



amy green design

Calculating Costs for Your Building Project

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01

The Two Categories of Costs on a Building Project

There are many costs that can affect the total cost of your building project, but they all fall into one of two cost categories; either a “hard cost” or a “soft cost”.

02

What are Hard Costs?

Hard costs are related to the physical construction of the building and any equipment that is fixed or builtin.

Some people like to think of it as “brick and mortar” costs. Hard costs include all the labor and materials needed for construction. They include items such as your building structure, doors, walls, windows, site, grading, paving, HVAC systems, electrical, plumbing, sprinklers, fire alarms, security systems, as well as a contingency for unforeseen costs and occurrences that may come up during construction.

03

What are Soft Costs?

Soft costs are any costs that are not direct construction costs. These include costs to hire your consultants such as your Architect, Engineers, Inspectors, and Expeditors. It also includes taxes, permits, building department fees, insurance, marketing costs, and movable objects inside your building such as furniture and appliances.

04 Worksheet for Calculating Total Project Costs

Soft Costs

Architect & Interior Designer (AGD provides both)	\$
Mechanical, Electrical and/or Plumbing Engineer	\$
Sprinkler and/or Fire Alarm Engineer	\$
Structural Engineer	\$
Landscape Architect or Other Specialty Consultants	\$
Expeditor	\$
Asbestos Testing Agency	\$
Geotechnical or Environmental Testing Agency	\$
Surveyor	\$
Special Inspections Agencies	\$
Permits & Fees	\$
Probes	\$
Attorneys and/or Accountants	\$
Broker	\$
Marketing	\$
Taxes & Property Tax Increases	\$
Insurance	\$
Co-op or Landlord Deposits	\$
Furniture & Decor	\$
Appliances	\$
Temporary Housing & Project Phasing	\$
Temporary Storage	\$

Hard Costs

Purchase or Lease Building/Lot/Space	\$
General Contractor Bid	\$
Contingency for Construction	\$
Owner-supplied Items for Construction	\$

Total Costs \$

05 Tips for Calculating Project Costs

Your Architect can help you determine the necessary consultants and contractors for your building project and assist you in gathering proposals, estimates, and bids from them to help you determine your total costs for your building project.

Costs will be less accurate at the beginning of your project and will become more accurate as your project progresses and the necessary consultants, their associated fees, services, and drawings are completed for your project so that contractors can accurately bid on the scope of work from accurate drawings.

Tips for Calculating Soft Costs

Architect & Interior Designer - AGD can provide both services for you and help oversee your project from start of design and conceptual space planning all the way through construction administration.

This is a huge benefit to clients of AGD as the vision for your project is all under the AGD umbrella!

AGD will also build the rest of your project team for you, provide you with proposals from AGD's recommended consultants for your review, and manage all project consultants on your behalf. AGD has built up a network of consultants that are some of the most professional and affordable in the business.

Gather a proposal from your Architect for an accurate estimate of their services and fees. Be wary of low-ball estimates from Architects as they may NOT be providing ALL the services you'll truly need on your project from start to finish.

Mechanical, Electrical and/or Plumbing Engineer - on smaller projects, particularly interior renovations, AGD will include Plumbing drawings, Electrical Power Plans, Switching drawings for lighting, and simple Mechanical drawings rather than bringing a separate Engineer on board for those services.

This saves ADG's clients thousands of dollars they would incur bringing a separate Engineer on board for those services.

Have your Architect gather proposals for you from Engineers they determine will be needed for your project and ensure your Architect will manage those consultants, review and coordinate those consultants work and drawings for you.

Sprinkler and/or Fire Alarm Engineer - have your Architect gather proposals for you from Engineers they determine will be needed for your project. Ensure your Architect will manage those consultants, review and coordinate those consultants work and drawings for you.

Structural Engineer - on smaller projects, particularly interior renovations, AGD will take responsibility for the structural aspects of the project rather than bringing a separate Engineer on board for those services.

This saves ADG's clients thousands of dollars they would incur bringing a separate Engineer on board for those services.

Have your Architect determine if a Structural Engineer will be necessary, and if so, have them assist you in acquiring proposals for their services and fees. Ensure your Architect will manage those consultants, review and coordinate those consultants work and drawings for you.



Landscape Architect or Other Specialty Consultants - these are consultants such as an acoustical consultant needed for a theater, kitchen consultant for a large commercial restaurant, IT, audio/visual, security, and other specialty consultants you may want for your project.

Your Architect can help you determine which of these consultants will be needed on your project and assist you in gathering proposals for their services. Ensure your Architect will manage those consultants, review and coordinate those consultants work and drawings for you.

Expeditor - complex Building Departments such as NYC, NY & NJ typically recommend an Expeditor to assist your project through the permitting, DOB review, DOB approval, DOB Inspection, and DOB sign-off process.

Your Architect can help you determine if an expeditor will be necessary and assist you in gathering a proposal for their services. Ensure your Architect will manage the expeditor for you and oversee their work.

Asbestos Testing Agency -this testing is often needed on buildings built before 1977 and for most NYC projects. Have your Architect determine if it is required, then have your Architect assist you in gathering proposals for those testing services.

There is a special report that will be needed from the tester and very specific materials that will need to be tested depending on the scope of your building project. Ensure your Architect will oversee testing for you.

Geotechnical and/or Environmental Testing Agency - these are typically only needed on projects where you're looking to expand, build new, or are in a environmentally sensitive area such as a brown field or wetland.

Have your Architect determine if a Geotechnical or Environmental Testing Agency will be necessary, and if so, have them assist you in acquiring proposals for their services and fees. Ensure your Architect will manage those consultants, review and coordinate those consultants work and reports for you.

Surveyor - if you're looking to expand the exterior of your property or rebuild new, your local DOB will typically require you to have a survey from within the last year provided to DOB for their review. They will also require a new survey once the expansion or new build is complete.

Have your Architect determine if a survey will be necessary, and if so, have them assist you in acquiring proposals for their services and fees.

Special Inspections Agency - if you're looking at revising the building structure or building systems such as mechanical, most DOB's will require you to enlist a specially certified inspection agency to inspect and provide reports to DOB of their inspections of those revised building structures and systems.

Have your Architect determine if a Special Inspection Agency will be required for your project, and if so, have them assist you in acquiring proposals for those services and fees. Ensure your Architect will review the results of the inspections for you and advise you of any corrective actions that need to be made as a result of the inspection reports.



Permits & Fees - your Architect and Expeditor can help you determine what permits and fees will need to be paid to your local Building Department as well as to other local jurisdictions such as Landmarks, FDNY, DOT, DEP, etc.

Probes - as unfortunately none of us have X-ray vision, sometimes it is necessary to perform probes to determine what is concealed behind walls, ceilings, and other obstructions. A building Super, GC you're interested in working with, or Handyman can perform the probes for you.

Have your Architect determine if probes will be needed for your project, and if so, have them assist you in acquiring proposals for those services and fees, providing direction to the individual performing the probes of what needs to be probed, and what needs to be provided after completion of the probes.

Ensure your Architect will review the results of the probes for you and advise you of how discoveries from the probes affect your project.

Attorneys & Accountants - you may elect to bring an Attorney or Accountant on board to assist you with reviewing contracts for the building project or financing or for other reasons. You'll want an estimate of their associated fees.

Broker - you may have to pay a broker to purchase/lease your site, have them help you lease remodeled space to tenants, or help you sell your property after construction --- either way you'll want to include an estimate of their fees.

Marketing - you may want to hire a marketing agency to promote your new building space, purchase ad space to promote it, or market your property in other ways. You'll want an estimate of the associated fees.

Taxes & Property Tax Increases- iou will want to consider including the taxes you'll have to pay on the property while it is under construction and/or until tenants lease the space.

As most construction and renovation projects will add value to your property, you'll also want to estimate how your tax payments may increase after a reevaluation of the property at completion of construction.

Insurance - be sure to include any necessary insurance costs during construction. These may include insurance you're required to pay due to restrictions in your lease, additional home owners insurance during construction, at the request of your financier, or for other reasons. Be sure to include an estimate of these costs.

Furniture & Decor - your General Contractor typically does NOT purchase, assemble, or place furniture for you; so if you are considering new furniture for your building project; be sure to include those costs, their delivery, assembly, tax on the items, and placement/installment of them in your estimated costs.

AGD receives trade discounts from a practically endless list of vendors. These discounts typically range from 5%-50% depending on the vendor, item, and total amount of items you're ordering from each vendor.

Appliances - your General Contractor typically does NOT purchase appliances for you such as fridges, ovens, microwaves, etc., so if you are considering new appliances, be sure to include those items in your estimated costs.

AGD has helped clients on a budget select appliances from big box vendors such as IKEA or Home Depot, and likewise we've helped clients select high-end appliances from vendors like SubZero, Wolf, Thermador, and more. Be sure to set yourself a budget for appliances early on to determine how those costs affect your total budget for the project.



Temporary Housing & Project Phasing - due to construction phasing or intrusiveness of proposed demolition and construction, it may be necessary for you to relocate from your existing space during part of all of construction.

You'll want to make it clear to your Architect, bidders, and contractors early on in your project whether you're looking to occupy the space as much as possible during construction, live elsewhere during construction, or need to be moved in by a certain date so both you and they can plan accordingly.

AGD has worked with clients and their contractors to expedite the process for clients who need to be moved in by a certain date. We at AGD understand how important schedule is to your project, so one of the first services AGD performs for clients when we kick off their project is to issue the client a project schedule so that from the very beginning of the project we're completed and scheduling all work to meet the desired timeline for your project.

AGD has likewise helped clients and their contractors develop a clear strategy and schedule for clients who want to occupy their space as much as possible during demolition and construction. We've been able to work with clients and their contractors so that all demo is performed quickly and temporary walls go up so that the client only has to be out of the unit for less than a week during demolition, and that then allows the clients to occupy the space for the remainder of construction; with them only having to be out of the unit for a couple days or a weekend here or there due to construction activities that impact the clients from being able to occupy the space such as refinishing the floors across the whole unit for example - which is best done all at one time but can typically be done in just a couple of days while the client is away for just a couple of days.

AGD has also developed phasing plans for clients who want to be able to move in and start occupying certain parts of their project by a certain date, with other aspects of their project slated for completion in later phases. Keep in mind phasing a project always costs more than performing all work at once as your contractor will have to mobilize numerous times, you'll likely have to pay the expeditor and the DOB at each phase of the project which means you'll have multiple fees for them rather than just one fee, and your consultants on the project --- including your Architect --- will likely have to create different sets of drawings (one set for each phase) which will increase your total timeline and costs for the project.

Be sure to include temporary housing in your estimated costs whether it's staying at a hotel, renting a separate space, or another solution.

Temporary Storage - due to construction phasing or intrusiveness of proposed demolition and construction it may be necessary to place items in storage during the process.

Be sure to get quotes for temporary storage space and include them in your estimated costs. You may want to consider donating or selling some items in order to avoid paying to store them during demolition and construction, and that can also allow you to select new furniture and decor best suited to your redesigned space.

Tips for Calculating Hard Costs

Purchase or Lease Building/Lot/Space & Paying HOAs - if you need to purchase or lease your building, lot or space be clear early on on exactly when you need to start paying rent, making HOA payments, or making mortgage payments as many clients are required to pay rent, HOA's, etc while their unit is under construction --- even if they are not occupying the space during that time. Be sure to include any such expenses it in your estimated costs.



General Contractor Bid - have your Architect help you solicit bids and/or estimates from contractors to give you an idea of construction costs for the project with an expert and liason (your Architect) on your side helping you negotiate and select the best contractor(s) for your job.

The farther into your building project you get with your Architect, building team, and drawings; the more accurate Contractors will be able to make their bids for your project. Ultimately, once your construction documents are complete (final blue prints) your final top bidder will provide you with a contract for their full construction services for you to sign, pay a deposit to them, and initiate their services.

The level of service and fees a contractor provides a client varies widely across construction firms. Some construction firms are small, newer, have less overhead, or are hungry to add a specific project type or photos from a certain type of project (yours might just happen to be one they have in mind) and as such will offer their services at a lower fee.

Likewise, typically the larger and more established construction firms, may have a foreman on-site every week to personally update the clients on construction progress, email weekly photos to the Architect for their review, have a project manager helping keep construction on schedule --- and other services that can benefit a client that smaller or less established construction firms typically don't offer a client. It does however mean the larger and more established construction firms typically have higher overhead and therefore higher fees.

It's not uncommon for the highest bidder to be almost twice the price of a lowest bidder - though it's not always in the client's best interest to sign on the lowest bidder as they may have left things out of their bid, will try to cut corners, or make substitutions during the construction process for less expensive materials and install than what was originally identified in your desired design and drawings.

There are construction firms that specialize in building cheap and fast which means their fees tend to be lower, others that specialize in high-end buildouts, luxury design, and attention to fine construction detailing which means their fees tend to be higher --- and other firms in between.

Because of the intricacies of the bidding & negotiation process with contractors, 95% of AGD's clients elect to have AGD assist them through the bidding & negotiation process with contractors as our 20 years of experience in the industry can help you get the best contractor at the best price for your unique project.

Contingency for Construction - at the beginning of the project there will typically be many unknowns, so contingency may be as high as 15-25%. As the project progresses, contingency can be reduced to 5-10%.

Contingency is necessary to budget for as there are always unforeseen costs, items, and changes that come up during a project, and it's better to budget for it and not have to use it then not have it available when you need it.

Some of the most typical uses of contingency funds we see on client projects are:

- changes from the original scope the client decides to make that increase project costs
- additions client decides to make that were not in original scope
- requesting additional services from the Architect and/or other project consultants
- Board or Landlord having a 3rd party Architect or Engineer review proposed drawings for the project and charging those reviews to the client
- change/increase in pricing, shipping, or delivery fees for materials
- unforeseen things uncovered during demolition that no one could have known about until it was uncovered and that need to be addressed in order for construction and buildout to successfully progress
- construction activities/delays that prohibit the client from occupying the space for longer than expected, so client must pay for additional temporary housing and/or storage or more HOA fees than they estimated for before they move in
- delays to the project caused by the client, Board, Landlord or DOB that result in the contractor, consultants, and/or Architect requesting additional fees due to the extension in timeline

Owner-supplied Items for Construction - most contractors, particularly in NYC, will only provide the bare minimum building materials in their bid such as sheet rock, studs, screws, caulking, pipes, steel, and similar building materials.

This means the owner needs to purchase all the other materials needed to complete their project such as tiles, countertops, cabinetry, sinks, toilets, tubs, showers, lights, outlets, light switches, flooring, trim, doors, windows, hardware, mirrors, medicine cabinets, vanities, window treatments and more --- depending on the scope of your project.

Be very clear with your bidders when negotiating with them to determine exactly what materials they will be providing and which they expect you as the owner to purchase and provide. Include costs for shipping, delivery, special handling fees, and taxes when estimating your budget for owner-supplied items for construction.



06 Understanding the Costs of Your Full Project Team

As we hope this guide has helped identify for you, there are team members beyond your Architect & Contractor that you'll need in order to complete your project from start to finish.

AGD has worked hard to develop a network of some of the most professional and affordable consultants in the industry for our clients as we understand that it's not just our fees, but the fees of all consultants on your project, that affect your total budget for the project.

Are You Comparing Apples to Apples

Confused by proposals from other Architects, some potential clients have asked AGD to compare proposals from other Architects and/or Engineers against AGD's proposal, to help advise the clients on the differences in services and fees between AGD's proposal and others they received.

Here is a comparison of AGD's proposal & recommended team versus another Architect's Proposal, Fee & Team:



AGD Proposal \$10,200
AGD Full Team \$12,250

- AGD's team included Expeditor & Asbestos Testing
- AGD fee included (4) in-person design & review meetings personally hosted by Amy, AGD's Owner
- AGD fee included review & advisement of bids for client
- AGD fee included Board Coordination
- AGD included construction administration in fee above so client would incur NO additional fees for CA of AGD
- AGD fee included sign-offs at completion of construction



Other Proposal \$12,750
Other Full Team \$17,500

- Other Architect included an Expeditor & Asbestos testing but both were higher than AGD's consultants
- Other Architect included NO reviews with or by client
- Other Architect included NO bidding assistance
- Other Architect included NO Board Coordination
- Other Architect included construction administration as an additional hourly fee in ADDITION to fees above
- Other Architect NEGLECTED to include DOB signoffs which are needed to protect the Owner from audit
- Other Architect INCORRECTLY included fees to file with Landmarks but the property was NOT landmarked
- Other Architect INCORRECTLY included to create a separate set of Mechanical drawings for filing which was NOT legally required given scope
- Other Architect INCORRECTLY included special Mechanical inspections which were NOT legally required given scope
- Other Architect INCORRECTLY included a fee for expediting a separate Mechanical filing with DOB which actually was NOT legally required given scope

AGD Client Testimonials:

"I like the artistic flair that Amy adds to her designs. Amy is very well rounded. She is responsive, a good communicator, and met my deadline and budget."
– Matt M.

"Amy is a driven and organized professional who is always ahead of the curve. She is client-focused and able to deliver readily on ideas, effort, and enthusiasm. With her broad architecture experience she is a great choice to service your project needs." – Andrew N.

07 Typical Appropriation of Project Costs

We created the pie chart below indicating the most common appropriation of costs across client's projects.

While one client might prioritize more expensive appliances and furniture while another might prioritize budget-minded materials and limited Architect & Interior Design Services --- the appropriation tends to be fairly consistent to chart below.

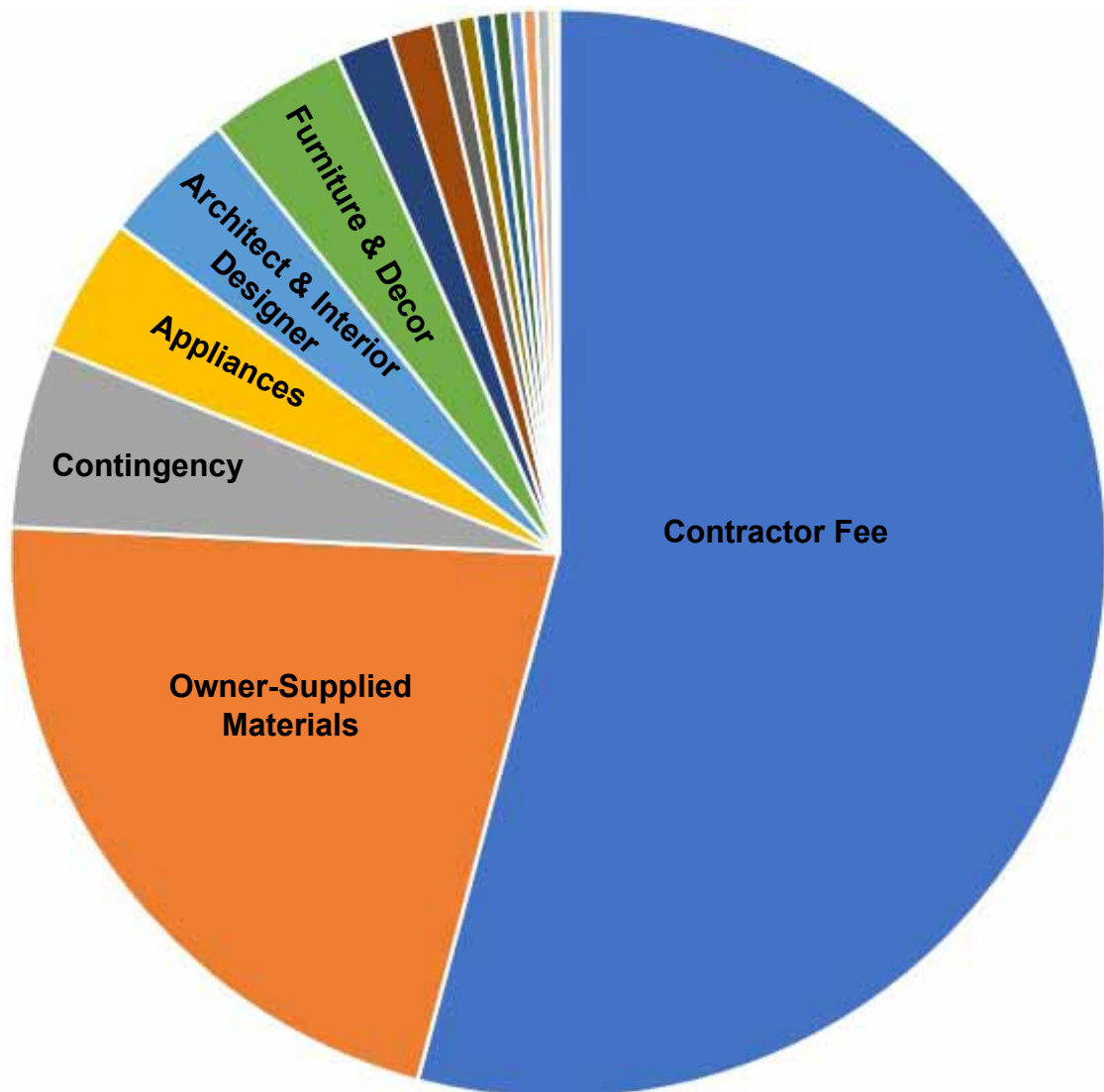
It's easy to see from the graph that Contractor Fee is typically by far the highest cost for a building or renovation project.

Owner-Supplied Materials are typically the second highest cost of a project.

Contingency is typically the 3rd highest cost as a result of it being a percentage of the entire total project costs.

Appliances, Furniture & Decor, Architect & Interior Designer fees are the next largest fees on project, but as you can tell --- each are significantly less than your Contractor Fee or Owner-Supplied Materials and fall among fourth typical highest costs.

We intentionally left Purchase of Building, Broker Fees, Marketing Fees, Attorney & Accountants, Taxes, and Insurance costs off the chart as many clients don't have those expenses --- however they are on our worksheet for those who need it.



- Contractor Fee
- Architect & Interior Designer
- Temporary Housing & Storage
- Special Inspections
- Probes
- Owner-Supplied Materials
- Furniture & Décor
- Permit Fees
- Geotechnical or Environmental Testing
- Contingency
- Engineers
- Expeditor
- Specialty Consultants
- Appliances
- Board Deposits
- Surveyor
- Asbestos Testing



08 Summary

In summary it's typically not just the Contractor fees nor Architect's fees that determine the total costs for your building project, but rather a summation of all hard and soft costs including consultants, tests, inspections, permits, surveys, and other items needed to complete your building project from start to finish.

Your Architect is your liaison and first step in helping you form the best team for your unique project and helping you gather proposals and fee estimates from proposed team members in order to help you determine the total costs for your project.

Contact amy green design today to discuss how we can assist you as the Architect & Interior Designer of your building project --- together forming a great team and ensuring your project's success.

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