# FIELD LEVEL HAZARD ASSESSMENT (FLHA)

Business name

Document: FLHA-001 Rev 1
Assessed: 2026-11-09 16:45
Valid for this shift / task only
Highest risk after controls: Medium

## 1. BUSINESS AND JOB DETAILS

| | | | |
|---|---|---|---|
| **Job** | Rooftop unit replacement | **Start date** | Nov 9, 2026 |
| **Working hours** | 7:00 am to 3:30 pm | **Trade** | HVAC |

## 2. JOB STEPS, HAZARDS AND CONTROLS

| # | Job step | Hazards | Risk before | Controls | Risk after | Responsible |
|---|---|---|---|---|---|---|
| 1 | Plan the crane lift and close the area below | Crane and lifting failure<br>Public entering the work area<br>Contact with overhead power lines<br><br>Rules: Provincial OHS regulation, cranes and hoisting | **High Possible / Serious injury** | 1.1 Barricade the lift zone and keep everyone out from under the load. [Engineering (guarding)]<br>1.2 Use a crane rated for the load at the radius, set up on firm ground with outrigger pads. [Engineering]<br>1.3 Check slings, chains, shackles and hooks before use. Remove anything damaged or not tagged. [Engineering]<br>1.4 Plan the lift: weight, radius, ground, path and landing area. Use a written lift plan for complex lifts. [Administrative]<br>1.5 Use certified crane operators and trained riggers and signallers, as your province requires. [Administrative]<br>1.6 Fence off the site with secure temporary fencing and lock the gates when you leave. [Engineering (guarding)]<br>1.7 Give pedestrians a safe, marked path around the work, with ramps for strollers and wheelchairs. [Engineering (guarding)]<br>1.8 Use hoarding, covered walkways or catch fans where work is above public areas. [Engineering]<br>1.9 Put signs at each entry: site name, contact number and "No unauthorised entry". [Administrative]<br>1.10 Make the site safe at the end of each day: cover holes, lower buckets and booms, remove ladders and lock tools away. [Administrative]<br>1.11 Ask the utility to de-energize, move or insulate the lines before work starts. [Elimination]<br>1.12 Use non-conductive (fibreglass) ladders near any power lines. [Substitution]<br>1.13 Mark the safe distance with flags, tape or goal posts and keep all equipment and people outside it. [Engineering (guarding)]<br>1.14 Keep to the provincial limits of approach and contact the utility before working near lines. [Administrative]<br>1.15 Use a dedicated spotter whenever equipment moves or raises anything near lines. [Administrative]<br>1.16 Treat all lines as live. If equipment touches a line, stay in the cab and keep everyone well away. [Administrative] | **Medium Rare / Fatality** | Site supervisor |

| # | Job step | Hazards | Risk before | Controls | Risk after | Responsible |
|---|---|---|---|---|---|---|
| 2 | Set up roof edge protection or harness anchors | Falling from a roof edge<br>Falling through a fragile roof or skylight<br><br>Rules: Provincial OHS regulation, fall protection | **Critical Likely / Fatality** | 2.1 Do what you can from the ground or from a scaffold at the gutter line, for example pre-assemble parts on the ground. [Elimination]<br>2.2 Install edge protection or guardrails on all open roof edges before work starts. [Engineering (guarding)]<br>2.3 Use a perimeter scaffold with handrails and toe boards along the eaves where practical. [Engineering]<br>2.4 Where guardrails cannot be fitted, use fall restraint on certified roof anchors so workers cannot reach the edge. [Engineering]<br>2.5 Use one safe, controlled access point and keep others off the roof. [Administrative]<br>2.6 Stop roof work in strong wind or rain, and when the roof is wet, icy or covered in dust or frost. [Administrative]<br>2.7 Wear a harness clipped to a rated anchor when using restraint or fall arrest, and soft-soled non-slip boots. [PPE]<br>2.8 Work from underneath or from an aerial work platform so nobody stands on the fragile roof. [Elimination]<br>2.9 Cover or guard every skylight and fragile sheet with a fixed, marked cover or mesh before work starts. [Engineering (guarding)]<br>2.10 Install safety mesh under new roof sheeting, and use crawl boards or staging to spread the load on fragile surfaces. [Engineering]<br>2.11 Use fall arrest on rated anchors when working near fragile areas. [Engineering]<br>2.12 Treat all roof sheets as fragile until a competent person confirms they are not. Old fibre cement and plastic sheets are fragile. [Administrative]<br>2.13 Put "Fragile roof" signs at every roof access point. [Administrative]<br>2.14 Never walk on sheets between purlins or along skylights. Stay on boards or staging. [Administrative]<br>2.15 Wear a full body harness clipped to a rated anchor. [PPE] | **Medium Rare / Fatality** | Site supervisor |
| 3 | Isolate power and gas, apply lockout and tags | Electric shock from live wiring<br>Gas and fuel lines<br><br>Rules: Provincial OHS regulation, electrical safety, and CSA Z462 | **Critical Possible / Fatality** | 3.1 Isolate the power before any work. Do not work live. [Elimination]<br>3.2 Lock out and tag the isolation point with your own personal lock and danger tag. [Engineering (guarding)]<br>3.3 Test before you touch: prove dead at the point of work with a tested voltage tester. [Engineering]<br>3.4 Only licensed electricians do electrical work, to the Canadian Electrical Code and provincial rules. [Administrative]<br>3.5 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Administrative]<br>3.6 If energized work cannot be avoided, use a permit, a safety observer and insulated tools, following CSA Z462. | **Medium Rare / Fatality** | Site supervisor |

| # | Job step | Hazards | Risk before | Controls | Risk after | Responsible |
|---|---|---|---|---|---|---|
| | | | | [Administrative]<br>3.7 Wear insulated gloves, arc-rated clothing and a face shield when testing or working near live parts. [PPE]<br>3.8 Isolate and purge the line before work, with the owner's approval. [Elimination]<br>3.9 Lock off and tag the isolation valve. [Engineering (guarding)]<br>3.10 Check for leaks with a gas detector before and during work, and ventilate the area. [Engineering]<br>3.11 Only licensed gas fitters work on gas lines. [Administrative]<br>3.12 Remove ignition sources: no smoking, no hot work and no sparking tools near the line. [Administrative]<br>3.13 Know where the shut-off valve is and what to do if a leak happens. [Administrative]<br>3.14 Wear safety glasses and gloves, and keep a fire extinguisher close by. [PPE] | | |
| 4 | Recover refrigerant before disconnecting | Refrigerant leaks | **Medium<br>Unlikely / Serious injury** | 4.1 Recover refrigerant into an approved cylinder before opening the system. Never vent it. [Engineering (guarding)]<br>4.2 Ventilate closed spaces and use a leak detector during the work. [Engineering]<br>4.3 Only certified refrigeration technicians handle refrigerants, as your province requires. [Administrative]<br>4.4 With flammable refrigerants (such as R32 or R290), remove ignition sources and use spark-free tools. [Administrative]<br>4.5 Wear cold-rated gloves and safety glasses or a face shield. [PPE] | **Low<br>Rare / Serious injury** | Site supervisor |
| 5 | Lift out the old unit and set the new one, keeping clear of the load | Crane and lifting failure<br>Falling tools and materials<br>Strong wind and storms<br><br>Rules: Provincial OHS regulation, cranes and hoisting | **High<br>Possible / Serious injury** | 5.1 Use tag lines to control loads and agree on clear radio or hand signals. [Administrative]<br>5.2 Stop lifting in high wind or when the operator cannot see the signaller. [Administrative]<br>5.3 Never ride on a load or hook. [Administrative]<br>5.4 Crane and lifting failure: see step 1 for the full controls [Administrative]<br>5.5 Barricade and sign the drop zone under overhead work so nobody walks beneath. [Engineering (guarding)]<br>5.6 Fit toe boards, kick plates and mesh screens on scaffolds and edges. [Engineering]<br>5.7 Use catch fans, debris netting or covered walkways where people pass below. [Engineering]<br>5.8 Tether hand tools when working at height. [Engineering]<br>5.9 Keep platforms tidy. Do not stack materials near edges or above toe board height. [Administrative]<br>5.10 Check the forecast each morning and plan work at height and lifting around the weather. [Elimination]<br>5.11 Tie down or weigh down loose sheets, panels, boards and rubbish at the end of each shift. [Engineering] | **Medium<br>Unlikely / Serious injury** | Site supervisor |

| # | Job step | Hazards | Risk before | Controls | Risk after | Responsible |
|---|---|---|---|---|---|---|
| | | | | 5.12 Set wind limits for roof work, platforms and cranes, using the manufacturer's limits, and stop when they are reached. [Administrative]<br>5.13 Stop work and get down in lightning. Wait 30 minutes after the last thunder before going back up. [Administrative]<br>5.14 Check scaffold, fencing and edge protection after strong wind before anyone uses them. [Administrative] | | |
| 6 | Connect, commission and clean the roof | Electric shock from live wiring<br>Poor housekeeping and waste<br><br>Rules: Provincial OHS regulation, electrical safety, and CSA Z462 | **Critical Possible / Fatality** | 6.1 Electric shock from live wiring: see step 3 for the full controls [Administrative]<br>6.2 Order materials to size and send packaging back where you can. [Elimination]<br>6.3 Put waste bins and chutes close to the work. [Engineering]<br>6.4 Clean as you go, and do a full clean up at the end of each day. [Administrative]<br>6.5 Keep exits, stairs and walkways clear at all times. [Administrative]<br>6.6 Stack materials neatly on level ground, away from edges. [Administrative]<br>6.7 Wear gloves when handling waste. [PPE] | **Medium Rare / Fatality** | Site supervisor |

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Critical. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of controls: Elimination, Substitution, Engineering (guarding), Engineering, Administrative, PPE.

## 3. PPE AND PERMITS

| Required PPE | Permits and plans |
|---|---|
| CSA green triangle safety boots (CSA Z195)<br>Hard hat (CSA Z94.1)<br>Full body harness (fall arrest)<br>High-visibility vest (CSA Z96)<br>Work gloves<br>Safety glasses (CSA Z94.3)<br>Sun protection (sunscreen, hat, long sleeves)<br>Rubber insulating gloves<br>Arc flash PPE (CSA Z462)<br>Face shield | Lift plan<br>Roof access permit<br>Fall protection plan<br>Lockout permit |

## 4. PLANT AND EQUIPMENT

| Plant / equipment | Licence or training needed | Inspection needed | Rego / ID | Last inspected | Certificate / report |
|---|---|---|---|---|---|
| Mobile crane | Provincial crane operator certification, qualified rigger | Pre-use check each shift; inspected, tested and maintained to CSA Z150 as adopted by your province | | | |

| Plant / equipment | Licence or training needed | Inspection needed | Rego / ID | Last inspected | Certificate / report |
|---|---|---|---|---|---|
| Hand tools | | | | | |
| Electrical test meter | | | | | |
| Extension ladder | | | | | |

## 5. CREW COMPETENCY, TICKETS AND LICENCES

Crew listed at sign-on below, with ticket and licence numbers.

## 6. EMERGENCY ARRANGEMENTS

| | | | |
|---|---|---|---|
| **Emergency number** | 911 | **First aid kit** | In the work vehicle |
| **Fire extinguisher** | In the work vehicle | **Alarm and evacuation** | Shout for help and stop work. Make the area safe and go to the assembly point. Call the emergency number and send someone to meet the ambulance. |
| **Reporting incidents** | Report serious incidents to the provincial regulator as required. | | |

## 7. MONITORING, REVIEW AND LEGAL BASIS

The supervisor and crew review this assessment at the start of the shift, whenever the task, crew or conditions change, and before any new work process starts. Re-assess and initial the changes below.

Legal basis: Provincial occupational health and safety law (e.g. Ontario OHSA and O. Reg. 213/91, BC OHS Regulation, Alberta OHS Code). Employers must identify hazards before work starts and control them, and workers must be told about them. A field level hazard assessment is done on site, at the start of each shift or task, and reviewed again when conditions change.

Keep completed hazard assessments for at least 3 years (COR auditors sample the last 12 months). Review this FLHA and re-sign whenever the task, crew or conditions change.

## 8. PRE-JOB CHECKS

| Check | Yes | No |
|---|---|---|
| PPE inspected and in good condition | | |
| Tools and equipment inspected | | |
| Permits reviewed and posted | | |
| Locates valid and on site (if digging) | | |
| Barricades or warning ribbon in place | | |

| Check | Yes | No |
|---|---|---|
| Muster point and emergency plan reviewed with the crew | | |
| SDS available for products used | | |
| Working alone check-in set up (if anyone works alone) | | |

## 9. RE-ASSESSMENT WHEN CONDITIONS CHANGE

| Time | What changed | New hazards | Controls | Initials |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

## 10. END OF SHIFT REVIEW

| | | | |
|---|---|---|---|
| **Completed at** | | **Reviewed by** | |
| **Area cleaned up and safe** | | **Permits closed** | |
| **Incidents or near misses** | | **Hazards remaining** | |

## 11. REVISION HISTORY

| Rev | Date | By | What changed |
|---|---|---|---|
| 1 | Nov 9, 2026 | | First issue |
| | | | |
| | | | |

## 12. SIGN-OFF

| | Name | Signature | Date | |
|---|---|---|---|---|
| **Prepared by** | | | | |
| **Supervisor** | | | | |
| **Prime contractor review** | | | | Accepted for use: Yes / No |

By signing below, each worker confirms they took part in this hazard assessment, it was reviewed with them before work started, and they will follow it. Stop and re-assess if anything changes.

| Name | Role / company | Tickets / licences | Signature | Date |
|---|---|---|---|---|
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| Name | Role / company | Tickets / licences | Signature | Date |
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