

### **IMPORTANT BRACING INFORMATION**

With the adoption of the new Alberta Building Code that references TPIC 2019 it is important to note that 1X4 bracing is no longer acceptable.

*9.23.14.11 2019 NBC Alberta Edition (Previous Code)*

*4) Bracing required in Sentence (3) shall consist of not less than 19 mm by 89 mm lumber nailed at right angles to the web members near their centres with at least two 63 mm nails for each member.*

**Has been removed in the 2020 NBC Alberta Edition and has been replaced with:**

*9.23.14.11.*

*3) All member bracing shall be installed as per the truss design drawings, and continuous lateral bracing shall be adequately anchored to the roof and ceiling diaphragms at intervals no greater than 6.10 m o.c.*

TPIC 2019 6.7.5.1 General Bracing states:

(3) Where web bracing is required:

- a. the brace and the connection to the web shall be designed to resist the lateral force specified in Clause 6.7.5.2 and the brace shall consist of not less than **38mm x 89mm** lumber nailed at right angles to the web member with at least two (2) 76 mm nails; or
- b. it shall be designed in accordance with Clause 6.7.5.1(4).

(4) An alternate method for bracing compression webs and long tension webs is by applying a member parallel to the web to form a T-section. See Table D.1., Appendix D.

When you go to Appendix D it also states: Web and T-brace material to be S-P-F No. 2 or better.

While we are on the new building code the 3<sup>rd</sup> part of 9.23.14.11(3) also states:

All member bracing shall be installed as per the truss design drawings, and continuous **lateral bracing shall be adequately anchored to the roof and ceiling diaphragms at intervals no greater than 6.10 m (20'-0") o.c.**

This is talking about the diagonals for the CLB, so if builders are resisting installing the diagonals this is where you point them, it is a code requirement.



*Some examples of inadequate 1X4 bracing above*

Thanks to Geoff Wheaton, P. Eng for the suggestion for the article.

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](mailto:dave@wwta.ab.ca)

## Economic Update

### Housing Starts

The Year End Numbers are in

In Alberta, urban housing starts totaled 3485 in December 2024, a year-over-year decrease of .17%. Canadian housing starts decreased by 11% over the same period. Edmonton was down 17.76% compared to November 2023, while Calgary was up 15%. Housing starts in Alberta were down from 4893 in the previous month of November 2024.

Housing Starts Alberta						
	Dec-24	Dec-23	% Change	YTD 2024	YTD 2023	% Change
Alberta	3485	3491	-0.17%	46629	35225	32.37%
Edmonton	1445	1757	-17.76%	18384	13184	39.44%
Calgary	1717	1493	15.00%	24369	19579	24.46%
Red Deer	12	9	33.33%	354	189	87.30%
Grande Prairie	12	22	-45.45%	194	133	45.86%
Lethbridge	26	27	-3.70%	715	243	194.24%
Wood Buffalo	11	15	-26.67%	37	39	-5.13%
Whitehorse*	125	61	104.92%	167	272	-38.60%
<b>Canada</b>	<b>16531</b>	<b>18593</b>	<b>-11.09%</b>	<b>227237</b>	<b>223197</b>	<b>1.81%</b>

\*Whitehorse Starts are for the quarter, statistics are not available monthly.

Despite all the funding for affordable housing in Canada and with the Feds allocating \$8.5 billion in this year’s budget we missed the target of increasing housing to 470,000 units on the way to a total of 2 million units by 2031. I guess we will just have to build more in the years remaining.

Housing Starts by Dwelling Type (Centres 10K+)

	DEC-24	DEC-23	YTD-24	YTD-23
Total	3,485	3,491	46,629	35,225
Single	1,251	1,189	15,696	12,339
Semi-detached	270	247	3,698	2,838
Row	602	542	6,655	5,532
Apartment	1,362	1,513	20,580	14,516

### [BILD Alberta 2024 Year in Review](#)

#### **More to come: A strong year for housing construction in Alberta**

Rob Roach, ATB ECONOMICS | January 16, 2025

The data are in for the last month of 2024 and Alberta came close to setting a record for annual housing starts.\*

December housing starts totalled 44,364 (annualized, seasonally adjusted). That's a decline from November's record high but the 17th straight month above the 40,000 mark.

At 47,827, the number of housing starts last year was the fourth highest on record and 33% higher than in 2023.

The strong showing came as home builders played catch-up with rapid population growth. Over the first nine months of 2024, Alberta added 139,725 new residents (data for the final three months are not yet available).

Alberta stood out among the other provinces last year. Excluding Alberta, housing starts declined by 3% in the rest of Canada due to pullbacks in Ontario, B.C. and Saskatchewan. Annual starts in Alberta, meanwhile, jumped by 33% and posted the largest absolute increase of any province.

According to our latest [forecast](#), even though population growth in the province is expected to slow this year, we expect that the ongoing gap between supply and demand will keep starts elevated at 45,600.

Our forecast is for housing starts in Alberta to total about 45,600 next year and 40,100 in 2026. Overall, home construction is a key reason why we expect Alberta's economy to continue to grow faster than the national economy in 2025 and 2026.

We see the [chasing affordability](#) theme continuing to play out inside Alberta. With Calgary becoming more expensive, other housing markets like Edmonton have gained strength over the last year. We expect the gap between Calgary and other Alberta markets will narrow further in 2025.

There have been four major waves of home construction booms in Alberta. In the mid-to-late 1970s, in the mid-2000s, the early 2010s, and most recently 2024. What did they all have in common? A response to rapid population growth. It doesn't take an economist to understand people need homes, and in the latest migration wave we have seen home builders step up to the plate by rapidly increasing the housing supply in response to surging demand.

## **Good enough: Inflation holds near target, keeping BoC in easing mode**

Inflation continued to cooperate last month, with an assist from the GST holiday break.

The overall inflation rate\* in Canada eased to 1.8% (from 1.9%) in December, staying below the Bank of Canada's 2% target, and in line with the consensus expectations.

Inflation has held in the Bank's 1-3% control range for 12 straight months, and has remained much softer than the readings south of the border.

The friendly inflation reading was aided by the GST holiday, which put downward pressure on the prices for a range of goods and services (e.g. food, alcohol, clothing, recreation). The impact is temporary, and the reinstatement of the tax will push inflation higher in February and March. The Bank of Canada has said it will see through the transitory effects of these measures.

This report is expected to keep the Bank of Canada in easing mode. The Bank has already signalled that jumbo cuts are likely done in this cycle, and nothing in today's report should change this view. Under our base case, we see three more 25 basis-point cuts, bringing the policy rate to 2.5% by summer. With inflation at target and tariff threats posing downside economic risk, we look for a cut next week.

### **National details:**

**Gasoline adds fuel to inflation** - The pullback in headline inflation came despite an acceleration in gasoline prices (up 3.5% above year-ago levels).

**Stickier 'trend' readings** - Core measures of inflation, which attempt to capture underlying trends, ticked down slightly on an annual basis. The two key indicators—median and trim—rose by 2.4% and 2.5% year-over-year (y/y), respectively. However, the three-month measures\*\* accelerated to the mid 3s, which may raise some eyebrows at the Bank.

**Shelter adding less** - Shelter is still a major inflation culprit, but its effect is diminishing. In December shelter costs rose 4.5% y/y—the lowest since June 2021. Mortgage interest costs were up 11.7% y/y, down from the peak of 31% in the summer of 2023. This measure is heavily influenced by monetary policy, and will continue to ease as the Bank cuts. Excluding mortgage interest costs, consumer prices rose only 1.3% y/y.

**Food** also adds less, but remains expensive - Food is not the same inflation driver as it was, though prices remain high. Grocery prices rose 1.9% y/y last month. While that's a cooldown from 2.6% in November, grocery prices are up 24% since January 2021.

## **Expanding export infrastructure is supporting the outlook for the oil and gas sector Bank of Canada Business Survey**

In November 2024, Bank of Canada staff held consultations in Calgary, Alberta with leaders from the oil and gas sector as well as industry experts. Participants included natural gas, conventional oil and oil sands producers. Results suggest that oil and gas production is expected to continue growing over the next one to two years. This outlook is supported by the start of commercial operations for the Trans Mountain Expansion (TMX) pipeline and the expected launch of Phase 1 of LNG Canada, a liquefied natural gas (LNG) export terminal in Kitimat, British Columbia, in mid-2025.

Business sentiment in the sector remains robust. Oil producers expect their investment and production levels to rise in 2025 as the TMX pipeline further increases oil flow, allowing the sector to further expand exports. Firms highlighted the positive economic impact of improved access to global markets, with Canadian crude finally reaching China and other Asian countries. Moreover, firms mentioned that they now receive better prices for their products due to their access to a larger number of export markets.

Recently, the oil and gas sector has experienced price volatility and some uncertainty surrounding tariff policies of the new US administration. Nevertheless, firms generally expect the prices of West Texas Intermediate (WTI) and Western Canadian Select (WCS) to stay above firms' production costs, with the WTI-WCS price differential remaining narrow at around US\$12–US\$14 per barrel in 2025. However, businesses anticipate that when export pipeline capacity in Western Canada approaches its limits over the next two to three years, the price differential might gradually widen again.

The launch of LNG Canada's Phase 1 is also supporting the increase in natural gas producers' capital expenditures over the coming year. Most firms expect Canadian producers of natural gas to quickly absorb all of the export terminal's capacity. Access to global markets is expected to provide more stable prices for natural gas in Canada. Overall, robust global demand for LNG and the low domestic production cost of natural gas position Canada favourably in LNG export markets.

Announcements and quarterly reports from publicly traded oil and gas producers about their 2024–25 capital expenditures and production point to a roughly 4% increase in capital expenditure budgets and about a 5% rise in oil and gas production for 2025 (Chart 1-A). The positive outlook for capital expenditures is further supported by projections from the Canadian Association of Energy Contractors, which represents drilling and service rig companies. The association anticipates 6,604 wells will be drilled in Western Canada in 2025—a 7.3% increase over 2024.

[Full Report](#)

[\*\*Bank of Canada expected to cut interest rates as tariff threat looms\*\*](#)

## **Trump**

Jack Mintz from the University of Calgary recently commented on the Trump tariffs

To decide on the best actions to deal with the Trump administration's tariff plans, it is important to understand underlying motivation. Just follow what many people around Trump say -- it is quite consistent. A November 2024 critical paper by Stephen Miran, nominated to be head of the Council of Economic Advisors, articulates well U.S. reasons and plans for tariffs. Tariffs will be desired for three reasons: (i) grow the manufacturing base for national security reasons, (ii) a payment by countries for the use of the U.S. defence umbrella and the costs of the U.S. dollar as a reserve currency that leads to chronic U.S. trade deficits (the Triffan rule) and (iii) a better source of revenues than income tax hikes to reduce the U.S. fiscal deficit -- the optimal tariff rate is 20 percent.

Marin argues that U.S. tariffs will cause devaluations in other countries, reducing substantially the impact of tariffs on consumer prices. Any increase in consumer prices will be a one-time event rather than a sustained increase in inflation. However, tariffs will push up the U.S. dollar even more, which is contrary to goal of trying to reduce it.

Marin suggests that the U.S. will begin with a low tariff rate (e.g. 10 percent) and ramp it up on those countries that do not negotiate. Lower rates and exemptions will be given by those countries that fix trade and border issues with the United States. This could make retaliation more costly.

If this is the strategy, Canada has to consider its response carefully. We live in times now where free trade has become almost a dirty word -- trade policy that becomes focused on economic power for national security reasons is dominating the motivation to grow the economy through free trade.

<https://financialpost.com/opinion/jack-mintz-not-going-to-enjoy-trump-tariff>

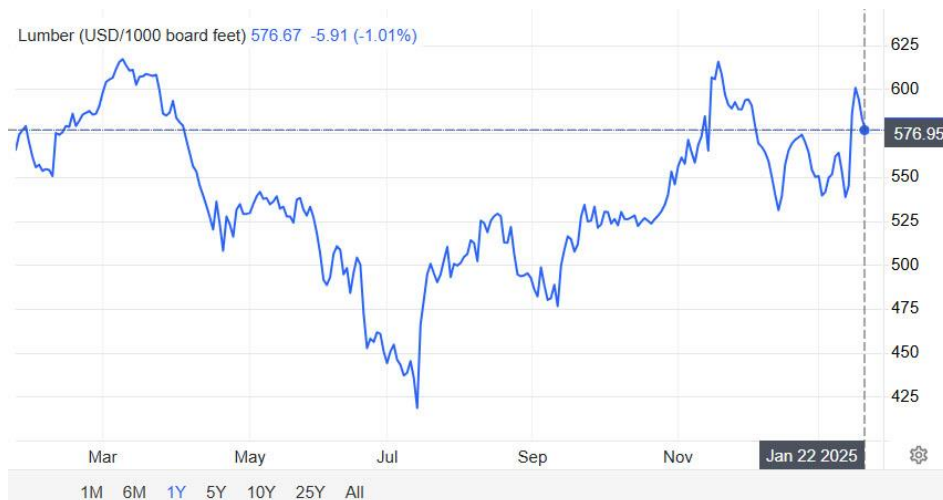
## **US Housing Starts**

Privately-owned housing starts in December were at a seasonally adjusted annual rate of 1,499,000. This is 15.8 percent ( $\pm 14.4$  percent) above the revised November estimate of 1,294,000, but is 4.4 percent ( $\pm 11.3$  percent)\* below the December 2023 rate of 1,568,000. Single-family housing starts in December were at a rate of 1,050,000; this is 3.3 percent ( $\pm 10.9$  percent)\* above the revised November figure of 1,016,000. The December rate for units in buildings with five units or more was 418,000.

An estimated 1,364,100 housing units were started in 2024. This is 3.9 percent ( $\pm 2.6$  percent) below the 2023 figure of 1,420,000.

## Lumber

Lumber prices fell toward \$580 per thousand board feet, retreating from eight-week highs of \$600 on January 16th, as the impending 25% tariffs on Canadian softwood lumber, set to take effect on February 1st, weighed on the market. These tariffs, imposed by President Trump, will increase the cost of Canadian lumber, which is a key input for U.S. housing construction, potentially reducing demand as builders face higher material prices. The price hike could discourage housing projects, especially as the broader construction sector slows. Trump's executive orders aimed at stimulating U.S. housing production, including efforts to lower construction costs, may further dampen demand for imported lumber by promoting domestic sourcing. **As Canada is the largest supplier of U.S. lumber, the tariff's impact on supply and demand dynamics is expected to be significant, with builders likely seeking alternatives as lumber prices rise.**



[BC launches Timber Sales Review](#)

[BC forest industry reacts to province's plan amid US tariff threat](#)

[BC supports forest-sector manufacturing](#)

[Biden withdraws old-growth forest plan](#)

[whats-the-story-with-october-2024-southern-pine-exports/](#)

[us-lumber-market-trump-administration/](#)

[Canadian-sawmill-production-increases-in-october](#)

[industrial product and raw materials price index Dec 2024](#)



## Quality Control

### Packaging your Shipping

One of the most difficult parts of a trusses' life is being shipped and delivered to the jobsite. Banding like trusses together “laminates” them, giving the multiple layers additional strength to resist breakage. This lamination depends on the trusses being banded tightly together using chord sections (and on occasion web) to bond the similar truss panels. The tight banding gives the layers horizontal resistance to relative movement between trusses, providing a stronger lateral truss package. Some fabricators will use a bright nail to nail each truss tail to the next to hold alignment. It makes it more difficult for the erection contractor, but it helps hold trusses in line and contributes to the horizontal strength of the banded pack.

In today's market, customers and designers often specify a cut up design where very few trusses are the same. For example, forty trusses with thirty eight set-ups is common in some areas. Frequently trusses are stacked in the order they are used on the building. This catering to the customer creates difficult banding situations that may impact the transport and delivery to the jobsite.



There are additional aspects to consider besides shipping considerations. Neatly aligned trusses will emphasize problems in production. Missing plates, misaligned plates, and incorrect profiles are easier to spot when care is used to align trusses. Also a consideration is aesthetics. A poorly aligned pack will set a preconceived notion that the trusses are not consistent. With the cut up design houses, careful stacking of like top chords or stacking bottom chords can often point to set-up issues when the stacker is

aware of what to look for in the way of discrepancies. As shown in the photograph below, trusses stacked in the order they will be installed requires blocking between dissimilar trusses to provide lamination and rigidity to the banded pack.



*Blocking between trusses*



*Plates aligning*

One of the most common questions is how do you effectively band trusses so that the banding is always restraining them if they move, particularly when banding a hip system.

One method is utilizing a figure 8 pattern with the banding that goes between the trusses as shown below.



Things to remember are:

1. Tight banded packs create laminated packages that strengthen the pack.
2. A carefully placed nail near the overhang as each truss is stacked can aid in alignment.
3. Blocking is absolutely necessary in order to prevent lateral stress on truss members.
4. Like trusses should be banded together if at all possible.
5. The longer the span, the more bands required.
6. Truss labels that are readable in the stack are preferred to help loading verification and make truss identification by the erection contractor quick and simple.
7. Neat, tight packaging with trusses aligned give the jobsite delivery a great first impression.

With all of the benefits of neatly stacked trusses, the extra effort is definitely worth the investment.

If you have an idea for a QC article please get it to me I am running out of ideas!

## Health and Safety Toolbox

### **Helping Workers with Addiction**

The Government of Alberta has announced its latest guidance plan to assist workplaces in providing recovery-friendly environments and support those who are struggling with substance abuse or addiction issues.

Mental Health and Addiction Minister Dan Williams made the announcement in partnership with a new Alberta Crown corporation called the Canadian Centre of Recovery Excellence (CORE).

#### [Recovery-Friendly Workplaces](#)

“This guidance is a blueprint for employers to support employees in their recovery journey and benefit from healthier and more productive teams, reduced absenteeism and stronger workplaces, organizations and communities across our province,” said Williams.

“We hope to see organizations and businesses looking for opportunities to support their staff, employees and industry relationships through recovery.”

Employers can play a crucial role in supporting workers struggling with addiction by fostering a workplace culture that prioritizes empathy, understanding, and proactive assistance. Here are some key ways employers can help:

### **1. Create a Supportive Workplace Culture**

- **Reduce Stigma:** Promote open conversations about mental health and addiction to reduce stigma.
- **Train Leadership:** Equip managers and supervisors with training to recognize signs of addiction and respond with sensitivity.
- **Encourage Open Communication:** Foster an environment where employees feel safe discussing personal challenges without fear of judgment or job loss.

### **2. Offer Employee Assistance Programs (EAPs)**

- Provide access to confidential counseling and addiction support services.
- Include resources for substance abuse treatment, therapy, and crisis intervention.
- Make these services readily accessible and clearly communicate their availability.

### **3. Implement Health-Focused Policies**

- Establish a **substance use policy** that prioritizes rehabilitation over punitive measures.
- Allow flexibility for employees to attend medical or counseling appointments related to their recovery.

### **4. Support Treatment and Recovery**

- Offer paid leave or flexible scheduling for employees to seek treatment.
- Partner with local organizations or clinics that specialize in addiction recovery.
- Provide accommodations, such as reduced workloads, during the recovery process.

### **5. Educate and Raise Awareness**

- Organize workshops or seminars on addiction, its impact, and available resources.
- Share information about recognizing early warning signs and how to seek help.

### **6. Monitor Workplace Stressors**

- Identify and address workplace conditions (e.g., excessive workloads, lack of breaks) that may contribute to substance use or relapse.
- Promote wellness initiatives, like stress management programs or fitness activities, to support overall well-being.

### **7. Ensure Confidentiality**

- Maintain strict confidentiality for employees seeking help with addiction to build trust and encourage participation.
- Clearly outline how personal information will be protected.

### **8. Encourage Peer Support**

- Facilitate peer support groups or mentorship programs within the organization.
- Allow employees in recovery to share their experiences to inspire others.

By taking these proactive steps, employers can create a healthier, more inclusive workplace and contribute to the long-term recovery and well-being of their employees.

According to the latest statistics from Alberta Health, approximately 10 per cent of employees employed in Alberta have struggled with substance abuse and one in five Albertans are suffering from mental illness or wellness challenges.

“We know as well that it’s a great cost to employers; we talk about productivity, it’s \$8,500 a year per employer for the cost of not addressing this when it’s averaged across our economy,” said Williams.

Stats from the province also show that half of Albertans who suffer from addiction issues are those who work in the trades and three out of four are men.

The Calgary Construction Association has also developed a Tailgate Toolkit for employers to address mental health and substance use.

[thetailgatetoolkit.ca/calgary/](http://thetailgatetoolkit.ca/calgary/)

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

### 2025 Annual General Meeting April 3 Calgary

Please save the date of April 3 for our Annual General Meeting that is going to be in Calgary. I am still working on the details and agenda but hope to have the invitation out by mid February.

### STANDATA UPDATE



“I believe I’ve designed the scariest roller coaster ever! I call it working with the Government.”

Meetings and Drafts are flying around quickly working towards a new STANDATA for trusses. I believe we are getting near the end and that the solution for Part 9 buildings will be a **requirement to authenticate the individual truss profiles**. No promises though.

Although this is not final you should be expecting to see something soon.

As far as I know there has been no new work to date on Structural Composite Lumber, but once we get a solution for trusses that is acceptable that will be next on the agenda of Municipal Affairs.

### **Alberta Value Added Wood Products Program Funding Round 2**

The initial funding for this program resulted in about \$250,000 remaining unallocated. The government was considering making new funding available, but this did not happen, so there is a second round to spend the remaining money.

#### Key items you should be aware about our next round of funding are:

- The web site has been updated and is ready to receive submissions. It can be accessed at: <https://avawpp.com/>
- Amount of funding available: minimum of \$30,000 to a maximum of \$75,000.
- 50% cost share is required.
- We anticipate that 3 to 5 projects will be funded via Round 2.
- The funding rules and eligible costs are similar to our initial call for proposals. Activities that can be funded are:
  - Business Development
  - Employee Training
  - Information Technology
  - Design Services
  - Technical & planning consulting services
- No funding is available for capital investments. This fact is clearly stated throughout the BDP web site.
- The call for proposals will close on March 31st.
- A **webinar** will be presented on **February 25** to provide more information about the program and our submission process.
- Successful recipients need to spend 100% of funds by March 31, 2026.
- Funding Agreements will be issued in the last week of April 2025.

Once you go to the website [AVAWPP](#) determine if you qualify by answering four questions and sign up, you will be invited to a webinar providing more information on Feb. 25<sup>th</sup>.

### Virtual Meetings

One day we will get back to meeting in a room I hope, but in the meantime if you have any topics you would like the WWTAA to hold a virtual meeting on please let me know.

### WWTAA 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 WWTAA 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 WWTAA website at: <http://www.wwta.ab.ca/truss-training-online.html>

### Did You Know?



Truss Engineering School