



LEED BD+C: Core and Shell | v3 - LEED India 2011

# Enhanced refrigerant management

EAc4 | Possible 2 points

Glossary

## Intent

To reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to climate change.

## Requirements

### OPTION 1

Do not use refrigerants.

OR

### OPTION 2

Select refrigerants and heating, ventilation, air conditioning and refrigeration (HVAC&R) equipment that minimize or eliminate the emission of compounds that contribute to ozone depletion and climate change. The base building HVAC&R equipment must comply with the following formula, which sets a maximum threshold for the combined contributions to ozone depletion and global warming potential:

For multiple types of equipment, a weighted average of all base building HVAC&R equipment must be calculated using the following formula:

<b>Imperial units</b> $\frac{\sum (LCGWP + LCODP \times 10^3) \times Q_{unit}}{Q_{total}} \leq 100$	<b>Metric units</b> $\frac{\sum (LCGWP + LCODP \times 10^3) \times Q_{unit}}{Q_{total}} \leq 13$
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Calculation definitions for $\frac{\sum (LCGWP + LCODP \times 10^3) \times Q_{unit}}{Q_{total}} \leq 100$ (Imperial units)	Calculation definitions for $\frac{\sum (LCGWP + LCODP \times 10^3) \times Q_{unit}}{Q_{total}} \leq 13$ (Metric units)
Q <sub>unit</sub> = Gross ARI rated cooling capacity of an individual HVAC or refrigeration unit (Tons)	Q <sub>unit</sub> = Eurovent Certified cooling capacity of an individual HVAC or refrigeration unit (kW)
Q <sub>total</sub> = Total gross ARI rated cooling capacity of all HVAC or refrigeration	Q <sub>total</sub> = Total Eurovent Certified cooling capacity of all HVAC or refrigeration (kW)

Small HVAC units (defined as containing less than 0.5 pounds of refrigerant) and other equipment, such as standard refrigerators, small water coolers and any other cooling equipment that contains less than 0.5 pounds of refrigerant, are not considered part of the base building system and are not subject to the requirements of this credit.

Do not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydrochlorofluorocarbons (HCFCs) or halons.