

JOINT APPENDIX 1

Glossary

NOTE: THIS **NEW JOINT** APPENDIX IS A CONSOLIDATION OF THE DEFINITIONS/GLOSSARY INFORMATION FROM SECTIONS 10-102 AND 101 OF THE 2008~~5~~ STANDARDS, ~~AS WELL AS THE FORMER RESIDENTIAL ACM MANUAL APPENDIX H, NONRESIDENTIAL ACM APPENDIX D, RESIDENTIAL MANUAL APPENDIX G, AND NONRESIDENTIAL MANUAL APPENDIX G FROM THE 2001 DOCUMENTS.~~

Term	Definition
ACCA	is the Air Conditioning Contractors of America.
ACCA MANUAL J	is the Air Conditioning Contractors of America document entitled "Manual J - Residential Load Calculation, Eighth Edition" (2003).
Accent (light)	is a directional luminaire designed to highlight or spotlight objects. It can be recessed, surface mounted, or mounted to a pendant, stem or track.
ACCEPTANCE REQUIREMENTS FOR CODE COMPLIANCE	<u>is a description of test procedures in the Nonresidential Appendices that includes equipment and systems to be tested, functions to be tested, conditions under which the test shall be performed, the scope of the tests, results to be obtained, and measurable criteria for acceptable performance.</u> is a description of test procedures in the Nonresidential ACM Manual that includes equipment and systems to be tested, functions to be tested, conditions under which the test shall be performed, the scope of the tests, results to be obtained and measurable criteria for acceptable performance.
ACCESSIBLE	is having access thereto, but which first may require removal or opening of access panels, doors, or similar obstructions.
ACM	See <i>Alternative Calculation Method</i> .
ACP	See <i>Alternative Component Package</i> .
ADDITION	is any change to a building that increases conditioned floor area and conditioned volume. Addition is also any change that increases the floor area or volume of an unconditioned building of an occupancy group or type regulated by Part 6. Addition is also any change that increases the illuminated area of an outdoor lighting application regulated by Part 6. See <i>Newly Conditioned Space</i>
AFUE	See <i>Annual Fuel Utilization Efficiency</i> .
AGRICULTURAL BUILDING	is a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. It is not a structure that is a place of human habitation, a place of employment where agricultural products are processed, treated or packaged, or a place used by the public.

Term	Definition
AIR POROSITY	is a measure of the air-tightness of infiltration barriers in units of cubic feet per hour per square foot per inch of mercury pressure difference.
AIRFLOW ACROSS THE EVAPORATOR	is the rate of airflow, usually measured in cfm across a heating or cooling coil. The efficiency of air conditioners and heat pumps is affected by the airflow across the evaporator (or condenser in the case of a heat pump). See <i>Thermostatic Expansion Valves (TXV)</i> .
AIR-TO-AIR HEAT EXCHANGER	is a device which will reduce the heat losses or gains that occur when a building is mechanically ventilated, by transferring heat between the conditioned air being exhausted and outside air being supplied. is a device which will reduce the heat losses or gains which occur when a building is mechanically ventilated, by transferring heat between the conditioned air being exhausted and the unconditioned air being supplied.
ALTERATION	is any change to a building's water-heating system, space-conditioning system, lighting system, or envelope that is not an addition. Alteration is also any change that is regulated by Part 6 to an outdoor lighting system that is not an addition. Alteration is also any change that is regulated by Part 6 to signs located either indoors or outdoors. is any change to a building's water heating system, space conditioning system, lighting system, or building envelope that is not an addition.
ALTERNATIVE CALCULATION METHODS APPROVAL MANUAL OR ACM MANUAL	is the document that specifies the procedures and tests required for approval of Alternative Calculation Methods. is the Alternative Calculation Method (ACM) Approval Manual for the 2001 Energy Efficiency Standards for Nonresidential Buildings, (P400-01-011) for nonresidential buildings, hotels, and multi-family residential buildings with four or more stories and the Alternative Calculation Method (ACM) Approval Manual for the 2001 Energy Efficiency Standards for Residential Buildings, (P400-01-012) for all single family and low-rise multi-family residential buildings.
ALTERNATIVE CALCULATION METHODS (ACMS)	(are the Commission's Public Domain Computer Programs, one of the Commission's Simplified Calculation Methods, or any other calculation method approved by the Commission. ACMS are also referred to as compliance software. are the Commission's Public Domain Computer Programs, one of the Commission's Simplified Calculation Methods, or any other calculation method approved by the Commission.

Term	Definition
ALTERNATIVE COMPONENT PACKAGE	is one of the sets of low-rise residential prescriptive requirements contained in § 151(f). Each package is a set of measures that achieve a level of performance, which meets the standards. These are often referred to as the prescriptive packages or packages. "Buildings that comply with the prescriptive standards shall be designed, constructed and equipped to meet all of the requirements of one of the alternative packages of components shown in Tables 151-B and 151-C for the appropriate climate zone..."
ANNUAL FUEL UTILIZATION EFFICIENCY (AFUE)	is a measure of the percentage of heat from the combustion of gas or oil which is transferred to the space being heated during a year, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 112.
ANNUNCIATED	is a type of visual signaling device that indicates the on, off, or other status of a load.
ANSI	is the American National Standards Institute.
ANSI Z21.10.3	is the American National Standards Institute document entitled "Gas Water Heaters, Volume I, Storage Water Heaters with input ratings above 75,000 Btu per hour," 2001 (ANSI Z21.10.3-2001).
ANSI Z21.13	is the American National Standards Institute document entitled "Gas-Fired Low Pressure Steam and Hot Water Boilers," 2000 (ANSI Z21.13-2000).
ANSI Z21.40.4	is the American National Standards Institute document entitled "Performance Testing and Rating of Gas-Fired, Air Conditioning and Heat Pump Appliances," 1996 (ANSI Z21.40.4-1996).
ANSI Z21.47	is the American National Standards Institute document entitled "Gas-Fired Central Furnaces," 2001 (ANSI Z21.47-2001).
ANSI Z83.8	is the American National Standards Institute document entitled "Gas Unit Heaters and Gas-Fired Duct Furnaces," 2002 (ANSI Z83.8 -2002).
APPLIANCE EFFICIENCY REGULATIONS	are the regulations in Title 20, Section 1601 et seq. of the California Code of Regulations.
APPLIANCE STANDARDS	are the Standards contained in the Appliance Efficiency Regulations.
APPROVED	as to a home energy rating provider or home energy rating system, is reviewed and approved by the Commission under Title 20, Section 1675 of the California Code of Regulations.
APPROVED BY THE COMMISSION	means approval under 25402.1 of the Public Resources Code.
APPROVED CALCULATION METHOD	is a Public Domain Computer Program approved under Section 10-109 (a), or any Alternative Calculation Method approved under Section 10-109 (b). (See "Alternative Calculation Methods"). .
AREAL HEAT CAPACITY	See <i>Heat Capacity</i> .

Term	Definition
<i>ARI</i>	is the Air-Conditioning and Refrigeration Institute.
<i>ARI 210/240</i>	is the Air-conditioning and Refrigeration Institute document entitled "Unitary Air-Conditioning and Air-Source Heat Pump Equipment," 2003 (ARI 210/240-94).
<i>ARI 310/380</i>	is the Air-conditioning and Refrigeration Institute document entitled "Packaged Terminal Air-Conditioners and Heat Pumps," 1993 (ARI 310/380-93).
<i>ARI 320</i>	is the Air-conditioning and Refrigeration Institute document entitled "Water-Source Heat Pumps," 1998 (ARI 320-98).
<i>ARI 325</i>	is the Air-conditioning and Refrigeration Institute document entitled "Ground Water-Source Heat Pumps," 1998 (ARI 325-98).
<i>ARI 340/360</i>	is the Air-conditioning and Refrigeration Institute document entitled "Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment," 2000 (ARI 340/360-2000).
<i>ARI 365</i>	is the Air-conditioning and Refrigeration Institute document entitled, "Commercial and Industrial Unitary Air-Conditioning Condensing Units," 2002 (ARI 365-2002).
<i>ARI 460</i>	is the Air-conditioning and Refrigeration Institute document entitled "Remote Mechanical-Draft Air-Cooled Refrigerant Condensers," 2000 (ARI 460-2000).
<i>ARI 550/590</i>	is the Air-conditioning and Refrigeration Institute document entitled "Standard for Water Chilling Packages Using the Vapor Compression Cycle," 1998 (ARI 550/590-98).
<i>ARI 560</i>	is the Air-conditioning and Refrigeration Institute document entitled "Absorption Water Chilling and Water Heating Packages," 2000 (ARI 560-2000).
<i>ASHRAE</i>	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers.
<i>ASHRAE 55</i>	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "Thermal Environmental Conditions for Human Occupancy," 1992 (ASHRAE Standard 55-1992).
<i>ASHRAE CLIMATIC DATA FOR REGION X</i>	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Climatic Data for Region X, Arizona, California, Hawaii and Nevada," Publication SPCDX, 1982 and "Supplement," 1994.
<i>ASHRAE HANDBOOK, APPLICATIONS VOLUME</i>	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Applications" (2003).
<i>ASHRAE HANDBOOK, EQUIPMENT VOLUME</i>	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Systems and Equipment" (2000).

Term	Definition
<i>ASHRAE HANDBOOK, FUNDAMENTALS VOLUME</i>	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Handbook: Fundamentals" (2001).
<i>ASME</i>	is the American Society of Mechanical Engineers.
<i>ASTM</i>	is the American Society for Testing and Materials.
<i>ASTM C55</i>	is the American Society for Testing and Materials document entitled "Standard Specification for Concrete Brick," 2001 (ASTM C55-01).
<i>ASTM C177</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus," 1997 (ASTM C177-97).
<i>ASTM C272</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions," 2001 (ASTM C272-01).
<i>ASTM C335</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Steady-State Heat Transfer Properties of Horizontal Pipe Insulation," 1995 (ASTM C335-95).
<i>ASTM C518</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus," 2002 (ASTM C518-02).
<i>ASTM C731</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Extrudability, After Package Aging of Latex Sealants," 2000 (ASTM C731-00).
<i>ASTM C732</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Aging Effects of Artificial Weathering on Latex Sealants," 2001 (ASTM C732-01).
<i>ASTM C1167</i>	is the American Society for Testing and Materials document entitled "Standard Specification for Clay Roof Tiles," 1996 (ASTM C1167-96).
<i>ASTM C1371</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers," 1998 (ASTM C1371-98).
<u><i>ASTM C836</i></u>	<u>is the American Society of Testing and Materials document entitled, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course," 2005 (ASTM C836-05).</u>

Term	Definition
<u>ASTM C1583</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)," 2004 (ASTM C1583-04).</u>
<u>ASTM D522</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings," 2001 [ASTM D522-93a (2001)].</u>
ASTM D822	is the American Society of Testing and Materials document entitled, "Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings," 2001 (ASTM D822-01).
<i>ASTM D1003</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics," 2000 (ANSI/ASTM D1003-00).
<u>ASTM D1653</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Test Methods for Water Vapor Transmission of Organic Coating Films," 2003 (ASTM D1653-03).</u>
<u>ASTM D2370</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Test Method for Tensile Properties of Organic Coatings," 2002 [ASTM D2370-98 (2002)].</u>
ASTM D2824	is the American Society of Testing and Materials document entitled "Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, Asbestos Fibered, and Fibered without Asbestos," 2002 (ASTM D2824-02).
<u>ASTM D3468</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing," 1999 (ASTM D3468-99).</u>
ASTM D3805	is the American Society of Testing and Materials document entitled "Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings," 1997 [ASTM D3805-97 (reapproved 2003)].
<u>ASTM D5870</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Practice for Calculating Property Retention Index of Plastics," 2003 [ASTM D5870-95 (2003)].</u>
<u>ASTM D6083</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Specification for Liquid Applied Acrylic Coating Used in Roofing," 2005 (ASTM D6083-05e1).</u>
<u>ASTM D6694</u>	<u>is the American Society of Testing and Materials document entitled, "Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing," 2001 (ASTM D6694-01).</u>

Term	Definition
<u>ASTM D6848</u>	<u>Is the American Society of Testing and Materials document entitled, "Standard Specification for Aluminum-Pigmented Emulsified Asphalt Used as a Protective Coating for Roofing Asphalt Roof Coatings," 2002 (ASTM D6848-02).</u>
<u>ASTM D4798</u>	<u>is the American Society for Testing and Materials document entitled "Standard Test Method for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method)," 2001 (ASTM D4798-01).</u>
ASTM E96	is the American Society for Testing and Materials document entitled "Standard Test Methods for Water Vapor Transmission of Materials," 2000 (ASTM E96-00).
ASTM E283	is the American Society for Testing and Materials document entitled "Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen," 1991 [ASTM E283-91(1999)].
ASTM E408	is the American Society for Testing and Materials document entitled, "Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques," 1971 [ASTM E408-71(2002)].
ATRIUM	is a large-volume space created by openings connecting two or more stories and is used for purposes other than an enclosed stairway, an elevator hoistway, an escalator opening, or as a utility shaft for plumbing, electrical, air-conditioning or other equipment, and is not a mall.
ATTIC	is an enclosed unconditioned space directly below the roof and above the ceiling.
AUDITORIUM:	See <u>Occupancy TypeNonresidential Functional Area or Type of Use.</u>
AUTO REPAIR:	See <u>Occupancy TypeNonresidential Functional Area or Type of Use.</u>
AUTOMATIC	is capable of operating without human intervention.
AUTOMATIC MULTI-LEVEL DAYLIGHTING CONTROL	is a multi-level lighting control that automatically reduces lighting in multiple steps or continuous dimming in response to available daylight. This control uses one or more photocontrols to detect changes in daylight illumination and then change the electric lighting level in response to the daylight changes.
AUTOMATIC TIME SWITCH CONTROL DEVICES	are devices capable of automatically turning loads off and on based on time schedules.

Term	Definition
BACK	is the back side of the building as one faces the front facade from the outside (see <i>Front</i>). This designation is used on the Certificate of Compliance (CF-1R form) to indicate the orientation of fenestration (e.g., Back-West).
<i>BATHROOM</i>	is a room containing a shower, tub, toilet or a sink that is used for personal hygiene. See " Residential Space Type "
<i>BELOW GRADE WALL</i>	is the portion of a wall, enclosing conditioned space, that is below the grade line.
BRITISH THERMAL UNIT (BTU)	is the amount of heat needed to raise the temperature of one pound of water one degree Fahrenheit.
BTU/H	is the amount of heat in Btu that is removed or added during one hour. Used for measuring heating and cooling equipment output.
BUILDER	is the general contractor responsible for construction
<i>BUILDING</i>	is any structure or space covered by Section 100 of the Building Energy Efficiency Standards. is any structure or space for which a permit is sought.
BUILDING DEPARTMENT	is the city, county or state agency responsible for approving the plans, issuing a building permit and approving occupancy of the dwelling unit.
BUILDING ENERGY EFFICIENCY STANDARDS	are the California Building Energy Efficiency Standards as set forth in the California Code of Regulations, Title 24, Part 6. Also known as the <i>California Energy Code</i> .
BUILDING ENTRANCE	See <i>Outdoor Lighting</i>
<i>BUILDING ENVELOPE</i>	is the ensemble of exterior and demising partitions of a building that enclose conditioned space.
BUILDING FAÇADE	See <i>Outdoor Lighting</i>

Term	Definition
BUILDING LOCATION DATA	<p>is the specific outdoor design temperatures shown in Joint Appendix II used in calculating heating and cooling loads for the particular location of the building .</p> <p>For heating, the outdoor design temperature shall be the Winter Median of Extremes value. A higher temperature may be used, but lower values are not permitted.</p> <p>For low-rise residential buildings for cooling, the outdoor design temperatures shall be the 1.0 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values. Lower temperatures may be used, but higher values are not permitted. Temperatures are interpolated from the 0.5% and 2.0% values in the ASHRAE publication, <i>Climatic Data for Region X</i>, 1982 edition and 1994 supplement (see Joint Appendix II).</p> <p>For nonresidential buildings, high-rise residential buildings and hotels/motels for cooling, the outdoor design temperatures shall be the 0.5 percent Cooling Dry Bulb and Mean Coincident Wet Bulb. For cooling towers the outdoor design temperatures shall be the 0.5 percent Cooling Design Wet Bulb values. Lower temperatures may be used, but higher values are not permitted.</p> <p>If a building location is not listed, the local enforcement agency may determine the location for which outdoor design temperature data is available that is closest to the actual building site.</p>
BUILDING OWNER	is the owner of the building or dwelling unit.
BUILDING PERMIT	is an electrical, plumbing, mechanical, building, or other permit or approval, that is issued by an enforcement agency, and that authorizes any construction that is subject to Part 6.
BUILDING TYPES	is the classification of buildings defined by the <i>CBC</i> and applicable to the requirements of the <i>Energy Efficiency Standards</i> .
CABINET SIGN	See <i>Sign</i>
<u>CALIFORNIA ELECTRICAL CODE</u>	<u>is the 2006 California Electrical Code</u>
CALIFORNIA ENERGY CODE	See <i>Building Energy Efficiency Standards</i>
CANOPY	See <i>Outdoor Lighting</i>
CAPTIVE-KEY OVERRIDE	is a type of lighting control in which the key that activates the override cannot be released when the lights are in the on position.
CBC	<u>is the 2006 California Building Code</u> CBC is the 2001 California Building Code.
CEILING	is the interior upper surface of a space separating it from an attic, plenum, indirectly or directly conditioned space or the roof assembly, which has a slope less than 60 degrees from horizontal.

Term	Definition
CENTER OF GLASS U-FACTOR:	is the U-factor for the glass portion only of vertical or horizontal fenestration and is measured at least two and one half inches from the frame. Center of glass U-factor does not consider the U-factor of the frame. Center of glass U-factor is not used
CERTIFICATE OF COMPLIANCE (CF-1R)	is a document with information required by the Commission that is prepared by the Documentation Author that indicates whether the building includes measures that require field verification and diagnostic testing.
CERTIFICATE OF FIELD VERIFICATION AND DIAGNOSTIC TESTING (CF-4R)	is a document with information required by the Commission that is prepared by the HERS Rater to certify that measures requiring field verification and diagnostic testing comply with the requirements.
CERTIFICATION	<p>is certification by the manufacturer to the Commission, as specified the Appliance Efficiency Regulations,, that the appliance complies with the applicable standard for that appliance.</p> <p>The Commission's database of certified heating appliances can be accessed by contacting the Commission Energy Hotline or from the Commission's website at http://www.energy.ca.gov/efficiency/appliances/index.html.</p> <p>The term certification is also used in other ways in the standards. Many of the compliance forms are certificates, whereby installers, HERS testers and others certify that equipment was correctly installed and/or tested.</p>
CERTIFIED	as to a home energy rater, is having been found by a certified home energy rating provider to have successfully completed the requirements established by that home energy rating provider.
CERTIFYING ORGANIZATION	is an independent organization recognized by the Commission to certify manufactured devices for performance values in accordance with procedures adopted by the Commission.
CHANDELIERS	<u>is a ceiling-mounted , close-to-ceiling, or suspended decorative luminaire that uses glass, crystal, ornamental metals, or other decorative material and that typically is used in hotel/motels, restaurants, or churches as a significant element in the interior architecture</u> See <i>Ornamental Chandeliers</i>.
CHANNEL LETTER SIGN	See <i>Sign</i>
CIVIC MEETING SPACE	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>
CLASSROOM, LECTURE, TRAINING, VOCATIONAL ROOM	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>
CLIMATE CONTROL SYSTEM-T- TOMATCH	See <i>Space Conditioning System</i>.

Term	Definition
CLIMATE ZONES	<p>are the 16 geographic areas of California for which the Commission has established typical weather data, prescriptive packages and energy budgets. Climate zone boundary descriptions are in the document "California Climate Zone Descriptions" (July 1995), incorporated herein by reference. Figure 2-1 is an approximate map of the 16 climate zones.</p> <p>are the 16 geographic areas of California for which the Commission has established typical weather data, prescriptive packages and energy budgets. Climate zone boundary descriptions are in the document "California Climate Zone Descriptions" (July 1995), incorporated herein by reference. Figure 101-A is an approximate map of the 16 climate zones</p>
CLTD	is the Cooling Load Temperature Difference
CMC	<p>is the 2006 California Mechanical Code is the 2001 California Mechanical Code.</p>
COEFFICIENT OF PERFORMANCE (COP), COOLING,	is the ratio of the rate of net heat removal to the rate of total energy input, calculated under designated operating conditions and expressed in consistent units, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 112.
COEFFICIENT OF PERFORMANCE (COP), HEATING,	is the ratio of the rate of net heat output to the rate of total energy input, calculated under designated operating conditions and expressed in consistent units, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 112.
<u>COEFFICIENT OF PERFORMANCE (COP), HEAT PUMP</u>	<p><u>is the ratio of the rate of useful heat output delivered by the complete heat pump unit (exclusive of supplementary heating) to the corresponding rate of energy input, in consistent units and as determined using the applicable test method in Appliance Efficiency Regulations or Section 112</u></p>
<u>COMBUSTION EFFICIENCY</u>	<p><u>is a measure of the percentage of heat from the combustion of gas or oil that is transferred to the space being heated or lost as jacket loss</u></p>
COMBINATION SPACE-HEATING AND WATER-HEATING APPLIANCE	is an appliance that is designed to provide both space heating and water heating from a single primary energy source.
COMBINED HYDRONIC SPACE/WATER HEATING SYSTEM	is a system which both domestic hot water and space heating is supplied from the same water heating equipment. Combined hydronic space heating may include both radiant floor systems and convective or fan coil systems.
COMMISSION	is the California State Energy Resources Conservation and Development Commission, also known as the California Energy Commission.
COMPLETE BUILDING	<p>is an entire building with one occupancy making up 90 percent of the conditioned floor area.</p> <p>See <i>Entire Building</i>.</p>

Term	Definition
COMPLIANCE APPROACH	is any one of the allowable methods by which the design and construction of a building may be demonstrated to be in compliance with Part 6. The compliance approaches are the performance compliance approach and the prescriptive compliance approach. The requirements for each compliance approach are set forth in Section 100(e) 2.D.ii.100 (e) 2 of Part 6.
COMPLIANCE DOCUMENTATION	are the set of forms and other data prepared in order to demonstrate to the building official that a building complies with the Standards. The compliance forms for the residential and nonresidential standards are contained in the Residential Manual and the Nonresidential Manual.
CONDITIONED FLOOR AREA (CFA)	is the floor area (in square feet) of enclosed conditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned space.
CONDITIONED FOOTPRINT	is a projection of all conditioned space on all floors to a vertical plane. The conditioned footprint area may be equal to the first floor area, or it may be greater, if upper floors project over lower floors. One way to think of the conditioned footprint area is as the area of the largest conditioned floor in the building plus the conditioned floor area of any projections from other stories that extend beyond the outline of that largest floor.
<i>CONDITIONED SPACE, <u>DIRECTLY</u></i>	<i>is an enclosed space that is provided with wood heating, is provided with mechanical heating that has a capacity exceeding 10 Btu/(hr.xft.²), or is provided with mechanical cooling that has a capacity exceeding 5 Btu/(hr.xft.²), unless the space-conditioning system is designed for a process space. (See "Process space") is space in a building that is either directly conditioned or indirectly conditioned.</i>
<i><u>CONDITIONED SPACE, INDIRECTLY</u></i>	<i>is enclosed space, including, but not limited to, unconditioned volume in atria, that (1) is not directly conditioned space; and (2) either (a) has a thermal transmittance area product (UA) to directly conditioned space exceeding that to the outdoors or to unconditioned space and does not have fixed vents or openings to the outdoors or to unconditioned space, or (b) is a space through which air from directly conditioned spaces is transferred at a rate exceeding three air changes per hour.</i>
<i>CONDITIONED VOLUME</i>	is the total volume (in cubic feet) of the conditioned space within a building.
CONSTRUCTION LAYERS	are roof, wall and floor constructions which represent an assembly of layers. Some layers are homogeneous, such as gypsum board and plywood sheathing, while other layers are non-homogeneous such as the combination of wood framing and cavity insulation typical in many buildings.
<i>CONTINUOUS DIMMING</i>	<i>(See "dimming, continuous.") is a lighting control method that is capable of varying the light output of lamps over a continuous range from full light output to minimum light output.</i>

Term	Definition
CONTROLLED VENTILATION CRAWL SPACE (CVC)	is a crawl space in a residential building where the side walls of the crawlspace are insulated rather than the floor above the crawlspace. A CVC has automatically controlled crawl space vents. Credit for a CVC is permitted for low-rise residential buildings that use the performance approach to compliance.
Convention Centers	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
COOL ROOF	is a roofing material with high thermal emittance and high solar reflectance, or lower thermal emittance and exceptionally high solar reflectance as specified in Section 118 (i), that reduces heat gain through the roof.
COOL ROOF RATING COUNCIL (CRRC)	is a not-for-profit organization designated by the Commission as the Supervisory Entity with responsibility to rate and label the reflectance and emittance of roof products.
COOLING EQUIPMENT	is equipment used to provide mechanical cooling for a room or rooms in a building.
COOLING LOAD	is the rate at which heat must be extracted from a space to maintain a desired room condition.
COOLING LOAD TEMPERATURE DIFFERENCE (CLTD)	is an equivalent temperature difference used for calculating the instantaneous external cooling loads across a wall or roof. The cooling load is the CLTD x U-factor x Area.
COP	See <i>Coefficient of Performance</i>
CORRIDOR	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
COURTYARD	is an open space through one or more floor levels surrounded by walls within a building.
CRAWL SPACE	is a space immediately under the first floor of a building adjacent to grade.
CRRC	See <i>Cool Roof Rating Council</i> .
CRRC-1	is the Cool Roof Rating Council document entitled "Product Rating Program" (2002).
CTI	is the Cooling Technology Institute. is the Cooling Tower Institute.
CTI ATC-105	is the Cooling Technology Institute document entitled "Acceptance Test Code for Water Cooling Towers," 2000 (CTI ATC-105-00). is the Cooling Tower Institute document entitled "Acceptance Test Code for Water Cooling Towers," 2000 (CTI ATC-105-00).
CTI STD-201	is the Cooling Technology Cooling Tower Institute document entitled "Certification Standard for Commercial Water Cooling Towers," 2002 (CTI STD-201-02).

Term	Definition
<u>CURTAIN WALL</u>	is an external nonbearing wall intended to separate the exterior and interior environments, which may consist entirely (or principally) of a combination of framing materials, glass and glazing, opaque in-fill and other surfacing materials supported by (or within) a framework
CUSTOM ENERGY BUDGET	See <i>Energy Budget</i> .
C-VALUE	(also known as C-factor) is the time rate of heat flow through unit area of a body induced by a unit temperature difference between the body surfaces, in Btu/(hr. x ft. ² x °F). It is not the same as K-value or K-factor.
DAYLIT AREA	is the floor area under skylights or next to windows. The daylight area includes Primary Sidelit Daylight Area, Secondary Sidelit Daylight Area, and Skylit Daylight Area is the floor area that is illuminated by daylight through vertical glazing or skylights as specified in Section 131(c).
<u>DAYLIGHT AREA, PRIMARY SIDELIT</u>	is the floor area directly adjacent to vertical glazing. The Primary Sidelit Daylight Area is primary sidelit depth multiplied by the sidelit width. The sidelit width is the width of the window plus, on each side, the lesser of either 2 feet, the distance to a 60-inch or higher permanent partition or one half the distance to the closest skylight or vertical glazing. The primary sidelit depth is the horizontal distance perpendicular to the glazing which is the lesser of one window head height, the distance to the nearest 60-inch or higher permanent partition, or one half the distance to the closest skylight or vertical glazing.
<u>DAYLIGHT AREA, SECONDARY SIDELIT</u>	is the floor area illuminated by vertical glazing, but not directly adjacent to the vertical glazing. The Secondary Daylight Area is secondary sidelit depth multiplied by the sidelit width, less the Primary Sidelit Daylight Area. The sidelit width is the width of the window plus, on each side, the lesser of either 2 feet, the distance to a 60-inch or higher permanent partition or one half the distance to the closest skylight or vertical glazing. The secondary sidelit depth is the horizontal distance perpendicular to the glazing which is the lesser of one window head height, the distance to the nearest 60-inch or higher permanent partition, or one half the distance to the closest skylight or vertical glazing.
<u>DAYLIGHT AREA, SKYLIT</u>	is the rough opening of the skylight, plus, in each horizontal direction perpendicular to the sides of the skylight opening, extended horizontally of the lateral and longitudinal dimensions of the skylight, the lesser of 70% of the floor-to-ceiling height, the distance to any permanent partition or permanent rack which is farther away than 70% of the distance between the top of the permanent partition or permanent rack and the ceiling, or one half the horizontal distance to the edge of the closest skylight or vertical glazing.
<u>DEADBAND</u>	is the temperature range within which the HVAC system is neither calling for heating or cooling.

Term	Definition
DECORATIVE GAS APPLIANCE	is a gas appliance that is designed or installed for visual effect only, cannot burn solid wood, and simulates a fire in a fireplace.
DEGREE DAY, HEATING	is a unit, based upon temperature difference and time, used in estimating fuel consumption and specifying nominal annual heating load of a building. For any one day, when the mean temperature is less than 65°F, there exist as many degree days as there are Fahrenheit degrees difference in temperature between the mean temperature for the day and 65°F. <u>The number of degree days for special geographical locations are those listed in the Residential Manual. For those localities not listed in the Residential Manual, the number of degree days is as determined by the applicable enforcement agency.</u>
<u>DEMAND RESPONSE</u>	<u>is controlling electricity loads in buildings in response to an electronic signal sent by the local utility requesting their customers to reduce electricity consumption.</u>
DEMISING PARTITIONS	<u>is a wall, fenestration, floor, or ceiling that separates conditioned space from enclosed unconditioned space.</u> are barriers that separate conditioned space from enclosed unconditioned space.
DEMISING WALL	is a wall that is a demising partition.
DENSITY	is the mass per unit volume of a construction material as documented in an ASHRAE handbook, a comparably reliable reference or manufacturer's literature.
DEPLETABLE SOURCES	is energy obtained from electricity purchased from a public utility, or energy obtained from burning coal, oil, natural gas, or liquefied petroleum gases.
DESIGN CONDITIONS	are the parameters and conditions used to determine the performance requirements of space-conditioning systems. Design conditions for determining design heating and cooling loads are specified in Section 144 (b) for nonresidential, high-rise residential, and hotel/motel buildings and in Section 150 (h) for low-rise residential buildings.
DESIGN HEAT GAIN RATE	is the total calculated heat gain through the building envelope under design conditions.
DESIGN HEAT LOSS RATE	is the total calculated heat loss through the building envelope under design conditions.
<u>DIMMING, CONTINUOUS</u>	<u>is a lighting control method that is capable of varying the light output of lamps over a continuous range from full light output to minimum light output.</u>
<u>DIMMING, STEPPED</u>	<u>is a lighting control method that varies the light output of lamps in one or more predetermined discrete steps between full light output and off.</u>
DINING	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>

Term	Definition
<u>DIRECT DIGITAL CONTROL (DDC)</u>	<u>is a type of control where controlled and monitored analog or binary data, such as temperature and contact closures, are converted to digital format for manipulation and calculations by a digital computer or microprocessor, then converted back to analog or binary form to control mechanical devices.</u>
DIRECTLY CONDITIONED SPACE	is an enclosed space that is provided with wood heating, is provided with mechanical heating that has a capacity exceeding 10 Btu/(hr.xft. ²), or is provided with mechanical cooling that has a capacity exceeding 5 Btu/(hr.xft. ²), unless the space-conditioning system is designed and thermostatically controlled to maintain a process environment temperature less than 55°F or to maintain a process environment temperature greater than 90°F for the whole space that the system serves, or unless the space-conditioning system is designed and controlled to be incapable of operating at temperatures above 55°F or incapable of operating at temperatures below 90°F at design conditions.
<u>DISPLAY LIGHTING</u>	<u>is lighting confined to the area of a display that provides a higher level of illuminance than the level of surrounding ambient illuminance.</u>
<u>DISPLAY PERIMETER</u>	<u>is the length of an exterior wall in a Group B; Group F, Division 1; or Group M Occupancy that immediately abuts a public sidewalk, measured at the sidewalk level for each story that abuts a public sidewalk.</u>
DIVIDERS	are wood, aluminum or vinyl glazing dividers including mullions, muntins, munnions and grilles. Dividers may truly divide lights, be between the panes, or be applied to the exterior or interior of the glazing.
DOCUMENTATION AUTHOR	is the person completing the compliance documentation that demonstrates whether a building complies with the standards. Compliance documentation requirements are defined in the Residential Manual.
DOMINANT OCCUPANCY	is the occupancy type in mixed occupancy buildings with the greatest percentage of total conditioned floor area.
DOOR	<u>is an operable opening in the building envelope that is not a fenestration product, including swinging and roll-up doors, fire doors, and access hatches. Doors that are more than one-half glass in area are considered a fenestration product. See Exterior Door.</u>
DORMITORY	is a building consisting of multiple sleeping quarters and having interior common areas such as dining rooms, reading rooms, exercise rooms, toilet rooms, study rooms, hallways, lobbies, corridors, and stairwells, other than high-rise residential, low-rise residential, and hotel/motel occupancies.
DOUBLE-FACED SIGN	See <i>Sign</i>
<u>DUAL-GLAZED GREENHOUSE WINDOWS</u>	are a type of dual-glazed fenestration product which adds conditioned volume but not conditioned floor area to a building.

Term	Definition
DUCT LOSSES	is heat transfer into or out of a space conditioning system duct through conduction or leakage.
DUCT SEALING	is a procedure for installing a space conditioning distribution system that minimizes leakage of air from or to the distribution system. Minimum specifications for installation procedures, materials, diagnostic testing and field verification are contained in the Residential Appendix RA4 and Nonresidential Appendix NRA1. <u>is a procedure for installing a space conditioning distribution system that minimizes leakage of air from or to the distribution system. Minimum specifications for installation procedures, materials, diagnostic testing and field verification are contained in the Residential and Nonresidential ACM Approval Manuals.</u>
DWELLING UNIT	is a dwelling unit within a multifamily building project or a single family building.
EA	is Effective Aperture.
EAST-FACING	means that a surface is oriented such that its normal is within 45 degrees of true east, including 45°0'0" south of east (SE), but excluding 45°0'0" north of east (NE)." <u>(See "orientation.")</u>
ECONOMIZER, AIR	is a ducting arrangement, including dampers, linkages, and an automatic control system, that allows a cooling supply fan system to supply outside air to reduce or eliminate the need for mechanical cooling. <u>is a ducting arrangement and automatic control system that allows a cooling supply fan system to supply outside air to reduce or eliminate the need for mechanical cooling.</u>
ECONOMIZER, WATER	is a system by which the supply air of a cooling system is cooled directly or indirectly by evaporation of water, or other appropriate fluid, in order to reduce or eliminate the need for mechanical cooling.
EDGE OF GLASS:	is the portion of fenestration glazing that is within two and one half inches of the spacer.
EER	See <i>Energy Efficiency Ratio</i> .
EFFECTIVE APERTURE (EA)	is a measure of the extent that vertical glazing or skylights are effective for providing daylighting. <u>is the extent that vertical glazing or skylights are effective for providing daylighting. The effective aperture for vertical glazing is specified in Exception 4 to Section 131(c). The effective aperture for skylights is specified in Section 146 (a) 4 F.</u>
EFFICACY, LAMP	is the quotient of rated initial lamp lumens divided by the rated lamp power (watts), without including auxiliaries such as ballasts, transformers, and power supplies. <u>is the quotient of rated initial lamp lumens divided by the rated lamp power (watts), without including auxiliaries such as ballasts, measured at 25°C according to IESNA and ANSI Standards.</u>

Term	Definition
EFFICACY, LIGHTING SYSTEM	is the quotient of rated initial lamp lumens measured at 25°C according to IESNA and ANSI Standards, times the ballast factor, divided by the input power (watts) to the ballast or other auxiliary device (e.g. transformer); expressed in lumens per watt.
ELECTRIC HEATING	is an electrically powered heating source, such as electric resistance, heat pumps with no auxiliary heat or with electric auxiliary heat, solar with electric back-up, etc.
ELECTRIC RESISTANCE HEATING	is a heating system that converts electric energy directly into heat energy by passing a current through an electric resistance. Electric resistance heat is inherently less efficient than gas as a heating energy source because it must account for losses associated with generation from depletable fossil fuels and transmission to the building site.
ELECTRICAL/ MECHANICAL ROOM	See Occupancy Type <u>Nonresidential Functional Area or Type of Use</u>
ELECTRONICALLY-COMMUTATED MOTOR	is a brushless DC motor with a permanent magnet rotor that is surrounded by stationary motor windings, and an electronic controller that varies rotor speed and direction by sequentially supplying DC current to the windings.
EMITTANCE, THERMAL	is the ratio of the radiant heat flux emitted by a sample to that emitted by a blackbody radiator at the same temperature.
ENCLOSED SPACE	<u>is space that is substantially surrounded by solid surfaces, including walls, ceilings or roofs, doors, fenestration areas, and floors or ground.</u> is space that is substantially surrounded by solid surfaces.
ENERGY BUDGET	is the maximum amount of Time Dependent Valuation (TDV) energy that a proposed building, or portion of a building, can be designed to consume, calculated with the approved procedures specified in Title 24, Part 6.
ENERGY EFFICIENCY RATIO (EER)	<u>is the ratio of net cooling capacity (in Btu/hr.) to total rate of electrical energy input (in watts), of a cooling system under designated operating conditions, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 112</u> is the ratio of net cooling capacity (in Btu/hr.) to total rate of electrical energy (in watts), of a cooling system under designated operating conditions, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 112.
ENERGY EFFICIENCY STANDARDS	See <i>Building Energy Efficiency Standards</i>
ENERGY FACTOR (EF)	<u>of a water heater is a measure of overall water heater efficiency, as determined using the applicable test method in the Appliance Efficiency Regulations.</u> is the ratio of energy output to energy consumption of a water heater, expressed in equivalent units, under designated operating conditions over a 24-hour use cycle, as determined using the applicable test method in the Appliance Efficiency Regulations.

Term	Definition
<u>ENERGY MANAGEMENT CONTROL SYSTEM (EMCS)</u>	<u>is often a computerized control system designed to regulate the energy consumption of a building by controlling the operation of energy consuming systems, such as the heating, ventilation and air conditioning (HVAC), lighting and water heating systems. The EMCS is also capable of monitoring environmental and system loads and adjusting HVAC operations in order to optimize energy usage and respond to demand response signals.</u>
ENERGY OBTAINED FROM DEPLETABLE SOURCES	is electricity purchased from a public utility, or any energy obtained from coal, oil, natural gas, or liquefied petroleum gases.
ENERGY OBTAINED FROM NONDEPLETABLE SOURCES	is energy that is not energy obtained from depletable sources.
ENFORCEMENT AGENCY	is the city, county, or state agency responsible for issuing a building permit.
ENTIRE BUILDING	is the ensemble of all enclosed space in a building, including the space for which a permit is sought, plus all existing conditioned and unconditioned space within the structure.
ENVELOPE	<u>(See "building envelope.")See Building Envelope.</u>
EVAPORATIVE COOLER	provides cooling to a building by either direct contact with water (direct evaporative cooler), no direct contact with water (indirect evaporative cooler), or a combination of direct and indirect cooling (indirect/direct evaporative cooler). The credit offered for evaporative coolers depends on building type and climate.
EXCEPTIONAL METHOD	is a method approved by the Commission that analyzes designs, materials, or devices, which cannot be adequately modeled using alternative calculation methods.
EXECUTIVE DIRECTOR	is the Executive Director of the Commission.
EXERCISE CENTER / GYMNASIUM	See <u>Occupancy Type Nonresidential Functional Area or Type of Use.</u>
EXFILTRATION	is uncontrolled outward air leakage from inside a building, including leakage through cracks and interstices, around windows and doors, and through any other exterior partition or duct penetration.
EXHIBIT	See <u>Occupancy Type Nonresidential Functional Area or Type of Use.</u>
EXPOSED THERMAL MASS	is mass that is directly exposed (uncovered) to the conditioned space of the building. Concrete floors that are covered by carpet are not considered exposed thermal mass.
EXTERIOR DOOR	is a door through an exterior partition that is opaque or has a glazed area that is less than or equal to one-half of the door area. Doors with a glazed area of more than one half of the door area are treated as a fenestration product.

Term	Definition
EXTERIOR FLOOR/SOFFIT	is a horizontal exterior partition, or a horizontal demising partition, under conditioned space. For low-rise residential occupancies, exterior floors also include those on grade.
EXTERIOR PARTITION	is an opaque, translucent, or transparent solid barrier that separates conditioned space from ambient air or space that is not enclosed. For low-rise residential occupancies, exterior partitions also include barriers that separate conditioned space from unconditioned space, or the ground.
EXTERIOR ROOF/CEILING	is an exterior partition, or a demising partition, that has a slope less than 60 degrees from horizontal, that has conditioned space below, and that is not an exterior door or skylight.
EXTERIOR ROOF/CEILING AREA	is the area of the exterior surface of exterior roof/ceilings.
EXTERIOR WALL	is any wall or element of a wall, or any member or group of members, which defines the exterior boundaries or courts of a building and which has a slope of 60 degrees or greater with the horizontal plane. An exterior wall or partition is not an exterior floor/soffit, exterior door, exterior roof/ceiling, window, skylight, or demising wall.
EXTERIOR WALL AREA	is the area of the opaque exterior surface of exterior walls.
EXTERNALLY ILLUMINATED SIGN	See <i>Sign</i>
Factory Assembled Cooling Towers	are cooling towers constructed from factory assembled modules either shipped to the site in one piece or put together in the field.
FENESTRATION AREA	<p>is the area of fenestration products (i.e., windows, skylights and glass doors) in exterior openings, including the sash or frame area. The nominal area (from nominal dimensions such as 4'0" x 4'0") or rough opening is also acceptable.</p> <p>Where the term "glazing area" is used in the standards it is the entire fenestration area, not just the area of glazing, unless stated otherwise.</p> <p>See <i>Fenestration Product, Glazing Area and Shading</i>.</p>
FENESTRATION PRODUCT	is any transparent or translucent material plus any sash, frame, mullions and dividers, in the envelope of a building, including, but not limited to, windows, sliding glass doors, French doors, skylights, curtain walls, garden windows, and other doors with a glazed area of more than one half of the door area.
<u>FENESTRATION PRODUCT, FIELD-FABRICATED</u>	<p><u>is a fenestration product including a glazed exterior door whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site-built fenestration with a label certificate or products required to have temporary or permanent labels.</u></p>

Term	Definition
<u>FENESTRATION PRODUCT, SITE-BUILT</u>	<u>is fenestration designed to be field-glazed or field assembled units using specific factory cut or otherwise factory formed framing and glazing units that are manufactured with the intention of being assembled at the construction site and are provided with an NFRC label certificate for site-built fenestration. Examples of site-built fenestration include storefront systems, curtain walls, and atrium roof systems.</u>
FENESTRATION SYSTEM	is a collection of fenestration products included in the design of a building. See <i>Fenestration Product</i> .
<u>FENESTRATION, SPANDREL</u>	<u>is opaque glazing material most often used to conceal building elements between floors of a building so that they cannot be seen from the exterior, also known as “opaque in-fill systems”.</u>
Field Erected Cooling Towers	are cooling towers which are custom designed for a specific application and which can not be delivered to a project site in the form of factory assembled modules due to their size, configuration, or materials of construction.
FIELD-FABRICATED FENESTRATION PRODUCT OR EXTERIOR DOOR	is a fenestration product or exterior door whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site-built fenestration with a label certificate or products required to have temporary or permanent labels.
FINANCIAL TRANSACTION	See <u><i>Occupancy Type Nonresidential Functional Area or Type of Use</i></u>
FIREPLACE	<u>is a hearth and fire chamber or similar prepared place in which a fire may be made and which is built in conjunction with a flue or chimney, including but not limited to factory-built fireplaces, masonry fireplaces, and masonry heaters as further clarified in the CBC.</u> is a hearth and fire chamber or similar prepared place in which a solid-fuel fire may be burned, as defined in the CBC; these include, but are not limited to, factory-built fireplaces, masonry fireplaces, and masonry heaters.
FLOOR AREA	is the floor area (in square feet) of enclosed conditioned or unconditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned or unconditioned space. See <i>Conditioned Floor Area</i> .
FLOOR/SOFFIT TYPE	is a type of floor/soffit assembly having a specific heat capacity, framing type, and U-value.
FLUX	is the rate of the energy flow per unit area.

Term	Definition
FOOD PREPARATION EQUIPMENT	<u>is cooking equipment intended for commercial use, including coffee machines, espresso coffee makers, conductive cookers, food warmers including heated food servers, fryers, griddles, nut warmers, ovens, popcorn makers, steam kettles, ranges, and cooking appliances for use in commercial kitchens, restaurants, or other business establishments where food is dispensed.</u> is cooking equipment intended for commercial use, including coffee machines, espresso coffee makers, conductive cookers, food warmers including heated food servers, fryers, griddles, nut warmers, ovens, popcorn makers, steam kettles, ranges, and cooking appliances for use in commercial kitchens, restaurants, or other business establishments where food is dispensed.
FOSSIL FUELS	are fuels which are derived from natural gas, coal, oil and liquefied petroleum products. These are generally nonrenewable resources, although natural gas may also be produced by other means, such as biomass conversion.
FRAMED PARTITION OR ASSEMBLY	is a partition or assembly constructed using separate structural members spaced not more than 32 inches on center.
FRAMING EFFECTS	is the effect on the overall U-factor due to the type and amount of framing in walls, roofs/ceilings and floors . For compliance, fixed values for wood framing percentages are assumed when calculating U-factors.
FRAMING PERCENTAGE	is the fraction of the surface of a partition that is framing as compared to that portion which is cavity.
FRONT	is the primary entry side of the building (front facade) used as a reference in defining the orientation of the building or unit plan. The orientation of the front facade may not always be the same as that for the front door itself.
GAP WIDTH	is the distance between glazings in multi-glazed systems. This is typically measured from inside surface to inside surface, though some manufacturers may report "overall" IG width, which is measured from outside surface to outside surface.
GAS COOLING EQUIPMENT	is cooling equipment that produces chilled water or cold air using natural gas or liquefied petroleum gas as the primary energy source.
GAS HEATING SYSTEM	is a natural gas or liquefied petroleum gas heating system.
GAS INFILLS	are air, argon, krypton, CO ₂ , SF ₆ , or a mixture of these gasses between the panes of glass in insulated glass units.
GAS LOG	is a self-contained, free-standing, open-flame, gas-burning appliance consisting of a metal frame or base supporting simulated logs, and designed for installation only in a vented fireplace. See also <i>Decorative Gas Appliance</i>
GENERAL COMMERCIAL AND INDUSTRIAL WORK	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>

Term	Definition
GENERAL LIGHTING	is lighting designed to provide a substantially uniform level of illumination throughout an area, exclusive of any provision for special visual tasks or decorative effect. When designed for lower-than-task illuminance used in conjunction with other specific task lighting systems, it is also called "ambient" lighting. See also <i>Lighting</i> .
GEOTHERMAL HEAT PUMP	See <i>Ground Source Heat Pump</i> .
GLAZING	See <i>Fenestration Product</i> .
GLAZING AREA	See <i>Fenestration Area</i> .
GOVERNMENTAL AGENCY	is any public agency or subdivision thereof, including, but not limited to, any agency of the state, a county, a city, a district, an association of governments, or a joint power agency.
GREENHOUSE WINDOW	is a type of fenestration product which adds conditioned volume but no conditioned floor area to a building.
GRILLES	See <i>Dividers</i> .
GROCERY SALES	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
GROSS EXTERIOR ROOF AREA	is the sum of the skylight area and the exterior roof/ceiling area.
GROSS EXTERIOR WALL AREA	is the sum of the window area, door area, and exterior wall area.
GROUND FLOOR AREA	is defined as the slab-on-grade area of a slab-on-grade building and the conditioned footprint area of a raised floor building (for compliance with the low-rise residential standards).
GROUND SOURCE HEAT PUMP	is a heat pump that uses the earth as a source of energy for heating and a sink for energy when cooling. Some systems pump water from an aquifer in the ground and return the water to the ground after transferring heat from or to the water. A few systems use refrigerant directly in a loop of piping buried in the ground. Those heat pumps that use either a water loop or pump water from an aquifer have efficiency test methods that are accepted by the Energy Commission. These efficiency values are certified to the Energy Commission by the manufacturer and are expressed in terms of heating Coefficient of Performance (COP) and cooling Energy Efficiency Ratio (EER).
<u>GU-24</u>	<u>is the designation of a lamp holder and socket configuration, based on a coding system by the International Energy Consortium, where "G" indicates the broad type of two or more projecting contacts, such as pins or posts, "U" distinguishes between lamp and holder designs of similar type but that are not interchangeable due to electrical or mechanical requirements, and "24" indicates 24 millimeters center to center spacing of the electrical contact posts.</u>

Term	Definition
<i>HABITABLE STORY</i>	is a story that contains space in which humans may work or live in reasonable comfort, and that has at least 50 percent of its volume above grade.
HARD COAT	is a low emissivity metallic coating applied to the glass, which will be installed in a fenestration product, through a pyrolytic process (at or near the melting point of the glass so that it bonds with the surface layer of glass). Hard coatings are less susceptible to oxidation and scratching as compared to soft coats. Hard coatings generally do not have as low emissivity as soft coats.
HARDSCAPE	See <i>Outdoor Lighting</i>
<i>HEAT CAPACITY (HC)</i>	is the amount of heat necessary to raise the temperature of all the components of a unit area in an assembly by 1°F. It is calculated as the sum of the average thickness times the density times the specific heat for each component, and is expressed in Btu per square foot per °F.
<i>HEAT PUMP</i>	is a device that is capable of heating by refrigeration, and that may include a capability for cooling.
<i>HEATED SLAB FLOOR</i>	is a concrete slab floor or a lightweight concrete topping slab laid over a raised floor, with embedded space heating hot water pipes. The heating system using the heated slab is sometimes referred to as radiant slab floors or radiant heating.
<i>HEATING EQUIPMENT</i>	is equipment used to provide mechanical heating for a room or rooms in a building.
<i>HEATING SEASONAL PERFORMANCE FACTOR (HSPF)</i>	<u>is the total heating output of a central air-conditioning heat pump (in Btu) during its normal use period for heating divided by the total electrical energy input (in watt-hours) during the same period, as determined using the applicable test method in the Appliance Efficiency Regulations.</u> is the total heating output of a central air-conditioning heat pump during its normal usage period for heating, divided by the total electrical energy input in watt-hours during the same period, as determined using the applicable test method the Appliance Efficiency Regulations.

Term	Definition
HEATING, VENTILATING AND AIR CONDITIONING (HVAC) SYSTEM	<p><u>is the mechanical heating, ventilating and air conditioning system of the building, also known as the HVAC system. The standards use various measures of equipment efficiency defined according to the type of equipment installed.</u></p> <p><u>Gas (fossil fuel) heating equipment is rated by the Annual Fuel Utilization Efficiency (AFUE). The heating efficiency of electric heat pumps with less than 65,000 Btu/h cooling capacity is rated by the Heating Seasonal Performance Factor (HSPF). The heating efficiency of heat pumps with cooling capacity of 65,000 Btu/h or more is rated by the Coefficient of Performance (COP). Electric resistance heating is rated by HSPF or COP.</u></p> <p><u>All electric cooling equipment (including heat pump cooling equipment) with less than 65,000 Btu/h output capacity is rated by the Seasonal Energy Efficiency Ratio (SEER) (equipment of this size may also be rated by the EER). Electric cooling equipment (including heat pump cooling equipment) with an output capacity of 65,000 Btu/h or more is rated by the Energy Efficiency Ratio (EER).</u></p> <p>is the mechanical heating, ventilating and air conditioning system of the building, also known as the HVAC system. The standards use various measures of equipment efficiency defined according to the type of equipment installed.</p> <p>Gas (fossil fuel) heating equipment is rated by the Annual Fuel Utilization Efficiency (AFUE). The heating efficiency of electric heat pumps with less than 65,000 Btu/h cooling capacity is rated by the Heating Seasonal Performance Factor (HSPF). The heating efficiency of heat pumps with cooling capacity of 65,000 Btu/h or more is rated by the Coefficient of Performance (COP). Electric resistance heating is rated by HSPF or COP.</p> <p>All electric cooling equipment (including heat pump cooling equipment) with less than 65,000 Btu/h output capacity is rated by the Seasonal Energy Efficiency Ratio (SEER) (equipment of this size may also be rated by the EER). Electric cooling equipment (including heat pump cooling equipment) with an output capacity of 65,000 Btu/h or more is rated by the Energy Efficiency Ratio (EER).</p>
HERS PROVIDER	see <i>Home Energy Rating System Provider</i> .
HERS RATER	See <i>Home Energy Rating System Rater</i> .
<i>HI</i>	is the Hydronics Institute of the Gas Appliance Manufacturers Association (GAMA).
<i>HI HTG BOILER STANDARD</i>	is the Hydronics Institute document entitled "Testing and Rating Standard for Rating Boilers," 1989.
HIGH BAY	See <u><i>Occupancy Type Nonresidential Functional Area or Type of Use, General commercial and industrial work</i></u>
<i>HIGH-RISE RESIDENTIAL BUILDING</i>	is a building, other than a hotel/motel, of Occupancy Group R, Division 1 with four or more habitable stories.

Term	Definition
HOME ENERGY RATING SYSTEM PROVIDER	is an organization that the Commission has approved to administer a home energy rating system program, certify raters and maintain quality control over field verification and diagnostic testing required for compliance with the Energy Efficiency Standards.
HOME ENERGY RATING SYSTEM RATER	is a person certified by a Commission approved HERS Provider to perform the field verification and diagnostic testing required for demonstrating compliance with the Energy Efficiency Standards.
HORIZONTAL GLAZING	See <i>Skylight</i> .
HOTEL AND MOTEL GUEST ROOM	is a guest room of a Hotel/Motel.
HOTEL FUNCTION AREA	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
HOTEL LOBBY	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> , Lobby, Hotel.
<i>HOTEL/MOTEL</i>	is a building or buildings incorporating six or more guest rooms or a lobby serving six or more guest rooms, where the guest rooms are intended or designed to be used, or which are used, rented, or hired out to be occupied, or which are occupied for sleeping purposes by guests, and all conditioned spaces within the same building envelope. Hotel/motel also includes all conditioned spaces which are (1) on the same property as the hotel/motel, (2) served by the same central heating, ventilation, and air-conditioning system as the hotel/motel, and (3) integrally related to the functioning of the hotel/motel as such, including, but not limited to, exhibition facilities, meeting and conference facilities, food service facilities, lobbies, and laundries.
HSPF	See <i>Heating Seasonal Performance Factor</i> .
HVAC	See <i>Heating, Ventilating and Air Conditioning</i>.
HVAC SYSTEM	See <i>HVAC</i> , See <i>Space Conditioning System</i> .
HYDRONIC COOLING SYSTEM	is any cooling system which uses water or a water solution as a source of cooling or heat rejection, including chilled water systems (both air and water-cooled) as well as water-cooled or evaporatively cooled direct expansion systems, such as water source (water-to-air) heat pumps.
HYDRONIC SPACE HEATING SYSTEM	is a system that uses water-heating equipment, such as a storage tank water heater or a boiler, to provide space heating. Hydronic space heating systems include both radiant floor systems and convective or fan coil systems. See <i>Combined Hydronic Space/Water Heating System</i>
<i>IESNA HB</i>	(See "IESNA Lighting Handbook")
<i>IESNA LIGHTING HANDBOOK</i>	is the Illuminating Engineering Society National Association document entitled "The IESNA Lighting Handbook: Reference and Applications, Ninth Edition." (2000)

Term	Definition
IG UNIT	See <i>Insulating Glass Unit</i>
ILLUMINATED FACE	See <i>Sign</i>
INDEPENDENT IDENTITY	<p>is having no financial interest in, and not advocating or recommending the use of any product or service as a means of gaining increased business with, firms or persons specified in Section 1673(i) of the California Home Energy Rating System Program regulations (California Code of Regulations, Title 20, Division 2, Chapter 4, Article 8). (Financial Interest is an ownership interest, debt agreement, or employer/employee relationship. Financial interest does not include ownership of less than 5% of the outstanding equity securities of a publicly traded corporation.)</p> <p>NOTE: The definitions of "independent entity" and "financial interest," together with Title 20, Section 1673(i), prohibit conflicts of interest between HERS Providers and HERS Raters, or between Providers/Raters and builders/subcontractors.</p>
INDIRECTLY CONDITIONED SPACE	<p>is enclosed space, including, but not limited to, unconditioned volume in atria, that (1) is not directly conditioned space; and (2) either (a) has a thermal transmittance area product (UA) to directly conditioned space exceeding that to the outdoors or to unconditioned space and does not have fixed vents or openings to the outdoors or to unconditioned space, or (b) is a space through which air from directly conditioned spaces is transferred at a rate exceeding three air changes per hour.</p>
INDUSTRIAL AND COMMERCIAL STORAGE BUILDING	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i>
INDUSTRIAL EQUIPMENT	is manufactured equipment used in industrial processes.
<i>INFILTRATION</i>	<p>is uncontrolled inward air leakage from outside a building or unconditioned space, including leakage through cracks and interstices, around windows and doors, and through any other exterior or demising partition or pipe or duct penetration.</p>
INFILTRATION CONTROLS	<p>are measures taken to control the infiltration of air. Mandatory Infiltration control measures include weatherstripping, caulking, and sealing in and around all exterior joints and openings.</p>
INSTALLATION CERTIFICATE (CF-6R)	<p>is a document with information required by the Commission that is prepared by the builder or installer verifying that the measure was installed to meet the requirements of the standards.</p>
INSULATING GLASS UNIT	<p>is a self-contained unit, including the glazings, spacer(s), films (if any), gas infills, and edge caulking, that is installed in fenestration products. It does not include the frame.</p>

Term	Definition
INSULATION	<p>Insulation is a material that limits heat transfer.</p> <p>Insulating material of the types and forms listed in Section 118(a) of the Standards, may be installed only if the manufacturer has certified that the insulation complies with the Standards for Insulating Material, Title 24, Part 12, Chapter 12-13 of the California Code of Regulations.</p> <p>Insulation must be placed within or contiguous with a wall, ceiling or floor, or over the surface of any appliance or its intake or outtake mechanism for the purpose of reducing heat transfer or reducing adverse temperature fluctuations of the building, room or appliance.</p> <p>Insulation may be installed in wall, ceiling/roof and raised floor assemblies and at the edge of a slab-on-grade. Movable insulation is designed to cover windows and other glazed openings part of the time to reduce heat loss and heat gain.</p>
<i>INTEGRATED PART LOAD VALUE (IPLV)</i>	<p>is a single number figure of merit based on part load EER or COP expressing part load efficiency for air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities for the equipment as determined using the applicable test method in the Appliance Efficiency Regulations or Section 112.</p>
INTERIOR PARTITION	<p>is an interior wall or floor/ceiling that separates one area of conditioned space from another within the building envelope.</p>
INTERNALLY ILLUMINATED SIGN	See <i>Sign</i>
IPLV	See <i>Integrated Part Load Value</i> .
<i>ISO 13256-1</i>	<p>is the International Organization for Standardization document entitled "Water-source heat pumps – Testing and rating for performance – Part 1: Water-to-air and brine-to-air heat pumps," 1998.</p>
ISOLATION DEVICE	<p>is a device that prevents the conditioning of a zone or group of zones in a building while other zones of the building are being conditioned.</p>
<i>KITCHEN</i>	<p>in a low-rise residential building is a room or area used for cooking, food storage and preparation and washing dishes, including associated counter tops and cabinets, refrigerator, stove, ovens, and floor area. Adjacent areas are considered kitchen if the lighting for the adjacent areas is on the same circuit as the lighting for the kitchen.</p>
KITCHEN/FOOD PREPARATION	<i>See Nonresidential Functional Area or Type of Use See Occupancy Type.</i>
KNEE WALL	<p>is a sidewall separating conditioned space from attic space under a pitched roof. Knee walls should be insulated as an exterior wall as specified by the chosen method of compliance.</p>
LANDSCAPE LIGHTING	See <i>Outdoor Lighting</i>

Term	Definition
LANTERN	See <i>Outdoor Lighting</i>
LAUNDRY	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i>
LEFT SIDE	is the left side of the building as one faces the front facade from the outside. This designation is used on the Certificate of Compliance and other compliance documentation
LIBRARY	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i>
<u>LIGHT EMITTING DIODE (LED)</u>	<u>is an solid-state electrical diode which produces optical radiation, also known as Solid State Lighting (SSL).</u>
<u>LIGHTING FLOOR AREA</u>	<u>is the floor area (in square feet) of enclosed space on all floors of a building, as measured at the floor level of the interior surfaces of all walls.</u>
LIGHTING ZONE	See <i>Outdoor Lighting</i>
LIQUID LINE	is the refrigerant line that leads from the condenser to the evaporator in a split system air conditioner or heat pump. The refrigerant in this line is in a liquid state and is at an elevated temperature. This line should not be insulated.
LOCKER/DRESSING ROOM	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
LOUNGE/RECREATION	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
LOW BAY	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> , <i>General commercial and industrial work</i>
LOW-E COATING	is a low emissivity metallic coating applied to glazing in fenestration products. See <i>Soft Coat</i> and <i>Hard Coat</i> .
LOW-RISE ENCLOSED SPACE	is an enclosed space located in a building with 3 or fewer stories.
<i>LOW-RISE RESIDENTIAL BUILDING</i>	<u>is a building, other than a hotel/motel that is of Occupancy Group R, Division 1, and is multi-family with three stories or less, or a single family residence of Occupancy Group R, Division 3, or an Occupancy Group U building located on a residential site.</u> is a building, other than a hotel/motel that is of Occupancy Group R, Division 1, and is three stories or less, or that is of Occupancy Group R, Division 3.
<i>LOW-SLOPED ROOF</i>	is a roof that has a ratio of rise to run of 2:12 or less.
<i>LPG</i>	is Liquefied Petroleum Gas. Propane is one type of LPG.
LUMENS/WATT	is the amount of light available from a given light source (lumens) divided by the power requirement for that light source (watts). The more usable light that a light source provides per watt, the greater its efficacy. See <i>Efficacy</i> .

Term	Definition
<i>LUMINAIRE</i>	is a complete lighting unit consisting of a lamp(s) and the parts designed to distribute the light, to position and protect the lamp(s), and to connect the lamp(s) to the power supply; commonly referred to as "lighting fixtures" or "instruments."
MAIN ENTRY LOBBY	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> , Lobby, Main entry.
MALL	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
mall building	is a single building enclosing a number of tenants and occupants wherein two or more tenants have a main entrance into one or more malls.
MANDATORY MEASURES CHECKLIST (MF-1R)	is a form used by the building plan checker and field inspector to verify compliance of the building with the prescribed list of mandatory features, equipment efficiencies and product certification requirements. The documentation author indicates compliance by initialing, checking, or marking N/A (for features not applicable) in the boxes or spaces provided for the designer.
<i>MANUAL</i>	is capable of being operated by personal intervention.
<i>MANUFACTURED DEVICE</i>	is any heating, cooling, ventilation, lighting, water heating, refrigeration, cooking, plumbing fitting, insulation, door, fenestration product, or any other appliance, device, equipment, or system subject to Sections 110 through 119 of Title 24, Part 6.
<i>MANUFACTURED FENESTRATION PRODUCT</i>	is a fenestration product constructed of materials which are factory cut or otherwise factory formed with the specific intention of being used to fabricate a fenestration product. A manufactured fenestration product is typically assembled before delivery to a job site. However a "knocked-down" or partially assembled product sold as a fenestration product is also a manufactured fenestration product when provided with temporary and permanent labels as described in Section 10-111; otherwise it is a site-built fenestration product.
MARQUEE LIGHTING	See <i>Outdoor Lighting</i>
<i>MECHANICAL COOLING</i>	is lowering the temperature within a space using refrigerant compressors or absorbers, desiccant dehumidifiers, or other systems that require energy from depletable sources to directly condition the space. In nonresidential, high-rise residential, and hotel/motel buildings cooling of a space by direct or indirect evaporation of water alone is not considered mechanical cooling.
<i>MECHANICAL HEATING</i>	is raising the temperature within a space using electric resistance heaters, fossil fuel burners, heat pumps, or other systems that require energy from depletable sources to directly condition the space.
MEDICAL AND CLINICAL CARE:	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .

Term	Definition
<i>METAL BUILDING</i>	is a complete integrated set of mutually dependent components and assemblies that form a building, which consists of a steel-framed superstructure and metal skin. This does not include structural glass or metal panels such as in a curtainwall system.
MIXED OCCUPANCY BUILDING	is a building designed and constructed for more than one type of occupancy, such as a three story building with ground floor retail and second and third floor residential apartments.
MODEL	is a floor plan and house or dwelling unit design that is repeated throughout a subdivision or within a multi-family building project. To be considered the same model, dwelling units shall be in the same subdivision or multi-family housing development and have the same energy designs and features, including the same floor area and volume, for each dwelling unit, as shown on the CF-1R. For multi-family buildings, variations in the exterior surface areas caused by location of dwelling units within the building do not cause dwelling units to be considered a different model.
MODELING ASSUMPTIONS	are the conditions (such as weather conditions, thermostat settings and schedules, internal gain schedules, etc.) that are used for calculating a building's annual energy consumption as specified in the ACM Manuals.
<i>MOTION SENSOR, LIGHTING</i>	<u>is a device that automatically turns lights off soon after an area is vacated. The term motion sensor applies to a device that controls outdoor lighting systems. When the device is used to control indoor lighting systems, it is termed an occupant sensor. The device also may be called an occupancy sensor, occupant-sensing device, or vacancy sensor.</u> is a device that automatically turns lights off soon after an area is vacated. The term Motion Sensor applies to a device that controls outdoor lighting systems. When the device is used to control indoor lighting systems, it is termed an occupant sensor. The device also may be called an occupancy sensor, or occupant sensing device.
<i>MOVABLE SHADING DEVICE</i>	See <i>Operable Shading Device</i> .
MULLION	is a vertical framing member separating adjoining window or door sections. See Dividers
MULTI-FAMILY DWELLING UNIT	is a dwelling unit of occupancy type R, as defined by the <i>CBC</i> , sharing a common wall and/or ceiling/floor with at least one other dwelling unit.
<i>MULTI-LEVEL LIGHTING CONTROL</i>	is a lighting control that reduces lighting power in multiple steps while maintaining a reasonably uniform level of illuminance throughout the area controlled.

Term	Definition
MULTIPLE ZONE	is a supply fan (and optionally a return fan) with heating and/or cooling heat exchangers (e.g. DX coil, chilled water coil, hot water coil, furnace, electric heater) that serves more than one thermostatic zone. Zones are thermostatically controlled by features including but not limited to variable volume, reheat, recool and concurrent operation of another system.
MULTISCENE PROGRAMMABLE SYSTEM MULTISCENE DIMMING SYSTEM	is a lighting control device that has the capability of setting light levels throughout a continuous range, and that has pre-established settings within the range.
MUNTINS	See <i>Dividers</i> .
MUSEUM	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i>
NEWLY CONDITIONED SPACE	is any space being converted from unconditioned to directly conditioned, or indirectly conditioned space. Newly conditioned space must comply with the requirements for an addition. See Section 149 for nonresidential occupancies and Section 152 for residential occupancies.
NEWLY CONSTRUCTED BUILDING	is a building that has never been used or occupied for any purpose.
NFRC	is the National Fenestration Rating Council. This is a national organization of fenestration product manufacturers, glazing manufacturers, manufacturers of related materials, utilities, state energy offices, laboratories, home builders, specifiers (architects), and public interest groups. This organization is designated by the Commission as the Supervisory Entity, which is responsible for rating the U-factors and solar heat gain coefficients of manufactured fenestration products (i.e., windows, skylights, glazed doors) that must be used in compliance calculations. <i>See also Fenestration Area and Fenestration Product.</i>
NFRC 100	is the National Fenestration Rating Council document entitled "NFRC 100: Procedure for Determining Fenestration Product U-factors" (November 2002).
NFRC 200	is the National Fenestration Rating Council document entitled "NFRC 200: Procedure for Determining Fenestration Product Solar Heat Gain Coefficients at Normal Incidence" (November 2002).
NFRC 400	is the National Fenestration Rating Council document entitled "NFRC 400: Procedure for Determining Fenestration Product Air Leakage" (January 2002).
NONDEPLETABLE SOURCES	is defined as energy that is not obtained from depletable sources. Also referred to as renewable energy, including solar and wind power. <i>See Energy Obtained from Nondepletable Sources</i>

Term	Definition
NONRESIDENTIAL BUILDING	<p><u>is any building which is a Group A, B, E, F, H, M, or S; and is a U Occupancy when the Group U Occupancy is on a nonresidential site</u>is any building which is a Group A, B, E, F, H, M, or S Occupancy</p> <p>NOTE:- Requirements for high-rise residential buildings and hotels/motels are included in the nonresidential sections of Title 24, Part 6.</p>
<u>NONRESIDENTIAL COMPLIANCE MANUAL</u> NONRESIDENTIAL MANUAL	is the manual developed by the Commission, under Section 25402.1(e) of the Public Resources Code, to aid designers, builders and contractors in meeting the energy efficiency requirements for nonresidential, high-rise residential, and hotel/motel buildings.
<u>NONSTANDARD PART LOAD VALUE (NPLV)</u>	<u>is a single-number part-load efficiency figure of merit for chillers referenced to conditions other than IPLV conditions. (See "Integrated Part Load Value")</u>
NORTH-FACING	<p>is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00' west of north (NW).</p> <p>This definition applies only to the prescriptive packages and master plans analyzed according to the multiple orientation alternative. In the computer methods the actual building orientation must be used, except in the case of master plans as stated above. <u>(See "orientation.")</u>.</p>
<u>NONRESIDENTIAL FUNCTION AREA OR TYPE OF USE</u> OCCUPANCY TYPE	<p>is one of the following:</p> <p><u>Atrium is a large-volume space created by openings connecting to or more stories and is used for purposes other than an enclosed stairway, an elevator hoistway, an escalator opening or as a utility shaft for plumbing, electrical, air conditioning, or other equipment and is not a mall</u></p> <p>Auditorium is the part of a public building where an audience sits in fixed seating, or a room, area, or building with fixed seats used for public meetings or gatherings not specifically for the viewing of dramatic performances.</p> <p>Auto repair is the portion of a building used to repair automotive equipment and/or vehicles, exchange parts, and may include work using an open flame or welding equipment.</p> <p><u>Beauty Salon is a room or area in which the primary activity is manicures, pedicures, facials, or the cutting or styling of hair. Also known as beauty shop or beauty parlor.</u></p> <p>Civic-meeting space is a city council or board of supervisors meeting chamber, courtroom, or other official meeting space accessible to the public .</p>

Term	Definition
OCCUPANCY TYPE CONT.	<p data-bbox="721 260 984 281">is one of the following:</p> <p data-bbox="764 306 1438 359">Classroom, lecture, or training is a room or area where an audience or class receives instruction.</p> <p data-bbox="764 384 1425 436">Commercial and industrial storage is a room, area, or building used for storing items.</p> <p data-bbox="764 462 1463 604">Convention, conference, multipurpose and meeting centers are assembly rooms, areas, or buildings used for meetings, conventions and multiple purposes, including but not limited to, dramatic performances, and that has neither fixed seating nor fixed staging.</p> <p data-bbox="764 630 1300 682">Corridor is a passageway or route into which compartments or rooms open.</p> <p data-bbox="764 707 1430 789">Dining is a room or rooms in a restaurant or hotel/motel (other than guest rooms) where meals that are served to the customers will be consumed.</p> <p data-bbox="764 814 1455 989">Dormitory is a building consisting of multiple sleeping quarters and having interior common areas such as dining rooms, reading rooms, exercise rooms, toilet rooms, study rooms, hallways, lobbies, corridors, and stairwells, other than high-rise residential, low-rise residential, and hotel/motel occupancies.</p> <p data-bbox="764 1014 1406 1096">Electrical/mechanical room is a room in which the building's electrical switchbox or control panels, and/or HVAC controls or equipment is located.</p> <p data-bbox="764 1121 1419 1203">Exercise center/gymnasium is a room or building equipped for gymnastics, exercise equipment, or indoor athletic activities.</p> <p data-bbox="764 1228 1430 1281">Exhibit is a room or area that is used for exhibitions that has neither fixed seating nor fixed staging.</p> <p data-bbox="764 1306 1414 1419">Financial institution is a public establishment used for conducting financial transactions including the custody, loan, exchange, or issue of money, for the extension of credit, and for facilitating the transmission of funds.</p> <p data-bbox="764 1444 1463 1526">General commercial and industrial work is a room, area, or building in which an art, craft, assembly or manufacturing operation is performed.</p> <p data-bbox="824 1551 1403 1604">High bay: Luminaires 25 feet or more above the floor.</p> <p data-bbox="824 1629 1411 1682">Low bay: Luminaires less than 25 feet above the floor.</p> <p data-bbox="764 1707 1442 1789">Grocery sales is a room, area, or building that has as its primary purpose the sale of foodstuffs requiring additional preparation prior to consumption.</p> <p data-bbox="764 1814 1463 1896">Hotel function area is a hotel room or area such as a hotel ballroom, meeting room, exhibit hall, or conference room, together with pre-function areas and other spaces and</p>

Term	Definition
OCCUPANCY TYPE CONT.	<p>ancillary to its function.</p> <p>Kitchen/food preparation is a room or area with cooking facilities and/or an area where food is prepared.</p> <p>Laundry is a place where laundering activities occur.</p> <p>Library is a repository for literary materials, such as books, periodicals, newspapers, pamphlets and prints, kept for reading or reference.</p> <p>Lobby, Hotel is the contiguous space in a hotel/motel between the main entrance and the front desk, including reception, waiting and seating areas.</p> <p>Lobby, Main entry is the contiguous space in buildings other than hotel/motel that is directly located by the main entrance of the building through which persons must pass, including reception, waiting and seating areas.</p> <p>Locker/dressing room is a room or area for changing clothing, sometimes equipped with lockers.</p>
<u>NONRESIDENTIAL FUNCTION AREA OR TYPE OF USE CONT.</u>	<p>is one of the following:</p> <p>Lounge/recreation is a room used for leisure activities which may be associated with a restaurant or bar.</p> <p>Mall is a roofed or covered common pedestrian area within a mall building that serves as access for two or more tenants.</p> <p>Medical and clinical care is a room, area, or building that does not provide overnight patient care and that is used to promote the condition of being sound in body or mind through medical, dental, or psychological examination and treatment, including, but not limited to, laboratories and treatment facilities.</p> <p>Museum is a space in which the primary function is the care or exhibit of works of artistic, historical, or scientific value. A museum does not include a gallery or other place where art is for sale. A museum does not include a lobby, conference room, or other occupancies where the primary function is not the care or exhibit of works of artistic, historical, or scientific value. is a space in which works of artistic, historical, or scientific value are cared for and exhibited.</p> <p>Office is a room, area, or building of CBC Group B Occupancy other than restaurants.</p> <p>Parking garage is a covered building or structure for the purpose of parking vehicles, which consists of at least a roof over the parking area, often with walls on one or more sides. Parking garages may have fences or rails in place of one or more walls. The structure has an entrance(s) and exit(s), and includes areas for vehicle maneuvering to reach the parking spaces. If the roof of a parking structure</p>

Term	Definition
	<p>is also used for parking, the section without an overhead roof is considered a parking lot instead of a parking garage.</p> <p>Precision commercial or industrial work is a room, area, or building in which an art, craft, assembly or a manufacturing operation is performed involving visual tasks of small size or fine detail such as electronic assembly, fine woodworking, metal lathe operation, fine hand painting and finishing, egg processing operations, or tasks of similar visual difficulty.</p> <p>Religious worship is a room, area, or building for worship.</p> <p>Restaurant is a room, area, or building that is a food establishment as defined in Section 27520 of the Health and Safety Code.</p> <p>Restroom is a room or suite of rooms providing personal facilities such as toilets and washbasins.</p> <p>Retail merchandise sales is a room, area, or building in which the primary activity is the sale of merchandise.</p> <p>School is a building or group of buildings that is predominately classrooms and that is used by an organization that provides instruction to students.</p>
<u>NONRESIDENTIAL FUNCTION AREA OR TYPE OF USE CONT.</u>	
OCCUPANCY TYPE CONT.	<p>is one of the following:</p> <p>Senior housing is housing other than Occupancy Group I that is specifically for habitation by seniors, including but not limited to independent living quarters, and assisted living quarters. Commons areas may include dining, reading, study, library or other community spaces and/or medical treatment or hospice facilities.</p> <p>Stairs, active/inactive, is a series of steps providing passage from one level of a building to another, <u>including escalators.</u></p> <p>Support area is a room or area used as a passageway, utility room, storage space, or other type of space associated with or secondary to the function of an occupancy that is listed in these regulations.</p> <p>Tenant lease space is a portion of a building intended for lease for which a specific tenant is not identified at the time of permit application.</p> <p>Theater, motion picture, is an assembly room, a hall, or a building with tiers of rising seats or steps for the showing of motion pictures.</p> <p>Theater, performance, is an assembly room, a hall, or a</p>

Term	Definition
	<p>building with tiers of rising seats or steps for the viewing of dramatic performances, lectures, musical events and similar live performances.</p> <p>Transportation function is the ticketing area, waiting area, baggage handling areas, concourse, or other areas not covered by primary functions in Table 146-C in an airport terminal, bus or rail terminal or station, subway or transit station, or marine terminal.</p> <p>Vocational room is a room used to provide training in a special skill to be pursued as a trade.</p> <p>Waiting area is an area other than a hotel lobby or main entry lobby normally provided with seating and used for people waiting.</p> <p>Wholesale showroom is a room where samples of merchandise are displayed.</p>
<u>NSHP GUIDEBOOK</u>	<u>is the California Energy Commission document entitled "New Solar Home Partnership Guidebook" that is in effect at the time of application for the building permit.</u>
OCCUPANT SENSOR, LIGHTING	<p><u>is a device that automatically turns lights off soon after an area is vacated. The term occupant sensor applies to a device that controls indoor lighting systems. When the device is used to control outdoor lighting systems, it is termed a motion sensor. The device also may be called an occupancy sensor, occupant-sensing device, or vacancy sensor.</u> is a device that automatically turns lights off soon after an area is vacated. The term Occupant Sensor applies to a device that controls interior lighting systems, but can be used interchangeably with occupancy sensor, occupant sensing device, and motion sensor.</p>
OFFICE	See <u>Occupancy Type Nonresidential Functional Area or Type of Use.</u>
OPERABLE SHADING DEVICE	is a device at the interior or exterior of a building or integral with a fenestration product, which is capable of being operated, either manually or automatically, to adjust the amount of solar radiation admitted to the interior of the building.
<u>ORIENTATION, EAST-FACING</u>	<u>is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).</u>
<u>ORIENTATION, NORTH-FACING</u>	<u>is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).</u>
<u>ORIENTATION, SOUTH-FACING</u>	<u>is oriented to within 45 degrees of true south including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).</u>

Term	Definition
<u>ORIENTATION, WEST-FACING</u>	<u>is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).</u>
ORNAMENTAL CHANDELIERS	are ceiling-mounted, close-to-ceiling, or suspended decorative luminaires that use glass, crystal, ornamental metals, or other decorative material and that typically are used in hotel/motels, restaurants, or churches as a significant element in the interior architecture.
ORNAMENTAL LIGHTING	See <i>Outdoor Lighting</i>
OUTDOOR AIR	is air taken from outdoors and not previously circulated in the building.
OUTDOOR LIGHTING	<p>definitions include the following:</p> <p>Building entrance is any operable doorway in or out of a building, including overhead doors.</p> <p>Building façade is the exterior surfaces of a building, not including horizontal roofing, signs, and surfaces not visible from any reasonable viewing location.</p> <p>Canopy <u>is a permanent structure, other than a parking garage as defined in Section 101, consisting of a roof and supporting building elements, with the area beneath at least partially open to the elements. A canopy may be freestanding or attached to surrounding structures. A canopy roof may serve as the floor of a structure above.</u></p> <p>Carport <u>is a covered, open-sided structure used solely for the purpose of parking vehicles, consisting of a roof over the parking area. Typically, carports are free-standing or projected from the side of the building and are only two or fewer car lengths deep.</u>is a permanent structure consisting of a roof and supporting building elements, with the area beneath at least partially open to the elements. A canopy may be freestanding or attached to surrounding structures. A canopy roof may serve as the floor of a structure above.</p> <p>Hardscape <u>is an improvement to a site that is paved or has other structural features, including but not limited to, curbs, plazas, entries, parking lots, site roadways, driveways, walkways, sidewalks, bikeways, water features and pools, storage or service yards, loading docks, amphitheaters, outdoor sales lots, and private monuments and statuary.</u>is an improvement to a site that is paved and has other structural features, including but not limited to, curbs, plazas, entries, parking lots, site roadways, driveways, walkways, sidewalks, bikeways, water features and pools, storage or service yards, loading docks, amphitheaters, outdoor sales lots, and private monuments and statuary.</p>
	<u>Landscape lighting is lighting that is recessed into or</u>

Term	Definition
OUTDOOR LIGHTING CONT.	<p><u>mounted on the ground, paving, or raised deck, which is mounted less than 42" above grade or mounted onto trees or trellises, and that is intended to be aimed only at landscape features.</u></p>
	<p>is lighting that is recessed into the ground or paving; mounted on the ground; mounted less than 42" above grade; or mounted onto trees or trellises, and that is intended to be aimed only at landscape features.</p>
	<p>Lantern is an ornamental outdoor luminaire that uses an electric lamp to replicate a pre-electric lantern, which used a flame to generate light.</p>
	<p>Lighting zone is a geographic area designated by the California Energy Commission that determines requirements for outdoor lighting, including lighting power densities and specific control, equipment or performance requirements. Lighting zones are numbered LZ1, LZ2, LZ3, and LZ4.</p>
	<p><u>Marquee lighting is a permanent lighting system consisting of one or more rows of many small lights, light emitting diodes (LEDs), or fiber optic lighting attached to a canopy.</u></p>
	<p>Marquee lighting is a permanent lighting system consisting of one or more rows of many small lights attached to a canopy.</p>
	<p>definitions include the following:</p>
	<p>Ornamental lighting is post-top luminaires, lanterns, pendant luminaires, chandeliers, and marquee lighting.</p>
	<p>Outdoor lighting is all electrical lighting for parking lots, signs, building entrances, outdoor sales areas, outdoor canopies, landscape lighting, lighting for building facades and hardscape lighting.</p>
	<p>Outdoor sales frontage is the portion of the perimeter of an outdoor sales area immediately adjacent to a street, road, or public sidewalk.</p>
	<p>Outdoor sales lot is an uncovered paved area used exclusively for the display of vehicles, equipment or other merchandise for sale. All internal and adjacent access drives, walkway areas, employee and customer parking areas, vehicle service or storage areas are not outdoor sales lot areas, but are considered hardscape.</p>
	<p>Parking lot <u>is a covered building or structure for the</u></p>

Term	Definition
<u>OUTDOOR LIGHTING CONT.</u>	<p><u>purpose of parking vehicles, which consists of at least a roof over the parking area enclosed with walls on all sides. Parking garages may have fences, rails, partial walls, or other barriers in place of one or more walls. The structure has an entrance(s) and exit(s), and includes areas for vehicle maneuvering to reach the parking spaces. If the roof of a parking structure is also used for parking, the section without an overhead roof is considered a parking lot instead of a parking garage.</u></p>
	<p>is an uncovered area for the purpose of parking vehicles. Parking lot is a type of hardscape.</p>
	<p>Paved area is an area that is paved with concrete, asphalt, stone, brick, gravel, or other improved wearing surface, including the curb.</p>
	<p>Pendant is a mounting method in which the luminaire is suspended from above.</p>
	<p>Post Top Luminaire is an ornamental outdoor luminaire that is mounted directly on top of a lamp-post.</p>
	<p>Principal viewing location is anywhere along the adjacent highway, street, road or sidewalk running parallel to an outdoor sales frontage</p>
	<p>Public monuments are statuary, buildings, structures, and/or hardscape on public land.</p>
	<p>Sales canopy is a canopy specifically to cover and protect an outdoor sales area.</p>
	<p><u>Stairs is a series of steps providing passage from one level of a building to another, including escalators.</u></p>
	<p>Vehicle service station is a gasoline, natural gas, diesel, or other fuel dispensing station. is a gasoline or diesel dispensing station.</p>
OUTDOOR SALES FRONTAGE	See <i>Outdoor Lighting</i>
OUTDOOR SALES LOT	See <i>Outdoor Lighting</i>
OUTSIDE AIR	See <i>Outdoor Air</i>
OVERALL HEAT GAIN	is the total heat gain through all portions of the building envelope calculated as specified in Section 143 (b) 2 for determining compliance with the Overall Envelope Approach.
OVERALL HEAT LOSS	is the total heat loss through all portions of the building envelope calculated as specified in Section 143 (b) 1 for determining compliance with the Overall Envelope Approach.
PACKAGED AIR CONDITIONER OR HEAT PUMP	is an air conditioner or heat pump that combines both the condenser and air handling capabilities in a single enclosure or package.
PANEL SIGN	See <i>Sign, Cabinet</i>

Term	Definition
PARKING GARAGE	See Occupancy Type <u>Nonresidential Functional Area or Type of Use</u>
PARKING LOT	See <u>Outdoor Lighting</u>
PART 6	is Title 24, Part 6 of the California Code of Regulations. See <u>Building Energy Efficiency Standards</u>
<u>PARTY PARTITION</u>	<u>is a wall, floor, or ceiling that separates the conditioned spaces of two different tenants.</u>
PAVED AREA	See <u>Outdoor Lighting</u>
PENDANT	See <u>Outdoor Lighting</u>
PERM	is equal to 1 grain of water vapor transmitted per 1 square foot per hour per inch of mercury pressure difference.
PERMANENTLY ATTACHED	is attached with fasteners that require additional tools to remove (as opposed to clips, hooks, latches, snaps, or ties).
<u>PERMANENTLY INSTALLED LIGHTING</u>	<u>includes all luminaires attached to the inside or outside of a building or site, including track and flexible lighting system; lighting attached to walls, ceilings, columns, inside or outside of permanently installed cabinets, internally illuminated case work, mounted on poles, in trees, or in the ground; attached to ceiling fans and integral to exhaust fans that are other than exhaust hoods for cooking equipment,. Permanently installed luminaires may have either plug-in or hardwired connections for electric power. Permanently installed lighting does not include portable lighting or lighting that is installed by the manufacturer in refrigerators, stoves, microwave ovens, exhaust hoods for cooking equipment, refrigerated cases, vending machines, food preparation equipment, and scientific and industrial equipment.</u>
<u>PHOTOCONTROL</u>	<u>is an electric device that detects changes in illumination levels then controls a lighting load at predetermined illumination levels. is an electric control that detects changes in illumination then controls its electric load at predetermined illumination levels.</u>
PLENUM	is an air compartment or chamber, including uninhabited crawl space, areas above a ceiling or below a floor, including air spaces below raised floors of computer/data processing centers, or attic spaces, to which one or more ducts are connected and which forms part of either the supply-air, return-air or exhaust air system, other than the occupied space being conditioned.
POOR QUALITY LIGHTING TASKS	are visual tasks that require Illuminance Category E or greater, because of the choice of a writing or printing method that produces characters that are of small size or lower contrast than good quality alternatives that are regularly used in offices.

Term	Definition
<u>PORTABLE LIGHTING</u>	is lighting with plug-in connections for electric power that is table and freestanding floor lamps, attached to modular furniture, workstation task lights, lights attached to workstation panels, movable displays, and other equipment that is not permanently installed lighting.
POST TOP LUMINAIRE	See <i>Outdoor Lighting</i>
PRECISION COMMERCIAL OR INDUSTRIAL WORK	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
<u>PRIMARY SIDELIT DAYLIGHT AREA</u>	(See <i>Daylight Area, Primary Sidelit</i>)
PRINCIPAL VIEWING LOCATION	See <i>Outdoor Lighting</i>
PRIVATE OFFICE OR WORK AREA	is an office bounded by 72-inch or higher permanent partitions and is no more than 200 square feet. See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
PROCESS	is an activity or treatment that is not related to the space conditioning, lighting, service water heating, or ventilating of a building as it relates to human occupancy.
<u>PROCESS SPACE</u>	is a space that is thermostatically controlled to maintain a process environment temperature less than 55° F or to maintain a process environment temperature greater than 90° F for the whole space that the system serves, or that is a space with a space-conditioning system designed and controlled to be incapable of operating at temperatures above 55° F or incapable of operating at temperatures below 90° F at design conditions.
PROCESS LOAD	is a load resulting from a process.
PROPOSED DESIGN	is the proposed building design which must comply with the standards before receiving a building permit. See also <i>Energy Budget and Standard Design</i> .
PUBLIC ADVISER	is the Public Adviser of the Commission.
PUBLIC AREAS	are spaces generally open to the public at large, customers, congregation members, or similar spaces, where occupants need to be prevented from controlling lights for safety, security, or business reasons.
PUBLIC MONUMENTS	See <i>Outdoor Lighting</i>
RADIANT BARRIER	is a highly reflective, low emitting material installed at the underside surface of the roof deck and the inside surface of gable ends or other exterior vertical surfaces in attics to reduce solar heat gain into the attic, as specified by Section 151(f)2.
RAISED FLOOR	is a floor (partition) over a crawl space, or an unconditioned space, or ambient air.

Term	Definition
READILY ACCESSIBLE	is capable of being reached quickly for operation, repair or inspection, without requiring climbing or removing obstacles, or resorting to access equipment.
REAR	See <i>Back</i> .
RECOOL	is the cooling of air that has been previously heated by space conditioning equipment or systems serving the same building.
RECORD DRAWINGS	are drawings that document the as installed location and performance data on all lighting and space conditioning system components, devices, appliances and equipment, including but not limited to wiring sequences, control sequences, duct and pipe distribution system layout and sizes, space conditioning system terminal device layout and air flow rates, hydronic system and flow rates, and connections for the space conditioning system. Record drawings are sometimes called "as built."
RECOVERED ENERGY	is energy used in a building that (1) is mechanically recovered from space conditioning, service water heating, lighting, or process equipment after the energy has performed its original function; (2) provides space conditioning, service water heating, or lighting; and (3) would otherwise be wasted.
RECOVERY EFFICIENCY	is one measure of the efficiency of water heaters. It is required for water heating energy calculations for some types of water heaters. It is a measure of the percentage of heat from combustion of gas or oil which is transferred to the water. For non-storage type water heaters, the recovery efficiency is really a thermal efficiency.
REDUCED FLICKER OPERATION	is the operation of a light, in which the light has a visual flicker less than 30% for frequency and modulation.
REFERENCE COMPUTER PROGRAM	is the reference method against which other methods are compared. For the nonresidential standards, the reference computer program is DOE 2.1E. For the low-rise residential standards the reference computer program is CALRES
REFLECTANCE, SOLAR	is the ratio of the reflected solar flux to the incident solar flux.
REFRIGERANT CHARGE	is to the amount of refrigerant that is installed or "charged" into an air conditioner or heat pump. The refrigerant is the working fluid. It is compressed and becomes a liquid as it enters the condenser. The hot liquid is cooled in the condenser and flows to the evaporator where it released through the expansion valve. When the pressure is released, the refrigerant expands into a gas and cools. Air is passed over the evaporator to provide the space cooling. When an air conditioner or heat pump has too much refrigerant (overcharged) the compressor may be damaged. When an air conditioner has too little refrigerant (undercharged), the efficiency of the unit is reduced. A <i>thermostatic expansion valve (TXV)</i> can mitigate the impact of improper refrigerant charge.

Term	Definition
REFRIGERATED CASE	is a manufactured commercial refrigerator or freezer, including but not limited to display cases, reach-in cabinets, meat cases, and frozen food and soda fountain units.
<u>REFRIGERATED WAREHOUSE</u>	<u>is a building or a space constructed for storage of products, where mechanical refrigeration is used to maintain the space temperature at 55° F or less.</u>
<u>REFRIGERATED SPACE</u>	<u>is building or a space that may be a refrigerated warehouse, walk-in cooler, or a freezer.</u>
REHEAT	is the heating of air that has been previously cooled by cooling equipment or systems or an economizer.
RELATIVE SOLAR HEAT GAIN	is the ratio of solar heat gain through a fenestration product (corrected for external shading) to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.
RELIGIOUS WORSHIP	See Occupancy Type <u>Nonresidential Functional Area or Type of Use</u> .
RELOCATABLE PUBLIC SCHOOL BUILDING	is a relocatable building as defined by Title 24, Part 1, Section 4-314, which is subject to Title 24, Part 1, Chapter 4, Group 1.
REPAIR	<u>is the reconstruction or renewal for the purpose of maintenance of any component, system, or equipment of an existing building. Replacement of any component, system, or equipment for which there are requirements in the Standards is considered an alteration and not a repair.</u> is the reconstruction or renewal of any part of an existing building for the purpose of its maintenance. NOTE: Repairs to low-rise residential buildings are not within the scope of these standards.
RESIDENTIAL BUILDING	See <i>High-Rise Residential Building and Low-Rise Residential Building</i> .
<u>RESIDENTIAL COMPLIANCE MANUAL</u> RESIDENTIAL MANUAL	is the manual developed by the Commission, under Section 25402.1 of the Public Resources Code, to aid designers, builders, and contractors in meeting energy efficiency standards for low-rise residential buildings.

Term	Definition
<u>RESIDENTIAL SPACE TYPE</u>	<p>is one of the following:</p> <p>Bathroom is a room or area containing a sink used for personal hygiene, toilet, shower, or a tub.</p> <p>Closet is a non-habitable room used for the storage of linens, household supplies, clothing, non-perishable food, or similar uses, and which is not a hallway or passageway.</p> <p>Garage is a non-habitable building or portion of building, attached to or detached from a residential dwelling unit, in which motor vehicles are parked.</p> <p>Kitchen is a room or area used for cooking, food storage and preparation and washing dishes, including associated counter tops and cabinets, refrigerator, stove, ovens, and floor area. Adjacent areas are considered kitchen if the lighting for the adjacent areas is on the same switch as the lighting for the kitchen.</p> <p>Laundry is a non-habitable room or space which contains plumbing and electrical connections for a washing machine or clothes dryer.</p> <p>Storage Building is a non-habitable detached building used for the storage of tools, garden equipment, or miscellaneous items.</p> <p>Utility Room is a non-habitable room or building which contains only HVAC, plumbing, or electrical controls or equipment; and which is not a bathroom, closet, garage, or laundry room.</p>
RESTAURANT	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>
RESTROOM	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>
RETAIL MERCHANDISE SALES	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>
RIGHT SIDE	is the right side of the building as one faces the front facade from the outside (see <i>Front</i>). This designation is used to indicate the orientation of fenestration and other surfaces, especially in model homes that are constructed in multiple orientations.
ROOF	is the outside cover of a building or structure including the structural supports, decking, and top layer that is exposed to the outside with a slope less than 60 degrees from the horizontal. See Exterior Roof/Ceiling.
<u>ROOFING PRODUCT</u>	is the top layer(s) of the roof that is exposed to the outside, which has properties including but not limited to reflectance, emittance, and mass.
<u>ROOF/CEILING TYPE</u>	is a type of roof/ceiling assembly that has a specific framing type and U-factor.

Term	Definition
RUNOUT	is piping that is no more than 12 feet long and that connects to a fixture or an individual terminal unit. is piping that is no more than 12 feet long and that is connected to a fixture or an individual terminal unit.
R-VALUE	is the measure of the thermal resistance of insulation or any material or building component expressed in (ft²-hr °F)/Btu. ft²-hr °F/Btu. See <i>Thermal Resistance</i>
SALES CANOPY	See <i>Outdoor Lighting</i>
SC	See <i>Shading Coefficient</i> .
SCHOOL	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i> .
SCIENTIFIC EQUIPMENT	is measurement, testing or metering equipment used for scientific research or investigation, including but not limited to manufactured cabinets, carts and racks.
SCONCE	is a wall mounted ornamental luminaire.
SEASONAL ENERGY EFFICIENCY RATIO (SEER)	is the total cooling output of a central air conditioner in Btu during its normal usage period for cooling divided by the total electrical energy input in watt-hours during the same period, as determined using the applicable test method in the Appliance Efficiency Regulations.
SENIOR HOUSING	See Occupancy Type <i>Nonresidential Functional Area or Type of Use</i>
<u>SECONDARY SIDELIT DAYLIGHT AREA</u>	<u>(See Daylight Area, Secondary Sidelit)</u>
SERIES FAN-POWERED TERMINAL UNIT	is a terminal unit that combines a VAV damper in series with a downstream fan which runs at all times that the terminal unit is supplying air to the space.
SERVICE WATER HEATING	is heating of water for sanitary purposes for human occupancy, other than for comfort heating.
SHADING	is the protection from heat gains because of direct solar radiation by permanently attached exterior devices or building elements, interior shading devices, glazing material, or adherent materials. Permanently attached means (a) attached with fasteners that require additional tools to remove (as opposed to clips, hooks, latches, snaps, or ties); or (b) required by the CBC for emergency egress to be removable from the interior without the use of tools.
SHADING COEFFICIENT (SC)	is the ratio of the solar heat gain through a fenestration product to the solar heat gain through an unshaded 1/8 inch thick clear double strength glass under the same set of conditions. For nonresidential, high-rise residential, and hotel/motel buildings, this shall exclude the effects of mullions, frames, sashes, and interior and exterior shading devices. See also <i>Solar Heat Gain Coefficient</i> .

Term	Definition
SIDE FINS	are vertical shading elements mounted on either side of a glazed opening that can protect the glazing from lateral low angle sun penetration.
<i>SIGN</i>	<p>definitions include the following:</p> <p>Illuminated face is a side of a sign that has the message on it. For an exit sign it is the side that has the word "EXIT" on it.</p> <p>Sign, cabinet is an internally illuminated sign consisting of frame and face(s), with a continuous translucent message panel, also referred to as a panel sign</p> <p>Sign, channel letter is an internally illuminated sign with multiple components, each built in the shape of an individual three dimensional letter or symbol that are each independently illuminated, with a separate translucent panel over the light source for each element.</p> <p>Sign, double-faced is a sign with two parallel opposing faces.</p> <p>Sign, externally illuminated is any sign or a billboard that is lit by a light source that is external to the sign directed towards and shining on the face of the sign.</p> <p>Sign, internally illuminated is a sign that is illuminated by a light source that is contained inside the sign where the message area is luminous, including cabinet signs and channel letter signs.</p> <p>Sign, traffic is a sign for traffic direction, warning, and roadway identification.</p> <p>Sign, unfiltered is a sign where the viewer perceives the light source directly as the message, without any colored filter between the viewer and the light source, including neon, cold cathode, and LED signs.</p>
SINGLE ZONE	is an HVAC system with a supply fan (and optionally a return fan) and heating and/or cooling heat exchangers (e.g. DX coil, chilled water coil, hot water coil, furnace, electric heater) that serves a single thermostatic zone. This system may or may not be constant volume.
SITE SOLAR ENERGY	is natural daylighting, or thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.

Term	Definition
<u>SINGLE PACKAGE VERTICAL AIR CONDITIONER (SPVAC)</u>	is a type of air-cooled small or large commercial package air-conditioning and heating equipment; factory assembled as a single package having its major components arranged vertically, which is an encased combination of cooling and optional heating components; is intended for exterior mounting on, adjacent interior to, or through an outside wall; and is powered by single or three-phase current. It may contain separate indoor grille(s), outdoor louvers, various ventilation options, indoor free air discharge, ductwork, wall plenum, or sleeve. Heating components may include electrical resistance, steam, hot water, gas, or no heat but may not include reverse cycle refrigeration as a heating means.
<u>SINGLE PACKAGE VERTICAL HEAT PUMP (SPVHP)</u>	is an SPVAC that utilizes reverse cycle refrigeration as its primary heat source, with secondary supplemental heating by means of electrical resistance, steam, hot water, or gas. ¹
SITE-BUILT FENESTRATION	is fenestration designed to be field-glazed or field assembled units using specific factory cut or otherwise factory formed framing and glazing units that are manufactured with the intention of being assembled at the construction site and are provided with an NFRC label certificate for site-built fenestration. Examples of site-built fenestration include storefront systems, curtain walls, and atrium roof systems.
<u>SITE SOLAR ENERGY</u>	is thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.
SKYLIGHT	is fenestration installed on a roof, less than 60 degrees from the horizontal. is glazing having a slope less than 60 degrees from the horizontal with conditioned or unconditioned space below.
SKYLIGHT AREA	is the area of the rough opening for the skylight.
SKYLIGHT TYPE	is a type of skylight assembly having a specific solar heat gain coefficient and U-factor, whether glass mounted on a curb, glass not mounted on a curb or plastic (assumed to be mounted on a curb).
<u>SKYLIT DAYLIGHT AREA</u>	(See Daylight Area, Skylit)
SLAB-ON-GRADE	is an exterior concrete floor in direct contact with the earth below the building.
SMACNA	is the Sheet Metal and Air-conditioning Contractors National Association.
SMACNA RESIDENTIAL COMFORT SYSTEM INSTALLATION STANDARDS MANUAL	is the Sheet Metal Contractors' National Association document entitled "Residential Comfort System Installation Standards Manual, Seventh Edition" (1998).
SOFT COAT	is a low emissivity metallic coating applied to glass, which will be installed in a fenestration product through a sputter process where molecules of metals such as stainless steel or titanium are sputtered onto the surface of glass. Soft coats generally have lower emissivity than hard coats.

Term	Definition
SOLAR HEAT GAIN COEFFICIENT (SHGC)	is the ratio of the solar heat gain entering the space through the fenestration area to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.
<u>SOLAR HEAT GAIN COEFFICIENT, CENTER OF GLAZING (SHGCc)</u>	<u>is the SHGC for the center of glazing area.</u>
<u>SOLAR HEAT GAIN COEFFICIENT, TOTAL FENESTRATION PRODUCT (SHGC or SHGct)</u>	<u>is the SHGC for the total fenestration product.</u>
SOLAR REFLECTANCE	See <i>Reflectance</i> .
<u>SOLAR REFLECTANCE INDEX (SRI)</u>	<u>is a measure of the roof's ability to reject solar heat which includes both reflectance and emittance.</u>
SOUTH-FACING	<u>(See "orientation.")</u> is oriented to within 45 degrees of true south including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
SPA	is a vessel that contains heated water, in which humans can immerse themselves, is not a pool, and is not a bathtub.
SPACE CONDITIONING SYSTEM	is a system that provides either collectively or individually heating, ventilating, or cooling within or associated with conditioned spaces in a building. The system may operate alone or in conjunction with other systems. See <i>Heating, Ventilating and Air Conditioning System</i> .
SPACER, ALUMINUM	is a metal channel that is used either against the glass (sealed along the outside edge of the insulated glass unit), or separated from the glass by one or more beads of caulk, which is used to separate panes of glass in an insulated glass unit.
SPACER, INSULATING	is a non-metallic, relatively non-conductive material, usually of rubber compounds, that is used to separate panes of glass in an insulated glass unit.
SPACER, OTHER	is a wood, fiberglass, or composite material that is used as a spacer between panes of glass in insulated glass units.
SPACER, SQUIGGLE	is a flexible material, usually butyl, formed around a thin corrugated aluminum strip that is used as a spacer in insulated glass units.
SPECIFIC HEAT	is the quantity of heat that must be added to a unit mass of a material to increase its temperature by one degree. Typical units are Btu/°F-lb.
SPLIT SYSTEM AIR CONDITIONER OR HEAT PUMP	Is an air conditioner or heat pump that has physically separate condenser and air handling units that work together as a single cooling system.
STAIRS, ACTIVE / INACTIVE	See Occupancy Type <u>Nonresidential Functional Area or Type of Use</u> .

Term	Definition
STANDARD DESIGN	is a hypothetical building that is used to calculate the custom budget for nonresidential and residential buildings. A new building or addition alone complies with the standards if the predicted source energy use of the <i>proposed design</i> is the same or less than the annual budget for space conditioning and water heating of the Standard Design. The Standard Design is substantially similar to the Proposed Design, except it is in exact compliance with the prescriptive requirements and the mandatory measures.
STANDARDS	See <i>Building Energy Efficiency Standards</i> .
STANDBY LOSS, BTU/HR	is the heat lost per hour from the stored water above room temperature. It is one of the measures of efficiency of water heaters required for water heating energy calculations for some types of water heaters. This standby loss is expressed as Btu/hr.
STANDBY LOSS, PERCENT	is the ratio of heat lost per hour to the heat content of the stored water above room temperature. It is one of the measures of efficiency of water heaters required for water heating energy calculations for some types of water heaters. Standby loss is expressed as a percentage.
<i>STEPPED DIMMING</i>	(See "dimming, stepped.") is a lighting control method that varies the light output of lamps in one or more predetermined discrete steps between full light output and off.
<i>STEPPED SWITCHING</i>	is a lighting control method that varies the light output of a lighting system with the intent of maintaining approximately the relative uniformity of illumination by turning off alternate groups of lamps or luminaires.
<u>STORAGE, COOL</u>	is a storage area within a refrigerated warehouse where space temperatures are maintained between 32° F and 55° F.
<u>STORAGE, COLD</u>	is a storage area within a refrigerated warehouse where space temperatures are maintained at or above 32° F.
<u>STORAGE, FROZEN</u>	is a storage area within a refrigerated warehouse where the space temperatures are maintained below 32° F.
SUBORDINATE OCCUPANCY	is any occupancy type, in mixed occupancy buildings, that is not the dominant occupancy. See <i>Dominant Occupancy, Mixed Occupancy</i> .
SUCTION LINE	is the refrigerant line that leads from the evaporator to the condenser in a split system air conditioner or heat pump. This line is insulated since it carries refrigerant at a low temperature.
SUPPORT AREA	See <i>Occupancy Type Nonresidential Functional Area or Type of Use</i> .
SUSPENDED FILMS	are low-e coated plastic films stretched between the elements of the spacers between panes of glazing; acts as a reflector to slow the loss of heat from the interior to the exterior.

Term	Definition
SYSTEM	is a combination of equipment, controls, accessories, interconnecting means, or terminal elements by which energy is transformed to perform a specific function, such as space conditioning, service water heating, or lighting.
TASK LIGHTING	is lighting that is designed specifically to illuminate a task location, and that is generally confined to the task location. See also <i>Lighting, General Lighting</i> .
TDV ENERGY	See <i>Time Dependent Valuation (TDV) Energy</i> .
TEMPORARY LIGHTING	is a lighting installation with plug-in connections that does not persist beyond 60 consecutive days or more than 120 days per year. is a lighting installation where temporary connections, such as cord and plug, are used for electric power, and for which the installation does not persist beyond 60 consecutive days or more than 120 days per year.
TEMPORARY LIGHTING	is a lighting installation where temporary connections, such as cord and plug, are used for electric power, and for which the installation shall not persist beyond 60 days or more than 120 days per year.
TENANT LEASE SPACE	See <i>Occupancy Type Nonresidential Functional Area or Type of Use</i>
THEATER, MOTION PICTURE	See <i>Occupancy Type Nonresidential Functional Area or Type of Use</i> .
THEATER, PERFORMANCE:	See <i>Occupancy Type Nonresidential Functional Area or Type of Use</i> .
THERMAL BREAK WINDOW FRAME	is metal fenestration frames that are not solid metal from the inside to the outside, but are separated in the middle by a material, usually urethane, with a lower conductivity.
THERMAL CONDUCTIVITY	is the quantity of heat that will flow through a unit area of the material per hour when the temperature difference through the material is one degree.
THERMAL EMITTANCE	See <i>Emittance</i> .
THERMAL MASS	is solid or liquid material used to store heat for later heating use or for reducing cooling requirements.
THERMAL RESISTANCE (R)	is the resistance of a material or building component to the passage of heat in (hr. x ft. ² x °F)/Btu.
THERMOSTATIC EXPANSION VALVE (TXV)	is a refrigerant metering valve, installed in an air conditioner or heat pump, which controls the flow of liquid refrigerant entering the evaporator in response to the superheat of the gas leaving it.
THROW DISTANCE	is the distance between the luminaire and the center of the plane lit by the luminaire on a display.

Term	Definition
TIME DEPENDENT VALUATION (TDV) ENERGY	<p>is the time varying energy caused to be used at by the building to provide space conditioning and water heating and for specified buildings lighting. <u>TDV energy accounts for the energy used at the building site and consumed in producing and in delivering energy to a site, including, but not limited to, power generation, transmission and distribution losses.</u></p> <p>g, accounting for the energy used at the building site and consumed in producing and in delivering energy to a site, including, but not limited to, power generation, transmission and distribution losses.</p>
TITLE 24	is all of the building standards and associated administrative regulations published in Title 24 of the <i>California Code of Regulations</i> . The <i>Building Energy Efficiency Standards</i> are contained in Part 6. Part 1 contains the administrative regulations for the building standards.
TRAFFIC SIGN	See <i>Sign</i>
U-FACTOR	is the overall coefficient of thermal transmittance of a construction assembly, in Btu/(hr. x ft. ² x °F), including air film resistance at both surfaces.
<u>U-FACTOR, CENTER OF GLAZING (U-FACTOR_c)</u>	<u>is the U-Factor for the center of glazing area.</u>
<u>U-FACTOR, TOTAL FENESTRATION PRODUCT (U-FACTOR or U-FACTOR_t)</u>	<u>is the U-Factor for the total fenestration product.</u>
UIMC	See <i>Unit Interior Mass Capacity</i>
UL	is the Underwriters Laboratories.
UL 181	is the Underwriters Laboratories document entitled "Standard for Factory-Made Air Ducts and Air Connectors," 1996.
UL 181A	is the Underwriters Laboratories document entitled "Standard for Closure Systems for Use With Rigid Air Ducts and Air Connectors," 1994.
UL 181B	is the Underwriters Laboratories document entitled "Standard for Closure Systems for Use With Flexible Air Ducts and Air Connectors," 1995.
UL 723	is the Underwriters Laboratories document entitled "Standard for Test for Surface Burning Characteristics of Building Materials," 1996.
UL 727	is the Underwriters Laboratories document entitled "Standard for Oil-Fired Central Furnaces," 1994.
UL 731	is the Underwriters Laboratories document entitled "Standard for Oil-Fired Unit Heaters," 1995.
UL 1598	is the Underwriters Laboratories document entitled "Standard for Luminaires," 2000.
UNCONDITIONED SPACE	is enclosed space within a building that is not directly conditioned or indirectly conditioned.

Term	Definition
UNFILTERED SIGN	See <i>Sign</i>
UNIT INTERIOR MASS CAPACITY (UIMC)	is the amount of effective heat capacity per unit of thermal mass, taking into account the type of mass material, thickness, specific heat, density and surface area. See also <i>Thermal Mass</i> .
U-VALUE	See <i>U-factor</i> .
<u>VACANCY SENSOR, LIGHTING</u>	<u>is an occupant sensor for which the lights must be manually turned on but the sensor automatically turns the lights off soon after an area is vacated. The device also may be called a manual-on occupant sensor.</u>
VAPOR BARRIER	is a material that has a permeance of one perm or less and that provides resistance to the transmission of water vapor.
VARIABLE AIR VOLUME (VAV) SYSTEM	is a space conditioning system that maintains comfort levels by varying the volume of conditioned air to the zones served.
VEHICLE SERVICE STATION CANOPY	See <i>Outdoor Lighting</i>
VENDING MACHINE	is a machine for vending and dispensing refrigerated or non-refrigerated food and beverages or general merchandise. is a commercial, coin-operated machine for vending of refrigerated or non-refrigerated food and beverages or general merchandise.
VENTILATION AIR	is that portion of supply air which comes from outside plus any recirculated air that has been treated to maintain the desired quality of air within a designated space. See also <i>Outside Air</i> .
VERTICAL GLAZING	See <i>Window</i> .
VERY VALUABLE MERCHANDISE	is rare or precious objects, including, but not limited to, jewelry, coins, small art objects, crystal, china, ceramics, or silver, the selling of which involves customer inspection of very fine detail from outside of a locked case.
VINYL WINDOW FRAME	is a fenestration frame constructed with a polyvinyl chloride (PVC) which has a lower conductivity than metal and a similar conductivity to wood.
<u>VISIBLE TRANSMITTANCE (VT)</u> VISIBLE LIGHT TRANSMITTANCE (VLT)	is the ratio (expressed as a decimal) of visible light that is transmitted through a glazing material to the light that strikes the material.
<u>VISIBLE TRANSMITTANCE, CENTER OF GLAZING (VTc)</u>	<u>is the VT for the center of glazing area.</u>
<u>VISIBLE TRANSMITTANCE, TOTAL FENESTRATION PRODUCT (VT or VTt)</u>	<u>is the VT for the total fenestration product.</u>
VOCATIONAL ROOM	See Occupancy Type <u>Nonresidential Functional Area or Type of Use.</u>

Term	Definition
WAITING AREA	See Occupancy Type <u>Nonresidential Functional Area or Type of Use</u>
WALL TYPE	is a type of wall assembly that has a specific heat capacity, framing type, and U-factor.
WEATHERSTRIPPING	is a specially designed strip, seal or gasket attached to doors and windows to prevent infiltration and exfiltration through cracks around the openings. Weatherstripping is one of the mandatory requirements for all new residential construction. See <i>Infiltration, Exfiltration</i> .
WEIGHTED AVERAGING	is an arithmetic technique for determining an average of differing values for the members of a set by weighting each value by the extent to which the value occurs. In some cases when two or more types of a building feature, material or construction assembly occur in a building, a weighted average of the different types may be sufficiently accurate to represent the energy impact of each type considered separately.
WEST-FACING	<u>(See "orientation.")</u> is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).
WHOLESALE SHOWROOM:	See Occupancy Type <u>Nonresidential Functional Area or Type of Use</u> .
WINDOW	is fenestration that is not a skylight.
WINDOW AREA	is the area of the surface of a window, plus the area of the frame, sash, and mullions.
WINDOW TYPE	is a window assembly having a specific solar heat gain coefficient, relative solar heat gain, and U-factor.
WINDOW WALL RATIO	is the ratio of the window area to the gross exterior wall area.
WOOD HEATER	is an enclosed wood burning appliance used for space heating and/or domestic water heating.
WOOD STOVE	See <i>Wood Heater</i> .
ZONAL CONTROL	is the practice of dividing a residence into separately controlled HVAC zones. This may be done by installing multiple HVAC systems that condition a specific part of the building, or by installing one HVAC system with a specially designed distribution system that permits zonal control. The Energy Commission has approved an alternative calculation method for analyzing the energy impact of zonally controlled space heating and cooling systems. To qualify for compliance credit for zonal control, specific eligibility criteria specified in the Residential ACM Manual must be met.
<u>ZONE, CRITICAL</u>	<u>is a zone serving a process where reset of the zone temperature setpoint during a demand shed event might disrupt the process, including but not limited to data centers, telecom and private branch exchange (PBX) rooms, and laboratories.</u>

Term	Definition
<u>ZONE, NON-CRITICAL</u>	<u>is a zone that is not a critical zone.</u>
ZONE, SPACE CONDITIONING	is a space or group of spaces within a building with sufficiently similar comfort conditioning requirements so that comfort conditions, as specified in Section 144 (b) 3 or 150 (h), as applicable, can be maintained throughout the zone by a single controlling device for each zone.

End Notes

The following notes are an explanation of the changes that have been made. These notes are not part of the Standard.

ⁱ The definitions of SPVAC and SPVHP are added to support new equipment classes added to §112 per ASHRAE 90.1-2007.