

SPECIALTY APPAREL RETAILER

ROI Actualization

Case Study



PROJECT BACKGROUND

A specialty women's apparel brand, undergoing continuous growth and expansion, completes approximately 50 new construction or major remodel projects annually. Each location featured 2-4 rooftop units (RTUs) or variable air volume systems (VAVs), requiring careful commissioning to ensure compliance with design specifications. In 2024, Melink Corporation conducted commissioning for 45 of the retailer's locations and identified an average of 60 deficiencies per site prior to opening.

KEY FINDINGS AND ESTIMATED COST ANALYSIS

Of the deficiencies uncovered, seven were identified as the most common. These issues, ranging from improperly balanced equipment to faulty electrical and plumbing components, can have a significant impact on store operations and customer experience. The key deficiencies and estimated costs included the following:

1. Outdoor air dampers not modulating on one or more RTUs when commanded by DCV/CO2 24v signal (\$250).
2. HVAC system not balanced to within $\pm 10\%$ of design specifications (\$1,150).

3. Exhaust fan speed controllers not installed per design (\$250).
4. One or more control faults causing exhaust fans not to activate or backdraft dampers not to open (\$350).
5. Interior lights and signage failing to cycle on automatically (\$250).
6. Electrical panels wired incorrectly according to prints (\$250).
7. Hand sink water temperatures outside the specified range (\$300).

The estimated minimum cost of addressing these deficiencies, if left unresolved beyond the warranty period, highlights the critical value of proactive commissioning. With an average estimated cost of \$5,000 per commissioning visit, the resolution of these seven deficiencies alone under warranty would offset approximately 61% of this expense. Factoring in the remaining 50+ deficiencies per site, with an estimated resolution cost of just \$50 per item, the total savings achieved within the first year would amount to approximately \$5,550 per location. This figure exceeds the initial commissioning cost, delivering a positive financial return on investment.



ADDITIONAL VALUE BEYOND FINANCIAL ROI

The benefits of commissioning extend far beyond direct financial savings. Proper commissioning reduces the need for facilities management teams to handle extensive work orders post-opening, thereby alleviating administrative burdens. Additionally, addressing issues during the construction phase eliminates the need for equipment rentals, nightwork, or other premium labor costs, avoiding unnecessary expenses. Ensuring optimal comfort and functionality also prevents disruptions that could detract from the overall experience of shoppers and staff, enhancing both customer and employee satisfaction. Unresolved deficiencies, such as malfunctioning ventilation systems or inadequate lighting, can lead to customer dissatisfaction, reduced employee productivity, and reputational risks—issues that far outweigh the initial commissioning investment.

Not Per Design



Remote sensor not installed for RTU-1.

Per Design



Remote sensor properly installed for RTU-3.



Missing temperature sensor for VAV.



No power to GFCI outlets.



No speed controller installed on EF-1.



Condensate drain not connected.

PROJECT TAKEAWAYS

By identifying and resolving deficiencies during the construction phase, the retailer not only achieved short term financial savings but was also able to achieve operational efficiency and a superior customer experience. The practice of commissioning provides peace of mind for construction, facilities, and store teams, reinforcing its role as a critical investment in the company's ongoing success. **The ROI of commissioning, both measurable and intangible, makes it a cornerstone for the retailer's growth strategy.**

“ THE MEASURABLE AND INTANGIBLE ROI OF COMMISSIONING WAS A CRUCIAL KEY TO THE RETAILER'S GROWTH STRATEGY. ”

