

Current Impacts of Material Shortages on Retail Construction in Canada

If you are building a gas station, convenience store, restaurant, or retail business in Canada in 2021 – you need to be prepared to pay more for materials and anticipate longer procurement timelines due to supply chain pressure.

“To account for procurement planning and strategy, we are recommending that our clients start their projects a minimum of three months sooner than they might have in the past.” said Devin Mahaffey, President of CTM Design Services Ltd.

In some instances, CTM (a Calgary-based engineering, architecture and design firm) has had to recommend alternate construction methodologies for its clients, based on the cost and availability of materials.

Shortage of web steel joists and underground storage tanks

According to a National Association of Manufacturers survey of its Canadian members, over 53% are presently experiencing operational disruptions.

+53%

of manufacturers are experiencing operational disruptions



CTM’s Devin Mahaffey cited underground fiberglass fuel storage tanks as one example of a shortage that is impacting gas station construction.

*“Currently, clients are being told that it will take up to **nine months** to have these tanks delivered. It’s a small component of the overall project, but without a tank in place, other work can’t move forward.” noted Mahaffey.*

As a result, projects that were set to begin this summer are now being pushed back until fall, and even into 2022.

There has also been a shortage of structural steel materials, according to Mahaffey. He said this has affected not just gas station clients, but any retail construction project.



What is behind the delays?

In an [op-ed for Construction Connect's Daily Commercial News](#), Patrick McManus wrote that a “perfect storm” has impacted material prices and led to scheduling uncertainty.

This is on top of the impacts Covid-19 has had on the manufacturing industry, including labour shortages, layoffs, and shipping delays.

McManus pointed to historic highs for material costs since Q3 2020. This includes a **300% increase in steel prices and 150% increase in softwood lumber prices**.

He also cited a **worldwide shortage of resins** used in building materials, as well as soaring product demand resulting from multi-trillion-dollar stimulus packages in the US and eastern Asia.

CTM’s Mahaffey added that several large-scale construction projects across Canada are competing for limited supplies, which has affected their clients’ ability to get prefabricated structural steel.

“Labour strife, logistics and microclimate impacts are all continuing to wreak havoc.” added McManus.

HISTORIC HIGHS FOR MATERIAL COSTS



300%
increase in
steel prices



150%
increase in softwood
lumber prices



3 ways project owners can mitigate procurement risk

According to Devin Mahaffey, as a project owner you have three choices. You can move ahead with a project as designed, knowing it will take longer and cost more. You can choose to delay or cancel the project. Or you can be agile and explore other options.

01 KNOW WHAT PRODUCTS YOU NEED – AND WHICH ARE DEALBREAKERS

It's always a good idea to develop a **risk management plan** at the outset of the design and construction process. This should include the **procurement strategy**. This will provide a basis for making decisions in the event of procurement delays – or unacceptable price increases.

“If you leave it to your contractor to figure out the risk well-into the process, it may be too late to pivot,” said Mahaffey.

Purchasing materials yourself as opposed to leaving it up to the contractor can expedite ordering. That said, it puts added risk, effort, and responsibility on your plate.



RISK MGT PLAN

Have a contingency plan prepared in the event of procurement issues.

02 START THE PROCESS EARLIER AND EXTEND YOUR SCHEDULE

Given the current situation, if materials have not been procured and warehoused in advance, allow yourself extra lead time when setting the project schedule. As mentioned earlier, CTM is advising its clients to begin projects a minimum of three months sooner than usual to build in extra time for procurement.



3 MONTHS EARLY

Build an extra three months into your schedule to account for procurement delays.

03 CONSIDER ALTERNATIVE BUILDING MATERIALS

If a project is at the early design stages, and you are not prepared to prolong the build, one option is to explore an engineering solution using different materials.

For example, due to difficulties obtaining open-web joists, CTM recently worked with one client to design their building with an alternate building structure, utilizing materials that were more readily available.



HAVE A PLAN "B"

Is there another way to build using different materials if required? Decide before detail design work begins.

Mahaffey said that given the current circumstances, construction alternatives should be considered as part of the planning process – *prior to the commencement of detailed design work*. This can allow for more agile, cost-effective procurement and construction that is aligned with current supply chain realities.

He cautioned that changing the design plan after permits have been issued may not save time in the end, as you may be required to resubmit your permit package – which can be a lengthy process.

Be prepared!

Between the post-pandemic construction ramp-up, and “the perfect storm” described by Patrick McManus, the current procurement challenges shouldn’t be surprising.

Yet, in a supply and demand economy where we have become increasingly reliant on the global supply chain, it just makes good business sense to be ready for these kinds of project risks.

MITIGATE YOUR PROCUREMENT RISK

Find out how CTM can help you devise a risk strategy as part of our integrated service offering.

LET'S TALK 

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