Canadian Electrical Code (CEC) Compliance Check List [2025]

1. Provincial and Local Amendments

Verify local amendments to the CEC in you province or territory. Ensure compliance with additional AFCI/GFCI requirements. Confirm bilingual labeling requirements where applicable.

2. Risk Assessment and Site Inspection

Conduct pre-installation risk assessments for hazardous locations.

Ensure correct wiring methods.

Verify fire protection measures for installations in combustible environments

Inspect conduit and enclosure ratings for wet and corrosive locations.

3. Certification and Documentation

Secure approval from local electrical safety authorities before energization. Submit compliance declarations and inspection reports as required.

4. Training and Continuous Education

Stay updated with CEC revisions and industry best practices.

Use official handbooks and guides for interpretation of code changes.

Implement best practices for conduit protection in high-vibration and wet locations.

5. General Electrical Installation Compliance

Verify conductor sizing and ampacity.

Ensure proper grounding and bonding.

Confirm compliance with voltage drop limits for long runs.

Use approved fittings, connectors, and fasteners for secure installations.

6. Conduit and Cable Management

Ensure conduit fill limits do not exceed CEC requirements.



Use proper bending radii for conduits to prevent conductor damage.

Select appropriate conduit types for hazardous, wet, or corrosive environments.

Ensure mechanical protection for exposed cables in high-traffic or industrial areas.

Secure cables at required intervals to prevent sagging or damage.

7. Panelboards, Disconnects, and Circuit Protection

Ensure overcurrent protection devices (OCPD) are sized correctly.

Verify panelboards have correct labeling, including circuit directories.

Confirm main service disconnects are properly rated and located.

Use surge protection where required, especially for sensitive electronic equipment.

8. Specialized Installations

Follow CEC Section 30 for lighting system installations.

Comply with Section 36 for high-voltage equipment installations.

Adhere to CEC Section 62 for electric heating systems.

Verify correct installation of renewable energy systems (CEC Section 64).

Ensure proper wiring and protection for EV charging stations (CEC Section 86).

9. Testing and Commissioning

Perform insulation resistance testing before energization.

Verify proper phase rotation for three-phase systems.

Conduct ground fault testing for GFCI and AFCI protection.

Document test results and maintain records for future inspections.

10. Maintenance and Periodic Inspections

Schedule routine inspections for electrical systems.

Inspect for deterioration of insulation, loose connections, or corrosion.

Verify load calculations to ensure circuits are not overloaded.

Update documentation and as-built drawings after modifications.

Ensure compliance with workplace electrical safety standards.

