Department of Public Works & Engineering
Planning & Development Services Division

2009 RESIDENTIAL ENERGY CONSERVATION FORM

PROJECT INFORMATION

Address:		**Project Number:** (CITY OF HOUSTON ASSIGNED)	
Building Type:	☐ Single Family ☐ Multi-family (3 stories or less) ☐ Townhouse ☐ Other: _____		
Scope of Work:	☐ New Construction ☐ Addition of _____ square feet ☐ Remodel		
Project affects: (Check all that apply)	☐ Walls/Ceilings/Floors that separate conditioned and unconditioned space ☐ Window/doors that separate conditioned and unconditioned space	☐ Service Water Heating Eqpt. ☐ Heating or Air Cond. Eqpt./Ducts ☐ None of the items listed --- **STOP**.	
The building is exempt due to: (Check all that apply) **------STOP-------**	☐ Historical (Attach certificate) – Must comply with code provisions unless the provision will invalidate the historical designation.	☐ Non-conditioned ☐ Low Energy (less than 1wt/sq.ft) ☐ Other: _____	

BUILDING ENVELOPE COMPLIANCE METHOD

(CHOOSE ONLY ONE OF THE BELOW METHODS IN THIS SECTION)

A Window to wall method. This requires slightly more calculation but allows up to 30% glazing.

(A1) Calculate. % glazing of wall area.

_____ Glazing (sq. ft.) ÷ _____ Wall area (sq. ft) x 100 = _____ %

(A2) Fenestration. Using the table, check the applicable box to indicate how glazing meets code criteria.

REFERENCE TABLE

Window to Wall %	Max. U-factor	Max. SHGC
15	.65	.40
20	.55	.40
25	.51	.35
30	.46	.35

☐ All glazing meets values in table.

OR

☐ Glazing is averaged with some glazing not meeting the criteria. (Attach calculations)

(A3) Insulation. Using the table, indicate what R-values and type of insulation will be used.

REFERENCE TABLE

Window to Wall Area	Ceiling R-Value	Wood Frame Wall R-Value	Floor R-Value	Crawl Space Wall R-Value
15	30	13	15	6
20	30	13	15	6
25	30	13	19	10
30	38	16	19	10

PROPOSED VALUES
(Use the Predominant R-Value)

R-_____ Ceiling
R-_____ Wall
R-_____ Floor
R-_____ Crawlspace
Insulation Type: _____

B Conditioned Floor Area Method. This method is an easier method, than the above but is limited to 18% glazing.

(B1) Calculate. % glazing of conditioned floor area.

_____ Glazing (sq. ft.) ÷ _____ Cond. Floor Area (sq. ft.) x 100 = _____ %

(B2) Insulation and Fenestration.

Max U-factor	Max. SHGC	Ceiling R-Value	Wall R- Value	Floor R-value
0.65	0.30	30	13	13

All values shall meet or exceed the minimums provided by this table when showing compliance with this method.

Indicate insulation type: _____

GENERAL PRESCRIPTIVE REQUIREMENTS

Radiant Barrier	☐ No ☐ Yes - Ceiling insulation may be reduced to R-19 from R-30 when using an approved radiant barrier when using method A above.
HVAC	Equipment Type: _____ SEER: _____ ****Duct insulation shall be R-8 in attics and R-6 otherwise . Excpt: Ducts located inside conditioned space .****