



Alberta Construction Association

Protecting Construction Sites from Wildfires in Alberta

With Alberta's increasing wildfire risk and overlapping construction activity in rural and forest-adjacent areas, it's critical that construction sites implement proactive fire safety planning. The Alberta Construction Association encourages all contractors and site supervisors to stay prepared before and during wildfire season.

Recommendations

As wildfire seasons become more unpredictable and severe, construction companies across Alberta must take leadership in protecting their workers, assets, and surrounding communities. The Alberta Construction Association urges all members to review their Fire Safety Plans, ensure worker awareness, and actively collaborate with local fire departments. Stay alert, stay prepared, and be part of a safer construction industry.

Please note *This is not meant to be an exhaustive list but rather suggestions you may want to consider.*

Pre-Wildfire Season Planning

Review and update your Fire Safety Plan. This review should be done regularly (minimum every 4 months), in line with Alberta [Building](#) and [Fire Code](#) requirements. Conduct at least one annual fire drill.

Review Emergency Response Procedures with all workers. Everyone should understand evacuation routes, muster points, and their individual responsibilities. Assign emergency roles for fire response and evacuation protocols.

Monitor local wildfire activity. In addition to news and other sources, you can monitor the following:

- Alberta Wildfire Dashboard: <https://wildfire.alberta.ca/>
- Alberta Emergency Alerts: <https://www.alberta.ca/emergency-alerts>
- Monitor local air quality indexes (AQI) using <https://airquality.alberta.ca> and adjust outdoor work accordingly.

Wildfire smoke can create a hazard on its own. Smoke from wildfires is common in the spring and summer months. Working outdoors in these conditions can be a health hazard even if you are not close to the fire. Smoke can be harmful due to particulate matter and chemicals that can cause eye irritation, coughing or difficulty breathing. Workers are at a greater risk of exposure when they:



Alberta Construction Association

- Perform strenuous physical work;
- Have existing health risks, including but not limited to respiratory, diabetic or cardiac related health conditions;
- Are elderly; and
- Are pregnant.

Know your fire jurisdiction. Sites near or outside municipal fire coverage may require Alberta Wildfire or forestry response support. Contact the local fire department to understand water access and response expectations. Include these elements in your Emergency Response plan.

Fire Safety Practices During Wildfire Season

Follow the Alberta [Fire Code](#) and [OH&S Code](#). Key measures include:

Equipment and Site Preparation

- Maintain a full inventory of firefighting equipment: water tanks, hoses, portable pumps, backpack sprayers.
- Ensure working fire alarms and emergency lighting. Alarms must be inspected annually by qualified personnel.
- Consider installing temporary sprinkler systems at high points on temporary or wood-frame structures.
- Ensure clear access for emergency vehicles and equipment. Roads must be unobstructed with clear signage.

Fire Prevention Standards

- Fire extinguishers must be accessible, properly mounted, and regularly serviced according to [NFPA 10](#) standards.
- Hydrants and standpipes must be tested, maintained, and compatible with municipal fittings.
- Hot work procedures must include a fire watch, post-activity checks, and use of thermal cameras.
- Clear ladder fuels such as brush and debris from forest edges. Limb trees to reduce candling risk.
- Mechanical rooms must remain unobstructed and clearly labelled. Doors should self-close.

Waste, Storage, and Smoking

- Waste containers must be closed and placed away from buildings. Store combustible materials in designated areas.
- Smoking policies must be enforced with safe zones, receptacles, and signage.



Alberta Construction Association

- Store flammable liquids like gasoline or propane with appropriate signage and secure, vented storage.

Vehicles and Access

Park vehicles away from dry grass or forested edges to prevent ignition from exhaust systems. Ensure emergency access routes are always open and signed clearly.

Things to Consider

If Your Site is Under Wildfire Risk or Alert

Monitor the [Alberta Emergency Alert System](#), if your company is under Evacuation Alert proceed with the following measures:

1. Before an Evacuation

- Communicate the risk to all workers.
- Ensure emergency supplies and transportation are ready.
- Secure tools, materials, and fuels to reduce hazard if evacuation is required.
- ✓ **Go-Bag Essentials** (keep in vehicle or easily accessible locker):
 - Government-issued ID and health card
 - Cell phone with portable charger
 - Prescription medications and personal hygiene items
 - Non-perishable snacks and bottled water (72-hour supply)
 - Flashlight, batteries, and multi-tool
 - Extra clothing, including a high-visibility vest and sturdy boots
 - Provide N95 or equivalent particulate respirators for workers exposed to prolonged outdoor smoke. Cloth masks and surgical masks are ineffective for filtering wildfire smoke.
 - Hard copy of emergency contact numbers and local maps
 - Copies of critical certifications or work permits
- ✓ **Vehicle Preparation:**
 - Keep gas tank at least half full
 - Store a first aid kit and fire extinguisher
 - Maintain an updated road map of the area
- ✓ **Know Your Route:**
 - Familiarize yourself with at least two evacuation routes from the site
 - Ensure routes are communicated to all personnel during site orientation



Alberta Construction Association

2. During an Evacuation

- ✓ **Follow Orders Immediately:**
 - Evacuate promptly when instructed by emergency services or site supervisor
 - Use the designated muster point before leaving the site, if safe to do so
- ✓ **Communication Protocol:**
 - Notify your direct supervisor and check in via text or emergency app
 - Use radios or satellite phones if mobile service is disrupted
 - Share your evacuation location and status with site safety officers
- ✓ **Travel Smart:**
 - Avoid smoke-impacted routes if possible; keep windows rolled up
 - Obey all roadblocks and follow RCMP or emergency personnel instructions

3. After an Evacuation

- ✓ **Local Emergency Resources:**
 - **Alberta Emergency Alert:** <https://www.alberta.ca/emergencyalert>
 - **Municipal Emergency Management Offices:** Monitor local radio (e.g., 880 CHED, 770 CHQR, CBC Alberta)
- ✓ **Check-In Procedures:**
 - Report to the designated emergency contact or reunification site
 - Await further instructions before returning to the construction site
- ✓ **Post-Incident Debrief:**
 - Participate in safety reviews and mental health check-ins
 - Report any injuries or lost/damaged equipment to site management



Alberta Construction Association

Alberta Resources for Wildfire Preparedness

- Alberta Wildfire:
<https://wildfire.alberta.ca/>
- FireSmart Canada (Alberta Section):
<https://www.firesmartcanada.ca/>
- Alberta Building & Fire Codes:
<https://www.alberta.ca/building-codes-and-standards.aspx>
- Occupational Health and Safety Code:
<https://www.alberta.ca/occupational-health-safety.aspx>
- Alberta Air Quality Index:
<https://airquality.alberta.ca/>
- [Wildfire smoke - OHS information for employers and workers](#)
- Additional Resources:
[HUB International Wildfire Resource Centre](#)