

Introduction

This Module explains why objective-based codes have been introduced in Canada and what it means for the construction industry.

What is an Objective-Based Code?

The 2005 Code is, very simply, an updated 1995 Code with objectives and functional statements linked to each technical requirement. It is not a performance code: like the 1995 Code, the 2005 Code contains both prescriptive requirements and performance requirements.

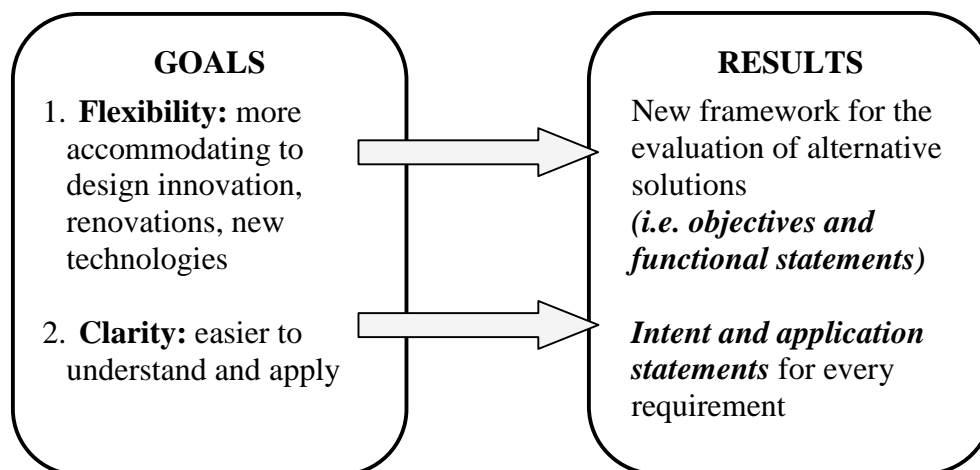
The objective-based code requires that any proposed equivalency (i.e. alternative solution) be compared to the technical requirements using the objectives and functional statements, which are defined in the new Division A.

Goals for the 2005 Code

The National Model Construction Codes are developed by the Canadian Commission on Building and Fire Codes (CCBFC).

In the early 1990's, the CCBFC was faced with a growing demand from provincial and territorial governments and the public to make the Codes

1. more flexible and adaptable to renovations, innovative design and new technologies, and
2. clearer and easier to use.



Benefits of Objective-Based Codes

Objective-based codes are intended to provide the following benefits:

- Increased understanding of the reasons for Code provisions
- More consistent application of the Codes
- Ability to apply familiar provisions from previous editions of the Codes
- Enhanced opportunity for design and technology innovation
- Increased flexibility to apply Codes to existing buildings
- Approach that is consistent with international code trends

Compliance Options in the 2005 Code

There have always been two ways to comply with the Code:

1. Comply with the technical requirements that are stated in the Code.
 - 2005 Code: Technical requirements are now called *acceptable solutions* and are located in Division B.
2. Demonstrate that a proposed equivalent product, material, system, design or method will perform at least as well as the technical requirement(s) it is satisfying.
 - 2005 Code: Equivalencies are now called *alternative solutions*, and the new information (i.e. objectives and functional statements) will make it easier to compare their performance with that of the Code provisions.

Option 1 – Comply with Division B Provisions	Option 2 – Propose an Alternative Solution
<ul style="list-style-type: none"> • Based on Div. A, 1.2.1.1.(1)(a) • Comply with Division B <i>acceptable solutions</i> (technical requirements) • “Business as usual” 	<ul style="list-style-type: none"> • Based on Div. A, 1.2.1.1.(1)(b) • Demonstrate that an <i>alternative solution</i> (equivalent) performs at least as well as applicable Division B technical provisions • New: More information to compare a proposed alternative solution with Division B requirements <ul style="list-style-type: none"> ○ objectives ○ functional statements

How Were the Code’s Objectives Determined?

The CCBFC asked its standing committees to analyze every requirement in the Code and to document why each one was in the Code. This analysis led to the development of the intent statements, application statements, objectives and functional statements.

Building Code Objectives

- OS** Safety
- OH** Health
- OA** Accessibility
- OP** Fire and Structural Protection of Buildings

Fire Code Objectives

- OS** Safety
- OH** Health
- OP** Fire Protection of Buildings and Facilities

Plumbing Code Objectives

- OS** Safety
- OH** Health
- OP** Protection of the Building or Facility From Water and Sewage Damage

Additional Objectives in the Provincial or Territorial Codes

Some provinces and territories may have additional objectives such as water conservation and energy efficiency in their codes.

One Other Thing to Remember

The Building, Fire and Plumbing Codes are regulatory documents; however, they are not manuals on how to design a building.

The NBC sets minimum requirements for some aspects of health, safety, accessibility and structural and fire protection of buildings. However, a designer must consider many other aspects, such as:

- other provincial and municipal codes, regulations, and by-laws,
- standards,
- design manuals,
- good engineering practice,
- manufacturer's information,
- insurance requirements, and
- owner requirements and goals.

Summary

The key points of this Module are:

- An objective-based code is a code in which every requirement achieves at least one of the Code's stated objectives.
- Two goals targeted by the change to objective-based codes are:
 - **Flexibility:** more accommodating to design innovation, renovations, new technologies
 - **Clarity:** easier to understand and apply
- Objective-based codes are intended to provide the following **benefits**:
 - Increased understanding of the reasons for Code provisions
 - More consistent application of the Codes
 - Ability to apply familiar provisions from previous Codes
 - Enhanced opportunity for design and technology innovation
 - Increased flexibility to apply Codes to existing buildings
 - Approach consistent with international code trends
- An objective-based code is not a performance code. The 2005 Code continues to contain a mix of prescriptive and performance requirements.