

KERN COUNTY BUILDING INSPECTION DIVISION – RESIDENTIAL ENERGY COMPLIANCE FOR ADDITIONS

Prescriptive Package A

Effective July 1, 2014

Permit No.: \_\_\_\_\_ Conditioned Floor Area: \_\_\_\_\_ Climate Zone: \_\_\_\_\_

Project Address: \_\_\_\_\_

		Climate Zone 13			Climate Zone 14			Climate Zone 16			
		<400ft <sup>2</sup>	400ft <sup>2</sup> -700ft <sup>2</sup>	>700ft <sup>2</sup>	<400ft <sup>2</sup>	400ft <sup>2</sup> -700ft <sup>2</sup>	>700ft <sup>2</sup>	<400ft <sup>2</sup>	400ft <sup>2</sup> -700ft <sup>2</sup>	>700ft <sup>2</sup>	
<b>Building Envelope</b>											
Insulation	Roofs/Ceilings		R-38			R-38			R-38		
	Walls		R-13	R-13	R-13+5 Or R-15+4	R-13	R-13	R-13+5 Or R-15+4	R-13	R-13	R-13+5 Or R-15+4
	Floors	Slab Perimeter	NR			NR			R-7.0		
		Raised Floor	R-19			R-19			R-19		
Radiant Barrier		REQ			REQ			NR			
Roofing Products <sup>1</sup>	Low-sloped (≤2:12)	Aged Solar Reflect.	0.63			NR			NR		
		Thermal Emittance	0.75			NR			NR		
	Steep-sloped (>2:12)	Aged Solar Reflect.	0.20			0.20			NR		
		Thermal Emittance	0.75			0.75			NR		
Fenestration	Maximum U-factor		0.32			0.32			0.32		
	Maximum SHGC		0.25			0.25			0.25		
	Maximum Total Area <sup>2</sup>		30%, 75ft <sup>2</sup>	25%, 120ft <sup>2</sup>	20%, 175 ft <sup>2</sup>	30%, 75ft <sup>2</sup>	25%, 120ft <sup>2</sup>	20%, 175 ft <sup>2</sup>	30%, 75ft <sup>2</sup>	25%, 120ft <sup>2</sup>	20%, 175 ft <sup>2</sup>
	Maximum West Facing Area <sup>2</sup>		60ft <sup>2</sup>	60ft <sup>2</sup>	5% or 70 ft <sup>2</sup>	60ft <sup>2</sup>	60ft <sup>2</sup>	5% or 70 ft <sup>2</sup>	60ft <sup>2</sup>	60ft <sup>2</sup>	5% or 70 ft <sup>2</sup>
<b>HVAC System</b>											
Space Heating <sup>3,4</sup>	If Gas, AFUE <sup>5</sup>		78%			78%			78%		
	If Heat Pump, HSPF <sup>6</sup>		MIN			MIN			MIN		
Space Cooling <sup>4</sup>	SEER <sup>6</sup>		MIN			MIN			MIN		
	Refrigerant Charge Verification or Charge Indicator Display		REQ			REQ			NR		
	Whole House Fan		NR	NR	REQ <sup>7</sup>	NR	NR	REQ <sup>7</sup>	NR	NR	NR
Central Air Handlers	Central Fan Integrated Ventilation System Fan Efficacy		REQ			REQ			REQ		
Duct Insulation		R-6			R-8			R-8			
Duct Sealing and Testing <sup>8</sup>		REQ			REQ			REQ			
Water Heating		Gas or propane storage type or instantaneous water heater with an input of 75,000 Btu/hr or less									

<sup>1</sup>Not required for additions of 300 square feet or less.

<sup>2</sup>When percentages are given, the limit is the listed percentage of the added floor area. If two limits are given, the larger may be used.

<sup>3</sup>No electric-resistance space heating systems are allowed

<sup>4</sup>When heating or cooling will be extended to an addition from the existing system(s), the existing heating and cooling equipment need not meet these requirements. Heating system capacity must be adequate to meet the minimum requirements of CBC Section 1204.1.

<sup>5</sup>A gas- or oil-fired warm-air furnace with a less than 225,000 Btu/hr input has been assumed for this worksheet. Please see CEC Section 110.2(a) for other heating equipment and systems.

<sup>6</sup>Please see CEC Section 110.2(a) for a list of efficiency requirements specific to different heating and/or cooling types.

<sup>7</sup>A whole house fan shall be sized using the formula below. Whole house fans are not required for additions 1,000 square feet or less.

$$\text{Required ventilation (CFM)} = 0.01 \times (\text{Conditioned floor area}) + 7.5 \times (\text{Number of bedrooms} + 1)$$

$$\text{CFM} = 0.01 \times \text{ft}^2 + 7.5 \times (\text{ } + 1)$$

<sup>8</sup>Not required when 40 or fewer linear feet of ducts are added/replaced.