



Going Green Inside and Out: Helpful tips for interior design and space planning

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Commercial real estate entities are becoming more environmentally conscious, with U.S. Green Building Council (USGBC) LEED certification becoming more prominent in the real estate community. At VeenendaalCave, we have witnessed this trend firsthand.

Many of the clients who use our interior design and space-planning services have expressed a business interest in going green. Either they want a measurable system such as LEED certification for their building or tenant suites, or they want to become more environmentally savvy and encourage green projects without the burden of significant documentation and fees.

In order to help our clients understand and articulate their corporate goals and capital budgets for sustainable projects, we have created the following recommendations to detail what is involved in retrofitting building shells and in green tenant-improvement projects. While implementing the following recommendations will not guarantee LEED certification, the recommendations represent measures that a building owner and manager can implement in an effort to go green as a basis for earning LEED certification. In some cases, the list may reflect items that are already in place and can garner points toward LEED certification.

If you are a commercial building owner, property manager or asset manager, I encourage you to review the following list. I also encourage you to appoint someone in your organization to become a flag bearer or champion of your green efforts.

Site Selection

Site selection is an important consideration when going green. Potential tenants may be more attracted to your building if the following are true.

- Your building has bicycle racks.
- Your building has shower facilities in close proximity to the bicycle racks.
- Your building is close to a subway or bus station.
- Your building controls roof heat gain through a white EPDM roofing system or rooftop planting/landscaping systems.
- You offer 10-year leases.
- Your building has space for multiple dumpster locations, allowing for the separation of recyclable materials.

Interior Construction

You can incorporate many green items during the construction process.

- You can set as building standard your landlord policies for indoor air-quality requirements during the construction process, including requiring walk-off mats in all construction areas to reduce the amount of tracked construction debris, dirt and dust.
- You can set as building standard the use of low- or no-VOC building materials, including but not limited to paint, carpet, wall covering and adhesives. Include documentation of this to earn LEED certification points.
- You can set as building standard the use of building products that are manufactured within a 500-mile radius of a given construction project.
- You can set as building standard the use of building products that are predominantly constructed of recycled materials.
- You can specify that demolition and TI construction must reuse materials and divert from landfills items such as carpet, ceiling tiles, doors and frames, metal studs and ceiling grids.
- You can set as building standard the use of high-efficiency filters on all HVAC equipment during the construction process.
- You can set as building standard the use of Energy Star HVAC and electrical equipment.
- You can set as building standard the use of water-efficient fixtures such as handsfree faucets, waterless urinals and low-water consumption toilets.

- You can set as building standard the use of fluorescent light fixtures — which reduce energy consumption and reduce heat gain — in lieu of incandescent fixtures.
- You can utilize LED light fixtures in lieu of MR16, incandescent spot lights or specialty lighting.
- You can provide lighting layouts that meet ASHRAE standards of 1 watt per square foot or LEED requirements of 15 to 30 percent less lighting than ASHRAE standards.
- You can provide two lamps for 2 x 4 fluorescent light fixtures in lieu of three.
- You can provide task lighting for work surfaces.
- You can provide motion sensor switches for all offices, breaks and conference rooms per current energy codes.
- You can provide a lighting management system.

Building Renovation

You can also use make the following renovations in the building shell to lower your overall operational costs, increase productivity and go green.

- You can increase the fresh air intake to a given floor or suite to increase the overall air quality.
- You can monitor the carbon dioxide output on a given floor or suite.
- You can install an HVAC management system.
- You can install separate meters for each suite that will monitor the overall usage of electricity and water consumption, and you can back-charge users as necessary.
- You can replace existing toilets, urinals and faucets with water-efficient fixtures such as hands-free faucets, waterless urinals and low-water-consumption toilets.
- You can have all building HVAC systems commissioned to ensure their proper setup.
- You can investigate through Georgia Power the cost of using environmentally conscious “green power.”
- You can replace existing T-12 fluorescent lamps with new T-8 and re-ballast lamps, as required.
- You can replace existing three-lamp 2 x 4 fluorescent light fixtures with two-lamp fixtures.
- You can replace existing incandescent down lights with fluorescent lamps, which have a longer life span and will reduce energy onsumption and heat gain.
- You can replace existing MR16, incandescent spot lights or specialty lighting with LED light fixtures.
- You can reconfigure existing lighting layouts to reduce the overall number of light fixtures to comply with ASHRAE standards of one watt per square foot or LEED requirements of 15 to 30 percent less lighting than ASHRAE standards.
- You can replace existing toggle switches for motion sensor switches at all offices per current energy codes.
- You can replace existing non-programmable thermostats with new programmable thermostats per current energy codes.

Operational Procedures

You can also institute the following operational procedures.

- You can designate the building as a no smoking facility.
- You can capitalize on LEED tenants’ recycling programs for glass, plastic, paper, cardboard and aluminum by creating a building-wide recycling program.
- You can install Energy Star electrical equipment such as refrigerators, copiers, computers and monitors in accordance with LEED, which requires 70 to 90 percent of this equipment to be Energy Star-rated.
- You can retrofit existing cubicle arrangements to have 42-inch-high panels to allow more natural light into the open office areas and reduce the number of required light fixtures.
- You can install sound masking to reduce noise and increase employee production and morale.
- You can provide task lighting for work surfaces.
- You can provide educational materials and placards that are readily visible and available to all building occupants to explain how certain pieces of equipment and/or systems work, and how they will save energy and water.



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