

ENERGY CONSERVATION APPLICATION FORM FOR LOW-RISE RESIDENTIAL NEW CONSTRUCTION and ADDITIONS 780 CMR Appendix J (effective 3/1/98)

Applicant Name: _____
 Applicant Address: _____

 Applicant Phone: _____

Site Address: _____
 City/Town: _____
 Use Group: _____
 Date of Application: _____
 Applicant Signature: _____

Compliance Path (check one):

Prescriptive Package (Limited to 1- or 2-family wood frame buildings heated with fossil fuels only)

Package (A through KK from Table J5.2.1b): _____ Heating Degree Days (HDD₆₅) from Table J5.2.1a: _____
 (For items d. through i., fill in all values that apply from Table J5.2.1b:)

- | | |
|---|---------------------------|
| a. Gross Wall Area _____ sq.ft. | f. Wall R-value R-_____ |
| b. Glazing Area ¹ _____ sq.ft. | g. Floor R-value R-_____ |
| c. Glazing % (100 x b ÷ a) _____ % | h. Basement wall R-_____ |
| d. Glazing U-value U-_____ | i. Slab Perimeter R-_____ |
| e. Ceiling R-value R-_____ | j. Heating AFUE _____ |

Component Performance: "Manual Trade-Off" (Limited to wood or metal framed buildings only)

Climate Zone (from Figure J6.2.2) Zone 12 Zone 13 Zone 14

Attach *Trade-Off Worksheet* from Appendix J, [and *HVAC Trade-Off Worksheet*, if applicable]

MAScheck Software

Attach *Compliance Report* and *Inspection Checklist* printouts.

Systems Analysis OR **Renewable Energy Sources**

Attach Mass Registered Architect or Engineer Analysis

ALTERNATIVE FOR ADDITIONS ONLY:

a. Gross Wall + Ceiling Area _____ sq.ft. b. Glazing Area¹ _____ sq.ft. c. Glazing % (100 x b ÷ a) _____ %

ADDITION with Glazing % (c.) up to 40% may use 780 CMR Table J1.1.2.3.1 below:

MAXIMUM U-value	MINIMUM R-Values				
Fenestration	Ceiling	Wall	Floor	Basement Wall	Slab Perimeter, Depth
0.39	R-37	R-13	R-19	R-10	R-10, 4 ft

"SUNROOM" addition (greater than 40% glazing-to-wall and ceiling gross area)

Attach "Consumer Information Form" from 780 CMR Appendix B.

Official's Name: _____

Official's Signature: _____

Application Approved Denied

Date of Approval/Denial: _____

Reason(s) for Denial: (provide additional details as needed on back side)

¹ Glazing Area may be either Rough Opening or Unit dimensions.

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS
 THE MASSACHUSETTS STATE BUILDING CODE

Manual Trade-Off Worksheet

Builder Name _____ Date _____
 Builder Address _____
 Site Address _____ Zone 12 13 14
 Submitted By _____ Phone _____

Permit # _____
 Checked by _____
 Date _____

PROPOSED
 Ceilings, Skylights, and Floors Over Outside Air

Description	Insulation R-Value	U-Value	x Net Area	=	UA						
Ceiling (Table J6.2.2a)			ft ²	→	<table border="1"> <tr><td>Required U-Value (Table J6.2.2b)</td><td>x Area</td><td>= UA</td></tr> <tr><td></td><td></td><td></td></tr> </table>	Required U-Value (Table J6.2.2b)	x Area	= UA			
Required U-Value (Table J6.2.2b)	x Area	= UA									
Floor Over Outside Air (Table J6.2.2a)			ft ²	→							
			ft ²	→							
			ft ²	→							
			Total Area								

Walls, Windows, and Doors

Description	Insulation R-Value	U-Value	x Net Area	=	UA						
Walls (Table J6.2.2b.c.d)			ft ²	→	<table border="1"> <tr><td>Required U-Value</td><td>x Area</td><td>= UA</td></tr> <tr><td></td><td></td><td></td></tr> </table>	Required U-Value	x Area	= UA			
Required U-Value	x Area	= UA									
Windows (NFRC or Table J1.5.3a)	---		ft ²	→							
Doors (NFRC or Table J1.5.3b)	---		ft ²	→							
Sliding Glass Doors (NFRC or Table J1.5.3a)	---		ft ²	→							
			ft ²	→							
			Total Area								

Floors and Foundations

Description	Insulation Depth	Insulation R-Value	U-Value	x Area or Perimeter	= UA
Floor Over Unconditioned Space (Table J6.2.2c)				ft ²	
Basement Wall (Table J6.2.2f)				ft	
Unheated Slab (Table J6.2.2g)	in.			ft	
Heated Slab (Table J6.2.2g)	in.			ft	
				ft ²	
				ft ²	

Total Proposed UA must be less than or equal to Total (or Adjusted) Required UA

Total Proposed UA	←	Total Required UA	→
	OR	Adjusted Required UA	→

Statement of Compliance: The proposed building design represented in these documents is consistent with the building plans, specifications, and other calculations submitted with the permit application.

Builder/Designer _____ Company Name _____ Date _____