ENVELOPE COMPONENT APPROACH

CERTIFICATE OF COMPLIANCE

This document is used to demonstrate compliance with mandatory requirements in §110.8(g) and §120.7(b)/§160.1 for newly constructed nonresidential, hotel/motel, multifamily and mixed-use buildings, and §141.0(b)1/§180.2 for alterations, related to roof, wall and floor assemblies. It is also used to demonstrate compliance with prescriptive requirements in §140.3/§170.2 for newly constructed buildings, and §141.0/§180.1/§180.2 for additions and alterations, related to roof, wall, floor, door, fenestration, and daylighting requirements.

Project Name:	Enforcement Agency:
Dwelling Address:	Permit Number:
City and Zip Code:	Permit Application Date:

A. GENERAL INFORMATION

01	Project Location (city)		05	# of Stories (Habitable Above Grade)	
02	Zipcode		06	Total Conditioned Floor Area (ft^2)	
03	Climate Zone		07	Total Unconditioned Floor Area (ft^2)	

04	Occupancy Types Within Project (select all that apply): If one occupancy constitutes >= 80% of the conditioned floor area, the entire building envelope may be designed to comply with the provisions of that occupancy per §100.0(f).	08	☐	Project includes unconditioned enclosed space(s) > 5,000ft^2 under a roof with a ceiling height of at least 15ft.[1]

☐ Office	☐ Retail	☐ Warehouse	☐ Grocery
☐ Hotel/ Motel	☐ School or Classroom	☐ Healthcare facility	☐ Financial Institution
☐ High-Rise Residential	☐ Relocatable Public School	☐ All Other Occupancy Types	☐ Unleased Tenant Space
☐ Auditorium	☐ Library	☐ Restaurant	☐ Parking Garage
☐ Convention Center	☐ Medical Office Bldg/ Clinic	☐ Theater	☐ Religious Facility
☐ Commercial Industrial	☐ Data Center	☐ Gymnasium	☐ Support Area

[1] FOOTNOTE: Enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft in climate zones 2 through 15 are required to meet the minimum daylighting requirements defined in §140.3(c)/§170.2(b). Compliance with §140.3(c)/§170.2(b) is documented in Table L. This is the only prescriptive requirement which applies to unconditioned spaces.

B. PROJECT SCOPE

This table specifies project envelope components within the permit application demonstrating compliance using the prescriptive paths outlined in §140.3/§170.2, and §141.0(a)1/§180.1 and §141.0(b)1 and 2/§180.2 for additions and alterations.

<table>
<tr><th colspan="3">My project consists of (check all that apply):</th><th colspan="3">Component Types</th></tr>
<tr><td colspan="3">01</td><td colspan="3">02</td></tr>
<tr><td>☐</td><td colspan="2">New Construction or Newly Conditioned Space</td><td rowspan="2">☐ Roof</td><td>☐ Walls</td><td>☐ Exterior Opaque Doors</td></tr>
<tr><td></td><td>☐</td><td>One or more enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft</td><td>☐ Floors</td><td>☐ Fenestration/ Glazed Doors[1]</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td>☐</td><td colspan="2">Addition of conditioned space</td><td rowspan="4">☐ Roof</td><td>☐ Walls</td><td>☐ Exterior Opaque Doors</td></tr>
<tr><td></td><td>☐</td><td>Addition is <= 700 ft²</td><td rowspan="3">☐ Floors</td><td rowspan="3">☐ Fenestration/ Glazed Doors[1]</td></tr>
<tr><td></td><td>☐</td><td>Addition is > 700 ft²</td></tr>
<tr><td></td><td>☐</td><td>One or more enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td>☐</td><td colspan="2">Alteration of conditioned space</td><td>☐ Roof Assembly</td><td>☐ Walls</td><td>Exterior Opaque Doors NA for Alts.</td></tr>
<tr><td></td><td>☐</td><td>One or more enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft and lighting system installed for the first time</td><td>☐ Roofing Material [2]</td><td>☐ Floors</td><td>☐ Fenestration</td></tr>
</table>

[1] FOOTNOTE: Doors that are more than 25% glass in area are considered Glazed Doors and should be documented on Table K with fenestration.
[2] Roof recovers and replacements must also check the "Roof Assembly" box and document compliance with insulation requirements in Table F. Roof recoats may document compliance with roof material only in Table G.

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through L. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see the applicable Table referenced below.

Opaque Envelope Components					Fenestration	Daylighting Spaces > 5,000ft^2	**Compliance Results**
Roof Assembly	Roofing Materials	Walls	Floors	Doors			
01	02	03	04	05	06	07	08
(See Table F)	(See Table G)	(See Table H)	(See Table I)	(See Table J)	(See Table K)	(See Table L)	**COMPLIES *or* COMPLIES with Exceptional Conditions *or* DOES NOT COMPLY**
YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the installer to the Authority Having Jurisdiction.

F. ROOF ASSEMBLY SCHEDULE

This table demonstrates compliance with prescriptive roof assembly requirements in §140.3(a)1B/§170.2(a)1B for new construction, §141.0(a)/§180.1 for additions and §141.0(b)2Biii/§180.2 for alterations.

01	Indicate roof types included in the project:	☐ Framed	☐ Framed-Multifamily	☐ SIPs	☐ Span Deck & Concrete	☐ Metal Panels	☐ Metal Building

Framed Roof Assemblies

01	☐	Include Framed Roof Assemblies in Area-Weighted Average U-factor Calculation[1]				
02	03	04	05	06		
Tag/Plan Detail ID	Name/Description	Status	Exception to Roof Insulation Requirements in §141.0(b)2Biii (Alts. Only)	Occupancy Type		

07	08	09	10	11	12	13	14	15		16
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing & Depth	Cavity Insulation per Design[2]	Continuous Insulation per Design[2]	Thermal Performance Unit	Required Thermal Performance[3]	U-factor per Design		Net Area[4] (ft^2)
								per Software/ Other		

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal building roofs may not be combined with other roof types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.

[2] For alterations using U-factor as the Thermal Performance Unit, at least R-10 insulation must be above deck.

[3] If "R-value" is shown in cell 13 as the Thermal Performance Unit, the R-value shown here is for continuous insulation per Table 141.0-C.

[4] Roof area minus any fenestration/ skylight area.

Structural Insulated Panels (SIPs) Roof/Ceiling Assemblies

01	☐	Include SIPs Roof assemblies in Area-Weighted Average U-factor Calculation[1]

02	03	04	05	06
Tag/Plan Detail ID	Name/Description	Status	Exception to Roof Insulation Requirements in §141.0(b)2Biii (Alts. Only)	Occupancy Type

07	08	09	10	11	12	13	14	15		16
Tag/Plan Detail ID	How Design U-factor was determined	Wood Framing Connection Type (Spline)	Panel Thickness (in.)	Core Insulation per Design [2]	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance [3]	U-factor Per Design		Net Area [4] (ft^2)
								per Software/ Other		

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal building roofs may not be combined with other roof types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.

[2] For alterations using U-factor as the Thermal Performance Unit, at least R-10 insulation must be above deck.

[3] If "R-value" is shown in cell 13 as the Thermal Performance Unit, the R-value shown here is for continuous insulation per Table 141.0-C.

[4] Roof area minus any fenestration/ skylight area.

Span Deck & Concrete Roof Assemblies

01	☐	Include Span Deck & Concrete Roof assemblies in Area-Weighted Average U-factor Calculation[1]						
02	03	04		05				06
Tag/Plan Detail ID	Name/Description	Status		Exception to Roof Insulation Requirements in §141.0(b)2Biii (Alts. Only)				Occupancy Type
07	08	09	10	11	12	13	14	15
Tag/Plan Detail ID	How Design U-factor was determined	Fireproofing	Concrete Topping Thickness (in)	Continuous Insulation per Design[2]	Thermal Performance Unit	Required Thermal Performance[3]	U-factor per Design	Net Area[4] (ft^2)
							per JA4	
							per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal building roofs may not be combined with other roof types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.

[2] For alterations using U-factor as the Thermal Performance Unit, at least R-10 insulation must be above deck.

[3] If "R-value" is shown in cell 12 as the Thermal Performance Unit, the R-value shown here is for continuous insulation per Table 141.0-C.

[4] Roof area minus any fenestration/ skylight area.

Metal Panel Assemblies

01	☐	Include Metal Panel Roof assemblies in Area-Weighted Average U-factor Calculation[1]

02	03	04	05	06
Tag/Plan Detail ID	Name/Description	Status	Exception to Roof Insulation Requirements in §141.0(b)2Biii (Alts. Only)	Occupancy Type

07	08	09	10	11	12		13
Tag/Plan Detail ID	How Design U-factor was determined	Panel Thickness (in)	Thermal Performance Unit	Required Thermal Performance	U-factor per Design		Net Area[2] (ft^2)
					per JA4		
					per Software/ Other		

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal building roofs may not be combined with other roof types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.

[2] Roof area minus any fenestration/ skylight area.

Metal Building Roof Assemblies

01	☐	Calculate Area-Weighted Average U-factor for Metal Building Roof[1]						
02	03	04		05			06	
Tag/Plan Detail ID	Name/Description	Status		Exception to Roof Insulation Requirements in §141.0(b)2Biii (Alts. Only)			Occupancy Type	
07	08	09	10	11	12	13	14	15
Tag/Plan Detail ID	How Design U-factor was determined	Insulation System	Cavity Insulation per Design[2]	Continuous Insulation per Design[2]	Thermal Performance Unit	Required Thermal Performance[3]	U-factor per Design	Net Area[4] (ft^2)
							per JA4	
							per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal building roofs may not be combined with other roof types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.

[2] For alterations using U-factor as the Thermal Performance Unit, at least R-10 insulation must be above deck.

[3] If "R-value" is shown in cell 12 as the Thermal Performance Unit, the R-value shown here is for continuous insulation per Table 141.0-C.

[4] Roof area minus any fenestration/ skylight area.

Multifamily Framed Roof Assemblies

New construction multifamily occupancies with attic roofs may choose between U-factor or R-value to demonstrate compliance with Table 170.2-A or Section 180.2(b)1 for alterations. New construction non-attic roofs must comply with U-factors per Table 170.2-A.

01	☐	Include Framed Roof Assemblies in Area-Weighted Average U-factor Calculation[1]

02	03	04	05	06	07
Tag/Plan Detail ID	Name/Description	Status	Roof Type [2]	Exception to Roof Insulation Requirements in §180.2(b)1 (Alts. Only)	Compliance Unit

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. The area-weighted compliance option is not available for assemblies demonstrating compliance with R-value requirements.
[2] Option B: insulation installed between the roof rafters in contact with the roof deck and an additional layer of ceiling insulation located between the attic and the conditioned space; Option C: ceiling insulation located between the attic and the conditioned space.

Assemblies Using U-factor as Compliance Unit

08	09	10	11	12	13	14	15	16		17
Tag/Plan Detail ID	How Design U-factor was determined	Frame Material	Frame Spacing & Depth	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance	U-factor per Design		Net Area[3] (ft^2)
								per JA4		
								per Software/ Other		

[3] Roof area minus any fenestration/ skylight area.

Assemblies Using R-value as Compliance Unit

18	19	20	21		22
Tag/Plan Detail ID	Radiant Barrier Req?	Thermal Performance Unit	Minimum R-value Required[3]		R-value per Design
			Below Roof Deck[4]		
			At Ceiling		

[3] When R-value is used for low-sloped roof alterations, the value shown here is for continuous insulation per §180.2(b)1Aiii.
[4] Install the specified R-value with an air space present between the roofing and the roof deck. Such as standard installation of concrete or clay tile.

R-values shown are for wood-frame construction with insulation installed between the framing members. Alternatives including insulation above rafters or above roof deck shall comply with the performance standards.

G. RATED ROOFING MATERIAL (COOL ROOF)

This table demonstrates compliance with prescriptive roof material requirements in §140.3(a)1A/§170.2(a)1A for new construction, §141.0(a)/§180.1 for additions and §141.0(b)2B/§180.2 for alterations.
Roof recovers and replacements must also document compliance with insulation requirements in Table F. Roof recoats may document compliance with roof material only in Table G.

01	02	03	04	05	06	07	08		09		10
Tag/Plan Detail ID	Name/ Description / Location	Status	Occupancy Type	Roof Slope	Roof Material	Compliance Method	Required Minimum Material Performance		Designed Material Performance		U-factor/ R-value of Assembly
							Reflectance		Reflectance[1]		
							Emittance		Emittance		
							SRI		SRI		

[1] FOOTNOTE: If Solar Reflectance (Initial) is indicated in column 07, enter the Initial Reflectance here and the form will convert it to a "Calculated Aged Solar Reflectance" when determining compliance.

H. WALL ASSEMBLY SCHEDULE

This table demonstrates compliance with prescriptive wall assembly requirements in §140.3(a)/§170.2(a) for new construction, §141.0(a)/§180.1 for additions and §141.0(b)1B/§180.2 for alterations.

01	Indicate wall types included in the project:[1]	☐ Framed	☐ Mass (new only)	☐ Concrete Sandwich Panel (new only)	☐ SIPs	☐ ICF (new only)
		☐ Metal Panel	☐ Metal Building	☐ Spandrel/ Curtain Wall	☐ Straw Bale	☐ Log Home (new only)

[1] FOOTNOTE: Wall types indicated above as "(new only)" do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above and compliance demonstrated within this table.

Framed Walls

01	☐	Calculate Area-Weighted Average U-factor for Metal Framed Walls[1]								
02	☐	Include Wood Framed Walls in Area-Weighted Average U-factor Calculation[1]								
03	04	05	06	07	08	09	10	11	12	13
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Location / Fire Rating	Frame Material, Spacing & Depth	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance[2]	U-factor per Design	Net Area[3] (ft^2)
									per JA4	
									per Software / Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal framed walls may not be combined with other wall types. Wood framed walls are combined with SIPs, spandrel & curtain, metal panel and straw bale wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.

[2] If "R-value" is shown in cell 10 as the Thermal Performance Unit, the R-value shown here is for cavity insulation per §141.0(b)1B.

[3] Wall area minus any fenestration area.

Mass Walls (new walls only)

01	☐	Calculate Area-Weighted Average U-factor for Mass Walls[1]								
02	03	04	05	06	07	08	09	10	11	12
Tag/Plan Detail ID	Occupancy Type	How Design U-factor was determined	Mass Information			Additional Insulation Information		Maximum U-factor Allowed[2]	U-factor per Design	Net Area[3] (ft^2)
			Mass Material	Fill Options	Thickness (in)	Frame Material & Thickness (in)	Cavity Insulation per Design			
									per JA4	
									per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Mass walls are combined with concrete sandwich panel, log & ICF wall types. Mass walls must meet mandatory insulation requirements in §120.7(b), but may area-weight to comply with prescriptive requirements in Table 140.3 for new construction.

[2] Mass walls are defined as "light" or "heavy" depending on their Heat Capacity. Heat Capacity is determined in Tables 4.3.5 and 4.3.6 in Joint Appendix 4. Walls with Heat Capacity of 15 or greater are "heavy" while walls with Heat Capacity from 7 to less than 15 are "light". Walls with heat capacity less than 7 would be categorized as "Wood framed and Other" for compliance purposes.

[3] Wall area minus any fenestration area.

Concrete Sandwich Panel Walls (new walls only)

01	☐	Calculate Area-Weighted Average U-factor for Concrete Sandwich Panel Walls[1]									
02	03	04	05	06	07	08	09	10	11		12
Tag/Plan Detail ID	Occupancy Type	How Design U-factor was determined	Mass Information		Insulation Thickness/ R-value	Additional Insulation Information		Maximum U-factor Allowed[2]	U-factor per Design		Net Area[3] (ft^2)
			Percent Concrete Web	Steel Penetrates Insulation?		Frame Material & Thickness (in)	Cavity Insulation per Design		per JA4		
									per Software/ Other		

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Concrete sandwich panels are combined with mass, log & ICF wall types. Concrete Sandwich Panel walls must meet mandatory insulation requirements in §120.7(b), but may area-weight to comply with prescriptive requirements in Table 140.3 for new construction.

[2] Concrete Sandwich Panel walls are defined as "heavy" since their Heat Capacity is 15 or greater as determined in Table 4.3.7 in Joint Appendix 4.

[3] Wall area minus any fenestration area.

Structural Insulated Panels (SIPs) Walls

01	☐	Include SIPs Walls in Area-Weighted Average U-factor Calculation[1]								
02	03	04	05	06	07	08	09	10	11	12
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Wood Framing Connection Type (Spline)	Panel Thickness (in.)	Core Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance[2]	U-factor per Design	Net Area[3] (ft^2)
									per JA4	
									Per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. SIP walls are combined with wood framed, spandrel & curtain, metal panel and straw bale wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in §141.0(b)1B3.

[2] If "R-value" is shown in cell 09 as the Thermal Performance Unit, the R-value shown here is for core insulation per §141.0(b)1B3.

[3] Wall area minus any fenestration area.

Spandrel & Curtain Walls

01	☐	Include Spandrel/ Curtain Walls in Area-Weighted Average U-factor Calculation[1]								
02	03	04	05	06	07	08	09	10		11
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Type	Finish	Insulation R-value	Thermal Performance Unit	Required Thermal Performance	U-factor per Design		Net Area[2] (ft^2)
								per JA4		
								per Software/ Other		

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Spandrel/ Curtain walls are combined with wood framed, SIPs, metal panel and straw bale wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in §141.0(b)1B4.
[2] Wall area minus any fenestration area.

Metal Building Walls

01	☐	Calculate Area-Weighted Average U-factor for Metal Building Walls[1]								
02	03	04	05	06	07	08	09	10		11
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Insulation System	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance[2]	U-factor per Design		Net Area[3] (ft^2)
								per JA4		
								per Software/ Other		

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal Building walls may not be combined with other wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-value in §141.0(b)1B1.
[2] If "R-value" is shown in cell 10 as the Thermal Performance Unit, the R-value shown here is for cavity insulation per §141.0(b)1B1.
[3] Wall area minus any fenestration area.

Metal Panel Walls

01	☐	Include Metal Panel Walls in Area-Weighted Average U-factor Calculation[1]					
02	03	04	05	06	07	08	09
Tag/Plan Detail ID	Name/ Description	Occupancy & Status	How Design U-factor was determined	Panel Thickness (in.)	Maximum U-factor Allowed	U-factor per Design	Net Area[2] (ft^2)
						per JA4	
						per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal Panel walls are combined with wood framed, spandrel & curtain, SIPs and straw bale wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in §141.0(b)1B3.

[2] Wall area minus any fenestration area

Log Home Walls (new walls only

01	☐	Calculate Area-Weighted Average U-factor for Log Home Walls[1]						
02	03	04	05	06	07	08	09	10
Tag/Plan Detail ID	Occupancy Type	How Design U-factor was determined	Log Diameter (in)	Additional Insulation Information		Maximum U-factor Allowed[2]	U-factor per Design	Net Area[3] (ft^2)
				Frame Material & Thickness (in)	Cavity Insulation per Design			
							per JA4	
							per Software	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Log walls are combined with concrete sandwich panel, mass & ICF wall types. Log Home walls must meet mandatory insulation requirements in §120.7(b), but may area-weight to comply with prescriptive requirements in Table 140.3 for new construction.

[2] Log Home walls are defined as "wood framed and other" or "light" depending on their Heat Capacity. Heat Capacity is determined in Table 4.3.11 in Joint Appendix 4. Walls with Heat Capacity from 7 to less than 15 are "light". Walls with heat capacity less than 7 would be categorized as "Wood framed and Other" for compliance purposes.

[3] Wall area minus any fenestration area

Straw Bale Walls

01	☐	Include Straw Bale Walls in Area-Weighted Average U-factor Calculation[1]						
02	03	04	05	06	07	08	09	10
Tag/Plan Detail ID	Name/ Description	Occupancy & Status	How Design U-factor was determined	Insulation per Design	Thermal Performance Unit	Required Thermal Performance[2]	U-factor per Design	Net Area[3] (ft^2)
							per JA4	
							per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Straw bale walls are combined with wood framed, spandrel & curtain, metal panel and SIPs wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in §141.0(b)1B3.

[2] If "R-value" is shown in cell 07 as the Thermal Performance Unit, the R-value shown here is for cavity insulation per §141.0(b)1B3.

[3] Wall area minus any fenestration area.

Insulated Concrete Form Walls (new walls only)

01	☐	Calculate Area-Weighted Average U-factor for ICF Walls[1]							
02	03	04	05	06	07	08	09	10	11
Tag/Plan Detail ID	Occupancy Type	How Design U-factor was determined	ICF Type	Concrete Core Thickness (in)	Insulation Type	Insulation Thickness (in)	Maximum Allowed U-factor[2]	U-factor per Design	Net Area[3] (ft^2)
								per JA4 / per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. ICF walls are combined with concrete sandwich panel, log & mass wall types. ICF walls must meet mandatory insulation requirements in §120.7(b), but may area-weight to comply with prescriptive requirements in Table 140.3 for new construction.
[2] ICF walls are defined as "light" or "heavy" depending on their Heat Capacity. Heat Capacity is determined in Table 4.3.13 in Joint Appendix 4. Walls with Heat Capacity of 15 or greater are "heavy" while walls with Heat Capacity from 7 to less than 15 are "light".
[3] Wall area minus any fenestration area.

I. FLOOR ASSEMBLY SCHEDULE

This table demonstrates compliance with prescriptive floor assembly requirements in §140.3(a)4/§170.2(a)5 for new construction, §141.0(a)/§180.1 for additions or mandatory floor assembly requirements in §141.0(b)1C/§180.2 for alterations.

01	Indicate floor types included in the project:[1]	☐ Framed	☐ SIPs (new only)	☐ Raised Mass	☐ Heated Slab-on-grade (new only)	☐ Slab-on-grade (New Low-rise MF only)

[1] FOOTNOTE: Floor types indicated above as “(new only)” do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above, and compliance demonstrated within this table.

Framed Floors

01	☐	Include Framed Floors in Area-Weighted Average U-factor Calculation[1]								
02	03	04	05	06	07	08	09	10	11	12
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Crawlspace	Frame Material, Spacing & Depth	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance[2]	U-factor per Design	Area (ft^2)
									per JA4	
									per Software / Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Framed floors are combined with SIPs floors. The area-weighted compliance option is not available for assemblies demonstrating compliance with R-values.
[2] If "R-value" is shown in cell 09 as the Thermal Performance Unit, the R-value shown here is for cavity insulation.

Structural Insulated Panels (SIPs) Floors (new floors only)

01	☐	Include SIPs Floors in Area-Weighted Average U-factor Calculation[1]								
02	03	04	05	06	07	08	09	10	11	12
Tag/Plan Detail ID	Occupancy Type	How Design U-factor was determined	Crawlspace	Wood Framing Connection Type (Spline)	Panel Thickness (in.)	Core Insulation per Design	Continuous Insulation per Design	Maximum U-factor Allowed	U-factor per Design	Area (ft^2)
									per JA4	
									per Software / Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. SIPs floors are combined with Framed floors.

Raised Mass Floors

01	☐	Calculate Area-Weighted Average U-factor for Raised Mass Floors[1]							
02	03	04	05	06	07	08	09	10	11
Tag/Plan Detail ID	Name/ Description	Occupancy & Status	How Design U-factor was determined	Insulation Location	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance[2]	U-factor per Design	Area (ft^2)
								per JA4	
								per Software/ Other	

[1] FOOTNOTE: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Raised Mass floors may not be combined with other floor types. The area-weighted compliance option is not available for assemblies demonstrating compliance with R-values.

[2] If "R-value" is shown in cell 08 as the Thermal Performance Unit, the R-value shown here is for continuous insulation.

Heated Slab-on-Grade Floors (new floors only)

01	02	03	04	05	06		07	08
Tag/Plan Detail ID	**Name/ Description**	**Insulation Location**	**Insulation Orientation**	**Min. R-value required**	**R-value per Design**		**Insulation Materials & Install**	**Location in Construction Documents**
			Vertical		R-		Materials & install requirements meeting §110.8(g) have been included in the construction documents.	
			Horizontal		R-			

Low-rise Multifamily Slab-on-Grade Floors (new floors in Climate Zone 16 only)

01	02	03	04	05	06	07	08
Tag/Plan Detail ID	Name/ Description	Insulation Location	Thermal Performance Unit	Required Thermal Performance	Thermal Performance per Design	Insulation Depth	Location in Construction Documents
						The minimum depth of concrete slab floor perimeter insulation shall be 16 inches or the depth of the footing of the building, whichever is less.	

J. EXTERIOR DOOR SCHEDULE

This table demonstrates compliance with prescriptive exterior door requirements in §140.3(a)7/§170.2(a)4 for new construction or additions. Doors which are being replaced (alterations) do not need to be documented in this table because there are no Title 24, Part 6 requirements that apply. Exterior doors separate conditioned space from unconditioned space or from ambient air. Doors that are more than 25% glass in area are considered Glazed Doors and should be documented on Table K with fenestration per Table B.

01	02	03	04	05	06	07	
Tag/Plan Detail ID	Name/Description	Occupancy Type	Door Type	Door Insulation	Maximum Allowed U-factor	U-factor per Design	
						per JA4	

K. FENESTRATION AND GLAZED DOOR SCHEDULE

This table demonstrates compliance with prescriptive fenestration requirements in §140.3(a)5/§170.2(a)3 for new construction, §141.0(a)/§180.1 for additions, or §141.0(b)2A/§180.2 for alterations. Exterior doors that are more than 25% glass in area are considered Glazed Doors and should be documented on this table with fenestration.

01	Indicate fenestration types included in the project:[1]	☐ Vertical (alteration)	☐ Vertical (new)	☐ Multifamily Vertical/Glazed Door (new)	☐ Skylights	☐ Glazed Doors (new only)

[1] FOOTNOTE: Fenestration types indicated above as "(new only)" do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above and compliance demonstrated within this table.

Vertical Fenestration and Glazed Doors- Total Building & West Facing Area (New Construction & Additions Only)

01	02	03	04	05
Elevation Item Tag/ Description	Orientation (Azimuth)[1]	Gross Exterior Wall Area[2] (ft²)	Display Perimeter Length[2] (ft)	Vertical Fenestration Area per Design[3] (ft²)

06	Maximum Allowed Vertical Fenestration (ft²)- All Orientations		07	Total Vertical Fenestration (ft²) per Design- All Orientations	
08	Maximum Allowed Vertical Fenestration (ft²)- West Facing		09	Total Vertical Fenestration (ft²) per Design- West Facing	

[1] FOOTNOTE: Orientation between 226 deg and 315 deg are considered "West Facing". A diagram has been provided in the Nonresidential Compliance Manual for visual reference.
[2] Do not include demising walls per §140.3(a)5.
[3] Includes glazed door fenestration area.

Multifamily Exterior Vertical Fenestration and Glazed Doors- Total Building Area (New Construction & Additions Only)

01	02	03	04	05
Elevation Item Tag/ Description	Orientation (Azimuth)[1]	Gross Exterior Wall Area[2] (ft^2)	Multifamily Conditioned Floor Area (ft^2)	Vertical Fenestration Area per Design[3] (ft^2)

06	Maximum Allowed Vertical Fenestration (ft^2)- All Orientations		07	Total Vertical Fenestration (ft^2) per Design- All Orientations	

[1] FOOTNOTE: Orientation between 226 deg and 315 deg are considered "West Facing". A diagram has been provided in the Nonresidential Compliance Manual for visual reference.

[2] Do not include demising walls per §170.2(a)3Ai.

[3] Includes glazed door fenestration area but does not include fenestration in demising walls.

Vertical Fenestration and Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/SHGC), Visible Transmittance (VT)

01	..	Calculate Area-Weighted Average U-factor for Vertical Fenestration and Glazed Doors[1]
02	..	Calculate Area-Weighted Average (R)SHGC for Vertical Fenestration and Glazed Doors[1]
03	..	Calculate Area-Weighted Average VT for Vertical Fenestration and Glazed Doors[1]

04	05	06	07	08	09	10	11	12	13
Tag/Plan ID	Fenestration Type	Occupancy & Status	U-factor/ (R)SHGC Compliance Method	VT Compliance Method	Calculation Method for Performance Values per Design[2]	Product Performance Unit	Required Product Performance	Product Performance per Design	Area (ft^2)
						U-factor (max)			
						(R)SHGC (max)			
					.. Overhang/Slats used for RSHGC	VT (min)			

14	15	16	17	18	19
NA6 Default Calculation					
Is the Window Projecting?[4]	Frame Type	Glazing Type	Product Performance Unit	Center of Glass (COG) Product Performance	Product Performance per NA6
			U-factor		
			SHGC		
			VT		

20	21	22	23	24	25	
§110.6 Default Tables						
Greenhouse/ Garden Window?	Is the Window Projecting?[4]	Frame Type	Glazing Type	Glazing Tint	Product Performance per Default 110.6 Tables	
					U-factor	
					SHGC	
					VT	

26	27	28	29	30	31	32
Overhang Details for RSHGC per §140.3/ §170.2						
SHGC of Window	Overhang or Horizontal Slats?	Azimuth of Fenestration (deg)	Projection per Eq. 140.3-C/ 170.2-A	Spacing per Eq. 140.3-C/ 170.2-A	Projection Factor	RSHGC

Skylights- Total Area

□	Multifamily adding up to 16ft2 of skylight per dwelling unit?		
01	02	03	04
Bulding has Atria > 55ft?	Gross Exterior Roof Area (ft^2)	Maximum Allowed Skylight Area[1] (ft^2)	Total Skylight Area per Design (ft^2)

[1] FOOTNOTE: 5% of total roof area allowed for areas other than atria > 55ft. 10% allowed for atria > 55ft.

Skylights- U-factor, Solar Heat Gain Coefficient (SHGC), Visible Transmittance (VT)

01	☐	Calculate Area-Weighted Average U-factor for Skylights[1]
02	☐	Calculate Area-Weighted Average SHGC for Skylights[1]
03	☐	Calculate Area-Weighted Average VT for Skylights[1]

04	05	06	07	08	09	10		11	12
Tag/Plan ID	Fenestration Type	Occupancy & Status	Calculation Method for Performance Values per Design[2]	Glaze/ Diffuser with Haze Value > 90%?	Compliance Method for Multifamily Alterations	Product Performance Unit	Required Product Performance	Product Performance per Design	Area (ft^2)
						U-factor (max)			
						SHGC (max)			
						VT (min)			

13	14	15	16
NA6 Default Calculation			
Frame Type	Product Performance Unit	Center of Glass (COG) Product Performance	Product Performance per NA6
	U-factor		
	SHGC		
	VT		

17	18	19	20	21	
§110.6 Default Tables					
Operable/Fixed	Frame Type	Glazing Type	Glazing Tint	Product Performance per Default 110.6 Tables	
				U-factor	
				SHGC	
				VT	

L. DAYLIGHT IN LARGE ENCLOSED SPACES

This table demonstrates compliance with prescriptive daylight zone requirements in §140.3(c)/§170.2(b) for new construction, additions, or alterations which install a new lighting system within climate zones 2-15. Enclosed spaces greater than 5,000ft2 and under a roof with at least a 15ft ceiling height must be included in the table.

01	Plan Sheet Showing Daylit Zones:											
02	03	04	05	06	07	08	09	10	OR	11	
Space Name	Compliance Method	Total Area of Space (ft^2)	Skylit Daylit Zone Area per Design (ft^2)	Primary Sidelit Daylit Zone Area per Design[1] (ft^2)	Compliance with §140.3(c)1/§170.2(b)		Total Skylight Area per Design[2] (ft^2)	Compliance with §140.3(c)4/§170.2(b)		Alternate Compliance with §140.3(c)4/§170.2(b)	
					Required Minimum Daylit Area (ft^2)	Daylit Area per Design (ft^2)		Skylight Area to Skylit Daylit Zone Area Ratio[3] (%)		Skylight Weighted Average VT[2]	Skylight AreaxVT to Skylit Daylit Zone Area Ratio[4] (%)

[1] FOOTNOTE: Any area which falls within the Skylit Daylit Zone may not be double counted for the Primary Sidelit Daylit Zone.
[2] May be calculated by Table K Fenestration Schedule.
[3] Must be at least 3% to comply with §140.3(c)4/§170.2(b).
[4] Must be at least 1.5% to comply with §140.3(c)4/§170.2(b).

M. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Nonresidential, Hotel/Motel, and High-rise Multifamily and Multifamily Mixed-use Certificates of Installation

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online.

YES	NO	Form/Title	Field Inspector	
			Pass	Fail
●	❍	NRCI-ENV-E - Must be submitted for all buildings.	☐	☐

N. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, form user must provide an explanation to be added to Table D Exceptional Conditions. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4. Individuals who perform the field testing and verification work, and provide the information required for completion of the fenestration Certificate of Acceptance documentation are not required to be licensed professionals. However, the person who signs the Certificate of Acceptance document to certify compliance with the acceptance requirements shall be licensed as specified in Standards Section 10-103(a)4 and NA7.3.1.

YES	NO	Form/Title	System to be Field Verified	Field Inspector	
				Pass	Fail
●	❍	NRCA-ENV-02-F - Must be submitted for all new, added or altered site-built fenestration.		☐	☐
		NRCA-ENV-03-F - Daylighting design indoor lighting power adjustment factors (PAF). *Note: The requirement for this NRCA is indicated on the NRCC-LTI (prescriptive) or NRCC-PRF (performance) because it is only relevant if a PAF is used for clerestories, daylight redirection devices or horizontal slats.*			

ENVELOPE COMPONENT APPROACH

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA Certification Identification (If applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

2. I certify the following under penalty of perjury, under the laws of the State of California:
    1. The information provided on this Certificate of Compliance is true and correct.
    2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
    3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
    4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
    5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
    6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:
Company :	Date Signed:
Address:	License:
City/State/Zip:	Phone:

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300

A. General Information

1. Enter the City the project is located in.
2. Enter the Zipcode.
3. Climate Zone: Select from dropdown.
4. Select the applicable Occupancy Types within the Project.
5. Enter the Number of Stories Above Grade.
6. Enter the Total Conditioned Floor Area.
7. Enter the Total Unconditioned Floor Area.
8. Check to Indicate if the project includes unconditioned enclosed spaces(s) greater than 5,000 square feet under a roof with a ceiling height of at least 15 ft.

B. Project Scope

1. Select the Scope of Work.
2. Select the Component Types included in the project.

C. Compliance Results

1. Results in this table are automatically calculated from data input and calculations in Tables F through L.

D. Exceptional Conditions

1. This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. Additional Remarks

1. Enter any notes or comments for the AHJ.

F. Roof Assembly Schedule

1. Select the roof types included in the project.

Framed Roof Assemblies

1. Check to include Framed Roof Assemblies in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description.
4. Status: Select from dropdown.
5. Exception to Roof Insulation Requirement: Select from dropdown.

6. Occupancy Type: Select from dropdown.
7. This field is filled out automatically.
8. How Design U-factor was determined: Select from dropdown.
9. Roof Type & Frame Material: Select from dropdown or user input.
10. Frame Spacing & Depth: Select from dropdown or user input.
11. Cavity Insulation per Design: Select from dropdown or user input.
12. Continuous Insulation per Design: Select from dropdown or user input.
13. Thermal Performance Unit: Select from dropdown.
14. Required Thermal Performance: Select from dropdown.
15. U-factor per Design: Select from dropdown or user input.
16. Enter the Net Area.

Structural Insulated Panels (SIPs) Roof/Ceiling Assemblies

1. Check to include SIPs Roof Assemblies in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description
4. Status: Select from dropdown.
5. Exception to Roof Insulation Requirement: Select from dropdown.
6. Occupancy Type: Select from dropdown.
7. This field is filled out automatically.
8. How Design U-factor was determined: Select from dropdown.
9. Wood Framing Connection Type: Select from dropdown or user input.
10. Panel Thickness: Select from dropdown or user input.
11. Core Insulation per Design: Select from dropdown or user input.
12. Continuous Insulation per Design: Select from dropdown or user input.
13. Thermal Performance Unit: Select from dropdown.
14. Required Thermal Performance: Select from dropdown.
15. U-factor per Design: Select from dropdown or user input.
16. Enter the Net Area.

Span Deck & Concrete Roof Assemblies

1. Check to include Span Deck & Concrete Roof Assemblies in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description.
4. Status: Select from dropdown.
5. Exception to Roof Insulation Requirement: Select from dropdown.
6. Occupancy Type: Select from dropdown.
7. This field is filled out automatically.
8. How Design U-factor was determined: Select from dropdown.
9. Fireproofing: Select from dropdown or user input.
10. Concrete Topping Thickness: Select from dropdown or user input.
11. Continuous Insulation per Design: Select from dropdown or user input.
12. Thermal Performance Unit: Select from dropdown.
13. Required Thermal Performance: Select from dropdown.
14. U-factor per Design: Select from dropdown or user input.
15. Enter the Net Area.

Metal Panel Assemblies

1. Check to include Metal Panel Roof Assemblies in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description
4. Status: Select from dropdown.
5. Exception to Roof Insulation Requirement: Select from dropdown.
6. Occupancy Type: Select from dropdown.
7. This field is filled out automatically.
8. How Design U-factor was determined: Select from dropdown.
9. Panel Thickness: Select from dropdown or user input.
10. Thermal Performance Unit: Select from dropdown.
11. Required Thermal Performance: Select from dropdown.
12. U-factor per Design: Select from dropdown or user input.
13. Enter the Net Area.

Metal Building Roof Assemblies

1. Check to calculate Area-Weighted Average U-factor for Metal Building Roofs.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description.
4. Status: Select from dropdown.
5. Exception to Roof Insulation Requirement: Select from dropdown.
6. Occupancy Type: Select from dropdown.
7. This field is filled out automatically.
8. How Design U-factor was determined: Select from dropdown.
9. Insulation System: Select from dropdown or user input.
10. Cavity Insulation per Design: Select from dropdown or user input.
11. Continuous Insulation per Design: Select from dropdown or user input.
12. Thermal Performance Unit: Select from dropdown.
13. Required Thermal Performance: Select from dropdown.
14. U-factor per Design: Select from dropdown or user input.
15. Enter the Net Area.

Multifamily Framed Roof Assemblies

1. Check to include Framed Roof Assemblies in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description
4. Status: Select from dropdown.
5. Roof Type: Select from dropdown.
6. Exception to Roof Insulation Requirement: Select from dropdown.
7. Compliance Unit: Select from dropdown.

Assemblies Using U-factor as Compliance Unit

8. This field is filled out automatically.
9. How Design U-factor was determined: Select from dropdown.
10. Frame Material: Select from dropdown or user input.
11. Frame Spacing & Depth: Select from dropdown or user input.

12. Cavity Insulation per Design: Select from dropdown or user input.
13. Continuous Insulation per Design: Select from dropdown or user input.
14. Thermal Performance Unit static text.
15. Required Thermal Performance: Select from dropdown.
16. U-factor per Design: Select from dropdown or user input.
17. Enter the Net Area.

Assemblies Using R-value as Compliance Unit

18. This field is filled out automatically.
19. This field is filled out automatically.
20. Thermal Performance Unit static text.
21. This field is filled out automatically.
22. Enter the R-value per Design.

G. Rated Roofing Material (Cool Roof)

1. Enter the Tag/Plan Detail ID.
2. Enter the Name/Description/Location.
3. Status: Select from dropdown.
4. Occupancy Type: Select from dropdown.
5. Roof Slope: Select from dropdown.
6. Roof Material: Select from dropdown.
7. Compliance Method: Select from dropdown.
8. This field is filled out automatically.
9. Enter the Designed Material Performance values.
10. U-factor/R-value of Assembly: Select from dropdown.

H. Wall Assembly Schedule

1. Select the wall types included in the project.

Framed Walls

1. Check to calculate Area-Weighted Average U-factor for Metal Framed Walls.
2. Check to include Wood Framed Walls in Area-Weighted Average U-factor Calculation.

3. Enter the Tag/Plan Detail ID.
4. Occupancy & Status: Select from dropdown.
5. How Design U-factor was determined: Select from dropdown.
6. Location/Fire Rating: Select from dropdown.
7. Frame Material, Spacing & Depth: Select from dropdown.
8. Cavity Insulation per Design: Select from dropdown or user input.
9. Continuous Insulation per Design: Select from dropdown or user input.
10. Thermal Performance Unit: Select from dropdown.
11. This field is filled out automatically.
12. U-factor per Design: Select from dropdown or user input.
13. Enter the Net Area.

Mass Walls (new walls only)

1. Check to calculate Area-Weighted Average U-factor for Mass Walls.
2. Enter the Tag/Plan Detail ID.
3. Occupancy Type: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Mass Material: Select from dropdown.
6. Fill Options: Select from dropdown.
7. Thickness: Select from dropdown.
8. Frame Material & Thickness: Select from dropdown or user input.
9. Cavity Insulation per Design: Select from dropdown or user input.
10. This field is filled out automatically.
11. U-factor per Design: Select from dropdown or user input.
12. Enter the Net Area.

Concrete Sandwich Panel Walls (new walls only)

1. Check to calculate Area-Weighted Average U-factor for Concrete Sandwich Panel Walls.
2. Enter the Tag/Plan Detail ID.
3. Occupancy Type: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.

5. Percent Concrete Web: Select from dropdown.
6. Steel Penetrates Insulation: Select from dropdown.
7. Insulation Thickness/R-value: Select from dropdown.
8. Frame Material & Thickness: Select from dropdown or user input.
9. Cavity Insulation per Design: Select from dropdown or user input.
10. This field is filled out automatically.
11. U-factor per Design: Select from dropdown or user input.
12. Enter the Net Area.

Structural Insulated Panels (SIPs) Walls

1. Check to include SIPs Walls in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Occupancy & Status: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Wood Framing Connection Type: Select from dropdown or user input.
6. Panel Thickness: Select from dropdown or user input.
7. Core Insulation per Design: Select from dropdown or user input.
8. Continuous Insulation per Design: Select from dropdown or user input.
9. Thermal Performance Unit: Select from dropdown.
10. This field is filled out automatically.
11. U-factor per Design: Select from dropdown or user input.
12. Enter the Net Area.

Spandrel & Curtain Walls

1. Check to include Spandrel/Curtain Walls in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Occupancy & Status: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Type: Select from dropdown or user input.
6. Finish: Select from dropdown or user input.
7. Insulation R-value: Select from dropdown or user input.

8. Thermal Performance Unit: Select from dropdown.
9. This field is filled out automatically.
10. U-factor per Design: Select from dropdown or user input.
11. Enter the Net Area.

Metal Building Walls

1. Check to calculate Area-Weighted Average U-factor for Concrete Sandwich Panel Walls.
2. Enter the Tag/Plan Detail ID.
3. Occupancy & Status: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Insulation System: Select from dropdown or user input.
6. Cavity Insulation per Design: Select from dropdown or user input.
7. Continuous Insulation per Design: Select from dropdown or user input.
8. Thermal Performance Unit: Select from dropdown.
9. This field is filled out automatically.
10. U-factor per Design: Select from dropdown or user input.
11. Enter the Net Area.

Metal Panel Walls

1. Check to include Metal Panel Walls in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description.
4. Occupancy & Status: Select from dropdown.
5. How Design U-factor was determined: Select from dropdown.
6. Panel Thickness: Select from dropdown or user input.
7. This field is filled out automatically.
8. U-factor per Design: Select from dropdown or user input.
9. Enter the Net Area.

Log Home Walls (new walls only)

1. Check to calculate Area-Weighted Average U-factor for Log Home Walls.
2. Enter the Tag/Plan Detail ID.

3. Occupancy Type: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Log Diameter: Select from dropdown or user input.
6. Frame Material & Thickness: Select from dropdown or user input.
7. Cavity Insulation per Design: Select from dropdown or user input.
8. This field is filled out automatically.
9. U-factor per Design: Select from dropdown or user input.
10. Enter the Net Area.

Straw Bale Walls

1. Check to include Straw Bale Walls in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description.
4. Occupancy & Status: Select from dropdown.
5. How Design U-factor was determined: Select from dropdown.
6. Insulation per Design: Select from dropdown or user input.
7. Thermal Performance Unit: Select from dropdown.
8. This field is filled out automatically.
9. U-factor per Design: Select from dropdown or user input.
10. Enter the Net Area.

Insulated Concrete Form Walls (new walls only)

1. Check to calculate Area-Weighted Average U-factor for ICF Walls.
2. Enter the Tag/Plan Detail ID.
3. Occupancy Type: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. ICF Type: Select from dropdown.
6. Concrete Core Thickness: Select from dropdown.
7. Insulation Type: Select from dropdown.
8. Insulation Thickness: Select from dropdown.
9. This field is filled out automatically.

10. U-factor per Design: Select from dropdown or user input.
11. Enter the Net Area.

I. Floor Assembly Schedule

1. Select the floor types included in the project.

Framed Floors

1. Check to include Framed Floors in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Occupancy & Status: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Crawlspace: Select from dropdown.
6. Frame Material, Spacing & Depth: Select from dropdown or user input.
7. Cavity Insulation per Design: Select from dropdown or user input.
8. Continuous Insulation per Design: Select from dropdown or user input.
9. Thermal Performance Unit: Select from dropdown.
10. This field is filled out automatically.
11. U-factor per Design: Select from dropdown or user input.
12. Enter the Net Area.

Structural Insulated Panels (SIPs) Floors

1. Check to include SIPs Floors in Area-Weighted Average U-factor Calculation.
2. Enter the Tag/Plan Detail ID.
3. Occupancy Type: Select from dropdown.
4. How Design U-factor was determined: Select from dropdown.
5. Crawlspace: Select from dropdown.
6. Wood Framing Connection Type: Select from dropdown or user input.
7. Panel Thickness: Select from dropdown or user input.
8. Core Insulation per Design: Select from dropdown or user input.
9. Continuous Insulation per Design: Select from dropdown or user input.
10. This field is filled out automatically.

11. U-factor per Design: Select from dropdown or user input.
12. Enter the Net Area.

Raised Mass Floors

1. Check to calculate Area-Weighted Average U-factor for Raised Mass Floors.
2. Enter the Tag/Plan Detail ID.
3. Enter the Name/Description.
4. Occupancy & Status: Select from dropdown.
5. How Design U-factor was determined: Select from dropdown.
6. Insulation Location: Select from dropdown or user input.
7. Continuous Insulation per Design: Select from dropdown or user input.
8. Thermal Performance Unit: Select from dropdown.
9. This field is filled out automatically.
10. U-factor per Design: Select from dropdown or user input.
11. Enter the Net Area.

Heated Slab-on-Grade Floors

1. Enter the Tag/Plan Detail ID.
2. Enter the Name/Description.
3. Insulation Location: Select from dropdown.
4. Insulation Orientation static text.
5. This field is filled out automatically.
6. Enter the R-value per Design.
7. Insulation Materials & Install static text.
8. Enter the Location in Construction Documents.

Low-rise Multifamily Slab-on-Grade Floors (new floors in Climate Zone 16 only)

1. Enter the Tag/Plan Detail ID.
2. Enter the Name/Description.
3. This field is filled out automatically.
4. Thermal Performance Unit: Select from dropdown.

5. This field is filled out automatically.
6. Enter the Thermal Performance per Design.
7. Insulation Depth static text.
8. Enter the Location in Construction Documents.

J. Exterior Door Schedule

1. Enter the Tag/Plan Detail ID.
2. Enter the Name/Description.
3. Occupancy Type: Select from dropdown.
4. Door Type: Select from dropdown.
5. Door Insulation: Select from dropdown.
6. This field is filled out automatically.
7. This field is filled out automatically.

K. Fenestration Schedule

1. Select the fenestration types included in the project.

Vertical Fenestration and Glazed Doors- Total Building & West Facing Area

1. Enter the Elevation Item Tag/Description.
2. Orientation (Azimuth): Select from dropdown.
3. Enter the Gross Exterior Wall Area.
4. Enter the Display Perimeter Length.
5. Enter the Vertical Fenestration Area per Design.
6. This field is filled out automatically.
7. This field is filled out automatically.
8. This field is filled out automatically.
9. This field is filled out automatically.

Multifamily Exterior Vertical Fenestration and Glazed Doors- Total Building Area

1. Enter the Elevation Item Tag/Description.
2. Orientation (Azimuth): Select from dropdown.
3. Enter the Gross Exterior Wall Area.

4. Enter the Multifamily Conditioned Floor Area.
5. Enter the Vertical Fenestration Area per Design.
6. This field is filled out automatically.
7. This field is filled out automatically.

Vertical Fenestration and Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/SHGC), Visible Transmittance (VT)

1. Check to calculate Area-Weighted Average U-factor for Vertical Fenestration and Glazed Doors.
2. Check to calculate Area-Weighted Average (R)SHGC for Vertical Fenestration and Glazed Doors.
3. Check to calculate Area-Weighted Average VT for Vertical Fenestration and Glazed Doors.
4. Enter the Tag/Plan ID.
5. Fenestration Type: Select from dropdown.
6. Occupancy & Status: Select from dropdown.
7. U-factor/ (R)SHGC Compliance Method: Select from dropdown.
8. VT Compliance Method: Select from dropdown.
9. Calculation Method for Performance Values per Design: Select from dropdown.
10. Product Performance Unit static text.
11. This field is filled out automatically.
12. Enter the Product Performance per Design.
13. Enter the Area.

NA6 Default Calculation

14. Is the Window Projecting?: Select from dropdown.
15. Frame Type: Select from dropdown.
16. Glazing Type: Select from dropdown.
17. Product Performance Unit static text.
18. Enter the Center of Glass (COG) Product Performance.
19. This field is filled out automatically.

§110.6 Default Tables

20. Greenhouse/Garden Window?: Select from dropdown.
21. Is the Window Projecting?: Select from dropdown.

22. Frame Type: Select from dropdown.
23. Glazing Type: Select from dropdown.
24. Glazing Tint: Select from dropdown.
25. This field is filled out automatically.

Overhang Details for RSHGC per §140.3/§170.2

26. Enter the SHGC of Window.
27. Overhang or Horizontal Slats?: Select from dropdown.
28. Enter the Azimuth of Fenestration.
29. Enter the Projection per Eq. 140.3-C/ 170.2-A.
30. Enter the Spacing per Eq. 140.3-C/170.2-A.
31. This field is filled out automatically.
32. This field is filled out automatically.

Skylights – Total Area

Check if Multifamily adding up to 16ft2 of skylight per dwelling unit.

1. Building has Atria > 55ft?: Select from dropdown.
2. Enter the Gross Exterior Roof Area.
3. This field is filled out automatically.
4. Enter the Total Skylight Area per Design.

Skylights – U-factor, Solar Heat Gain Coefficient (SHGC), Visible Transmittance (VT)

1. Check to calculate Area-Weighted Average U-factor for Skylights.
2. Check to calculate Area-Weighted Average SHGC for Skylights.
3. Check to calculate Area-Weighted Average VT for Skylights.
4. Enter the Tag/Plan ID.
5. Fenestration Type: Select from dropdown.
6. Occupancy & Status: Select from dropdown.
7. Calculation Method for Performance Values per Design: Select from dropdown.
8. Glaze/ Diffuser with Haze Value > 90%?: Select from dropdown.
9. Compliance Method for Multifamily Alterations: Select from dropdown.

10. This field is filled out automatically.
11. Enter the Product Performance per Design.
12. Enter the Area.

NA6 Default Calculation

13. Frame Type: Select from dropdown.
14. Product Performance Unit static text.
15. Enter the Center of Glass (COG) Product Performance.
16. This field is filled out automatically.

§110.6 Default Tables

17. Operable/Fixed: Select from dropdown.
18. Frame Type: Select from dropdown.
19. Glazing Type: Select from dropdown.
20. Glazing Tint: Select from dropdown.
21. This field is filled out automatically.

L. Daylight in Large Enclosed Spaces

1. Enter the Plan Sheet Showing Daylit Zones.
2. Enter the Space Name.
3. Compliance Method: Select from dropdown.
4. Enter the Total Area of Space.
5. Enter the Skylit Daylit Zone Area per Design.
6. Enter the Primary Sidelit Daylit Zone Area per Design.
7. This field is filled out automatically.
8. This field is filled out automatically.
9. Enter the Total Skylight Area per Design.
10. This field is filled out automatically.
11. Enter the Skylight Weighted Average VT.
12. This field is filled out automatically.

M. Declaration of Required Certificates of Installation

1. Selections have been automatically made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

N. Declaration of Required Certificates of Acceptance

1. Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

Documentation Declaration Statements

1. The person who prepared the NRCC will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, will complete the fields for their name, company (if applicable), address, phone number, license number (if applicable), date and signature.