

Dalton Township's
Residential Building Permit Checklist

NO PERMITS WILL BE ISSUED UNTIL ALL REQUIREMENTS ARE MET.

Please use the following as a checklist of requirements.

Requirements for a new house Building Permit

- 1) Proof of ownership (copy of deed, unless information is on file with Dalton Township)
- 2) Parcel Number (on deed)
- 3) Address of Building Site (Issued thru Muskegon County Dispatch).
- 4) Zoning Approval
- 5) Well & Septic Permits (Muskegon County Health Department).
- 6) Driveway Permit (Muskegon County Road Commission).
- 7) Soil Erosion Control Permit (on or near a lake or river)
- 8) Building Plans – 2 sets; must include the following:
 - a) Egress window locations
 - b) Foundation detail
 - c) Insulation detail
 - d) Wall detail
- 9) Truss Information (truss prints are required onsite for the rough inspection)
- 10) Michigan Energy Code Compliance.
- 11) Five day minimum waiting period before permit issuance.

No concrete will be poured until a permit is issued. Any work started before a permit is obtained, an Administrative/investigation fee shall be paid before the permit is issued.

Required Inspections

- 1) Footing: After forms are in place
- 2) Bonding: Before footing concrete is poured. All new house foundations require electrical bonding (E3608.1.2)
- 3) Rough In: After the trade inspections have approved their rough-ins. Truss prints are required on site.
- 4) Insulation: Before drywall is hung.
- 5) Final: After air leakage test is completed and after trade inspections are finalized.

Certificate of Occupancy Requirements

- 1) All final inspection reports are turned in.
- 2) Air leakage test (Blower Door) results are turned in.
- 3) Manual S and Manual J Calcs are turned in.

Building permits, trade permits, and Zoning forms are available at www.daltontownship.org or at Dalton Township Hall.

Building Inspector..... Troy Debrot 231-332-6705
Electrical Inspector..... Jeff Johnson 231-329-4465
Plumbing/Mechanical Inspector.... Jim Callender 231-206-6563
Zoning Department..... 231-332-6706

SEPTIC AND WELL PERMITS

Environmental Health 231-724-6208
209 E. Apple Ave.
Suite C173 Muskegon, MI 49442

MISS DIG SYSTEMS, INC.
Phone #: 811
1030 Featherstone Rd.
Pontiac, Mi. 48345-183

SOIL EROSION PERMITS

Department of Public Works 231-724-6411
131 E. Apple Ave.
Muskegon, MI 49442

MUSKEGON CENTRAL DISPATCH
Shawn Grabinski 231-722-3524

DRIVEWAY PERMIT

County Road Commission 231-788-2381
7700 E. Apple Ave.
Muskegon, MI 49442

DALTON TOWNSHIP

Phone: 231-766-3043 Fax: 231-766-2636
1616 E. Riley Thompson Rd.
Muskegon, MI 49445

N1102.4.1.1 Air Leakage - The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with manufacturer's installation instructions and the following criteria:

**TABLE N1102.4.1.1 (R402.4.1.1)
AIR BARRIER AND INSULATION INSTALLATION**

COMPONENT	CRITERIA
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope shall contain a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair, or knee wall doors to unconditioned attic spaces shall be sealed.
Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.
Rim joists	Rim joists shall be insulated and include the air barrier.
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.
Electrical/phone box on ext. walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.
Fireplace	An air barrier shall be installed on fireplace walls.

Heating and Cooling Equipment Sizing- Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling methodologies. The Manual S and Manual J calculations shall be submitted prior to the rough in inspections.

Air Leakage Testing (Blower Door) – The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding the limits of the compliance path chosen. Testing shall be conducted by a certified independent third party. A signed written report of the test results shall be provided to the building official.

Energy Code Compliance Paths

Energy code provisions require you to choose one of four alternative compliance paths to demonstrate code compliance. Indicate the path you choose below by checking one of the following boxes and completing the instructions.

Prescriptive (as prescribed by the code)

If you choose to use the prescriptive method of compliance, you may demonstrate compliance by completing the attached Prescriptive Compliance Report Form. The prescriptive insulation materials and methods shown on the building plans shall match what is indicated on the compliance report.

Total UA Alternative (prescriptive trade-off method)

Compliance with the Total UA Alternative method may be demonstrated by completing a compliance report using REScheck software provided free of charge at energycodes.gov. At present, REScheck does not offer a code edition incorporating State of Michigan amendments. However, you may use the 2015 International Energy Conservation Code (**2015 IECC**) since it meets or exceeds Michigan requirements. Use "Muskegon County or Muskegon, Michigan" for location criteria.

Please note that the building plans shall show the same materials and methods you use to complete the REScheck form. For example, if you use basement wall insulation in REScheck, such insulation should be clearly indicated on the building plans too.

Simulated Performance Alternative (performance analysis)

Certain commercially available compliance software (e.g. REM/RATE, etc.) may be used to demonstrate that the proposed construction will have an annual energy cost that is less than or equal to the energy cost of the standard reference design. Please see Section N1105 of the code for specific criteria.

Such software shall generate a compliance report that documents that the proposed design complies and shall include information outlined in Section N1105.

Above Code Programs

Compliance with certain energy efficiency programs such as Energy Star Version 3 and ICC 700-2012 "silver" are acceptable. See Section N1101.7 and N1106 for specific provisions. Provide a compliance report that documents that the proposed design meets program requirements.

Prescriptive Compliance Method

If using the prescriptive compliance method, the prescribe values listed in the table below are the minimum insulation requirements. Indicate the proposed values of insulation for each component of the proposed structure. Please note that such components shall meet or exceed the performance of the prescribed values.

Component Description	Prescribed Value	Proposed Value	Comment
Window U-Factor	0.32		
^b Skylight U-Factor	0.55		
Ceiling R-Value	38		
Wood Frame R-Value	20 or 13+5		
^h Mass Wall R-Value	13/17		
Floor R-Value (if the basement or crawl space is not insulated)	30		
^c Basement Wall R-Value	10/13		
^e Slab R-Value/Depth	10/2 feet		
^d Crawl Space Wall R-Value	15/19		
Ducts outside building thermal envelope (i.e. attic spaces) R-Value	8		
Ducts within building but outside conditioned space (i.e. crawls spaces) R-Value	6		
Ducts within building envelope assembly, insulation placed between duct and unconditioned space R-value	8		
High-efficacy lamps in permanently installed light fixtures - Percentage	75%		
Attic access doors - Doors shall be weather-stripped and insulated to level of ceiling insulation. A wood frame or equivalent retainer is required around the access when loose fill insulation is used.			

• ~~Typical House~~

- a. R-values are minimums. U-factors are maximums.
- b. The fenestration U-factor excludes skylights.
- c. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the crawlspace wall. "15/19" may be met with R-13 cavity insulation on the interior of the crawlspace wall plus R-5 continuous insulation on the interior or exterior of the home.
- e. R-5 shall be added to the required slab edge R-values for heated slabs.
- f. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- g. First value is cavity insulation, second is continuous insulation or insulated siding, so "13 + 5" means R-13 cavity insulation plus R-5 continuous insulation or insulated siding. If structural sheathing covers 40% or less of the exterior, continuous insulation R-value may be reduced by no more than R-3 in the locations where structural sheathing is used — to maintain a consistent total sheathing thickness.
- h. The second R-value applies when more than half the insulation is on the interior of the mass wall.