



014000 Quality Requirements

1. **Building Code Compliance** Hi-Tech warrants compliance with the Canadian Standards Association A-277 Procedures for Factory Certification of Buildings ("CSA A-277") as adopted and amended by the province where the modular structure is to be delivered as of the date of the initiation of manufacture. Hi-Tech is only responsible for such local variations from the effective provincial code as has been communicated in writing to Hi-Tech by the Purchaser and incorporated into the terms and conditions of the Purchase Agreement for the structure.

018313 Superstructure Performance: Design Loads

1. **Floor Load:** 40 pounds per square foot
2. **Ground Snow Load:** 40 pounds per square foot
3. **Wind Load:** up to 90 miles per hour
4. **Seismic Zone:** 0 to 1

051200 Metals: Structural Steel Framing

1. **I-Beams:** 12" I-Beam
2. **I-Beam Spacing:** 82 ½" for floors 13' wide and under. 99 ½" wide for all others.

0611001 Wood Framing: Floors

1. **Floor Joists:** 2x8 @ 16" OC.
2. **Perimeter Rim Joists:** Double 2x8 length of floor, doubled on hitch end and tripled on non-hitch end of single-section homes, tripled on both ends of multi-section homes with 8" cantilever. Rim joist spliced with metal gang plates.

0611002 Wood Framing: Exterior Walls

1. **Wall Height:** 8'0" (96")
2. **Studs:** 2x6 @ 16" OC, center-drilled where necessary for electrical wiring.
3. **Plates:** Double top and single bottom 2x6 plates.
4. **Headers for Exterior Wall Openings:** Engineered & sized per specific spans.
5. **Wall-to-Floor and Wall-to-Roof Connections:** Mechanically fastened with additional galvanized steel banding connectors from walls to roof. Wall sheathing overlaps floor rim joist 2".
6. **Exterior Wall Fastening:** All wood-to-wood connections with mechanical fasteners.
7. **Gable End-Walls Under Hinged Roofs:** Pre-framed 2x3 gable end walls, typical stud & plate construction, sheathed with OSB. Shipped loose for installation and completion in field by others.

0611003 Wood Framing: Mating Walls

1. **Studs:** 2x3 (finger jointed) @ 16" OC (except where 2x4 required by snow load).
2. **Plates:** 2x3 single top and bottom plates.
3. **Headers for Mating Wall Openings:** Engineered & sized per specific spans.

0611004 Wood Framing: Interior Partitions

1. **Studs:** 2x4 (2x6 for plumbing walls) @ 16" OC.
2. **Plates:** Single top and bottom plates, matching studs.
3. **Headers for Interior Partition Openings:** Framed to match stud wall with cripples above.

0611005 Wood Framing: Roofs

1. **Roof Pitch:** Single-section homes @ 3/12. Multi-section homes @ 6/12.
2. **Ceiling Contour:** Flat Throughout.
3. **Roof Framing:** Engineered wood trusses @ 24" OC. Framed assemblies to complete roof peak of hinged roofs shipped loose for site installation.
4. **Mating Line Beams:** Engineered LVL beams are used over openings and are concealed above the ceiling.
5. **Backers:** OSB backers for electrical boxes and fixtures.
6. **Overhangs:** 3" eaves and 12" gable rakes for single-section homes. 12" eaves and gable rakes with 31" boxed returns on gable ends for multi-section homes.
7. **Sub-Fascia Board:** 1 x 6 for single-section home roofs. 2 x 6 for multi-section home roofs.

061600 Wood Sheathing

1. **Floor Decking:** 3/4" (23/32") tongue and groove, OSB floor decking installed perpendicular to joists with staggered joints, glued, fastened with .099" x 2" 6D ring-shank nails 6" OC (all seams are sanded). 1/4" luan underlayment, installed over the sub-floor decking, in all linoleum areas.
2. **Wall Sheathing:** 7/16" OSB on all exterior walls. 3.4 mm luan installed under drywall of mating walls.
3. **Roof Decking:** 7/16" OSB decking with "H" - clips between trusses.

062200 Finish Carpentry: Millwork

1. **Window Jamb:** All window jamb extensions ½" vinyl-wrapped (Charlotte Oak), veneer core plywood.
2. **Casing:** 2-1/4" non-finger jointed colonial pine casing, stained to match interior doors and window jambs.
3. **Base Molding:** 3" non-finger jointed colonial pine baseboard, stained to match interior doors and window jambs.

064300 Finish Carpentry: Stairs and Railings

1. **Stairs To Basement:** Furnished and installed on-site by others when required.

072100 Thermal Protection: Insulation

1. **Floors:** R-19 fiberglass unfaced blanket insulation.
2. **Walls:** R-24 fiberglass unfaced batt insulation.
3. **Roof:** R-40 blown cellulose. Insulation baffles at eaves.
5. **Window/Door:** Foam insulation around windows. Fiberglass insulation between door frames and wall framing.

072500 Moisture Protection: Weather Barriers

1. **Floor Bottom:** Seamless, poly-scrim reinforced plastic sheeting (below floor moisture, insect and rodent barrier) full length.
2. **Wall Weather Wrap:** Air infiltration/water barrier building wrap between siding and sheathing (entire home wrapped including gable ends).
3. **Vapor Barrier:** Continuous 6-mil poly installed on warm side (between exterior wall studs and gypsum wall board and between truss bottom cords and gypsum ceiling board).

073100 Moisture Protection: Roofing

1. **Shingles:** 30-year warranted, Architectural fiberglass shingles, nailed, **NOT STAPLED.**
2. **Drip Edge:** White aluminum
3. **Shingle Underlayment:** 15 lb. felt. All flashings at roof vents and penetrations are sealed with roof flashing sealant.
4. **Ice Dam Protection:** Ice and water shield at roof edge up roof deck a minimum of 24" inside of exterior wall
5. **Attic Ventilation:** Continuous shingle over ridge vent with insect screen and perforated soffit with insulation baffles at eaves.

074600 Moisture Protection: Siding

1. **Siding:** .040" double 4-1/2" exposure vinyl siding fastened with hand driven aluminum nails - **NOT STAPLED.**
2. **Siding Trim:** Outside and inside corners match siding color. J-Boxes, J-Channel, Dryer vents and miscellaneous trim are white. Outside corners are nail-on style.
3. **Soffit:** Eaves and gables -white vinyl vented.
4. **Fascia:** 6" White pre-finished steel or aluminum.

079000 Joint Protection: Sealants

1. **Exterior Wall, Floor & Roof Intersections:** Flexible acrylic sealant between wall/floor, wall/wall and wall/ceiling or wall/roof intersections.
2. **Inter-Module Seal at Mate Walls:** Bulb seal installed around perimeter.

081011 Openings: Doors and Frames

1. **Exterior Main Entry Door:** 3'-0" x 6'-8" x 1-3/4" 6-panel "white" vinyl finish insulated steel front entry door with dead bolt and round satin nickel door handle.
2. **Exterior Secondary Entrance Door:** 2'8" x 6'8" 1-3/4" 6-panel "white" insulated vinyl finish steel entry door with deadbolt and satin nickel round style door handle. "Fire Rated" when used as door to garage.
3. **Exterior Patio Door:** Insulated 6'-0" x 6'-8" Low-E vinyl (per print/option) with screen door and manufacturer's individual lock system. Grids optional.
4. **Exterior Door Keying:** All exterior door locksets and deadbolts (except patio door) are keyed alike.
5. **Exterior Door Thresholds:** All exterior doors have adjustable thresholds with temporary covering/protection installed.
6. **Exterior Door Weather Stripping:** Compression style.
7. **Exterior Door Jamb/Brick Mold:** Vinyl wrapped wood on Main and Secondary doors. A door to a garage is primed finger-jointed pine.
8. **Storm Doors:** Optional.
9. **Interior Passage Doors:** 1-3/8" thick 6'-8" high (width per plan, 2'-6" minimum for bedrooms, 2' 8" minimum for utility rooms and basement, when required) 6-panel, hollow core, embossed wood grain/tone doors, with stained pine jambs.
10. **Interior Wardrobe/Closet Doors:** Bi-fold or swing type per plan, 6- panel, hollow core, embossed wood grain/tone, with stained pine jambs.
11. **Interior Passage Door Hardware:** Lever style with brushed nickel finish.
12. **Interior Privacy Locks:** Privacy locks on all bathroom and bedroom doors.
13. **Interior Door Hinges:** Three, solid metal, satin finished nickel, mortised type.

14. **Doorstops:** Baseboard or hinge mounted as appropriate, for all swing doors.
15. **Openings Without Doors:** Full height to ceiling (no dropped headers), with drywall finish (mate line openings require site finishing by others). Optional cased openings with dropped headers.
16. **Furnace Compartment:** Interior passage door and grill with drywall inside.
17. **Water Heater Compartment:** Interior Passage door with drywall inside.

083100 Openings: Access Doors & Panels

1. **Crawlspace Access:** Furnished and installed on-site by others
2. **Attic Access:** Included when hinged roof utilized and provided with insulated panel.
3. **Temporary Access Openings:** Openings provided as necessary for on-site inter-module connection of mechanical systems by others. To be closed and finished on-site by others.

085000 Openings: Windows

1. **Windows:** White vinyl, low maintenance, single-hung, 3/4" insulated "Low "E" glass with tilt sash and fiberglass screen. Egress windows in all bedrooms, all other windows sized per plan. Grids optional.

092116 Finishes: Drywall

1. **Gypsum Board Assemblies for Walls:** 1/2" drywall, adhesively applied horizontally and mechanically fastened with nails at perimeter and screws in field of board. Water resistant drywall in tub/shower areas. All drywall finished smooth.
2. **Gypsum Board Assemblies for Ceilings:** High-strength drywall secured to trusses or ceiling joists with two-part urethane adhesive and screws. Ceiling has smooth finish (Optional stipple/texture finish). Ceiling drywall held back 12" where necessary for on-site finishing at mate line openings. *Note: Any exposed ceiling framing at mate line requires cross fastening with lag screws on site by others prior to drywall replacement and finishing.*
3. **Gypsum Board Joint Finish:** Reinforced corner bead for outside corners. Fiber mesh tape for flat joints with paper tape for all inside corners. All joints bed coated with high-strength joint compound and finished smooth with one-or-more finish coats of topping compound.

096000 Finishes: Flooring

1. **Resilient Flooring:** No wax vinyl flooring, minimum .014" wear layer and minimum .055" total thickness, in kitchen, foyer, baths, laundry, utility rooms and morning rooms (where applicable). Entry foyer guest closet to match adjoining flooring.
2. **Carpeting:** 30 oz. carpet with 1/2", 6 lb. rebond carpet pad with tack strip. Carpeting for stairs to upper level(s) of two-story and 1-1/2 story (cape cod) designs shipped loose for installation on-site by others.

099100 Finishes: Paint

1. **Interior Walls and Ceilings:** One coat of flat white latex primer.
2. **Interior/Exterior Trim:** Pre finished stained pine with nail holes puttied with color matched filler. Brickmold caulked to exterior door jambs.

102000 Specialties: Interior

1. **Mirrors:** Bath mirrors over vanities are the width of the vanity, 36" tall, with pencil ground edges and set in aluminum bottom track secured with metal clips at top. When vanity is less than 30" wide with no drawers, a 16"x22" recessed mirrored medicine cabinet is used.
2. **TP Holders, Towel Bars and Door Hooks:** Optional.
3. **Shower Curtains and Enclosures:** Spring tension chrome shower rod with vinyl curtain for all tub/showers and 48" stand-alone showers. Tempered glass shower doors for 36" and 60" stand-alone showers.

105000 Specialties: Storage

1. **Closet Shelves:** Single 12" vinyl-coated metal ventilated shelf in all clothes/guest closets. 4 - 16" vinyl coated metal ventilated shelves in linen and pantry closets.
2. **Washer/Dryer Shelf:** Single 12" vinyl-coated metal ventilated shelf above washer and dryer area.

107000 Specialties: Exterior

1. **Shutters:** 15" wide, louvered or raised panel vinyl shutters on front of home only.

113100 Equipment: Residential Appliances

1. **Range hood:** 30" white, 160 cfm with light, vented to outside.
2. **Kitchen and Laundry Appliances:** Whirlpool, white, gas range and 18 cu. ft. Energy Star refrigerator with icemaker. Dishwasher, microwave, garbage disposal, and laundry appliances optional.
3. **Dishwasher:** Plumbing, electrical and base cabinetry prepared to accept installation of standard dishwasher if appliance not purchased from HTH.

122000 Furnishings: Window Treatments

1. **Blinds:** White 2" vinyl faux wood blinds

123000 Furnishings: Casework

1. **Cabinets:** Custom built, Oak Park kitchen and bathroom cabinets with recessed panel - square oak framed doors.
2. **Cabinet Height:** 30" overhead cabinets.
3. **Cabinet Hardware:** Concealed 2-way adjustable hinges, satin nickel drawer and door knobs/pulls.
4. **Cabinet Trim:** 2-9/32" oak crown molding for overhead cabinets.
5. **Cabinet Configuration:** Drawer over door style base cabinets with one roll-out shelf in bases over 9" wide.
6. **Pantry Cabinets/Closets:** Pantry cabinets include 5-full depth shelves.
7. **Toe Kick:** All cabinets have finished toe kick.
8. **Bath Vanities:** Master bath vanities are 21" deep by 36" high (incl. countertop). Secondary bath vanities are 21" deep x 33" high (incl. countertop). Optional banks of drawers available.
9. **Countertops:** High-pressure laminate with rolled edge countertop and integral 4" post formed backsplashes at all walls. *Note: On peninsula tops, edges may be mixed between post-formed and self-edge.*

1334232 Fabricated Structures: Module Dimensions/Transportation

1. **Module Dimensions:** Single-section homes @ 12'-0", 13'-9", 15'-6" wide. Multi-section homes @ 20'-0", 24'-0", 26'-0", 27'-6", 30'-0", and 31'-6" ..
2. **Transport Method:** Permanent frame with detachable hitch. 14 1/2" x 14 ply, low profile tires. All brake axles.

3. **Shipped Loose Materials:** See Hi-Tech scope-of-work standards for materials to complete the home that are shipped loose for installation on-site by others.

221000 Plumbing Piping:

1. **Water Supply Lines (installed):** Color-coded cross-linked polyethylene (PEX) with brass fittings. Water lines are solvent free and freeze/thaw stable. Water distribution system is pressure tested to 100 psi; Inter-module connections and connection to water source furnished and installed on-site by others.
2. **Water Heater & Shower Diverted Water Lines:** Water lines to shower diverters, water heater and softener (if ordered) are color-coded cross-linked polyethylene (PEX).
3. **Shutoff Valves:** Individual water shut off valves at all fixtures except tubs and showers.
4. **Main Water Shutoff:** 3/4" Ball valve master shut off on cold side prior to hot water feed.
5. **Dishwasher:** Prep for optional dishwasher.
5. **Washer:** Recessed washer box with hot & cold supply valves and 2" ABS drain included within laundry area .
6. **Plumbing for Icemaker:** Installed through floor outside of wall with poly line to refrigerator.
7. **Drain, Waste & Venting:** DWV piping is ABS, drain connections completed to extent possible, with inter-module connections, completion of vents through roof, and connections to sanitary system furnished and installed on-site by others.

223000 Plumbing: Equipment

1. **Water Heater:** 40 gallon, electric.

224100 Plumbing: Fixtures

1. **Water Closets:** Elongated style toilets with porcelain tank and lid. (1.6 gallon per flush water conserving style).
2. **Sinks:**
 - a. **Kitchen:** Stainless steel 33" x 22" x 8" deep, double bowl kitchen sink.
 - b. **Bathroom:** White oval vitreous china bowl with popup drain and overflow. Pedestal sink standard in half baths.
3. **Tubs & Showers:**
 - a. One-piece fiberglass showers, tub/showers, garden and corner tubs (per plan).
4. **Faucets:**
 - a. **Exterior:** One exterior frost-free water faucet with back flow protection (located under Kitchen window area).
 - b. **Kitchen:** Delta Peerless single lever, satin nickel with sprayer.
 - c. **Bath Vanity:** Delta Peerless single lever satin nickel.
 - d. **Corner Tubs (per plan):** Delta Peerless dual knob satin nickel.
 - e. **Tub/Shower Combination:** Delta Peerless single lever, satin nickel with diverter spout.
 - f. **Shower:** Delta Peerless single lever satin nickel with anti-scald protection.
 - g. **Showerheads:** Installed and reinforced 80" above finished floor.

233000 Heating, Ventilation and Air Conditioning (HVAC)

1. **Gas Piping:** Gas piping is installed from furnace and range to point indicated on plans. Gas piping is included when gas dryer and/or gas water heater options are selected otherwise is optional.
2. **Central Heating:** Auto-ignition gas forced air furnace.
3. **Instrumentation & Control:** Programmable thermostat installed.
4. **Air Exchange System:** Whole house fan with flex-ducting to roof vent.
5. **Air Distribution-Exhaust fans:** Exhaust fans in all baths are 50 CFM fan/light combination with separate switch for the fan and light. Venting to exterior with insulated flexible duct.
6. **Air Distribution-Dryer Vent:** Vent is recessed into the wall and installed through the floor or sidewall (per plan). Materials shipped loose to complete on site if through floor.
7. **Air Distribution-Cold Air Return:** Grills in walls over doors.
8. **Air Distribution-Registers:** Perimeter in floor room registers and boots in all rooms. Toe kick under cabinet registers in kitchens and bathrooms as required.
9. **Air Distribution-Duct:** 6" x 18" insulated fiberboard primary duct, with 6" round insulated flex duct to register boots.
10. **Air Distribution-Crossover between Modules:** Through rim joist on mate line, located per plan.

262000 Electrical: Distribution

1. **Switchboards & Panelboards:**
 - a. **Service:** 200 AMP
 - b. **Panel Box:** 32/64-space circuit capacity, all circuits labeled, with gray cover.
 - c. **Panel Box Installation:** Panel box installed in wall located per plan will have an empty 2" ABS chase conduit stubbed through the floor.
2. **Conductors & Cables:**
 - a. All wiring is copper with nonmetallic sheathing ("NMC"), sized per code.
3. **Circuit Protection:**
 - a. **Ground Fault Interrupters:** GFI for all exterior receptacles, baths and kitchen appliance circuits.
 - b. **Inter-Module Wire Connections:** amp connectors-110v, junction boxes for 220v.
4. **Boxes & Devices:**
 - a. **Switches:** Toggle switches throughout.
 - b. **Three-Way Switches:** Three-way electrical switches at hallways over 10' long, foyers and stairs, and rooms with two entrances – up to three.
 - c. **Exhaust Fan Switches:** Separate switches for lights and fans.
 - d. **Receptacles:** Tamper resistant except dedicated appliance receptacles and receptacles above kitchen counters in attics and in crawl spaces..
 - e. **Exterior Receptacles:** Two exterior GFI protected receptacles.
 - f. **Dishwasher Receptacle:** Hard-wired box on dedicated 15 amp circuit.
 - g. **Washer Receptacle:** 110 volt, 20 amp.
 - h. **Dryer Receptacle:** 220 volt, 30 amp.
 - i. **Range Receptacle:** 110 volt behind range, 220 volt, 40-amp (for electric range).
 - j. **Garbage Disposal Receptacle:** Wiring for garbage disposal on separate switch at kitchen sink OPTIONAL

- k. **Switched Receptacles for Rooms without Standard Light Fixtures:** Bedrooms, dens, living rooms and great rooms.
- l. **Heat Tape Receptacle:** At water inlet, on GFI circuit with non-GFI receptacle.
- m. **Door Chime:** 110-volt electric hard-wired door chime with a 12-volt transformer for door bell button at front door.

265000 Electrical: Lighting

1. **Exterior Lights:** White exterior coach light at all exterior doors (shipped loose for site installation).
2. **Attic Lighting:** One pull chain attic light fixture when roof is hinged.
3. **Kitchen Lighting:** Up to six (6") recessed can lights, including one over the kitchen sink and five in the main kitchen area – per plan.
4. **Dining Room & Breakfast Room/Nook Lighting:** A 3 or 5 arm brushed nickel light fixture. Dimmer switch optional.
5. **Walk-In Closet Lighting:** Walk-in closets have a switched 11" globe/dome light with a 2-bulb capacity.
6. **Hall/Utility Room Lighting:** Foyers, halls and utility rooms have a switched 11" globe/dome light with a 2-bulb capacity.
7. **Bathroom Lighting:** Brushed chrome light bar over vanity sized per print.
8. **Light Bulbs & Globes:** Bulbs and globes are included and installed, except down-lights and specialty lights.

274000 Communications: Audio-Visual

1. **Phone Jacks:** Two phone jacks installed; one in the kitchen and one in the master bedroom per plan. Conduit drops from jacks only, no cabling.
2. **TV Jacks:** Two TV jacks installed; one in the living room and one in the master bedroom per plan. Conduit drops from jacks only, no cabling.

283100 Electronic Safety & Security: Detection & Alarm

1. **Smoke and Carbon Monoxide Alarms:** Smoke alarms are hard wired with battery backup per home. Installed per code. One combination smoke/carbon monoxide detector installed per level of home.

NOTE: *Hi-Tech Housing, Inc has a continuous product improvement program making all specifications subject to change without notice. Check with Hi-Tech Housing, Inc. for current specifications and features for all homes.*