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Canada

CODES CANADA



# Firestop

National Building Code 2015

25 September 2019

André Laroche, Manager Regulatory Solutions

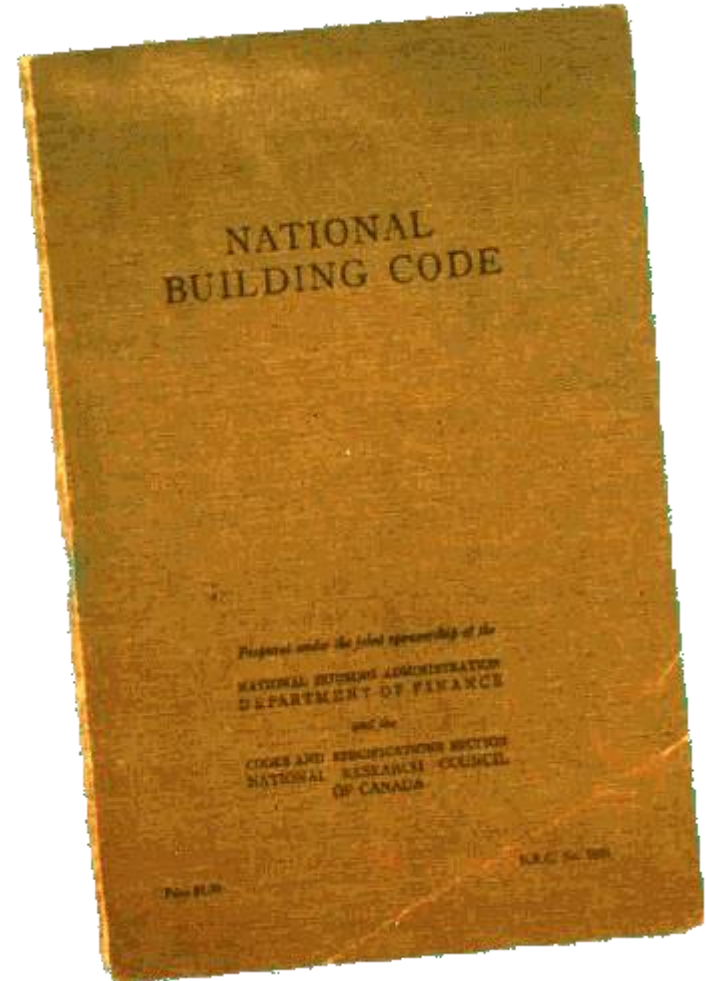


# Outline

- **National Model Codes**
- **Codes Development System**
- **How to participate**
- **What's up?**
- **Summary of changes**

# History!

- 1937
- First edition of the National Building Code: 1941



# Today's codes & guides

- 50+ Codes published since 1941
- 2015 latest editions of 4 codes
- Paper & electronic format (\$\$\$) and free versions
- 3 Guides, supplements and commentaries
  - Structural Commentaries (User's Guide–NBC 2015: Part 4 of Division B)
  - Illustrated User's Guide–Part 9 NBC 2015, Housing and Small Buildings
  - User's Guide–National Energy Code of Canada for Buildings 2015 and 2017
- Codes seminar videos and handbook

# Benefits of National Model Codes



**Safe, Healthy,  
Accessible &  
Energy  
Efficient  
Buildings for  
Canadians**



**Reduced  
Regulatory  
Burden**



**Increased  
Productivity for  
Canada's  
Industry**



**Cost-Effective  
Development**

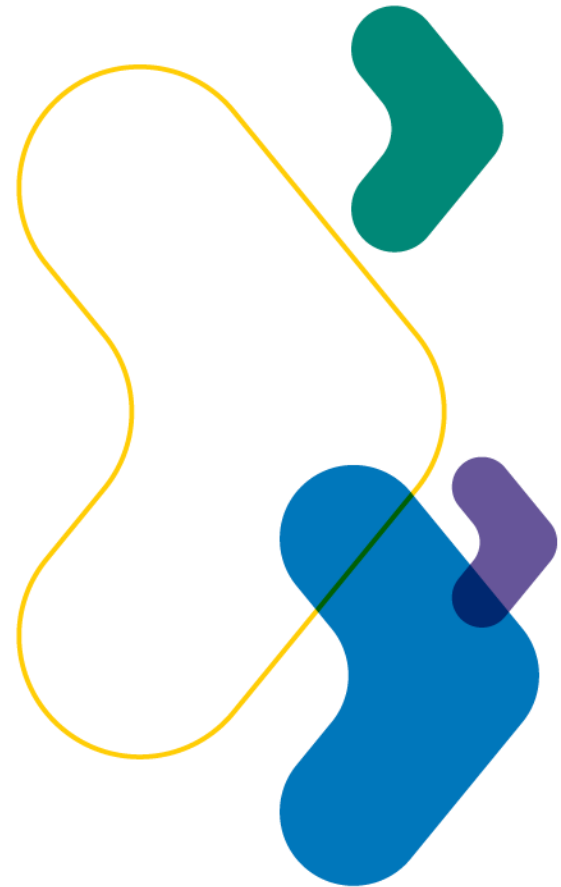


**Facilitate  
Internal Trade**

Increased national uniformity and creates economic prosperity

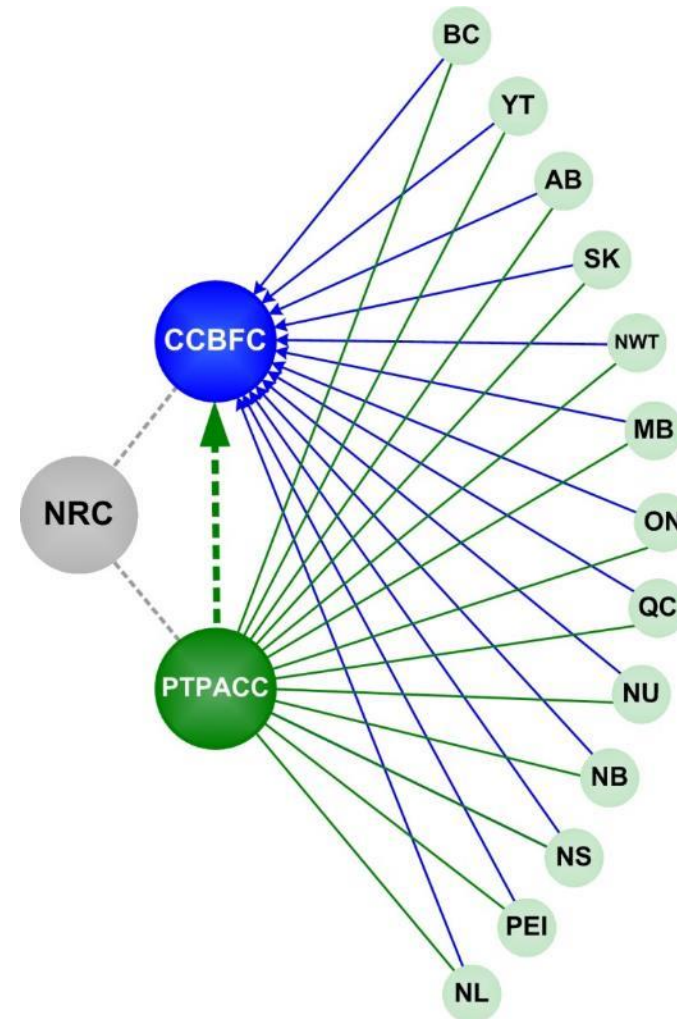
# National collaboration

- Over 75 years of collaboration and partnership between
  - Provinces and Territories
  - National Research Council (NRC)
- Canadian Commission on Building and Fire Codes (CCBFC)
  - Provincial/Territorial Policy Advisory Committee on Codes (PTPACC)

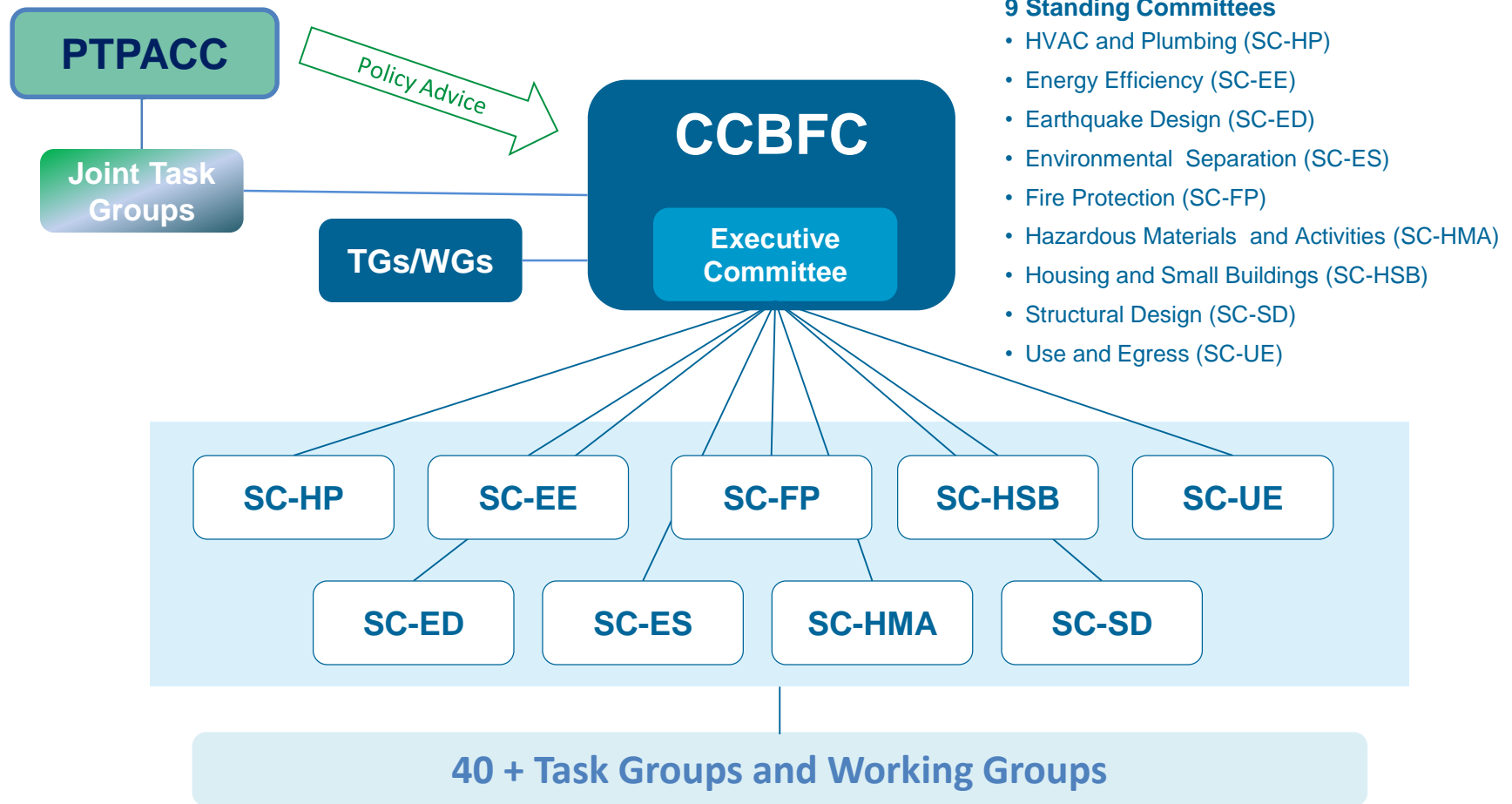


# The coordinated code development system in Canada

- › Independence
- › Balance
- › Consensus
- › Expertise
- › Evidence
- › Neutrality
- › Legislative authority
- › Policy goals

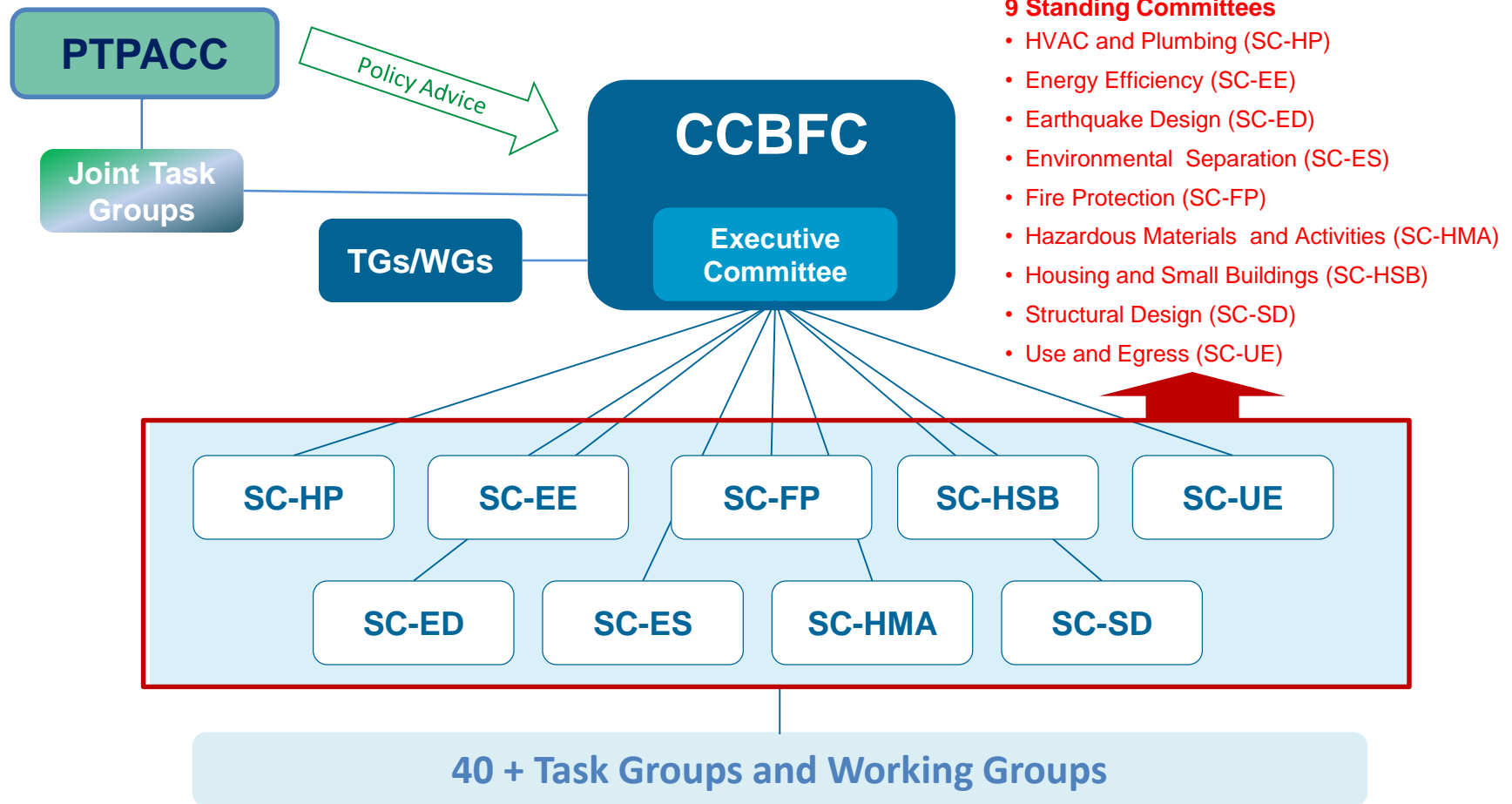


# CCBFC committees & interactions

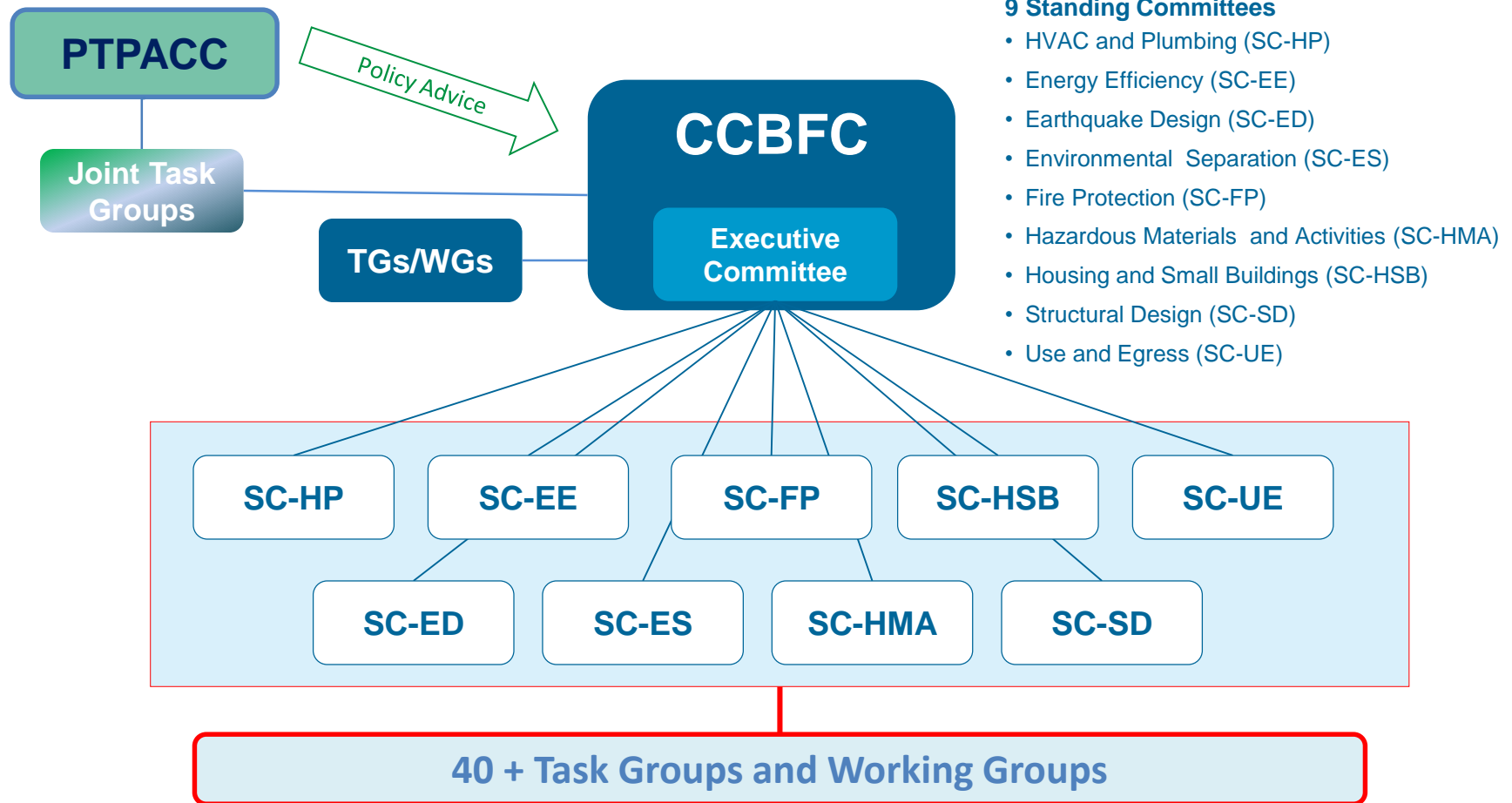




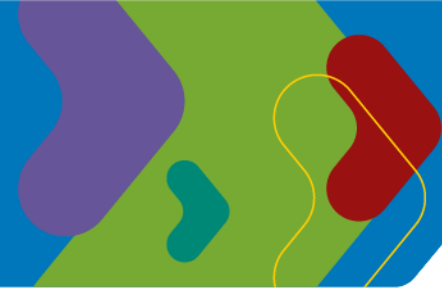
# CCBFC committees & interactions



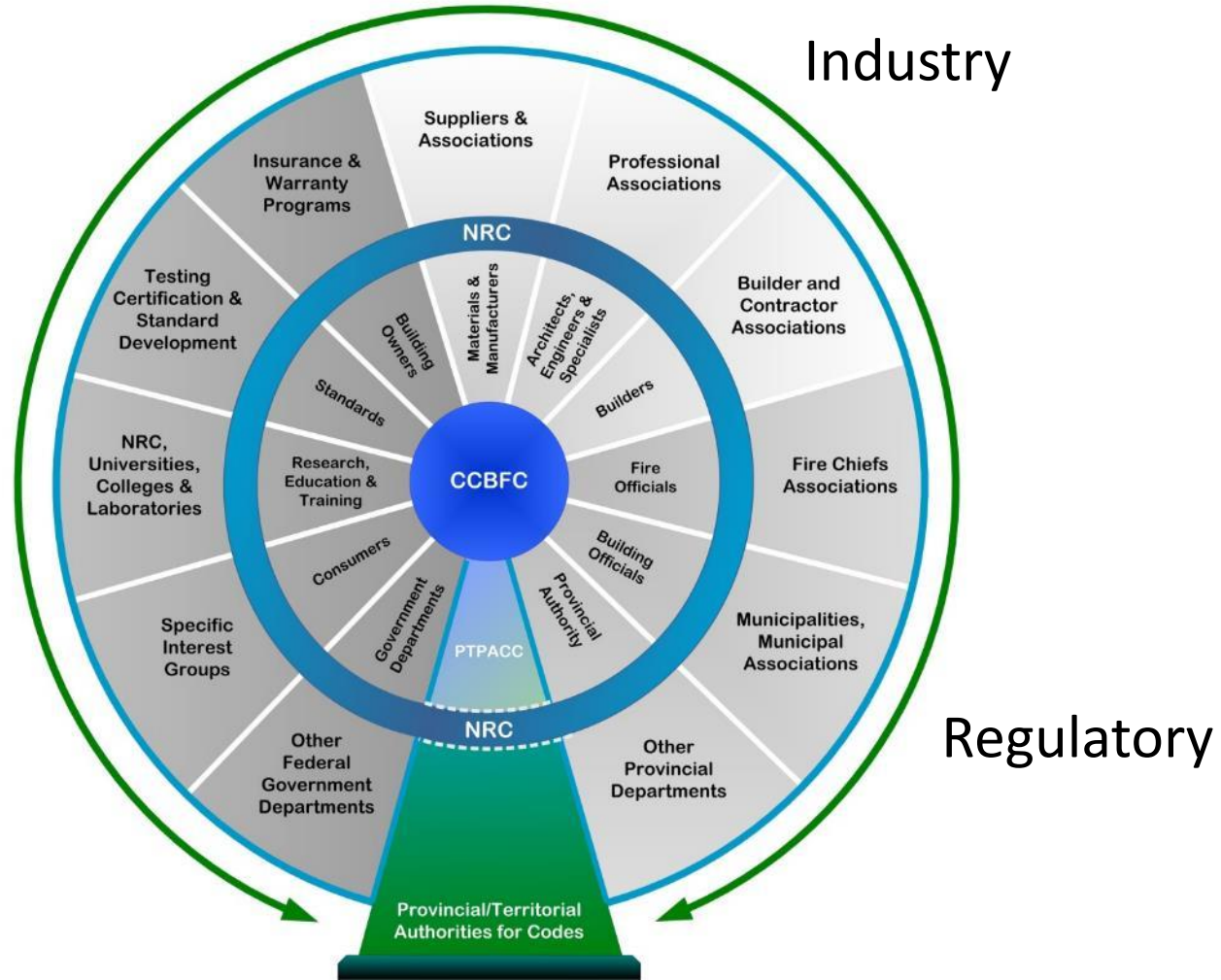
# CCBFC committees & interactions



# Balanced membership



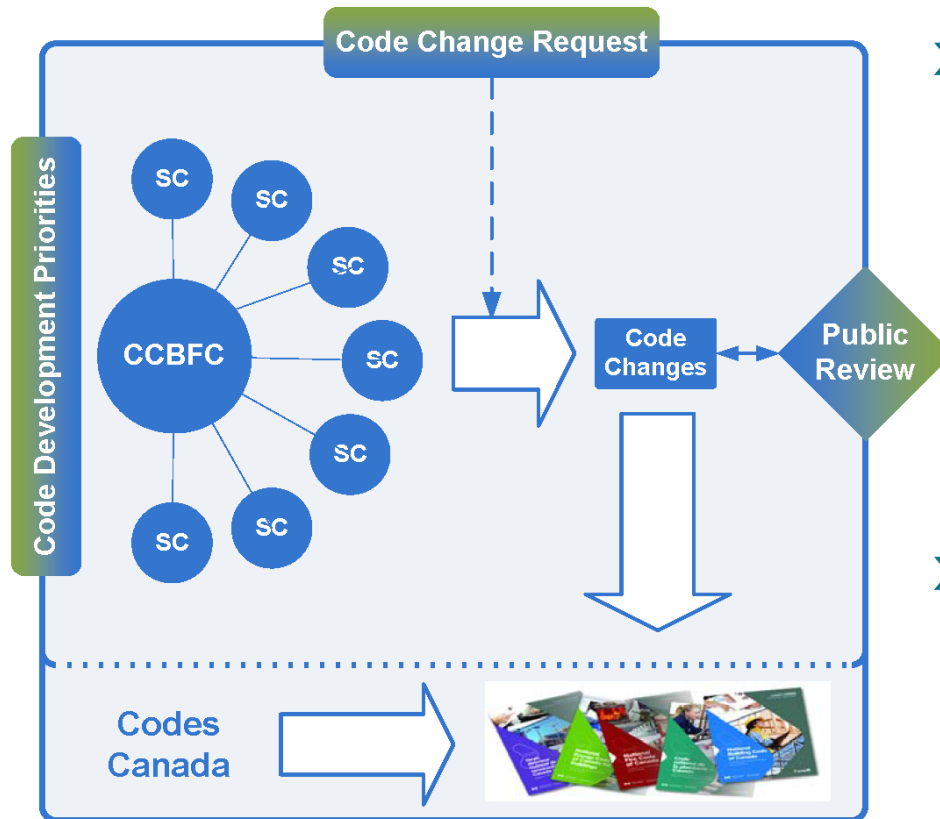
General Interest



Industry

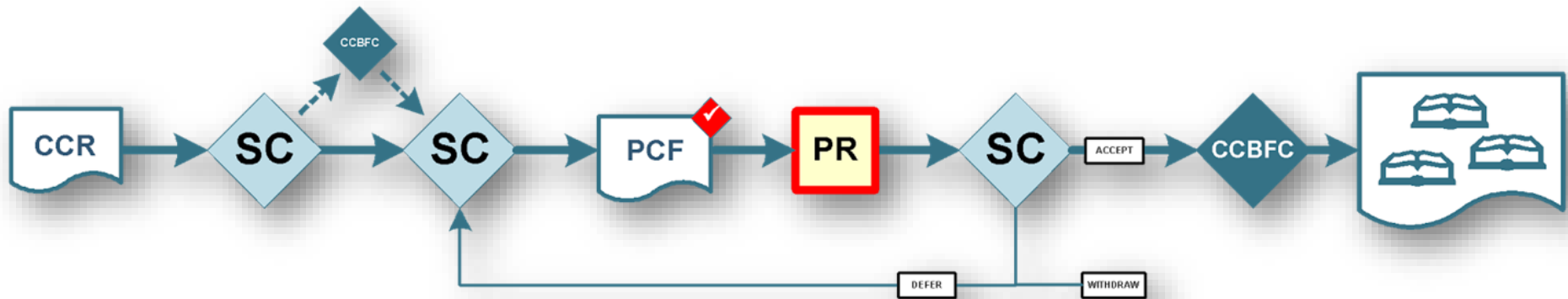
Regulatory

# Entry points to code development system



- Entry points for code users
  - Submit requests
  - Submit comments
  - Participate in meetings
- Additional entry point for Provinces and Territories
  - Advise CCBFC

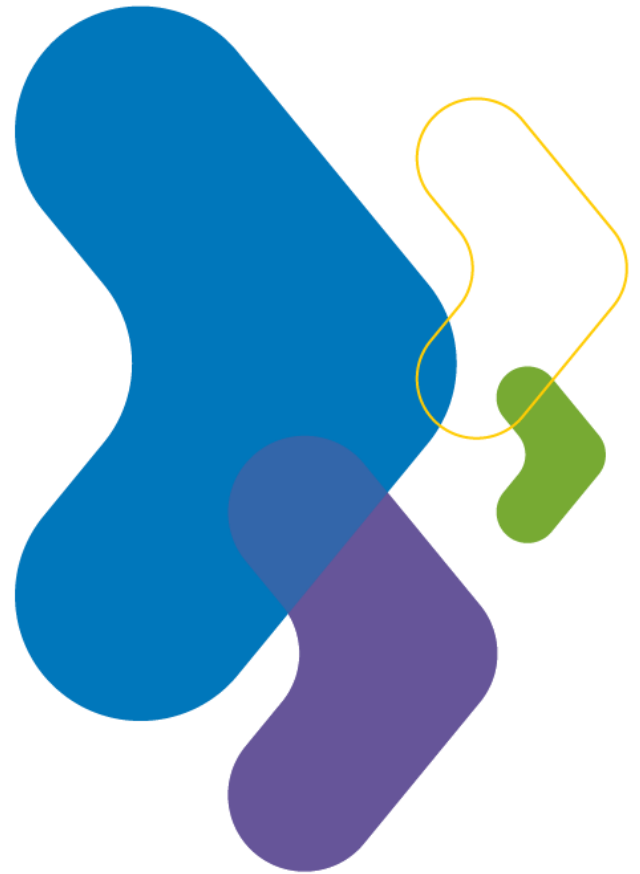
# How to participate



- › CCR: code change request
- › SC: standing committee
- › PCF: proposed change form
- › PR: public review

# Consensus-based decision making

- Substantial agreement of members
- All opinions are considered and weighed



# Conflict of interest

- Self-declare conflict of interest (known or potential)
- Participate in discussion
- Abstain from vote



# Code change request assessment criteria

## Step 1.

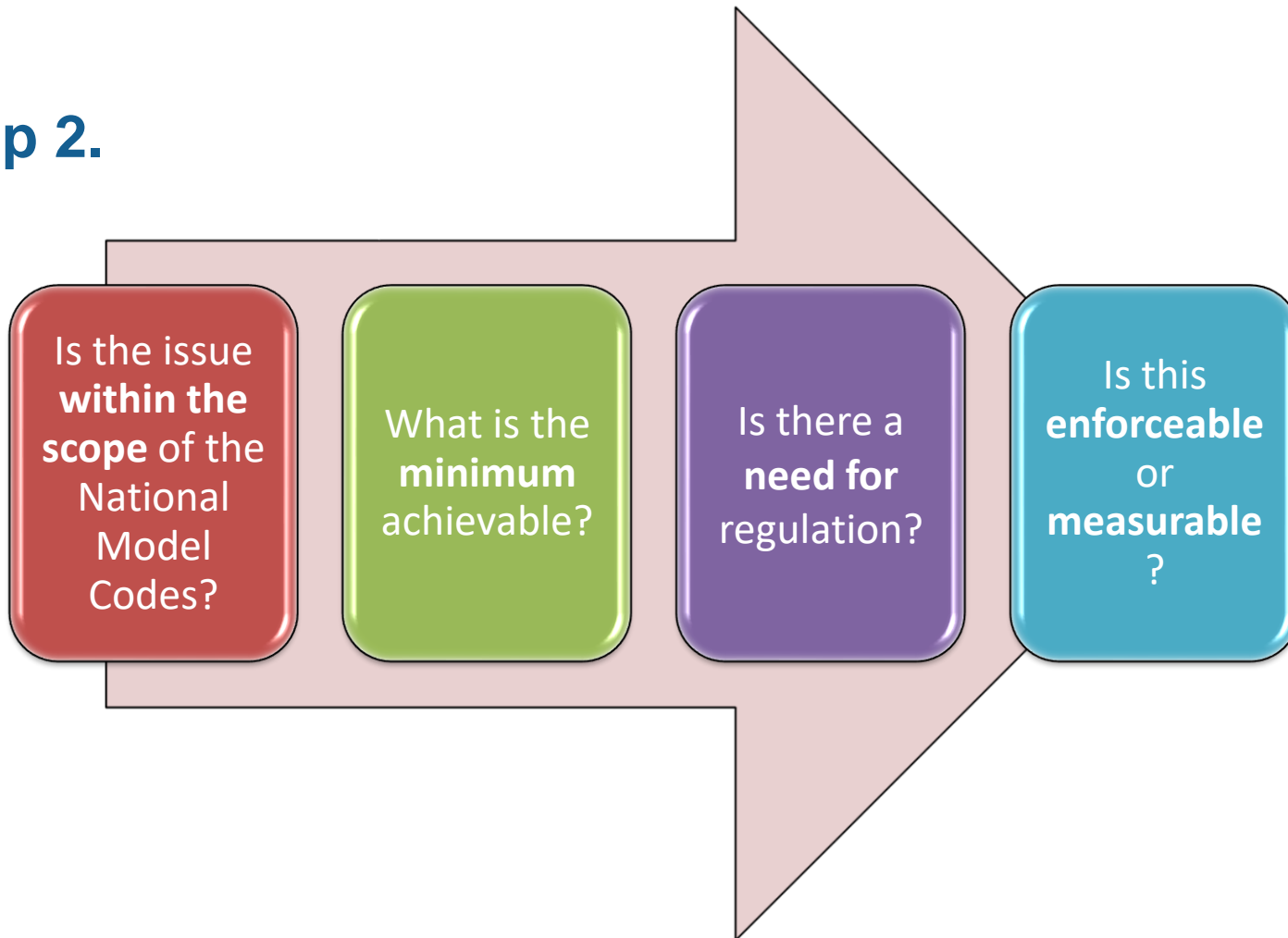
- Define or validate what the problem is
- What is the issue or need that the proposal will address?





# Code change request assessment criteria

## Step 2.



# Code change request assessment criteria

## Step 3.

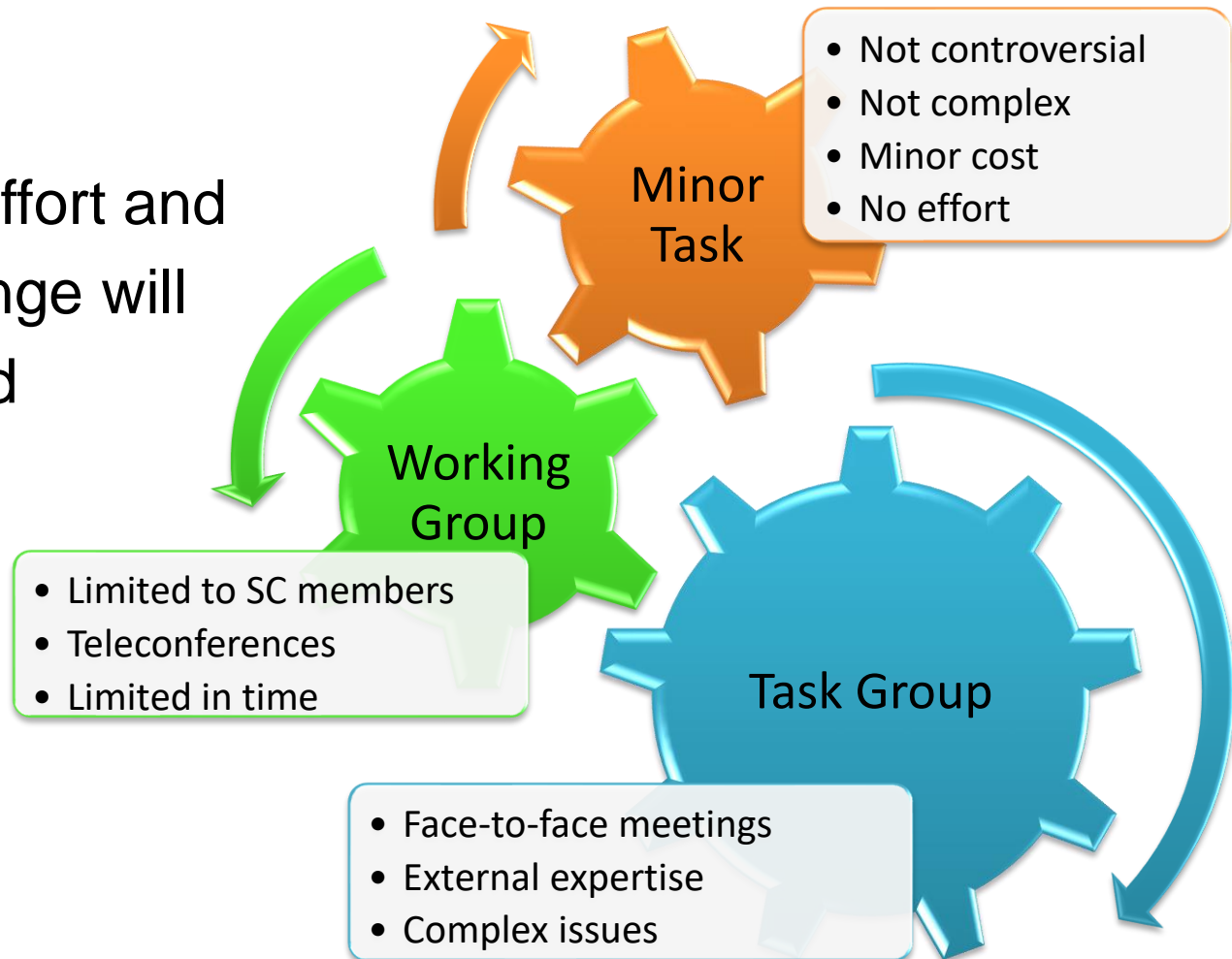
Assess the priority

Fits under existing priority		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Widespread issue	<input checked="" type="checkbox"/> Local issue		<input type="checkbox"/>
Serious concern	<input type="checkbox"/> Low risk/low probability		<input checked="" type="checkbox"/>
Likely to occur	<input type="checkbox"/> Rare to occur		<input checked="" type="checkbox"/>
Industry, P/T support	<input checked="" type="checkbox"/> Individual, isolated issue		<input type="checkbox"/>

# Code change request assessment criteria

## Step 4.

Assess the effort and how the change will be developed



# Principles of SMART regulation

## A requirement must

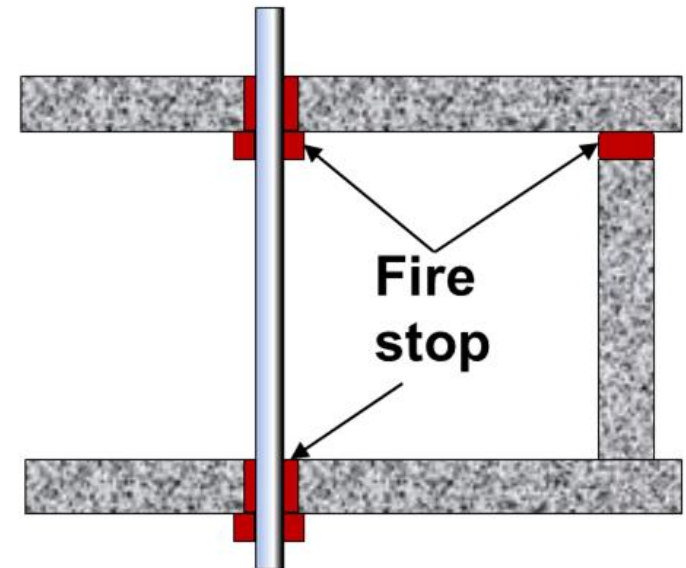
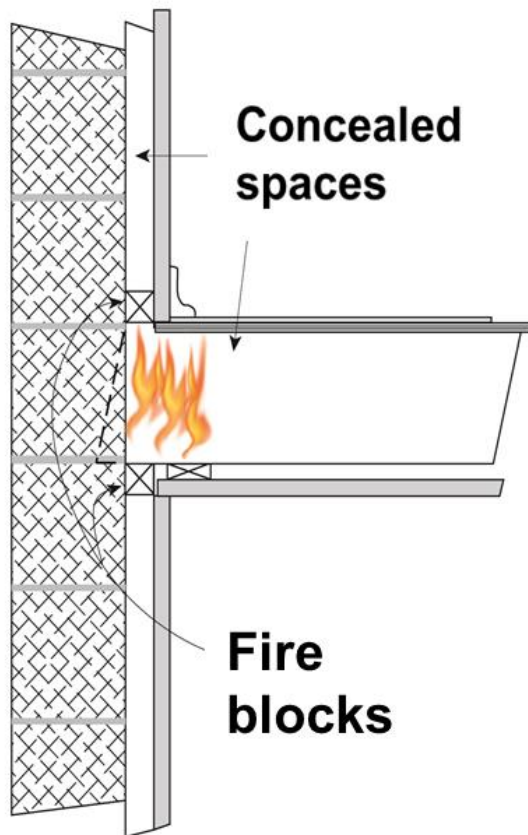
- Be within the scope of the code (objectives)
- Identify a minimum acceptable solution
- Address issues that need to be regulated
- Be enforceable/measurable (at the time of construction)
- Satisfy an impact analysis



# What's up?

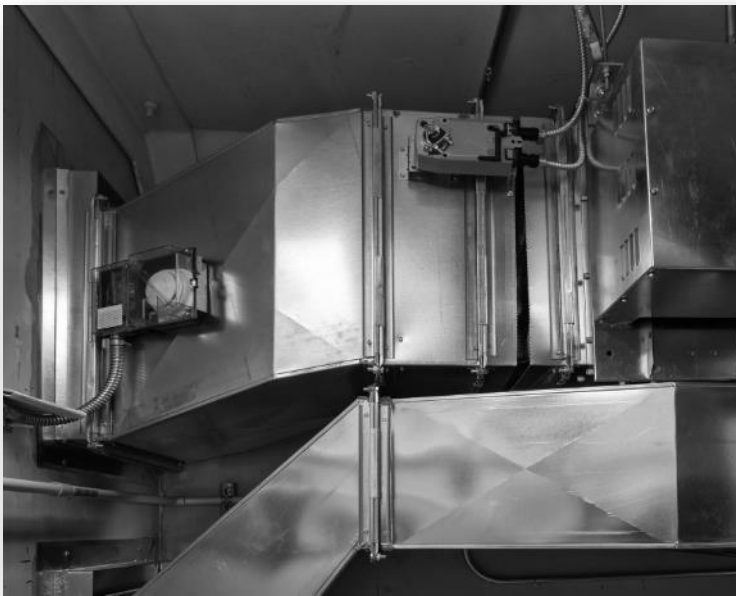
- › Public reviews fall 2019 and winter 2020
- › Comments review
- › Recommendations for publication
- › Final approval of the proposed changes
- › Target publication is NBC 2020

# New definitions (2010)



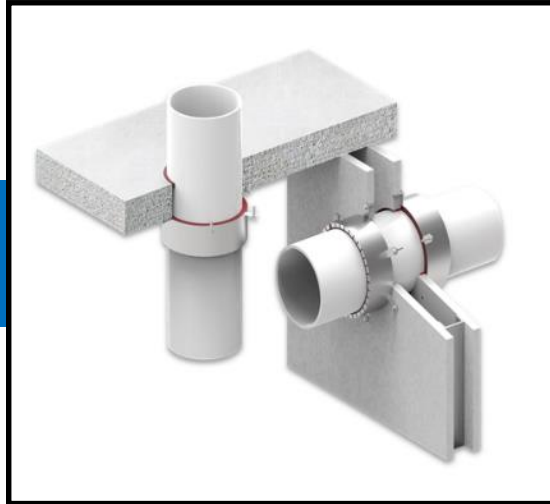
# Rating of fire stop (2010)

- CAN/ULC-S115, “Standard Method of Fire Tests of Firestop Systems”

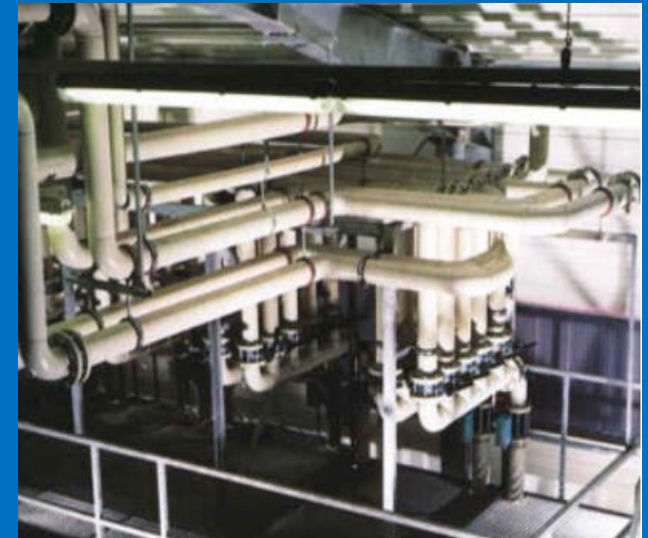
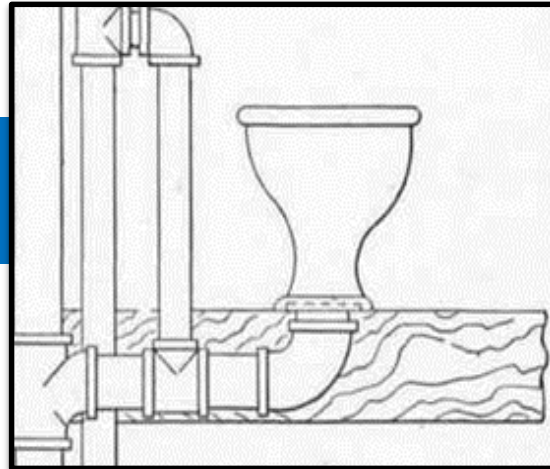


# Applications clarification (2010)

Water distribution



Water closet



Polypropylene pipes

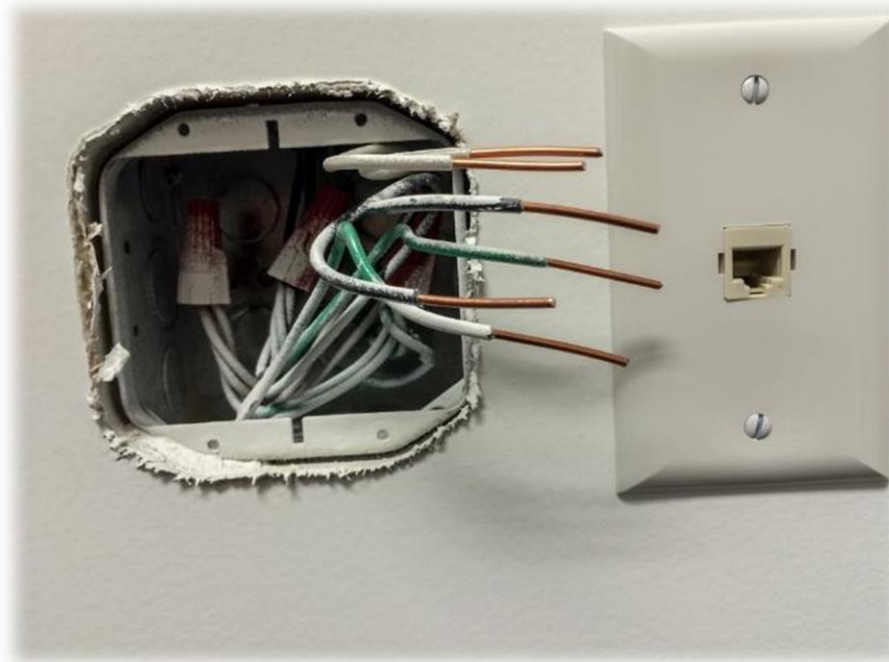


# Summary–2010 Changes

- **New definitions for fire stop and fire block**
- **Qualification of penetration protection requirements**
- **Relaxations for penetrations in fire separations**

# Electrical outlet boxes (2015)

- CAN/ULC-S112.2, “Standard Method of Fire Test of Ceiling Firestop Flap Assemblies”



# Fire block (2015)

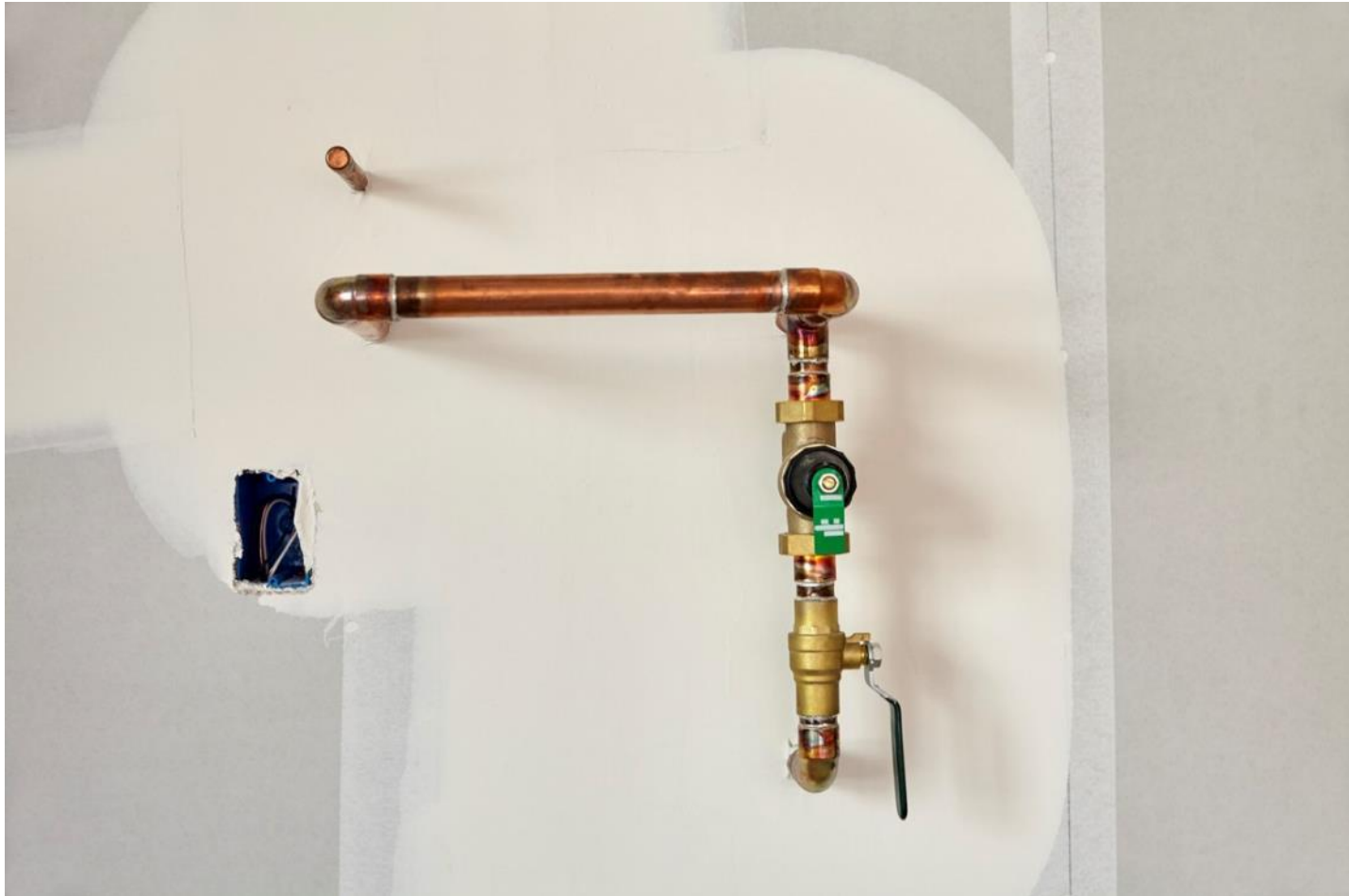
- Qualification of fire block materials:
  - ASTM D5456, “Evaluation of Structural Composite Lumber Products”
- Midrise combustible construction and horizontal concealed spaces



# Summary–2015 Changes

- Clarification for the protection of outlet boxes
- New standard for the design requirement of fire stop flaps
- New wood products accepted as fire block materials
- Fire block required in horizontal concealed spaces for 5- and 6-storey combustible buildings

# Combustible piping penetrations (2020)

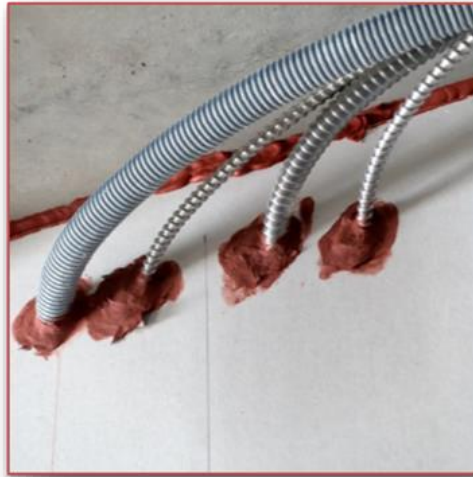


# Damage to fire-rated elements

- National Fire Code
- Firestop



# Penetrations (2020)



# Summary–2020 Changes

- **Clarification for combustible piping penetration**
- **Maintain the integrity of a fire separation**
- **Clarification of application**
- **Consistency between Parts 3 & 9**



# Key messages

- Over 75 years of collaboration & partnership
- Many external points of contact
- Provinces/Territories choose to adopt the National Model Codes
- Harmonized codes across the country
- Penetrations in fire separation



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