

# Cooper Commissioning: Troubleshooting Services

Do you have a persistent HVAC problem?

Are your occupants getting frustrated by uncomfortable temperatures/humidity?

Have you had multiple contractors out to address the problem, but it is not fixed?

Has a contractor told you what you are experiencing is to be expected/normal, but you are not satisfied with how your system is running?

Have you had a contractor or designer tell you that what you need is an entirely new system?

Have you recently finished a project and are still within warranty period with no success in resolving HVAC issues?

Has a contractor told you it must be a “design issue”?

Call Andy, he has yet to meet an HVAC problem he couldn't figure out!

We have found that persistent HVAC/mechanical headaches are almost always the result of a system not meeting the design intent: often from a combination of fairly minor issues in programming, sensors, and equipment. **Rarely** after a full testing process do we find that there exists any fundamental problems with the system's design.

To find all the issues that come together to create these persistent headaches takes **exhaustive testing of individual components followed by system-wide integrated testing**. Individual electrical, mechanical, plumbing, controls, or TAB contractors don't do this testing because much of it exists outside the scope of any one contractor.

The cause of your HVAC headache likely is NOT from a big mistake made by one contractor, poor design, or poor workmanship. HVAC systems are increasingly complex to meet energy savings requirements: this leads to exponentially more interactions among individual components in the system. All of that complexity means one bad sensor or valve can have an outsized effect on the system as a whole. **Systematic testing is the only way to track down where those problems are.**



**Our approach: Determine if the system is performing per design intent. Spoiler: it isn't. What we do is find out exactly where the deviations are by working meticulously in each step of our process:**

- 1** || Gather information from Owner, facilities personnel, and/or occupants about the issues they are experiencing.
- 2** || Create system-specific functional testing procedures based on a thorough review of the plans, specs, and submittals.
- 3** || Perform on-site functional performance testing to identify areas where the system is not meeting design specifications. Numerous minor issues can usually be addressed quickly by the appropriate contractor.
- 4** || Coordinate the effort among all involved contractors to address more complex issues. Andy has extensive experience in conducting this process successfully.

**Throughout our process we:**

- **Communicate frequently** with the Owner to keep them up-to-date on what we are finding and progress on issues being addressed by contractors.
- **Work collaboratively** with contractors to resolve any issues we find. Sometimes contractors that haven't worked with us before are a bit resistant, but quickly realize Andy is just troubleshooting to get a system working, NOT trying to place blame or make any contractor look bad. Usually the issues that need to be addressed truly are not any one parties' 'fault' – they are the result of interactions in a complex system with thousands of individual components that can fail.

**If you are frustrated by how your facility is functioning (or how it isn't!) – contact Andy.**

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