



Community Development Department
Building-Safety Division
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ALTERNATIVE MATERIALS - METHOD OF CONSTRUCTION, DESIGN OR INSULATING SYSTEMS EVALUATION SHEET

PROJECT ADDRESS: _____ **DATE:** _____

CONSTRUCTION TYPE: Single Family Residence: [] Addition [] Enclosure [] Change of use

**OWNER/OWNER'S AGENT/
DESIGNER/CONTRACTOR:** _____

Check off and note those items which will be used as Methods of Alternative Compliance within the 2006 IRC/ IECC Residential Energy Efficiency Standards.

Ceilings:

- 1. Ceiling FLAT: All-Wood Joist/Rafter/Truss, R-38.0 cavity insulation
Comments: _____
- 2. Ceiling Vaulted: All-Wood Joist/Rafter/Truss, R-30.0 cavity insulation
Comments: _____

Above-Grade Walls:

- 1. Exterior Wall 1: N S E W : Wood Frame, 16" o.c., R-13.0 cavity insulation
Comments: _____
- 2. Knee Wall (crawl space conditioned): N S E W : Wood Frame, 16" o.c., R-10.0 cavity insulation or R-13 total wall materials
Comments: _____
- 3. Exterior Wall: Mass Wall (masonry): N S E W :R-5 Insulation
Comments: _____

Basement Walls:

- Basement Wall: N S E W : R-10 cavity insulation or R-13 total wall materials
Comments: _____

Windows:

- 1. Window main, U-factor: _____ (0.40 min.); Wall Facing: N S E W
Panes____ Frame Type_____ Thermal Break? Yes No; Low-E? Yes No
For windows without labeled U-factors, describe features:
Comments: _____
- 2. Window side 2: U-factor: _____ (0.40 min.); Wall Facing: N S E W
Panes____ Frame Type_____ Thermal Break? Yes No; Low-E? Yes No
For windows without labeled U-factors, describe features:
Comments: _____
- 3. Window side 3: U-factor: _____ (0.40 min.); Wall Facing: N S E W
Panes____ Frame Type_____ Thermal Break? Yes No; Low-E? Yes No
For windows without labeled U-factors, describe features:
Comments: _____
- 4. Window side 4: U-factor: _____ (0.40 min.); Wall Facing: N S E W
Panes____ Frame Type_____ Thermal Break? Yes No; Low-E? Yes No
For windows without labeled U-factors, describe features:
Comments: _____

- 5. Window 5: U-factor: .50 max ; Wall Facing: SOUTH PASSIVE SOLAR DESIGN
 # Panes____ Frame Type_____ Thermal Break? Yes No
 Overhang on south side to provide maximum protection from sun at summer solstice:
 Comments: _____
- 6. Window 6: WINDOW TINT U-factor 0.50 max; Wall Facing: N S E W
 Comments: _____

Doors:

- 1. Door 1: Solid/ Opaque, U-factor: 0.500 min.
 Comments: _____
- 2. Door 2: Solid/ Opaque, U-factor: 0.500 min.
 Comments: _____
- 3. Door 3: Solid/ Opaque, U-factor: 0.500 min.
 Comments: _____

Floors:

- 1. Floor 1: All-Wood Joist/Truss, Over Unconditioned Space, R-19.0 cavity insulation
 Comments: _____
- 2. Floor 2: Slab-On-Grade: Un-heated, 2.0' insulation depth R-10 continuous insulation
 Comments: _____

(Slab insulation to extend down from the top of the slab to at least 2.0 ft. OR down to at least the bottom of the slab then horizontally for a total distance of 2.0 ft. Exterior insulation rigid, opaque, weather-resistant protective covering that covers the exposed (above-grade) insulation and extends at least 6 in. below grade.)

Heating and Cooling Equipment:

- 1. Furnace 1: Forced Hot Air, 78 AFUE or higher
 Make and Model Number _____
- 2. Air Conditioner 1: Electric Central Air, 10 SEER or higher
 Make and Model Number _____

Air Leakage:

- Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed.
- Recessed lights must be 1) Type IC rated, or 2) installed inside an appropriate air-tight assembly with a 0.5" clearance from combustible materials. If non-IC rated, the fixture must be installed with a 3" clearance from insulation.
- Seal plate uses weather/ caulking joint sealant

Skylights:

- Minimum insulation within skylight shafts equal to or greater than 12 inches is R-19.
- Skylight glazing 0.60 max.

Vapor Retarder:

- Warm-in-winter side of all non-vented framed ceilings, walls, and floors.

Electrical Identification:

Materials and equipment identified as ENERGY STAR:

- Water Heater
- Refrigerator
- Freezer
- Heating
- Cooling
- Stove
- Dishwasher

- Light Fixtures
- Other _____

Low Power Usage Devices:

- Compact florescent for 50% of fixtures
- Motion sensor exterior light
- Solar powered exterior light
- Other _____

Duct Insulation:

- Supply ducts in unconditioned attics or outside the building insulated to R-8.
- Return ducts in unconditioned attics or outside the building insulated to R-4.
- Supply ducts in unconditioned spaces insulated to R-8.
- Return ducts in unconditioned spaces (except basements) insulated to R-2.
- Where exterior walls are used as plenums, the wall insulated to R-8.
(Insulation is not required on return ducts in basements.)

Duct Construction:

- Duct connections to flanges of air distribution system equipment sealed and mechanically fastened. All joints, seams, and connections securely fastened with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric, or tapes. Tapes and mastics rated UL 181A or UL 181B.
[*Exception:* Continuously welded and locking-type longitudinal joints and seams on ducts operating at less than 2 in. w.g. (500 Pa).]
- The HVAC system balancing air and water systems.

Temperature Controls:

- Thermostats for each separate HVAC system. A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each zone or floor shall be provided.
- Programmable Thermostats

Service Water Heating:

- Water heaters with vertical pipe risers, or is part of a circulating system.

Circulating Hot Water Systems:

- Insulate circulating hot water pipes to the R-2.
- Pool pumps with a time clock.

Heating and Cooling Piping Insulation:

- HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F insulated R-2.

_____ Total Number 's checked X 5 points = _____ (minimum 100 points required for alternative design IECC 2006. 103.1)

COMPLIANCE:

Building-Safety Division Approval

Date

Please acknowledge your understanding and acceptance of these minimum energy conservation requirements above by signing and dating below:

Owner/Owner's Agent/Applicant Signature

Date