





This bulletin provides details on what you need to know with respect to verifying that a concrete production facility is in compliance with all relevant requirements in CSA standards that are further echoed and/or referenced in owner, municipal, provincial and Alberta Building Codes (ABC).

If you would like to get more information, or if you have any questions, please contact Concrete Alberta at 780-436-5645 or info@concretealberta.ca or visit our website at https://concretealberta.ca/certification/plant-certification.

# **Design Code Requirements for Concrete in Alberta**

A concrete production facility needs to be verified to produce to CSA. Similar to approving and verifying a concrete mix design to meet CSA, the same is required of a concrete production facility to produce concrete to CSA. Validation of a concrete production facility's certification to CSA is often verified by owners, contractors, consultants, home builders and government agencies as one of the due diligence steps to demonstrate mandatory compliance with the Alberta Safety Codes Act which is the legislation under which the National Building Code – 2023 Alberta Edition is adopted.

Code Reference	Verification Requirement Reference
Alberta Building Code (ABC) 2023 Based on National Building Code of Canada References CSA A23.3-19	Division B: • 4.3.3. Plain, Reinforced & Pre-stressed Concrete • 4.3.3.1. Design Basis for Plain, Reinforced & Pre-stressed Concrete
Alberta Building Code (ABC) Based on National Building Code of Canada References CSA A23.1-19	Division B: 9.3.1.1 (1)
CSA A23.3-19 Design of Concrete Structures	Section 4.3: Concrete Quality, Mixing, and Placement
CSA A23.1-19 Concrete Materials & Methods of Concrete Construction	Section 5.2: Production of Concrete

### **Table 1: Code Reference**

Governing Document	Section / Division	CSA Reference
Alberta Building Code (ABC) based on NBCAE 2023	Division B: 9.3.1.1 (1)	CSA A23.1-19
Alberta Building Code (ABC) based on NBCAE 2023	Division B: 4.3.3.1	CSA A23.3-19
CSA A23.3-24 - Design of Concrete Structures	Section 4.3: Concrete Quality Mixing, and Placement	CSA A23.1-19
CSA A23.1-19 - Concrete Materials and Methods of Concrete Construction	Section 5.2: Production of Concrete	

## **Table 2: Safety Act**

Governing Document	Section / Division	Reference
Alberta Building Code (ABC) based on NBCAE 2023	Volume 1 - Conformity Assessment	Alberta Safety Codes Act
Alberta Safety Codes Act	Part 1 Responsibilities, Section 5-8	

<sup>\*</sup> If these codes and standards requirements for concrete production materials and equipment are not met, the concrete does not meet code and standards.





# CAN YOU AFFORD YOUR CONCRETE NOT TO BE CODE COMPLIANT: RISKS AND LIABILITIES

# **Responsibilities of Concrete Producers and Owners/Constructors**

## **Concrete Producer**

Provincial Certification /
Concrete Alberta Certification

Document and demonstrate compliance to CSA and ABC

- Stationary plants to CSA A23.1-19, Section 5.2, ABC Volume 1 and Alberta Safety Codes Act
- Volumetric Mixers to CSA A23.1-19, Section 5.2.2.8 and ASTM C685/C685M and CSA A23.1 Exposure Requirements

## **Owner/Constructors**

Verify for Provincial Certification (or equivalent) Annually:

- CSA A23.1, Section 5.2: Production of Concrete "The owner is responsible for quality assurance processes to verify that the requirements for concrete are met."
- CSA A23.1, Section 4.4.1.4: Responsibilities "The owner shall be responsible to ensure that the requirements of this Standard are met and to clearly specify all qualification, acceptance testing, and submittal requirements for the project"
- Alberta Building Code, Conformity Assessment "This responsibility is established under the Safety Codes Act and its Regulations"
- CSA A23.3-19, Section 4.3.1.1 Concrete quality, mixing, and placement "Concrete shall be proportioned and produced in accordance with CSA A23.1 or CSA A23.4, as applicable."

### **Concrete Alberta Certification**

CSA recognizes the Provincial Concrete Facility Certification Program as operated by Concrete Alberta. Concrete Alberta assists the Alberta concrete industry, and the construction industry, by providing Ready-Mixed Concrete Plant and Mobile Mixer

Certification Programs that are designed to provide the required verification to owners, contractors, home builders and others.





The certification provides owners, contractors, consultants, home builders and government agencies a single document that:

- Confirms an audit of facilities, equipment and materials by a licensed professional in good standing with APEGA, once every 3 years for compliance with all relevant requirements in CSA standards that are further echoed and/or referenced in owner, municipal, provincial and Alberta Building Codes and Standards.
- Confirms annual validation that all aspects of Concrete Alberta Certification are maintained.
- Provides validation to support a producer's claim of supplying concrete to CSA and to other codes and standards that reference it.
- Supports an owner's and contractor's obligation to validate the project specification requirements for submittals and certifications are met.

When a concrete producer is certifying to supply concrete that meets industry referenced codes and standards, an owner or their delegate can shorten their requirement of verifying this claim by asking the concrete producer for their Concrete Alberta certification documentation. It's convenient for owners and contractors to reference for project specification.