



Energy-Control Window Film - Energy Audit Request Form

(Numbers in parentheses refer to Notes at end of form)

Clear-Wall Representative:

Pages 1 and 2: Information provided by Building Contact

Building Information	Name of Building	Building Contact Name	
	Building Address	Building Contact Phone	
	City – State – Zip	Building Contact Email	
DOE-2 Model	Nearest Large City <input type="checkbox"/> Arcata <input type="checkbox"/> Bakersfield <input type="checkbox"/> Daggett <input type="checkbox"/> Fresno <input type="checkbox"/> Long Beach <input type="checkbox"/> Los Angeles <input type="checkbox"/> Sacramento <input type="checkbox"/> San Diego <input type="checkbox"/> San Francisco <input type="checkbox"/> Santa Maria		
General	Type of Building (choose from list at bottom of page 2):		Approx year building was built:
	Total Building Floorspace Area (sqft): (total of all floors) Building Rotation from True North/South/East/West: degrees (for example, if "North" side of building actually faces NE, rotation is 45 degrees, if NW - 45 deg)		Number of Stories/Floors: <u>Approximate Bldg. Dimensions:</u> East - West (FT) North - South (FT)
Choose Method A or B (*)	Method A (*)		Method B (*)
	Annual Average Electricity Cost per kilowatt hour:		Electricity Cost per kilowatt hour : Electricity Cost per KW Demand :
Utility Rates And Annual Energy Costs	Electric Utility Company		Electric Rate Schedule
	Natural Gas Cost per therm :		Fuel Oil Cost per gallon :
	Annual Costs for: Electricity \$		Natural Gas \$ Fuel Oil \$
Temperatures	Heating Temperature: Day Night		Cooling Temperature: Day Night
	Heating Times: Day Night		Cooling Times: Day Night

General Comments:

Energy-Control Window Film Energy Analysis Request Form

(Numbers in parentheses refer to Notes at end of form)

Pages 1 and 2: Information provided by Building Contact

HVAC System	<p>Check appropriate air distribution system type (check one only) (if more than one type of system, check most prevalent)</p> <p style="text-align: center;"> <input type="checkbox"/> Variable Volume <input type="checkbox"/> Constant Volume with reheat <input type="checkbox"/> Powered Induction Units </p> <p>Estimate of ventilation rate: cfm per person <input type="checkbox"/> Check box if air-side economizer is in use</p>
Heating System	<p>Check appropriate equipment types:</p> <p>Heating Plant / System (check one only) <input type="checkbox"/> None <input type="checkbox"/> Gas Boilers <input type="checkbox"/> Electric Boilers <input type="checkbox"/> Other (specify _____)</p> <p style="margin-left: 20px;"> <input type="checkbox"/> Gas Furnace <input type="checkbox"/> Electric Furnace <input type="checkbox"/> Room Heat Pump </p> <p style="margin-left: 20px;"> <input type="checkbox"/> Central Heat Pump <input type="checkbox"/> Gas Heat Pump Hot water reset used? Yes <input type="checkbox"/> / No <input type="checkbox"/> </p>
Cooling System	<p>Cooling Plant / System (check one only) <input type="checkbox"/> None <input type="checkbox"/> Centrifugal <input type="checkbox"/> Reciprocating or Screw <input type="checkbox"/> Variable Speed Drive (VSD)</p> <p style="margin-left: 20px;"> <input type="checkbox"/> Double Bundle <input type="checkbox"/> Gas Absorption <input type="checkbox"/> Central Direct Expansion (DX) Units </p> <p style="margin-left: 20px;"> <input type="checkbox"/> Packaged Terminal Units (Rooftop Units) </p> <p>Cooling Tower Fans (check one only) <input type="checkbox"/> None <input type="checkbox"/> Centrifugal <input type="checkbox"/> Propeller <input type="checkbox"/> 2 speed Propeller <input type="checkbox"/> Variable Speed Propeller</p> <p>Number & Size (tons) of Chiller(s) Estimate of Chiller kw/ton (full load)</p> <p>Chilled water reset used? Yes <input type="checkbox"/> / No <input type="checkbox"/> Thermal Storage in Use? Yes <input type="checkbox"/> / No <input type="checkbox"/></p>

System Comments:

Building types:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Large Office - Floor space greater than 50,000 square feet, more than 2 floors. 2. Small Office - Floor space 5,000 to 50,000 square feet, 1 or 2 floors 3. College 4. High School 5. Primary School 6. Hospital 7. Nursing Home | <ol style="list-style-type: none"> 8. Hotel / Large Lodging 9. Motel / Small Lodging 10. Large Retail - Floor space greater than 50,000 square feet 11. Small Retail - Floor space 1,000 to 50,000 square feet 12. Sit-Down Restaurant 13. Fast Food Restaurant 14. Grocery Store 15. Warehouse |
|---|---|



Energy-Control Film Energy Analysis Input Form

(Numbers in parentheses refer to Notes at end of form)

Page 3: Complete as much as possible. To be confirmed by Clear-Wall or Local Contractor prior to installation.

		North (2)	East (2)	South (2)	West (2)
Envelope	Windows Shaded by an Adjacent Building (3)	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>
	Window Area (Show value even if film is not to be applied) (4)	Sq Ft	Sq Ft	Sq Ft	Sq Ft
	Film to be applied to this exposure? (Check Yes or No)(4)	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>
	Amount of overhang shading window or amount window is recessed in from Building Exterior (5)	Ft	Ft	Ft	Ft
	Window Shading Used (Drapes or Blinds) (6)	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>	Yes <input type="checkbox"/> / No <input type="checkbox"/>
	If blinds or drapes are used, indicate approximate color <input type="checkbox"/> Light / <input type="checkbox"/> Medium / <input type="checkbox"/> Dark				
	Window Glass Type (7) <small>(Check appropriate pane thickness, number of panes, glass color, if reflective, and if Low-e windows - Check Low-E type)</small>	<input type="checkbox"/> 1/8 <input type="checkbox"/> 3/16 <input type="checkbox"/> 1/4 <input type="checkbox"/> 3/8 <input type="checkbox"/> 1/2 <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Bronze <input type="checkbox"/> Green <input type="checkbox"/> Blue Reflective? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Low-E <input type="checkbox"/> Hi Perf Low-E VLT	<input type="checkbox"/> 1/8 <input type="checkbox"/> 3/16 <input type="checkbox"/> 1/4 <input type="checkbox"/> 3/8 <input type="checkbox"/> 1/2 <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Bronze <input type="checkbox"/> Green <input type="checkbox"/> Blue Reflective? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Low-E <input type="checkbox"/> Hi Perf Low-E VLT	<input type="checkbox"/> 1/8 <input type="checkbox"/> 3/16 <input type="checkbox"/> 1/4 <input type="checkbox"/> 3/8 <input type="checkbox"/> 1/2 <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Bronze <input type="checkbox"/> Green <input type="checkbox"/> Blue Reflective? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Low-E <input type="checkbox"/> Hi Perf Low-E VLT	<input type="checkbox"/> 1/8 <input type="checkbox"/> 3/16 <input type="checkbox"/> 1/4 <input type="checkbox"/> 3/8 <input type="checkbox"/> 1/2 <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Bronze <input type="checkbox"/> Green <input type="checkbox"/> Blue Reflective? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Low-E <input type="checkbox"/> Hi Perf Low-E VLT

Concerns to be addressed & other comments:

NOTES:

- (1) DOE-2 requires the use of detailed hourly weather information. Only a limited number of cities collect this necessary information, so weather data from a nearby city may need to be used. Enter the name of the nearest large city so that the person creating the model of the building will know which weather data file to use from the limited list of cities available.
- (2) For exposures that do not face true N, S, E or W divide the window square footage evenly between the appropriate adjacent N, S, E or W exposures. For example, for a SW exposure, include half of the SW square footage in the S column and half of the SW square footage in the W column.
- (3) If there is a building that shades one or more of the exposures for the building being analyzed, check yes where appropriate. For example, if there is a building to the East that shades all or most of the modeled building, then you would check yes under East. To shade all or most of an exposure, the adjacent building will need to be of equal height (number of floors). Check yes only if more than 1/2 of the modeled building's exposure is substantially shaded during the day.
- (4) Enter the area for all windows on each exposure, even if film is not to be applied to a particular exposure. Indicate which exposures are to have film applied by circling Yes or No.
- (5) The "window setback" indicates that the window is either setback into the building from the building exterior (recessed into the building) or that there is an overhang above the window that shades the window.
- (6) Indicate whether interior window shading is used (drapes, curtains, or blinds) for each exposure.
- (7) For the windows on each exposure, indicate precisely what type of windows exist by circling the appropriate: pane thickness, number of panes, whether clear or tinted (and color of tint), whether reflective, and if high performance solar control low-e or standard low-e coating is used.
- (8) Indicate which films are to be used in the energy analysis, such as N1020, R20, R35 etc.
- (9) Indicate the total amount of film to be installed. This area should match the window area that is to be filmed for all exposures from page 3 of the form. Check to make sure both totals match.
- (10) Indicate the installed price per square foot for each film. Be sure to include the effect of any utility rebate in this cost. For example, if your quote is \$3.50 per square foot, but a utility rebate of \$0.50 per square foot will be in effect, show \$3.00.
- (11) Indicate the total quote for each film, installed. Multiply the total film square footage by the film cost per square foot for each film.