



Beauty Brand Retailer ROI ACTUALIZATION

TAB Case Study



PROJECT BACKGROUND

A national beauty retailer engaged Melink Corporation for Testing, Adjusting, and Balancing (TAB) services as part of their routine HVAC equipment replacement and new construction balancing initiatives. Over the first half of 2024, Melink balanced 13 locations, identifying an average of five punch list items per site. Addressing these deficiencies within the warranty period presents a clear financial return on investment (ROI) for the client.

KEY FINDINGS AND ESTIMATED COST ANALYSIS

Before detailing the most frequently identified deficiencies, it is important to understand that these issues often stem from installation inconsistencies, improper calibration, or deviations from design specifications, all of which can impact HVAC performance and efficiency. The five most frequently identified deficiencies, and their estimated costs to resolve outside of the warranty period, are below:

1. Improper airflow settings resulting in incorrectly set dampers or variable air volume (VAV) box calibrations, leading to inefficient HVAC performance (\$350).
2. Uncalibrated thermostats, affecting temperature regulation and energy efficiency (\$450).
3. Duct leakage leading to air loss from improperly sealed ducts, causing increased operational costs (\$450).
4. Unbalanced exhaust and supply airflows cause negative building pressure, which can create discomfort and energy inefficiencies (\$550).
5. Blocked or incorrectly installed diffusers, impacting airflow distribution and overall indoor air quality (\$500).



Negative building pressure when overall pressure should be positive.



Each of these deficiencies, if left unaddressed, could lead to increased maintenance costs and other serious issues. However, when identified through TAB, they can typically be resolved under warranty at no additional cost. With an average TAB visit cost of \$2,250 per site, addressing the most common deficiencies within the warranty period would fully offset the cost of balancing, ensuring complete financial recovery of the service investment.

ADDITIONAL COST AVOIDANCE FACTORS

Beyond the direct repair cost savings, there are several additional financial and operational benefits.

Reduced administrative costs result from minimizing the time and resources spent managing work orders for HVAC-related issues.

The **avoidance of premium repair costs** is another advantage, as TAB helps **prevent emergency service fees** such as nightwork or equipment rental that would otherwise be necessary to conduct maintenance in an operational store.

Additionally, ensuring a comfortable indoor environment **enhances both customer and**

employee experience by preventing temperature discomfort, indoor air quality issues, and Sick Building Syndrome symptoms, all of which could negatively impact sales and productivity.

Finally, energy efficiency improvements ensure optimal HVAC performance, reducing unnecessary energy consumption and long-term maintenance costs.



Exhaust fan without a working motor when switched on and breaker set to on.



Exhaust fan with missing belt and not operational.



RTU condensation leak in store ceiling.

PROJECT TAKEAWAYS

By identifying and addressing HVAC deficiencies through a comprehensive TAB process, Melink enables its clients to achieve full ROI on balancing services while also securing long-term operational and financial benefits. Going beyond mere occupancy requirements, TAB ensures optimal system performance, improved occupant comfort, and significant cost savings—making it an essential investment for retail construction and maintenance teams.

