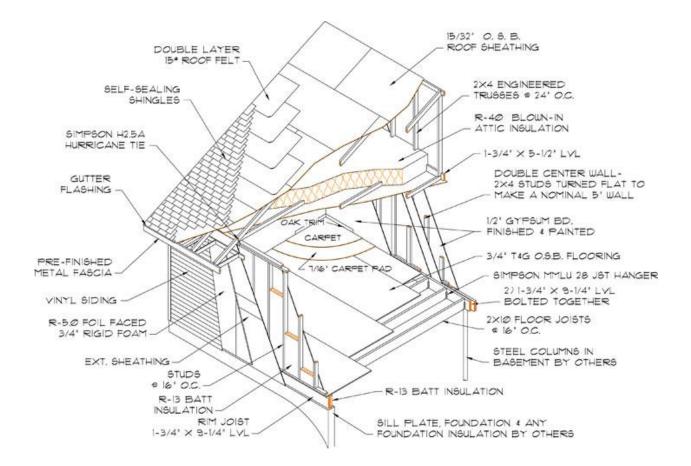
## **Construction Specifications**



Certain features you choose may change or improve these minimums. We set high standards when selecting the materials and products used in every home.

**Plans**: Architectural building plans are included along with the suggested foundation and garage plans, if required, for the on-site construction work and for your use in obtaining financing.

**Laminated Beams:** 1-3/4" x 9-1/4" laminated beams run the entire length of the home for both the rim joists and the center structural beam. After the house is set on the foundation, the center laminated beams of each modular section are bolted together with 1/2" steel bolts. This eliminates the need for a center steel beam and adds additional strength to the structure.

**Floors:** Floor joists are 2" x 10" select structural at 16" on center. The floors are 3/4" tongue and grooved oriented strand board (OSB), fastened with ring shank nails and adhesive. An open joist truss floor system is optional.

**Walls:** All load bearing walls are built with 2" x 4" or optional 2" x 6" studs at 16" on center. The outside walls are sheathed with 7/16" OSB for strength and as an air barrier, and is applied with both staples and adhesive. OSB doesn't have the voids that plywood has, and because of the oriented strands, provides more strength than plywood.

**Roofs:** Roofs are framed with engineered trusses 24" on center and sheathed with 15/32" OSB. Shingles are 30 year, 250 lb. CertainTeed fiberglass with seal down adhesives (self-sealing on summer hot days) applied over a double layer of 15 lb. asphalt impregnated felt. Eave overhangs are 22" and gable end overhangs are 16".

**Framing Connectors:** Homes meets the Simpson Well Connected House standards with the steel framing anchors and hurricane ties used in the floor system, outside walls, rim joists, wall to roof and other areas to reinforce structural framing members.

**Siding:** There are a number of siding options available. Standard vinyl siding by CertainTeed with a limited lifetime warranty and vinyl soffits and corner boards that never need painting are standard. Also available is fiber cement wood grain painted lap siding. These boards hold paint very well, will not rot or delaminate, and are dimensionally stable even with extended moisture, humidity or snow. It is made from Portland cement, ground sand, and wood cellulose fiber and is noncombustible. Fiber cement has a 50-year limited transferable product warranty. Stained rough sawn 1"x8" Western Red Cedar lap siding and 2"x8" log siding with wood soffits and fascia are also available for those who prefer a more rustic look.

**Insulation:** Exterior walls have  $3\frac{1}{2}$ " of fiberglass batt insulation with a vapor barrier (R-13) between the studs. Then we add 7/16" OSB sheathing, which acts as an air barrier and adds structural integrity. Next, the exterior of the walls is sheathed with  $3\frac{1}{4}$ " rigid foil faced foam insulation. Our rigid foam is Dow TUFF-R, a uniform closed cell polyisocyanurate with an R-5.0 rating. Economy polybead may be all right for coffee cups, but not for our homes. With rigid foam, our standard wall has an R-value of over R-20 considerably better than the outdated 2" x 6" wall construction system. The attic insulation is highly efficient cellulose insulation blown in to average an R-40. Even more insulation is available with our Superinsulation System, which gives you R-25 walls and an R-50 attic.

**Electrical:** A 200 amp panel box with 40 full size breaker spaces is wired and included to mount on the basement wall. Wiring is grounded and light fixtures, smoke detectors and bath fans are installed. No mast or service entrance is included. Bath, kitchen and exterior outlets have GFI protection and all bedroom outlets have AFCI protection.

**Windows:** Windows are Gerkin Comfort Series, superior, thermal-efficient, vinyl single hung windows with fusion-welded main frames. The sashes provide optimum structural strength and excellent air infiltration and water penetration performance. The combination of vinyl profiles with argon gas filled 3/4" double pane LoE3 insulating glass makes Gerkin windows more thermally efficient than standard thermopane wood windows. Vinyl has excellent insulation properties and is a nonconductor of heat and cold, so the window frame will be comfortable to the touch and will reduce the chance of any frost or condensation. The overall window performance has a U-value of 0.33 and an air infiltration rating of .12 CFM.

The argon gas filled LoE3 high performance insulated glass (windows in higher elevations will not have argon gas) will save significantly on energy bills by blocking 95% of the suns harmful ultraviolet rays and deliver a 98% performance improvement in night time insulation over clear insulated glass. The summer heat is reflected away and in the winter heat is reflected back into the house. The vinyl windows are made from multi-chambered rigid UPVC and are formulated to meet the wide temperature range and weather conditions of our continent. See the printed window warranty for complete details.

**Exterior Doors:** The front door and other outside doors are made of warp-free steel, with a wood thermal break, foam insulation, and adjustable thresholds. The vinyl frame patio doors have 1" thick LoE insulating glass.

**Plumbing:** All water lines are rigid copper, while waste and vent piping is DWV Schedule 40 PVC plastic. Shower and tub/showers have Moen pressure balancing valves for anti-scald protection. The kitchen sink and lavatories have single lever Moen valves and PVC corrosive-resistant sink waste traps.

**Heating:** Our standard design calls for the furnace and duct work to be in the basement. Registers, boots and return air grilles are installed through the floor for basement connections. A metal flue is available if you plan to have a gas furnace or gas water heater. Thermostat wiring is installed. The furnace, air conditioning, ductwork and water heater are provided by others.

**Interiors:** All interior walls and ceilings are gypsum drywall. Walls have a textured orange peel finish and are painted at the factory. Rounded drywall corners are standard on all outside corners and on the window returns. The ceilings have a knock down texture finish and are painted. The paint is a washable, vinyl latex high-build, low sheen enamel, from Sherwin Williams.

**Millwork:** Interior doors are oak, with oak jambs and casing. They are stained and finished by our own employees, using an environmentally safe pigmented stain that penetrates the wood and brings out the natural wood grain better than solvent-based stains. The wood is sealed and finished with Aqualux Plus, a water based polyurethan, that is approximately nine times harder than solvent-based products. Windows have round corner drywall returns with oak sills (oak jamb extensions are available). Jamb extensions, sills, casing and base are oak, stained in natural amber, prairie heritage or spice.

**Kitchens:** Cabinets have solid oak frames and raised panel oak doors. The cabinets are also finished in our factory with the same up-to-date process as we use on the millwork. The cabinets are available in spice, prairie heritage, or natural amber. Cherry, Hickory, Pine and Maple cabinets are also available along with optional drawer bases, utility cabinets, dishwasher panels, appliance garages, valances, corner cabinets, lazy susans and crown moldings. Countertops are Formica brand with a 7" ceramic tile backsplash. Optional solid surface countertops are also available in a variety of colors. Stainless steel sinks are standard and include a garbage disposal and a single lever Moen faucet. A hood fan with charcoal filter is included over the range.

**Baths:** Baths have oak vanities with Formica tops and oak edges, 7" ceramic tile backsplashes, and oval drop-in lavatories. One-piece cultured granite lavatory/tops are optional. The main bath has a one-piece, fiberglass tub/shower with a smooth gelcoat finish and curtain rod. Master baths have a one piece fiberglass shower stall with a gel-coat finish and tempered glass sliding door. Tubs, shower stalls and vitreous china stools are standard white color unless otherwise specified.

**Flooring:** Each home includes vinyl and carpeting. The vinyl is Armstrong Midstar 14' wide sheet vinyl for fewer seams, installed over 1/4" underlayment in the kitchen, baths, entries and laundry areas. Our standard carpet is Beaulieu Bliss in brilliant stain-resistant colors installed over a 7/16" thick foam pad. An upgrade textured high performance carpet is available room by room or for the whole house.

**Appliances:** Sears dishwashers, ranges, cooktop grilles, refrigerators, and above-the-range microwaves are available as optional design features.

**Codes:** Homes are inspected during construction to comply with the International Residential Code or Uniform Building Code, Uniform Plumbing Code, Uniform Mechanical Code and National Electrical Code. Some areas require additional snow loads or local modifications to these codes and we can accommodate these special needs if disclosed to us. All construction meets or exceeds the requirements for conventional financing.

**Warranty:** Be sure to ask for your written warranty that includes a limited three year workmanship and material warranty plus a ten year structural warranty.