# BOMA BEST Questionnaire – Multi-Unit Residential

## BASIC INFORMATION

| Basic Information | |
|---|---|
| 0.2 What is the name of the building?<br>Tip: Enter the name as you would like it to appear on the certificate if the building becomes certified. This name will also appear on the online BOMA BEST Certified Buildings list. A "building" may consist of a building or building block complex that is served by a single mechanical plant. If different parts of the building complex are served by different mechanical systems enter those blocks as separate buildings under the BOMA building complex category. | |
| 0.3.1 What is the street address? | |
| | 0.3.2 City? |
| | 0.3.4 Province? Select 0.3.5 Postcode? |
| 0.4 Is this building being recertified?<br>Tip: Please note:<br>For previous certifications using the BOMA BEST assessment (not Go Green / Go Green Plus) you may use the recertification feature. Click on the "Recertify Building" button to access an assessment that will feature components of the previous certification. | ◯ Yes ◯ No |
| Building Management (on-site) contact information: | |
| 0.5.1 First Name: | |
| 0.5.2 Last Name: | |
| 0.5.3 Title: | |
| 0.M.2 Company: | |
| 0.5.4 Telephone: | |
| 0.5.5 Email: | |
| Please identify the person who is responsible for completing this survey: | |
| 0.6.1 First Name: | |
| 0.6.2 Last Name: | |
| 0.6.3 Company: | |
| 0.6.4 Telephone: | |
| 0.6.5 Email: | |
| | ◯ CBD or inner city |

| | |
|---|---|
| 0.7 Specify the location:<br>Tip: CBD means Central Business District. | ◯ Suburban<br>◯ Rural |
| When was the building constructed?<br>Tip: Specify the median year for construction of at least 51% of the conditioned space OR choose an era. | ☐ (exact year) 0.8.1<br>◯ prior to 1960 0.8.2<br>◯ prior to 1989<br>◯ 1990 and after |
| 0.9.1 What was the date of the latest major renovation (involving HVAC or building envelope)?<br>Tip: "Major renovation" refers to construction work that is sufficiently extensive that it warrants the cessation of normal building operations AND/OR that a new certificate of occupancy is required. Please input the calendar date of the renovation. Use DD Mon YYYY (e.g. "4 Jul 2014"), to avoid ambiguity. You may use the pop-up calendar to select a date, or type a valid date value. | Date: ☐<br>0.9.2 Describe renovations:<br>☐ |
| 0.11 Please choose the preferred unit of area for building measurements: | ◯ square feet<br>◯ square metres |
| 0.12 What is the gross floor area of the building?<br>Tip: GROSS FLOOR AREA is all floor area measured to the outside of the exterior walls including basements, mechanical equipment floors, and penthouses (ANSI/BOMA Standard Z65.3-2009, Construction Area). No exclusions are made for shafts, stairs, or atria. | ☐ ft² |
| What are the floor areas of the following spaces? | 0.13.2 Total Rentable (residents) Area ☐ ft²<br>Tip: All the tenant occupied areas within the Gross Property Floor Area (excluding parking areas). Includes: Internal floor space contained within a tenancy at each floor level, internal walls. Excludes: areas with less than 1.5 m in height, service areas, public spaces and thoroughfares, car parks.<br>0.13.3 Common Parts Area ☐ ft²<br>Tip: Common parts area can be calculated as Gross Floor Area minus Tenant (leased) Area. It should include: shared circulation areas (e.g. staircases, escalators and lifts), activity areas (e.g. lobbies), and fully enclosed service and storage areas.<br>0.13.4 Parking Area ☐ ft²<br>0.13.6 Exterior Landscape Area ☐ ft²<br>0.13.7 Pool Area ☐ ft² |
| 0.16 How many floors are there? | ☐ |
| How many conditioned floors are there?<br>Tip: This refers to the part of the complex that has the greatest number of heated floors. | 0.17.1 Above ground: ☐<br>0.17.2 Below ground: ☐ |
| 0.18 How many parking stalls are there? | ☐ |
| 0.19 Is there underground parking? | ◯ Yes ◯ No |
| 0.20 The property is: | |

| | |
|---|---|
| | ◯ Low-Rise (2-3 story walk up)?<br>◯ Mid-rise (4 - 9 stories)?<br>◯ High-rise (10 plus stories)? |
| 0.21 The property is: | ◯ A rental tenancy?<br>◯ A co-op?<br>◯ A condominium?<br>◯ A condo/rental tenancy? |
| How many residential units are in the building? | 0.22.1 Studio<br>0.22.2 One Bedroom<br>0.22.3 Two Bedroom<br>0.22.4 Three Bedroom<br>0.22.5 Other<br>0.22.6 Total<br>Tip: If zero is entered for Total Units, the value will be automatically calculated as the sum of the various individual unit types. |
| 0.29 What is the approximate total number of people living on the property? | |
| 0.37.1 What has the VACANCY rate been, on average, over the last year?<br>Tip: To be eligible for BOMA BEST certification, the total VACANCY RATE in the last 12 months must be less than 30% (or an OCCUPANCY RATE of at least 70%). VACANCY RATE refers to the amount of leasable area that is not leased divided by the total leasable area in the building (i.e. % of the total rentable space that has been vacant). | % <br>0.37.2 Describe: |
| 0.38 Who is the owner of the building? | |
| 0.39.1 Who is the building manager?<br>Tip: Provide the name of individual responsible for the property / building management. | |
| 0.39.2 What is the name of the corporation responsible for the property / building management?<br>Tip: This information will appear on the BOMA BEST "Certified Buildings" page. | |
| 0.40 How long has the current management company been managing this property? | years |
| 0.41 Is the property manager's office on-site or off-site? | ◯ On-site<br>◯ Off-site |
| What are the annual operational costs? | 0.42.1 Cleaning $<br>0.42.2 Repairs / maintenance $<br>0.42.3 Utilities $<br>0.42.4 Roads & Grounds $<br>0.42.5 Taxes $<br>0.42.6 Admin (incl. Security) $ |
| 0.43 If rentable property, what is the rent scale? | |

| | |
|---|---|
| | ○ Low<br>○ Medium<br>○ High<br>○ N/A |
| 0.44 Provide a brief general description of the building.<br>Tip: Provide a short description of the building. Note massing, placement on the lot, landscaping, any significant physical, historical or functional characteristics, and any significant renovations or retrofits within the last 5 years. | ☐ |
| What types of other use are present and what are their respective areas?<br>Tip: Where a type of space is not present, mark "0". | |
| 0.45.2 Restaurant/food court area: | ft² |
| 0.45.3 Retail area: | ft² |
| 0.45.4 Hotel area: | ft² |
| 0.45.5 Gym area: | ft² |
| 0.45.6 Other area: | ft²<br>0.45.7 Describe:<br>Tip: Provide a short functional description including any significant features that would have a positive or negative impact on energy or water use. For example large areas of the building that operate extended hours, interior landscaping.<br>☐ |
| Check all applicable construction features: | |
| Walls: | |
| • 0.49.1 Wood | ○ Yes ○ No |
| • 0.49.2 Masonry | ○ Yes ○ No |
| • 0.49.3 Concrete, Above Grade and precast panels | ○ Yes ○ No |
| • 0.49.4 Concrete, Below Grade | ○ Yes ○ No |
| • 0.49.5 Metal - steel frame | ○ Yes ○ No |
| • 0.49.6 Stone | ○ Yes ○ No |
| • 0.49.7 Glass | ○ Yes ○ No |
| Roofs: | |
| • 0.49.8 Concrete Deck | ○ Yes ○ No |
| • 0.49.9 Wood Deck | ○ Yes ○ No |
| • 0.49.10 Metal Deck | ○ Yes ○ No |
| Windows: | |
| • 0.49.11 Single Glaze | ○ Yes ○ No |
| • 0.49.12 Double Glaze | ○ Yes ○ No |
| • 0.49.13 Triple Glaze | ○ Yes ○ No |
| | ☐ |

| | |
|---|---|
| 0.49.15 Describe any additional significant construction features not found in the list: | |
| Check all applicable HVAC features and provide description of building HVAC system: | |
| Primary Cooling: | |
| • 0.50.1 Central cooling plant with cooling tower (s) for heat rejection | ◯ Yes ◯ No |
| • 0.50.2 Central cooling plant with air cooled condenser(s) for heat rejection | ◯ Yes ◯ No |
| • 0.50.3 Centrifugal chiller | ◯ Yes ◯ No |
| • 0.50.4 Reciprocating chiller | ◯ Yes ◯ No |
| • 0.50.5 Screw chiller | ◯ Yes ◯ No |
| • 0.50.6 Absorption chiller | ◯ Yes ◯ No |
| • 0.50.7 Package DX | ◯ Yes ◯ No |
| • 0.50.8 Split DX | ◯ Yes ◯ No |
| • 0.50.9 Purchased chilled water | ◯ Yes ◯ No |
| • 0.50.10 Window mounted air conditoners | ◯ Yes ◯ No |
| Primary Heating: | |
| • 0.50.11 Central heating plant | ◯ Yes ◯ No |
| • 0.50.12 Furnace | ◯ Yes ◯ No |
| • 0.50.13 Ground-source (geothermal) heat pump | ◯ Yes ◯ No |
| • 0.50.14 Air-source heat pump | ◯ Yes ◯ No |
| • 0.50.15 AHU/terminal systems | ◯ Yes ◯ No |
| • 0.50.16 Single zone | ◯ Yes ◯ No |
| • 0.50.17 Multi zone | ◯ Yes ◯ No |
| • 0.50.18 No mechanical ventilation | ◯ Yes ◯ No |
| • 0.50.19 Constant air volume | ◯ Yes ◯ No |
| • 0.50.23 Fan coil units (perimeter) | ◯ Yes ◯ No |
| • 0.50.24 Unit ventilators | ◯ Yes ◯ No |
| • 0.50.25 Steam/hot water radiators/convectors | ◯ Yes ◯ No |
| • 0.50.26 Electrical baseboard heaters | ◯ Yes ◯ No |
| Other: | |
| • 1.2.5.15 Cogeneration<br>Tip: Cogeneration is the simultaneous production of heat and electrical or mechanical power. It is achieved by capturing and recycling the rejected heat that escapes from an electricity generation or a manufacturing process in the building. Cogeneration can be used to reduce peak demand. Where cogeneration would not be | ◯ Yes ◯ No ◯ N/A |

| | |
|---|---|
| economically justified or would not be practical, mark “not applicable”. | |
| • 1.2.3.3 Building Automation System (energy monitoring and control system)<br>Tip: A Building Automation System (BAS) can control HVAC (Heating, Ventilating, Air Conditioning), lighting and other systems to optimize their start-up and performance, improve the interaction of mechanical subsystems, improve occupant comfort, and lower energy use. The computer and controllers in the BAS can be networked to the internet or serve as a stand-alone system. Some can also provide off-site building control. A partial BAS would include HVAC or lighting controls only, or control systems for only part of the building. | ○ Full<br>Tip: There is full BAS.<br>○ Partial<br>Tip: There is a partial BAS. A partial BAS would include HVAC or lighting controls only, or control systems for only part of the building.<br>○ None<br>Tip: There is no BAS. |
| • 0.50.27 On-site generation (e.g. solar photovoltaic, wind) | ○ Yes ○ No |
| • 1.2.6.3.1 Active (thermal) solar equipment<br>Tip: This is generally used to increase the temperature of large volumes of water or air in commercial and industrial buildings (e.g. solar wall or solar DHW panels). | ○ Yes ○ No |
| • 1.2.5.8 Energy (heat) recovery<br>Tip: A heat-recovery system captures heat from building exhaust air and reuses some of the energy to precondition the incoming outside air before supplying it to the building. This could be in the form of an air-to-air heat exchanger, glycol heat-recovery loop, heat wheel or heat pipe. Where heat recovery would not be practical, or cost-prohibitive, mark “not applicable.” | ○ Yes ○ No ○ N/A |
| Exhaust Systems: | |
| • 5.1.7.2 Kitchen hoods | ○ Yes ○ No |
| 0.50.29 Describe any additional HVAC features not found in the list: | □ |

## OVERALL TOTAL

**Points**
990

## ENERGY

**Points**
340

| Question | Points |
|---|---|
| **Energy Consumption Information** | **0** |
| Please select the fuels or utilities used by the building, for which energy consumption figures will be entered.<br>Tip: Check each fuel type for which consumption will be entered. If there is more than one meter for a given fuel type, please combine data for all meters into a single value for data entry. Data must be for a full 12 month period and must not pre-date the previous calendar year. | |
| □ Electricity - ○ kWh ○ GJ ○ Btu 1.1.1 | |

| | |
|---|---|
| ☐ Natural Gas - ◯ $m^3$ (cubic metres) ◯ GJ ◯ Therms 1.1.2<br>Fuel Oil - ◯ Litres ◯ Imperial Gallons 1.1.3<br>☐ Tip: Select “Fuel Oil” if the building uses fuel oil as a primary fuel or a back-up fuel for heating and/or hot water. Do not include Diesel Fuel for routine testing of emergency generators.<br>☐ Purchased (District) Steam - ◯ Mlbs. Tip: 1,000 lbs. ◯ GJ ◯ Btu ◯ MBtu Tip: 1,000 Btu ◯ MMBtu Tip: Million Btu 1.1.4<br>Tip: Select “Purchased District Steam” only if purchased directly from an external supplier.<br>☐ Propane - Litres<br>☐ Purchased (District) Chilled Water - ◯ GJ ◯ Ton Hours 1.1.5<br>Tip: Select “Purchased (District) Chilled Water” only if purchased directly from an external supplier.<br>☐ Enwave Deep Lake Cooling - Ton hrs (Toronto area only)<br>☐ PWGSC Water Cooling - GJ (Ottawa area only)<br>☐ On-site Electricity Generation - ◯ kWh ◯ GJ ◯ Btu 1.1.7 | |
| Indicate the change-over month for heating and cooling systems:<br>Tip: Indicate the month normally associated with the seasonal change-over of the building heating and cooling systems. For cooling to heating, this change typically occurs in Sep/Oct/Nov; for heating to cooling, this change typically occurs in Apr/May. For example, the change-over from cooling-to-heating typically occurs sometime between September and November; and the change-over from heating-to-cooling in April or May. | |
| 1.1.8.1 Cooling to Heating: | select month |
| 1.1.8.2 Heating to Cooling: | select month |
| Indicate how the property is being billed for electricity and heating fuel (for example, building owner pays or occupant pays, or a combination). | |
| **Electricity (information questions)** | |
| 1.1.9 The reported electricity consumption covers: | ◯ Total occupants' electricity consumption for the complex including residents' dwelling units, lighting, outside lighting/parking and common/service areas<br>◯ Outside lighting/parking and/or common/service areas only |
| 1.1.10 Are occupants independently metered and billed by the electricity supplier? | ◯ All occupants metered and billed<br>◯ Some occupants metered and billed<br>◯ No occupants metered and billed |
| 1.1.13 Where occupants are not independently metered and billed by the electricity supplier, indicate how the occupants pay the landlord for their share of electricity usage:<br>Tip: A sub-meter is a separate meter installed by the landlord to measure actual energy use by the individual tenant, to quantify what portion of the main utility account is to be paid by the tenant. An engineering load study refers to an analysis of actual building loads and operating characteristics, by a qualified professional, to accurately calculate energy use allocated to tenants to ensure fair and equitable billing for shared utility costs. “Engineering study” means an analysis conducted by a qualified professional, that gives an accurate profile of energy used by tenants based on actual building loads and operating characteristics. | ◯ Floor area (i.e. pro-rated portion of utility bill)<br>◯ Submetered data<br>Tip: A sub-meter is a separate meter installed by the landlord to measure actual energy use by the individual tenant, to quantify what portion of the main utility account is to be paid by the tenant.<br>◯ Engineering load study<br>Tip: An engineering load study refers to an analysis of actual building loads and operating characteristics, by a qualified professional, to accurately calculate energy use allocated to tenants to ensure fair and equitable billing for shared utility costs. “Sub-meter” means a separate meter installed by the landlord to measure a tenant's energy use and establish how much of the main utility account is to be paid by the tenant. “Engineering study” means an analysis conducted by a qualified professional, that gives an accurate profile of energy used by tenants based on actual building loads and operating characteristics.<br>◯ N/A |
| | |

| | |
|---|---|
| 1.1.14 Is the property manager able to obtain copies of the electricity bills from occupants that are independently metered and billed by the electricity supplier?<br>Tip: Contact your local utility company to obtain aggregated data for the building (service varies by company). Where the occupants are not independently metered, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A |
| **Heating Fuel (information questions)** | |
| 1.1.15 The reported heating fuel consumption covers: | ◯ Total heating fuel consumption for the complex including occupants' areas and common/service areas<br>◯ Common/service areas only |
| 1.1.16 Are occupants independently metered and billed by the heating fuel (natural gas / Propane / Oil) supplier? | ◯ All occupants metered and billed<br>◯ Some occupants metered and billed<br>◯ No occupants metered and billed |
| 1.1.18 Where occupants are not independently metered and billed by the fuel supplier, indicate how they pay for their share of fuel usage. | ◯ Floor area (i.e. pro-rated portion of utility bill)<br>◯ Submetered data<br>Tip: A submeter is a separate meter installed by the landlord to measure actual energy use by the individual tenant, to quantify what portion of the main utility account is to be paid by the tenant.<br>◯ Engineering load study<br>Tip: An engineering load study refers to an analysis of actual building loads and operating characteristics, by a qualified professional, to accurately calculate energy use allocated to tenants to ensure fair and equitable billing for shared utility costs.<br>◯ N/A |
| 1.1.19 Is the property manager able to obtain copies of the heating fuel bills from occupants who are independently metered and billed by the heating fuel supplier?<br>Tip: Contact your local utility company to obtain aggregated data for the building (service varies by company). Where the occupants are not independently metered, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A |
| 1.1.20 Describe how occupant energy-use billing is handled:<br>□ | |

| Question | | Points |
|---|---|---|
| **Energy Consumption** | | **80** |
| Specify the ending month of the most recent consecutive 12 month period for which energy consumption figures are being entered.<br>Tip: In order to accurately benchmark energy consumption for buildings, energy consumption information must be provided for the most recent 12 months of consumption at verification. Consumption information from the period prior to the most recent full calendar year will not be accepted (e.g., buildings certified in 2013 can not include any data from 2011 or earlier). | 1.1.21.1 Month: Select<br>1.1.21.2 Year: Sel | |
| 1.1.22 What was the building’s total energy bill for the 12 month period specified?<br>Tip: This will be calculated automatically if 12 months of detailed data is entered below. Leave this field blank if you wish it to be calculated | $ | |

| | | |
|---|---|---|
| automatically. If detailed information is not available, please provide an estimate. | | |
| What was the energy consumption, date of utility meter reading and associated cost for each fuel type by billing period?<br>Tip: How BOMA BEST benchmarks energy performance: The building's energy intensity (ekWh/ft$^2$/yr), which is calculated using utility data, is compared to a rating scale based on benchmarks derived from the BOMABEST data. BOMA BEST benchmarks energy performance by comparing the building's energy intensity (in ekWh/ft$^2$/yr) based on utilities data, to a benchmarks derived from BOMA BEST data. | | 80 |
| | | **Points** |

***ELECTRICITY***

| **Billing Period**<br>Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.23.1 **Meter Reading Date**<br>Tip: **Reading date** refers to the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2008). You may use the pop-up calendar to select a date, or type the date value. BOMA BEST is looking for Note: Provide the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is not the same as the "billing date" when the utility issued the invoice. | 1.1.23.2 **Consumption**<br>Tip: **Period consumption**. Should be provided in the units billed by the utility. | 1.1.23.3 **Cost**<br>Tip: **Period cost** includes all taxes, rebates and adjustments. If energy is purchased from a broker, then add the broker energy charges (including taxes), broken down for each period's net utility cost. Note that the cost of energy purchased does not factor in the BOMA BEST scoring. |
|---|---|---|---|
| Previous Reading Date: | | | |
| Electricity period 1: | | kWh | Cost $ |
| Electricity period 2: | | kWh | Cost $ |
| Electricity period 3: | | kWh | Cost $ |
| Electricity period 4: | | kWh | Cost $ |
| Electricity period 5: | | kWh | Cost $ |
| Electricity period 6: | | kWh | Cost $ |
| Electricity period 7: | | kWh | Cost $ |
| Electricity period 8: | | kWh | Cost $ |
| Electricity period 9: | | kWh | Cost $ |
| Electricity period 10: | | kWh | Cost $ |
| Electricity period 11: | | kWh | Cost $ |

| | | | |
|---|---|---|---|
| Electricity period 12: | | kWh | Cost $ |

OPTIONAL - Electricity demand does not have to be entered, but will allow your power factor to be calculated.
Tip: **Electricity Demand.** Provide monthly peak kW AND kVA. These two items are usually clearly indicated on the monthly invoices. Where only the kW is indicated, then enter only these values. Enter monthly values AFTER any adjustment by the utility.

| Billing Period | 1.1.23.4 kW | 1.1.23.5 kVA |
|---|---|---|
| Electricity Demand period 1:<br>Tip: Please input the total electricity demand (kW) and kilovolt-amperes (kVA) from the utility bills. This is used to calculate monthly and average annual power factor for the building. | kW. | kVA |
| Electricity Demand period 2: | kW. | kVA |
| Electricity Demand period 3: | kW. | kVA |
| Electricity Demand period 4: | kW. | kVA |
| Electricity Demand period 5: | kW. | kVA |
| Electricity Demand period 6: | kW. | kVA |
| Electricity Demand period 7: | kW. | kVA |
| Electricity Demand period 8: | kW. | kVA |
| Electricity Demand period 9: | kW. | kVA |
| Electricity Demand period 10: | kW. | kVA |
| Electricity Demand period 11: | kW. | kVA |
| Electricity Demand period 12: | kW. | kVA |

Points

***NATURAL GAS***

| **Billing Period**<br>Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.24.1 **Meter Reading Date**<br>Tip: **Reading date** refers to the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2008). You may use the pop-up calendar to select a date, or type the date value. BOMA BEST is looking for Note: Provide the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is not the same | 1.1.24.2 **Consumption**<br>Tip: **Period consumption**. Should be provided in the units billed by the utility. | 1.1.24.3 **Cost**<br>Tip: **Period cost** includes all taxes, rebates and adjustments. If energy is purchased from a broker, then add the broker energy charges (including taxes), broken down for each period's net utility cost. Note that the cost of energy purchased does not factor in the BOMA BEST scoring. |
|---|---|---|---|

| | | | |
|---|---|---|---|
| | as the “billing date” when the utility issued the invoice. | | |
| Previous Reading Date: | | | |
| Gas period 1: | | $m^3$ | Cost $ |
| Gas period 2: | | $m^3$ | Cost $ |
| Gas period 3: | | $m^3$ | Cost $ |
| Gas period 4: | | $m^3$ | Cost $ |
| Gas period 5: | | $m^3$ | Cost $ |
| Gas period 6: | | $m^3$ | Cost $ |
| Gas period 7: | | $m^3$ | Cost $ |
| Gas period 8: | | $m^3$ | Cost $ |
| Gas period 9: | | $m^3$ | Cost $ |
| Gas period 10: | | $m^3$ | Cost $ |
| Gas period 11: | | $m^3$ | Cost $ |
| Gas period 12: | | $m^3$ | Cost $ |

| | Points |
|---|---|
| ***FUEL OIL*** | |

| **Billing Period**<br>Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.25.1 **Fuel Oil Delivery Date**<br>Tip: **Delivery date.** Input the calendar date of the fuel oil deliveries. For months where there was more than one delivery, group the deliveries together into monthly periods. DD-MMM-YYYY (i.e. 04-JUL-2014). You may use the pop-up calendar to select a date, or type the date value. Provide the actual date of the fuel oil delivery that the utility used to base the invoice. | 1.1.25.2 **Consumption**<br>Tip: **Period consumption**. Provide monthly fuel oil delivery quantities in the units billed by the utility. | 1.1.25.3 **Cost**<br>Tip: **Period cost**. Include all taxes, rebates and adjustments. Note that the cost of energy purchased does not factor in the scoring. |
|---|---|---|---|
| Previous Delivery Date: | | | |
| Oil period 1: | | Litres | Cost $ |
| Oil period 2: | | Litres | Cost $ |
| Oil period 3: | | Litres | Cost $ |

| | | | | |
|---|---|---|---|---|
| Oil period 4: | | Litres | Cost $ | |
| Oil period 5: | | Litres | Cost $ | |
| Oil period 6: | | Litres | Cost $ | |
| Oil period 7: | | Litres | Cost $ | |
| Oil period 8: | | Litres | Cost $ | |
| Oil period 9: | | Litres | Cost $ | |
| Oil period 10: | | Litres | Cost $ | |
| Oil period 11: | | Litres | Cost $ | |
| Oil period 12: | | Litres | Cost $ | |
| | | | | Points |
| ***PURCHASED STEAM*** | | | | |
| **Billing Period** Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.26.1 **Meter Reading Date** Tip: **Reading date** refers to the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2008). You may use the pop-up calendar to select a date, or type the date value. BOMA BEST is looking for Note: Provide the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is not the same as the "billing date" when the utility issued the invoice. | 1.1.26.2 **Consumption** Tip: **Period consumption**. Should be provided in the units billed by the utility. | 1.1.26.3 **Cost** Tip: **Period cost** includes all taxes, rebates and adjustments. If energy is purchased from a broker, then add the broker energy charges (including taxes), broken down for each period's net utility cost. Note that the cost of energy purchased does not factor in the BOMA BEST scoring. | |
| Previous Reading Date: | | | | |
| Steam period 1: Tip: Where applicable, enter the data for the steam line heating. | | Btu | Cost $ | |
| Steam period 2: | | Btu | Cost $ | |
| Steam period 3: | | Btu | Cost $ | |
| Steam period 4: | | Btu | Cost $ | |
| Steam period 5: | | Btu | Cost $ | |
| Steam period 6: | | Btu | Cost $ | |

| | | | | |
|---|---|---|---|---|
| Steam period 7: | | Btu | Cost $ | |
| Steam period 8: | | Btu | Cost $ | |
| Steam period 9: | | Btu | Cost $ | |
| Steam period 10: | | Btu | Cost $ | |
| Steam period 11: | | Btu | Cost $ | |
| Steam period 12: | | Btu | Cost $ | |
| | | | | Points |
| ***PROPANE*** | | | | |
| **Billing Period** Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.27.1 **Meter Reading Date** Tip: **Reading date** refers to the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2008). You may use the pop-up calendar to select a date, or type the date value. BOMA BEST is looking for Note: Provide the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is not the same as the “billing date” when the utility issued the invoice. | 1.1.27.2 **Consumption** Tip: **Period consumption**. Should be provided in the units billed by the utility. | 1.1.27.3 **Cost** Tip: **Period cost** includes all taxes, rebates and adjustments. If energy is purchased from a broker, then add the broker energy charges (including taxes), broken down for each period's net utility cost. Note that the cost of energy purchased does not factor in the BOMA BEST scoring. | |
| Previous Reading Date: | | | | |
| Propane period 1: | | Litres | Cost $ | |
| Propane period 2: | | Litres | Cost $ | |
| Propane period 3: | | Litres | Cost $ | |
| Propane period 4: | | Litres | Cost $ | |
| Propane period 5: | | Litres | Cost $ | |
| Propane period 6: | | Litres | Cost $ | |
| Propane period 7: | | Litres | Cost $ | |
| Propane period 8: | | Litres | Cost $ | |
| Propane period 9: | | Litres | Cost $ | |
| Propane period 10: | | Litres | Cost $ | |

| | | | | |
|---|---|---|---|---|
| Propane period 11: | | Litres | Cost $ | |
| Propane period 12: | | Litres | Cost $ | |
| | | | | Points |
| ***PURCHASED CHILLED WATER*** | | | | |
| **Billing Period**<br>Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.28.1 **Meter Reading Date**<br>Tip: **Reading date** refers to the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2008). You may use the pop-up calendar to select a date, or type the date value. BOMA BEST is looking for Note: Provide the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is not the same as the "billing date" when the utility issued the invoice. | 1.1.28.2 **Consumption**<br>Tip: **Period consumption**. Should be provided in the units billed by the utility. | 1.1.28.3 **Cost**<br>Tip: **Period cost** includes all taxes, rebates and adjustments. If energy is purchased from a broker, then add the broker energy charges (including taxes), broken down for each period's net utility cost. Note that the cost of energy purchased does not factor in the BOMA BEST scoring. | |
| Previous Reading Date: | | | | |
| Chilled Water period 1:<br>Tip: Chilled water includes the purchase of any sort of pre-chilled water, including deep lake cooling. | | GJ | Cost $ | |
| Chilled Water period 2: | | GJ | Cost $ | |
| Chilled Water period 3: | | GJ | Cost $ | |
| Chilled Water period 4: | | GJ | Cost $ | |
| Chilled Water period 5: | | GJ | Cost $ | |
| Chilled Water period 6: | | GJ | Cost $ | |
| Chilled Water period 7: | | GJ | Cost $ | |
| Chilled Water period 8: | | GJ | Cost $ | |
| Chilled Water period 9: | | GJ | Cost $ | |
| Chilled Water period 10: | | GJ | Cost $ | |
| Chilled Water period 11: | | GJ | Cost $ | |
| Chilled Water period 12: | | GJ | Cost $ | |

| | | | | Points |
|---|---|---|---|---|
| ***ONSITE GENERATION*** | | | | |
| **Period**<br>Tip: **Period.** Provide monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 1.1.29.1 **Meter Reading Date**<br>Tip: **Reading date.** Please input the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2008). You may use the pop-up calendar to select a date, or type the date value. BOMA BEST is looking for the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is **not** the same as the "billing date" when the utility issued the invoice. | 1.1.29.2 **Generation**<br>Tip: **Period generation.** Provide adjusted generation in the units used by the utility. | 1.1.29.3 **Income**<br>Tip: **Period Income.** Include all taxes, rebates and adjustments. | |
| Previous Reading Date: | | | | |
| Onsite period 1: | | kWh | Income $ | |
| Onsite period 2: | | kWh | Income $ | |
| Onsite period 3: | | kWh | Income $ | |
| Onsite period 4: | | kWh | Income $ | |
| Onsite period 5: | | kWh | Income $ | |
| Onsite period 6: | | kWh | Income $ | |
| Onsite period 7: | | kWh | Income $ | |
| Onsite period 8: | | kWh | Income $ | |
| Onsite period 9: | | kWh | Income $ | |
| Onsite period 10: | | kWh | Income $ | |
| Onsite period 11: | | kWh | Income $ | |
| Onsite period 12: | | kWh | Income $ | |

| Question | Points |
|---|---|
| **Energy Efficiency Features** | **130** |
| **Lighting** | **17** |
| Does the building incorporate any of the following high-efficiency lighting features:<br>Tip: Indicate which features apply to your building, and the percentage that has been implemented throughout the building. Choose as many as apply. | |

| | | |
|---|---|---|
| • 1.2.1.3 Compact fluorescents in common areas, property exterior or parking areas?<br>Tip: Indicate the percentage of installed compact fluorescent lamps compared to the total number of bulbs including incandescent lamps. | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 2 |
| • 1.2.1.6 T8 or T5 fluorescent lamps in garage areas?<br>Tip: Indicate the percentage of installed lower wattage T8 or T5 lamps compared to the total number of tubes including T12 fluorescents. Where there are no garage areas mark “not applicable”. | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40%<br>◯ N/A | 2 |
| • 1.2.1.8 EXIT signs with Light-Emitting Diodes (LEDs)?<br>Tip: Indicate the percentage of installed LED-type EXIT lights compared to the total number of EXIT lights, including those that use incandescent bulbs. Alternative efficient EXIT sign technologies, compliant with applicable codes and regulatory bodies, may be reported in question 1.2.8.1.1. | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 2 |
| • 1.2.1.10 High-intensity discharge lamps (e.g. high-pressure sodium or metal-halide lamps)?<br>Tip: High-intensity discharge (HID) lighting systems are widely used in applications where high light levels are desired for large areas, such as high-bay industrial, and street lighting. Where there are no high levels of light required over large areas, or where changing lamps is not difficult, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 1 |
| • 1.2.1.21 Energy efficient lighting within residents' suites?<br>Tip: Estimate the percentage of resident suites that have installed energy efficient lighting in their suites or that are taking advantage of a management incentivization program to use energy efficient lighting. | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 1 |
| • 1.2.1.22.1 Motion detectors on lights in model suites, exit stairways, laundry rooms, trash chute rooms, common area restrooms and other appropriate common areas?<br>Tip: Where motion detectors are not permitted by local property code, mark “not applicable”.<br>1.2.1.22.2 Describe:<br>□ | ◯ Over 5 detectors<br>◯ 1-5 detectors<br>◯ No detectors<br>◯ N/A | 2 |
| 1.2.1.23 What percentage of all lighting in the common areas is “high efficiency lighting”?<br>Tip: Estimate the percentage either by floor area or by number of lights. “High efficiency interior lighting” means T8 and T5 fluorescents with electronic ballast rather than T12s, AND compact fluorescent or LED light bulbs rather than incandescent. | ◯ 80%-100%<br>◯ 60%-79%<br>◯ 40%-59%<br>◯ 20%-39%<br>◯ Under 20%<br>◯ None | 3 |
| Does the building incorporate any of the following high-efficiency lighting features for the parking area and exterior lighting: | | |
| • 1.2.1.24 Daylight sensors?<br>Tip: Exterior lighting controlled with photovoltaic sensors (photocells or daylight sensors) ensures that lighting operates only at night. | ◯ Yes ◯ No | 2 |
| • 1.2.1.25 Timers to control exterior lighting?<br>Tip: Time clocks, computerized lighting control systems or the building's mechanical control systems need to be adjusted to account for different seasonal daylight hours. | ◯ Yes ◯ No | 2 |
| **Major HVAC Equipment** | | **20** |
| 1.2.2.1 Are the boilers 20 years old or more?<br>Tip: This applies only to active boilers presently used for building heating. The average life cycle of a boiler is 25 years. A boiler older than 20 years may need to be replaced. If there are no boilers, mark “not applicable”. | ◯ Yes ◯ No<br>◯ N/A (no boilers) | |
| 1.2.2.2.1 What percentage of heating boilers have a combustion efficiency rate of 85% or higher?<br>Tip: For each boiler provide a copy of preventative maintenance procedures and | ◯ 50%-100%<br>◯ 25%-49% | 12 |

| | | |
|---|---|---|
| combustion efficiency test results performed within the last year. Combustion efficiency tests must include analysis of temperature and CO2 or O2 levels of the flue gases as well efficiency measurements for at least two firing rates (e.g. low fire and high fire).<br>Electric boilers that meet outlined efficiency requirements are also eligible for points under this question.<br>If there are no boilers, mark “not applicable”.<br>1.2.2.2.2 Provide models and efficiencies:<br>▫ | ◯ Under 25%<br>◯ N/A | |
| 1.2.2.3 Do the boilers have a control system that allows them to operate through a wide range of loads?<br>Tip: A built-in control system that regulates the air-fuel mixture in the burner makes the boiler more efficient for handling varying loads and delivering the desired burner output. If there are no boilers, mark “not applicable”. | ◯ Yes ◯ No<br>◯ N/A (no boilers) | 2 |
| 1.2.2.5.1 What percentage (by capacity) of chillers in the facility are high-efficiency?<br>Tip: “High efficiency” means chillers with a full-load efficiency in the range of 0.46 - 0.65 kW/ton (or a COP equal to or greater than 5.4) in contrast to old CFC-11 or CFC-12 chillers that have an efficiency in the range of 0.72 - 0.90 kW/ton. For minimum performance levels, consult NRCan Energy Efficiency Regulations Higher Efficiency Requirements for Chillers Bulletin on Amending the Standards May 2010. If there is no central cooling plant nor chillers, mark “not applicable”.<br>1.2.2.5.2 Provide models and efficiencies:<br>▫ | ◯ 50%-100%<br>◯ 25%-49%<br>◯ Under 25%<br>◯ N/A (no chillers) | 6 |
| **Controls** | | **9** |
| 1.2.3.1 Is temperature setback implemented?<br>Tip: A simple way to reduce heating/cooling energy consumption is to match temperature to occupancy patterns by adjusting thermostats or by installing automatic controls and programming the equipment. Generally, any controller that can automatically set temperature lower in the heating season can also automatically set temperature higher in the cooling season. | ◯ Yes ◯ No | 2 |
| 1.2.3.2 Is temperature/weather compensation implemented?<br>Tip: Outdoor reset controls use outside air temperature as the basis for determining an ideal ""target"" water temperature to be supplied to the terminal units in systems that use water as a heating medium. Generally, any controller that can automatically set temperature lower in the heating season can also automatically set temperature higher in the cooling season. Mark “not applicable” where there is no hot water heating system. | ◯ Yes ◯ No ◯ N/A | 2 |
| 1.2.3.3 Is there a Building Automation System?<br>Tip: A Building Automation System (BAS) can control HVAC (Heating, Ventilating, Air Conditioning), lighting and other systems to optimize their start-up and performance, improve the interaction of mechanical subsystems, improve occupant comfort, and lower energy use. The computer and controllers in the BAS can be networked to the internet or serve as a stand-alone system. Some can also provide off-site building control. The computer and controllers in the BAS can be networked to the internet or serve as a stand-alone system. | ◯ Full<br>Tip: There is full BAS.<br>◯ Partial<br>Tip: There is a partial BAS. ◯ None<br>Tip: There is no BAS. | 3 |
| 1.2.3.7 Are there programmable thermostats in tenant spaces? | ◯ Yes ◯ No | 2 |
| **Hot Water** | | **15** |
| 1.2.4.1.1 What is the predominant type of heating system used for Domestic Hot Water (DHW)?<br>1.2.4.1.2 Describe:<br>▫ | ◯ Natural gas/fuel oil<br>◯ Electric<br>◯ Small commercial type or centralized heating boilers<br>◯ Instantaneous natural gas<br>◯ Instantaneous electric | |

| | | |
|---|---|---|
| | ◯ Other | |
| 1.2.4.3 Does the building have high-efficiency water heating equipment?<br>Tip: “High efficiency” heating equipment means condensing water heaters, “tankless” (instantaneous) water heaters, heat pump water heaters or solar water heating technology, or electrical heaters in areas where hydroelectric production consists of more than 60% of the total generating capacity. This includes regions in BC, Manitoba, Quebec and Newfoundland. | ◯ Yes ◯ No | 5 |
| 1.2.4.4.1 What percentage of hot water faucets have water saving devices?<br>Tip: “Water-saving devices” means devices that reduce the rate and/or duration of water-flow in faucets, for example low-flow faucets with aerators or automatic faucet on/off controls.<br>1.2.4.4.2 Describe:<br>□ | ◯ 50%-100%<br>◯ 25%-49%<br>◯ Under 25% | 5 |
| 1.2.4.5 Are domestic hot water temperatures maintained between 49°C (120°F) and 52°C (125°F)?<br>Tip: Measure temperatures at the taps. Temperatures between 49°C (120°F) and 52°C (125°F) are generally sufficient for killing legionella bacteria and are not high enough to cause scalding. Many factory settings are much higher than required. Since the dials of water heaters are calibrated only approximately, some trial and error and testing of the water temperature at the tap may be needed. | ◯ Yes ◯ No | 5 |
| **Other Energy Efficiency Features** | | **15** |
| Are there variable speed drives on the majority (i.e. more than 50%) of each of the following fan and pump systems?<br>Tip: Variable speed drives control the motor speed by varying the frequency of the electrical supply to match actual load conditions. This reduces energy consumption, improves fan or pump control, and extends the life of the equipment. Mark “not applicable”, where the systems are not present. Answer “Yes” only if there are variable speed drives on more than 50% of the particular system. | | |
| • 1.2.5.1 Main supply air systems? | ◯ Yes ◯ No ◯ N/A | 1 |
| • 1.2.5.2 Main chilled water pump and/or condenser water systems? | ◯ Yes ◯ No ◯ N/A | 1 |
| • 1.2.5.3 Heating pump systems? | ◯ Yes ◯ No ◯ N/A | 1 |
| • 1.2.5.4 Domestic water booster pumps? | ◯ Yes ◯ No ◯ N/A | 1 |
| • 1.2.5.5 Cooling tower fan motors? | ◯ Yes ◯ No ◯ N/A | 1 |
| 1.2.5.6 What percentage of motors on fans and pumps are high-efficiency?<br>Tip: The motor's nameplate usually indicates whether the motor is high efficiency. High-efficiency motors (HEMs) generally use 1 - 4% less electricity than standard motors, are more reliable, last longer, have extended winding and bearing life, result in lower transformer loading, cope well with short-term overloads and withstand higher voltage fluctuations or phase imbalances. | ◯ 50%-100%<br>◯ 25%-49%<br>◯ Under 25% | 2 |
| Are there other energy efficiency measures such as: | | |
| • 1.2.5.8 Exhaust air heat recovery?<br>Tip: A heat-recovery system captures heat from building exhaust air and reuses some of the energy to precondition the incoming outside air before supplying it to the building. This could be in the form of an air-to-air heat exchanger, glycol heat-recovery loop, heat wheel or heat pipe. Where heat recovery has been investigated and found to be unfeasible, mark “not applicable". Tip: A heat-recovery system captures heat from building exhaust air and reuses some of the energy to precondition the incoming outside air before supplying it to the building. This could be in the form of an air-to-air heat exchanger, glycol heat-recovery loop, heat wheel or heat pipe. Where heat recovery would not be practical, or cost-prohibitive, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 2 |
| • 1.2.5.15 Cogeneration (building or district scale)?<br>Tip: Cogeneration is the simultaneous production of heat and electrical or | ◯ Yes ◯ No ◯ N/A | 3 |

| | | |
|---|---|---|
| mechanical power. It is achieved by capturing and recycling the rejected heat that escapes from an electricity generation or a manufacturing process in the building. Cogeneration can be used to reduce peak demand. Where cogeneration would not be economically justified or would not be practical, mark “not applicable”. Where cogeneration has been investigated and found to be unfeasible, mark “not applicable”. | | |
| • 1.2.5.18 Energy Star in-suite appliances?<br>Tip: Management should have a policy to replace appliances with Energy Star rated appliances on a systematic basis. | ◯ 50%-100%<br>◯ 25%-49%<br>◯ Under 25% | 2 |
| • 1.2.5.19 Natural gas dryers?<br>Tip: If there are no dryers or natural gas supply is not available for the property, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 1 |
| **Low-Impact Electricity** | | **12** |
| 1.2.6.1 Is low-impact electricity purchased?<br>Tip: Many energy retailers now offer energy produced from certified solar, water, wind and recovery technologies. Points are only awarded when low-impact electricity is purchased from sources (generators /aggregators /distributers) certified under the EcoLogo or Green-e programs. If not known, check “No”. | ◯ Yes ◯ No | 4 |
| 1.2.6.2.1 How much low-impact electricity is purchased?<br>1.2.6.2.3 Name the provider:<br>□ | ☐ ◯ kWh ◯ GJ ◯ Btu 1.2.6.2.2 | |
| Does the building utilize any of the following renewable on-site energy sources:<br>Tip: Renewable energy sources do not deplete natural resources. | | |
| • 1.2.6.3.1 Active Solar?<br>Tip: This is generally used to increase the temperature of large volumes of water or air in commercial, residential and industrial buildings (e.g. solar wall or solar DHW panels).<br>1.2.6.3.2 Describe:<br>□ | ◯ Yes ◯ No | |
| • 1.2.6.4.1 Wind?<br>Tip: This is generally used to generate electricity to offset electricity purchased from the electric utility.<br>1.2.6.4.2 Describe:<br>□ | ◯ Yes ◯ No | |
| • 1.2.6.5.1 Photovoltaic?<br>Tip: Photovoltaic cells convert the sun's energy to usable electricity.<br>1.2.6.5.2 Describe:<br>□ | ◯ Yes ◯ No | 4 |
| • 1.2.6.6.1 Ground Source “Heat Pump”?<br>Tip: Using the temperature differential between above ground and below ground (or ground water), fluid is circulated in an underground (or underwater) loop. The energy collected is used for air and/or water heating. The system can be reversed in summer to provide cooling instead of heating.<br>1.2.6.6.2 Describe:<br>□ | ◯ Yes ◯ No | |
| • 1.2.6.7.1 Bio-mass?<br>Tip: Fuel such as round wood, wood and agricultural waste, prepared wood fuels, landfill gas and digester gas are burned using high efficiency combustion to provide space and/or water heating.<br>1.2.6.7.2 Describe:<br>□ | ◯ Yes ◯ No | |
| 1.2.6.8.1 What percentage of the building’s total energy use is supplied by these renewable sources? | ◯ Over 10%<br>10% or less | 4 |

| | | |
|---|---|---|
| Tip: Enter percentage of total annual energy requirements supplied from above sources.<br>1.2.6.8.2 Describe the source:<br>□ | ○<br>○ 0% | |
| **Envelope** | | **36** |
| Has the current performance of the building envelope been assessed in last 5 years in terms of the following:<br>Tip: An assessment of the current performance and condition of the envelope should consider the issues of relative humidity temperature and interior pressure. | | |
| • 1.2.7.1 Water infiltration and condensation?<br>Tip: Consider the differences in temperature on the inner and outer surface of the building, and conditions that might promote condensation on the surface of thermal bridges, i.e. the mold and mildew "control points". | ○ Yes ○ No | 1 |
| • 1.2.7.2 Moist air transfer?<br>Tip: Consider the envelope permeability and the ability of materials to withstand, without deterioration, periods of freezing and thawing. | ○ Yes ○ No | 1 |
| • 1.2.7.3 Air flow?<br>Tip: Consider the air pressure differences and air-leakage characteristics of the envelope. | ○ Yes ○ No | 1 |
| • 1.2.7.4 Heat transfer?<br>Tip: Assess the thermal resistance and quantity of heat transferred through of the envelope. | ○ Yes ○ No | 1 |
| 1.2.7.5.1 Are windows energy efficient?<br>Tip: Energy-efficient windows consist of, at a minimum, double-glazed windowpanes with frames spacers that have high thermal integrity.<br>1.2.7.5.2 Describe:<br>□ | ○ Yes ○ No | 5 |
| 1.2.7.6.1 Does the property have appropriate shading on south and west facing elevations to reduce the cooling load?<br>Tip: Appropriate shading may include shade created by near-by building(s) and/or high structure(s). Mark "not applicable" if there are no windows or where windows are located on the north face of the buildings (no direct sunlight).<br>1.2.7.6.2 Describe:<br>□ | ○ Yes ○ No ○ N/A | 3 |
| 1.2.7.9 Do pedestrian entrances from the outdoors use double doors with a vestibule or revolving doors and where there are vestibule heaters, do the set points avoid excessive or continuous heating? | ○ Yes ○ No | 1 |
| Has the building envelope been air-sealed in the following areas:<br>Tip: Seal all exterior joints in the building envelope and around penetrations of the building envelope for the utility services. Stack effect and air leakage through the building envelope can cause significant heat loss and deterioration of the building envelope. One indication of a leaky building can be observed in the winter, when occupants in the lower levels complain of draft and cold and those in upper levels complain of over-heating. | | |
| • 1.2.7.11 The top part of the building?<br>Tip: Seal roof-to-wall connections and exterior openings of mechanical penthouse and floors in the upper part of the building. | ○ Yes ○ No | 4 |
| • 1.2.7.12 The bottom part of the building?<br>Tip: Seal exterior openings and floor slab-to-wall connections and service core of the parking areas, entrance doors and the floors in the lower third of the building. | ○ Yes ○ No | 3 |
| • 1.2.7.13 Vertical shafts and elevators?<br>Tip: Seal service ducts and conduit penetrations, including excessive cable holes in the elevator shafts. In buildings with no vertical shaft or no elevators mark "not applicable". | ○ Yes ○ No ○ N/A | 2 |
| | | 4 |

| | | |
|---|---|---|
| 1.2.7.14 Has a comprehensive Building Condition Report been produced within the last 5 years?<br>Tip: A building condition assessment conducted at least every 5 years helps to ensure that issues are addressed before they turn into major problems. This also provides advance notice to owners, enabling them to plan a short, medium and long-term budget for repairs. In a building older than 10 years, the building envelope assessment should comprise a review of foundation, roof (for leaks), exterior walls (for cracking in the sealing and corrosion in exterior panel hangers), exterior windows, and infrared thermal imaging as needed. Systems to be assessed include plumbing systems, electrical systems, security systems, fire alarm systems, and mechanical systems. In buildings less than 10 years old and not requiring a Building Condition Report, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| 1.2.7.15 Were the recommendations of the Building Condition Report for the walls and windows carried forward into a Capital or Building Maintenance Plan?<br>Tip: In buildings less than 10 years old and not requiring a Building Condition Report, mark “not applicable”. In buildings 10 years or older, with no report done within the last 5 years, mark “no”. | ◯ Yes ◯ No ◯ N/A | 4 |
| 1.2.7.16 Were the recommendations of the Building Condition Report for the roof carried forward into a Capital Plan?<br>Tip: In buildings less than 10 years old and not requiring a Building Condition Report, mark “not applicable”. In buildings 10 years or older, with no report done within the last 5 years, mark “no”. | ◯ Yes ◯ No ◯ N/A | 6 |
| **Energy Innovation** | | **6** |
| 1.2.8.1.1 Are there other innovative energy efficient lighting measures (e.g. LED light-emitting diodes (LEDs) for general lighting, induction lighting, photoluminescent light for EXIT signs (excluding LED exit lighting)?<br>1.2.8.1.2 Describe:<br>□ | ◯ Yes ◯ No | 2 |
| 1.2.8.2.1 Are there other energy-saving systems or measures?<br>Tip: “Large impact” refers to technologies that have reduced energy use/carbon emissions by more than 10% of previous levels. “Small impact” refers to less than 10% reduction. Energy-saving systems or measures could include deep-lake cooling, solar absorption chillers, $CO_2$ demand ventilation, displacement ventilation, dehumidification methods, high-performance fume hoods, thermal mass storage, or demand-response capability such as participation in a program for off-peak scheduling of significant building electricity loads.<br>1.2.8.2.2 Describe any other energy-saving systems or measures:<br>□ | ◯ Large impact<br>◯ Small impact<br>◯ None | 4 |

| Question | | Points |
|---|---|---|
| **Energy Management** | | **70** |
| **Energy Policy** | | **5** |
| 1.3.1.1 Is there an energy management policy endorsed by senior management?<br>Tip: This must be a public document that expresses a commitment to establish energy targets, assign responsibilities, monitor performance, and undertake an annual review and report. | ◯ Yes, there is a formal energy management policy<br>◯ No, there is no energy management policy | 5 |
| **Energy Assessment** | | **4** |
| 1.3.2.1 Has the building had an energy assessment within the past three years that included recommendations with costs, savings and a payback period?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. A minimum of an ASHRAE Level 1 Walk-through audit or equivalency is required that includes:<br>• Utility billing analysis with benchmarking observations | ◯ Yes<br>◯ No<br>◯ A BOMA-accepted equivalent | 4 |

| | | |
|---|---|---|
| • Summary of major equipment and type of lighting systems in the buildings<br>• List of potential energy conservation opportunities, estimated savings, and simple payback, based on walk-through audit of the facility<br><br>The assessment report must identify low-cost improvements and potential capital improvements as well as redflag issues for a future more-detailed audit. In particular situations, where the building meets criteria set out in the BOMA BEST Application Guide for an acceptable equivalent, mark “A BOMA-accepted equivalent”. Buildings that have been occupied for less than 2 (two) years may utilize an energy study report that was prepared during the design of the building in lieu of a post-construction energy assessment report. This report must have shown simulated energy consumption for different design scenarios, and identify which options were chosen for the actual construction. Applicants must be able to demonstrate that these energy-reduction features were incorporated in the building. Please see the BOMA BEST Application Guide for more details. | | |
| **Energy Management, Monitoring and Targeting** | | **16** |
| 1.3.3.1 Is there a building-specific Energy Management (reduction) Plan to address issues raised in the energy assessment?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. The Energy Management Plan must document building-specific measures to improve building energy efficiency and reduce demand based on the most recent energy assessment and targets. These measures should be based on a clearly identified energy performance target, identified through the energy assessment or by the operational staff. The Plan must show allocated resources, estimated payback, and implementation timelines for specific energy efficiency improvements. In situations where the building meets criteria set out in the BOMA BEST Application Guide for an acceptable equivalent, mark “BOMA-accepted equivalent”. | ◯ Yes<br>◯ No<br>◯ A BOMA-accepted equivalent | 2 |
| 1.3.3.2.1 Is there a documented protocol for the regular review of energy consumption by a qualified and designated person to identify anomalies or excessive consumption and take corrective action as needed?<br>Tip: Monthly energy bills must be reviewed and monitored by the designated Energy Manager to identify anomalies or excessive consumption. Whenever a review has been done, this must be logged.<br>1.3.3.2.2 Describe how this is done:<br>□ | ◯ Not actively done<br>◯ By onsite staff using in-house spreadsheets<br>◯ By onsite staff using third party tools<br>◯ By an Energy Manager<br>◯ By a contracted energy company | 3 |
| 1.3.3.3.1 Are energy usage targets set?<br>Tip: Energy usage targets should be defined and documented. These can be expressed as an energy intensity or percent reduction over a period of time.<br>1.3.3.3.2 Describe:<br>□ | ◯ Yes ◯ No | 3 |
| 1.3.3.4.1 Is there evidence of movement towards these energy targets over time?<br>Tip: Review energy data for the past 3 years. If there is no energy data or no set targets, mark “no”. MEASUREMENT AND VERIFICATION uses measurements to reliably determine what savings have actually been achieved as a result of an energy management/conservation program or a specific energy efficiency project. The savings are determined by monitoring consumption during an ongoing energy program or before-and-after implementation of a project. Appropriate adjustments should be made to account for changes in conditions such as weather.<br>1.3.3.4.2 Describe:<br>□ | ◯ Yes ◯ No | 4 |
| 1.3.3.5 Have steps been taken to analyze and reduce peak energy demand?<br>Tip: Peak demand is the highest demand for energy during a time cycle. An electric bill consists of two major components: the **demand charge** and the **energy consumption charge**. Demand charges show the highest rate at which electricity is being consumed during peak-utility-service hours, typically measured by the service provider in 15- or 30-minute intervals during peak hours. Because | ◯ Yes ◯ No | 4 |

| | | |
|---|---|---|
| demand charges form a significant portion of a monthly electric bill, peak load management strategies that lower a facility's demand during those peak demand periods can result in significant facility cost savings. Many electricity utility companies now offer cost incentives for buildings that participate in 'demand limiting' programs that require buildings to limit their peak demand in response to specific time-based utility request. | | |
| **Energy Training** | | **5** |
| 1.3.4.1.1 Is there a continuing education plan for operations staff including new employees, on how to implement energy monitoring, equipment preventive maintenance, and energy efficiency measures?<br>Tip: Training can be in-house or external. Training needs should be identified, for example, for new staff, and whenever there are system upgrades. For new employees, this would comprise an introduction to the building's energy goals and energy efficiency operations. For current staff, the training would consist of ongoing, regular updates.<br>1.3.4.1.2 List the training courses or internal training taken by operations staff in last two years and for the next 12 months:<br>□ | ◯ Yes ◯ No | 5 |
| **Financial Resources** | | **5** |
| 1.3.5.1.1 Does the operating budget include items that relate to improving energy efficiency OR is the building participating in a program for energy efficient upgrades?<br>Tip: This can consist of an energy efficiency improvement budget for operations and capital improvements or participation in a program that provides financial assistance for energy upgrades.<br>1.3.5.1.2 Describe:<br>□ | ◯ Yes ◯ No | 5 |
| **Submetering** | | **8** |
| 1.3.6.2.1 Have submeters been installed to accurately measure and record occupants' energy usage?<br>Tip: Submetering, whereby occupants pay for the actual energy that they consume, increases their motivation to conserve energy and rewards those who do so. Submetering also allows property owners to keep the cost of rent reasonable and fair for all units regardless of how much energy they consume.<br>1.3.6.2.2 Describe:<br>□ | ◯ 50%–100%<br>◯ 25%–49%<br>◯ Under 25% | 6 |
| Have submeters been installed to measure the following major energy uses OR is the Building Automation System (BAS) used to track these energy uses:<br>Tip: Mark "not applicable" where the particular energy use is not present in the facility. | | |
| 1.3.6.4 • Cooling plant? | ◯ Yes ◯ No ◯ N/A | 0.5 |
| 1.3.6.5 • Cooling towers? | ◯ Yes ◯ No ◯ N/A | 0.5 |
| 1.3.6.6 • Food court/restaurant? | ◯ Yes ◯ No ◯ N/A | 0.5 |
| 1.3.6.7 • Other uses? | ◯ Yes ◯ No ◯ N/A | 0.5 |
| 1.3.6.8 Describe sub-metering:<br>□ | | |
| **Documented Operating Instructions** | | **5** |
| 1.3.7.1 Are there readily available operating instructions covering standard control settings and/or basic trouble-shooting for all major equipment and related sub-systems?<br>Tip: There must be a user-friendly, accessible operating manual that lists all the building systems along with a description of their function, and standard control settings and/or basic trouble shooting. For each system, the standard control settings should be outlined for each day from Monday to Sunday plus holidays, | ◯ Yes ◯ No | 5 |

| | | |
|---|---|---|
| and each time-of-day, as well as for the modes of operation – for example, occupied vs. unoccupied; day vs. night, etc. While an electronic manual may be available, there could also be a printed copy in an accessible location. Thus, in the event that computers are down or regular staff is not available, someone who is not entirely familiar with the system can still take over. The manual needs to be updated as systems are revised and serviced. In addition to the manual, a best practice is to post an instruction sheet of operating parameters (e.g. temperature set points, pressures, operating schedule) for each piece of equipment in the room. | | |
| **Maintenance and Commissioning** | | **22** |
| Does the regular mechanical systems maintenance schedule include the following:<br>Tip: The maintenance schedules must be documented and records maintained. The following operations and maintenances tasks must be performed bi-annually, or as recommended by the manufacturer, or in accordance with ASHRAE/IES Standard 100-2006R, *Energy Efficiency in Existing Buildings*. | | |
| • 1.3.8.2 Checks on boiler systems and measurements of boiler efficiency?<br>Tip: To monitor for proper combustion efficiency, carry out efficiency tests at least annually and calibrate burners so that delivered efficiency meets manufacturer specifications. If there are no boilers, mark “not applicable”. | ○ Yes ○ No ○ N/A | 1 |
| • 1.3.8.3 Checks on the correct operation of ventilation and cooling controls?<br>Tip: This involves checking that all setpoints are adjusted to meet efficiency requirements. If there is no HVAC, mark “not applicable”. | ○ Yes ○ No ○ N/A | 2 |
| • 1.3.8.4 Checking of temperature and humidity controls to ensure they are set correctly and are responding as intended?<br>Tip: There must be bi-annual evaluations of the control systems. | ○ Yes ○ No | 1 |
| • 1.3.8.5 Checking of air supply grilles to ensure they are not blocked and are delivering air as required?<br>Tip: Mark “not applicable” where there are no air grilles. | ○ Yes ○ No ○ N/A | 1 |
| • 1.3.8.6 Checks for refrigerant leaks?<br>Tip: For systems using refrigerant, maintain the refrigerant charge per the manufacturer’s requirements. Keep refrigerant leakage under 5%. If there is no cooling plant, mark “not applicable”. | ○ Yes ○ No ○ N/A | 1 |
| • 1.3.8.7 Checking of cooling towers?<br>Tip: This must include reviewing water treatment, bleed control and cycles of concentration, water temperatures, pump operation and sequencing, and sump during operation. If there are no cooling towers, mark “not applicable”. | ○ Yes ○ No ○ N/A | 1 |
| • 1.3.8.8 Scheduled filter replacement?<br>Tip: Replace or clean filters in accordance with manufacturer’s recommended schedule or design pressure drop. Ensure correct size and type of filter. If there is no air handling unit, mark “not applicable”. | ○ Yes ○ No ○ N/A | 2 |
| • 1.3.8.9 Cleaning and sterilizing of wet regions in the air conditioning system and checking for accumulation of dirt?<br>Tip: If there is no air handling unit, mark “not applicable”. | ○ Yes ○ No ○ N/A | 1 |
| • 1.3.8.10 Periodic caulking inspection and repair program of building envelope?<br>Tip: High performance weather stripping on doors and sealing around windows combined with regular checking and maintenance increases their thermal performance. | ○ Yes ○ No | 2 |
| • 1.3.8.12 Periodic check and repairs of all exterior doors and windows, and associated caulking or weather-stripping to ensure tight fit with minimal infiltration of outside air?<br>Tip: High performance weather stripping on doors combined with regular checking and maintenance increases their thermal performance. | ○ Yes ○ No | 1 |
| 1.3.8.14 Is there a Preventive Maintenance Program for the HVAC (Heating Ventilation and Air Conditioning) system and its components? | ○ Yes ○ No | 7 |

| | | |
|---|---|---|
| Tip: This is a prerequisite for BOMA BEST. Preventive maintenance recognizes that certain systems and their components require scheduled periodic maintenance, as well as overhauling or replacement after a certain age, at certain intervals, or due to specific causes. The Preventive Maintenance Program is a systematic approach that outlines what equipment must be reviewed, the corrective action that must be taken and how frequently this must occur. "Please see the BOMA BEST Application Guide for more details. | | |
| 1.3.8.15 Is there fault detection and diagnostic capability to verify and maintain operational performance of rooftop HVAC equipment? Tip: Incorporate fault detection and diagnostic (FDD) capabilities in all rooftop manufactured HVAC equipment to monitor equipment performance in following categories: refrigerant charge, airflow, economizer option, and cycling duration operations. Where there are no rooftop units, mark "not applicable". | ◯ Yes ◯ No ◯ N/A | 2 |

| Question | | Points |
|---|---|---|
| **Transportation** | | **60** |
| **Public Transportation** | | **45** |
| 1.4.1.1 What is the building's walkability index? Tip: Enter the walkability score for your building from http://www.walkscore.com. | ◯ Over 80%<br>◯ 65%-80%<br>◯ Under 65% | 15 |
| 1.4.1.2 Does the building have access to public transport within 500 meters? Tip: Good access to public transport is defined as at least one bus or streetcar stop, or train or underground station within 500 meters of the building. Where the building is located outside the public transportation network mark "not applicable". | ◯ Yes ◯ No ◯ N/A | 15 |
| 1.4.1.3 Is there service at least every 15 minutes during rush hour? Tip: Commuters expect public transport service at least every15 minutes during rush-hour periods. Where the building is located outside the public transportation network mark "not applicable". | ◯ Yes ◯ No ◯ N/A | 15 |
| **Cycling Facilities** | | **10** |
| 1.4.2.3 Are there bicycle racks for minimum 5% of occupants OR is there a bicycle rack vacancy of 10% at all times? Tip: Providing bicycle facilities for minimum 10% of occupants encourages the use of bicycles as an alternate form of transportation. | ◯ Yes ◯ No | 8 |
| 1.4.2.4 Are the majority of bike racks protected from inclement weather? Tip: Sheltering bicycles from rain further encourages cycling to work. | ◯ Yes ◯ No | 2 |
| **Innovation Points - Other measures** | | **5** |
| 1.4.3.1.1 Are there other measures to reduce car dependency (e.g. initiatives that support car-pooling, preferred parking spaces for car poolers, nearby auto share services)? Tip: Encourage residents to car pool by providing information on benefits and facilitating communication among occupants. Providing a reduced price on transit passes for all building occupants greatly encourages them to use public transport. Locating car-share services on the premises gives building occupants flexibility in the way they commute. Improving the site access for pedestrians and bikes using signage and/or landscaping can also help to decrease car dependency. 1.4.3.1.2 Describe: ▫ | ◯ Yes ◯ No | 5 |

## WATER

Points 80

| Question | | Points |
|---|---|---|
| **Water** | | **80** |
| **Water Consumption** | | **30** |
| 2.1.1 How is water consumption data collected for the building?<br>Tip: Some jurisdictions, such as Quebec do not meter water. | ◯ Water consumption unmetered or partially metered<br>◯ Utility invoice or calculated<br>◯ Submeter (including submeters connected to BAS) | |
| 2.1.5 The reported water consumption covers: | ◯ Total water consumption for the complex including occupants' areas and common/service areas and outside use<br>◯ Outside use and/or common/service areas only | |
| 2.1.6 Are occupants independently metered and billed by the water supplier? | ◯ All occupants metered and billed<br>◯ Some occupants metered and billed<br>◯ No occupants metered and billed | |
| 2.1.7 Where occupants are not independently metered and billed by the water supplier, indicate how occupants pay the landlord for their share of water usage:<br>Tip: A submeter is a separate meter installed by the landlord to measure actual water use by the individual resident unit, to quantify what portion of the main utility account is to be paid by the resident. Mark “not applicable” where occupants are independently metered by the water utility, or are not assessed a charge for water use. | ◯ Floor area<br>◯ Submetered data<br>◯ N/A | |
| 2.1.8 Is the property manager able to obtain copies of the water bills from the occupants independently metered and billed by the water supplier?<br>Tip: Aggregated water use data may be obtained from the local utility company. Where the tenants are not independently metered, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| 2.1.9 Describe how occupant water-use billing is handled:<br>Tip: Options include individual occupants with their own water meters, a single main water meter serving the building, with management billing occupants for calculated or estimated usage based on occupied floor area, or other parameters based on the type of occupation, or no water billing (i.e. management pays without reimbursement from occupants).<br>□ | | |
| | | **Points** |
| Please specify the ending month of the 12 month period for which water consumption figures are being entered.<br>Tip: Provide water consumption data for the most recent 12 months of consumption. Consumption information from the period prior to the most recent full calendar year will not be accepted (e.g., buildings certified in 2013 can not include any data from 2011 or earlier). | 2.1.10.1 Month: Select<br>2.1.10.2 Year: Sel | |
| 2.1.11 What was the building's total water bill for the 12 month period specified?<br>Tip: This will be calculated automatically if detailed data is entered below. If detailed information is not available, please provide an estimate. | $ | |
| What was the water consumption, date of utility meter reading and associated cost by billing period?<br>Tip: Provide water consumption for the specified 12 month period by inputting either total values (in any of the boxes provided), or billing period amounts. | | 30 |

| | | |
|---|---|---|
| 2.1.12 Water Consumption will be entered in: | ◯ m³<br>◯ Imperial Gallons | |

| | | | | Points |
|---|---|---|---|---|
| **Billing Period**<br>Tip: **Billing period** refers to monthly utility billing data for all forms of purchased and exported energy for at least 12 consecutive months or by monthly readings from local energy meters (either utility or owner-provided). If the utility does not bill monthly, then enter data for each billing period (e.g. quarterly or bi-annually). | 2.1.13.1 **Meter Reading Date**<br>Tip: **Reading date.** Input the calendar date of the meter reading. DD-MMM-YYYY (i.e. 04-JUL-2014). You may use the pop-up calendar to select a date, or type the date value. Provide the actual date of the meter reading that the utility used to base the invoice. This is usually clearly indicated on the monthly invoice, and is not the same as the "billing date" when the utility issued the invoice. | 2.1.13.2 **Consumption**<br>Tip: **Period consumption**. Should be provided in the units billed by the utility. | 2.1.13.3 **Cost**<br>Tip: **Period cost** includes all taxes, rebates and adjustments. If energy is purchased from a broker, then add the broker energy charges (including taxes), broken down for each period's net utility cost. Note that the cost of energy purchased does not factor in the BOMA BEST scoring. | |
| Previous Reading Date: | | | | |
| Water period 1: | | m³ | Cost $ | |
| Water period 2: | | m³ | Cost $ | |
| Water period 3: | | m³ | Cost $ | |
| Water period 4: | | m³ | Cost $ | |
| Water period 5: | | m³ | Cost $ | |
| Water period 6: | | m³ | Cost $ | |
| Water period 7: | | m³ | Cost $ | |
| Water period 8: | | m³ | Cost $ | |
| Water period 9: | | m³ | Cost $ | |
| Water period 10: | | m³ | Cost $ | |
| Water period 11: | | m³ | Cost $ | |
| Water period 12: | | m³ | Cost $ | |

| | Points |
|---|---|
| Indicate which of the following major water uses are present, and, where sub-metered, provide the water use quantity per annum.<br>Tip: Select "Submetered" or "Not submetered" for each use that is present. Mark "Not present" where a water service is not present. | |

| Usage | Submetered? | Consumption |
|---|---|---|
| Evaporative cooling towers | 2.1.14.1 | 2.1.14.2 |

| | | |
|---|---|---|
| | ◯ Submetered<br>◯ Not submetered<br>◯ Not present | m³ |
| Irrigation of landscape | 2.1.15.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.15.2<br>m³ |
| Large scale laundry services | 2.1.16.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.16.2<br>m³ |
| Food court and/or retail | 2.1.17.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.17.2<br>m³ |
| Gym | 2.1.18.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.18.2<br>m³ |
| Swimming pool | 2.1.19.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.19.2<br>m³ |
| Car washing | 2.1.20.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.20.2<br>m³ |
| Other water-intensive service (e.g. boiler feed)<br>2.1.21.3 Describe:<br>□ | 2.1.21.1<br>◯ Submetered<br>◯ Not submetered<br>◯ Not present | 2.1.21.2<br>m³ |

| | | Points |
|---|---|---|
| **Water Conserving Features** | | **30** |
| For each category of fixture, indicate what percentage of the fixtures are water efficient: | | |
| • 2.2.1 Low flow toilets that use equal to or less than 4.8 Litres/flush? | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 7 |
| • 2.2.4 Faucets for residential use with flow equal to or less than 5.7 Litres/min at 60 psi and/or proximity detectors? | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 5 |
| • 2.2.5 Low flow shower heads (equal to or less than 7.6 Litres/min)? | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 5 |
| • 2.2.6 Water efficient washing machines (front loading)? | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40% | 3 |

| | | |
|---|---|---|
| 2.2.9.1 Does all landscaping minimize the need for irrigation?<br>Tip: Landscaping that requires low or no supplemental irrigation, known as xeriscaping, involves the use of plant species that require little watering and techniques that help reduce the amount of water needed for irrigation. If the building and paved parking areas cover more than 80% of the site area, i.e. where there is no land available for landscaping, mark “not applicable”.<br>2.2.9.2 Describe:<br>□ | ◯ Yes ◯ No ◯ N/A | 3 |
| Are the following non-potable sources of water used for irrigation:<br>• 2.2.10 Rainwater?<br>Tip: Rainwater is water collected in cisterns for irrigation. These can be located either inside or outside the building. A green roof that uses no irrigation also qualifies as a rainwater capture system. If the building and paved parking areas cover more than 80% of the site area, i.e. there is no land available for landscaping, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 2.2.11 Externally supplied recycled water?<br>Tip: Some municipalities supply externally recycled water. Where there is no irrigation or where there is no source of externally supplied recycled water, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |
| • 2.2.12 Grey Water?<br>Tip: Grey water is treated waste-water from sinks and showers (not toilets) that has had soils and undesirable bacteria removed. While a grey water system often requires an outside treatment field and dual plumbing, some systems are designed to be located inside the building. If the building and paved parking areas cover more than 80% of the site area, i.e. there is no land available for landscaping, or where local regulations prohibit grey water, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| Is the following water efficient technology used for irrigation:<br>Tip: If there is no landscaping, or where landscaping does not require any irrigation, mark “not applicable”. | | |
| • 2.2.13 Drip irrigation? | ◯ Yes ◯ No ◯ N/A | |
| • 2.2.14 Root-fed irrigation? | ◯ Yes ◯ No ◯ N/A | 4 |
| • 2.2.15 Moisture sensors? | ◯ Yes ◯ No ◯ N/A | |
| • 2.2.16.1 Other water efficient technology?<br>2.2.16.2 Describe:<br>□ | ◯ Yes ◯ No ◯ N/A | |
| **Water Management** | | **18** |
| 2.3.1 Is there a written policy intended to minimize water use, and encourage water conservation?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. A water conservation policy should express a commitment to reduce demand for water and to establish goals and strategies to reduce water consumption. | ◯ Yes ◯ No | 3 |
| 2.3.2 Is there a documented protocol for the regular review of water bills to identify and investigate all occurrences of excessive or unusual water use?<br>Tip: Water use must be monitored on a regular, scheduled basis. Monthly water bills must be carefully reviewed and compared to water meter readings for anomalies or excessive consumption, and action must be taken to identify the causes of undesirable trends. Whenever a review has been done, this must be logged. Mark “not applicable” where water is not metered. | ◯ Yes ◯ No ◯ N/A | 4 |
| 2.3.4 Has a water assessment been completed within the last three years?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. The water assessment report must include:<br>• Water billing analysis including cost and consumption history;<br>• Water intensity benchmarks;<br>• Water-using equipment inventory and end-use analysis; | ◯ Yes<br>◯ No<br>◯ A BOMA-accepted equivalent | 4 |

| | | |
|---|---|---|
| • List of potential water conservation measures including maintenance procedures and retrofit measures;<br>• Estimated costs, savings and payback times for recommended measures.<br><br>The water assessment report may be incorporated into the energy assessment report.<br>In particular situations, where the building meets criteria set out in the BOMA BEST Application Guide for an acceptable equivalent, mark “A BOMA-accepted equivalent”. Buildings that have been occupied for less than two (2) years or have no water meter may submit a Water-using Equipment Inventory Report. Buildings where 75% or more of the water is purchased directly by tenants may prepare a water communication plan. Consult the BOMA BEST Application Guide for requirement details. | | |
| 2.3.5.1 Are there water use reduction targets?<br>Tip: Water usage targets must be defined and recorded. Targets can be expressed as a volume or percent reduction over a specific period of time, or as a percentage reduction in Litres/person.<br>2.3.5.2 Describe:<br>▫ | ◯ Yes ◯ No | 4 |
| 2.3.6 Are there regular procedures for checking and fixing water leaks?<br>Tip: Periodic checks for leaks can be done by recording the water meter reading before and after a set time period when there is no water use. (For example: taking a meter reading at night and again the following morning). Mark “not applicable” if there is no water meter, or no opportunity to monitor the water meter over extended periods. | ◯ Yes ◯ No ◯ N/A | 3 |
| **Innovation Points - Other Measures** | | **2** |
| 2.4.1.1 Are there other water-saving features or measures?<br>Tip: Other water-saving features could include low-flow cleaning.<br>2.4.1.2 Describe:<br>▫ | ◯ Yes ◯ No | 2 |

## WASTE REDUCTION AND SITE

**Points**
110

| Question | | Points |
|---|---|---|
| **Waste Reduction and Recycling** | | **55** |
| **Recycling, Handling and Storing Recyclable Materials** | | **25** |
| 3.1.1.1 Is there a waste diversion program that incorporates the recycling of materials such as: paper & cardboard; bottles and cans; food waste; and plastics for occupants, visitors and operations at the site, to the extent that local infrastructure is available to accommodate these materials?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. The property must have an active recycling program. A BOMA-accepted equivalent may suffice in particular situations as per the conditions and criteria set out in the BOMA BEST Application Guide. | ◯ Yes<br>◯ No<br>◯ A BOMA-accepted equivalent | 6 |
| 3.1.1.2 Are there separate storage/handling facilities for used paper products, glass, metal and plastic?<br>Tip: A separate designated area for storage will help to avoid recycled waste being inadvertently hauled away with other refuse. | ◯ Yes ◯ No | 6 |
| 3.1.1.3 Are there collection points for sorting paper, glass, metal and plastic in the areas where waste is generated?<br>Tip: Recycling rates increase when collection points are located near the area where waste is being generated. All collection should | ◯ Yes ◯ No | 5 |

| | | |
|---|---|---|
| separate recyclables from waste garbage as per local or hauler requirements. | | |
| Is there a provision for central collection / storage for the following: | | |
| 3.1.1.5 • Batteries? | ◯ Yes ◯ No | 1 |
| 3.1.1.6 • Compact fluorescent lamps? | ◯ Yes ◯ No | 1 |
| 3.1.1.8 • Electronic waste? | ◯ Yes ◯ No | 1 |
| 3.1.1.12 Does the building have a composting program for organic waste?<br>Tip: Composting may be done on-site or off-site at a special centralized facility. Mark "not applicable" where there are no facilities available to divert compost. | ◯ Yes ◯ No ◯ N/A | 5 |
| **Waste Reduction Program** | | **30** |
| 3.1.2.1 Are waste audits conducted:<br>Tip: A waste audit can be conducted in-house, or by an external third party. It must identify the performance period in question along with the types and quantities (weight / volume) of waste generated in the building. | ◯ Annually?<br>◯ Every 2-3 years?<br>◯ At longer intervals?<br>◯ No | 5 |
| 3.1.2.2 Is regular monitoring of waste conducted?<br>Tip: This is done by recording the weight or volume of waste that is leaving the building. | ◯ Yes ◯ No | 5 |
| 3.1.2.3 What is the current diversion rate?<br>Tip: "Diversion rate" means the ratio between the weights of the non-hazardous solid waste that is recycled and/or composted compared to the total amount of non-hazardous waste generated, expressed as a percentage by weight using the following formula:<br>(Waste Recycled & Reused) / (Total Waste Recycled + Waste Reused + Waste Disposed) x 100%<br>Diverting waste minimizes the land required for solid waste disposal sites and reduces the impact on groundwater and soil. "Total waste" means all waste destined for landfill as well as all waste that could be diverted including operations waste, electronic waste and renovation waste. | ◯ 90% or more<br>◯ 80%-89%<br>◯ 70%-79%<br>◯ 60%-69%<br>◯ 50%-59%<br>◯ 40%-49%<br>◯ 30%-39%<br>◯ 20%-29%<br>◯ 10%-19%<br>◯ Under 10%<br>◯ Unknown | 10 |
| OPTIONAL - Entering monthly waste figures is encouraged, but not required. Waste figures should include all waste from the property. | | |
| Please specify the ending month of the 12 month period for which solid waste figures are being entered. | 3.1.2.4.1 Month: Select / 3.1.2.4.2 Year: Sel | |
| 3.1.2.5 If you do not have monthly data, what was the building's total waste (landfill plus recycling) bill for the 12-month period specified?<br>Tip: This will be calculated automatically if detailed data is entered below. | $ | |
| What was the total waste (landfill plus recycling) in imperial tons or metric tonnes (MT), in total or by month, for the 12 month period specified?<br>Tip: Enter the total amount of waste (aggregate waste destined for landfill and recycling) for each month or as a total amount for the 12 month period specified. | | |
| 3.1.2.6 Waste Consumption will be entered in: | ◯ Metric Tonnes<br>◯ Imperial Tons | |

| Month | 3.1.2.7.1 Waste Amount | 3.1.2.7.2 Cost |
|---|---|---|
| Waste/recycling month 1: | MT | Cost $ |
| | | |

| | | | |
|---|---|---|---|
| Waste/recycling month 2: | MT | Cost $ | |
| Waste/recycling month 3: | MT | Cost $ | |
| Waste/recycling month 4: | MT | Cost $ | |
| Waste/recycling month 5: | MT | Cost $ | |
| Waste/recycling month 6: | MT | Cost $ | |
| Waste/recycling month 7: | MT | Cost $ | |
| Waste/recycling month 8: | MT | Cost $ | |
| Waste/recycling month 9: | MT | Cost $ | |
| Waste/recycling month 10: | MT | Cost $ | |
| Waste/recycling month 11: | MT | Cost $ | |
| Waste/recycling month 12: | MT | Cost $ | |

| | | |
|---|---|---|
| 3.1.2.8.1 Are there waste-reduction targets?<br>Tip: Targets can be expressed as a waste quantity by weight or percent reduction.<br>3.1.2.8.2 Describe: | ○ Yes ○ No | 5 |
| 3.1.2.13 Is there a written policy intended to minimize renovation / construction waste being sent to landfill?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. Construction and demolition waste - which accounts for about 30% of Canada's landfill - can be reduced by implementing a source separation and recycling program on-site. The program must meet the minimal requirements of the jurisdiction (e.g. 3R Code of Practice). The waste specifications should address recycling of corrugated cardboard, metals, concrete blocks, clean dimensional wood, plastic, glass, gypsum board and carpet. | ○ Yes ○ No | 5 |

| Question | | Points |
|---|---|---|
| **Site** | | **55** |
| **Site Pollution** | | **20** |
| 3.2.1.1 Is the building site free of contamination?<br>Tip: There must be evidence that the site is free of contamination or that it has been remediated to an acceptable level. | ○ Yes ○ No ○ Unknown | 20 |
| If the site is known to be free of contamination, which of the following is this based on:<br><br>Tip: There must be evidence that the site is free of contamination or that it has been remediated to an acceptable level. | | |
| • 3.2.1.2 Document Search?<br>Tip: A document search has been conducted and there is no reason to suspect that the site is contaminated (i.e. it has never had underground storage tanks (USTs) or outside storage tanks (ASTs), it was always a residential building or other facility that did not use chemicals, it is not situated near gas stations or other problem industries, there have been no previous potential problem businesses on the site). | ○ Yes ○ No | |
| • 3.2.1.3 Phase 1 Environmental Assessment?<br>Tip: A Phase 1 Environmental Site Assessment has been conducted that proves the site to be free of contamination. | ○ Yes ○ No | |
| | | |

| | | |
|---|---|---|
| • 3.2.1.4 Confirmation Phase 2 Environmental Site Assessment or Phase 3 Clean Up Report?<br>Tip: The site was once contaminated, but has been remediated to an acceptable level, as indicated by a Phase 3 Cleanup Report. | ◯ Yes ◯ No | |
| 3.2.1.5.1 If the site is known to be contaminated are efforts being made to clean it up?<br>Tip: If the site is known to be contaminated, efforts to clean up the site include conducting an engineering assessment of potential hazards, developing cost estimates to eliminate the problem, and hiring a contractor for removal and cleanup. Evidence of the management of the risk with regular inspections and leak detectors approved by the Dept. of Environment is also acceptable. If the site is known to be uncontaminated, mark “not applicable”.<br>3.2.1.5.2 Describe:<br>□ | ◯ Yes ◯ No ◯ N/A | |
| **Site Enhancement** | | **35** |
| Does building exterior management include the following best practices: | | |
| • 3.2.2.1 Selection of maintenance equipment that minimizes energy, water and noise?<br>Tip: Best practices include using equipment that minimizes use of energy and water and reduces noise emissions (for example, using brooms, rakes, shovels, ice picks etc.). Where conventional mechanical maintenance equipment is needed, it should be phased out when it reaches the end of its useful life and replaced with environmentally preferable equipment that performs well in terms of energy and water efficiency, emissions and noise levels. | ◯ Yes ◯ No | 2 |
| • 3.2.2.2 Building Exterior/Façade Cleaning?<br>Tip: Best practices include use of high pressure water with no added chemicals to impact vegetation and groundwater. Window cleaning should utilize pH neutral products. Low VOC sealants should be used on the building's exterior should be used “as-needed” as part of the preventive maintenance program. | ◯ Yes ◯ No | 2 |
| • 3.2.2.3 Sidewalk/Hardscape Cleaning?<br>Tip: Products, equipment and procedures should minimize the use of harmful chemicals, energy waste, water waste, air pollution, solid waste and/or chemical runoff. The building’s sidewalks should be swept frequently and cleaned as needed with a GS-37 certified chemical. Parking garages should be cleaned with a propane-powered sweeper. | ◯ Yes ◯ No | 2 |
| 3.2.2.4 Does the site use “moderate to high drought tolerant plants” that are also included in a local or regional “native species” plant list OR Does the site include a native butterfly garden?<br>Tip: Plant lists include those from universities, water agencies, government or nursery growers associations. Mark “not applicable” where there is no landscaping. | ◯ Yes ◯ No ◯ N/A | 4 |
| 3.2.2.5 Does the site contribute to a wildlife corridor where adjacent sites include naturalized landscaping?<br>Tip: Mark “not applicable” where adjacent sites do not provide conditions to establish a contiguous wildlife corridor. | ◯ Yes ◯ No ◯ N/A | 3 |
| 3.2.2.6 Does the site include stormwater management enhancements to help divert stormwater from roof, parking lots and sidewalks before it reaches the storm sewer or adjacent natural body of water?<br>Tip: Diversion measures include a green roof, directing stormwater run-off to swales, a rain garden, retention basin, pervious pavements or a cistern (for re-use) before it reaches the storm sewer. Mark “not applicable” where the building covers more than 90% of the site. | ◯ Yes ◯ No ◯ N/A | 3 |
| 3.2.2.7 Is outdoor lighting designed to minimize night-time light pollution?<br>Tip: All exterior fixtures that exceed 2,500 lux need to be shielded such that they do not directly emit any light at a vertical angle more than 90 degrees from straight down. | ◯ Yes ◯ No | 3 |
| 3.2.2.8 Are bird-friendly measures in place that include measures to mitigate daytime collisions AND nighttime collisions? | ◯ Yes ◯ No | 3 |

| | | |
|---|---|---|
| Tip: Measures for mitigating **daytime collisions** include (at a minimum) applying primary window treatments to all glass building facades up to 16 metres. Primary (exterior) treatments must cover 85% of window surfaces if it represents more than a 2 m2 area of contiguous glass. When appropriate, the remaining 15% should be treated with secondary (internal or other exterior) treatments if it represents more than a 2 m2 area of contiguous glass. Measures for mitigating **nighttime collisions** include "lights-out" programs AND shielding or projecting light downward on the building exterior. Review the BOMA BEST® Bird-Friendly Guidelines – details (Q3.2.2.8) for more details on these requirements. | | |
| 3.2.2.9.1 Are there measures to reduce the heat island effect including trees or high albedo paving or a combination of trees and high albedo paving on at least 20% of non permeable landscaping?<br>Tip: The heat island effect can be reduced by increasing the heat reflectance of paved areas by repaving with material of SRI of 25 or higher, providing tree-shade or other shading of hardscapes.<br>3.2.2.9.2 Describe:<br>□ | ◯ Yes ◯ No | 5 |
| 3.2.2.10 What percentage of the roof is covered with high albedo surfacing?<br>Tip: The heat island effect can be reduced by the introduction of white (high albedo) roofs having a Solar Reflectance Index (SRI) of 70 or higher for low slope roofs or SRI of 25 or higher for steep slope roofs. | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40%<br>◯ None | 3 |
| 3.2.2.11 What percentage of available roof space forms a green roof?<br>Tip: The heat island effect can be reduced by the introduction of vegetated (green) roofs.<br>A green roof is an extension of an above-grade roof, building on top of a human-made structure that allows vegetation to grow in a growing medium. Green roofs can be either extensive (shallow growth media with low and hardy, typically alpine, dryland or indigenous plants) or intensive (deeper growing medium which can accommodate shrubs and trees).<br>Components of a green roof can include: vegetation, growing media, moisture retention mat, drainage panel and filter fabric, root barrier, waterproofing membrane and a protection board.<br>Applicants should be able to produce construction or design drawings for the green roof and must allow access for the verifier to visually inspect the green roof. | ◯ 70%-100%<br>◯ 40%-69%<br>◯ Under 40%<br>◯ None | 5 |
| 3.2.2.12 Describe measures to reduce the heat island effect of the roof:<br>□ | | |

## EMISSIONS AND EFFLUENTS

**Points**
170

| Question | | Points |
|---|---|---|
| **Air Emissions** | | **30** |
| **Boiler Emissions** | | **30** |
| 4.1.1 What percentage of the building's boilers have low $NO_x$ emission rates?<br>Tip: A low-$NO_x$ emitting boiler which uses gaseous fuel produces the following emissions:<br>• 26 g/GJ for boilers with capacity of 10.5-105 GJ/hr;<br>• 40 g/GJ for boilers with capacity above 105 GJ/hr.<br>Electric and condensing boilers are considered low-$NO_x$ emitting boilers. If there are no boilers, mark "not applicable".<br>Typically the burners are set up to achieve the required $NO_x$ emission rates during initial commissioning. A third party testing company will sometimes attend and test to | ◯ 75%-100%<br>◯ 50%-74%<br>◯ 25%-49%<br>◯ Under 25%<br>◯ None<br>◯ N/A | 23 |

| | | |
|---|---|---|
| confirm. During the annual combustion setup/tune, $NO_x$ emission rates should be checked again and adjusted to maintain permitted levels.<br>The BOMA BEST program requires a copy of the initial (if the boiler has been in use for no longer than one year), or most recent, annual combustion analysis test report, which must include $NO_x$ emission rates. Combustion analysis testing must be performed annually. For additional guidelines please refer to the Canadian Council of Ministers of the Environment document titled National Emission guidelines for commercial/industrial boilers and heaters, released in 1998. | | |
| 4.1.2 Are records kept of the cleaning and calibration of burners, monitoring of controls, and analysis of flue gas?<br>Tip: To help maintain proper combustion efficiency, carry out efficiency tests annually as a minimum, preferably more often, and calibrate burners so that the delivered efficiency meets manufacturer specifications. If there are no boilers, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 7 |

| Question | | Points |
|---|---|---|
| **Emissions - Ozone Depletion** | | **43** |
| **Refrigerants** | | **25** |
| Please indicate the percentage of each type of refrigerant used for the building’s cooling systems:<br>Tip: The “Ozone-depleting potential (ODP)” of a substance means the measure of its contribution to ozone depletion relative to that of CFC11 - the higher the value, the more damaging it is to the ozone layer. Another concern with regards to refrigerants is the global warming potential (GWP). For a summary of common refrigerants in HVAC equipment, see “Refrigerant Summary”. Include refrigerants from packaged or window A/C units (where applicable), if owned by the building. Where multiple refrigerants are used in the building's cooling systems, indicate the percentage use of refrigerants based on the total cooling capacity of the chillers utilizing each refrigerant. If there are no ozone depleting substances (ODS), mark “not applicable”. | | |
| • 4.2.1.1 R11?<br>Tip: R11 (CFC 11), ODP = 1.0, GWP = 1500 | ☐ % | |
| • 4.2.1.2 R12?<br>Tip: R12 (CFC 12), ODP = 1.0, GWP = 4500 | ☐ % | |
| • 4.2.1.3 R22?<br>Tip: R22 (HCFC22), ODP = 0.05, GWP = 510 | ☐ % | |
| • 4.2.1.4 HCFC123?<br>Tip: HCFC123, ODP = 0.014, GWP = 29 | ☐ % | 10 |
| • 4.2.1.5 HFC134?<br>Tip: HFC134, ODP = 0, GWP = 420 | ☐ % | |
| • 4.2.1.6 R410A?<br>Tip: R410A, ODP = 0, GWP = 1900 | ☐ % | |
| • 4.2.1.7 R410B?<br>Tip: R410B, ODP = 0, GWP = 2000 | ☐ % | |
| • 4.2.1.8.1 Other with no ODP?<br>Tip: Other refrigerants with an ODP of 0 | ☐ % | |
| 4.2.1.8.1 Describe:<br>☐ | | |
| • 4.2.1.9 Check if there are no ODS:<br>Tip: The building does not use any refrigerants | ☐ | |
| 4.2.1.10 Are there automatic refrigerant leak detectors?<br>Tip: There should be refrigerant sensors in machinery rooms where refrigerant vapour from a leak may be concentrated. In well-ventilated areas, leak detection should consist of air-sampling lines connected to specific parts of the refrigeration system, such as the compressor housing. If there are no ODS, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 10 |

| | | |
|---|---|---|
| 4.2.1.11 If the building has on-site ozone-depleting substances (ODS), are there recovery facilities or services that comply with federal guidelines and requirements?<br>Tip: Recovery can be to a system receiver or to a certified recycling or recovery machine provided by third party operator. Refrigerant recovery should take place prior to opening equipment for maintenance, service, repair or disposal. It should be done according to procedures set out in the Air-Conditioning and Refrigeration Institute (ARI) Standard 740, "Refrigerant Recovery/Recycling Equipment". If there are no ODS, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 5 |
| 4.2.1.13 What is the number of in-suite (e.g window) cooling units? | | |
| **Management of Ozone Depleting Refrigerants** | | **18** |
| Is there a documented management plan for Ozone Depleting Substances (ODS) that includes the following:<br>Tip: This is a prerequisite to achieve BOMA BEST certification. Effective January 1, 2015, operating or allowing the operation of a chiller containing CFCs will be prohibited. If there are no ODSs, mark “not applicable”. | | |
| • 4.2.2.1 inventory of refrigerants and records?<br>Tip: Inventory should show the present ODS and records should show the historical quantities of ODS. | ◯ Yes ◯ No ◯ N/A | 3 |
| • 4.2.2.2 maintenance reports, loss reports, and leak test results? | ◯ Yes ◯ No ◯ N/A | 2 |
| • 4.2.2.3 operational staff training?<br>Tip: Environmental awareness courses should include course content on “Refrigerant Control” or “CFC Handling” that has been developed by the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) and Environment Canada. These courses are typically one day in length. When the maintenance of the equipment is outsourced, the contractor should provide evidence of meeting the staff training requirements. | ◯ Yes ◯ No ◯ N/A | 2 |
| • 4.2.2.4 periodic leak testing? | ◯ Yes ◯ No ◯ N/A | 3 |
| 4.2.2.5 Is there a phase-out plan for ozone-depleting refrigerants?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. Until December 31, 2009, charging a chiller with CFCs following an overhaul was still allowed if the owner agreed to convert or replace the system within 12 months after it had been charged so that it no longer contained CFCs. Effective January 1, 2015, operating or allowing the operation of a chiller containing CFCs will be prohibited. If there are no ODS, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 5 |
| 4.2.2.6 Is there a maintenance contract for the cooling system with a certified contractor?<br>Tip: A “Certified Contractor” is one who is recognized by the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) as qualified to handle ODSs. The contract should be for regular maintenance and monitoring of the refrigeration system, the distribution piping, and the leak detection system. If there are no ODSs, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |

| Question | | Points |
|---|---|---|
| **Emissions - Water Effluents** | | **22** |
| **Waste Water Effluents** | | **22** |
| 4.3.1 Are floor drains protected from chemical spills in areas where chemicals are stored?<br>Tip: At a minimum, there must be containment of chemicals used in building operations, for example, oils, solvents, rust inhibitors, biocides, and pesticides. This can consist of secondary containment with plastic trays to store the materials. Where there are no chemicals in the building, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 5 |

| | | |
|---|---|---|
| 4.3.2 Are roof drains connected to sanitary or combined sewers?<br>Tip: Disconnecting roof drains from sanitary or combined sewers avoids unnecessary loading of wastewater treatment facilities. | ◯ Yes ◯ No | 5 |
| 4.3.3.1 Are storm water management measures implemented to reduce water run-off from roofs and hard surfaces, such as parking areas?<br>Tip: STORMWATER MANAGEMENT includes managing the quantity and quality of stormwater run-off. Best management practices can be structural or operational. Structural measures include: rainwater catchment, flow control structures which channel the overflow into the pervious areas; green roofs; integrating “soft” structures such as ponds, swales or wetlands to work with existing or “hard” drainage structures such as pipes and concrete channels; creating above- or below-ground retention ponds to treat polluted stormwater; or installing control devices to remove contaminants before they pollute surface or groundwater. Operational practices include: managing hazardous materials to prevent release of pollutants into the environment (source control).<br>4.3.3.2 Describe measures:<br>□ | ◯ Yes ◯ No | 5 |
| 4.3.6 Are there documented procedures to ensure that glycol discharges from the flushing of cooling coils are minimized or eliminated?<br>Tip: Used glycol and water from cooling towers should be tested to ensure that they meet local sewer-use by-laws before being discharged into the drain system. Ethylene glycol, used as an anti-corrosion agent, and in freezing point depressants in air conditioning systems, is toxic to humans and animals. Mark “not applicable” if glycol is not being used. | ◯ Yes ◯ No ◯ N/A | 4 |
| 4.3.7.1 Are there documented policies for snow and ice management that aim to minimize damage to the environment by minimizing contaminated run-off?<br>Tip: Snow should be removed from building entrances and high-traffic exterior walkways using manual snow shovels and brooms. Only when heavy snowfall exceeds the ability to manually remove snow and ice, should this be done with mechanical snow brushes and snow blowers. Prompt removal of snow should reduce the need for de-icer. Certified environmentally friendly de-icers should be specified. During extreme cold, sand should be used as an abrasive, and the application of de-icing agent discontinued. Unused de-icing agent should be carefully stored to eliminate the potential for chemical runoff.<br>4.3.7.2 Describe:<br>□ | ◯ Yes ◯ No | 3 |

| Question | | Points |
|---|---|---|
| **Emissions - Hazardous Materials** | | **45** |
| **Hazardous Materials Survey** | | **5** |
| 4.4.1.1 Has a hazardous building materials survey and a use-related chemical inventory been completed within the last three years?<br>Tip: This is a prerequisite to achieve BOMA BEST® certification. A **Hazardous Materials Survey** should include only building-related hazardous materials and must indicate, at a minimum, whether the following four hazardous building materials are present in the building: Asbestos-containing materials (e.g., insulation coverings, putties and caulking, older equipment); Polychlorinated biphenyls (PCBs) (e.g., old fluorescent lighting ballasts, transformers); Lead (e.g., lead in paint); and Mercury (e.g., thermostats, lighting). The survey must indicate the type of hazardous materials present in the building, its location, the quantity, its condition, and a list of recommended actions to meet province-specific regulatory requirements with respect to maintenance, inspection, training and abatement.<br>In addition, a **Hazardous Chemicals or Use-Related Products Inventory** must also be conducted and include pesticides, at a minimum. This Inventory must include a list of chemicals or use-related products brought into the building for use, handling and storage; location, Material Safety Data Sheets for each chemical or use-related product; approximate quantities; and a live index of the chemicals or use-related | ◯ Yes ◯ No | 5 |

| | | |
|---|---|---|
| products including the chemical name and page reference for easy access to Material Safety Data Sheets (MSDS) and other relevant information related to each chemical. | | |
| **Asbestos** | | **10** |
| 4.4.2.1 If there is asbestos present, is there an up-to-date inventory based on an asbestos survey that includes records of locations and the condition of all asbestos?<br>Tip: Buildings constructed before 1981 are more likely to contain asbestos. If there is no asbestos in the building mark “not applicable”. | ○ Yes ○ No ○ N/A | 3 |
| 4.4.2.2 Is all friable asbestos encapsulated to prevent the fibres from becoming air-borne?<br>Tip: The presence of asbestos-containing materials does not, in itself, constitute a health hazard, provided the asbestos is intact. Friable asbestos can crumble. Encapsulating it avoids the health hazards, which can occur when asbestos fibres become airborne. If the building was completed after 1981, mark “not applicable”. | ○ Yes ○ No ○ N/A | 3 |
| 4.4.2.3 Is there a documented asbestos management plan that includes training and the precautions to be taken during repairs and renovations?<br>Tip: The management plan should include the provision for regular inspections of all friable asbestos in the building and training for anyone who may have some responsibility for, or contact with asbestos. During repairs or renovations, asbestos that was originally stable may be disturbed and become hazardous. When asbestos is being removed, building occupants must be notified; the work area must be isolated and clearly identified and in some circumstances, pressure sealed and provided with an air-filtration system. Workers (including building staff and contractors) must be fully trained to use specially designed protective clothing and equipment to handle the asbestos in the prescribed manner. Once removed, the asbestos must be packaged in a rigid, impermeable, sealed container of sufficient strength to accommodate the weight of the friable asbestos waste, or it should be double bagged within two six-mm polyethylene bags. The final disposal of asbestos waste must be an approved sanitary or designated industrial landfill site. If the building was completed during a period when legislation was in place forbidding the use of asbestos (e.g. after 1981) or there is no asbestos mark “not applicable”. | ○ Yes ○ No ○ N/A | 4 |
| **Radon** | | **5** |
| 4.4.3.1.1 Is the building located outside a high risk area for radon, OR If the building is in a high risk area for radon, has a radon survey been done which indicates levels below 200 Bq/m³?<br>Tip: Radon is a colourless, odorless, naturally occurring, radioactive gas produced by radium decay. It is believed to cause lung cancer. The most common source of indoor radon is the uranium in the soil or rock upon which facilities are built. Areas considered high-risk in Canada are Winnipeg, Calgary, Vancouver, Sherbrooke, Saint John and Sudbury. A Phase 1 Environmental Site Assessment will typically make reference to radon levels.<br>4.4.3.1.2 Where applicable, describe precautions that are being taken:<br>□ | ○ Yes ○ No | 5 |
| **PCBs** | | **5** |
| 4.4.4.1 Are there any PCBs present in the building?<br>Tip: Until the early 1980s, PCBs were used in fluorescent lamp ballasts for interior lighting and in some high-intensity discharge (HID) ballasts for exterior lighting. There are also electrical transformers and capacitors still in operation that contain PCBs. If the building was constructed after 1980 there is little likelihood that PCBs are present. | ○ Yes ○ No | 5 |
| 4.4.4.3 Is there a PCB management plan that designates responsibilities, requires inventory of all materials containing PCBs, including transformers, as well as records showing locations of major PCB-containing equipment, stipulates storage requirements, and describes a strategy for phasing out and disposing of PCB-containing equipment?<br>Tip: If there are no PCBs mark “not applicable”. Mark “yes” only if the plan contains **all** of the above elements. | ○ Yes ○ No ○ N/A | |
| | | |

| | | |
|---|---|---|
| 4.4.4.4 Are there procedures in place to ensure that: all PCB containing materials are safely stored; regular inspection of storage sites is conducted by designated persons; and staff training includes spill response procedures?<br>Tip: If there are no PCBs mark “not applicable”. Mark “yes” only if there are procedures for **all** of the above. | ◯ Yes ◯ No ◯ N/A | |
| **Storage Tanks** | | **20** |
| 4.4.5.1 Are there any above-ground (AST) or under-ground (UST) storage tanks?<br>Tip: Most tank systems are used for storing heating fuel, but some are also used to store fuel for electric generators and vehicles; solvents, lubricants and hazardous substances, such as corrosive or noxious chemicals. | ◯ Yes ◯ No | |
| Is there a storage tank management plan, which ensures legal compliance and includes the following operation and maintenance procedures:<br>Tip: Indicate as many procedures as apply. If there are no storage tanks mark “not applicable”. | | |
| • 4.4.5.2 Tank system registration and reporting as required by the authority having jurisdiction?<br>Tip: Owners of an existing storage tank system are required to register all storage tanks of the system with the authority having jurisdiction in a manner and timeframe prescribed by the authority having jurisdiction. Federal and Provincial authorities having jurisdiction for tank registration are listed at http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=61B26EE8-1&offset=16&toc=show. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 4.4.5.3 Inventory (reconciliation) control?<br>Tip: Establishing an inventory of tank systems is the first step in preparing tank management plan. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 4.4.5.4 Tank upgrading and replacement schedule?<br>Tip: The components that are subject to upgrade are leak detection, secondary containment, corrosion protection, overfill protection and spill containment. Mark “non-applicable” if there are no storage tanks. Mark “yes” if tanks were already replaced or upgraded. | ◯ Yes ◯ No ◯ N/A | 20 |
| • 4.4.5.5 System testing?<br>Tip: System tests include leak tests and dipping for diesel in water and for water in diesel. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 4.4.5.6 Filling, transferring operations and spill protection?<br>Tip: The Technical Guidelines and Codes of Practice may require property managers to install systems for spill containment, overfill protection, secondary containment, dispenser sump and leak detection. Various systems are available for both aboveground and underground storage tank systems. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 4.4.5.7 Emergency preparedness?<br>Tip: An emergency preparedness plan should identify response personnel who are to be trained, and their responsibilities in the event of a leak or spill. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 4.4.5.8 Record keeping?<br>Tip: All inspections, maintenance, alterations and upgrades should be documented. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |
| • 4.4.5.9 Tank closure, abandonment or removal?<br>Tip: A storage tank system must be properly decommissioned when replaced or taken out of service. Correct closure process should be documented in the operations manual. If there are no storage tanks, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | |

| Question | Points |
|---|---|
| **Emissions - Hazardous Products and WHMIS** | **30** |
| **WHMIS Program** | **8** |

| | | |
|---|---|---|
| 4.5.1.1 Are Material Safety Data Sheets (MSDS), spill clean-up kits, and safety equipment such as eye-wash stations located in an accessible place near the chemical storage areas?<br>Tip: Material Safety Data Sheets (MSDS) contain information about the properties and safe handling of each hazardous product. | ◯ Yes ◯ No | 3 |
| 4.5.1.2 Are the MSDSs less than 3 years old? | ◯ Yes ◯ No | 2 |
| 4.5.1.3 Are WHMIS labels present on regulated products?<br>Tip: Implementing the Workplace Hazardous Materials Information System (WHMIS) is a Canada-wide legal requirement, designed to ensure that chemicals and other hazardous substances are handled safely and that information about them including the relevant protective measures is disseminated to workers and employers. Common chemicals requiring the WHMIS label include ammonia, bromine, chlorine, ethylene glycol, hydrogen peroxide, mercury, various acids. Refer to http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/substance-eng.php#a1 for specifics on types of substances covered under WHMIS. | ◯ Yes ◯ No | 3 |
| **Health & Safety and Management of Hazardous Products** | | **17** |
| 4.5.2.1 Are chemicals and hazardous materials stored under appropriate conditions in secure locations?<br>Tip: Hazardous chemicals used in buildings include oils, biocides, solvents, insecticides, pesticides and herbicides. They should be stored in rooms with proper ventilation, controlled temperatures, drain protection and adequate shelf space. Containers should be capped to avoid possible spills and fumes, properly labelled and kept in securely locked areas. | ◯ Yes ◯ No | 3 |
| 4.5.2.2 Is there a Hazardous Products (hazardous chemicals) Management Plan?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. A hazardous products management plan should indicate how controlled products are received at the facility, how they are to be used and safe disposal procedures. It should also include the provision of WHMIS sheets for all products identified in the inventory. Chemicals used in buildings that are classified as hazardous include oils, biocides, solvents, insecticides, pesticides and herbicides. They should be stored in rooms with proper ventilation, controlled temperatures, drain protection and adequate shelf space. Containers should be capped to avoid possible spills and fumes, properly labelled and kept in securely locked areas. | ◯ Yes ◯ No | 4 |
| 4.5.2.3 Are education and training sessions provided for the people responsible for the management of chemicals and for staff who may be required to work with them?<br>Tip: “Education” means the provision of general information about the WHMIS program and the hazards of controlled products. “Training” refers to site-specific instruction related to the proper use of the products and emergency procedures. | ◯ Yes ◯ No | 3 |
| 4.5.2.4 Is there a designated person responsible for managing hazardous products?<br>Tip: The designated person should be responsible for: (1) advising workers of potential and actual hazards (2) ensuring that workers use prescribed protective equipment devices, and (3) taking every reasonable precaution for the protection of workers. Responsible person(s) may work off-site overseeing several buildings. | ◯ Yes ◯ No | 3 |
| 4.5.2.5 Are there inventory and records of the hazardous products/waste, including their removal and disposal?<br>Tip: The inventory must identify the hazardous waste streams, the operations in the building that produce them, how and where the hazardous waste is handled and stored, and who is responsible for it. The records should show that the organization tracks the hazardous waste from the facility through a provincially licensed or certified carrier to a waste disposal facility that is also licensed or certified by the province to accept hazardous waste. | ◯ Yes ◯ No | 4 |
| **Pesticides** | | **5** |
| 4.5.3.1 Are there suitable measures to ensure that food or food waste is well contained and that there are no unprotected openings, to minimize access by rodents? | ◯ Yes ◯ No | 1 |

| | | |
|---|---|---|
| Tip: One way to minimize pesticides usage indoors is through the planned elimination of food sources and pest habitats. | | |
| 4.5.3.2.1 Do landscaping practices minimize the use of pesticides, herbicides, fertilizers and petroleum-based products?<br>Tip: “Pesticide” means insecticides, herbicides, fungicides, rodenticides, disinfectants, anti-foulants and plant growth regulators. Alternatives to pesticides include use of local, resistant plants in landscaping, trap plants, introduction of beneficial insects, companion planting and low toxicity pesticides. If there is no landscaping, mark “not applicable”.<br>4.5.3.2.2 Describe the extent to which these products are used, and any alternative methods being employed on both the exterior and interior:<br>□ | ◯ Yes ◯ No ◯ N/A | 1 |
| 4.5.3.3 Are pest-control inspections done monthly?<br>Tip: There should be a log showing records of inspections. Where there is no landscaping or where pest management is not required, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 1 |
| 4.5.3.4 Do pest control contracts require that the staff be licensed and use integrated pesticide management methods?<br>Tip: The contract should require that records be kept on the type and frequency of applications of pesticides, alternative pest management approaches, compliance with legislation, and communication to tenants to notify them of pesticide applications in locations that they use. Where there is no landscaping (e.g. where the building footprint and parking cover more than 100% of the site area) or where pest management is not required, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 2 |

## INDOOR ENVIRONMENT

**Points**
180

| Question | | Points |
|---|---|---|
| **Indoor Air Quality** | | **163** |
| **Indoor Air Quality - Ventilation** | | **25** |
| 5.1.1.1 What type of ventilation system is in each dwelling unit? | ◯ Natural ventilation<br>◯ Corridor air supply system<br>◯ Central ventilation system to all dwelling units | |
| 5.1.1.2 Are air intakes located far from sources of pollution such as parking areas, bus stops, cooling towers or stagnant water?<br>Tip: If intakes are on the roof, check for stagnant pools of water, insects and pigeon droppings. If intakes are near the ground level, check for sources of vehicle emissions (parking and idling), industrial or commercial pollution. Check for proximity to sources of contaminants such as cooling towers (which give off spray) and building envelope penetrations such as gas vents or oil fill pipes. Note the wind direction with regard to these potential sources of contaminants. | ◯ Yes ◯ No | 3 |
| 5.1.1.3 Are all air intakes located at least 9 metres (30 feet) away from building exhaust outlets?<br>Tip: Separating air intakes from exhaust avoids “re-entrainment” (short-circuiting) of exhaust air. Also consider the prevailing direction of the wind relative to the intakes and exhaust. | ◯ Yes ◯ No | 3 |
| 5.1.1.4 Are all air intakes checked regularly to ensure that the openings are protected and free from obstruction?<br>Tip: As part of the regular HVAC maintenance system, check that the grilles on the | ◯ Yes ◯ No | 3 |

| | | |
|---|---|---|
| fresh-air supply inlets are free from obstruction by leaves, snow, insects and pigeon droppings. At minimum, do this in the spring after snow has melted, and during fall when there are more leaves and debris. | | |
| 5.1.1.9 Is there free-standing water which cannot drain away in the condensate drip trays?<br>Tip: Verify that there is no free-standing water in the air-conditioning ductwork, particularly in the condensate drip trays of cooling coils, downstream from humidifiers, which can result in contamination of ducts by bacteria and fungi. If there is no air-conditioning, mark “non-applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |
| 5.1.1.10 Are there signs of corrosion, loose material (such as damaged filter bags) or sound attenuation material in the air-handling unit (AHU)?<br>Tip: Inspect the air-handling units (air-mixing chambers, coils and fan blades) and duct interiors including any crawlspaces, tunnels or other areas that are used as ducts or which may be in contact with the ventilation air stream. Investigate whether commissioning took place. If there are no air-handling units, mark “non-applicable”. | ◯ Yes ◯ No ◯ N/A | 2 |
| 5.1.1.17 Is there at least one operable window provided for all habitable rooms, except bathrooms and kitchens, and is their size, placement and operation likely to result in reasonably effective ventilation?<br>Tip: The recommended ASHRAE ventilation rates are 8 L/s/person (15 cfm/person) for living rooms, 25 cfm/kitchen and 20 cfm/bathroom areas. | ◯ Yes ◯ No | 4 |
| 5.1.1.18 Does every dwelling unit have an adequate supply of air with no blockages?<br>Tip: Verify that air pathways in the original ventilation system design continue to function. Watch out for operable windows that can't be opened; ventilation systems between suites and corridors that are blocked off; supplies and returns that are closed intentionally to correct drafts; and dirt or other blockage that prevent air movement. | ◯ Yes ◯ No | 3 |
| 5.1.1.19 Are exhaust systems, particularly the bathroom and kitchen exhausts, operating effectively?<br>Tip: Use a smoke pencil or light tissue paper to confirm that air is flowing sufficiently into the exhaust grilles and check that the grilles are not blocked by lint build-up. Bathroom and kitchen fans are an important part of the dwelling unit's ventilation system. They remove odors, which improves indoor air quality. They also remove moisture, which can decrease the level of humidity. High humidity can damage building materials. Worse, high humidity can cause mold growth, which can harm occupants' health. | ◯ Yes ◯ No | 4 |
| **Indoor Air Quality - Filtration System** | | **11** |
| 5.1.2.1 Are filters rated at minimum efficiency of MERV 8 (Minimum Efficiency Reporting Value)?<br>Tip: The efficiency of filters is usually indicated on filter packages. Filters remove and prevent airborne particles from clogging heating/cooling fins or radiators, which can affect performance in the air flow system and damage to heat exchanger systems. Filtration also improves the occupants' breathable environment by removing microbes, pollen, dust, and mites. It protects a facility’s interior, equipment and contents (including items of artistic historic or cultural value) from air-born particle damage, helps to reduce fire hazards, and can even improve shelf life of food by reducing airborne mold. Filters should be cleaned regularly. Some companies now specialize in filter cleaning. The use of MERV 8 signifies best practices beyond the minimum required filtration of MERV 1 to 4 for residential buildings. | ◯ Yes ◯ No | 4 |
| 5.1.2.2 Are there manometers or pressure sensors to indicate when filters should be cleaned or changed?<br>Tip: A manometer, which measures the pressure drop across the filters, indicates when these need cleaning or replacing. Manometers connected to BAS give even better warning. Mark “not applicable” if there are no manometers, but a regular filter inspection and replacement program. | ◯ Yes ◯ No ◯ N/A | 3 |
| 5.1.2.3 Is there easy access for cleaning and inspecting filters?<br>Tip: Providing good access makes it easier to visually check whether air is bypassing | ◯ Yes ◯ No | 2 |

| | | |
|---|---|---|
| the filters and whether the filters are properly installed. Relocate objects that are impeding access to the HVAC equipment. Maintain service lighting. | | |
| 5.1.2.4 Do the filters fit snugly within the filter supports?<br>Tip: Verify that there is a snug fit, that the filters are the right size and that they are installed in the correct direction. | ◯ Yes ◯ No | 2 |
| **Indoor Air Quality - Humidification System** | | **15** |
| 5.1.3.1 Does the building have a humidification system (indicate type)?<br>Tip: Where more than one type of system is being used, select the type that is most prevalent. The humidification load is based upon the amount of outdoor air entering the space either through the ventilation system or from infiltration through the envelope including doors and windows. Humidification systems are needed to correct low relative humidity problems which could impact occupant comfort, electronic equipment and building contents. | ◯ Yes - Steam<br>◯ Yes - Spray<br>◯ Yes - Other (including dehumidification)<br>◯ No | 3 |
| 5.1.3.2 If steam humidification is used, is clean steam rather than treated boiler water utilized?<br>Tip: The steam must not be provided from a source using chemical water treatment, such as the central heating plant, because of potential air contamination from boiler additives used to control scale and corrosion. Independent steam generation using potable water in equipment such as re-boilers, instantaneous electric, or gas fired steam generators is required.<br>Water treatment in HVAC equipment must, at all times, meet local provincial and/or federal guidelines and regulations.<br>If no steam humidification is used, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 0 |
| 5.1.3.3 If spray humidification is used, is the system rigorously maintained and free of rust, algae, or loose contaminants of any kind?<br>Tip: Recognizing that the inadequate maintenance of spray humidification systems may increase the likelihood of microbial growth and legionella, the building must (at a minimum) have in place a Risk Management Plan that includes documented records on the inspection of features which:<br>• Prevent standing water in drain pans;<br>• Limit water droplet carryover;<br>• Minimize stagnant water in humidifier and water spray sumps.<br>For more guidance on creating this risk management plan, please review the Hazard Analysis and Critical Control Point (HACCP) risk management plan in ASHRAE Standard 188, *Prevention of Legionellosis Associated with Building Water Systems.*<br>Water treatment in HVAC equipment must, at all times, meet local provincial and/or federal guidelines and regulations.<br>If no spray humidification is used, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 12 |
| **Indoor Air Quality - Cooling Towers** | | **12** |
| 5.1.4.1 Are the cooling towers located away from fresh air intakes and flue outlets?<br>Tip: Check the relative positions of ventilation intakes to cooling tower drift, and the prevailing wind direction. If there are no cooling towers, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 2 |
| 5.1.4.2 Are cooling towers equipped with drift eliminators?<br>Tip: Drift eliminators remove water droplets generated by the cooling tower. This saves water and reduces the risk of downdraft of a spray that could contain Legionella. Eliminators can be internal or external to the cooling tower. If there are no cooling towers, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 5 |
| Is there a maintenance program for cooling towers which includes the following:<br>Tip: There should be at least monthly inspections of cooling towers that include checking for evidence of slime or mold (which could indicate an elevated level of bacteria), regular treatment of the cooling tower water, and complete cleaning and disinfection of each cooling tower at least every six months. If there are no cooling towers, mark “not applicable”. | | |
| • 5.1.4.3 At least monthly inspection of cooling towers for evidence of mould or slime, which could indicate elevated levels of bacteria? | | 2 |

| | | |
|---|---|---|
| | ◯ Yes ◯ No ◯ N/A | |
| • 5.1.4.4 Regular treatment of the cooling tower water? | ◯ Yes ◯ No ◯ N/A | 2 |
| • 5.1.4.5 Complete cleaning of each cooling tower at least every six months? | ◯ Yes ◯ No ◯ N/A | 1 |
| **Indoor Air Quality - Parking and Loading** | | **15** |
| 5.1.5.1 Are enclosed parking areas mechanically ventilated?<br>Tip: Closed garages are generally underground and require mechanical ventilation to avoid carbon monoxide, oil and gas fumes becoming concentrated in the garage and entering the building. Open or partially open garages, which are typically above-grade, may not need mechanical ventilation. If there are no enclosed parking areas, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |
| 5.1.5.2 Is there an “Idle Free” area adjacent to the entrance?<br>Tip: Permanent signs denoting “Idle Free Zone” discourage residents and visitors from sitting at the entrance to the building with car engines running while waiting for others. | ◯ Yes ◯ No | 2 |
| 5.1.5.3.1 Are there measures to prevent intake of exhaust fumes into the building interior from the loading dock and parking areas?<br>Tip: Measures include posting notices to turn off vehicles, having well-sealed doors between the parking and occupied areas and increasing exhaust ventilation in the garage and loading docks. If there is no loading dock nor parking areas, mark “not applicable”.<br>5.1.5.3.2 Describe:<br>□ | ◯ Yes ◯ No ◯ N/A | 4 |
| Is there a carbon monoxide detection and monitoring system: | | |
| 5.1.5.5 • In enclosed parking garages?<br>Tip: Control of garage ventilation fans using a carbon monoxide detection system reduces energy use by operating the fans only as required to dispel CO build-up. If there are no enclosed parking areas, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |
| 5.1.5.6 • Near gas or fuel-fired heating boilers?<br>Tip: If there are no gas or fuel-fired boilers, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |
| **Indoor Air Quality - Control of Pollutants at Source** | | **32** |
| Have there been ongoing observations or complaints of symptoms of mould or excess moisture such as the following:<br>Tip: Check for visual or odor clues in the following areas: crawl spaces, sub-floor cavities and service tunnels, cold surfaces such as under windows and in corners formed by exterior walls, uninsulated cold water piping, bathrooms, indoor areas in the vicinity of known roof or wall leaks, floors and ceilings under plumbing, duct interiors near humidifiers, cooling coils, outdoor air-intakes and under carpets. | | |
| • 5.1.6.1 Stained ceilings or walls? | ◯ Yes ◯ No | 3 |
| • 5.1.6.2 Musty odors? | ◯ Yes ◯ No | 2 |
| • 5.1.6.3 Damp or musty carpets? | ◯ Yes ◯ No | 2 |
| 5.1.6.5 Do common areas, including social rooms and kitchens, and chemical storage facilities have effective local exhaust?<br>Tip: Some special-use areas may require additional local exhaust to prevent air pollutants from accumulating in or spreading beyond a local area. Fans should operate continuously when the source is present, not only when the room is occupied. Test the exhaust effectiveness with chemical smoke or light tissue paper. | ◯ Yes ◯ No | 3 |
| 5.1.6.6 Are there grates or mats at all high volume occupant entryways into the building throughout the year?<br>Tip: Grates and walk-off mats help remove moisture and dirt from people’s shoes at | ◯ Yes ◯ No | 4 |

| | | |
|---|---|---|
| the entrance of buildings. This helps to protect floors from wear-and-tear. Mats need to be kept throughout the year. If only in the winter, these mats will not capture the summer dust and particulate matter. | | |
| 5.1.6.7.1 Are there documented measures to control pollutants at source in common areas such as social rooms, kitchens, chemical storage and general storage areas?<br>Tip: There should be evidence that at least five of the following measures are being implemented:<br>• In washrooms that are not frequently used, toilets are flushed and water run in the sinks to ensure water does not stagnate in the supply lines. This is logged;<br>• Gas appliances are vented and there is a regular schedule for checking leaks. This is logged;<br>• Waste bins are located to avoid odours entering into the building and are regularly checked for cleanliness;<br>• Signs are posted prohibiting vehicles from idling their engines;<br>• There is an annual inventory of materials and supplies and scheduled clean-up to avoid the accumulation of junk, materials, boxes or other miscellaneous objects. This is logged.<br>• Storage rooms are well organized and are easy to access for floor cleaning.<br><br>5.1.6.7.2Describe:<br>□ | ◯ Yes ◯ No | 2 |
| 5.1.6.9 Does the contract with the building cleaning staff or contractors specifically state that they must use environmentally preferable cleaning materials and/ or devices?<br>Tip: Best management practices call for products, equipment and procedures which minimize the use of harmful chemicals, energy and water. Cleaning products or devices must meet standards for industrial and institutional cleaning such as Green Seal GS-37 or GS-53 for general-purpose, bathroom, glass and carpet cleaners; Ecologo CCD-110 for cleaning and degreasing compounds; CCD-146 for hard surface cleaners; and CCD-113 for drain or grease traps. | ◯ Yes ◯ No | 5 |
| 5.1.6.10Is the building designated non-smoking? | ◯ Yes ◯ No | 2 |
| 5.1.6.11 If the building is designated non-smoking, is there a designated smoking area outside that is away from entrances and will limit the spread of smoke to the inside of the building?<br>Tip: Banning smoking is the most effective way to avoid environmental tobacco smoke. Outside smoking areas should be no closer than 9 m from building entrances and other air intakes. Indoor designated smoking areas must be designed to contain, capture and remove environmental tobacco smoke (ETS) from the building. The area should be exhausted to the outdoors with no recirculation of ETS-containing air to the remainder of the building. It should be enclosed with impermeable partitions and operated at a negative pressure compared to the rest of the building of at least 7 Pa. The performance of designated smoking areas should be verified as per the tracer gas testing methods. If the building is not designated non-smoking, mark “not applicable”. Non-smoking designation refer to common-areas / hallways only. | ◯ Yes ◯ No ◯ N/A | 2 |
| 5.1.6.12.1 Is there a standard checklist that includes items connected to indoor air quality that must be discussed (as applicable, depending on the project) with architects, engineers, contractors, and other professionals prior to renovations and repairs?<br>Tip: The checklist should include all of the following items to be discussed as appropriate:<br>• Procedures must be in place to avoid releasing throughout the building, dust and hazardous products used in construction.<br>• Adhesives, sealants and paints must have a VOC content that meets or exceeds the local VOC limit requirements or Green Seal requirements.<br>• Non-carpet finished flooring must be environmentally certified. Carpet and carpet cushions should meet the requirements of an Environmental Carpet Testing Program. | ◯ Yes ◯ No | 5 |

| | | |
|---|---|---|
| • Composite panels and agri-fibre products must contain no added urea-formaldehyde resins. Best management practices call for the use of paints and sealants with the smallest environmental impact in regards to air pollution and chemical runoff.<br><br>Discussion is essential to avoid design features that could interfere with ventilation or thermal comfort, or which could result in the selection of inappropriate materials or systems. Renovation procedures must also be discussed to avoid the release dust and fumes from sealants, finishes, carpets and furnishings that emit volatile organic compounds (VOCs). Paints must meet the GS-11 VOC limits of 50 grams/Litre for flat topcoats, 100 grams/Litre for non-flat topcoats, 100 grams/Litre for primers or undercoats, 100 grams/Litre for floor paint, 250 grams/Litre for anti-corrosive coatings, 50 grams/Litre for reflective wall coatings and 100 grams/Litre for reflective roof coatings. Exterior sealants must adhere to South Coast Air Quality Management Rule 1168 limits of 150 grams/Litre for outdoor carpet adhesives, 100 grams/Litre for wood flooring adhesives, 65 grams/Litre for ceramic tile adhesives, 50 grams/Litre for VCT and asphalt tile adhesives, 50 grams/Litre for panel adhesives, 50 grams/Litre for cove base adhesives, 70 grams/Litre for multi-purpose construction adhesives, 100 grams/Litre for structural glazing adhesives and 250 grams/Litre for single ply roof membrane adhesives.<br>5.1.6.12.2 Describe:<br>□ | | |
| 5.1.6.13 Does the building's water system maintenance program include measures to eliminate the occurrence of *Legionella*?<br>Tip: ASHRAE Standard (SPC188) *Prevention of Legionellosis Associated with Building Water Systems* establishes absolute requirements for the prevention of legionellosis associated with building water systems. The standard requires Hazard Analysis and Critical Control Point (HACCP) risk management to be used to reduce the potential of legionellosis associated with buildings. Having point-of-use water heaters OR by maintaining water temperatures between 50° and 55° C and avoiding stratification and dead legs in water circulation systems may a simplest way of meeting the standard. | ○ Yes ○ No | 2 |
| **Dwelling Unit Indoor Air Quality** | | **32** |
| 5.1.7.1 Do the dwelling units allow for cross ventilation?<br>Tip: When wind hits one side of a building (windward side), the air will speed up in order to flow around the building to the opposite (leeward side). This creates a positive pressure on the windward side and a negative pressure on the leeward side. If windows are open in the building on both the windward and leeward side, air will be forced through the building. | ○ Yes ○ No | 4 |
| 5.1.7.2 Do all installed stoves have outside vented fume hoods?<br>Tip: Range hoods remove odors, steam, filter grease and pollutants. | ○ Yes ○ No | 5 |
| 5.1.7.3 Are the dryer and/or bathroom vents separate and ventilated from the outside?<br>Tip: Laundry rooms that have driers and/or bathroom may have an operable window or a separate exhaust ventilation. | ○ Yes ○ No | 5 |
| 5.1.7.4 Have there been complaints from occupants concerning stale, dry, or humid air, and/or odor transfer?<br>Tip: Occupant data falls into two categories: complaints of discomfort or other symptoms (e.g., teary eyes, chills) and perceptions of building conditions (e.g., odors, draftiness). Investigators can gather valuable information about potential indoor air problems from listening to occupants. | ○ Yes ○ No | 5 |
| 5.1.7.5 Are the dwelling walls or ceilings discolored, indicating the possible presence of mold?<br>Tip: When warm, moist air comes into contact with a surface that is too cold, it releases condensation. The water and frost that may collect on windows is a visible example. Mold and mildew can cause allergies and illness Over the long term, the result may be damage to the building structure. To identify a mold, dab suspected marks with a drop of chlorine bleach. (Note the precautions to take when working with | ○ Yes ○ No | 4 |

| | | |
|---|---|---|
| chlorine bleach.) If the color changes or disappears, the stain is likely organic and probably a mold. | | |
| 5.1.7.6 Do kitchen storage units minimize off gassing, particularly by formaldehyde-containing materials?<br>Tip: Off-gassing is the release of chemicals from non-metallic substances under ambient or greater pressure conditions. Off-gassing occurs continuously, but can be limited by the complete curing of polymeric material. | ○ Yes ○ No | 5 |
| 5.1.7.7 Do dwelling units contain low VOC materials, particularly paints and wood finishes?<br>Tip: Construction materials and furnishings contain a number of chemicals and many of these products off-gas volatile organic compounds (VOCs). These chemicals - particularly VOCs - may affect the health and comfort of the general population and are often linked to health problems in children and other special populations. Because of this, many low- and no-VOC building materials are now available. Low-VOC building materials include less-polluting paints, adhesives, solvents, cleaning agents, caulks, wood products, carpet and sealants. | ○ Yes ○ No | 4 |
| **Indoor Air Quality Management** | | **21** |
| 5.1.8.1 Does building management have in place a documented means for addressing tenant/occupant concerns regarding indoor air quality (such as a complaint form and incident log)?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. Building management must have in place a documented means for addressing tenant/occupant concerns regarding indoor air quality. Complaint logs can provide evidence of occupant dissatisfaction and its causes. Trends in complaint rates over time may indicate occupant reactions to changes in building operation. The incident log must provide fields to capture the following information:<br>• Incident log number; Form completed by __; Date<br>• Occupant Name; Company & Department; Location in Building<br>• Date complaint was received; Description of Complaint; Suggested cause; Summary of problem<br>• Actions completed; date of occupant interview<br>• $CO_2$ measurements; ventilation rate assessment (if required); ventilation system inspection; airborne contaminant sampling (if required)<br>• Remedial action report completed<br>• Occupant advised of actions taken | ○ Yes ○ No | 4 |
| 5.1.8.2 Has the building had an indoor air quality audit in the past year?<br>Tip: The audit must be detailed enough for management to gain a comprehensive understanding of all of the factors that could influence the building's indoor air quality. The audit must consist of a walkthrough inspection of the building and must report on a review of the following: a list of responsible staff and/or contractors, evidence of training, and job descriptions, HVAC design data, manuals and operating instructions including control settings and operating schedules, HVAC maintenance and calibration records, testing and balancing reports, inventory of locations where occupancy, equipment, or building use has changed, identification of areas where positive or negative pressures should be maintained, a record of locations that need monitoring or correction, and an inventory of HVAC system components needing repair, adjustment, or replacement. | ○ Yes ○ No | 5 |
| Are there documented procedures for maintaining good indoor air quality that include:<br>Tip: Building management must have heating, ventilation and air conditioning (HVAC) procedures and a preventive maintenance program in place. | | |
| • 5.1.8.3 Scheduled HVAC maintenance?<br>Tip: There must be daily, weekly and monthly schedules including a coil-cleaning program. | ○ Yes ○ No | 2 |
| • 5.1.8.4 Preventive maintenance?<br>Tip: This must include a scheduled program for monitoring, cleaning and/or | ○ Yes ○ No | 2 |

| | | |
|---|---|---|
| replacing HVAC components such as outside air intakes, outside air dampers, air filters, drain pans, heating and cooling coils, the interior of air handling units, fan motors and belts, air humidification, controls and cooling towers. | | |
| • 5.1.8.5 Housekeeping procedures including care and maintenance of floors?<br>Tip: These must identify all areas that should be cleaned, specify the products that are to be used and their appropriate application, and provide a cleaning schedule. Floor finishes must be free of zinc or other metals and a VOC concentration no more than 7% by weight. Strippers must have no more than 7% VOCs when diluted for use as directed. All products must avoid ammonia, ammonium hydroxide, or ammonium salts, dibutyl phthalate or alkylphenol ethoxylates. Products must have phosphorus concentration of 0.5% or less by weight, a pH no higher than 11.5 and a flash point above 150°F. Choose products in recyclable or refillable containers. A floor care program typically includes the use of finishes, strippers and cleaners. **Floor finishes** provide a protective coating that increases stain and water resistance, and makes cleaning easier. Many floor finishes contain zinc, which is highly toxic to aquatic life. With wear and tear, over time, **floor strippers** are needed to remove the finishes for a thorough cleaning of the floor surface. Traditional strippers have high VOC levels. Several low-toxicity floor finishes and floor strippers are now becoming available, including finishes that do not contain zinc or other metals, and strippers that have VOC content of 6% or less compared to traditional strippers that commonly have VOC levels between 15% and 30%. Consult Green Seal or other certification bodies for information on ingredients and recommended products. **Education in floor care** is important. Even an environmentally preferable product may still pose a health hazard or environmental risk. Education of janitorial workers in proper floor cleaning and maintenance methods can reduce the amount of floor-care products used over the long term. There are techniques that make it possible to use of smaller quantities of the product. For example, regular wet-mop, dust, and vacuum will help to preserve the finish and avoid too-frequent stripping. Floor-maintenance schedules should be based on wear patterns rather than simply following a calendar schedule. Follow label directions for proper dilution amounts and procedures. A stripped floor should be thoroughly rinsed to neutralize the surface prior to applying the new floor finish. | ○ Yes ○ No | 2 |
| • 5.1.8.6 Mold management?<br>Tip: The program must include the following: 1) Procedures for preventing moisture/water or mold growth conditions; 2) A regular inspection routine that makes it possible to detect moisture and mold growth early to minimize property damage and liability; and 3) Procedures for responding to moisture/water or mold growth conditions. | ○ Yes ○ No | 2 |
| • 5.1.8.7.1 Procedures for unscheduled maintenance?<br>Tip: Procedures for unscheduled maintenance must be documented in the event of equipment failures which may require the prolonged deactivation or modification of the building's HVAC equipment. | ○ Yes ○ No | 2 |
| 5.1.8.7.2 Describe procedures for maintaining good indoor air quality:<br>□ | | |
| 5.1.8.10 Is the operations staff sufficiently trained to implement an indoor air quality program to address occupant concerns?<br>Tip: The training should be adequate to enable staff to identify, prevent and solve indoor air quality problems. Indoor air quality problems can be complex. Staff should also have a clear understanding of when it is advisable to call in a professional and the authorization to do so. | ○ Yes ○ No | 2 |

| Question | | Points |
|---|---|---|
| **Lighting** | | **12** |
| **Lighting Features** | | **5** |
| 5.3.1.7 Does the floor plan of the building potentially allow for 80% of a typical living area to have access to day-lighting? | ○ Yes ○ No | 5 |

| | | |
|---|---|---|
| Tip: Although occupants may erect barriers that prevent daylight from penetrating in the area, consider whether the building plan could allow easy access to daylight. | | |
| **Lighting Management** | | **7** |
| 5.3.2.2 Is there a planned schedule of cleaning light fixtures?<br>Tip: Cleaning luminaires can increase light output and quality, resulting in the need for fewer lamps and significant energy savings over the life of the facility. Where lighting does not warrant this approach, such as when fixtures are easy to reach, or the type of fixtures do not require additional attention, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 4 |
| 5.3.2.3 Is there a group-relamping schedule that is based on lighting power density?<br>Tip: Lamps that are changed before they burn out produce greater light output, resulting in better quality light. Group relamping at planned intervals can also reduce labour costs to between one-fifth and one-tenth of the cost per lamp for spot relamping. (Spot relamping is the replacement of individual lamps when they burn out.) The time needed for someone to replace a single lamp includes the time a maintenance worker spends determining which particular lamp is to be replaced, getting the new lamp, placing the ladder, opening the fixture, replacing the lamp (and hopefully cleaning the fixture), returning the ladder, and disposing of the old lamp. This time is much greater than the time involved for replacing each lamp in an organized replacement of all lamps at once. In a group relamping plan, all lamps are replaced at a preplanned point in the life of the group of lamps. The most economical time to relamp can be predicted on the basis of the known rate of burnouts. Ordinarily, the most economical group-relamping period is at about 70 to 80 percent of rated life. when depreciation of lamp quality is appreciable and with a view to the required lighting levels for various tasks. The Operations Manager / Staff should create a re-lamping schedule based on the expected intervals at which lighting output falls below a certain level. Where fixtures are easy to reach and group relamping is not necessary, mark “not applicable”. | ◯ Yes ◯ No ◯ N/A | 3 |

| Question | | Points |
|---|---|---|
| **Noise** | | **5** |
| 5.4.1 Is there sufficient acoustic privacy?<br>Tip: If it is common to receive complaints from residents that there is significant noise transfer from adjacent suites, then the answer to this question should be “No”. | ◯ Yes ◯ No | 5 |

## ENVIRONMENTAL MANAGEMENT SYSTEM

**Points** 110

| Question | | Points |
|---|---|---|
| **Environmental Management System (EMS) Documentation** | | **30** |
| 6.1.1 Does building management have a written environmental policy?<br>Tip: The policy should be a public document that is easily accessible to staff and occupants. It should express a commitment to: comply with relevant laws or other requirements; continuous improvement; and pollution prevention. It should also be signed by senior management. | ◯ Yes ◯ No | 10 |
| Are there stated goals and targets documented in the policy manual with respect to each of the following:<br>Tip: Goals and specific targets to improve or maintain the facility’s environmental performance should be **documented** as part of the “environmental vision” for the building. | | |
| • 6.1.2 Energy conservation and $CO_2$ reduction? | ◯ Yes ◯ No | 3 |
| • 6.1.3 Water conservation? | ◯ Yes ◯ No | 3 |
| • 6.1.4 Waste reduction and recycling? | ◯ Yes ◯ No | 3 |
| • 6.1.5 Environmental purchasing? | ◯ Yes ◯ No | 2 |

| | | |
|---|---|---|
| • 6.1.6 Reduction in use and proper handling of hazardous products? | ◯ Yes ◯ No | 2 |
| • 6.1.7 Training and education? | ◯ Yes ◯ No | 2 |
| 6.1.8.1 Are there action plans to improve the environmental and energy performance of the building?<br>Tip: The action plans should outline implementation strategies, timelines, training and resources needed to achieve stated targets. They should be reviewed, revised and updated on a regular, scheduled basis.<br>6.1.8.2 Describe:<br>□ | ◯ Yes ◯ No | 5 |

| Question | | Points |
|---|---|---|
| **Environmental Purchasing** | | **35** |
| 6.2.1 Does building management have a written environmental-purchasing policy?<br>Tip: The policy should give direction to a plan that assigns responsibilities, ensures that those who do (corporate) purchasing have adequate training, refers to products used by in-house staff, stipulates requirements for cleaning contractors, and provides education to occupants. | ◯ Yes ◯ No | 6 |
| 6.2.2.1 Is there a list of preferred products used in housekeeping and building maintenance?<br>Tip: Staff need a list of feasible environmentally friendly substitutes and their suppliers. Because products are frequently discontinued and new products introduced to the market, the list should be regularly reviewed and updated.<br>6.2.2.2 Identify who maintains the list:<br>6.2.2.3 Provide examples of products being used:<br>□ | ◯ Yes ◯ No | 7 |
| 6.2.3.1 Does the purchasing policy include the requirement for purchasing energy efficient building equipment and appliances?<br>Tip: The policy must include the requirement that any purchases of appliances and HVAC should involve consulting the EnerGuide and/or purchase of Energy Star rated products.<br>6.2.3.2 Provide examples:<br>□ | ◯ Yes ◯ No | 6 |
| 6.2.4 Are Material Safety Data Sheets (MSDS) reviewed by staff who purchase hazardous products?<br>Tip: Those responsible for purchasing must ensure that up-to-date Material Safety Data Sheets (MSDS) for controlled products are reviewed and are available to employees. They must not be dated more than 3 years previous to the receiving date. | ◯ Yes ◯ No | 6 |
| 6.2.5 Does building management have a written policy for the selection of building materials that attempts to reduce any potential negative impact on the environment?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. The policy committing the organization to using low environmental impact building materials and equipment in its facilities must also be part of the construction/renovation guidelines. Examples of low impact building materials include materials with high recycled content or low off-gassing carpeting and furnishings. See section 5.6 Indoor Air Quality - Control of Pollutants at Source referring to the checklist of items to be discussed with architects etc. Consider the following criteria:<br>• Avoiding materials that will result in excessive scrap material because of sizing needs;<br>• Salvaging reusable materials during demolition;<br>• Selecting materials that have recycled content;<br>• Selecting renewable materials;<br>• Selecting materials with low embodied energy and low maintenance requirements. | ◯ Yes ◯ No | 10 |

| | | |
|---|---|---|
| Management should be able to demonstrate that the policy is actually implemented and put into practice in projects. | | |

| Question | | Points |
|---|---|---|
| **Emergency Response** | | **20** |
| 6.3.1 Are procedures documented and staff trained to deal with and obtain prompt assistance for emergencies such as fire, spills, power failures and illness?<br>Tip: Procedures must be detailed for quick and effective action in the event of an emergency. They should include up-to-date contacts to obtain assistance promptly and to report the emergency. There should also be a protocol to assess the risks of re-occupying a building in the case of evacuation. | ○ Yes ○ No | 5 |
| 6.3.2 Is there an Emergency Plan outlining emergency procedures, reporting and record-keeping?<br>Tip: The Plan must designate accountability with respect to ensuring regulatory compliance, record-keeping and reporting. It should identify the building's vulnerabilities to emergency situations; indicate how to prevent or mitigate potential effects; describe staff response; and provide a blueprint for recovery. The plan should be condensed into an Emergency Plan handbook. | ○ Yes ○ No | 5 |
| 6.3.4 Is there easy-to-access equipment on-site to deal with environmental emergencies, such as spills?<br>Tip: The environmental Emergency Plan must require that equipment such as spill control kits, absorbents, and personal protection equipment be on-site for quick and easy access. | ○ Yes ○ No | 4 |
| 6.3.5 Are there contingency plans for both short-term and long-term power failures?<br>Tip: Planning for power failures must address the following elements: communication to tenants; security; provision of emergency power and water; and, if necessary, evacuation. | ○ Yes ○ No | 3 |
| 6.3.6 Is there an up-to-date site map showing the location of environmentally significant features such as shut-off valves, underground and above ground storage tanks etc.?<br>Tip: This is helpful for first responders. Site plans must identify environmentally significant features such as hazardous waste storage rooms, PCB-containing equipment, sanitary and storm sewer lines, CFC equipment, storage tanks as well as emergency equipment. | ○ Yes ○ No | 3 |

| Question | | Points |
|---|---|---|
| **Occupant Awareness** | | **25** |
| 6.4.1.1 Has a documented Communications Work Plan been developed and/or updated for tenants/occupants regarding environmental initiatives and practices in the building within the past 12 months?<br>Tip: This is a prerequisite to achieve BOMA BEST certification. Building management must have in place a building-specific Communications Work Plan, which must include evidence of communication strategies, activities, responsibilities and timelines for implementation. Tenants / occupants must be provided with information, and must have a forum or hotline to discuss their environmental concerns and to coordinate their activities. The key aspects of effective communication are frequency, accuracy, comprehensiveness and inclusiveness. To ensure that building occupants work together with building management to achieve environmental goals, there must be frequent communication. Please see the Application Guide (BEST Practices section) for details on the core components of a Communications Work Plan required by this BEST Practice.<br>6.4.1.2 Describe the plan:<br>□ | ○ Yes ○ No | 8 |
| Are there ongoing communications to occupants on the environmental measures that they can implement in the building to contribute to:<br>Tip: Guidance on energy and environmental issues should be provided in the Occupants' Manual. | | |

| | | |
|---|---|---|
| • 6.4.2 Energy conservation including plug load reduction?<br>Tip: An inexpensive way to reduce energy costs is by developing energy efficiency procedures and personal habits. Provide information to occupants on energy use and means of saving energy (such as information on turning off lights and equipment in unoccupied spaces, after normal office hours and the correct use of blinds). | ◯ Yes ◯ No | 3 |
| • 6.4.3 Water conservation? | ◯ Yes ◯ No | 3 |
| • 6.4.4 Waste reduction and recycling?<br>Tip: This can include promotional materials such as brochures and newsletters to keep tenants informed about how they can reduce the amount of waste being sent to landfill through such things as recycling and composting. | ◯ Yes ◯ No | 3 |
| • 6.4.5 Proper handling, storage and disposal of toxic products?<br>Tip: The information must be of a general nature and should communicate that each toxic product has its own characteristics, which require proper handling, storage and disposal. | ◯ Yes ◯ No | 3 |
| 6.4.9 Has an occupant satisfaction survey been completed in the last 3 years?<br>Tip: An occupant satisfaction survey enables property managers to prioritise efforts and maximise the performance of their assets. | ◯ Yes ◯ No | 5 |