

## E.2

### Conduct a walk-through to detect opportunities for improving energy efficiency through operational and equipment adjustments

*A simple walk-through of the property can help identify issues and identify opportunities for improvement in energy systems. Use the checklist to conduct your walk-through. Retain the checklist with your certification records.*

BUILDING ENERGY EFFICIENCY WALK-THROUGH			
Walk-through conducted by			
Date(s)			
Date(s) of last walk-through:			
Operations & Maintenance (O&M)			
Item	OK	Not OK	Notes or Action Required
Preventive and routine maintenance plan/schedule adhered to			
Benchmarking tool (e.g., Portfolio Manager®) regularly updated			
EMS/BAS/BMS functioning and fully engaged			Example: Contact BAS vendor to check that all features are fully utilized
Equipment room(s) orderly			
Vacant spaces appropriately conditioned/lighted			
Engineering team trained on building equipment			
Contractors effective and fully utilized			
Temperature set-points optimal			
Thermostats adjusted seasonally at optimal set-points			
Access to thermostats appropriately restricted			
Acceptable number of hot/cold calls from tenants/occupants			
Building Envelope			
Item	OK	Not OK	Notes or Action Required
No visible cracks in property exterior			
Doors properly aligned and sealed			
Automatic and vestibule doors functional			
Windows properly aligned and sealed			

Blinds and curtains fully functional			
No windows and/or doors left open			
Conditioned and unconditioned spaces properly insulated			
Outdoor shading devices properly positioned and functional			
Roof properly maintained and in good condition			
<b>HVAC</b>			
<b>Item</b>	<b>OK</b>	<b>Not OK</b>	<b>Notes or Action Required</b>
HVAC system meets loads			
Chiller(s) appears functional, with no visible issues			
Cooling tower(s) appears functional, with no visible issues			
Boiler(s) appears functional, with no visible issues			
Equipment free of soot, mineral deposits, pooling water, etc.			
Filters and coils clean and maintained			
Duct and pipe insulation in place and intact			
Run-time schedule optimized/HVAC operating only when necessary			
Temperature set-points optimal			
Sensors functional and calibrated			
Automatic controls functional and properly set			
Dampers and valves close tightly			
Steam traps maintained and functional			
No unnecessary or mysterious cycling			
Boiler system staging and sequencing optimal			
Compressor system staging and sequencing optimal			
Fans and pumps not operating excessively			
Variable frequency drives (VFDs) operating as intended			

Air flow feels correct and consistent from one space to the next			
No noticeable air leaks from ducts and plenums			
Return, outdoor, and exhaust dampers properly sequenced			
Air inlets and outlets clean and unobstructed			
<b>Lighting</b>			
<b>Item</b>	<b>OK</b>	<b>Not OK</b>	<b>Notes or Action Required</b>
No lights on in unoccupied areas			
All de-lamping opportunities taken			
Ballasts disconnected where de-lamping has occurred			
Two lamps removed from four-lamp fixtures where possible			
Incandescent lights replaced with CFLs or HIDs			
T-12s converted to T-8s and/or T-5s			
LEDs installed where possible			
Occupancy sensors installed and functional			
Lighting sweep switches installed and functional			
Security/outdoor lighting automatically controlled and not excessive			
<b>Domestic hot water</b>			
<b>Item</b>	<b>OK</b>	<b>Not OK</b>	<b>Notes or Action Required</b>
Hot water temperature not excessive			
Water temperature reduced during unoccupied periods			
System insulation installed and intact			
No apparent water drips or leaks			
Water heater coils clean and maintained			
Hot water recirculation pumps do not run continuously			

<b>Plug loads</b>			
<b>Item</b>	<b>OK</b>	<b>Not OK</b>	<b>Notes or Action Required</b>
Tenants/occupants educated on plug loads and energy efficiency			
Computers off after operating hours			
Fax machines and copiers off after operating hours			
No space heaters			
Vending machines powered down when possible			
Refrigerated drinking fountains powered down in unoccupied spaces			

### Alternative Documentation

Instead of this form, you may submit at least one of the following to IREM®:

- Paragraph summarizing the walk-through and your findings
- Copy of any checklist used for your walk-through

### Optional Next Steps

- Investigate your demand charges. Are they excessive? Can you participate in a demand response program?
- Where the walk-through revealed any issues, explore what types of O&M changes and/or equipment retrofits would improve energy efficiency.
- Reference and use *ANSI/ASHRAE/ASHE Standard 189.3-2017: Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities* and the *ASHE Health Facility Commissioning Handbook and Guidelines* to optimize operations for energy efficiency and other factors.