## STEPS TO BUILDING A HOUSE



## Bankofwashington.com 636.239.7831

You have found that perfect piece of land to build your dream home. Your budget is prepared, your house plans are finalized, you've located your general contractor (or most of your subcontractors if you are the general) and have bids on what it will cost to build your home. The home loan officers at Bank of Washington have arranged your construction loan which will then roll unto a conventional mortgage loan. Permits are obtained and now FINALLY you have reached the day you thought would never come. You are ready to break ground and begin construction on your family's new home! Following is an outline of a typical sequence of steps to building a new home. This can obviously vary depending upon your builder, house plans, building codes and restrictions . . . but you will get the overall idea. Congratulations!

1. Staking the house and lot: A land surveyor can stake the corners and the lot lines of your land. Additionally you need to stake the desired position of your home on the building site. This step is very important because you must ensure that the house meets all setback and building restrictions according to the covenants on your property. (For example, "All houses must set back 100 feet from the street"). If a surveyor marks the building site, then they most likely will be responsible for the expenses that may be incurred to correct if mistakes are made. If the building site is already staked, it may be in your best interest to have the property re-staked since you do not know if the stakes have previously been moved.

A few things you can consider when positioning your home:

- Interior light: A north-south facing home will be darker than an east-west facing house.
- Water flow: Do you have a slope on your property? How will it affect landscaping and basement drainage?
- Setback requirements: Are determined by local zoning and deed restrictions. You should also take into consideration setbacks of neighboring houses, even if not in the deed restriction for aesthetic purposes. Make sure you are within the legal boundaries of your property!
- The street it is located on: Is it curved? Corner lot? Should the house be parallel with the street?
- Privacy on all sides of the house. Think about what your windows will overlook and what you neighbors will, or will not, be able to see. You may want to change your window placement based on this step.
- Make sure you check with your homeowner's association (if applicable) to ensure you are meeting all requirements and setbacks.
- 2. Clearing and excavation: This step includes clearing trees, brush, rocks, roots, and debris from where your home will be located. Your contractor will usually clear a 10 foot area around the foundation which will allow for equipment (fork lifts, tractors, etc.) to work at the site. An excavation subcontractor prepares the land for a crawl space, or concrete slab, or a basement foundation. If you have large trees to remove, this can become quite costly. You may want to look into a tree removal company as well as your excavator contractor for a cost comparison.
- 3. Order utilities and temporary electric service: Before purchasing the lot, you should have investigated what utilities were available and how much it would cost to bring utilities to your property.
  - Electric: Now that you are starting the building process, you need to arrange for temporary electric service for your subs. Your electrician is responsible for obtaining electrical permits and for installing the temporary electrical panel box as well as having it inspected. You however, will have to apply for the service from the utility company.
  - Wells and septic system: If this is part of your building plan, it can be installed now. County and/or city health inspectors may be required by code to determine the location of your well and septic system. If there is an existing sewer system, check the depth of the house in relation to the sewer system to ensure you will have proper drainage. Make sure you communicate plans for driveways, gardens, trees you hope to save to help them in their decisions. If no temporary source of water is available, your well will need to be dug and temporarily wired for your brick masons, or they will have to truck in their own water.
- 4. Footings: The footing is the base of a structure. It can be poured into wooden forms or in trenches and is a mass of concrete supporting the foundation of the house. It must be below the frost line, or it can heave when the ground thaws and freezes. Local codes will clearly state the requirements for footings in your area. This is one of the most important steps in building your home. If it settles at all your house will move. If the dimensions are not poured properly, you will have to alter the plans to accommodate the new footing dimensions are torn out and re-pour the footings. Depending on code requirements, you may need to put in a footing drain to get rid of the water by your home. Building inspectors usually check the locations of the footing before they are poured to make certain they are deep enough and on undisturbed earth.
- 5. Foundation and soil treatment, then foundation survey: Your foundation wall needs to be high enough so that water will be diverted away from the house by the final grade of the soil around the house. It must also be high enough so that the framing of the house will be at least 8 inches (again can vary by codes) above the finish grade and protect from soil moisture. Experienced contractors make sure the foundation is high enough at the highest point of the outline of the foundation wall, and will use that highest point as the control point. Your finished foundation should be waterproofed from the footing to the finish grade line. Potentially, depending upon where you build, the soil may have to be treated for insects and pests especially termites. This is done after the foundation is in, but before concrete is poured for either the basement or the garage. The foundation is formed with concrete, then holes are punched in it for such things as the water supply and the sewage outlet, install a sleeve under the footing for sewage connection, the pipe is placed through the hole, and space between the pipe and wall is patched for a tight waterproof fit.

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- **6. Rough-ins for plumbing, if on a slab, and inspection:** A plumber will install the sewer line and water pipes that will be under the concrete if you have a basement or building a house on a concrete slab. Any wiring that will go under the concrete will be placed in conduit and roughed-in; however, most wiring can be run through the stud wall and ceiling joists.
- 7. Slabs, basement, and garage: Now that everything has been prepared above, concrete flatwork, also called a concrete slab, for a basement and/or garage floor can now be constructed.
- 8. Framing: Other than a home's foundation, framing is an extremely important step in the construction process. If your new home is not framed per your home plans, nothing that follows will be correct.
- 9. Exterior siding, trim, veneers: This step of the construction process will continue while work progresses on the inside and should be done before roof shingles are installed. Masonry chimneys are installed after siding or brick is completed. Veneers such as brick should be installed before final exterior trim is added. After all of this is completed, if there is exterior painting, it can be done at this time. Additionally the exterior of all windows should be caulked at this time. It is suggested that you don't leave exterior trim unpainted or unstained for too long as it could warp or get moldy.
- 10. Chimney and roofing: Your chimney should be built before the roof is shingled. This will allow placement of flashing around the chimney for waterproofing, and will also avoid causing damage to the shingles. If you have a prefab fireplace and flue, it would be installed at this time. Roofing will then follow after your chimneys are completed.
- 11. Rough-ins: All electrical, plumbing, phone, heating/air-conditioning, cable/satellite line, internet, burglar alarm systems, etc. will be roughed-in any time after the framing is complete. This doesn't mean that the units are installed, but just the wiring or plumbing for them. Inspections will probably be needed after wiring/plumbing/hvac is completed.
- **12. Insulation:** Some areas require an inspection of insulation by utility and building inspector when completed. This occurs before it is covered by drywall.
- 13. Cleaning: House will need to be cleaned, vacuumed and wet mopped to get rid of dust. Temporary or permanent HVAC needs to be functioning to control humidity in house in order to begin hardwood installation.
- 14. Hardwood flooring and underlayment: After drywall is installed you may begin the process to lay the hardwood. First you need to check the subfloor to ensure humidity/moisture levels are around 45%. If not, a de-humidifier may be needed. Then the hardwood will be brought into the home for 3-5 days to allow wood to acclimate to the home's temperature/humidity. This will help prevent shrinking and/or warping of the hardwood floors.
- 15. Drywall: Most residential interior walls are finished with wallboard called drywall. In bathrooms, or other moist areas, waterproof board is recommended. Some municipalities may require a drywall inspection.
- **16. Priming walls:** Before interior trim is installed, walls and ceilings will be primed usually with a spray gun. Priming reduces the finish painting time which will save you money. Only windows will need to be covered.
- 17. Painting: Now you are ready for your final painting. Please note, it usually adds costs if you have a lot of paint color changes from room to room. Wallpaper may also be hung at this time.
- **18. Interior trim and cabinets:** Interior trim such as doors, moldings, cabinets, countertops, etc. are installed at this time. This includes bath cabinets, kitchen cabinets, and any other built-ins such as bookcases.
- 19. Other trims such as counter tops, ceramic tile, ceramic flooring: It is now time to install ceramic or vinyl flooring.
- 20. Finish plumbing, electrical and hook up utilities: Now the plumber and electrician can finish their work. Some of the fixtures a plumber installs must be wired, so the plumber needs to finish before the electrician can finish. Additionally, your heating and air-conditioning must be completed before your electrician finishes his work. Then your electrician can install switches, receptacles, light fixtures, and electrical appliances. Now it is time to hook up your utilities.
- 21. Clean-up: Getting closer! Cleaning can begin on both the inside and outside of your new home. Wave good-bye as the trash is hauled away.
- 22. Carpet and/or hardwood floor finish: At this time hardwood floors should be finished before any carpet is installed. If you don't do this, sanding from the hardwood can get into your new carpet. If you have hardwood to finish, the sanding will be done before the deep cleaning in completed.
- 23. Driveway: You should keep heavy trucks off newly laid concrete or asphalt driveways for a period of time. That being said, try to have all heavy shipments such as drywall, etc. received before pouring. If you wait till the very end, then you might have a moving van on it, so consider all of this in your timing if possible. Concrete can handle heavier trucks usually a week after being poured, but asphalt cannot.
- 24. Landscaping: This step in the process can usually wait until after you move in; however, do discuss this with your lender. At this time, the Bank of Washington does not require landscaping to be complete in order to close on your mortgage loan.
- 25. Final inspections, surveys, and mortgage loan refinance or modification of the construction loan: After you complete the home (exception driveway and landscaping), all final inspections from the country or city for building, electrical, mechanical, and plumbing should be made. Your construction lender will also make a final inspection.
- 26. Enjoy your dream home!