. If the shape of the house is more complex, the roof structure ends up being more dynamic and as a result, the framing, roofing, and other structural cost will all add up to more, and make the overall home more expensive to build per sq. ft. The more angles and corners added, the more cost, but these angles and corners also add character & design. This can be a win-lose kind of situation, if budget is your only consideration.

9. What about cutting sq. footage to meet my per sq. ft. budget,

- **Smaller is not always smarter.** Sometimes altering a home’s design in the name of ‘cutting square footage’ can actually costs more to build on a per sq. ft. basis, and will definitely cost more to build per. sq. ft. if keeping all other specifications and finishes the same - especially if ‘cutting’ square footage creates more jogs, and roof detailing, which creates changes in structure and foundation layout, which ends up actually costing more money per sq. ft.!
- Opposite of ‘cutting’ is adding square footage, which does not always mean adding that much more cost to the overall build. For example, if pushing out an exterior wall say 2’-0” creates the ultimate desired room, then we encourage it. If adding a space of 2’-0” in a typical cross section of a home, this usually requires only one extra truss, a few extra floor joists, minimal amount of concrete and added structural members, (assuming all big ticket items such as appliances, mechanical, and cabinets all stay the same), and the gross overall new-area of the expanded homes per sq. ft. cost is negligible, then it actually goes down on a “per sq. ft.”basis, with the overall home building cost only increasing by a small amount.
- If your thinking of cutting square footage on a room that is 14’ wide for example, and you decide to “cut” that same room down to say 13’-0” wide, you should note that lumber sizes come in two foot increments, such as 8’-10’-12’-14’-16’ and so forth. This means a 13’ dimension could mean 1’ of lumber is most likely going straight into the garbage, netting little saving, if any. The same with carpet and other flooring goods, which generally come in 12’ widths. If you specify an 11’-8” room width, then 4” of flooring ends up getting cut-off and tossed into the garbage. alternatively a room of say 12’-2”means a long added 2” flooring seam needs to be included

which adds substantially to the base sq. ft. flooring cost, in both labour and materials. (see also building sq. ft. sweet-spot, item #5)

10. Can I save money being my own builder?

- One cost factor saving is whether you decide to hire a builder or act as your own contractor. Hiring a builder can obviously cost you some money as they need to make a profit, but consider this - good builders that have been in the industry a long time get large contractor discounts. In some cases it is as much as 30%, and on average 15% to 20%, whereas you as a “private person” are probably going to get the “retail price” unless you have lots of friends as subcontractor/trade contacts, and you know how to talk the “tradesman-lingo”, as most good tradesman and subcontractors can smell a “**Newbie-home-builder**” a mile away. You may find there may more benefits to having a builder involved and in a lot of cases may even cost you less than if you tried to do it yourself,- never mind the savings in headaches if you use a “good builder”, and that is probably why this is the most common way to build a home(*we have other information on that subject but we won't address it here*). However, for homeowners with some past building experience and a lot of extra time on their hands, the savings could add up and be worth the effort.

REAL Factors That Make Up Price Per Square Foot

Will your house cost \$150 per square foot, \$200 per square foot, or \$300 per square foot? It is impossible to answer this question without “first” being able to see any finished house plans or not having any idea of interior or exterior building specifications. The size of the home and property is not enough to gauge a ball-park price per square foot from, even though some builders will try to give you an idea. This figure will almost always change, and will most likely increase, as any builder “ball-parking” a number, will almost always do so on the lower side of the scale, so as not to scare you away with “too big a number”.

If you choose to base your building budget with this very rough method, you most likely end up feeling like you have fallen for the bait (and want to switch when the builder tells you they have detailed plans and specifications in front of them), that the initial price per square foot given over the phone has now substantially increased. All of this “after” you’ve just spent weeks or months in the “builder/client” courtship process. Even if it has increased by \$30 a square foot - multiply that by say an average home of 2,500 sq. ft., means you need to increase your budget by \$75,000! Any builder that gives you a price per sq. ft. over the phone without having seen the finished working plans from your architect or designer, hasn’t met with you, and has not walked your property, is not providing you with a professional and honest answer. Be prepared for unhappy surprises when you get to the end of the process.

Different builders might calculate square footage differently

This can be an innocent difference in opinion of how square footage should be calculated. However, some builders and contractors do so on purpose to make their bid look lower and more appealing than those of their competitors. For example, some builders may include the open areas of the home, or even the garage and deck areas, into the total square footage, while others do not. In these cases, the total cost of the house would be divided by a greater number of square feet and the “cost per square foot” would appear to be considerably lower.

The best way to calculate an effective cost per square foot is to make sure you are actually comparing apples to apples. Otherwise, the cost per square foot information you get is useless. No matter what method you use, and not apples to turnips, make sure that you are comparing everything equally when you’re looking at different bids and different builders. And don’t fall into the trap of estimating the cost of your project based on a cost per sq. ft. estimate alone. You won’t get an accurate price unless all builders/contractors are bidding on exactly the same thing.

This is why basing your building cost on a **per sq. ft. method is probably the worst way to base your green light decision for moving forward with a project, and is in no way an accurate means of measuring the costs associated with building a new home or renovation.** Further, any misunderstanding you might have with your builder/contractor in how they calculated sq. ft. pricing will almost always lead to some misunderstanding and expensive decision making later in the building process.

Of course, cost per sq. ft. has its place, but you need to have an honest discussion about its shortcomings as a predictor of cost - especially if you don’t have detailed plans and specifications to work from.

Cost per square foot explained

‘*True cost per square foot*’ cannot be properly calculated until your builder or project estimator has identified absolutely every cost associated with your project, including plans, building materials, labour, bids from subcontractors, lot preparation, interior and exterior finishes, upgrades, appliance and light fixture selections, and so forth. These calculations require a very complete set of building plans, complete with any structural or engineering drawings, and further accompanied by very detailed building specifications. For this reason, ‘*true cost per square foot*’ **usually won’t be available until after the final plans and specifications are signed off by the client and then official estimate is drafted.**

**So, once your estimate is complete,
what goes into calculating your final cost per square foot?**

Calculating Cost Per Square Foot

It would be hard (and probably more confusing) to cover all the ways builders figure cost per sq. ft. Most builders follow the industry standard for calculating the net sq. ft. price by taking the estimated cost based on plans and building specifications, as the **Total Cost of the Home** then divide by the “**Livable Area Square Feet**” * of the home. As per the Calgary Real Estate Board;

**Livable square feet does not include porches, garages, driveways, unfinished spaces (like attics) in the home, however, the cost of these item/areas are included in total build cost. Some builders include the open to below areas such as in stairwells in their overall livable area, whereas others don't! (The Realtor industry generally includes stairwells in their floor area calculations). Builders and Realtors generally calculate a home's livable area from the very outside measurement of the homes exterior walls.*

Just to reiterate: without every critical piece of information, cost per sq. ft. stops being useful altogether; especially when you consider each builder can have different ways of looking at these costs.

How can cost per Sq. Ft. be misleading?

If you are trying to use cost per sq. ft. as a means of comparing basic estimates between builders, you might not be comparing apples to oranges, but rather apples to turnips. In other words you may be trying to compare pricing that is not even in the “fruit category” per say. This can have a huge difference if each builder is quoting totally different specifications, or different finishes, or not including items that another builder is including. There is literally thousands of places where a builder could “hide” these differences, and if you are not trained to look for these hidden items, you might not know the difference, and in the end pay to up-grade something that was originally included in the competitors pricing.

You might think you're getting a better deal, but you're actually not. Clarity is crucial when deciphering cost per sq ft. The very best way to get “real pricing” is to first have “very detailed” plans completed, and then also have a very detailed set of building specifications, included very detailed finishes, with very detailed mill-work and cabinet details, as well as a very detailed room to room specification that clearly outlines all the room finishes. This makes sure all builders are bidding the “exact same thing”.

The building plans themselves need to be very detailed. To be clear, you can actually get a building permit on what is considered in the building industry as very “skinny plans”. These types of plans are the very basic plans needed for construction, and are usually the “cheapest plans” however, basic plans are open to trade and subcontractor misunderstandings and therefore open to missing plan details, that result in change orders for upgrades later on. The one big excuse used by contractors in an effort to try and get their price up later is “*that item was not on the plans, and that will now be EXTRA.*”

This also applies to finishes:

We can build a 2,000 square foot home with **standard finishes** and another 2,000 square foot home with **high-end finishes** and there may be a \$40 per square foot difference between the two, even though the size of the home is the same!

Ask your builder how they calculate the cost per square foot before using that information to make any decisions. Remember, **cost per sq. ft. is only useful when you know everything is included in the builder's cost**. Be sure to consider all the costs associated with how you want your house **finished**, not just built.

When is cost per. square foot actually useful?

When is it useful? *Almost* never. Granted, we understand predicting cost is important to anyone in the up-front planning stages, where average cost per square foot are tempting to rely on. But it's an unreliable crutch, because in the home building industry **there is no official standard for what constitutes a 'square foot'**. Instead, we suggest that if you *absolutely must* use cost per sq. ft. in your decision-making process, then use it as a very **loose gauge for ball-parking final cost**. And if you would like to use cost per sq. ft. estimates to compare home builders, **you need to be absolutely certain you have an exact apples-to-apples comparison between the two builders**. You don't want to make big financial decisions by comparing 'apples-to-tunips' or using inconsistent information. The fact is, not all home builders use cost per sq. ft. internally. It's a number generated for your benefit, not the builder. You do need to clarify how your home builder calculates the cost per sq. ft. Once you have that, you'll still want to have an in-depth conversation about the build cost. Every home builder is a little different, but we at Landen always sit down with our customers and detail the costs associated with their project or build – *upfront*. We give a firm price that won't change unless the client wants it to.

Other cost per sq. ft. to consider

As of late 2019, here are some other average cost per sq. ft. that can directly affect the overall home costing budget process:

- Decks tend to run around \$35 to \$50 per sq. ft. including materials and labour. This per sq. ft. rate can vary depending on the finishing, railing types, etc. If you plan to have a water proofed deck system, that would add more cost of between \$10 to \$15 more per sq. ft. over conventional wood decking. Further, if you need to add soffit, such as to the underside of a deck covering a lower patio, that would add another \$8 to \$12 per sq. ft. Deck railing can range anywhere from \$30 per. lineal ft. to well over \$80 per lineal ft. Deck support post/columns can vary greatly in price, for example, a raised upper deck with a patio below that has a cultured stone base with painted post can run well over \$1,500 PER POST.

- Covered Decks or verandas, tend to run \$110 to \$145 per sq. ft., this of course depending on the design and details such as pillar detail, etc.
- Garage “bare bones” finish tends to run about \$80 to \$135 per sq. ft. A fully finished garage with door openers, fully insulated and drywalled with basic heat will run somewhere in the \$150 to \$180 per sq. ft. range, so if adding a four car garage to what would normally be a two car garage home, would of course greatly affect the overall homes’ base per sq. ft. rate of cost if having to “blend-in” the extra garage cost into the home living area cost.

Acreage build cost will differ from city built home cost:

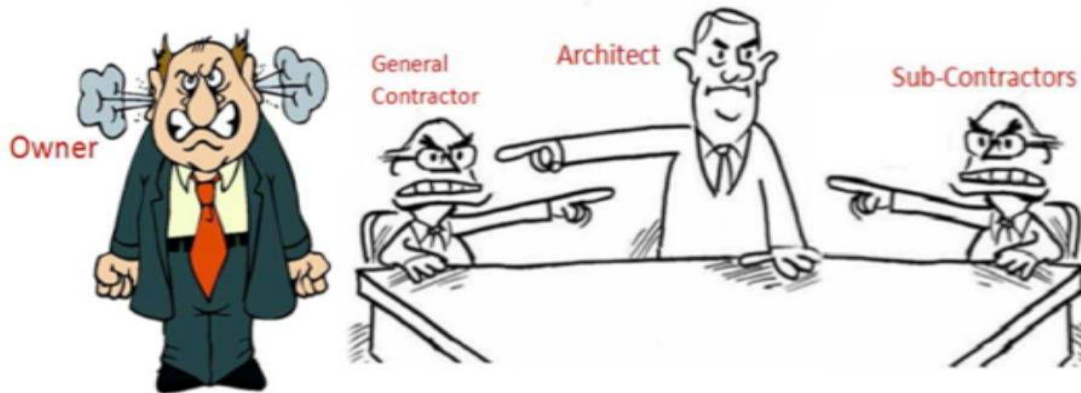
- Septic system - \$28,000 to \$40,000
- Road/driveway (depends on how long) - average is \$40,000 for say 300 lineal ft. of paved driveway
- Water well and water pressure system - \$20,000 to 30,000
- Electrical servicing hook-up (depends on how long) - average is \$8,000 to \$10,000
- Landscaping - average is \$30,000(this can become enormous for elaborate landscaping)
- These are all costs that are “above and beyond” the normal home cost compared to a home built on a normal city lot. Of course these acreage cost can vary greatly depending on site conditions and where available services exist.

Hiring out the Architectural Design Separately from the Builder

One question we get asked all the time is ***“If we hire you to design our home, and then use someone else to build the home, will we save money?”*** The short answer is most likely not! There are a number of reasons why using a “design-build” formula saves money, but the big one is when it comes to misunderstandings or errors on the plans, and where the builder or his contractors make a mistake during construction, then it becomes a big “finger pointing” game. If you use a separate home design from that of the builder you are open to these possible issues. This is where the builder and his contractors can take advantage of the situation and charge the client for extras, when in fact it was a builder or designer error! Now you have to try and recoup by taking to task each party on an individual basis, and in some cases end up in court trying to resolve the issue.

Under a single design-build contract it makes it very hard for the builder/general contractor to simply “pass the buck” as they are both one and the same, the designer and the builder! To be clear, that does not mean that there will not be any surprises if using a design/build arrangement, as there can still be issues that arise that are totally outside the builder or home designers control.

Who's Responsible For This Mess?



A final word on the cost of custom homes

Typically, over the phone estimates are given to a potential customer based on what builders will roughly charge on the ‘price per sq. ft.’ basis. This ‘price per sq. ft.’ is not the final price, as there are many other factors that will affect your net-end price. This ROUGH pricing is to give the client a ROUGH indication of what the cost of your new home will be. This is important to know in early planning as you figure out finances, create a design, and commit to moving ahead in the process of home building. However, this rough pricing should have some flexibility built in for upgrades, changes, and an added customer wish list as you go along the building process.

Let’s look in more detail what composes this ‘price per sq. ft. term and how different factors could lower or raise the cost of your house. To get more accurate per sq ft pricing we need a detailed set of plans to quote. We offer a service whereby we can create a preliminary plans that we can set a “budget” for, but we would need to go to a minimum of a “Quote Plan” to get more firm pricing (see also custom design process).

When clients begin researching a builder for their custom home, most often the first question asked is – “What is your price per square foot?” Most people believe this is the best way to get an idea of what it will cost to build their home. The other misconception is believing a builder can give them a ball-park price based on another home they saw on the builders website because the square footage is similar.

Unfortunately, this isn’t the right question to ask a builder when starting the relationship. They won’t tell you this but every builder feels the same way. What is really happening is the builder (*who has most likely been “cold called” by the prospective client without seeing any drawings or specs*) is forced to give a starting point to at least capture the client’s confidence, which then erodes like melting ice cream

in the hot sun once the builder sees the plans and begins giving true costs (which can often be higher) – but the client is still fixated on the original price quoted as if it were gospel.

I hope this book brought some much-needed education on the price tag of custom homes; an unfortunate nebulous, but vital aspect to consider when shopping. Since price is such a touchy matter for a lot of builders, it can be difficult to find some practical information on the topic. Whether it's on the issue of accepting a "ball-park estimate," adopting a fixed-price or cost-plus pricing structure, or even pricing out your home based on your current needs, I hope this book's pricing options was valuable to you. Keep an eye out for more posts and blogs' on our website on the intricacies of custom homes and country living which are due to appear every now and then. Until then, see the next section where we left the best for last!

We left the best for last

So! Where do you start?

There are two ways to tackle a new home build, or a major renovation, both start with having a budget in mind first. However, to arrive at a budget amount you first need to have "some idea" of what you want. To help figure this out and help create a "rough" budget, you might want to go around and look at a few show homes from various builders that may have homes similar in specification and scope to what you may be thinking to build. Then take these same show-home prices and deduct the "average lot/land" price, and then divide by the show homes overall sq. ft. living area to arrive at an average sq. ft. price. By doing this with a number of builders' show homes, say four to six, you should have a good indication of average sq. ft. cost, for the type of home you want, however, it should also be noted that this is NOT a hard number that you should work from - just a good starting point..



The second method is to engage a custom home designer that is also very experienced with cost estimating. It should be noted that there are several very good custom architectural home designers out there, however, many have zero understanding of construction cost as many architects and many home designers have never held a hammer in their hand, nor ever built a custom home from scratch! So when asking around about an architectural home designer, ask if they have had any "hands-on-experience."

Once you have selected a good quality home designer, don't hesitate to give them your proposed construction budget.

An experienced architectural home designer will then try and design a home to meet your building budget rather than the other way around and design the home of your dreams, only to find out after your selected builder works out the building cost from the designers plans which is way over your budget!

So how do you go about getting preliminary plans done so that you can get “real” construction pricing?

And do so without breaking your piggy bank?

You are in luck! We at Landen Design-Build are one of the very few architectural design-build firms in the Calgary area that actually draft "preliminary plans" for our clients as a complementary no charge service for clients that are within our geographic area of work within 50 kilometres of Calgary. You can also check out our website for more details at landendevlopment.com However, there are a few pre-qualifying guidelines. We first need to know that you already own your building site and you agree not to disclose our preliminary plans to any other designer or builder unless you have paid for our plans. In exchange, we will provide you up to 30 hours of quality architectural design time, no charge, up to a \$1,900 value based on our normal hourly design rates of \$65 per hour.

We get asked all the time, “*Why can we do this for free*”? The simple answer is that it is worth it to us. The reason is we tend to have a 95% closing rate on our preliminary planning services, meaning, that most clients are so happy with our preliminary services that they do end up going on to completing a full set of construction plans and documents with us, and in most cases also go on to build with us. So our real loss is only 5%. We are so sure that you will be totally satisfied with our architectural design services that we put our money where our mouth is!

To add some clarity and hopefully ease any concerns of what we at Landen can offer you, here is a breakdown of our design process:

1. First we meet up and go over all your wants and needs in an initial design consultation, for which there is no charge for this consultation.
2. If after this initial consultation we both feel we are a good fit, we then move forward to the preliminary planning stage. This stage includes "roughed-out floor plans, elevations, and a few full colour 3-D renderings, all done to scale in CAD, however, keep in mind these are only rough preliminary plans at this stage. They do, however, give you a very good idea of what your project would look like, again we do not charge for this preliminary design and planning stage. If everything at this point of the relationship looks like we are on the right track, we then at that time also start to work on setting up a very detailed specification for what type of finishes and items you want to have included in the project. At this point we can then start putting some preliminary budget pricing together based on the

"preliminary plans and detailed specifications" and effectively create a rough project budget, for which we also have no charge for this rough budget service to this point. (*Keep in mind very few other architectural designers or builders offer these free services*). At this point you would have a very good idea of what your project would look like and a very good idea of what to expect for a project budget, of which up to this point all of these Landen services are provided as complementary-no charge services, where you will not have spent a single dime, other than maybe putting on a coffee or two for our design meetings!

3. If at this point the preliminary construction budget looks in line, and the preliminary plans look in alignment with what you want in a home, with possibly the need for a few client requested revisions, we then need to go to finalized plans in order to be able to firm up a more solid construction price.

4. At that point, and only at that point of the design process do we ask you to enter into a design agreement with Landen. (Note: *at this point, if you are not happy with Landen's services, you can decline and move on with your project with another designer, with zero obligation to move forward with Landen*). However, you should also note that most completed permit ready renovation plans similar to that of what you are looking for would cost between \$3,000 to \$5,000 depending on complexity and number of revisions. (*See also our free download "Ball Park" Design Estimator*) If at the finished preliminary plan and initial budget stage you wish to pass on our design services you owe us nothing, and you can go to another designer or home-builder to design your project, however, the preliminary plans done by Landen to this stage, (*if not paid for*) still belong to Landen under copyright law and cannot be used by another designer or builder to have them completed. (*See also our eBook on copyright*) If you do acquire the permit-ready plans completed by Landen, and you have fully paid for these plans, then they belong to you and you can use any builder to complete your home. It should be also be noted that most designers or builders "KEEP" ownership of the plans even though you have paid for them. Effectively they only licence the plan to you, which means that they could sell the same plan to someone else, over and over again (*we don't do any of that*). When we design a custom home, it is just that, truly custom. We promise in writing that we will not duplicate the same custom home again for any other client (*unless you use one of our stock or modified stock plans*).

5. If you do decide to move forward with Landen's design service through to complete/finished permit ready plans, it would take us about one to two weeks to complete (depending on any revisions request by you).

6. Once the permit ready plans are complete we then send them out (*at your request*) for tender to our trades, subcontractors and suppliers. As well, we also do a very detailed materials take-off, for which we have a standard \$800 project estimating fee for this tendering and estimating service. However, we do fully refund this estimating fee if you end up using Landen for the construction of your project, we also fully refund all design fees if you build with Landen. You should further note that this detailed take-off estimate is a document that you can provide to ANY other builder to get detailed

pricing from. This way you can directly compare Landen's pricing to ANY other builder to ensure that we are treating you fairly with our construction pricing.

7. Once plans are complete and fully paid for by the client, they can then also be sent out by the client to several other builders for comparison bids. This gives you further assurance that you know we at Landen are honest with our pricing, as well, at this point of the relationship you can go with any other builder and complete the project using the Landen plans, with zero obligation to move forward with Landen for the construction of the project. Again, once the plans are fully paid for they belong to you, it should be noted that we are one of the very few architectural design firms that pass ownership of plans onto our client. Most other designers KEEP ownership of plans and effectively license the plan to you, We don't do any of that stuff!

8. Once you have a few competitive "other builder bids" come in, we also offer a no charge service to do what we call our Apples verses Turnips comparison check list to make sure all bidders are actually bidding the same thing. As some builders might "on purpose" not even be in the Apples/Oranges category. This being another reason why you need very detailed specifications and very detailed building plans done up-front, before sending anything out for pricing.

9. If at this point, if you do decide to go with Landen for the construction of your project, then, and only then do we ask you to enter into a construction contract, of which we have three basic ways that this can be done, of which we fully outline in our initial no charge consultation meeting. Our most often used method of contracting as most often selected by our past clients is "project management" whereby we build your project on a fixed management fee - this based on 12% of the mutually agreed to construction budget. You then get to see ALL project costs which are directly passed onto you along with all of our contractor discounts which on average tend to be 10%. Effectively you get our project management services for about 2% net of our discounts. Or we can also work with a fixed price project contract (*see also our web site for more detail*).

We are very transparent with all that we do at Landen and we have many hundreds of customer references for you to follow up on to prove this point. We are insured up to \$2 million, bonded, licensed, and a fully qualified Architectural Design Build firm with 40 years of custom home and renovation design-build experience.

Landen's on-line calculators

At Landen we have developed many MS XL based "rough calculators" to help our clients develop a preliminary budget. We have calculators to estimate design and engineering costs. Another one calculates the building construction costs, based on the same cost ratios used by bank inspectors, and bank appraisers to evaluate construction draw amounts for each stage of the homes construction and used to set mortgage construction draws. Keep in mind these are very rough numbers, but will at least put you in the "ballpark" so to speak. We also have bathroom and kitchen renovation calculators, plus kitchen cabinet costing calculators, all of which can be downloaded for free from Landen's web site.

Cabinet Cost Calculator

Kitchen and Vanity "Ball Park" Cost Estimator

| | quantity Lin. Ft. | Basic cabinet laminate door | 30% Mid Grade Cabinet Oak / maple | 60% Upgraded Cabinet exotic finish / gloss |
|---|-------------------|-----------------------------|-----------------------------------|--|
| Kitchen cabinets | | | | |
| Lineal feet of lower cabinets | 34 | \$ 9,520.00 | \$ 12,376.00 | \$ 15,232.00 |
| Lineal feet of island cabinets | 20 | \$ 6,000.00 | \$ 7,800.00 | \$ 9,600.00 |
| Lineal feet upper cabinets 30" high | 0 | \$ - | \$ - | \$ - |
| Lineal feet upper cabinets 42" high | 34 | \$ 6,970.00 | \$ 9,061.00 | \$ 11,152.00 |
| Area of counter top sq. ft. "post form" | 0 | \$ - | \$ - | \$ - |
| Area of counter top sq. ft. "Granite" | 54 | \$ 3,240.00 | \$ 3,240.00 | \$ 3,240.00 |
| | | \$ 25,730.00 | \$ 32,477.00 | \$ 39,224.00 |
| Laundry other cabinets | | | | |
| Lineal feet of lower cabinets | 4 | \$ 1,120.00 | \$ 1,456.00 | \$ 1,792.00 |
| Lineal feet upper cabinets 30" high | 8 | \$ 1,480.00 | \$ 1,924.00 | \$ 2,368.00 |
| Lineal feet upper cabinets 42" high | 0 | \$ - | \$ - | \$ - |
| Area of counter top sq. ft. "post form" | 4 | \$ 72.00 | \$ 72.00 | \$ 72.00 |
| Area of counter top sq. ft. "Granite" | 0 | \$ - | \$ - | \$ - |
| | | \$ 2,672.00 | \$ 3,452.00 | \$ 4,232.00 |
| Vanity Cabinets | | | | |
| Lineal feet of lower cabinets | 19 | \$ 4,560.00 | \$ 5,928.00 | \$ 7,296.00 |
| Upper tower cabinets per unit | 0 | \$ - | \$ - | \$ - |
| Area of counter top sq. ft. "post form" | 0 | \$ - | \$ - | \$ - |
| Area of counter top sq. ft. "Granite" | 19 | \$ 1,140.00 | \$ 1,140.00 | \$ 1,140.00 |
| | | \$ 5,700.00 | \$ 7,068.00 | \$ 8,436.00 |
| Average per lin. Ft. rate | 119 | \$ 286.57 | \$ 361.32 | \$ 436.07 |
| Total cabinets | | \$ 34,102.00 | \$ 42,997.00 | \$ 51,892.00 |

Kitchen & Bathroom Renovation Calculators

| Kitchen Renovation Calculator | | |
|-------------------------------|-----|------------------|
| Your Target Budget >>> | \$ | Item Cost |
| Demolition | 2% | \$ 700 |
| Framing | 2% | \$ 700 |
| Plumbing | 4% | \$ 1,400 |
| Electrical | 6% | \$ 2,100 |
| Counter & Bsplsh | 17% | \$ 5,950 |
| Drywall | 3% | \$ 1,050 |
| Paint | 1% | \$ 350 |
| Flooring | 9% | \$ 3,150 |
| Baseboards | 1% | \$ 350 |
| CABINETS | 55% | \$ 19,250 |
| Total | | \$ 35,000 |

| Bathroom remodeling Calculator | | |
|--------------------------------|------|---------------------|
| Target Budget | \$ | Item Cost |
| Inspection | 1% | \$ 144.50 |
| Demo | 3% | \$ 433.50 |
| Framing | 5% | \$ 722.50 |
| Plumbing | 14% | \$ 2,023.00 |
| Plumbing Materials | 11% | \$ 1,589.50 |
| Electrical | 7% | \$ 1,011.50 |
| Masonry | 33% | \$ 4,768.50 |
| Drywall | 4% | \$ 578.00 |
| Paint | 3% | \$ 433.50 |
| Hardware- Towel Hooks | 1% | \$ 144.50 |
| Shower Enclosure | 8% | \$ 1,156.00 |
| Vanity | 8% | \$ 1,156.00 |
| Contingency | 2% | \$ 289.00 |
| | 100% | |
| Total | | \$ 14,450.00 |

Sample of a preliminary building budget calculator

A typical Landen preliminary building budget is, based on our "Ballpark cost estimator" which is a free download that we developed that you can play around with to give you a rough idea of building cost based purely on average per sq. ft. data derived from the same data used by the banking industries home appraisers in Alberta, to establish construction draws.



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Mr. & Mrs. Res

"Ball Park" New Home Construction Cost Estimator

(Based on Calgary & area cost Data)

| | | Only edit blue area's for cost estimating | | | |
|--|------|---|----|---|----------------|
| Basic Home details, average Estate Spec. total sq. ft. of: | | 2,279 | | Update "green" cost data on a regular basis | |
| Main floor sq. ft. area | 1398 | \$ 205.00 | \$ | 286,590.00 | \$ 286,590.00 |
| Second floor Sq. ft. area | 881 | \$ 168.00 | \$ | 148,008.00 | \$ 148,008.00 |
| Attic Truss area rough in only | 0 | \$ 34,000.00 | \$ | - | * |
| Developed basement sq. ft. area | 1398 | \$ 68.00 | \$ | 95,064.00 | * |
| Walk out basement (Average cost) | 1 | \$ 12,000.00 | \$ | 12,000.00 | * |
| Extra car garage (over 2 car) sq. ft. | 384 | \$ 44.00 | \$ | 16,896.00 | * |
| Deck areas no roof over # sq ft | 144 | \$ 58.00 | \$ | 8,352.00 | * |
| Deck areas roof over sq. ft. | 144 | \$ 84.00 | \$ | 12,096.00 | * |
| Acreage development (Average cost) | 0 | \$ 35,000.00 | \$ | - | \$ 434,598.00 |
| Note: a 2-car garage is included in base main floor sq. ft. | | | | \$ 579,006.00 | Home only no * |
| Note: above per sq. ft. values based on " mid-range cost" | | | | | |
| Average overall sq. ft. cost | | | | \$ 254.06 | \$ 190.70 |

Rough Home Budget Cost Amount \$ 579,006.00 based on a standard home spec

NOTE: % below is based on normal Alberta Bank Appraisal data

| STAGE ONE MAIN STRUCTURE | | % | |
|--|------|----------------------|---------------|
| Architectural plans | 0.8 | \$ 4,632.05 | |
| Permits surveyor, Home warranty | 1.1 | \$ 6,369.07 | |
| Site service connections | 1.2 | \$ 6,948.07 | |
| Lot clearing excavation back fill | 4.2 | \$ 24,318.25 | |
| Footings foundation basement slab | 3.2 | \$ 18,528.19 | |
| Cribbing foundation labor | 2.5 | \$ 14,475.15 | |
| Water supply septic waste | 0 | \$ - | |
| Framing labor for structural work | 5.5 | \$ 31,845.33 | |
| Framing lumber / trusses / floor joist | 10.3 | \$ 59,637.62 | |
| Roofing materials | 1.5 | \$ 8,685.09 | |
| Roofing labor | 1.5 | \$ 8,685.09 | |
| Windows | 4.4 | \$ 25,476.26 | |
| Garage doors openers | 0.5 | \$ 2,895.03 | |
| | | \$ 212,495.20 | \$ 212,495.20 |

| STAGE TWO MAJOR SYSTEMS | | % | |
|--|-----|----------------------|---------------|
| Exterior siding & finish materials | 3.9 | \$ 22,581.23 | |
| Exterior siding & trim labor | 3.4 | \$ 19,686.20 | |
| Soffit gutter & fascia mat & labor | 0.8 | \$ 4,632.05 | |
| Rough-in plumbing | 2.6 | \$ 15,054.16 | |
| Rough-in electrical | 3.1 | \$ 17,949.19 | |
| Rough-in heating /air conditioning | 3.8 | \$ 22,002.23 | |
| Insulation materials | 1.8 | \$ 10,422.11 | |
| Insulation labor | 0.8 | \$ 4,632.05 | |
| Drywall, materials | 1.8 | \$ 10,422.11 | |
| Drywall, taping, sanding & ceiling tex | 2 | \$ 11,580.12 | |
| Ceiling texture | 0.5 | \$ 2,895.03 | |
| Fireplace & chimneys | 1.1 | \$ 6,369.07 | |
| | | \$ 148,225.54 | \$ 148,225.54 |

| STAGE THREE FINISHING | | % | |
|---|-----|----------------------|---------------|
| Plumbing fixtures | 3.1 | \$ 17,949.19 | |
| Electrical final install fixtures | 1 | \$ 5,790.06 | |
| Flooring | 4.1 | \$ 23,739.25 | |
| Cabinets & Vanities (with granite tops) | 5.5 | \$ 31,845.33 | |
| Win/door casing & finishing materials | 3 | \$ 17,370.18 | |
| finishing labor | 2.5 | \$ 14,475.15 | |
| Passage doors materials | 1 | \$ 5,790.06 | |
| Mirror & glass | 0.3 | \$ 1,737.02 | |
| Painting | 4 | \$ 23,160.24 | |
| Tile work | 1 | \$ 5,790.06 | |
| Built-ins | 0.5 | \$ 2,895.03 | |
| Job final work | 1.2 | \$ 6,948.07 | |
| Decks, sidewalk, patios | 9 | \$ 52,110.54 | |
| Drive way (gravel)& final grading | 1.5 | \$ 8,685.09 | |
| | | \$ 218,285.26 | \$ 218,285.26 |

| | | | | |
|-----------------------------|-------|-----|----------------------|---------------|
| % over standard | | 0 | \$ - | \$ 579,006.00 |
| Project Management | | 12% | \$ 69,480.72 | |
| | GST @ | 5% | \$ 28,950.30 | |
| Total home with GST | | | \$ 677,437.02 | |
| Plus Land / Lot with GST | | | \$ - | |
| Total Home & Lot | | | \$ 677,437.02 | |

| | | |
|---------------------------------------|-------------|----------------------|
| Appliance allowance | \$ 5,000.00 | |
| Lighting allowance | \$ 2,000.00 | |
| Granite allowance (in cabinet number) | \$ - | |
| Other allowance | \$ - | |
| Total Project with Allowances | | \$ 684,437.02 |

Disclaimer Note: \$ 677,437.02

The above estimator is based on industry AVERAGE costing, as each home can vary in size, design, features, and finishes, final building cost can vary greatly. This estimator is for rough budgeting only, once building plans are in place, fully detailed tendering and quotations should be done for a more accurate costing

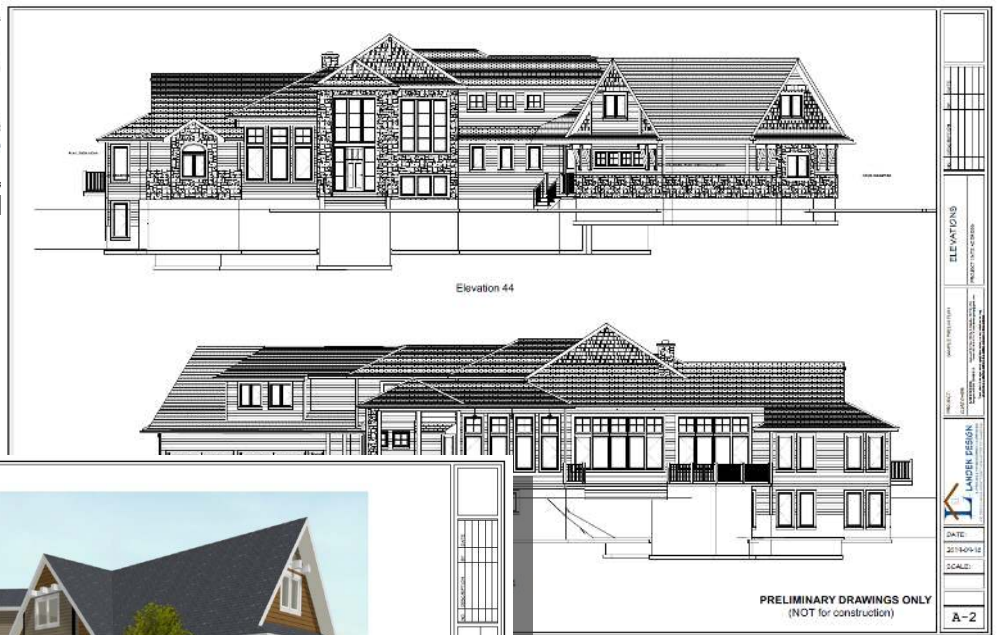
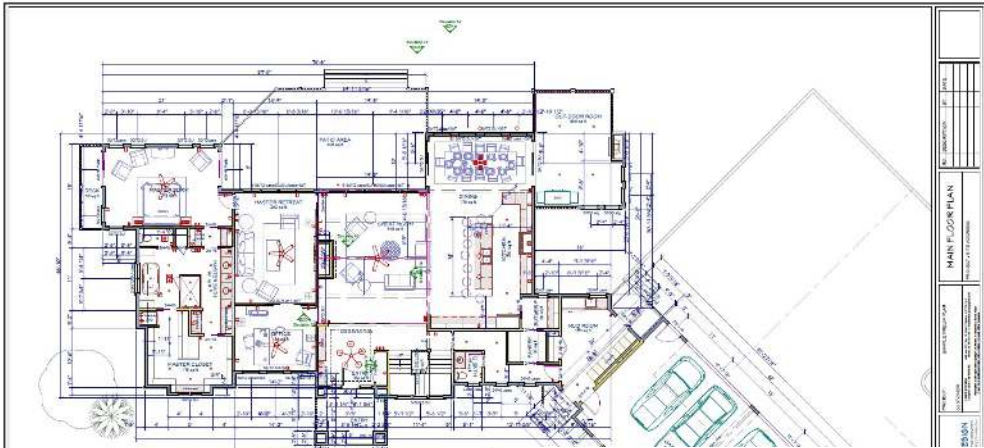
NOTE:
The above % data is based on the averages used by bank inspectors and home appraisers in order to determine cost to complete and set home construction values for mortgage purposes, This % data can vary greatly based on the client's taste, quality expectations and wish list
This calculator does not take into account up-graded items and uses industry AVERAGES ONLY

So what is included in Landen's complementary preliminary planning?

Below is a sample of a preliminary plan, these are NOT building plans, but as you can see they do give a client a very good idea of what a proposed home would look like!

In a preliminary plan from Landen you would get the following:

1. Real design & planning, up to 30 hours
2. Basic floor plans done to scale
3. Basic elevations done to scale
4. 3-D rendering and modelling



Conclusion

After reading this book you should by now have a good idea of what is involved in figuring out a construction budget for a new home or renovation, and what to look out for when shopping around for an architectural home designer and or builder/contractor. However, as there are endless home building options out there, along with endless ways to achieve a final result, at the end of the day you are still somewhat asking for a guess at what your project will cost. The concept of writing this ebook was to take some of that guess work out of the equation. That said, in no way have we covered off everything related to this topic, and the only way we could answer your individual questions would be for us to go through Landen's no obligation preliminary design process. Going through this preliminary process will cost you nothing, but should help to eliminate some of the "what-if" factors of guess work that inherently end up going into a project.

This ebook by Landen Design/Build is one of several by the same author that are somewhat related to the overall process of building a new home or renovation. Look for the following titles:

- Lien rights in Alberta and how to protect yourself from liens
- What to look for in a builder or contractor and how to avoid a bad one
- The architectural design process
- Designing closets
- Building energy efficient homes with Landen
- PWF wood foundations and why they work so well
- ICF foundations and why they are a good "Energy Saving" option
- Attic truss developed living space and how this cuts building cost
- Basement development and what to look out for
- Home additions and what to look out for
- Simple bump-out additions
- Second story additions
- Avoiding renovation nightmares
- Kitchen & bath renovations and what to look out for
- 10 Ways to build green
- Building an energy efficient home
- All about construction contracts and why you need them
- Renovation contracts and why they are different from standard construction contracts

More to come.

Notes: