ENVELOPE COMPONENT APPROACH (Page 2 of 4) ENV-2C

Project Name:	Date:	Climate Zone:

Opaque Surface Details

For the furred portioned of Mass Walls see Furring Strips Construction Table below.

A	B	C	D	E	F	G	H	I	J
Proposed See Note				**Standard**	Values From JA4 Table				
Tag/ ID[1]	Assembly Name or Type[2]	Framing Material and Size[2]	Thickness, Spacing, or Other[3]	U-factor[4]	JA4 Table Number[5]	Framed Cavity R-value[6]	Continuous Insulation R-Value[7]	JA4 Assembly Row/Col[8]	Proposed Assembly U-factor[9]

Note: For furred assemblies use the Mass and Furring Strips Construction Table below. See Page JA4-3 & Page JA4-5 for Equation 4-1 or 4-4.

1. *For Tag/ID indicate the identification name that matches the building plans.*
2. *Indicate the Assembly Name or type: Roof/Ceiling, Walls, Floors, Slabs, Crawl Space, Doors and etc…Indicate the Frame type and Size: For Wood, Metal, Metal Buildings, Mass, enter 2x4, 2x6, or etc… see JA4 for other possible frame type assemblies.*
3. *Enter the thickness for mass in inches or Spacing between framing members enter; 16"or 24"OC; or Other for all other assembly description such as Concrete Sandwich Panel, Spandrel Panel, Logs, Straw Bale Panel and etc….*
4. *Based on the Climate Zone; enter the Standard U-factor from Table 143-A, B or C for each different assembly Name or type.*
5. *Enter the Table number that closely resembles the proposed assembly.*
6. *Enter the R-value that is being installed in the wall cavity or between the framing; otherwise, enter "0".*
7. *Enter the Continuous Insulation R-value for the proposed assembly; otherwise, enter "0".*
8. *Enter the row and column of the U-factor value based on Column F Table Number and enter the Assembly U-factor in Column J.*
9. *The **Proposed** Assembly U-factor, Column J, must be equal to or less than the **Standard** U-factor in Column E to comply.*

Furring Strips Construction Table for Mass Walls Only

A	B	C	D	E	F	G	H	I	J	K	L	M
Proposed Properties of Masonry and Concrete Walls From Reference Joint Appendix Table 4.3.5, 4.3.6, 4.3.7					**Added Interior or Exterior Insulation in Furring Space from Reference Joint Appendix Table 4.3.13**							
Mass Thickness[1]	Assembly Name or Type[2]	JA4 Table Number[3]	JA4 -Mass Cell Value[4]	Mass U-Factor[5]	Insulation Layer Thickness	Frame Thickness	Frame Type Wood or Metal	Furring Cavity R-value[3]	JA4 -Mass Cell Value[4]	Effective R-value[5]	Final Assembly U-factor[6,7]	Comment

1. *Indicate the Mass Thickness from Reference Joint Appendix JA.*
2. *Indicate the Assembly Name or type: Roof/Ceiling, Walls, Floors, Slabs, Crawl Space, Doors and etc…Indicate the Frame type and Size: For Wood, Metal, Metal Buildings, Mass, enter 2x4, 2x6, or etc… see JA4 for other possible frame type assemblies.*
3. *Enter the Table number that closely resembles the proposed assembly.*
4. *Enter the row and column of the U-factor value.*
5. *Enter the Effective R-value listed in the JA4 Table Number.*
6. *The Final Assembly is calculated by using Equation 4-1 or Equation 4-4 of the Reference Joint Appendix JA4. Enter the value in Column L.*
7. *Insert the Final Assembly U-factor value back on to the Opaque Surface Details table in Column J.*