

Applicant Name: _____

Address: _____ Phone: _____

**NEW RESIDENTIAL APPLICATION FOR
NATURAL GAS OR ELECTRIC UTILITY FOR HEATING OR COOLING**

RESIDENTIAL NEW CONSTRUCTION

Osage Climate Zone 6

CATEGORY	2006 IECC (old)	2009 IECC (effective 1/1/2010)	REVIEW
Attic	R-49	R-49	
Exterior Walls (Wood)	R-19	R-20 or R-13+5¹	
Exterior Walls (Mass)	R-15/19	R-15/19 ²	
Basement Walls	R-10/13	R-15/19²	
Floors over Unheated Spaces	R-30	R-30	
Crawl Space Walls Below Uninsulated Floors	R-10/13	R-10/13 ³	
Heated Slab, Depth	R-10, 4 foot	R-10, 4 foot	
Unheated Slab, Depth	R-15, 4 foot	R-15, 4 foot	
Skylight U-factor	0.60	0.60	
Fenestration U-factor	0.35	0.35	
Fenestration SHGC	NR	NR	

1. R-13+5 means R-13 cavity insulation plus R-5 insulated sheathing.
2. R-15/19 means R-15 continuous insulated sheathing on the interior or exterior or R-19 cavity insulating the interior of the basement or mass wall.
3. R-10/13 means R-10 continuous insulated sheathing on the interior or exterior or R-13 cavity insulating the interior of the crawl space wall.

Other Mandatory 2009 IECC Zone 6 requirements:

Building Envelop – Sealed with caulking or gasket system. Joints & Seams sealed, taped or covered with a moisture vapor-permeable wrapping material.

Ducts, air handlers, filter boxes and cavities – Joints and seams must be sealed.

Lighting Equipment – 50% of lamps to be high efficiency lamps.

The Applicant agrees to provide the 2009 IECC minimum level of insulation either through inspection or certification. The applicant must call OMU for an inspection while materials are being installed or certified compliant through a government agency or certified Energy Auditor.

Applicant's Signature: _____

Inspected & Approved By: _____

Date: _____

**EXISTING RESIDENTIAL APPLICATION FOR
 NATURAL GAS OR ELECTRIC UTILITY FOR HEATING OR COOLING**

RESIDENTIAL EXISITNG	MINIMUM¹	RECOMMENDED	REVIEW
Attic/Roof	R-24	R-49	
Exterior walls	R-14	R-20	
Floors where basements walls inadequately insulated	R-19	R-30	
Windows – Double pane and/or storm window			
Storm doors with proper weather stripping			

Applicant's Signature: _____

Inspected & Approved By: _____

Date: _____

¹Existing energy conservation measures are based on the requirements at the time the structure was constructed. It is assumed that the structure met these minimal requirements. OMU Recommends that home owners upgrade their insulation levels to meet today's minimum standards to save money and energy.

**MANUFACTURED HOUSING APPLICATION FOR
 NATURAL GAS OR ELECTRIC UTILITY FOR HEATING OR COOLING**

MANUFACTURED HOUSING (MOBILE HOMES)	1976		1994		REVIEW
HUD Regulations (24 CFR Part 3280)	Single	Double	Single	Double	
Attic/Roof	R-19	R-19	R-19	R-22	
Exterior walls	R-13	R-11	R-19	R-19	
Floors	R-14	R-19	R-19	R-22	
Windows – Double pane and/or storm window					
Storm doors with proper weather stripping					

All transportable sections of manufactured homes built in the U.S. after June 15, 1976 must contain a red label on the home; the label is the manufacturer's certification that the home section is built in accordance with HUD's construction and safety standards.

The applicant agrees to follow HUD and the State of Iowa minimum insulation and infiltration standards and that the manufactured home is constructed for thermal zone 3 as certified on the data plate located by the main electrical panel.

Applicant's Signature: _____

Inspected & Approved By: _____

Date: _____

Iowa Department of Public Safety Building Code and manufactured housing requirements as of July 12, 2010:

http://www.dps.state.ia.us/fm/building/factory_built/index.shtml

HUD Manufactured Home Construction & Safety standards:

<http://www.gpo.gov/fdsys/pkg/CFR-2008-title24-vol5/pdf/CFR-2008-title24-vol5-part3280-subpartF.pdf>

BUILDING MATERIAL R-VALUES¹

MATERIAL	R-VALUE	MATERIAL	R-VALUE
Siding		Insulation per inch	
Wood Bevel siding, 1/2" x 8". lapped	0.81	Fiberglass Batt	3.14-4.30
Wood Bevel siding, 3/4" x 10". lapped	1.05	Fiberglass Blown (attic)	2.20-4.30
Asbestos-cement shingles	0.03	Fiberglass Blown (wall)	3.70-4.30
Stucco per inch	0.20	Rock Wool Batt	3.14-4.00
Building paper, permeable felt	0.06	Rock Wool Blown (attic)	3.10-4.00
Hardboard 1/2" Thick	0.34	Rock Wool Blown (wall)	3.10-4.00
Aluminum, Steel, Vinyl Siding hollow backed	0.61	Cellulose Blown (attic)	3.13
Aluminum, Steel, Vinyl Siding w/1/2" Insulating board	1.80	Cellulose Blown (wall)	3.70
Fiberboard per inch	2.64	Vermiculite	2.13
Flooring		Autoclaved Aerated Concrete	1.05
3/4" Hardwood finish flooring	0.68	Urea Terpolymer Foam	4.48
Asphalt, linoleum, vinyl or rubber flooring	0.05	Rigid Fiberglass (> 4lb/ft3)	4.00
Carpet and fibrous pad	2.08	Expanded Polystyrene (bead board)	4.00
Carpet and foam rubber pad	1.23	Extruded Polystyrene	5.00
Soft Wood Lumber per inch	1.25	Polyurethane (foamed-in-place)	6.25
2" nominal (1 1/2")	1.88	Polyisocyanurate (foil-faced)	7.20
2x4 (3 1/2")	4.38	Construction	
2x6 (5 1/2")	6.88	Concrete block 8"	1.11
Cedar Logs and Lumber per inch	1.33	Concrete block 12"	1.28
Plywood per inch	1.25	Face brick per inch	0.11
Particle board per inch	1.31	Common brick per inch	0.20
Finish wall		Poured Concrete	0.80
1/2" Gypsum board drywall	0.45	Roof	
5/8" Gypsum board	0.56	Asphalt roof shingle	0.44
3/8" Paneling	0.47	Wood roof shingles	0.87
1/2" Lightweight aggregate gypsum plaster	0.32		

¹ <http://www.coloradoenergy.org/procorner/stuff/r-values.htm>

OMU Residential Insulation Incentive Program

For homes built prior to December 31, 2000, OMU offers an Insulation Incentive Program that could rebate 70% of your insulation and professional labor up to \$750 in the form of a credit to your utility account. For details contact OMU's offices or www.osage.net.