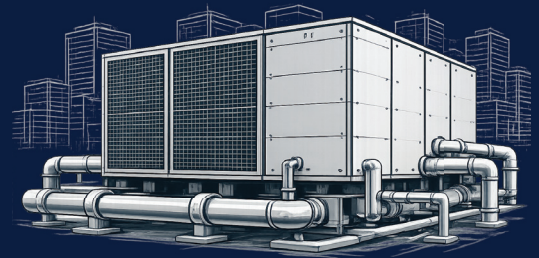


DO YOU NEED AN HVAC UPGRADE?

A BUILDING OWNER'S DECISION GUIDE



1

START HERE WHAT IS DRIVING THE CONCERN?



Frequent
HVAC repairs



Rising
utility costs



Comfort
complaints



Poor humidity or
indoor air quality



Planned renovation
or change in use



Aging or obsolete
equipment

If one or more of these issues affect your building, determine whether the problem is isolated equipment failure or a broader system issue.

2

WARNING SIGNS THE PROBLEM MAY GO BEYOND THE EQUIPMENT

- ☒ Temperatures vary widely between spaces
- ☒ Some areas feel humid, stuffy, or under-ventilated
- ☒ The system runs longer without improving performance
- ☒ Complaints continue after repeated repairs

- ☒ Controls no longer match building use
- ☒ Parts or refrigerants are difficult to obtain
- ☒ Energy use has increased without a clear reason



**IF TWO OR MORE
WARNING SIGNS
APPLY, CONSIDER
A SYSTEM-LEVEL
HVAC REVIEW.**

3

HAS THE BUILDING CHANGED SINCE THE SYSTEM WAS INSTALLED?



Has occupancy
increased?



Have layouts
changed?



Have operating
hours changed?



Have tenant
uses changed?



Has new
heat-producing
equipment
been added?



Have
ventilation
needs changed?

Building use often changes while the original HVAC assumptions remain the same.

4

A COMPLETE HVAC REVIEW SHOULD EVALUATE



LOADS

Is the system
sized for how
the building
operates today?



DISTRIBUTION

Are the
ductwork
and piping
still adequate?



CONTROLS

Are schedules,
sensors, and
sequences
working properly?



INFRASTRUCTURE

Does the building
have electrical and
structural capacity for
new equipment?



VENTILATION AND REFRIGERANTS

Do current ventilation
needs and refrigerant
requirements affect the
upgrade path?

5

WHEN SHOULD YOU ENGAGE AN MEP CONSULTANT?



- ☒ Recurring issues remain after repairs
- ☒ The building use has changed
- ☒ Equipment replacement is being considered

- ☒ Multiple system issues appear connected
- ☒ Capital improvements need to be prioritized
- ☒ You want to avoid replacing equipment based on outdated assumptions



An HVAC upgrade assessment helps identify the real problem before major spending begins.

6

WHAT SCHNACKEL ENGINEERS EVALUATES



Existing
equipment
condition



Heating and
cooling
loads



Controls and
operating
sequences



Ductwork
and
piping



Ventilation
requirements



Electrical and
structural
impacts



Construction
phasing for
occupied buildings



NOT SURE WHETHER YOUR BUILDING NEEDS AN HVAC UPGRADE?

Contact Schnackel Engineers to evaluate your existing system and identify the right next step.

www.schnackel.com