



# The Shaw Homes Construction Process

## *What You Can Expect During Construction*

We've provided this simple step-by-step guide to help you know what to expect when you work with Shaw Homes. We want you to be informed and educated about the process so that you can make the best decisions for your family's needs. If you ever have a question or don't understand any step, we'll be there to help you through it all.

### Step 1. The Contract

The contract is a legally binding document, so seek legal advice if you don't fully understand the contract. An earnest money deposit is required and the amount required varies depending on the price of the home we will be constructing as well as the amount of customization required. We require the deposit because we need to know that you are as committed to the project as we will be.

### Step 2. Preliminary Matters

After the contracts are signed, but before we begin moving dirt, many things are beginning to happen. We will create a plot plan of your lot showing the location of the house on the property. The building plans will be submitted to the developer or architectural committee for their approval. Other plans will be submitted to the appropriate township permit office with our application for a building permit. The banks will require building plans and specifications for a property appraisal prior to loan closing. Also at this time we will order windows, doors, and brick. Due to the nature of government bureaucracy, it is not unusual for these processes to take three to four weeks.

### Step 3. The Foundation

This stage begins with the creation of a level pad site. Pad elevation is very critical in insuring proper water drainage away from the structure. Next, the house lines are staked out on the lot in accordance with the plot plan, and then the footing is dug. Steel bars are installed through the footing. A city inspector will then approve the footing prior to pouring concrete. Once the footing is poured, wood forms will be erected around the perimeter of the structure. These forms determine building size and finished floor elevation, another critical step in insuring proper drainage.

## Step 4. The Rough-In Process

After the forms are in place on the footing, plumbers will rough in all water and drain lines. At Shaw Homes, we use only quality copper water lines and PVC drain pipes. The plumbers will run the main water, sewer, and gas lines to the appropriate tie in locations at this time. Upon the plumber's completion and city inspection, fill dirt is brought in and installed inside the wood forms and leveled off approximately 4" below the tops of the forms. If the heat and air ducts are to be installed under the slab they are installed at this time and inspected. Next, post tension cables are installed and the steel bars extending from the footing are bent over into the slab area to tie the full footing and slab together. The footing is cleaned to insure proper placement of concrete and the full structure is treated for termites. Another city inspection is done prior to pouring any concrete, and upon inspection the slab is poured and the forms are removed. Seven to ten days after the slab is poured, the post tension cables are tightened to 28,000 pounds of pressure per square inch and then cut flush with the slab.

## Step 5. The Exterior

Once the slab is poured, carpenters will begin the framing process. During this stage substantial progress is made very quickly. Walls, headers, beams, floor trusses, and rafters are engineered to ensure proper structural properties throughout the dwelling. Many interior items and changes are left until the final stages of the framing process called "punch out." Windows, doors, and fireplaces are installed and cabinets ordered at this time. Brick ties are nailed on all surfaces that will receive masonry to insure that these walls are held tightly to the framing. Roofing shingles are applied and the house is "in the dry."

## Step 6. Mechanical Matters

After the roof is on, the plumbers will return to "top out" the home, running additional water and drain lines as well as vent pipes and gas lines. They also install certain tubs and showers at this time. All lines are pressurized to protect against possible leaks later on.

The furnaces are set and the ductwork run throughout the house. Provision is made for return airflow to the furnaces and air handler and also for the condensing units, which will be installed outside later on. Bathroom fans are vented to the exterior at this time.



The electricians will rough in the wiring for the breaker box, switches, receptacles, and lights. Heavy gauge wire will be run for the cooking equipment and air conditioners. Recessed light fixtures are installed at this stage, as are your cable TV and telephone outlets.

All mechanical trades will have their rough-in work inspected and then a frame inspection is done to make sure no boards have been cut or moved that could cause structural weakness. Upon all approvals, insulation is installed in the walls that will be insulated and in certain inaccessible ceilings. All holes in exterior walls are filled with polycell foam to maintain air tightness. Exterior masonry is normally installed about this same time. All interior selections and colors must be finalized at this point.

## Step 7. Drywall/Trim/Painting

Sheetrock drywall is installed on all ceilings and walls then taped, bedded, and skimmed. Wall texture is applied where indicated. Hardwood floors are installed next by first laying plastic over the concrete slab then installing 5/8" plywood to the concrete. A layer of 15-pound felt will top the plywood and finally true hardwood floors are installed.

Trim carpenters arrive to install the cabinets, doors, moldings and mantle. Closets are laid out and installed to maximize their storage capacity. Painters take over and initially stain any necessary wood and then apply oil-based enamel to all other woodwork. Afterwards these surfaces are tightly taped and the walls and ceilings painted. Exterior landscaping, sod installation, guttering and the pouring of concrete driveways, sidewalks, and porches may also be begin now.

## Step 8. The Interior Finish

Kitchen and bathroom countertops and marble tubs and showers are installed as well as ceramic tile floors and backsplash. Then plumbers will install fixtures and faucets. Next, electricians will install light fixtures, switches, receptacles, and appliances. Finally, garage door openers, security keypads, shower doors, mirrors, and hardware are installed to complete construction, all prior to the installation of carpeting and applying the final coat on the hardwood floors.



## Step 9. Final Detailing

After the carpets are installed, a detailed cleaning takes place to make sure your home is in optimal move-in condition. Window screens are installed and final inspections take place. Your pre-closing walk-through also takes place at this time.

## Step 10. After Closing

Your new home has been constructed with hundreds of products found in nature and others that are man made. Many of these products have moisture inherently in them. These characteristics and the changing of seasons cause expansion and contraction in many materials. Therefore, you should expect to see minor cracking in drywall and masonry surfaces. This is perfectly normal and unavoidable as tons and tons of weight now sits where once was empty ground, and these surface problems are easily corrected with readily available construction compounds and sealants.

At this time, you should make special note to file for homestead exemption on you property taxes. This can be done as soon as you receive your recorded deed back from the mortgage company at the county courthouse.