

COMPREHENSIVE THERMAL ASSESSMENT & EFFICIENCY REVIEW

Find the cooling you're already paying for – but not using.

Most critical facilities are running harder than they need to. Over time, equipment additions, evolving loads, and drift in control logic create inefficiencies that quietly drive up energy costs, accelerate equipment wear, and put uptime at risk. Access delivers a data-driven picture of where you stand, and a prioritized plan to fix it.

WHAT YOU WALK AWAY WITH

A clear picture of current performance against industry standards.

A prioritized list of improvements ranked by impact and effort.

Documentation you can hand off to leadership and your controls provider.

Single visit

Scoped to your facility
size & complexity

15 days

From site visit to full
report delivery

Neutral

Vendor-neutral findings and
recommendations.
We do not sell the equipment.

¹ Uptime Institute, *Reducing Bypass Airflow Is Essential for Eliminating Computer Room Hot Spots* (2004); finding restated in Turner, Klesner & Orr, *Implementing Data Center Cooling Best Practices*, *Uptime Institute Journal* (June 25, 2014).

THE BOTTOM LINE

Most facilities have efficiency gains hiding in plain sight. Our job is to find them, and give you a clear plan to capture them.

WHY THIS MATTERS

Three things every critical facility is quietly losing.

Equipment additions, control drift, and evolving loads create inefficiencies that don't show up on a dashboard, until something fails. Here's what they cost you.

01 / ENERGY

Money walking out the door.

Overcooling, simultaneous humidify/dehumidify cycles, and reheat conflicts drive utility costs up with no measurable benefit to reliability.

02 / RELIABILITY

Equipment that wears faster than it should.

Systems running against themselves cycle harder and run hotter, which tends to shorten equipment life and pull capital replacement forward.

03 / RISK

Hidden hot spots, hidden exposure.

When conditioned air bypasses the IT load, hot spots build silently. The first warning is often a thermal event that takes a load offline.

Built for environments where uptime isn't optional.

If a thermal event would cost you in dollars, downtime, or compliance, this assessment is built for you.

- Enterprise & colocation data centers
- Hospital server & imaging suites
- Manufacturing control rooms
- Municipal & utility SCADA rooms
- Telecom & edge facilities
- Financial services trading floors
- Higher-ed research computing
- Any 50kW+ critical environment

WHY NOW

Most facilities operate above their actual efficiency ceiling.

An assessment costs far less than the energy waste, premature equipment replacement, or unplanned thermal event it surfaces. The earlier issues are found, the cheaper they are to fix, and the longer your installed equipment lasts.

WHAT WE ASSESS

Five layers, examined end-to-end.

Our engineers walk your facility, instrument representative measurement points, analyze your current control strategy, and benchmark against industry standards² including ASHRAE TC 9.9 thermal guidelines. No surface-level checklist.

01	Site & airflow evaluation	Layout, rack density, hot/cold aisle effectiveness, bypass paths, and the cumulative impact of equipment additions and changes over time. On average, only ~40% of conditioned air supplied actually reaches IT equipment; the rest is lost to bypass and recirculation ¹ . We identify where it's going.
02	Control strategy review	Setpoints, control logic, and how your cooling units interact in current operation. We look for conflicting commands, redundant cycling, and drift between what the original control scheme intended and what's actually happening today.
03	Thermal & airflow measurement	Representative sampling of rack-inlet and exhaust temperatures, perforated tile balance, thermal imaging, and quantified hot-spot mapping, scaled to the size and complexity of your facility, not an exhaustive every-rack inventory.
04	Power & cooling alignment	How the facility has changed over time and how those changes affect current cooling demand. UPS sizing review, loading profile, and efficiency observations. Where you can share forward-looking load plans, we incorporate them; where forward-looking information isn't available, we focus our recommendations on current conditions.
05	Best-practice benchmarking	Comparison against ASHRAE thermal guidelines and recognized data center operating standards, with a prioritized gap analysis you can act on.

¹ Uptime Institute, *Reducing Bypass Airflow Is Essential for Eliminating Computer Room Hot Spots* (2004).



WHAT WE TYPICALLY FIND

Every facility is different. The patterns are not.

Across critical environments, the same handful of issues show up again and again, almost always invisible until someone goes looking. We surface them, document them, and give you a clear path to resolve each one.

FINDING 01 Bypass airflow & leakage Conditioned air escapes through cable cutouts, unsealed tiles, and gaps in containment, never reaching the IT load it was meant to cool.	FINDING 02 Overcooling without benefit Setpoints driven lower than needed for reliability, increasing energy cost with no measurable gain in equipment uptime or lifespan.
FINDING 03 Tile & airflow misalignment Perforated tiles or vents placed where they don't match the current heat-load distribution, creating hot spots and cold waste in the same room.	FINDING 04 Control strategy drift Control logic that made sense at original install but hasn't been updated as the facility evolved, now driving inefficient or conflicting operation.
FINDING 05 Capacity misalignment Installed cooling capacity that doesn't match current or projected IT load, creating either uptime risk or unnecessary operating expense.	FINDING 06 Cooling units working against each other A normal byproduct of facilities that have grown in stages, with units simultaneously heating and cooling or humidifying and dehumidifying. Easily corrected once identified.

HOW IT WORKS

From scoping call to actionable plan.

01	Schedule	Brief scoping call to confirm fit and book the on-site visit.
02	Assess	Single on-site visit, scoped to your facility size and complexity.
03	Analyze	Findings compiled, benchmarked against industry standards, and prioritized.
04	Deliver	Full report within 15 business days, with a walk-through included.

READY WHEN YOU ARE

The savings are already there. Let's find them.

A brief scoping call costs you nothing – and tells you whether an assessment will pay for itself many times over.

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