

*Blue Lake Township*  
 1491 OWASIPPE ROAD  
 TWIN LAKE, MICHIGAN 49457  
 PHONE 894-6335

# BUILDING PERMIT APPLICATION

TO BE COMPLETED BY APPLICANT  
 As Required by: PUBLIC ACT 135 OF 1989 STATE OF MICHIGAN

JOB ADDRESS	LEGAL DESCRIPT.	LOT NO. BLOCK NO.	SUB'D OR ADDITION
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Applicant is responsible for the payment of all fees and charges applicable to this application and must provide following information.

OWNER/LESSEE	MAIL ADDRESS	CITY/STATE	ZIP CODE	REASON FOR EXEMPTION
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FEDERAL I.D. NO./SOC. SEC. NO.	CITY LIC. NO./STATE
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CONTRACTOR	MAIL ADDRESS	PHONE	ZIP CODE	
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FEDERAL I.D. NO./SOC. SEC. NO.	INSURANCE
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ARCHITECT OR ENGINEER	MAIL ADDRESS	PHONE	ZIP CODE	STATE LICENSE NO.
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Class of Work:     NEW     ADDITION     ALTERATION     REPAIR     DEMOLITION     RELOCATION     SIGN

PREMANUFACTURE     COMMERCIAL     INDUSTRIAL     SWIMMING POOLS     FENCE     RENTAL     OTHER

RESIDENTIAL     MOBILE HOME

Describe work:	DO NOT WRITE IN THIS SPACE BELOW
	Use of Building:
	Change of Use to:
	Valuation: \$                      Fee:
	Foundation Only <input type="checkbox"/> Fee:
Starting Date:	Starter Fee:
	Time and Material: <input type="checkbox"/> Fees:

All work must comply with state code as adopted by Reference City Ordinance	Permit Fee:
	Plan Review Fee:

SPECIAL CONDITIONS: POUR NO CONCRETE UNTIL FORMS ARE APPROVED. CALL 24 HOURS IN ADVANCE.	Type of Const.	Occupancy Group	Division
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NOTE: All New construction must be approved by the building official before issuance.	Size of Bldg. (Total) Sq. Ft.	No. of Stories	Max. Occ. Load
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Application Accepted By	Building Inspector or Authorized Persons Plans Checked By    Approved For Issuance By	Fire Zone	Use Zone	Fire Sprinklers Required: <input type="checkbox"/> yes <input type="checkbox"/> no
		Variance	Off St. Parking	

BLDG. INSP.	No. of Dwelling Units
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<p style="text-align: center;"><b>NOTICE:</b></p> <p>SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, PLUMBING, HEATING, VENTILATING OR AIR CONDITIONING.</p> <p>THIS PERMIT BECOMES NULL AND VOID IF WORK OR CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN _____ DAYS, OR IF CONSTRUCTION OR WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF _____ DAYS AT ANY TIME AFTER WORK IS COMMENCED.</p> <p>I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF LAWS AND ORDINANCES GOVERNING THIS TYPE OF WORK WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. THE GRANTING OF A PERMIT DOES NOT PRESUME TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATION CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.</p> <p>SECTION 23A OF THE STATE CONSTRUCTION CODE ACT OF 1972, ACT NO. 230 OF THE PUBLIC ACTS OF 1972, BEING SECTION 125.1523A OF THE MICHIGAN COMPILED LAWS, PROHIBITS A PERSON FROM CONSPIRING TO CIRCUMVENT THE LICENSING REQUIREMENTS OF THIS STATE RELATING TO PERSONS WHO ARE TO PERFORM WORK ON A RESIDENTIAL BUILDING OR A RESIDENTIAL STRUCTURE. VIOLATORS OF SECTION 23A ARE SUBJECT TO CIVIL FINES.</p> <p>TO HOMEOWNERS THAT ARE APPLYING FOR A PERMIT (WHEN NO OTHER CONTRACTOR ASSISTANCE IS BEING USED), UNDER REASON FOR EXEMPTION STATE THAT YOU ARE THE HOMEOWNER AND WILL BE DOING THE WORK.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:25%;">Special Approvals</th> <th style="width:25%;">Required</th> <th style="width:25%;">Received</th> <th style="width:25%;">Not Required</th> </tr> <tr> <td>ZONING</td> <td></td> <td></td> <td></td> </tr> <tr> <td>HEALTH DEPT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FIRE DEPT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SOIL REPORT</td> <td></td> <td></td> <td></td> </tr> <tr> <td>OTHER (Specify)</td> <td></td> <td></td> <td></td> </tr> <tr> <th colspan="3" style="text-align: center;">REVIEWS TO BE PERFORMED</th> <th style="text-align: center;">DATE</th> </tr> <tr> <td colspan="4">SITE PLAN:</td> </tr> <tr> <td colspan="4">PLUMBING:</td> </tr> <tr> <td colspan="4">MECHANICAL:</td> </tr> <tr> <td colspan="4">ELECTRICAL:</td> </tr> <tr> <td colspan="4">ENERGY:</td> </tr> <tr> <td colspan="4">BARRIER FREE:</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>NOTICE: CALL FOR FINAL INSPECTION</b></td> </tr> </table>	Special Approvals	Required	Received	Not Required	ZONING				HEALTH DEPT.				FIRE DEPT.				SOIL REPORT				OTHER (Specify)				REVIEWS TO BE PERFORMED			DATE	SITE PLAN:				PLUMBING:				MECHANICAL:				ELECTRICAL:				ENERGY:				BARRIER FREE:				<b>NOTICE: CALL FOR FINAL INSPECTION</b>			
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SIGNATURE OF APPLICANT \_\_\_\_\_ OWNER/CONTRACTOR \_\_\_\_\_ DATE \_\_\_\_\_

### REQUIREMENTS FOR A NEW HOUSE BUILDING PERMIT

- 1- Well & Septic Permits
- 2- Drive Permit
- 3- Building Plans (2 sets)
- 4- Truss Information
  - Truss Prints Required at Rough Inspection
- 5- Energy Code Compliance
- 6- Soil Erosion Control Permit
  - On or Near a Lake or River
- 7- Zoning Approval

### BUILDING PLANS DETAILS

- 1- Show Egress Window Locations
- 2- Show Foundation Detail
- 3- Show Insulation Detail
- 4- Show Wall Detail

### 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 are Done
  - Truss Prints Required on Job Site
- 4- Insulation - Before Drywall is Hung
- 5- Final- After Air Leakage Test is Completed
  - After the Trade Inspections are Finalized

### C of O REQUIREMENTS

- 1- All Final Inspection Reports Turned In
- 2- Air Leakage Test (Blower Door) Results Turned In
- 3- Manual S & Manual J Calcs Turned In

## Homeowner Permits

The Michigan Licensing Law gives the homeowner an exemption to act as the general contractor if the homeowner is building their own residence for their own personal use. This means that in the case of your own single family residence, the homeowner may act as the general contractor, even though a licensed builder may be significantly involved. This exemption does not apply to an apartment building or duplex.

Section 339.2403 of the Michigan Occupational Code state the following:

*A person may engage in the business of or act in the capacity of a residential builder without having a license if the person is:*

*An owner of the property in reference to a structure on the property for the owner's own use and occupancy.*

If the Homeowner acts as the general contractor and obtains the building permit, you should be aware of the following:

That as the permit holder, the homeowner incurs all of the liability and all of the responsibility that the licensed contractor would normally assume:

This means that:

- It will be the homeowners responsibility to correct any code violations, even if a contractor or any other person(s) did the work.
- The homeowner can be held liable for any injury which occurs on the job, whether it is to a builder's or sub-contractor's employee. The homeowner is responsible for workers compensation, all withholding taxes both for federal and state, and FICA taxes for all persons on the job.
- In the event of an occurrence beyond the builder's control- (lawsuit, etc ... ), which causes the builder to be unable to complete the work, the homeowner will be legally responsible for the completion of the job.

I, \_\_\_\_\_ have read and understand the above.  
Print name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

"Section 23a of the State Construction Code Act of 1972, Act No. 230 of the Public Acts of 1972, being section 125.1523a of the Michigan Compiled Laws, prohibits a person from conspiring to circumvent the licensing requirements of this state relating to persons who are to perform work on a residential building or a residential structure. Violators of Section 23a are subjected to civil fines."

# HOUSE PROFILE CROSS SECTION

TRUSS LOADING—TCLL \_\_\_\_\_ TCDL \_\_\_\_\_ BCLL \_\_\_\_\_ BCDL \_\_\_\_\_

50# GROUND SNOW LOAD

ROOF COVERING: \_\_\_\_\_

ROOF SHEATING TYPE \_\_\_\_\_

2 COURSES ICE  
& WATER GUARD \_\_\_\_\_

SOFFIT & FASCIA TYPE \_\_\_\_\_

WALL HDR TYPE \_\_\_\_\_

CEILING INSULATION  
TYPE & R VALUE \_\_\_\_\_

WALL STUD TYPE \_\_\_\_\_

TYPE OF SIDING \_\_\_\_\_

VAPOR BARRIER \_\_\_\_\_

WALL INSULATION  
TYPE & R VALUE \_\_\_\_\_

WALL SHEATING TYPE \_\_\_\_\_

SUBFLOOR SIZE \_\_\_\_\_

FLOOR JOIST SIZE/  
TYPE/SPAN \_\_\_\_\_

FOUNDATION INSULATION  
TYPE & R VALUE \_\_\_\_\_

CRAWL SPACE HGT \_\_\_\_\_

BASEMENT HGT \_\_\_\_\_

CENTER BEAM SIZE \_\_\_\_\_

CMU / POURED WALL \_\_\_\_\_

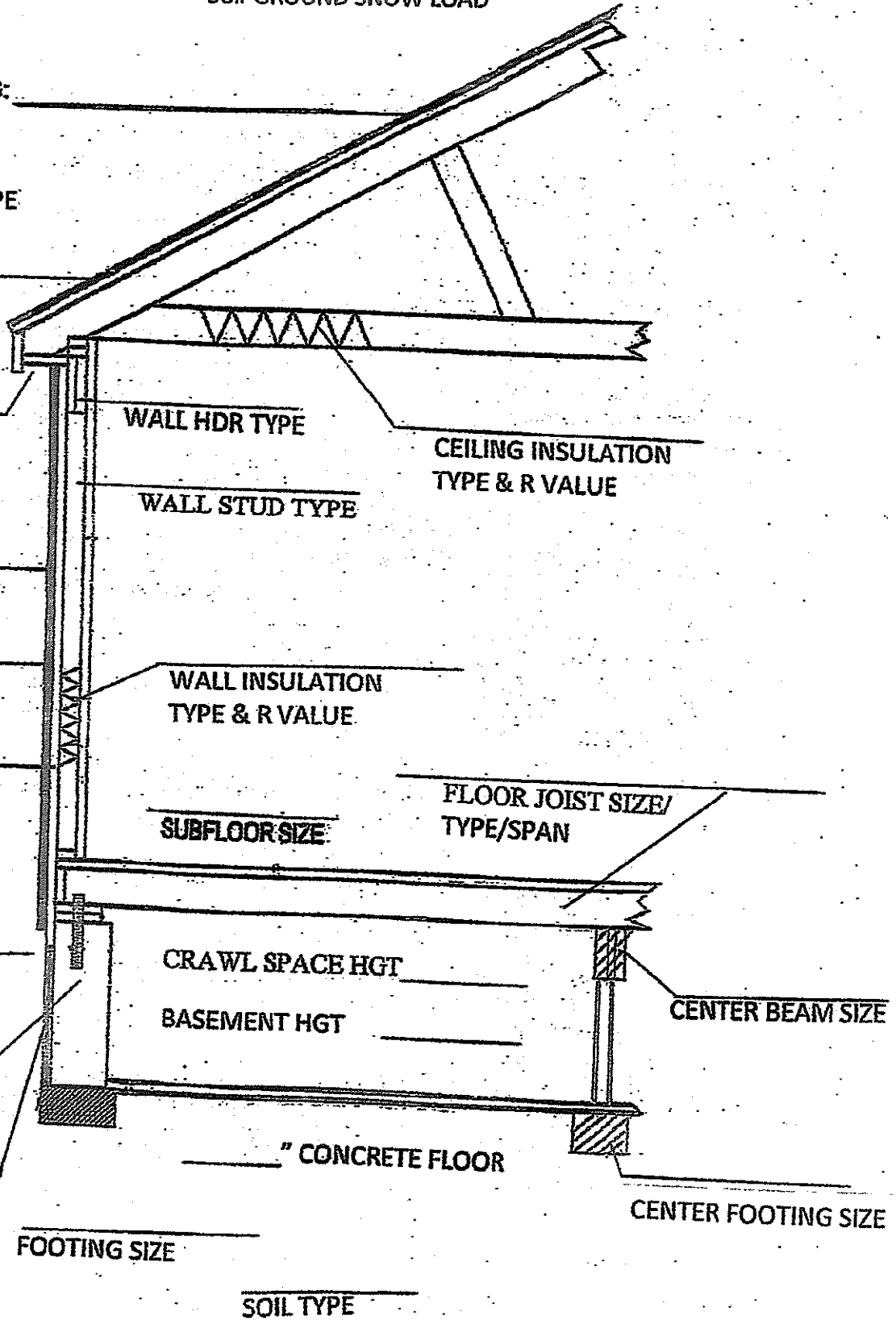
\_\_\_\_\_ " CONCRETE FLOOR

MOISTURE BARRIER \_\_\_\_\_

CENTER FOOTING SIZE \_\_\_\_\_

FOOTING SIZE \_\_\_\_\_

SOIL TYPE \_\_\_\_\_



# #5 Requirements

**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](http://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
<b>Window U-Factor</b>	<b>0.32</b>		
<sup>b</sup> Skylight U-Factor	0.55		
<b>Ceiling R-Value</b>	<b>38</b>		
<b>Wood Frame R-Value</b>	<b>20 or 13+5</b>		
<sup>h</sup> Mass Wall R-Value	13/17		
Floor R-Value (if the basement or crawl space is not insulated)	30		
<sup>c</sup> <b>Basement Wall R-Value</b>	<b>10/13</b>		
<sup>e</sup> Slab R-Value/Depth	10/2 feet		
<sup>d</sup> <b>Crawl Space Wall R-Value</b>	<b>15/19</b>		
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%		
<b>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.</b>			

- **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.

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.