

A quick overview of the process of building your house

Every house starts in a very different way. We are attempting to answer some of the questions that you may encounter, but by no means is this all inclusive of the potentials for your specific home.

Planning and Plans/Pre Permit Application

(Plans in hand) If you already have plans prepared by an architect or draftsman, a meeting to go over the plans and some questions about finish items can help Carlsen Contracting Company, Inc. prepare a cost to construct.

This is the beginning. This portion takes almost as much time to complete as the time to actually construct the project. This is the time that information is put into the floor plan to ensure that the usage of it will fit your needs, as no two people use the same space the same way. For the most part, just about every floor plan can be modified to look like any style house, from Mediterranean to Spanish to Florida Style to Modern, or Florida Cracker Style and many more. The floor plan is where the rooms are located inside the house and are related to traffic flow and use. The look of the house, or Elevation of the house, is what the house looks like from the road. During this time, discussions include size, shape, materials, what the use of the space is, how you use the space, special needs or wants, and your 5 and 10 year plan on being in the space. Carlsen Contracting Company, Inc. can assist in the beginning to develop drawings to facilitate a preliminary estimate, but eventually, all projects are taken to a professional designer based on your specific project and comfort level with the design professional. The cost for a preliminary set of plans may be required so that a more precise estimate can be completed.

- During this time, the exterior window manufacturer, exterior door manufacturer, and roofing material will need to be identified.

Contract:

(plans in hand) After working through the estimate, and a price is agreed upon, it is time to sign a contract and deposits made.

After the drawings are determined, and prior to incurring cost for the design professional, a contract should be signed. We include the estimate, the design professional drawings, the contract, and any specific additional information as the total of the "contract document." There are times that prior to a complete contract for construction, a specific use contract is done to complete efforts such as preliminary plans, surveys, soil bearing tests or other similar items that may affect the final project.

Permit Application/Phase I Selections

There is still more work to be done by Carlsen Contracting after the completion of the drawings and prior to a building permit being issued. Truss drawings and engineered drawings must be obtained, energy calculation forms as required by building code, manufacturers approval documents for some specific construction materials obtained, notice of commencement letters signed. There is a lot of information that flows between multiple entities at this time, and all of the information must be in hand prior to making the permit application. Often, we send paperwork out, it is reviewed by a vendor, a document is returned to Carlsen and reviewed for approval, returned to the vendor, a work order is created and final documents returned to Carlsen, quite the exchange of information. At the building

department, we submit multiple copies of your building permit application which includes many types of documents. The general time for a building permit to be issued is approximately 30 days after permit application.

- **Window and Door Meetings:** Meetings at Carlsen Contracting should be occurring during this time. Windows and doors have a long lead time, so final selections should be made to include style/color/opening methods/hardware and so on, but not the change of manufacturer.

Permit Pick Up:

We monitor the progress of the permit application online and through communications with the building departments. We do not actually know the exact time that the permit will be issued, but as departments such as zoning/mechanical/electrical/building and others approve their sections we will generally know about a week ahead of time when the permit is going to be issued. At this time, we start to get sub contractors lined up to be ready to begin work. We do not start work prior to the issuance of a building permit which includes ordering materials, as anything can happen at building departments which may affect actual starting times.

- **Windows and Doors:** Immediately after the issuing of the building permit is when we like to order your windows and doors so that they are available when we need them during the construction sequence.
- **General Selection sheets** will be given to you providing an over view of the upcoming selections that need to be completed. Some of the selections are not needed till the end of the job. As you follow the information below, many of the main selection points will have construction completion times that go hand in hand with the selections.
- **Cabinet Meetings:** Cabinet meetings should also be occurring during this time. We do not need to know the color of the cabinets, but the beginning of location/arrangement/appliance location should begin during this time, mostly because it can affect sub floor electrical or plumbing requirements. **NOTE:** cabinets usually are the most time consuming component for an owner to select. There will be several meetings during the course of the project to ensure that the correct layout and style are provided.
- **Air Conditioning System (HVAC)** manufacturer identified.

General Sitework:

The beginning of this includes the scraping of the lot to remove biological material from where the house is going to be. This also includes having a survey company "locate" on site the boundary of the house. Some locations require a perimeter silt fence and or controlled entry ways. Dumpsters get delivered and port-o-lets get delivered.

Foundations:

Your house could be built with a stemwall construction or monolithic construction. Stemwall means that there will be a footer in the ground, which includes structural steel continuously throughout the footer. The footer follows the entire exterior profile of the house. At required locations, vertical steel will be connected (tied) to the footer steel. These vertical areas include places such as corners of the building, edges of each opening of windows and doors, and others as indicated by the engineer. Monolithic is very similar but has only form boards at the outside and is a slab on grade.



After the footer, then a small vertical wall of block will be placed, with a special type of block at the top to create the level of your finished floor. All of this small block wall (known as a stem wall) will be filled with concrete.

Dirt then will be filled into the area under your house to a level 4 inches below your actual concrete floor. At this time works such as routing of plumbing lines, HVAC (air conditioning) drain lines or other lines, electric lines as necessary, gas lines, and any other below concrete needed items are done in the dirt. Each component has to be inspected.

- Plumbing: Sub floor plumbing should be run to where it needs to be. Items such as ice makers, water supply lines, drains need to be known and installed prior to the sub floor/concrete.
- Electric: Electrical items such as islands or in floor outlets need to be installed at this time.
- Other: HVAC drain lines or other specialty sub floor lines installed.
- Appliances should be identified. Carlsen Contracting can provide you with resources to make all of your selections. They need to be identified for electrical requirements, drain requirements, plumbing requirements, but are not needed anytime soon.
- Continued cabinet meetings.

Slab:



After all the rough in work is done and inspected, the concrete sub-contractor then is back on site to ensure compaction of the dirt, provide the required vapor barrier, termiticide, additional steel in the

slab as may be required, and his work gets inspected. After his work is inspected, then the concrete slab is poured.

- **Roofing Material:** Final selection of style/color/material of roofing should be determined at this time so that ordering is put in for the material.

Masonry Walls:



Concrete Masonry Units, or block is installed to create the exterior walls and provide the openings for windows and doors. Some construction requires additional steel to be placed in certain areas for increased loads. At the finish height of the wall, all along the perimeter of the house continuous steel is set, along with connecting steel down rods from the top to the verticals at the slab level. Holes are left in certain blocks so that building inspectors can see the attachment of the vertical steel to the down rod steel.

Some houses are built entirely from wood frame construction.

- Plumbing selections should be made. This is more specific to the type of wall valves and finishes of the sinks, toilets, tubs, and faucets. The specific selections can affect the way the 2nd phase of plumbing is performed. Carlsen Contracting can provide you with resources to make all of your selections.
- Continued cabinet meetings.

Roof Framing and Trusses:



Your pre-manufactured roof trusses are then installed on top of the block wall/wall. The trusses are connected using specified connectors that are set into the concrete in the block. Roof sheathing is

applied to the top of the trusses. The interior walls are then built and connected to the bottom of the trusses.

Once the walls are up, this is the time that Carlsen Contracting Company, Inc. likes to walk through the space with the owner. This is the time where the size and feel of the house can truly be felt. During this walk through spatial relationships are talked about and often drawings and mock ups are done on the floor to assist with size and space considerations. Some specifics of plumbing, electrical, and HVAC are covered during this time as it's the last chance to "move" an object a couple inches here or there.

Windows and Doors:



Your windows and doors are installed per the manufactures recommendations and conforming to applicable building code and permitted plans.

- Preliminary electrical meeting should occur at Carlsen Contractings office. We like to verify the location and placement of all outlets and switches by going over the plans. Due to your specific light fixtures or furniture, the exact placement is critical. Carlsen Contracting will then have the electrician install rough in boxes based on the meeting notes and plans. After the electrical sub contractor has completed, Carlsen Contracting then likes to walk through the space with you to ensure that it is as discussed. Once the wires are run, movement or modifications can be costly.
- Interior trim and interior door selections. Some casing and doors may be custom and have a long lead time. Identifying the correct selection at this time ensures that they are available when needed on the job.
- Cabinets selections should be completed or near completion for timely installation.

Plumbing 2nd Rough In:



The plumbing sub contractor comes back in to extend lines as needed, set shower valves and head locations, extend vent tubes through the roof, modify or adjust as necessary for tub placements.

HVAC Rough In:



The air conditioning sub contractor comes in to install the supply lines, the supply boots where the grills will go, drain lines, service copper lines, and thermostat wires to desired locations.

Electrical Rough In:



The electrical sub contractor will then start to install boxes for the light switches, the electrical outlets, the boxes in the ceiling for surface mount lights and the rough in boxes for can lights. Other items such as phone, data, computer wiring will also be run at this time. Carlsen Contracting Company, Inc. likes to first meet with owners to go over the electrical plans at an office environment. Carlsen Contracting will then pass along any changes or modifications of the drawn plans to the electrician. The electrician will install boxes only in the beginning. Carlsen Contracting will then walk through the house with you to make sure you see the location of boxes and lights as they are "boxed in" with no wires run to them for final approval. After approval, the electrician then will make modifications to locations, run wires to the boxes as necessary for operation.

- Flooring takes the second longest amount of time and meetings, just behind cabinets. Carlsen Contracting can provide you with resources to make all of your selections.

Insulation and Drywall:



There are many forms of insulation, some of the insulation is driven by the building code and the energy calculation form that is completed in connection with your house. Some insulation is only for sound deadening inside the house, such as between living areas and bedrooms, or between bedrooms and bathrooms. Other insulation is installed to prevent heat gain or loss from the outside. Some insulation is a spray foam insulation and some is batt insulation. Insulation also requires a building inspection.

Drywall is installed after the insulation inspection. Finishes of drywall can be in multiple levels, smooth level 5 all the way to an orange peel finish, a knockdown finish, a skip trowel finish and other artistic finishes. Finishes can be done on walls, ceilings, or combinations. Wet walls such as showers and tub surrounds receive a Durock concrete board instead of dry wall.

- **Paint colors and details:** This is the time to meet at the office to discuss paint colors and make some final selections. Every job is different, there are times when a designers touch could be helpful. If you feel you need one, we can assist you with finding one that suits your desires.
- **Appliances** could be ordered near this time to ensure that they are available when needed.

Trim Installation:



Interior trim to include interior door installation occurs at this time. Trim includes items such as; crown, base, wood window returns, window sills, chair rails, bead board paneling, panels, and other mouldings as selected.

Painting:



Painting is all about the preparation. The paint company will caulk and putty gaps and nails holes. Sanding of the filled areas will occur. Primers over raw wood or raw drywall as necessary to seal the raw material and make a smooth paintable surface may be applied. Two finish coats of finish paint colors will be applied.

Cabinets and Vanities:



Cabinets are installed after the paint. Cabinets take a long time to construct and produce the finish product. After cabinets are installed, counter tops are templated for installation. Selection of cabinets and counter tops should be made several months in advance of when they will be needed.

Wet Wall/Floor Installs:

Flooring:

Your finish flooring starts to get installed at this time. This would include all floor tiles, woods, carpets, wall tiles, tile back splashes or any other decorative finishes applied on top of drywall.

Final Trades:

At this time items such as the final switches and outlets are installed, surface mount light fixtures are installed to include ceiling fans, faucets, shower valves, shower heads, toilets, HVAC supplies and grills. Some of the appliances that are direct wire connected are also installed, or appliances that are not free standing such as drop in cook-tops, wall mount ovens and others.

- HVAC:
- Plumbing:
- Electric:
- Gas:

Clean Up:

Cleaning will include wiping down counters, vacuuming cabinets and drawers, removal of construction debris, wiping down windows and doors, sweeping and moping of floors.

Exterior finishes/Landscape:

This goes on throughout the process, but the final landscaping and final touches to the outside happen during this last phase as well. This reduces the amount of vehicles or foot traffic on your finished driveway or people walking over newly planted landscapes.

Walkthrough and Punch Out:

Carlsen Contracting Company will walk through the house with you and create a list, also known as a punch list, of items that need additional attention. Most of these items are simple to correct, and this is the time that taking care of these items makes the most sense. There will be minor imperfections that

occur during the course of the building, also there may be minor blemishes that occur due to abrasions, dirty hands, dropped equipment and so on, the remedy of them all can be handled at this time. As some items have to have electrical service to operate, now is the time that those items can be checked.

Hand Over:

With the Certificate of Completion in hand, and the above completed, it is now time for Carlsen Contracting Company Inc. to provide you with your keys and leave you to enjoy your house.