Commentary-Dave Pasolli-Western Wood Truss Association of Alberta

Creating Solutions for Problems that Don't Exist

With the recent flurry of activity around authentication requirements for trusses and structural lumber products my common sense farm boy mentality got me thinking. Do we really need to reinvent the stuff that was actually working pretty well in the first place?

For an update on the STANDATA saga look in the News and Events section further in this newsletter.

Silicon Valley is full of hyped-up ideas raising boat loads of money to solve problems that don't exist. One of the best examples of this that I can think of is **Juicero**.

This $400 wi-fi connected juicer was to be the first home cold-pressed juicing system that promised a world where a glass of fresh juice in the morning didn't require you to squeeze pulpy citrus between your bare hands like primitive man.

It was as simple as pulling out a pre-packaged packet of fruits and vegetables, securing it in the machines squeezing plates, and pressing a button. Presto, fresh juice. It was going to change the world for all the whole post-raw-vegan subscribing juicing world. Farm to glass.

The company's whole aesthetic - from its machines, to its website to its advertising - took a leaf out of Apples design book, with sleek lines, poppy colours and a lot of white. "Perfected by Earth," the Juicero billboards read. "Pressed by us." If the machine was the giant juice-squeezing iPod, the Produce Packs were the 99-cent tracks you digested every morning.

Juicing was hard. Juicero was easy. Take my money.

Remember when you decided how fresh food was by smelling it, not by scanning a QR code?

Then, Bloomberg showed that Juicero's produce packs were essentially giant ketchup sachets of fruit and vegetable pulp that you could scoop straight out of the bag and squeeze with your hands.

No need to scan the QR code on the bag. No need to sync the app. No need to insert the produce pack into the Juicero. In fact, you could ditch that squeeze-box altogether - just use your meat hooks and mash that fruit pulp like God intended! The Juicero's plates (plates that could supposedly create enough pressure to lift two Teslas) were effectively

nothing more than two giant, Wi-Fi connected hands doing what your own hands could do. Your hands were a Juicero.

People had been doing it all wrong. Using their supply chain of their legs and feet to walk to the grocer to buy oranges, mushing them, and occasionally licking their hands like a child. That just wasn't the way to get things done in Silicon Valley.

In a response the company responded trying to convince the world that they hadn't monetised the same process toddlers use to squeeze paint from a tube.

Just like the Homer Simpson car, taking a product and service and adding too many bells and whistles shows that Homer was so infatuated with his own ideas that he ignored the bigger picture of what needed to be accomplished.

Fall in love with the problem. Don't get infatuated with your own solutions.

Homer focused all his efforts on flashy solutions and didn't spend any time making sure customers could – and would – pay for the car.

Remember when in 1985, Coca-Cola introduced a reformulated version of its classic beverage, known as "New Coke." The company perceived a problem with its existing product's market share but underestimated consumer attachment to the original formula. The backlash led to the quick reintroduction of "Coca-Cola Classic."

If you have an idea for a commentary or would like to submit your own commentary for a future newsletter please let me know at dave@wwta.ab.ca

Economic Update

In Alberta, urban housing starts totaled 3816 in April 2024, a year-over-year increase of 62%. Canadian housing starts decreased by 8.63% over the same period. Edmonton had a strong month with a 64% increase compared to April 2023, and Calgary was up by 57%. Housing starts in Alberta were up from 3122 the previous month of March 2024.

Housing Starts Alberta						
	Apr-24	Apr-23	% Change	YTD 2024	YTD 2023	% Change
Alberta	3816	2356	61.97%	13560	8556	58.49%
Edmonton	1656	1008	64.29%	5143	3254	58.05%
Calgary	1831	1164	57.30%	7216	4791	50.62%
Red Deer	71	27	162.96%	257	61	321.31%
Grande Prairie	19	4	375.00%	53	23	130.43%
Lethbridge	61	21	190.48%	199	50	298.00%
Wood Buffalo	1	3	-66.67%	3	8	-62.50%
Whitehorse*	N/A	N/A	#VALUE!	N/A	N/A	#VALUE!
Canada	18486	20231	-8.63%	67875	64029	6.01%
*Whitehorse Starts are for the quarter, statistics are not available monthly.						

Housing Starts by Dwelling Type (Centres 10K+)

	APR-24	APR-23	YTD-24	YTD-23
Single	1,263	925	4,067	2,956
Semi-detached	332	218	1,129	748
Row	628	458	1,920	1,494
Apartment	1,593	755	6,444	3,358
Total	3,816	2,356	13,560	8,556

The following is taken from the CMHC Housing Market Outlook Spring 2024

Housing Market Outlook (HMO) (cmhc-schl.gc.ca)

Regional outlook: Ontario and B.C. face challenges, while Prairie provinces thrive.

• The Prairie provinces are expected to perform well due to their affordable home prices and stronger economic outlook. This attracts homebuyers and job seekers, leading to increased home construction with fewer constraints on skilled workers.

• Ontario and British Columbia are expected to drive the decline in national housing starts for 2024. High home prices will make certain home types unaffordable, while developers may struggle even with apartment construction because of supply-side challenges, particularly financing costs.

• Québec housing starts are expected to grow more robustly compared to those in other regions as they realign with fundamental levels but remain below postpandemic levels. Québec experienced a sharp decline in new home construction in 2023, before other provinces did.

• In the Atlantic region, the pressure on new home construction due to unusually strong migration in 2022– 2023 will ease. Housing starts in certain provinces will remain historically robust but will realign more closely with weaker population growth over the forecast period

Edmonton

• Strong housing starts: Total housing starts are forecasted to remain robust, propelled by economic fundamentals and a strong demand for lower-priced multi-unit housing developments.

• Resale market growth: Resale market transactions are expected to grow modestly, accompanied by an increase in the average price. Potential homeowners may face challenges due to reduced borrowing capacity and limited inventory of lower-priced units.

• Edmonton rental market outlook: The rental market in Edmonton is projected to stay tight, with rental demand surpassing supply, leading to lower vacancy rates and higher average rents throughout most of the forecast period

Economic fundamentals are poised to drive construction and resale activity in the housing market throughout the forecast period. The economy of Alberta presents an overall positive outlook, characterized by favourable labour conditions, stable energy prices and significant investments in the petrochemicals, oil and gas, and power sectors.

This positive outlook is likely to continue in the short term, supported by employment gains across various sectors, including construction, wholesale and retail trade, and professional and technical services.

Moreover, relative housing affordability and lower living costs in Edmonton are anticipated to continue attracting both international and interprovincial migrants, leading to higher population growth. The housing market is projected to remain active over the forecast horizon, supported by strong demand fundamentals.

The historical trend of average housing prices for Edmonton, Toronto and Vancouver show that the price ratios between Edmonton and these larger centres are at their lowest in decades. With comparable average household incomes, this implies that homeownership remains much more attainable in Edmonton than in the other major markets.

Calgary

• Increase in housing starts: Growth in total housing starts is expected , driven by robust demand fundamentals such as population growth and household income levels.

• Continued development of multi-unit homes: Developers are projected to initiate further construction on multi-unit homes due to low vacancy rates and increasing demand for these types of dwellings.

• Resale market activity forecast: The forecast indicates an upward trend in resale market activity with modest price gains, supported by low inventories that are maintaining sellers' market conditions.

• Tighter rental market conditions: Further tightening of rental market conditions is expected as lower vacancy rates exert upward pressure on average rent throughout the forecast period.

Positive economic and labour market conditions in Alberta, along with stable oil and gas prices, are expected to continue driving demand for housing of all types and tenures over the forecast period. Demand should persist for relatively affordable unit types, which cater to potential homeowners most impacted by high mortgage rates. The market will remain active, supported by:

• strong population growth, driven by both international and interprovincial migration;
• growth in the population of young adults (18–24) and the core working-age population (25–44); and
• rising employment and growth in local wages and household income levels.

In 2024, housing starts are projected to reach new highs as builders respond to strong demand and limited inventories. In spite of higher costs and stricter financing conditions in 2023, price and rent increases maintained the profitability of projects for developers and a record number of projects were initiated that year. With low inventories, particularly for multi-unit structures and lower-priced homes, builders will likely continue breaking ground on these types of dwellings in the coming years.

Alberta Population Growth

Over the 12 months from the end of the June 2022 to the start of July 2023, the census metropolitan area (CMA)* of Calgary posted the strongest growth among Alberta's large centres in both absolute and percentage terms.

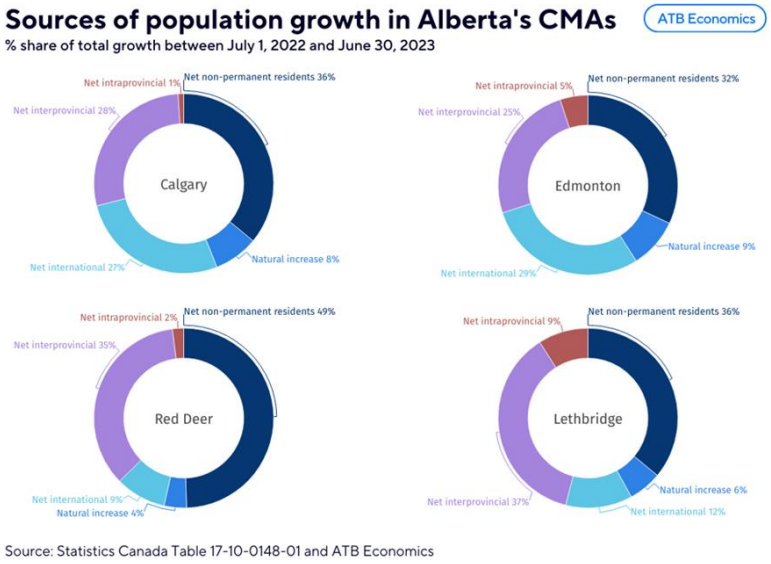
Already Alberta's largest urban area, Calgary added almost 96,000 new residents last year to reach just under 1.7 million. This translates into an annual growth rate of 6.0% and over half of Alberta's total growth. For context, Calgary's average growth rate over the previous 10 years was a more modest 2.0%.

Looking beyond Alberta, only two Canadian CMAs grew at a slightly faster clip than Calgary last year: Kitchener-Cambridge-Waterloo and Moncton, both at 6.1% (see the first chart below).

The Edmonton CMA also posted strong numbers, growing by 63,000 to hit almost 1.6 million residents. With an annual growth rate of 4.2%, Edmonton beat the average across all CMAs of 3.5% and tied with Vancouver and Peterborough for fifth place in the list of fastest growing CMAs.

The pace of growth was slower in Alberta's two other CMAs with both Lethbridge and Red Deer growing by 3.4%.

Alberta's CMAs are gaining residents from a variety of sources, but non-permanent residents (NPRs) was the largest category last year. In Calgary, the net gain from NPRs accounted for 36% of total growth followed by net interprovincial migration (28%) and net international immigration (27%) (see the chart below). Natural increase (births less deaths) contributed 8% while net moves within Alberta (i.e., **inter**provincial migration) accounted for 1% Calgary's growth.



Source: Statistics Canada Table 17-10-0148-01 and ATB Economics

It was a similar pattern in Edmonton, but with the gain from international migration a little higher than the increase from interprovincial flows. Intraprovincial migration was somewhat more important in Edmonton, adding almost 3,100 residents (5% of total

growth).

International immigration played a smaller role in Red Deer (9% of total growth) and Lethbridge (12%), but the net gain from NPRs from other countries accounted for almost half of Red Deer's growth and over a third of Lethbridge's.

Homeowners Awaiting Rate Cuts

Bank of Montreal says 72 per cent of respondents hoping to buy a home will wait until borrowing costs fall — an increase of four per cent compared with last year.

The Bank of Canada is widely expected to begin cutting its key lending rate in the second half of the year. BMO Capital Markets senior economist Robert Kavcic said this should pull some demand off the sideline and firm up the housing market.

"But rates have a long way to fall still before affordability is restored to recent norms," he said in a release on Monday.

Other financial concerns such as inflation and the high cost of living are also holding many back from buying homes this year, the BMO survey suggested.

The survey of 2,500 respondents was conducted by Ipsos from Feb. 28 to March 18. While 62 per cent of respondents believe owning a home is one of their biggest aspirations in life, more than half think it is unattainable amid the financial strains and economic conditions.

The survey also shows 85 per cent of respondents say they're making real financial progress toward buying their first home but face financial anxiety. Among the top concerns were unexpected expenses, climate considerations such as wildfires and the high costs of homeownership.

Despite the economic and market challenges, many young Canadians are preparing to embark on their homebuying journey and enter the real estate market for the first time, said Hassan Pirnia, BMO's head of personal lending and home financing.

US Housing Starts

On May 23, the US Census Bureau and Department of Housing and Urban Development jointly announced that new residential single-family home sales for April were at a seasonally adjusted annual rate (SAAR) of 634,000, according to estimates. This is **4.7% below** the revised March rate of 665,000 and 7.7% below the April 2023 rate of 687,000.

The median sales price of new houses sold in April was $433,500. The average sales price was $505,700.

The seasonally adjusted estimate of new houses for sale at the end of April was 480,000. This represents a supply of 9.1 months based on the current rate of sales.

Lumber

Lumber stabilized below $550 per thousand in May, as investors weighed demand and supply prospects. 30-year mortgage rates in the United States remain above 7%, a prohibitive level for many prospective home buyers. Meanwhile, building permits declined for the second consecutive month in April and housing starts rebounded less than expected. On the other hand, keeping the floor under prices, supply uncertainties increased from halts of activities at sawmills in British Columbia. The leading lumber producer Canfor announced the permanent closure of its Polar sawmill located in Bear Lake, BC, and the suspension of planned reinvestment initiatives in Houston, BC due to a shortage of economically viable timber and difficult operational conditions.

Canfor announces permanent mill closure, investment suspension in B.C.

After thorough analysis of the persistent shortage of economically available timber and challenging operating conditions in northern British Columbia, Canfor Corporation has announced the permanent closure of its Polar sawmill in Bear Lake, B.C., and the suspension of its planned reinvestment in Houston, B.C.

The Polar sawmill, with a production capacity of about 300 million board feet annually, has been curtailed since January 2024. The permanent closure will impact approximately 180 employees.

Don Kayne, president and CEO, Canfor Corporation made the following statement:

"The ability to reliably access enough economic timber to run our manufacturing facilities is critical for our business. Unfortunately, while our province has a sufficient supply of timber available for harvest as confirmed by the Allowable Annual Cut set by B.C.'s chief forester, the actual harvest level has declined dramatically in recent years. In 2023 the actual harvest was 42 per cent lower than the allowable cut, a level not seen since the 1960s."

Linda Coady, president and CEO of the BC Council of Forest Industries (COFI), has voiced concerns over the escalating closures and curtailments of lumber, pulp, and paper mills in B.C.

Coady emphasized the urgent need for the provincial government to swiftly address challenges in timber supply stabilization.

"In the face of mounting mill closures, we urge the provincial government to expedite transition measures within the next 60 days," stated Coady. "Current challenges in approval and permitting systems, coupled with changing land use policies, are precipitating dramatic declines in harvest levels."

Coady highlighted the profound impacts of mill closures on employees, families, and local communities, stressing the loss of high-paying jobs and tax revenue. "Each closure creates uncertainty regarding the future of critical forest sector infrastructure and capacity," she remarked.

Acknowledging recent government initiatives, including the appointment of Andrew Mercier as Minister of State for Sustainable Forestry Innovation, Coady urged accelerated efforts to stabilize fibre supply. "The forest industry is integral to BC's economy, driving manufacturing productivity, government revenue, and exports," she emphasized.

U.S. updates antidumping duties following NAFTA Panel decision. May 9, 2024

The U.S. Department of Commerce recently reassessed its antidumping duties for certain softwood lumber products imported from Canada. This review, initiated on April 30, 2024, was prompted by a directive from a NAFTA Chapter 19 Binational Panel issued on October 5th, 2023. The investigation period spanned from October 1st, 2015, to September 30th, 2016.

In their reassessment, the Department determined new estimated weighted-average dumping margins for various Canadian lumber companies.

These margins are as follows: 6.63 per cent for Canfor, 3.08 per cent for Resolute, 7.14 per cent for Tolko, and 5.18 per cent for West Fraser. For all other Canadian softwood lumber producers, the recalculated rate is 5.66 per cent, which is slightly lower than the

original rate of 6.04 per cent. This all-others rate was derived from a weighted average of the dumping margins calculated for the mandatory respondents.

Click here for more information.

The Honourable Mary Ng, Minister of Export Promotion, International Trade and Economic Development, issued the following statement regarding yesterday's decision by the North American Free Trade Agreement (NAFTA) Chapter 19 panel on U.S. countervailing duties on Canadian softwood lumber:

"Canada welcomes the panel's decision that U.S. duties on Canadian softwood lumber are inconsistent with U.S. law.

"The Canadian softwood lumber industry is a critical and reliable partner to the United States, creating jobs and making valuable contributions to our deeply integrated North American supply chains.

"Although we are disappointed by certain aspects of yesterday's decision, it is still an important step toward the elimination of U.S. countervailing duties and supports Canada's long-standing position that U.S. duties on Canadian softwood lumber products are unfair and unwarranted.

"It is in the best interests of both Canada and the United States to find a durable, mutually acceptable resolution to this dispute, and Canada remains ready to work collaboratively toward that goal."

Residential Building Construction Costs

Residential building construction costs increased 0.8% in the first quarter, following a 1.1% increase in the previous quarter. Non-residential building construction costs rose 0.8% in the first quarter, following a 0.8% increase in the previous quarter. This marks the slowest quarterly growth in residential building construction costs since the second quarter of 2020 and the slowest quarterly growth in non-residential building construction costs since the fourth quarter of the same year.

Year over year, construction costs for residential buildings rose 5.2% in the first quarter of 2024 in the 11-census metropolitan area (CMA) composite, while non-residential building construction costs saw a slightly more modest increase of 4.6%. Halifax (+8.1%) led the year-over-year growth in construction costs for residential buildings, while Moncton (+7.9%) led the growth of non-residential buildings.

Skilled labour shortages and the resulting increases in labour rates, availability of materials, interest rate pressure, and building codes updates were all reported as key factors impacting the construction sector.

In the first quarter, residential building construction costs rose across the 11 CMAs measured. Halifax (+1.8%) and Calgary (+1.8%) experienced the largest quarterly increases. Ottawa (+0.1%) experienced the smallest increase in residential construction costs throughout the quarter.

Quality Control

Systemic Defects

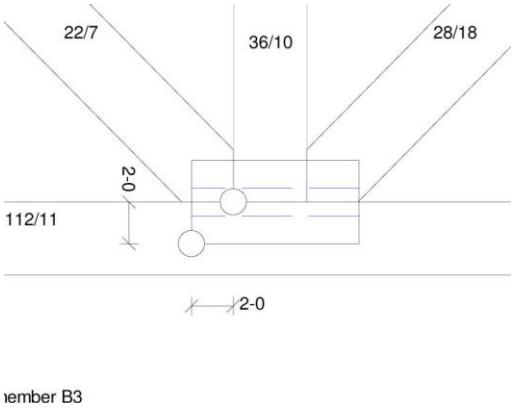
Great, you are doing your internal truss inspections. Last month I talked about minor and major defects and why it is important to have a process to determine what you do with them including documenting the nonconforming product and repair if necessary.

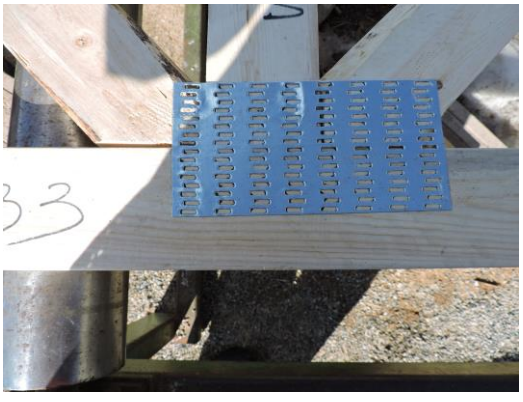
From the moment that a nonconforming process or output is noticed within the company, there is a series of steps that must be followed in order to come up with a solution for the issue and prevent it from happening again.

1. Identify the nonconformity
2. Record the nonconformity
3. Control the nonconformity

Occasionally you will find an issue, either during your internal inspection, or by a keen production worker that affects more than just the truss you are inspecting. This is a systemic defect, meaning that the defect may occur similarly in other trusses.

For example, if you find a plate that has too many ineffective teeth due to a lumber defect it most likely just affects the truss that you are looking at. However, if you find a plate oriented in the wrong direction or the wrong grade of lumber in the truss, you must look at <u>all</u> the previous trusses of that type to see if they have the same defect.





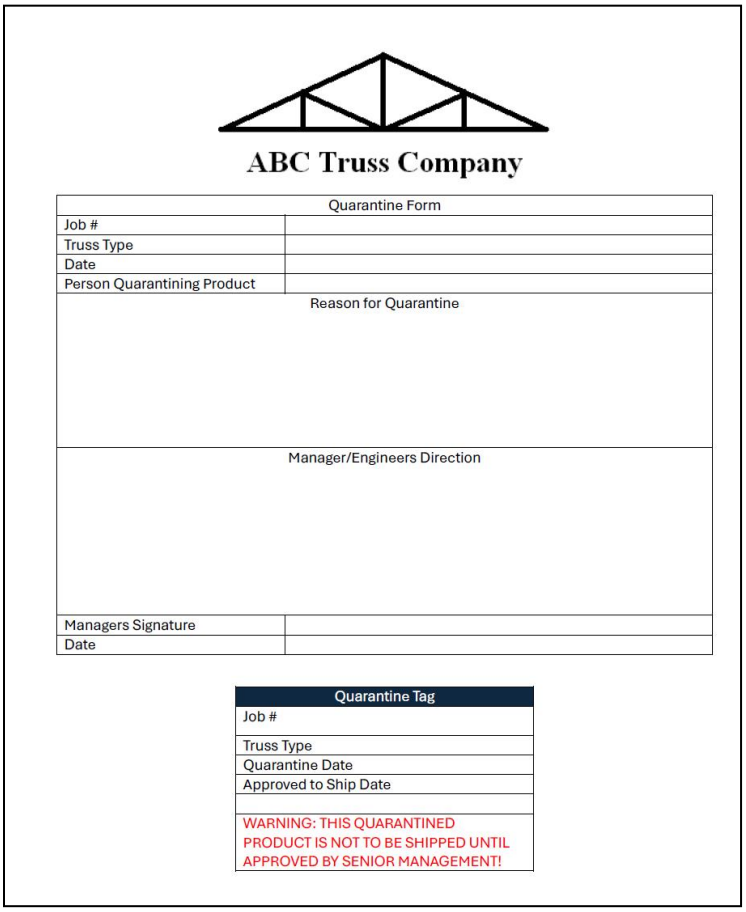
Example of a plate installed 1" out of tolerance to the right.

In this example you should have a process to quarantine the affected trusses until you determine what action to take. When a nonconforming product has been identified and a plan of action has been established to solve the problem, it can either be permanently removed or possibly altered in order to fit the guidelines of an acceptable product.

If it is altered or reprocessed, it must go through a revalidation process by someone of proper authority in order to be approved for release and documentation must be developed.

For example, you find that after building ten 70’ trusses you inspect one and discover that the bottom chord was built with #2 instead of the specified 2100 MSR. When you run the trusses you find that they work as built if you change the spacing from 24” o.c. to 16” o.c. Once you notify the customer, create new design drawings, change the placement plan, and accept the inevitable back charge you could still sell the trusses.

While you are deciding what action to take it is a good idea to have a quarantine area established for product to ensure that it is not released. You should also create a quarantine form and tag to place on the product. This form and tag should be in your Q.C. manual.



ABC Truss Company

Quarantine Form	
Job #	
Truss Type	
Date	
Person Quarantining Product	
Reason for Quarantine	
Manager/Engineers Direction	
Managers Signature	
Date	

Quarantine Tag
Job #
Truss Type
Quarantine Date
Approved to Ship Date
WARNING: THIS QUARANTINED PRODUCT IS NOT TO BE SHIPPED UNTIL APPROVED BY SENIOR MANAGEMENT!

If possible, you should have a designated area in your yard that you store quarantined product in that everyone is aware of.

If it is determined that the product can not be repaired or is not suitable for use. There should be a process of destroying the trusses.

When discovering a quality defect in a product, it's crucial to assess the scope of the issue and determine the potential impact on previously built products. The extent to which you should backtrack depends on various factors:

1. **Severity of the Defect**: If the defect poses a significant risk to safety, functionality, or customer satisfaction, it's essential to conduct a thorough investigation and backtrack as far back as necessary to identify affected products.

2. **Root Cause Analysis**: Understanding the root cause of the defect can help determine its timeframe. If the issue stems from a recent change in manufacturing processes, materials, or design, you might not need to backtrack too far. However, if it's a systemic issue that could have persisted over time, a more extensive investigation might be required.

3. **Customer Complaints or Returns**: Analyzing customer complaints, returns, or warranty claims can provide insights into when the defect might have originated. If there's a pattern of complaints or returns over a specific period, it could indicate when the issue first arose. Even if your product is meeting tolerance guidelines, if you are having customer complaints they should be addressed.

4. **Production Records and Quality Control Data**: Reviewing production records and quality control data can help pinpoint when the defect started occurring. Look for any deviations or anomalies in the manufacturing process that could correlate with the emergence of the issue. This is why any good quality control management system should have regular Q.C. meetings, so that all workers are aware of issues.

5. **Risk Assessment**: Consider the potential consequences of not addressing the defect in previously built products. If there's a low likelihood of harm or customer dissatisfaction, you might prioritize addressing the issue in current and future production rather than backtracking extensively.

Ultimately, the goal is to strike a balance between thoroughness and efficiency. Backtrack as far as necessary to ensure that all potentially affected products are identified and addressed.

You are after all building components to structures that people live and work in. If there are quality control issues your customers can not return the product like a pair of shoes.

Health and Safety Toolbox

Similarly to the Quality topic the WWTA would like to give you a monthly item you can discuss when doing your Safety Toolbox meeting.

Keeping Summer Students Safe

It is the time of year when many manufacturers hire students for summer employment. These young, enthusiastic, and oftentimes obliging short-term employees can provide a tremendous boost to the morale and productivity of the full-time team. However, special care needs to be taken when selecting, onboarding, and supervising these employees.

According to the 2016 Live Safe Work Smart survey, adolescents and young adults are twice as likely to sustain a work injury as adults. Worse still, new and young workers can be up to four times more likely to be injured during the first month of employment than at any other time. Given that the average tenure of "summer student hires" is two to four months, the risk to these employees is considerable.

When you think back to your days as a "young worker," you may be able to recall some of your own near misses. If you are in that camp, the reasons why are all too common. You didn't know what you were doing, you were eager to please your supervisor, and your natural characteristics may have lent themselves to unsafe behaviour. So, how do you help your employees avoid situations you may have found yourself in?

Obviously, training employees on the correct and safe way to do their jobs is essential. Even more important is fostering a mentoring environment among more experienced staff and supervisors with the young employees with whom they work. Once you create an environment where best practice is shared freely and readily, and employees have the confidence to relate near misses that occur, you have taken a big step toward lowering the frequency of otherwise unreported safety occurrences and ultimately serious injuries.

Having an accurate measure of your employees behavioural traits can also be a leading indicator. If your instincts are telling you to do it faster, take some chances, and be bold, you may be inadvertently placing yourself at risk. People who are naturally calm, deliberate, steady, precise, careful, conservative, compliant, collaborative, etc. have fewer accidents. Employees with these qualities conduct themselves in a more calculated fashion, follow the rules, and do things the "right way." The correlation between this approach and safety is very strong.

Being made aware of "blind spots" is sometimes all that is necessary to help employees that are not naturally deliberate and cautious in their approach. Better still is when messaging around the "safe" way to do things is consistently communicated throughout the organization.

- Only one in five young employees in Canada reported having any safety training on the job, according to the Institute of Work and Health.
- In Canada, more than half of serious and fatal workplace accidents involving young workers aged 15 to 25 take place within the first six months on the job. Nearly 20 per cent occur during the first month, according to the Canadian Federation for Independent Business.
- While young workers make up only 13 per cent of the workforce, they account for about 16 per cent of all allowed schedule 1 WSIB lost-time injury claims, according to the Infrastructure Health & Safety Association.

Too often we hear about employers that fail to provider the proper training when it comes to workplace safety – especially for new or younger employees.

Whether it's lack of resources or lack of concern, the safety side of a job is often neglected. People are in a rush, the rules are a burden or things are just done the way they always have been.

Of course, another big issue is newcomers who are afraid to speak up, worried they will appear foolish or should know better.

"If you're unsure about something or don't know if it's safe, DON'T DO IT," That is a good sign to put up in the shop. "It's better to look stupid or be embarrassed than to injure yourself."

As you start to think about hiring summer students, pause and reflect on the environment in which you are going to place them. Is a structure in place that will ensure an adequate amount of training is provided? Is there ongoing mentoring and supervision? Is a near miss reporting protocol in place? And finally, do you have an accurate measure of a candidate's behavioural tendencies and is that information used to help in the hiring, onboarding, and ongoing management of the employee?

Instinctively, you may want to answer yes to all of these questions, but you need to be honest with this assessment. Any efforts made in these areas will go a long way in helping mitigate the risk for new employees. Drilling these practices into the culture of your organization will provide dramatic improvements in your safety records and ensure these student hires head back to school in September in one piece.

Here is a pretty good publication from WorkSafe BC:

Support for employers: Training and orientation for young and new workers | WorkSafeBC

The Alberta Government has a new format OHS eNews you can subscribe to with all kinds of good material at: https://ohs-pubstore.labour.alberta.ca/

News and Events

STANDATA Saga Heating up Again

On May 2 It was brought to my attention that the City of Edmonton had issued a bulletin-***Authentication of engineered roof and floor system designs***.

At the time it was our understanding was that this new requirement issued by the City of Edmonton will not affect Permit Applications or Inspections at this time.

However, it did not take long for your builders in Edmonton to start saying that they were being refused permits because of this new requirement. So, if they were not enforcing it they appear to have forgotten to tell their employees.

It appears that the City of Edmonton may have been using this as a tactic as it looked like now new STANDATA was forthcoming from Alberta Municipal Affairs to replace 19-BCI-023 that was withdrawn in December 2022.

While causing a lot of confusion in the market place it did put the issue on the front burner again.

I have been told by the City of Edmonton that they will be issuing some guidance later today (May 5th) providing a pause/transition on the authentication requirements (basically reverting to the now archived standata) until such time as the Ministries provide further direction. However, as I am writing this I still have not seen anything in writing.

How Did We Get Here

As you are aware the STANDATA 19-BCI-023 was withdrawn by Alberta Municipal Affairs in December 2022. This withdrawal was based on unintended consequences respecting the requirement for engineer seals on truss layouts and profiles as it was being interpreted.

At the time of the withdrawal Alberta Municipal Affairs (AMA) asked for industry input from the WWTA on developing new criteria that was submitted in January 2023. It is not known if this input was considered by AMA as there was no feedback given.

In late January 2023 AMA submitted two new draft STANDATA to the Builders Sub-council for review that did not incorporate any of the WWTA's submission and was still requiring professional involvement. The WWTA provided feedback of what our understanding was of the draft requirements to AMA and did not receive any response.

In March 2023 the Building Sub-council created a working group to be chaired by Keith Jansen with the goal of working towards an acceptable solution which could be presented to AMA for incorporation of the replacement STANDATA.

The result was a proposal that would require the builder to issue a letter of construction intentions to the AHJ outlining: the supplier, loads, software utilized including version, and that the design was in accordance with the code. Incorporated in this submission would be an attached letter from the supplier and an engineering software letter. This engineering software letter would be similar to ones supplied under previous STANDATA to AHJ's. There was no requirement for authenticated work included.

This proposal from the Builders Sub-council was submitted to AMA in September 2023 with the intent that it could be incorporated into a replacement STANDATA.

At the March 2024 Building Sub-council meeting when asked for an update from AMA it was reported that AMA was not going to proceed with the creation of new STANDATA because they could not overcome the hurdle of an engineering software letter that disclaimed all responsibility for the warranty of its use or performance.

It had been communicated to me that this is the only issue that needs to be overcome and that AMA could proceed if this were addressed. However, APEGA seems to continue to move the goal posts.

The consequences of not having guidelines in the form of new STANDATA is that AHJ's will determine their own requirements which would obviously cause a lot of confusion in the market and no doubt lead to requirements for the maximum amount of professional involvement.

And that is exactly happened on May 2 with the City of Edmonton writing their bulletin. In a subsequent notice the stated "With no new STANDATA forthcoming, we are required to ask for engineering on every house permit."

It was not specific as to what would be acceptable as required engineering.

In the May 2 bulletin, the requirements appeared pretty clear that they were looking for authentication of the system, not just the components. (below)

"However, the vast range of possible SCL floor, roof and wall configurations give rise to the need for the design of the particular system to be authenticated by a registered professional. System elements include, for example, manufactured joist, beam, lintel, stud, hangers/joint connections/fasteners, frame-on-site portions, etc., and placement (layout) and installation guidance. (See also Note A-9.4.1.1.) (See also TPIC2019)"

These, of course, are the exact unintended consequences that led to the withdrawal of the STANDATA in December 2022.

In the past 2 weeks there has been several virtual meetings with APEGA, our industry engineers and builders to try and resolve with a practical solution.

At this time APEGA continues with their position that because Part 4 is referenced in the appendix A-9.23.14.11(2) where it states *that wood roof trusses be designed in conformance with 4.3.1., and Sentence 2.4.1.2.(1) of Division C, which applies to all of Part 4, requires that the designer be a registered professional skilled in the work concerned.* Part 4 requires full engineering which is govern by their act when authenticating professional work products.

The following is taken from the APEGA publication Authenticating Professional Work Products-2022

3.1 AUTHENTICATION TEST

The *Engineering and Geoscience Professions (EGP) Act* requires APEGA *licensed professionals* to accept professional responsibility by authenticating *professional work products (PWPs)* they have prepared or reviewed.

Answer the three questions in Figure 1 to determine whether an *output* is a *PWP* that requires *authentication*. If there is still doubt after applying the *authentication* test, APEGA's director of professional practice can answer any questions.

Note: If *authentication* is required, *validation* is also required for those who hold a *Permit to Practice*.

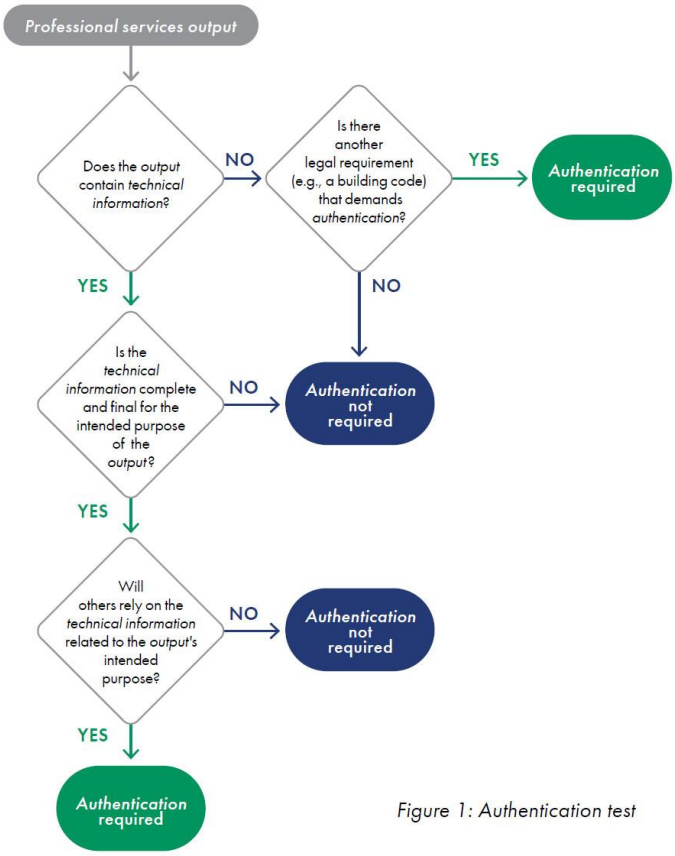


Figure 1: Authentication test

Basically, they are of the opinion that if engineering is required, only engineers should be doing the work and they believe that software programs that perform engineering calculations are performing “engineering” and should only be used by registered professionals.

Truss or floor “layouts” are considered by APEGA (Andy Smith) as “Engineer Work Products”, and therefore should be authenticated.

At our most recent meeting where APEGA was represented they are also starting to suggest that they whole design of the primary structural system of Part 9 buildings is missing a co-ordinating professional that, of course, would also have to be an engineer. The lack of an SER could contribute to a lack of clarity concerning professional responsibilities This is to ensure that not only are the designs good, but that the system of the building is considered, and that maybe even the products are installed correctly. APEGA believes that the bracing of roof trusses needs to be detailed and designed on a site-specific basis and this therefore constitutes engineering.

We have continued to point out that while the code language does point to Part 4, it appears those involved in this interpretation have lost some perspective for small buildings, and that the current system works efficiently. Requesting for engineering involvement “piece meal” may not be the best solution.

Requesting an engineer responsible for a component raises the question of whether that engineer should at some stage review the drawings for the overall structure, or for the support of their component, which the do not have control over, thus performing some or all of the functions of a SER. This may result in a significant change in scope for the engineer as their scope of practice may be limited to the roof trusses and not the design of the complete building.

I think that APEGA would support the position that an engineer may refuse to seal a document on the basis that they are not the SER.

We have another meeting teed up for next week with Alberta Municipal Affairs to again try to resolve the question if engineering should be involved or not as the public safety question - and the broader question of if it does how that affects industry.

Stay tunned.

Alberta unveils tax credit to lure 2,000 skilled tradespeople to the province

The Alberta government has narrowed its plan to attract skilled workers to the province by offering a new tax credit that will only apply to skilled tradespeople.

Jobs, Economy and Trade Minister Matt Jones says the Alberta is Calling program, launching in April, will offer a one-time $5,000 refundable tax credit to tradespeople who move to the province in 2024 and file that year's taxes in Alberta.

Alberta programs are not training skilled tradespeople as quickly as the market needs them, Jones said at a Tuesday news conference.

"Skilled trades workers are key to building Alberta today and tomorrow," Jones said. "From homes to hospitals to schools to large-scale capital infrastructure, they are needed by the thousands."

The $10-million program will be capped at 2,000 workers, according to government officials at a briefing March 12. The credits will be handed out on a first-come, first-served basis.

Mike Holden, chief economist and vice-president of policy for the Business Council of Alberta, said the challenge of recruiting skilled tradespeople in Alberta is gradually worsening as older workers retire and fewer young people seek out training.

Whether $5,000 is enough to lure those workers to the province likely depends on individual circumstances, he said.

"I think if you were considering a move to Alberta, this is something that could tip the scales," he said.

WWTA Online Training

With the provincial building codes now coming into force and referencing TPIC 2019 there have been several inquiries and sign-ups about our online training courses from outside of Alberta now that truss plants are starting to implement their QMS systems and determining that training of their workers is crucial to being in compliance.

If you have not yet taken a look at the WWTA online training program I would encourage you to, as no doubt you will be hiring new workers in the near future and it is a good method to get them productive earlier and safer. If you want an overview of the program go to the WWTA website at: http://www.wwta.ab.ca/truss-training-online.html

Did You Know?

In an update on its ongoing investigation sparked by the January Alaska Airlines flight where a Boeing 737 Max 9 lost a door plug mid-flight, the FAA said areas of non-compliance included Boeing's manufacturing process control, parts handling and storage, and product control.
Citing a document on the findings, the Times added, "the F.A.A. saw Spirit (AeroSystems) mechanics apply liquid Dawn soap to a door seal 'as lubricant in the fit-up process.'" Spirit AeroSystems makes and installs the door plugs on MAX 9 planes.