

## OAHS Building Specifications

**The following specifications are included for your review to ensure minimum requirements OAHS needs to ensure our development is sustainable. It is expected that the construction format, whether it is modular, panelized, or conventional construction method, meets or exceeds the energy requirements and OAHS requirements.**

### 1.0 FRAMING / GENERAL CONSTRUCTION

- To supply and install all modular framing, trusses, sheathing, insulating, vapor barrier and air sealing in compliance with current Energy Efficiency/OBC requirements. Detailed specs as per your stamped drawings.
- Panelized construction methods will be considered, if R-values and flashing details are consistent with typical stick framing/modular construction methodologies
- Low impact foundation systems will be considered

### 2.0 ENTRY DOORS

- To supply and install new 36" x 80" insulated 6 panel Steel Entry Doors.
- To be flashed per approved flashing detail on plans
- One door at the front of the unit and one door at the back of the unit.
- Doors to come pre-painted white both sides from factory.
- Slab to come predrilled for deadbolt.
- Door frame to come with white vinyl clad frame.
- Door to come with magnetic weather-stripping, peep holes (accessible and standard) and all necessary sill extensions.
- All interior and exterior finishing to be included. Interior casing/trim to be composite PVC unless approved otherwise by OAHS rep.
- Brick mould to be maintenance free – Vinyl.
- No hollow capping permitted.
- To supply and install wireless doorbell at main entry.
- To supply and install interior hinge pin door stops on all entrance doors.
- Forward receipt and warranty documentation to OAHS with invoice upon completion

### 3.0 ENTRY LOCKS

- To supply and install WEISER passage lever handle and Weiser SMART key Deadbolt.
- Locks to come with nickel finish.
- Both doors to be keyed alike. Keys to be given to OAHS representative upon completion unless directed otherwise.
- Forward receipt and warranty documentation to OAHS with invoice upon completion

#### 4.0 ROOFING

- To supply and install new drip edge around perimeter of roof.
- To install 2 rows of ice and water shield on all eaves, valleys and vulnerable area. Cover remainder of roof with synthetic underlayment. Venting must be adequate for square footage of attic space. Venting to be either Max Static Vents or Ridge Venting. No whirly birds permitted.
- Supply and install new ABS flashing around all vent stacks.
- Ensure venting is flashed and taped per approved flashing details
- Supply and install Lifetime Architectural Shingles on entire roof surface. Seal where necessary
- Remove all debris, shingles and nails off site.
- Forward receipt and warranty documentation to OAHS with invoice upon completion.

#### 5.0 INTERIOR LIGHTING

- Interior lighting fixtures with 7" LED flush mount low profile lights. Different profile can be used if approved by OAHS rep.
- Bulbs to be LED and equivalent to 60-watt incandescent minimum.
- Eco Option / Energy Star qualified.
- Forward receipt and warranty documentation to OAHS with invoice upon completion.
- Switches on timers for bathrooms and closet lighting

#### 6.0 PAINTING

- Prime and Paint all walls with Semi-gloss latex paint. Paint colour must be neutral, confirm with OAHS prior to start date.
- Do not paint light fixtures, vinyl windows, vinyl or rubber casings, handles, plug covers, etc. unless requested otherwise by OAHS rep.
- Leave unused cans on site in basement for future touch ups.
- Forward colour swatch to OAHS with invoice for future reference.

#### 7.0 WINDOWS

- To supply and install new Vinyl triple-pane casement windows with standard handle and lock.
- All windows to come Low E, Argon & Energy Star Rated.
- All windows to come with vinyl jamb extensions to suit wall depth.
- All windows to be shimmed, insulated, and sealed properly as per manufacturer install specs and approved flashing details on plans.
- To come with vinyl, maintenance free brick mould.
- All exterior and interior finishing to be included.
- Interior casing/trim to be MDF minimum 2 ¾" width & 5/8 thickness.
- All casing to have nail holes and joints filled/puttied and painted.

- Forward receipt and warranty documentation to OAHS with invoice upon completion.

## 8.0 KITCHEN

- Kitchen Design to meet CSA standards and to be installed per approved kitchen shop drawings submitted after site measurements.
- To supply and install all new Kitchen Cabinets as per approved drawings. Cabinets to come with solid wood framing and wood veneer, laminate, or melamine doors. Colour & style of cabinets to be verified prior to install.
- To supply and install all kitchen cabinet hardware including handles/pulls. All hardware to be nickel in colour. Any changes must be verified/ approved by OAHS.
- To supply and install laminate countertops as per drawing. Colour to be verified by OAHS prior to install. Ensure all countertops are caulked where necessary.
- To supply and install new stainless steel double kitchen sink. To supply and install new sink fixture. Fixture to be single handle, nickel finish with Water Sense label. Manufacturer to be Moen.
- Ontario Aboriginal Housing will supply all appliances

## 9.0 SMOKE ALARMS

- To supply and install new hardwired Smoke CO combo detectors in all required locations as per OBC.
- Units to have strobe and voice commands for alarm functions.
- All operating instructions to be left on site. Consult OAHS rep on location to leave them.

## 10.0 INSULATION

- To supply and install mor-vents/ baffles into each rafter space to suit insulation depth.
- To build and secure retainer around attic hatch to hold back insulation.
- To blow in fiberglass wool insulation to approximately 18.5" in total to achieve R50.
- To insulate back of attic hatch using rigid board insulation.
- To install weather-stripping around face of attic hatch to ensure it seals properly.

## 11.0 ENERGY MODEL

The intent of this development is to build an energy efficient dwelling to reduce emission in efforts to reach Canadas net zero goal of 2050, to be verified with a blower door test at two stages of construction. 1- once building is framed prior to finishes 2- upon substantial completion – An air exchange rate of 1.0-1.5 is the desired target.

if the proponent is unable to provide a net zero or net zero ready model to Canada's 2050 goals the single detached dwelling must have an energy model and installation standards that meet a minimum of 26 - 40% reduction in operating energy consumption and greenhouse gas

emissions. An Energy Report must be provided upon completion that is satisfactory to OAHS & CMHC requirements for energy reduction.

## 12.0 EXTERIOR SIDING:

- To supply and install rigid insulation of High performing tapes and exterior vapour barrier to be used around the entire exterior of the unit.
- Ensure all seams and penetration are flashed and taped per approved flashing details
- Install all necessary light/ utility extensions to suit wall depth.
- To supply and install dryer, exhaust, receptacle and all necessary J Blocks. Vents must be vinyl. Colour to be verified by OAHS with siding colour.
- Supply and install 4.5" dutchlap vinyl siding around entire exterior. Lighter, stock colour for siding and associated vinyl J trim to be verified by OAHS prior to start date.
- To seal all windows, doors, vents and penetrations with exterior caulking per approved flashing details.
- To clean job site and remove all debris and nails.
- Forward receipt and warranty documentation to OAHS with invoice upon completion.

## 13.0 FLOORING

- To supply and install glue down Resilient Vinyl Plank flooring throughout unit. Flooring must commercially grade and be minimum 5 mm in thickness.
- To supply and install new white PVC baseboard throughout. Other materials such as rubber may permitted if approved by OAHS rep.
- To supply and install any transitions/ reducers/ nosing's necessary.
- To remove all debris and leave work area clean.
- Forward receipt and warranty documentation to OAHS with invoice upon completion.
- Flashing details and methodology should be highlighted and confirmed during construction to avoid unnecessary airflow through dwelling

## 14.0 EAVESTROUGH

- To supply and install new seamless aluminum eaves trough on all eaves with proper slope for drainage.
- To supply and install necessary aluminum downspouts.
- To supply and install Low Profile Vinyl Downspout Extensions. Minimum 24" in length, black in colour.
- To seal with silicone where required.

## 15.0 HEATING SOURCE

### 15.1 ELECTRIC BASEBOARDS

- To supply and install new electric Dimplex Linear Proportional Convection Heaters.
- Units to come with built in controls.

- All units **MUST** be installed with 1" wall spacers to reduce direct heat to wall.
- To supply and install Multi-Zone Programmable Smart Thermostat (Must **not** be only Wifi connectivity) in accessible location. Smart Stat is Preferred.
- To supply and install new TRIM (casing) on wall to suit new smaller baseboard size. Match existing trim/casing if possible.
- To ensure units are functioning properly.
- To leave instructions on site. OAHS rep to instruct where.
- Forward any relevant warranty information to OAHS with invoice upon completion

### 15.2 COLD CLIMATE HEAT PUMPS

- Supply a ductless mini-split Air Source Heat Pump per unit. Installed as per manufactures installation specs. If layout will allow, it can be a multi-head unit (specified in quote) to allow for cost savings.
- Exterior unit to have 3 sided protection.
- Thermostat to be a wireless wall mounted control, not remote.
- Unit must be Energy Star rated to meet energy efficiency requirements.
- Unit must be a Cold Weather Heat Pump and have a minimum temperature rating of -25 C.
- Units must be sized appropriately for square footage of house.
- To prevent snow from blocking airflow over the coil and to permit defrost water drainage, the unit should be raised or placed on a stand that raises it 30 to 60 cm (12 to 24 in.) above the ground. The stand should be anchored to a concrete pad, which in turn should sit on a bed of gravel to enhance drainage.
- Refrigrant lines must be insulated to minimize unwanted heat loss and to prevent condensation.
- Ensure all through penetration for venting are flashed and taped per approved flashing detail

### 15.3 HOT WATER

- To supply & install 40-gallon electric hot water tank.
- Tank must come with Energy guide Label and be Energy Star Rated.
- Insulate all hot water lines within minimum 2-3 metres of tank with insulated pipe wrap.
- Tank must be installed as per manufacturers instructions and temperature set to meet current OBC.

### 15.4 HEAT RECOVERY VENTILATOR

- Ensure proper air exchange/ air quality is met as per OBC
- To install control on main floor near existing thermostat unless directed otherwise by OAHS
- Heat Recovery Ventilator must Energy Star Rated and be adequately sized for unit.

- The HRV must meet current OBC requirements, have defrost mode and have sensible recovery efficiency of at least 75% at 0°C
- Insure all through penetration for venting are flashed and taped per approved flashing detail

## 16.0 EXTERIOR LIGHT FIXTURES

- To supply and install outdoor wall lights at all entrances. Lights to be black in colour & LED compatible.
- To supply and install LED exterior bulb in fixture. Minimum 60-watt equivalent.
- For supplemental exterior lighting (not beside entrances or Parking lot lighting) we would prefer Solar powered, LED Motion sensing lighting.
- Dawn to Dusk switches

## 17.0 INTERIOR DOORS

- To supply and install 6 panel pre-hung textured & primed interior doors.
- All main floor interior doors (including bathrooms) to have a clear opening width of 32 in.
- Paint doors and frames white in colour using semi-gloss latex paint.
- All main floor int doors (including bathrooms) to have a clear opening width of 810 mm (32 in.)
- To supply and install passage handles. Nickel finish unless approved by OAHS.
- To supply and install hinge pin doors stops on all interior doors.

## 18.0 BATHROOM

### 18.1 VANITY

To supply and install 30" vanity in both bathrooms. Vanity to come with 1 piece sink & countertop. Caulk where necessary. Colours/style to be verified with OAHS prior to install. Supply and install door handles/hardware if not supplied with vanity. Nickel finish. To supply and install new sink fixture. Fixture to be single handle, nickel finish with Water Sense label. Manufacturer to be Moen.

### 18.2 SHOWER

To supply and install 1 piece shower & tub unit in bathrooms. To supply and install permanent shower curtain rod on both units. To supply and install shower/tub fixtures. Fixture to be single handle, nickel finish with Water Sense label. Manufacturer to be Moen. To caulk where necessary. Verify style of Shower/Tub surround with OAHS rep prior to install.

### 18.3 TOILET

To supply and install 1 new *American Standard* Water Sense toilet. Toilet to come with elongated bowl, chair height and no greater than 4.8 LPF. Include any plumbing modifications as required. Any other manufacturer or changes in spec must be approved by OAHS.

#### 18.4 EXHAUST FAN

Supply & install new ventilation exhaust fans in bathroom. Fan must be minimum 100 cfm & Energy Star rated/qualified. Fan must be humidity sensing. All exhaust fans ductwork must be properly insulated & vented to the outside.