



CBECS

Commercial Buildings
Energy Consumption Survey

Show Cards



Respondent Function

- 1 Operations, maintenance, or engineering
- 2 Property management
- 3 Store management
- 4 Mall management
- 5 Administration or company management
- 6 Energy or environmental management
- 7 Building owner
- 8 Business owner
- 9 Accounting, finances, or payroll
- 10 Executive official
- 11 School official
- 12 Religious official
- 13 Support staff
- 14 Other

Square Footage Category

- 1** 1,000 square feet or less
(1,000 square feet is approximately 2 times the size of a two-car garage)
- 2** 1,001 to 5,000 square feet
(Example: fast food restaurant)
- 3** 5,001 to 10,000 square feet
(Example: sit-down style chain restaurant)
- 4** 10,001 to 25,000 square feet
(Example: one- or two-screen movie theater)
- 5** 25,001 to 50,000 square feet
(Example: supermarket)
- 6** 50,001 to 100,000 square feet
(Example: large discount or home improvement store)
- 7** 100,001 to 200,000 square feet
(Example: 3-level department store)
- 8** 200,001 to 500,000 square feet
(Example: professional basketball arena)
- 9** 500,001 to 1 million square feet
(Example: convention center)
- 10** Over 1 million square feet
(Example: skyscraper)

Wall Construction Material

- 1** Brick, stone, or stucco
- 2** Pre-cast concrete panels
- 3** Concrete block or poured concrete
(above grade)
- 4** Aluminum, asbestos, plastic, or wood materials
(siding, shingles, tiles, or shakes)
- 5** Sheet metal panels
- 6** Window or vision glass
(Glass that can be seen through from inside the building)
- 7** Decorative or construction glass
*(Glass that can NOT be seen through. Includes exterior decorative coverings such as glass blocks or spandrels.
Decorative or construction glass is sometimes used to give a building a uniform appearance and may look just like window glass when viewed from the street.)*

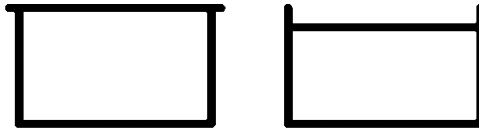
Roof Construction Material

- 1 Built-up
(tar, felts, or fiberglass and a ballast, such as stone)
- 2 Slate or tile shingles
- 3 Wood shingles, shakes, or other wooden materials
- 4 Asphalt, fiberglass, or other shingles
- 5 Metal surfacing
- 6 Plastic, rubber, or synthetic sheeting
(single or multiple ply)
- 7 Concrete

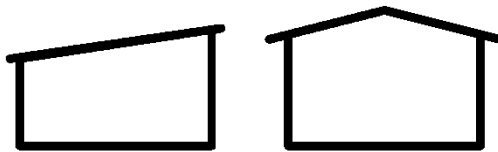
Roof Tilt

(profile view)

1 Flat

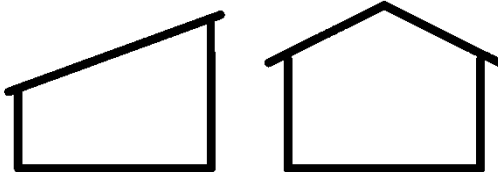


2 Shallow pitch



(3 in 12 or less; 14° or less)


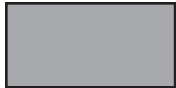

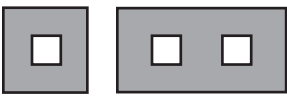

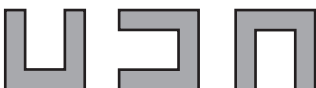




3 Steeper pitch



(more than 3 in 12; more than 14°)

Building Shape

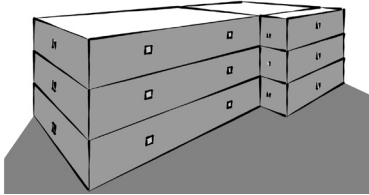
(view from above)

- | | | |
|----|--|---|
| 1 | Square |  |
| 2 | Wide rectangle |  |
| 3 | Narrow rectangle |  |
| 4 | Rectangle or square with an interior courtyard |  |
| 5 | "H" shaped |  |
| 6 | "U" shaped |  |
| 7 | "E" shaped |  |
| 8 | "T" shaped |  |
| 9 | "L" shaped |  |
| 10 | "+" or cross shaped |  |
| 11 | Other shape | |

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and begins on the next page

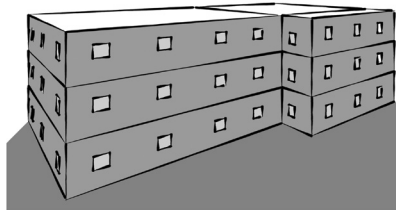
Percent Exterior Glass

- 1 1 percent or less



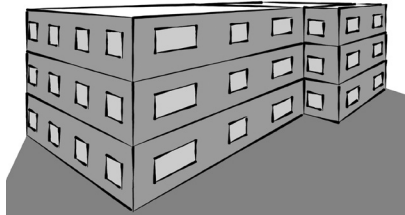
1 percent glass

- 2 2 to 10 percent



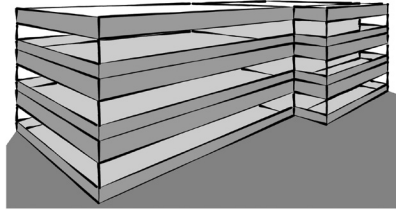
6 percent glass

- 3 11 to 25 percent



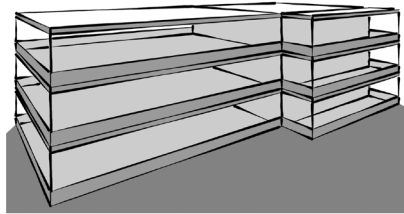
18 percent glass

4 26 to 50 percent



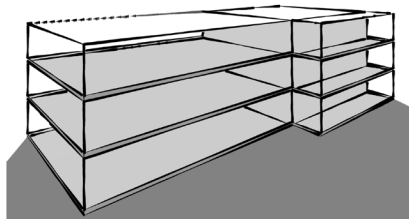
40 percent glass

5 51 to 75 percent



65 percent glass

6 76 to 100 percent



90 percent glass

Year of Construction Category

- 1** Before 1920
- 2** 1920 to 1945
- 3** 1946 to 1959
- 4** 1960 to 1969
- 5** 1970 to 1979
- 6** 1980 to 1989
- 7** 1990 to 1999
- 8** 2000 to 2003
- 9** 2004 to 2007
- 10** 2008 to 2012

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and begins on the next page

Types of Renovations

(choose ALL that apply)

- 1 Addition or annex
- 2 Reduction of enclosed floorspace
(Example: *demolition of unused wing of building*)
- 3 Interior or exterior cosmetic improvements
(Example: *new paint, siding, furniture, wallpaper, or carpeting*)
- 4 Interior wall re-configuration
(Example: *individual offices turned into area for cubicles*)
- 5 Roof replacement
- 6 Exterior wall replacement
- 7 Window replacement
- 8 HVAC (heating, ventilation, or air conditioning) equipment upgrade

- 9 Lighting upgrade
- 10 Plumbing system upgrade
(Includes hot water heaters)
- 11 Electrical upgrade
- 12 Insulation upgrade
- 13 Fire, safety, or security upgrade
- 14 Structural upgrade
(Example: foundation upgrade, seismic upgrade)
- 15 Other

Activity in Building

- 11 Office/Professional
- 12 Data center/Computer “server farm”
- 13 Warehouse/Storage
- 14 Food sales or service
- 15 Enclosed mall
- 16 Retail (*other than mall*)
- 17 Education
- 18 Religious worship
- 19 Public assembly
- 20 Health care
- 21 Service
- 22 Lodging
- 23 Public order and safety
- 24 Residential
- 25 Industrial
- 26 Agricultural
- 27 Vacant
- 28 Other (*Includes enclosed parking garages*)

Office Type

- 1** Administrative or professional office building
(Examples: *consulting, insurance, law, utility / telephone company, publishing, or college administration*)
- 2** Government office
- 3** Mixed-use office
- 4** Bank or other financial institution
- 5** Doctor's or dentist's office
- 6** Sales or leasing office
(Examples: *vehicles or real estate*)
- 7** Contractor's office
(Examples: *construction, plumbing, or HVAC*)
- 8** Non-profit or social services office
- 9** Research and development office
- 10** City hall or city center
- 11** Religious office
- 12** Call center
- 13** Courthouse or probation office
- 14** Library
- 15** Veterinarian's office
- 16** Vacant
- 17** Other type of office

Warehouse Type

- 1 Non-refrigerated warehouse or storage building
- 2 Refrigerated warehouse
- 3 Distribution or shipping center
- 4 Public rental storage units
- 5 Vehicle storage and/or maintenance (car barn)
- 6 Airplane hangar
- 7 Vacant
- 8 Other type of warehouse

Food Sales or Service Type

- 1 Restaurant or cafeteria
- 2 Fast food
- 3 Bar, pub, or lounge
- 4 Grocery store or food market
- 5 Gas station with a convenience store
- 6 Convenience store
- 7 Beer, wine, or liquor store
- 8 Reception hall
- 9 Catering service
- 10 Coffee, doughnut, or bagel shop
- 11 Ice cream or frozen yogurt shop
- 12 Bakery
- 13 Vacant
- 14 Other type of food sales or service

Retail Type

- 1 Retail store
(Examples: department store, furniture, clothing, hardware, drugstore, bookstore, building supplies, auto parts, lumber, home improvement, farm equipment, lawn and garden, floral, crafts, gifts, antiques, pawn shop, or wholesale club)
- 2 Bank or other financial institution
- 3 Convenience store
- 4 Beer, wine, or liquor store
- 5 Rental center
(Examples: equipment, furnishings, or movies)
- 6 Dealership or showroom for vehicles or boats
- 7 Studio or gallery
- 8 Grocery store or food market
- 9 Photo processing shop
- 10 Copy center or printing service
- 11 Distribution or shipping center
- 12 Gas station with a convenience store
- 13 Gas station without convenience store
- 14 Post office or postal center
- 15 Recreation
(Examples: gymnasium, health club, bowling alley, ice rink, field house, or indoor racquet sports)
- 16 Repair shop
- 17 Vacant
- 18 Other type of retail

Type of Store

- 1 Apparel specialty
- 2 Drug store
- 3 Home center or hardware store
- 4 Electronics or appliance store
- 5 Other specialty merchandise (hard-line goods)
(Examples: toys, sporting goods, books, office supplies, crafts, or home furnishings)
- 6 Department store
- 7 Warehouse club
- 8 Discount or supercenter
- 9 Other type of store

Education Type

- 1** Elementary or middle school
(Includes junior high school)
- 2** High school
- 3** College or university
- 4** Preschool or daycare
- 5** Adult education
- 6** Career or vocational training
- 7** Religious education
- 8** Library
- 9** Laboratory
- 10** Vacant
- 11** Other type of classroom education

Public Assembly Type

- 1** Social or meeting
(Examples: *community center, lodge, meeting hall, convention center, or senior center*)
- 2** Recreation
(Examples: *gymnasium, health club, bowling alley, ice rink, field house, or indoor racquet sports*)
- 3** Entertainment or culture
(Examples: *museum, theater, cinema, sports arena, casino, or night club*)
- 4** Library
- 5** Religious worship
- 6** Funeral home
- 7** Student activities center
- 8** Armory
- 9** Exhibition hall
- 10** Broadcasting studio
- 11** Transportation terminal
(Examples: *airport terminal, bus station, or train station*)
- 12** Elementary or middle school
(Includes *junior high school*)
- 13** High school
- 14** Restaurant or cafeteria
- 15** Fast food
- 16** Bar, pub, or lounge
- 17** Vacant
- 18** Other type of public assembly

Health Care Type

- 1 Doctor's or dentist's office
- 2 Clinic or other outpatient health care building
- 3 Hospital (inpatient)
- 4 Outpatient rehabilitation center
- 5 Inpatient rehabilitation center
- 6 Nursing home, assisted living center,
or other residential care building
- 7 Retirement home
- 8 Veterinarian's office
- 9 Laboratory
- 10 Vacant
- 11 Other type of health care

Showcard B11 contains 2 pages
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Service Type

- 1 Auto service or auto repair shop
- 2 Vehicle storage and/or maintenance (car barn)
- 3 Airplane hangar
- 4 Car wash
- 5 Gas station with a convenience store
- 6 Gas station without convenience store
- 7 Building and grounds maintenance shop
- 8 Contractor's office
(Examples: *construction, plumbing, or HVAC*)
- 9 Kennel
- 10 Repair shop
- 11 Dry cleaner or laundromat
- 12 Photo processing shop
- 13 Copy center or printing shop
- 14 Post office, postal center, or mail sorting
- 15 Distribution or shipping center
- 16 Bank or other financial institution
- 17 Beauty parlor or barber shop
- 18 Tanning salon

- 19** Restaurant or cafeteria
- 20** Fast food
- 21** Bar, pub, or lounge
- 22** Transportation terminal
(Examples: *airport terminal, bus station, or train station*)
- 23** Recreation
(Examples: *gymnasium, health club, bowling alley, ice rink, field house, or indoor racquet sports*)
- 24** Student activities center
- 25** Library
- 26** Preschool or daycare
- 27** Non-profit or social services office
- 28** Funeral home
- 29** Rental center
(Examples: *equipment, furnishings, or movies*)
- 30** Public rental storage units
- 31** Telephone switching facilities
- 32** Indoor parking garage
- 33** Vacant
- 34** Other type of service

Lodging Type

- 1 Motel or inn
- 2 Hotel
- 3 Dormitory, fraternity, or sorority
- 4 Retirement home
- 5 Nursing home, assisted living center,
or other residential care building
- 6 Convent or monastery
- 7 Shelter, orphanage, or children's home
- 8 Halfway house
- 9 Jail, reformatory, or penitentiary
- 10 Vacant
- 11 Other type of lodging

Public Order and Safety Type

- 1 Police station
- 2 Fire station
- 3 Combination police and fire station
- 4 Jail, reformatory, or penitentiary
- 5 Courthouse or probation office
- 6 Halfway house
- 7 Armory
- 8 City hall or city center
- 9 Vacant
- 10 Other type of public order and safety

Residential Type

- 1 Hotel
- 2 Motel or inn
- 3 Retirement home
- 4 Shelter, orphanage, or children's home
- 5 Convent or monastery
- 6 Dormitory, fraternity, or sorority
- 7 Nursing home, assisted living center, or other residential care building
- 8 Halfway house
- 9 Other type of residential

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Other Type

- 1 Laboratory
- 2 Airplane hangar
- 3 Broadcasting studio
- 4 Telephone switching facilities
- 5 Funeral home
- 6 Crematorium
- 7 Vehicle storage and/or maintenance (car barn)
- 8 Indoor parking garage
- 9 Library
- 10 Post office, postal center, or mail sorting

- 11** Distribution or shipping center
- 12** Entertainment or culture
(Examples: *museum, theater, cinema, sports arena, casino or night club*)
- 13** Recreation
(Examples: *gymnasium, health club, bowling alley, ice rink, field house, or indoor racquet sports*)
- 14** Transportation terminal
(Examples: *airport terminal, bus station, or train station*)
- 15** Veterinarian's office
- 16** Vacant
- 17** Agricultural building with some retail space
- 18** Manufacturing or industrial building
with some retail space
- 19** Other type of building

Type of Complex

- 1 College, university, or junior college
- 2 Primary or secondary school (GRADES K-12)
- 3 Other type of school
- 4 Office complex
- 5 Retail complex
- 6 Storage complex
- 7 Religious campus or complex
- 8 Hospital or other health care complex
- 9 Lodging or resort complex
- 10 Post office complex
- 11 Prison or correctional facility
- 12 Other type of government complex
- 13 Industrial complex
- 14 Transportation complex such as a terminal, depot, or airport
- 15 Other type of campus or complex

Building Owner

- 1 Real estate investment trust (REIT)
- 2 Other public or private corporation, partnership, limited liability company (LLC), or limited liability partnership (LLP)
- 3 Individual owner(s)
- 4 Religious organization
- 5 Non-profit organization
(other than religious or government)
- 6 Private academic institution
- 7 Other

Number of Businesses or Organizations Category

- 0 Zero
- 1 1
- 2 2 to 5
- 3 6 to 10
- 4 11 to 20
- 5 21 to 50
- 6 51 to 100
- 7 More than 100

Purchasing Power/ Operations and Maintenance

- 1** Property management company or leasing agent
- 2** Business owner or tenant
- 3** Facilities personnel employed directly by the building owner
- 4** Facilities or energy management consultant
- 5** Volunteer member of the organization
- 6** Manager with general supervisory duties
- 7** Other

Weekly Hours Category

- 1** 1 to 39
(For example, open only a few hours per day, or only on weekends)
- 2** 40 to 48
(For example, open 8 or 9 hours a day, Monday through Friday)
- 3** 49 to 60
(For example, open 10 to 12 hours a day, Monday through Friday, or 7 or 8 hours a day, every day)
- 4** 61 to 84
(For example, open 9 to 12 hours a day, every day)
- 5** 85 to 167
(Open most of the time)
- 6** 168
(Open 24 hours a day)

Number of Employees Category

(main shift)

- 1** None
- 2** 1 to 4
- 3** 5 to 9
- 4** 10 to 19
- 5** 20 to 49
- 6** 50 to 99
- 7** 100 to 249
- 8** 250 to 499
- 9** 500 to 999
- 10** 1,000 to 2,499
- 11** 2,500 to 4,999
- 12** 5,000 or more

Energy Sources Used

(choose ALL that apply)

- 11** Electricity
- 12** Natural gas
- 13** Fuel oil, diesel, or kerosene
- 14** Bottled gas, also known as LPG or propane
- 15** District steam piped in from a separate building or utility
- 16** District hot water piped in from a separate building or utility
- 17** District chilled water piped in from a separate building or utility
- 18** Wood, coal, or solar
(Do NOT include passive solar)
- 24** Other source or sources

Heating Equipment Types

(choose ALL that apply)

- 1** Furnaces that heat air directly, without using steam or hot water
(Installed inside the building, similar to a residential furnace)
- 2** Packaged central unit (roof mounted)
(Self-contained unit, either unitary or built-up, that contains heating equipment and may include air conditioning equipment)
- 3** Boilers inside (or directly adjacent to) the building that produce steam or hot water
(Does not include boiler in central plant in separate building)
- 4** District steam or hot water piped in from outside the building
(From a central plant in a separate building or from a utility)
- 5** Heat pumps (other than components of a packaged unit)
- 6** Individual space heaters (other than heat pumps)
(Can be freestanding or mounted in walls, ceilings, or windows. Include heating elements in room space conditioning equipment such as packaged terminal air conditioners [PTACs].)
- 7** Other heating equipment

Type of Furnace

(choose ALL that apply)

- 1** Packaged central unit (roof mounted)
(Self-contained unit that contains all heating components)
- 2** Split system (residential-type furnace with DX cooling unit)
(Separate indoor [furnace and cooling coil] and outdoor [condenser] units)
- 3** Duct furnace (installed in air distribution duct)
- 4** Individual room furnace (freestanding or floor-mounted)

Type of Boiler/District System

(choose ALL that apply)

- 1** Radiators
(Heat by convection and radiation without fans; typically located along baseboards)
- 2** Fan coil units in rooms (or areas)
(Units with heating coil and fan to circulate air)
- 3** Induction units
(Similar to fan-coil units; air injection rather than fan used)
- 4** Water loop heat pump
(Individual heat pump units connected to a circulating water loop)
- 5** Central air handling system (hydronic/steam coils)
(Heating coils located in air handler)
- 6** Packaged unit (hydronic/steam coils)
(Heating coils located in packaged unit)
- 7** Duct reheat (hydronic/steam coils)
(Heating coils located within ducts; common in variable air volume, or VAV, systems)

Other Heating Equipment Components

(choose ALL that apply)

- 1** Heating coil or electric heat strip
(Electric resistance coils for heating)
- 2** Duct reheat or electric reheat
(Electric resistance coils for reheating; common in variable air volume [VAV] systems)
- 3** Powered induction units (PIUs)
(Units with fan that mix warmed air with unheated air)
- 4** None of these components

Type of Packaged System

- 1** Factory-assembled unitary packaged unit
(Installed as a self-contained unit)
- 2** Custom built-up packaged unit
(Assembled from separate components)

Type of Heating Components

(choose ALL that apply)

- 1** Furnace
- 2** Heat pump
- 3** Heating coil
- 4** Powered induction unit (PIU)
- 5** Duct reheat
(Common variable air volume [VAV] systems.)

Heat Pump Heating/Cooling System

(choose ALL that apply)

- 1** Packaged unit
(Components in self-contained unit, typically roof-mounted)
- 2** Split system (residential-type)
(Separate outdoor condenser and indoor heating/cooling coil components)
- 3** Individual room heat pump (packaged terminal heat pump or PTHP)
(Typically found in hotels/motels and similar spaces)
- 4** Ductless mini-split system
(Outdoor condenser and ductless indoor heating/cooling unit)
- 5** Variable refrigerant flow (VRF) system
(Outdoor condenser and multiple ductless indoor heating/cooling units)

Type of Heat Pump

(choose ALL that apply)

- 1** Air source heat pump
(Extracts heat from outside air)
- 2** Ground source or ground water heat pump (geothermal)
(Extracts heat from fluid circulated through tubing buried in ground)
- 3** Dual source heat pump (combination air source and geothermal)
- 4** Water loop heat pump
(Connected to water-filled tubing connected to cooling tower/chiller or boiler)

Type of Individual Heater

(choose ALL that apply)

- 1** Infrared radiant heater (permanent)
(Often used for large, drafty areas such as garages and warehouses; typically ceiling-mounted)
- 2** Baseboard heater (permanent)
(Usually a flat device mounted along the wall near the floor; uses electric resistance for heating)
- 3** Portable space heater
(Any type of portable heater of any fuel type that can be moved from room to room)
- 4** Wall heater
(Electric resistance heater that mounts to the wall to provide heating for small spaces, such as offices)
- 5** Individual furnace
(Free-standing or self-contained furnace that generates and delivers heat to a local zone within the building; no mechanical air distribution system)
- 6** Unit heater
(Self-contained heating unit installed in the space it is intended to heat; unit is not connected to air distribution ducts)
- 7** Heating element in packaged terminal air conditioner (PTAC)
(PTACs are individual room air conditioners commonly found in motel or hotel rooms; if they contain electric resistance heating elements they can operate as heating units)

Heating/Cooling Ventilation Types

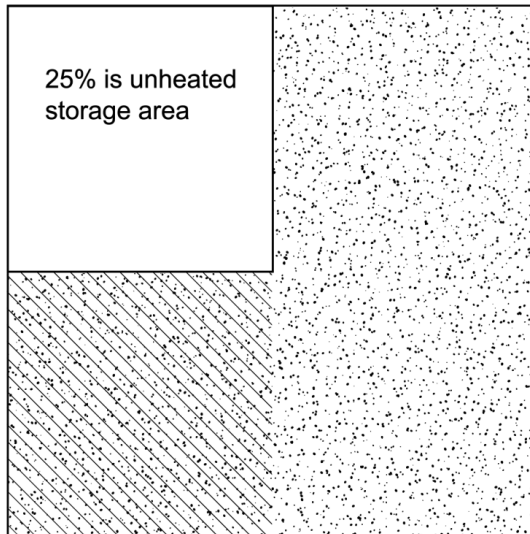
(choose ALL that apply)

- 1** Central air-handling unit(s) with constant air volume (CAV) control
(Commonly used in smaller buildings or buildings with simpler heating/cooling demands)
- 2** Central air-handling unit(s) with variable air volume (VAV) control
(Commonly used in buildings with more complex heating/cooling demands)
- 3** Underfloor air distribution
- 4** Dedicated outside air system (DOAS)
(Separate system to deliver outside air)
- 5** Demand controlled ventilation
- 6** None of these types

Percent Heated by Each Equipment Type

Example:

If 25 percent of the building or establishment is unheated, that means that 75 percent is heated.



Heated by
space heater



Heated by
furnace

If all of that heated space is heated by a furnace, then 100 percent of the **heated space** is heated by furnace.

If one-third of that heated space is also heated by a space heater, then 33 percent of the **heated space** is heated by a space heater.

Cooling Equipment Types

(choose ALL that apply)

- 1** Residential-type central air conditioners (other than heat pumps) that cool air directly and circulate it without using chilled water
(Split systems that consist of an outside unit typically mounted on a slab beside the building and a separate inside cooling unit)
- 2** Packaged air conditioning units (other than heat pumps)
(Contain air conditioning equipment as well as fans, are typically mounted on the roof or on a slab next to the building, and may include heating equipment. Includes unitary units and built-up units.)
- 3** Central chillers inside (or directly adjacent to) the building that chill water for air conditioning
(Does not include central chiller in central plant in separate building)
- 4** District chilled water piped in from outside the building
- 5** Heat pumps for cooling
- 6** Individual room air conditioners (other than heat pumps)
(Installed in either walls or windows, includes what are commonly termed Packaged Terminal Air Conditioners [PTACs])
- 7** “Swamp” coolers or evaporative coolers
- 8** Other cooling equipment

Type of Chiller

(choose ALL that apply)

- 1** **Air-cooled**
(Chiller that uses a vapor-compression refrigeration cycle and has an air-cooled condenser.)
- 2** **Water-cooled**
(Chiller that uses a vapor-compression refrigeration cycle and has a water-cooled condenser.)
- 3** **Absorption**
(Chiller that uses an absorption-refrigeration cycle. Heat is used to drive the refrigeration cycle.)

Chiller/District Chilled Water Distribution

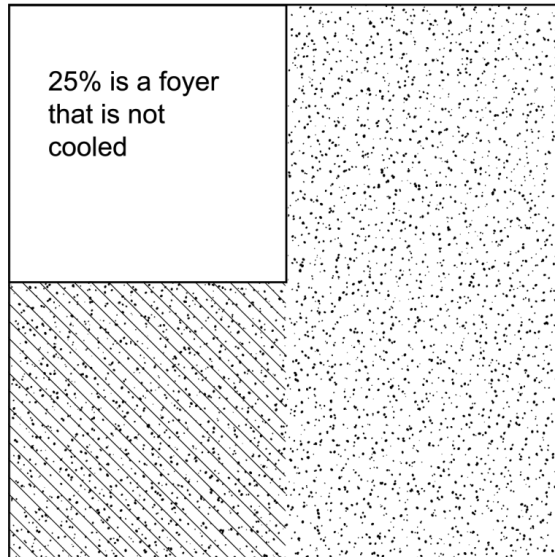
(choose ALL that apply)

- 1** Central air handler (hydronic coils)
(Cooling coils located in air handler)
- 2** Fan coil units in rooms (or areas)
(Units with cooling coil and circulation fan)
- 3** Induction units
(Similar to fan-coil units; injection rather than fan used)
- 4** Water loop heat pump
(Individual heat pump units connected to a circulating water loop)
- 5** Chilled beam
(Located in ceiling, contains pipes that circulate chilled water)
- 6** Packaged unit (hydronic coils)
(Cooling coils located in packaged unit)
- 7** Duct reheat
(Installed to heat areas that are too cool)

Percent Cooled by Each Equipment Type

Example:

If 25 percent of the building or establishment is not cooled, that means that 75 percent is cooled.



Cooled by individual A/C



Cooled by central A/C

If all of that cooled space is cooled by central A/C, then 100 percent of the **cooled space** is cooled by central A/C.

If one-third of that cooled space is also cooled by an individual A/C unit, then 33 percent of the **cooled space** is cooled by individual A/C.

Type of Economizer Cycle

- 1** Air-side economizer
(Permits cooler outside air to be used for cooling)
- 2** Water-side economizer
(Supply or intake air cooled indirectly by chilled water system)

Energy Sources for Electricity Generation

(choose ALL that apply)

- 12** Natural gas
- 13** Fuel oil/Diesel/Kerosene
- 14** Bottled gas/LPG/Propane
- 18** Wood
- 19** Coal
- 20** Solar
- 24** Other energy source

Electricity Generation Technologies

(choose ALL that apply)

- 1** Photovoltaic (PV) cells
(Usually large, roof-mounted panels that convert sunlight directly into electricity, commonly known as solar cells)
- 2** Fuel cells
(Electrode devices that convert the energy of a chemical reaction directly into electrical energy, heat, and water; somewhat like a battery that requires no recharging)
- 3** Large turbines
(Combustion turbines that typically produce more than 1,000 kW of power)
- 4** Microturbines
(Small combustion turbines that produce between 25 kW and 500 kW of power)
- 5** Wind turbines
(Small wind turbines that produce 100 kW or less of power and are located on site)
- 6** Reciprocating engines
(Combustion engines that typically produce more than 1,000 kW of power)

Ways That Electricity Is Purchased

(choose ALL that apply)

- 1** Bought from the local utility
- 2** Contracted or bought from an independent power producer or non-local utility
- 3** Bought from someone else, such as a broker

D19

Showcard

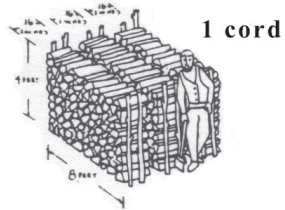
Amount of Bottled Gas Used

(gallons or pounds)

- 1** Less than 100
- 2** 100 to 499
- 3** 500 to 999
- 4** 1,000 or more

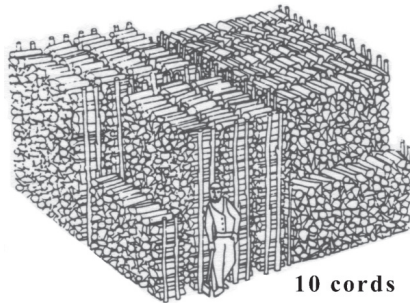
Amount of Wood Burned

1 Less than 1 cord

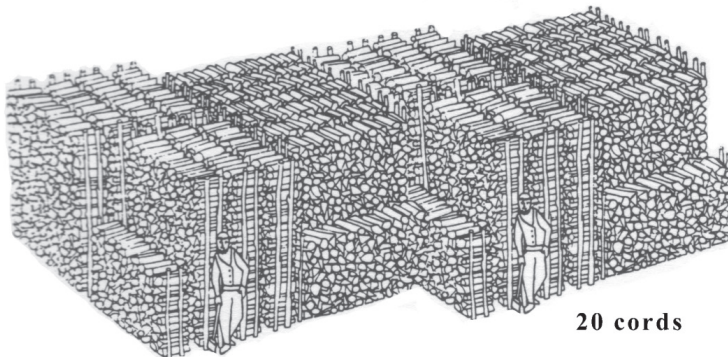


2 1 to 9 cords

3 10 to 20 cords



4 More than 20 cords



Wood Expenditures Category

- 1** \$1 to \$100
- 2** \$101 to \$500
- 3** \$501 to \$1,000
- 4** \$1,001 to \$2,000
- 5** Over \$2,000

Type of Food Preparation or Serving Area

(choose ALL that apply)

- 1** **Snack bar or concession stand**
(Limited or no seating; limited food preparation such as a grill or warming areas)
- 2** **Fast food or small restaurant**
(Includes area for food preparation; some customer seating)
- 3** **Cafeteria or large restaurant**
(Includes area for food preparation; customer seating)
- 4** **Large kitchen, commercial kitchen, or other large food preparation area**
(No customer seating; areas for food preparation such as in a pastry shop or bakery, catering service, culinary school, or nursing home)
- 5** **Small kitchen area**
(Kitchen area similar to a residential kitchen)
- 6** **Employee lounge, breakroom, or pantry**
(Very limited cooking such as coffeepots, microwaves, or toaster ovens)
- 7** **Other type of food preparation or serving area**

Refrigeration Types

(choose ALL that apply)

- 1** Full-size residential-type refrigerators/freezers
- 2** Half-size or compact refrigerators
- 3** Walk-in refrigeration/freezer units
- 4** Open refrigerated/freezer cases or cabinets
(Units with no covers, flexible covers, or plastic strips, such as produce, dairy, and deli cases; salad bars; and sandwich preparation units)
- 5** Closed refrigerated/freezer cases or cabinets
(Units with doors that shut, such as beverage display coolers, grocery coolers or freezers, dessert displays, under-counter coolers, and floral display coolers)
- 6** Refrigerated vending machines
(Examples: soda, juice, water, or frozen dessert machines)
- 7** Commercial ice makers
- 8** Large cold storage areas
(Such as within a refrigerated warehouse)

Computers/Laptops/Servers Category

- 1** 1 to 4
- 2** 5 to 9
- 3** 10 to 19
- 4** 20 to 49
- 5** 50 to 99
- 6** 100 to 249
- 7** 250 to 499
- 8** 500 to 999
- 9** 1,000 to 2,499
- 10** 2,500 to 4,999
- 11** 5,000 or more

Flat Screen Monitor



Separate Computer Areas

(choose ALL that apply)

- 1** **Data center or server farm**
(Areas specifically designed and equipped to meet the needs of high density computing equipment such as server racks, used for data storage and processing. Typically, data centers require additional equipment to provide uninterruptible power and to maintain proper working conditions (cooling and humidity control) for the equipment. When a data center is located within a larger building, it will usually have its own power and cooling systems. Do NOT include server closets as data centers.)
- 2** **Computer-based training room**
(Room used for hands-on computer training, where every person or every two people have their own computer)
- 3** **Student or public computer center**
(Such as at a school, library, hotel, or community center)
- 4** **Trading floor**
(Large, open area with computers and electronic equipment that is used for trading stocks or other securities in financial markets)
- 5** **None of these types of areas**

Percent Lit When Open/Closed Category

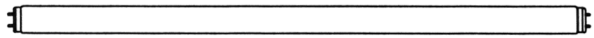
- 1** 1 to 25 percent
- 2** 26 to 50 percent
- 3** 51 to 75 percent
- 4** 76 to 100 percent
- 5** Not lit at all when it is normally open/Not lit at all during off hours

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and begins on the next page

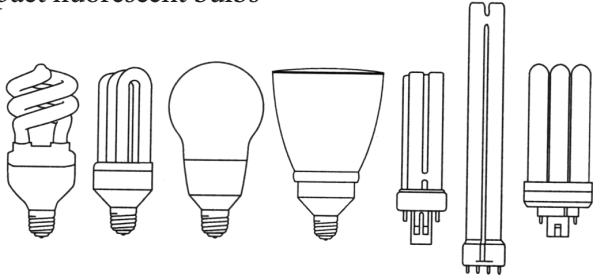
Lighting Types

(choose ALL that apply)

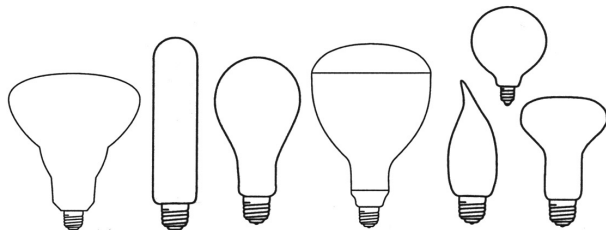
- 1 Fluorescent lighting other than compact fluorescent bulbs



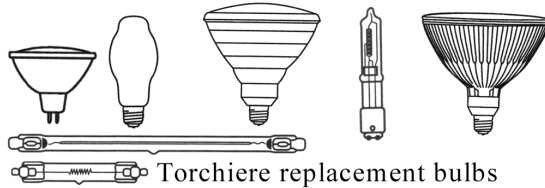
- 2 Compact fluorescent bulbs



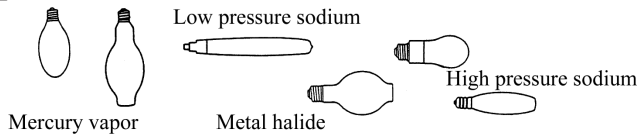
- 3 Incandescent light bulbs other than halogen bulbs



4 Halogen bulbs



5 High intensity discharge (HID) lights such as high pressure sodium, metal halide or mercury vapor



6 Light-emitting diode (LED) lights

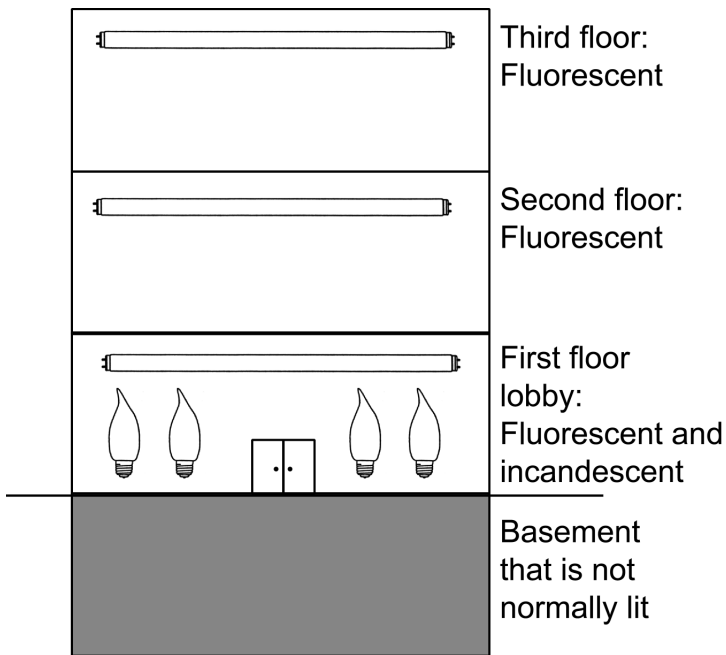
(A type of solid state lighting where a semi-conducting material converts electricity directly into light. Unlike incandescent and fluorescent lights, LEDs generate light without producing heat. Typical uses include: small-area lighting such as task and under-shelf fixtures, decorative lights, and pathway and step marking. Do not include LEDs used in "EXIT" signs.)

7 Other type of lighting

Percent Lit by Each Bulb Type

Example:

If a four-story office building has a basement that is not normally lit, that means it is 75 percent lit when open.



If the three non-basement floors all have fluorescent bulbs, then 100 percent of the **lighted floorspace** is lit by fluorescent lighting.

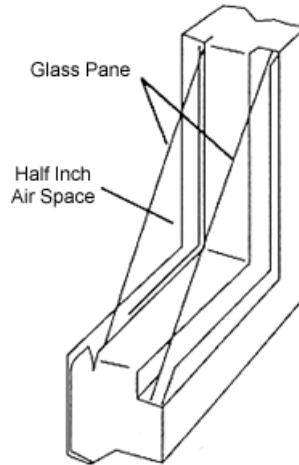
If the first floor is also lit by incandescent bulbs, then one-third, or 33 percent of the **lighted floorspace**, would also be lit by incandescent bulbs.

Lighting Controls or Strategies

- 1** Scheduling
(Lights are automatically dimmed or turned off at certain times of the day)
- 2** Occupancy sensors that reduce lighting when rooms are unoccupied
(Sensors that automatically turn off or dim lights when a person leaves a room or space)
- 3** Multi-level lighting or dimming
(Control devices that adjust lighting power by continuous dimming, stepped dimming, or stepped switching)
- 4** Daylight harvesting
(A lighting control and shade system that automatically dims light fixtures when natural light is available, and/or adjusts shades so that the combination of natural light and artificial light combine to provide the desired level of lighting)
- 5** High-end trimming or light-level tuning
(High-end trimming sets the maximum level of lighting to less than 100 percent. Light-level tuning sets the level even lower if a room or space needs less light)
- 6** Plug-load control
(Device that automatically turns off wall plugs and lights when a person leaves a room or space)
- 7** Demand responsive lighting
(Reduces lighting at times of peak electricity pricing)
- 8** None of these

Exterior Window Glass Type

- 1 Single layer glass
- 2 Multi-layer glass
- 3 Combination of both



Multi-layer (double-paned) glass

Daylighting/Conservation Features

(choose ALL that apply)

- 1 Tinted window glass
- 2 Reflective window glass
- 3 External overhangs or awnings
- 4 Skylights or atriums designed to provide light

Natural Gas Units

- 1 Hundred cubic feet (Ccf)
- 2 Therms
- 3 Thousand cubic feet (Mcf)
- 4 Dekatherms
- 5 Cubic feet (cf)

District Steam Units

- 1 Thousand pounds
- 2 Pounds
- 3 Million Btus

Water Units

- 1 Gallons
- 2 Thousand gallons
- 3 Million gallons
- 4 Cubic feet (cf)
- 5 Hundred cubic feet (Ccf, HCF)
- 6 Thousand cubic feet (Mcf)

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