



# RUNNING THE RIGHT TIRES

## Improving safety and reliability in winter driving conditions

A guide for fleet operators, owner-operators and drivers

### Why it's important to use the right tires in winter driving conditions

- BC's unique terrain, changing elevations and unpredictable weather make this one of the most demanding winter driving environments in North America.
  - o For more than half the year – from early October to late April – weather conditions can change from summer-like to winter with little or no warning.

October 1 - April 30	
<p><b>UNDER 11,794 kg</b> LICENSED GVW</p> <p><b>WINTER TIRES OR CARRY CHAINS</b></p>	<p><b>OVER 11,794 kg</b> LICENSED GVW</p> <p><b>MUST CARRY TIRE CHAINS</b></p>

- On most major highways outside Greater Vancouver and southern Vancouver Island:

o commercial vehicles weighing between 5,000 kg and 11,794 kg LGVW must carry chains (or other acceptable traction devices), unless equipped with winter-rated tires (identified by the 3-peaked mountain and snowflake symbol or the M+S symbol).



**M+S**

o commercial vehicles weighing 11,794 kg LGVW or more must carry steel chains and are recommended to use tires suited for winter driving.

### Using the right tires in winter increases safety and reliability

- To improve driver safety and to protect your equipment and other road users, commercial vehicle owners should:
  - o equip vehicles with tires best suited to the routes they travel
  - o train drivers to safely navigate winter road conditions, inspect tires and properly install chains. Visit <https://shiftintowinter.ca/worker-tools/commercial-trucking-resources/chaining-up/>
  - o keep vehicles in top winter operating condition
- Drivers of trucks properly equipped for winter conditions are more confident and experience less fatigue and downtime.
- Road closures caused by vehicles getting stuck, spinning out or running off the road costs everyone time and money.

Current Road Conditions  
[www.drivebc.ca](http://www.drivebc.ca)

**1-800-550-4997**

- Drivers and dispatchers need to pay attention to weather warnings and road reports to decide if it's safe to proceed or if a trip should be re-routed or postponed. For information about current road conditions, weather warnings or delays consult [DriveBC.ca](http://DriveBC.ca).

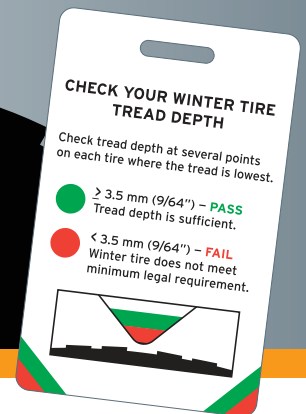
# Know the condition of your tires

Tires should be checked before and during a trip to ensure they're in good condition:

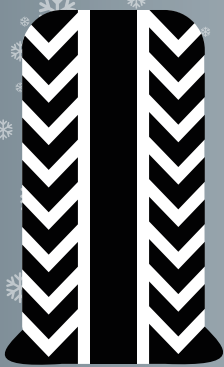
## Tread depth

- minimum tread depth allowed for winter driving in BC is 3.5 mm (or 5/32") - tire manufacturers recommend a tread depth of at least 6.5 mm (8/32") for optimal winter traction.
- use a tread depth gauge – they're accurate and inexpensive

Make sure you are in the green



### UNDER INFLATED



### PROPERLY INFLATED

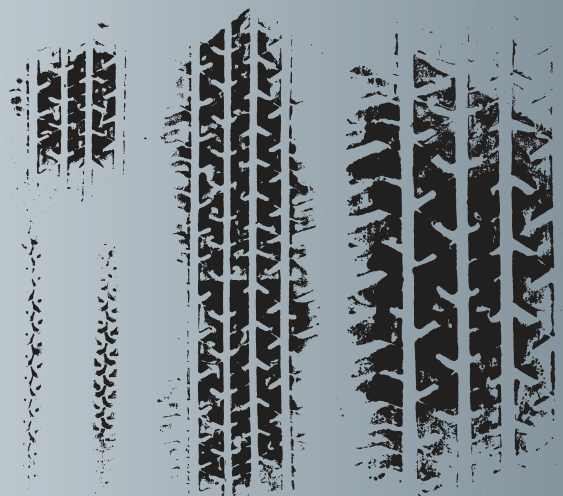


## Inflation

- proper tire inflation is critical to support loads, maximize fuel economy and minimize tread wear - underinflation by just 10% can decrease tread life by up to 15%.
- tire pressure should be checked regularly, especially during winter months when outside temperatures can vary throughout a trip.
- tire pressure should be checked outside to reflect actual driving conditions – not inside a heated shop.

## Tread wear

- uneven tread wear is a sign of other problems such as misalignment, over/under-inflation, or a worn suspension.
- tire chunking (missing tread) may be a sign of suspension problems or that the tire is not well-suited to the driving conditions
- tires with insufficient tread-depth, signs of chunking and/or uneven tread wear should be replaced as soon as possible.



## Matching tires to road conditions - industry best practices

- The routes you travel in winter will dictate your decision – for example, if business takes you:
  - o across northern BC or across Canada – prepare for extreme cold and snow and ice all winter
  - o through mountain passes – equip to tackle grades and prepare for sudden changes in weather – even in the fall and spring
  - o north - south (e.g. from BC to Mexico) – expect everything from extreme winter to heavy rainfall to summer heat
  - o off-road – equip for mud, hard-packed snow and ice
  - o in Greater Vancouver or southern Vancouver Island – expect cool, wet weather and occasional snow
- Consult your tire supplier and follow industry best practices concerning tire choices:
  - o choose tires best suited to the routes you regularly travel
  - o consider factors such as rubber compound, tread pattern and tread depth
  - o install new tires or retreads in the fall so they are in optimal condition heading into winter
  - o choose tires designed for winter conditions even if travelling where chains are not required
  - o although lighter commercial vehicles (weighing less than 11,794 LGVW) are required to use winter-rated tires OR carry chains (where specified), best practice is to use winter tires AND carry steel chains or other traction devices such as cable chains or wheel socks. For more information visit: <https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/seasonal/winter-driving/commercial>

[ShiftIntoWinter.ca](https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/seasonal/winter-driving/commercial)

[DriveBC.ca](https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/seasonal/winter-driving/commercial) | [TranBC.ca](https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/seasonal/winter-driving/commercial)

## Tire wear and fuel economy

- Choosing the right tires for winter use requires research and talking to tire suppliers:
  - o tires with an aggressive tread pattern will work well in certain winter conditions but may be less fuel efficient.
  - o tires with higher natural rubber content are softer and provide better traction in cold temperatures, but will wear faster in warm, dry conditions.
  - o tires with higher synthetic content wear more slowly but may tear and chunk in extreme winter conditions.



- New tires vs. retreads
  - o equipping commercial vehicles with retreads may be a more cost-effective and eco-friendly option than always buying new tires.
  - o retreads are available in a variety of rubber compounds and tread patterns.
  - o investing in good quality casings will extend tire life and reduce long-term costs.
  - o retreads can be used on drive axles and trailers, but not on steer axles.
- Consult your tire supplier to determine which tires are best for you.