

# MAPLE LEAF HOMES

## Ontario Standard A277 Modular and Mini Home Building Spec - 2020

### Building Code:

- \* CSA A277 Standard
- \* 2010 National Building Code of Canada (NBC)
- \* 2012 Building code of Ontario including supplementary standard SB-12
- \* 2010 National Plumbing Code
- \* 2018 Canadian Electrical Code with amendments
- \* All equipment to be CSA approved

### Design Criteria:

- \* Live Floor Load  
40 psf
- \* Specified snow load  
psf to be determined by area
- \* Zones - Zone 1 above 5000 degree days  
- Zone 2 below 5000 degree days

### Exterior Wall (8'-0" Mod/7'-6" Mini) (load bearing):

- \* 1/2" (13mm) Gypsum
- \* 6 mil vapor barrier
- \* 2"x6" (38mmx140mm) SPF #2 or better studs at 16" o.c. (400mm)
- \* See tables below for insulation requirements
- \* 3/8" (10mm) Plywood Sheathing glued and stapled
- \* Air barrier
- \* Oregon Pride Double 4" Horizontal Vinyl Siding by Mitten c/w 5 1/2" White Vinyl Corners & White Accessories.  
Limited Lifetime Warranty
- \* DuPont Flashing system around windows and doors

### Interior Wall (non-rated Wall) (non load bearing):

- \* 1/2" (13mm) Gypsum
- \* 2"x4" (38mmx89mm) SPF #2 or better studs at 16" o.c. (400mm), 2"x3" (38mmx75mm) for Mini Homes
- \* 1/2" (13mm) Gypsum

### Mate Wall - Mod Only (load bearing):

- \* 1/2" (13mm) Gypsum
- \* 2"x4" (38mmx89mm) SPF #2 or better studs at 16" o.c. (400mm) or 2"x3" (38mmx75mm)  
SPF #2 or better depending on intermodular openings
- \* 7/16" (11mm) OSB Sheathing, Stapled
- \* 7/16" (11mm) OSB Sheathing, Stapled
- \* 2"x4" (38mmx89mm) SPF #2 or better studs at 16" o.c. (400mm) or 2"x3" (38mmx75mm)  
SPF #2 or better depending on intermodular openings
- \* 1/2" (13mm) Gypsum

### **Floor Assembly:**

- \* Cushion and/or carpet (40 oz.)
- \* 3/8" (10mm) underlay for rolled good areas
- \* 5/8" (16mm) T&G Plywood Sheathing, glued and stapled
- \* 2"x10" (38mmx235mm) SPF #2 or better floor joists at 16" o.c. (400mm)(box sizes 12'-0"-15'-0"), joist hangers as required - Typical
- \* 2"x10" (38mmx235mm) SPF #2 or better floor joists at 12" o.c. (300mm)(box size 16'-0"), joist hangers as required - Modular or Mini on foundation
- \* Double 2"x10" (38mmx235mm) SPF #2 or better rim joist
- \* See tables below for insulation requirements
- \* Fabric Bottom Board for protection during shipping
- \* Steel jackpots as required for center support - Modular Homes on foundation
- \* 2"x8" Wood Beams - Modular and Mini on blocking

### **Roof Assembly:**

- \* Asphalt Shingles - Limited lifetime warranty
- \* Eave Protection
- \* DuPont Roof Protector Underlay - entire roof
- \* 1/2" (13mm) OSB Sheathing
- \* See tables below for insulation requirements
- \* Engineered Monohinge trusses at 24" o.c. (600mm), 5/12 Slope, 13 1/4" (336mm) overhang front & back, 12" (300mm) on gables. Tie downs as required - Modulares
- \* Engineered trusses at 24" o.c. (600mm), 4/12 Slope, 8 3/8" finished overhang all sides - Mini Homes
- \* Ridge Vent (for attic ventilation)
- \* 6 mil vapor barrier
- \* 1"x3" (19mmx64mm) strapping at 16" o.c. (400mm)
- \* 1/2" (13mm) Gypsum
- \* Attic access - Modulares only

### **Trim & finish:**

- \* White wood, colonial package (2 1/4" casing) trim & white painted jambs
- \* 3 1/2" Wood baseboard trim throughout
- \* Solid Wood White window build outs
- \* All Gypsum walls to be crack filled and primed - Modular
- \* 1/2" (13mm) Square Board and Battens - Mini
- \* Ceiling to be crack filled and painted smooth
- \* Frameless cabinetry c/w maple melamine interiors & brushed pewter hardware. Standard kitchen base cabinets are 24" deep x 35" high. Standard vanity cabinets are 21" deep x 31" high.
- \* Vanity and Kitchen countertop to be post formed laminate c/w 2300 profile by Belanger
- \* Rubbermaid Easy Slide shelving - 1 shelf per standard closet, 5 shelves for pantry & linen closets
- \* 24"x36" (38mmx75mm) Mirror c/w beveled edge above bath vanity

### **Heating and Ventilation:**

- \* Heating as per tables below
- \* Air Exchanger as per tables below
- \* 50 cfm Bathroom fan c/w dedicated switch
- \* Range hood, black or white vented outside or charcoal filter when on interior wall

### **Electrical:**

- \* 120/240V single phase 200amp panel
- \* Wiring within modules is copper
- \* Smoke detectors c/w strobe lights in each bedroom and 1 outside bedrooms
- \* Decora style devices

**Communications:**

- \* Phone Jack (CAT5E) one standard with every home
- \* Cable Jack (RG-6), optional
- \* Phone and Cable jack wiring to be coiled under floor joists - Homes on foundation
- \* Phone and Cable jack wiring to be wired to junction box in water heater closet - Homes on blocking or crawl space

**Lighting:**

- \* Residential coach light at each exterior door (IOL1, black or white)
- \* 12" Flush mount lights in various areas within Unit (IFM1612-O BPT)
- \* Standard 5-Lite Chandelier in dining room (ICHAN75BPT)
- \* 2-Lite Kitchen sink light (ICW52BPT)
- \* 2-head Vanity Light (IVL202BPT)
- \* All light bulbs to be LED

**DWV:**

- \* ABS plastic DWV pipe, sized as required by code
- \* All ABS lines are dropped through floor joists - Tie in's by others

**Potable Water:**

- \* Potable water pipe to be PEX (cross-linked polyethylene)
- \* Shut-off valve provided at each fixture
- \* All domestic water is distributed by insulated PEX
- \* All solder to be lead free
- \* 40gal electric water heater
- \* Low flow toilet
- \* Drop in vitreous china vanity sink c/w single lever faucet
- \* 1 PCS Acrylic 5' dome top tub c/w single lever faucet
- \* Stainless steel double bowl Kitchen sink c/w single lever faucet

**Windows & Doors:****Windows**

- \* Kohltech White Vinyl windows, Single Hung - See table below for glazing

**Doors**

- \* 36" Steel Exterior Kohltech doors c/w vinyl clad wood frame, threshold, weather strip, door sweep, deadbolt, lever handle & 9 lite (front door), solid 6 panel (rear door)
- \* Two panel textured arch top hollow core interior doors w/wood jambs
- \* All interior handles to be knob style

## Insulation Packages

### Zone 1 - Furnace – Gas Only (Table 3.1.1.2.A.) - Compliance package A6 (All values are min. nominal)

Item	Value	Cost	Notes
Ceilings w/Attic, incl cathedral	R-60	\$\$	(ft <sup>2</sup> )
Ceilings w/o Attic	R-31	n/a	Flat roof
Exposed Floor - Mini	R-31	n/a	
Exposed Floor - Mod	R-31	\$\$	(ft <sup>2</sup> )
Walls above Grade	R-22 + 1" (R-5) Rigid	\$\$	(8ft wall) Per perimeter foot of wall. Includes covering floor joists & truss heel
Windows & Sliding Glass Doors	ER 25 or U 1.6 max.	n/a	MLH Std.
Skylights	U 2.8 max.	n/a	
Furnace	92% min.	n/a	MLH std. is 95.1%
HRV	65%	\$\$	RNC1.0 – Mini or RNC2.0 - Mod
Water Heater	EF 0.8 min.	n/a	

### Zone 1 - Electric (Table 3.1.1.2.C.) - Compliance package C2 (All values are min. nominal)

Item	Value	Cost	Notes
Ceilings w/Attic – Mods	R-60 w/10" heel	\$\$	(ft <sup>2</sup> ) 10" heel is std. for Mods
Ceilings w/Attic – Mini, incl cathedral	R-60 w/10" heel	\$\$	(ft <sup>2</sup> ) Low slope application
Ceilings w/o Attic	R-31	n/a	Flat Roof
Exposed Floor - Mini	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Exposed Floor - Mod	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Walls above Grade	R-22 + 2" (R-10) Rigid	\$\$	(8ft wall) Per perimeter foot of wall. Includes covering floor joists & truss heel
Windows & Sliding Glass Doors	ER 34 or U 1.2 max.	See Table A See Table B	Supreme Single Hung w/Energlass, <b>NO GRILLS</b> Supreme Casement w/Triple glaze, 1x Low-E & grills
Skylights	U 2.8 max.	n/a	
HRV	75%	\$\$	RNC1.2 – Mini or RNC2.0 - Mod
Water Heater	n/a	n/a	

### Zone 1 - Oil (Table 3.1.1.2.B) - Compliance package B5 (All values are min. nominal)

Item	Value	Cost	Notes
Ceilings w/Attic, incl cathedral	R-50	n/a	(ft <sup>2</sup> )
Ceilings w/o Attic	R-31	n/a	Flat roof
Exposed Floor - Mini	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Exposed Floor - Mod	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Walls above Grade	R-19 + 2" (R-10) Rigid	\$\$	(8ft wall) Per perimeter foot of wall. Includes covering floor joists & truss heel
Windows & Sliding Glass Doors	ER 29 or U 0.25 max.	n/a	MLH Std.
Skylights	U 0.49 max.	n/a	
Furnace	84% min.	n/a	MLH std. is 86%
HRV	75%	\$\$	RNC1.2 – Mini or RNC2.0 - Mod
Water Heater	EF 0.66 min.	n/a	

**Zone 2 - Furnace – Gas Only (Table 3.1.1.3.A.) - Compliance package A6 (All values are min. nominal)**

Item	Value	Cost	Notes
Ceilings w/Attic, incl cathedral	R-50	n/a	
Ceilings w/o Attic	R-31	n/a	Flat roof
Exposed Floor - Mini	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Exposed Floor - Mod	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Walls above Grade	R-22 + 1.5" (R-7.5) Rigid	\$\$	(8ft wall) Per perimeter foot of wall. Includes covering floor joists & truss heel
Windows & Sliding Glass Doors	ER 29 or U 1.4 max.	n/a	MLH standard
Skylights	U 2.8 max.	n/a	
Furnace	92% min.	n/a	MLH std. is 95.1%
HRV	75%	\$\$	RNC1.2 – Mini or RNC2.0 - Mod
Water Heater	EF 0.7 min.	n/a	MLH std. Giant electric water heater – meets requirements

**Zone 2 - Electric (Table 3.1.1.3.C.) - Compliance package C1 (All values are min. nominal)**

Item	Value	Cost	Notes
Ceilings w/Attic – Mods	R-60 w/10" heel	\$\$	(ft <sup>2</sup> ) 10" heel is std. for Mods
Ceilings w/Attic – Mini, incl cathedral	R-60 w/10" heel	\$\$	(ft <sup>2</sup> ) Low slope application. Longer baffles will be required in mini home cathedral areas which may result in extra labor due to installation time.
Ceilings w/o Attic	R-31	n/a	Flat Roof
Exposed Floor - Mini	R-31 + 2" (R-10) Rigid	\$\$	(ft <sup>2</sup> )
Exposed Floor – Mod	R-31 + 2" (R-10) Rigid	\$\$	(ft <sup>2</sup> )
Walls above Grade	R-24 + 2" (R-10) Rigid	\$\$	(8ft wall) Per perimeter foot of wall. Includes covering floor joists & truss heel
Windows & Sliding Glass Doors	ER 34 or U 1.2 max.	See Table A See Table B	Supreme Single Hung w/Energlass, <b>NO GRILLS</b> Supreme Casement w/Triple glaze, 1x Low-E & grills
Skylights	U 2.8 max.	n/a	
HRV	81%*	\$\$	*Mini Homes not on foundations only require 75% use RNC1.2 and include blower door testing. Homes going on foundation will require larger HRV Venmar AVS X24HRV ECM.
Water Heater	n/a	n/a	MLH std. Giant electric water heater – meets requirements

**Zone 2 - Oil (Table 3.1.1.3.B.) - Compliance package B5 (All values are min. nominal)**

Item	Value	Cost	Notes
Ceilings w/Attic, incl cathedral	R-50	n/a	(ft <sup>2</sup> )
Ceilings w/o Attic	R-31	n/a	Flat roof
Exposed Floor - Mini	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Exposed Floor - Mod	R-35	\$\$	(ft <sup>2</sup> ) R-24 + R-12 batt insulation
Walls above Grade	R-19 + 2" (R-10) Rigid	\$\$	(8ft wall) Per perimeter foot of wall. Includes covering floor joists & truss heel
Windows & Sliding Glass Doors	ER 29 or U 0.25 max.	n/a	MLH Std.
Skylights	U 0.49 max.	n/a	
Furnace	84% min.	n/a	MLH std. is 86%
HRV	81%*	\$\$	*Mini Homes not on foundations only require 75% use RNC1.2 and include blower door testing. Homes going on foundation will require larger HRV Venmar AVS X24HRV ECM.
Water Heater	EF 0.66 min.	n/a	MLH std. Giant electric water heater – meets requirements

**"Maple Leaf Homes reserves the right to change the specification, if required, with advance notice given to purchaser in writing"**