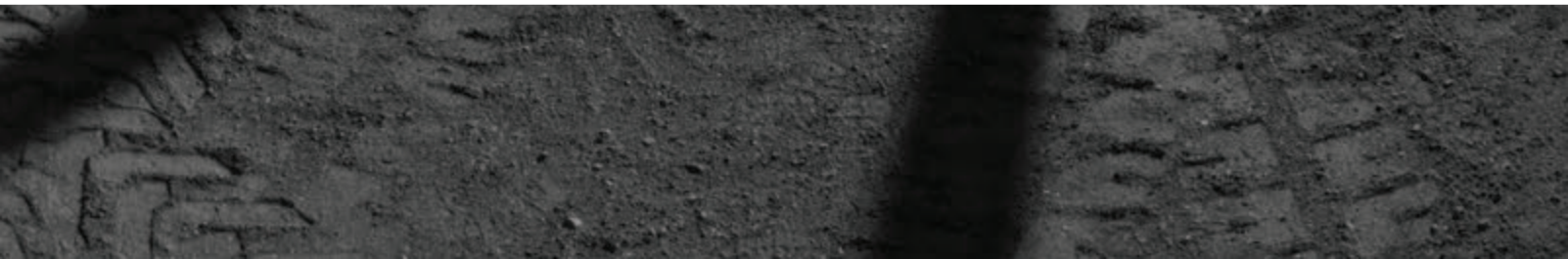
CONSTRUCTION PLANNING GUIDE

LAYING THE GROUNDWORK FOR YOUR PROJECT'S SUCCESS

CHIEF® BUILDINGS



STARTING WITH THE RIGHT DECISIONS

Means Ending with the Best Results

BEFORE MATERIALS ARRIVE ONSITE, BEFORE A BLUEPRINT IS EVER CONCEIVED, A SITE EVEN SELECTED, YOU MUST HAVE A PLAN OF ACTION.

The following pages will take you through the planning process and keynote the important questions or issues you will need to address at each stage. There is also a checklist which will help you keep track of the numerous details that are involved in the procedure.

Remember, too, your independent authorized CHIEF Builder is also available to help you through this exciting–yet, sometimes overwhelming–experience.

STEP 1

REVIEW YOUR COMPANY'S BUILDING NEEDS

You and your employees will be living with the building decisions you ultimately make. That's why you must devote a great deal of time at this stage to thoroughly investigate what you need to make the new building work well for everyone.

If it's not possible to talk to everyone in your company, then at least single out key people in each department and ask for their opinions. Find out what works well in their present environment in addition to what your employees believe is lacking.

Try not to limit these discussions to only the department heads. Talk to those in the mainstream too, because they are certain to offer valuable insight on how your present building accommodates the day-to-day work process.

This is the point where you find out what will improve the quality of the work environment for your people. For instance, do the majority of your employees bring their lunches each day? If so, a separate lunchroom or kitchenette may be both convenient and considerate. Or, how many commute by car to the office? You may wish to provide ample parking space for them.

HERE ARE SOME OTHER POINTS TO INVESTIGATE:

Space:
Find out the total square footage needed by each department or work area. This must also include storage for their materials and equipment. Your unique process flow will also determine how and where each work area is located. Should your process allow it, a simple, long and skinny building may be appropriate. If there are many processes that share resources within your operation then more square footage may be required simply for materials handling, adding even square footage above and beyond the sum of all the departments' requirements.

Special Requirements:
What do your people need to get the job done? Consider such things as the need for loading docks, number, capacity and orientation of overhead crane runways, and your minimum clear heights and clear widths. The lowest height to the interior structural members, to hanging fixtures, to machines or to the finished ceiling and still allow passage below is your required minimum clear heights. The minimum width that you need between columns and door openings to safely move materials or product throughout your new facility will go hand in hand with early building layout and design. All of these will vary throughout the building so there are many situations and conditions to keep in mind during this process.

Environmental Requirements:
Identify special needs in the area of humidity and temperature control, electrical and plumbing necessities, parking space, break rooms, accommodations for the disabled, meeting rooms, etc.

Locale Requirements:
Climate conditions play a major role in building materials. In areas of high wind or heavy snow conditions, special reinforced construction may be required. As energy codes become more important it is paramount to consider insulation requirements early in the process.

Operating and Maintenance Expense Considerations:
Your completed facility will involve certain recurring expenses. Among these are maintenance and insurance which are usually the most costly. The single greatest impact on these recurring expenses will be the materials and construction techniques that you choose.

Consider the use of external walls and windows with factory-applied baked-on finishes. Some materials will remain attractive for decades without need of refurbishing.

In many cases, steps you take to lower maintenance costs will also reduce insurance premiums. Bring your insurance agent into the planning process when you are meeting with your builder. His advice on materials, sprinkler systems, alarms and security monitors should help minimize insurance premiums.

STEP 2

DETERMINE YOUR BUILDING METHOD

Once you have gotten a picture of what needs your building must meet, it will be easier to decide what building method will work best. The three building types most often recommended for commercial use today are the concrete building, the masonry building and the steel framed building.

What follows is a brief overview of each building type. Your architect or CHIEF builder will also be beneficial in helping you determine which one will best meet your needs.

BUILDING METHODS

The concrete building, whether poured on site or delivered as pre-cast panels, is very popular due to its economical construction and fire-resistant properties. However, it can cost you more in areas where labor rates are high. With Its heavy tilt-up wall panels, you are required to supply substantial (and very expensive) foundation work. The cost of regular and periodic maintenance requirements, such as additional waterproofing and repainting, continue to add up years after construction is complete.

The masonry building, which is comprised of bricks or concrete blocks, carry the same costly disadvantages as pre-cast concrete buildings. In addition, this building method requires even more on-site skilled labor, which is always very expensive.

Both the concrete building and the masonry building are heavily reliant on a secondary roof structure system. Wood trusses or a steel framing system are always required on anything but the smallest of structures. Proper coordination of the separate suppliers and the separate tradesmen needed for these independent construction phases add complexity to your project. Added complexity almost always equates to longer schedules and ultimately more costs.

The steel framed building falls within two major categories when we look at commercial construction, conventional steel and then metal building systems. Both methods share some of the same advantages but there are some very important points of distinction. Conventional steel design employs off the shelf, hot rolled steel members that have prescribed structural properties. Metal building systems design employs custom made three plate built-up structural members that are unique to each new building. The material thickness and overall shape of these members are carefully chosen to meet very specific structural properties. Three plate built-up members are a more efficient use of steel. A metal building system and will always net a lighter framing package than a conventional steel package for the same low-rise, non-residential project. Less weight ships cheaper and installs quicker and all that equates to cost savings.

When choosing the integral metal panel walls with a metal building system you not only get weather-resistant but you also benefit from a product that requires little to no maintenance. In addition, expanding and modifying this type of building is easy because it uses non-load-bearing walls, which means your structure can grow with you over the years.

A metal building system is both economical and timesaving in the construction phase, too. Actual construction time–from concept to completion–is as much as one-third faster than with other methods, resulting in lower interim financing costs. That means you can move in sooner and begin taking advantage of the features your new building provides. And, because of the engineering flexibility of today's pre-engineered buildings, they are virtually unlimited in size, shape, appearance or utilization of internal space.

Ask your local, independent authorized CHIEF Builder for more details and proof that metal building systems are becoming an increasingly popular and financially attractive choice among business owners like yourself.

STEP 3

INVESTIGATE THE AVAILABILITY OF FINANCE PLANS AND INTEREST RATES

At this point you must sit down with your accountant or financial planning advisor and determine what needs to be done to cover the costs of a new building. By now, you have an idea of the scope of the project which will give you a picture of what will be needed to accomplish it.

Your accountant or financial advisor will be able to steer you in the best direction for obtaining financing for your building project. However, don't overlook the following areas for financial assistance:

Bank Financing

Small Business Administration Loans

Industrial Revenue Bonds

Industrial Development Administration Bonds

STEP 4

DETERMINE THE SITE CRITERIA AND MAKE YOUR SELECTION

To get the most from your building–and the investment involved–where you build is as important as how you build. When planning the site of your building, it's smart to draw up a list of criteria the selection must meet.

That list begins with the information from Step 1 (assessing your company's building needs). It continues with information from the following areas of importance:

ACCESS TO TRANSPORTATION AND SHIPPING:
How far are you from the nearest airport, railroad or major highway? If your business is primarily involved in the transportation of goods these points will make a difference in your future productivity. You must also consider the degree of difficulty your employees will face in commuting to your new location.

RANGE OF LOCAL EMPLOYMENT RESOURCES:
If the nature of your business is such that you must frequently re-staff or hire seasonal support, you'll need to take a careful look at the labor pool available in your new location.

DETERMINE UTILITY, BUILDING CODES, HIRING LAWS, DEED AND ZONING REQUIREMENTS:
Each city, county and state has its own set of rules and regulations when it comes to overseeing the business sector. Some could save your company money and/or time, while others may present a potential headache for you. Plan on doing a thorough investigation of these areas before you commit to any property.

DETERMINE PARKING REQUIREMENTS:
When planning the position of the building on your site, consider access from the nearest street or highway, as well as parking facilities. If your property is an irregular plot, place parking and storage on the irregular side.

DETERMINE SPACE NEEDS FOR FUTURE EXPANSION:
You can't predict the future but you can at least prepare for it. It's smart to allow for the possibility of expansion on at least two sides of the structure.

DETERMINE THE LOAD-BEARING CAPACITY OF THE SOIL:
You will need to arrange for sub-soil investigation by a professional testing laboratory to see if it will accommodate your building plans.

DETERMINE STORM DRAINAGE REQUIREMENTS:
Don't forget about Mother Nature while selecting your site. Be certain that the property you choose will not become an expensive hazard to you in the event of a storm.

CHECK FOR A CLEAR TITLE:
Make sure the property will be completely yours and doesn't come with any future surprises.

CHECK A PROPERTY SURVEY:
It's important to denote the true value of your investment for documentation.

STEP 5

INVESTIGATING YOUR BUILDER'S CAPABILITIES

If you want a satisfactory outcome to your building project, you will need to choose the right builder. When choosing a builder, you want to be aware of the following points:

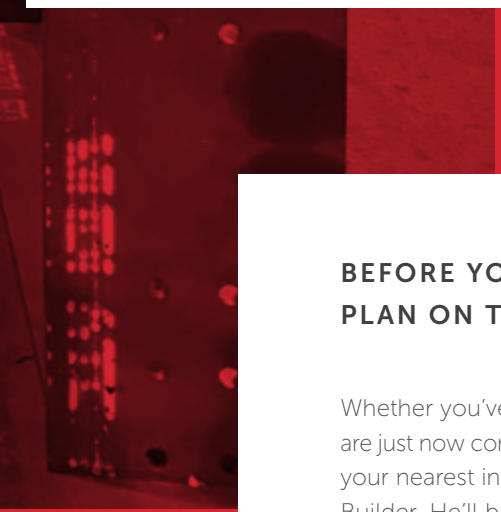
FINANCIAL STABILITY:
Will he be able to complete your project? Also, investigate his bonding capacity which will be another objective indicator of his job performance.

EXPERIENCE WITH SIMILAR PROJECTS:
Does he know how to give you the best performance?

ABILITY TO HANDLE THE COMPLETE JOB:
Does he have a working knowledge of building codes, state-of-the-art techniques, etc.?

PROFESSIONAL REPUTATION:
Is he known for having integrity and being dependable? Has he established a pattern for on-budget, on-time delivery?

Before making your selection, be sure to tour some of the projects completed by the contractor. And don't be afraid to ask questions. Lots of them. Query past customers and building owners, check company bank and credit ratings, evaluate the builder's standing in the community and determine the candidate's level of sincere concern for your project. Remember, the success of your project will rest greatly on the person you choose to build it.



BEFORE YOU MAKE ANY PLANS... PLAN ON TALKING TO A CHIEF BUILDER

Whether you've already decided to build, or are just now considering it, feel free to contact your nearest independent authorized CHIEF Builder. He'll be happy to talk to you about design planning, cost evaluation, or any other area of concern you may have.

If you're thinking about an attractive, utilitarian and distinctively-designed building, you'll find a CHIEF Builder will be right for the job. CHIEF Builders have the up-to-date contracting qualifications and experience necessary to provide you with full service, from planning and building right down to the finishing details. And, you'll discover CHIEF Builders are backed by one of the most comprehensive custom design services available in the industry.

So, if it's a job well done that you're looking for, you're looking for a CHIEF Builder to do the job.

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PLANNING CHECKLIST

USE THIS CHECKLIST AS YOU GO THROUGH THE PLANNING PROCESS TO MAKE SURE YOU HAVE COVERED ALL PERTINENT AREAS OF CONCERN.

REVIEW YOUR COMPANY'S BUILDING NEEDS

1. Determine total square footage needed by department or work area:

Name of Department of Work Area	Present Sq. Ft.	Needed Sq. Ft.	Person(s) Assigned	Start Date	Complete Date

2. Identify special building requirements
Examples: loading docks, crane runway capacities, column-free areas

3. Identify environmental requirements
Examples: humidity/temperature control, electrical, plumbing, etc.

4. Identify location requirements

5. Other:

6. Other:

DETERMINE AVAILABILITY OF FINANCE PLANS AND INTEREST RATES

	Person(s) Assigned	Start Date	Complete Date
1. Bank financing (= %)			
2. Small Business Administration (= %)			
3. Industrial Revenue Bonds (= %)			
4. Industrial Development Adminsitration Bonds (= %)			
5. Other:			

DETERMINE SITE CRITERIA

	Person(s) Assigned	Start Date	Complete Date
1 .Identify needs for access to transportation and shipping			
2. Determine range of local employment resources			
3. Determine utility requirements			
4. Determine parking requirements			
5. Determine space needs for future expansion			
6. Determine load bearing capacity of sub-soil			
7. Determine storm drainage requirements			
8. Other			

MAKE SITE SELECTION

	Person(s) Assigned	Start Date	Complete Date
1. Check for clear title			
2. Determine zoning and deed restrictions			
3. Check for easements on the property			
4. Arrange for sub-soil investigation by a competent testing laboratory			
5. Check for adequate storm drainage requirements			
6. Check on property survey			
7. Check on property appraisal			
8. Other			

NOTE: Now that you have identified the needs of your building and its location, assistance in completing the remaining steps of your planning process may be obtained by contacting your local Chief Builder.

INVESTIGATE YOUR BUILDER'S CAPABILITIES

To have complete confidence and peace of mind that your CHIEF Builder is capable of completing your project **on time** and **on budget,** ask him to provide evidence of the following:

	Person(s) Assigned	Start Date	Complete Date
1. Financial stability to complete your project Example: Does the firm meet bonding requirements?			
2. Areas of Expertise			
3. Experience with similar projects			
4. Knowledge of building codes, state-of-the-art techniques, and ability to handle the complete job			
5. Reputation for integrity and on-budget delivery			
6. Reputation for dependability and on-time delivery			

WITH ASSISTANCE FROM YOUR CHIEF BUILDER, COMPLETE THE REMAINING STEPS:

DETERMINE AND NEGOTIATE THE FEE STRUCTURE

	Person(s) Assigned	Start Date	Complete Date
1. Hourly-plus expenses			
2. Stipulated fee			
3. Cost-Plus			
4. Percentage of construction costs			

COORDINATE EXPERTISE

	Person(s) Assigned	Start Date	Complete Date
1. Meet with design/builder and key company personnel to discuss overall needs and expectations			
2. Determine type of building i.e. pre-cast concrete, masonry, systems building			
3. Other			

INITIATE THE DESIGN PHASE

	Person(s) Assigned	Start Date	Complete Date
1. Have design/builder submit conceptual drawings and specifications			
2. Have design/builder submit working drawings and specifications			
3. Have design/builder prepare cost analysis of all materials, projected manpower requirements, equipment, and fixtures			

CONSIDER VARIOUS DESIGN ELEMENTS

	Person(s) Assigned	Start Date	Complete Date
1. Examine functional aspects			
2. Examine energy efficiency aspects			
3. Examine flexibility/expandability/allowance for special needs			
4. Other			

SELECT MATERIALS

	Person(s) Assigned	Start Date	Complete Date
1. Consider impact on initial and lifetime maintenance costs			
2. Consider appearance of building relative to environmental impact			
3. Evaluate warranties			
4. Consider impact on insurance premiums			
5. Other			

REVIEW CONTRACTS

	Person(s) Assigned	Start Date	Complete Date
1. Submit all contracts to attorney for review			
2. Other			
3. Other			

And lastly,

- [ ] **INITIATE THE CONSTRUCTION PHASE**