Feature .

Building Success: Collaborative Strategies for Retrofits on Occupied Buildings

By Jessica Davis

ON SEPTEMBER 30, 2024, at the IIBEC/ OBEC BES in Toronto, Ontario, Canada, a panel discussion took place between Sal Alajek, project director at WSP Canada Inc.; Babita Singh, project manager at Home Depot of Canada Inc.; and Jim McKillip, senior regional account manager at Atlas-Apex Roofing Inc. The main purpose of this discussion was to demonstrate how a consultant (Alajek), a building owner (Home Depot of Canada, represented by Singh), and a contractor (McKillip) can successfully collaborate on retrofit projects on existing occupied buildings. The three participants have worked together on reroofing and repair projects on Home Depot stores in Canada.

IMPORTANT FACTORS FOR SUCCESSFUL CONSTRUCTION PROJECTS

Early in the discussion, Alajek outlined four elements critical to project success from a consultant's perspective. First, fostering contractor success through thoughtful design, communication, and planning ensures positive outcomes and avoids adversarial dynamics. Second, delivering on the project mandate ensures accountability and quality through hands-on site involvement and thorough quality assurance. Third, effective risk management, including technical, contractual, and operational considerations, balances responsibilities among stakeholders. Last, comprehensive documentation is crucial for addressing concealed conditions, supporting future maintenance, and mitigating liability. Alajek believes these strategies ensure efficient execution, quality results, and long-term value.

ADDRESSING MISCONCEPTIONS IN ROOFING AND WALL RETROFIT PROJECTS

In roofing and wall retrofit projects, misconceptions among building users, such as Home Depot store teams, can create

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unnecessary concerns. Singh highlighted the need for structured communication to address fears of exposure to the elements, significant disruptions, and extended timelines. To address those concerns, Singh explained that Home Depot of Canada uses initial notices to inform stores of their selection for reroofing, followed by overview meetings to clarify project details. At the kickoff stage, which involves engineers, contractors, and store representatives, project teams use common terms to ensure that everyone understands what will happen. By addressing concerns proactively-for example, establishing contingency plans for leaks or disruptions—project teams alleviate stress on store associates, enabling them to focus on their primary role of assisting customers.

KEY DESIGN LESSONS DRIVING CONSTRUCTION IMPROVEMENTS

When asked to discuss lessons learned during the design phase that led to improvements during the construction phase, Alajek shared two key insights. First, he mentioned the challenges posed by the wall-to-roof tie-ins in the light steel construction of Home Depot stores, in which kraft air/vapor barriers terminate at the deck edge. His team's identification of some of the stores' common original construction errors has enabled better detailing in subsequent projects by providing a clearer understanding of potential issues and concealed conditions. Second, Alajek addressed challenges associated with single-ply roofing assemblies, specifically the choice between mechanical fasteners and adhesives. Congested conduits in stores have presented challenges, including one incident in which a punctured conduit led to significant operational

downtime. These experiences underscore the importance of refining construction practices based on past errors to ensure better outcomes for future projects.

NAVIGATING CONSTRUCTION SCHEDULING CHALLENGES

Construction scheduling in Canada presents unique challenges due to unpredictable weather and varying methodologies among contractors. McKillip emphasized that proposed schedules submitted at the time of tender are only snapshots based on available resources and specific conditions at the time. Weather, project awards, and crew availability can significantly alter these timelines, making initial schedules unreliable predictors of project completion. He recommended scrutinizing tender forms, considering realistic working days, and understanding that schedules often evolve.

Speaking from his experience as a consultant, Alajek highlighted the difficulty in evaluating bids in which schedules differ significantly, leading to confusion for building owners. He noted that while some contractors propose idealistic schedules assuming perfect working conditions, others account for weather delays, resulting in discrepancies. To allow more equitable comparisons across bids, he suggested that tender forms standardize assumptions about weather delays.

Both McKillip and Alajek stressed the importance of aligning schedules with building owners' priorities, such as whether timely completion or cost savings takes precedence. Ultimately, collaborative dialogue between contractors, consultants, and building owners is essential to reconcile schedule expectations with real-world constraints, fostering more accurate planning and decision-making.

BEST PRACTICES FOR MANAGING CONSTRUCTION PROJECTS

Part of the discussion focused on best practices and innovative approaches that the panelists have utilized to successfully manage the projects that they have worked on together.

Singh emphasized clear communication, leveraging past experiences, and resolving design issues early to prevent delays and reduce costs. She also highlighted the importance of adopting practices from other disciplines such as heating, ventilating, and air conditioning or civil projects.

Alajek underlined the cost-saving benefits of salvaging materials like insulation, and he touched on the role of full-time spotters in stores to monitor and coordinate on-site activities to ensure safety. He also stressed the advantage of leveraging national contractors and specifying crew sizes in tenders to maintain efficiency and accountability within shorter construction seasons.

Proactive communication and flexibility are key, according to McKillip. He explained how stakeholders can anticipate challenges and address them promptly with the help of daily emails, weekly meetings, and custom roof-mapping software that visually tracks construction progress. For contractors, maximizing productivity means maintaining a balance between meeting deadlines and mitigating weather-related disruptions.

Together, these insights showcase how collaboration, clear expectations, and innovative tools mitigate risks, streamline project management, and ensure successful outcomes.



KEY CONSIDERATIONS FOR DEVELOPING A BUSINESS CASE FOR A RETROFIT PROJECT

Developing a business case for a retrofit project involves multiple factors, and Singh highlighted many considerations guiding these decisions. Building age and condition are primary factors, supported by detailed assessments provided by consultants. These evaluations enable project managers to present informed cases to stakeholders. Other important factors include the competitive landscape, such as proximity to newly built competitors, and prior investments in a building. Operational impact also plays a vital role; stores with specialized services, such as tool rental centers, require tailored plans to minimize disruption during retrofits. External factors like weather and competition for contractor availability further influence timelines and priorities.

A forward-thinking approach is key, and with Alajek's support as a roofing consultant, Home Depot of Canada has been able to prioritize their reroofing projects effectively. Noting the trade-off between immediate repairs and delayed action, Alajek emphasized that postponing projects leads to increased deterioration, reduced salvage potential, and higher costs.

Ultimately, the business case should focus on maintaining building integrity and ensuring functionality while balancing operational and financial constraints.

THE IMPORTANCE OF ACCURATE DOCUMENTATION FOR FUTURE PROJECTS

With many existing buildings undergoing retrofits, Alajek emphasized that better as-built documentation is essential to capture hidden or concealed conditions that could impact future roof and wall renewals. By improving the way this information is recorded, the industry can help building owners avoid costly surprises and delays in future projects. Alajek stressed that building enclosure professionals must adopt effective tools for capturing and storing crucial data, ensuring that each new project benefits from the lessons learned from previous ones.

MANAGING OPTIONAL SCOPE ITEMS IN TENDERS

Part of the discussion explored the challenges and strategies associated with pricing optional scope items in roofing project bids. McKillip expressed frustration with extensive tender forms filled with nonessential "wish list" items. He highlighted that unclear specifications often lead to inflated costs as contractors factor in multiple mobilizations for standalone items. He recommended grouping related scope



items and ensuring that tender forms clearly specify that optional items will be completed concurrently with the base scope, which allows for cost efficiencies.

Alajek offered a contrasting perspective, noting that building owners often request additional options to capitalize on contractor presence. He proposed an alternative approach to start with a larger base scope and subtract items as needed. He acknowledged the logistical and documentation challenges of optional items but stressed the importance of providing flexibility to address unforeseen client priorities without missing opportunities for cost-effective additions.

Both McKillip and Alajek agreed that effective communication and documentation in the tender process are key to managing scope efficiently and ensuring competitive pricing.

OVERCOMING CHALLENGES IN DISTRIBUTED TEAMS

With a portfolio spanning Canada, managing a geographically dispersed project team

for Home Depot of Canada has presented Alaiek with some communication challenges. including coordinating across time zones and training staff. A key concern is ensuring that lessons learned in one region are consistently implemented in others, despite differences in personnel. To address these challenges, Alajek's team developed training modules and onboarding packages to equip staff nationwide with a standardized understanding of project execution. These resources include a "cheat sheet" of past lessons learned, providing guidance on potential issues and appropriate responses. This proactive approach, while an up-front investment, helps mitigate future issues and ensures that the team is aligned in their approach. Additionally, high staff turnover in recent years means that ongoing retraining is necessary. The focus on preparation and knowledge sharing underscores the importance of adaptability and proactive communication in managing a dispersed project team effectively.

STRATEGIC ROOF RENEWAL PLANNING

In Canada, the intended service lives of Home Depot's buildings have evolved over time, and Singh noted that many of the stores, now over 30 years old, were constructed around the same time. Therefore, the company focuses on extending the life of its buildings through a phased roof renewal program. Instead of replacing roofs at all Home Depot locations within a short time frame, the company plans repairs that can extend roof life by 3 to 5 years, prioritizing stores based on age, condition, and use. This approach allows for more strategic resource allocation as the company gradually works through its numerous locations across Canada.

BALANCING REPETITION AND INNOVATION

Singh highlighted some advantages of having a standardized approach for Home Depot of Canada's national portfolio of buildings, including simplifying project execution and ensuring consistency in design and implementation across regions. Alajek added that while repetition helps maintain cost competitiveness for national contractors, the large portfolio also offers opportunities for innovation. The large scale allows Home Depot to experiment with new materials, methods, or contractors in certain regions through pilot projects. Some of these innovations have been successful and were later scaled across the portfolio, while others have provided valuable lessons for future initiatives. This balance of repetition and experimentation streamlines operations while driving continuous improvement.

CONCLUSION

This panel discussion provided valuable insights into the collaborative efforts needed to successfully execute retrofit projects on occupied buildings. By emphasizing effective communication, proactive planning, and the leveraging of past experiences, consultants, building owners, and contractors can align their priorities and overcome challenges related to scheduling, cost management, and technical complexities. Through strategic planning and innovative approaches, the panelists demonstrated how to balance consistency with experimentation, ensuring long-term building performance and operational efficiency. Ultimately, the conversation highlighted the importance of partnership, adaptability, and continuous improvement in achieving successful construction outcomes.

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