



BCBC2024

Part 9 Lateral Bracing Refresher

March 19th, 2026

Presenter: Tim Warner

Email: twarner@boabc.org



Disclaimer

Information presented today does not directly represent the opinions of the Building Officials Association of BC (BOABC). This presentation is conceptual and for informal educational purposes only. The presenter and Association takes no responsibility for application of any concepts or interpretations in this presentation to specific projects. The slides must not be considered complete or exhaustive. Code provisions have been generally represented and may not reflect all exceptions.



Land Acknowledgement



Welcome!

Today's Session:

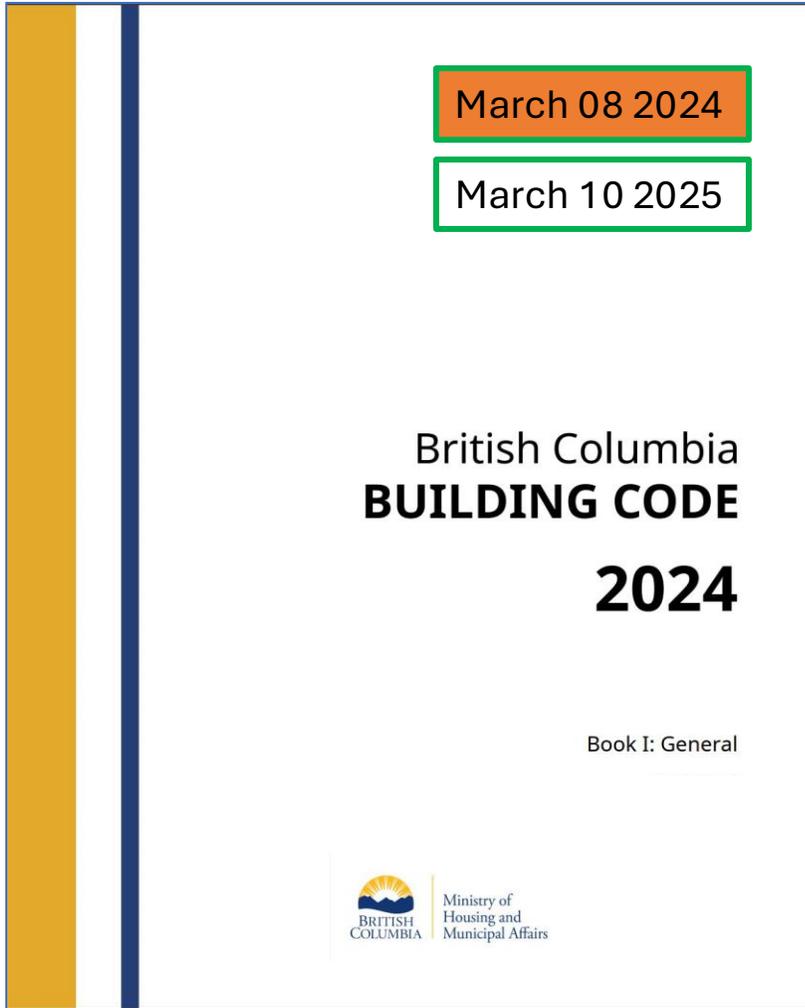
- 1 year of implementation
- Code changes and confusion
- Comparison of Calculation Method and Simplified Approach
 - Special Guest
 - Learning Guides/Resources

Why is our Building Code changing?

1. Our Environment is Changing
2. Our Understanding of our Environment is Changing
3. Our Buildings are Changing
4. Bridging an existing gap between Part 4 and Part 9 lateral bracing design

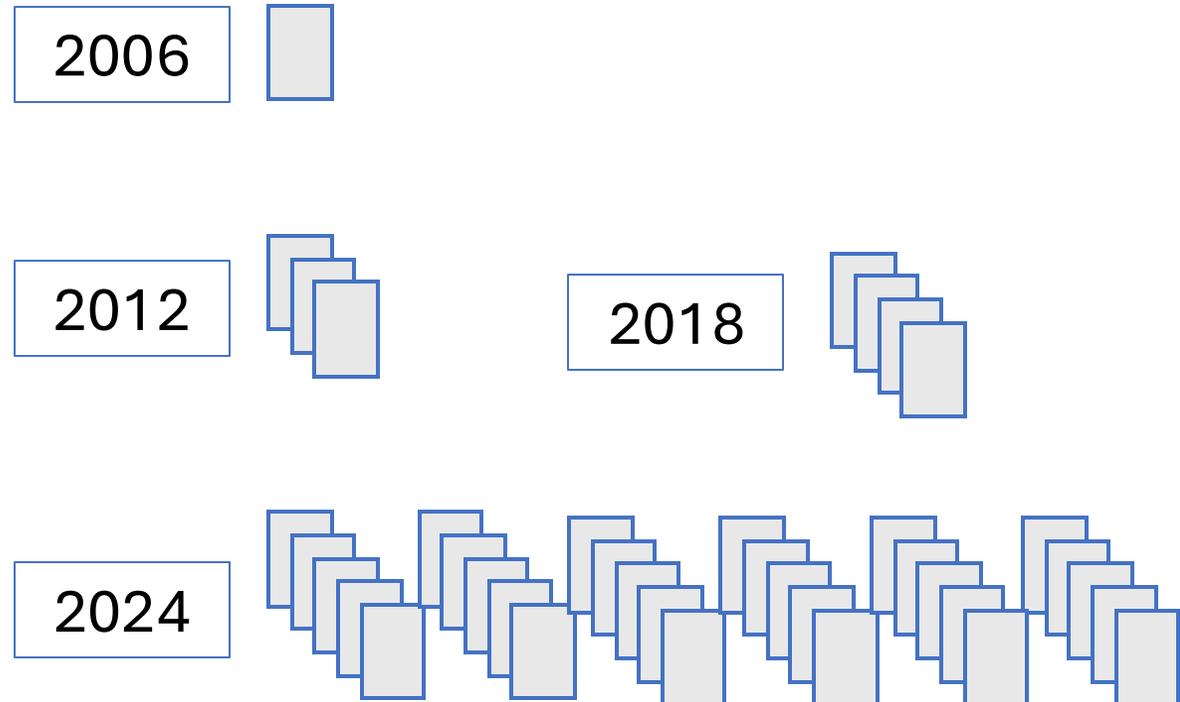


When is our Building Code changing?



https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/visions-and-mo/bcbc_2024.pdf

BCBC 9.23.13 changes through the years



Spoiler: Mostly Tables

Preparing for the Changes



BCBC2024 Part 9 Lateral Bracing Series

Presentation 1 of 2 : February 5th, 2025

Presenter: Tim Warner
Email: twarner@boabc.org

1



BCBC2024 Part 9 Lateral Bracing Series

Presentation 2 of 2 : February 27th, 2025

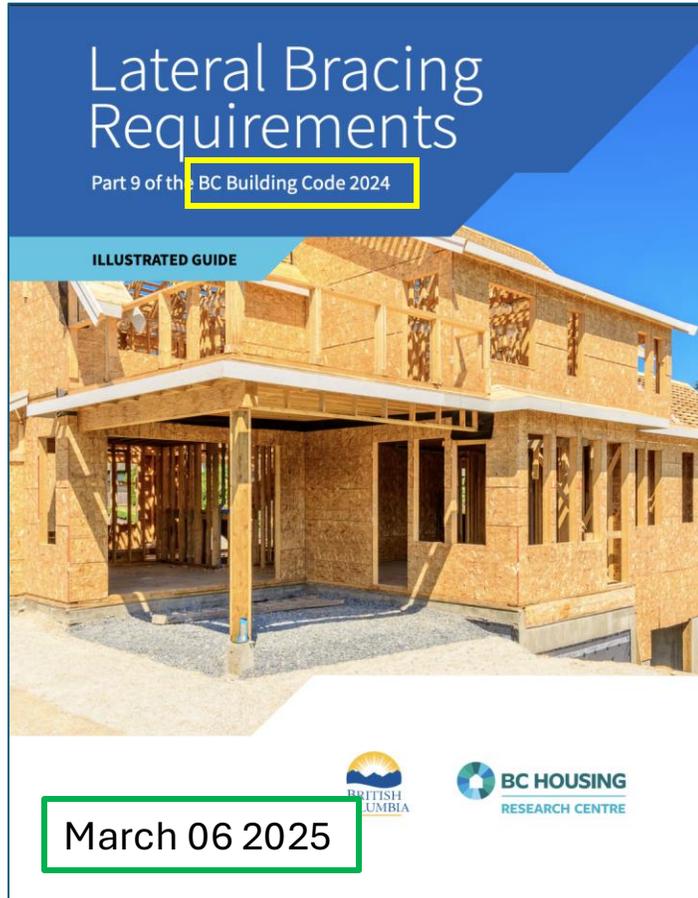
Presenter: Tim Warner
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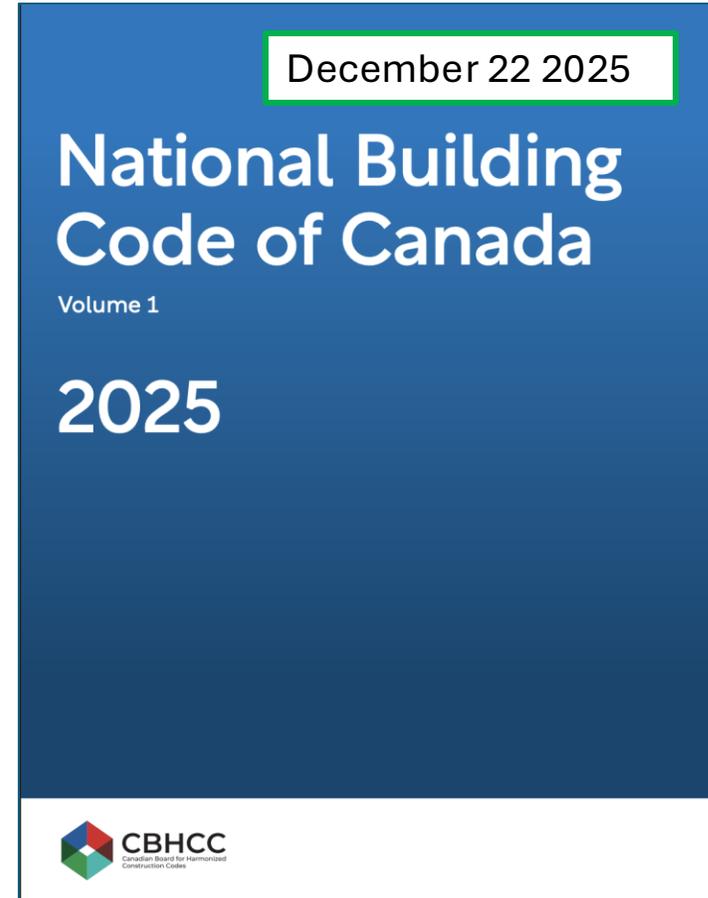
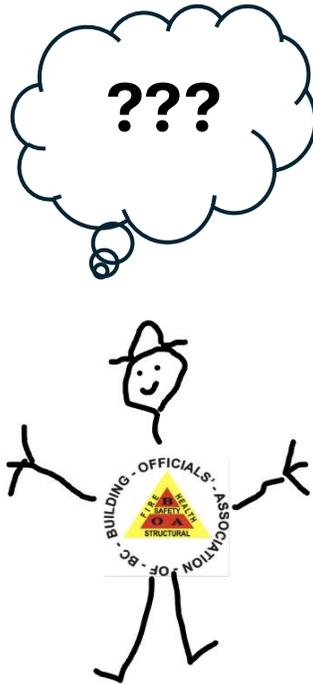
Slides are available at boabc.org/lunch-learn-webinars/

Questions, issues, errors, concerns? Please let me know!

Working with the Changes



<https://www.bchousing.org/sites/default/files/media/documents/Illustrated-Guide-Lateral-Bracing-Requirements-Part-9-BC-Building-Code-2024.pdf>



<https://nrc-publications.canada.ca/eng/view/ft/?id=adf1ad94-7ea8-4b08-a19f-653ebb7f45f6>

Working with the Changes

PROVINCE OF BRITISH COLUMBIA

ORDER OF THE MINISTER OF HOUSING AND MUNICIPAL AFFAIRS

Building Act

Ministerial Order No. BA 2025 02

I, Ravi Kahlon, Minister of Housing and Municipal Affairs, order that Book 1 (General) of the British Columbia Building Code established by Ministerial Order No. BA 2023 10 dated November 24, 2023, is amended as set out in the attached Schedule.

June 06 2025

June 16, 2025
Date


Minister of Housing and Municipal Affairs

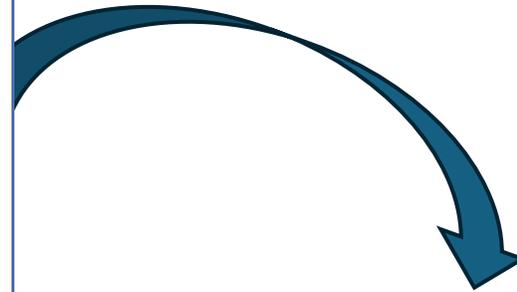
(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: Building Act, S.B.C. 2015, c. 2, s. 3

Other: _____

page 1 of 17



BC Building and Plumbing Code 2024 revisions

6 Adaptable dwelling units, Part 9 seismic, and general updates

Effective June 16, 2025: Revision 6 changes include updates to make adaptable dwelling units easier to design and construct, offering greater flexibility that can reduce space requirements and costs beneficial to the project. The changes also clarify seismic requirements for houses and small buildings (Part 9) to support builder understanding and compliance. Additional general updates are also included.

- [Ministerial Order BA 2025 02 \(PDF, 681 KB\)](#)

Working with the Changes



February 02 2026

Information Bulletin
Construction Standards and Digital Solutions
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2
Email: building.safety@gov.bc.ca
Website: www.gov.bc.ca/buildingcodes

No. B26-02
February 2, 2026

Navigating Part 9 Lateral Load Requirements in the BC Building Code 2024 and the Illustrated Guide

This bulletin provides guidance on how code users can apply and navigate both the recently released 2025 Edition of the [Illustrated Guide: Lateral Bracing Requirements - Part 9 of the BC Building Code 2024](#) (Illustrated Guide or Guide) and the [British Columbia Building Code 2024](#) (BCBC 2024) including [Revision 6](#)¹. Bulletin [B24-02-R](#) provides information on the transition period for seismic provisions and which climatic data to use when applying the 2018 or 2024 edition of the British Columbia Building Code.

Background

The BCBC 2024 adopted new Part 9 requirements for wood frame construction based on updates developed for the [National Building Code of Canada 2025](#) (NBC 2025) that was published December 22, 2025. **Subsection 9.23.13. Bracing to Resist Lateral Loads Due to Wind and Earthquake** in Division B of the BCBC 2024 has been substantially revised. These updates reflect increased wind and seismic hazard values across many regions in British Columbia, informed by evolving climate patterns and new data related to seismic activity and active faults.

Following the publication of BCBC 2024, an updated version (2025 Edition) of the Illustrated Guide was created to include approved final versions of changes to be included in the NBC 2025. These changes, called proposed change forms or PCFs, including 1475, 1979, and 2048, were still in development at the time of publication of the BCBC 2024 which is why some differences appear. Information on the development process and PCF documents are available on the [Canadian Board for Harmonized Construction Codes](#) website.

Figure 1 (shown below) provides an overview of the development timeline of the BCBC 2024 and the Illustrated Guide - and how these PCFs were incorporated based on where they were in development. For example, the BCBC 2024 includes content that was presented in the first version of PCF 1475 due to adoption timelines. After adoption of the BCBC 2024, PCF 1475 continued to be amended, and a subsequent version created. It is the second and final version of PCF 1475 and others that have since been included in the NBC 2025, and which are reflected in the Illustrated Guide and not in the BCBC 2024.

¹ Ministerial Order No. BA 2025 02, effective June 16, 2025, was the sixth revision to the BCBC 2024.

The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. The Construction Standards and Digital Solutions Branch does not enforce compliance with the British Columbia Building Code. Local authorities are authorized to enforce the BC Building Code through the Local Government Act and Community Charter.

1

June 16 2025

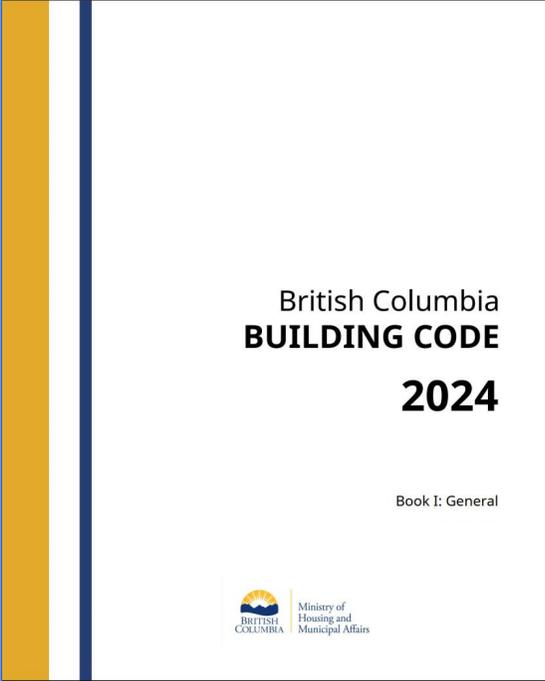


June 16 2025

British Columbia BUILDING CODE 2024

Book I: General

Working with the Changes



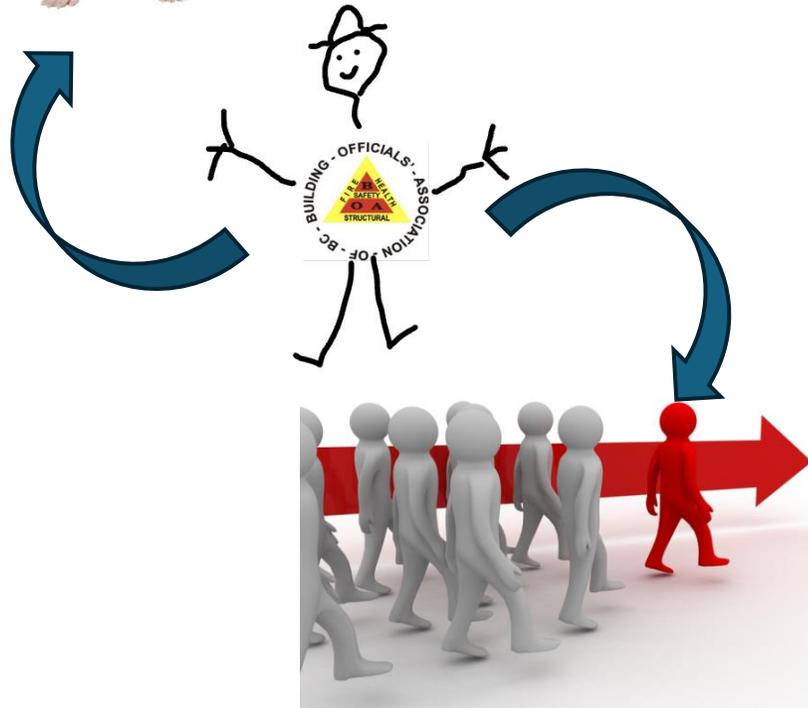
CBHCC | **CCHCC**
Canadian Board for Harmonized Construction Codes | Comité canadien de l'harmonisation des codes de construction

HARMONIZATION

2026?
2027?
BCBC2027?

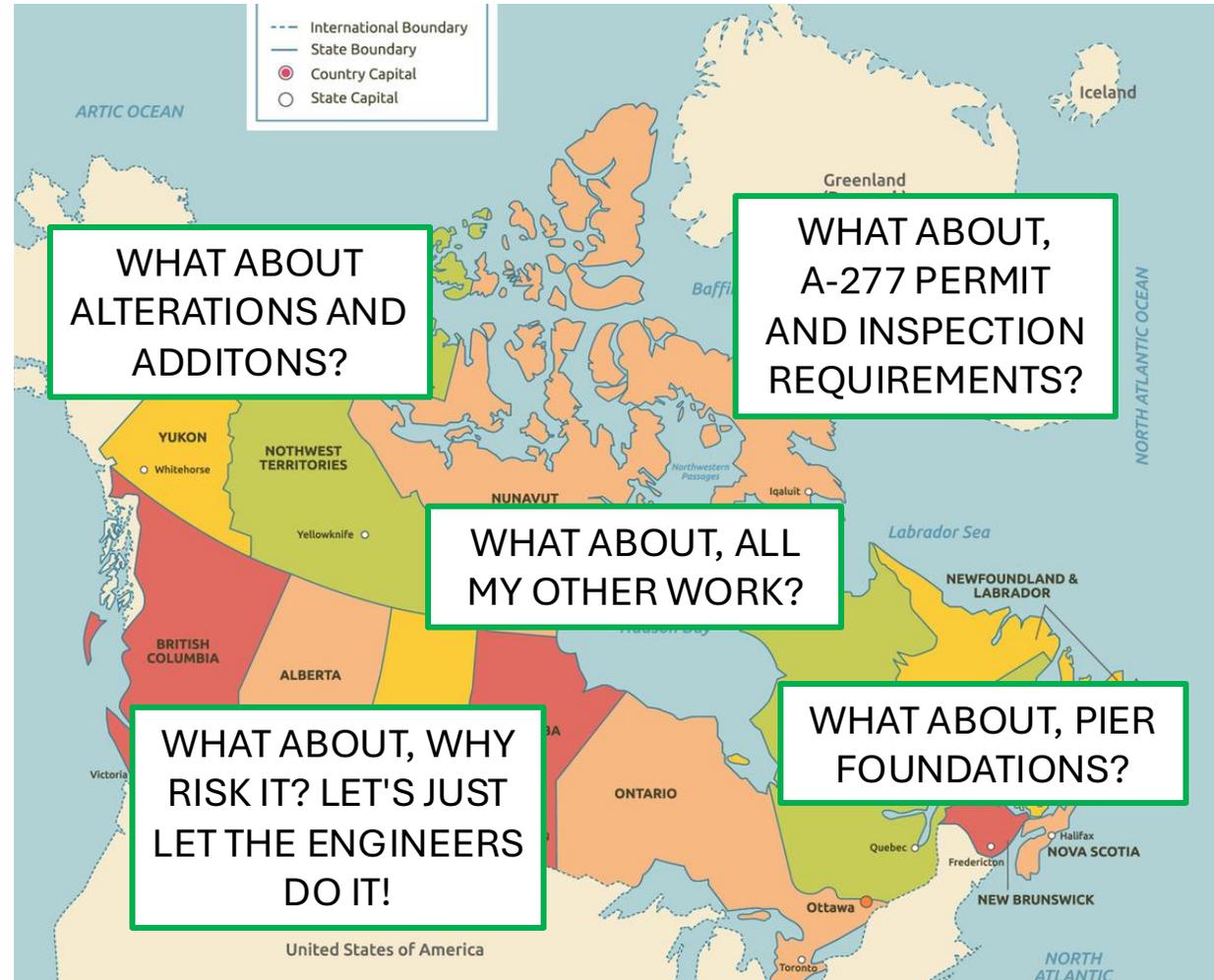


Working with the Changes



<https://www.petsmart.ca/>

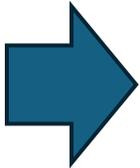
<https://draravindan.com/articles/leading-the-way-inspirational-leadership>



www.vector4free.com

Subsection 9.23.13 Framework **RECAP+**

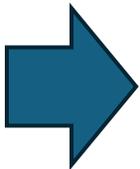
Part 9:
Housing and Small Buildings



<600m² building area
<3 storeys
Group C, D, E and F2/3 occupancies



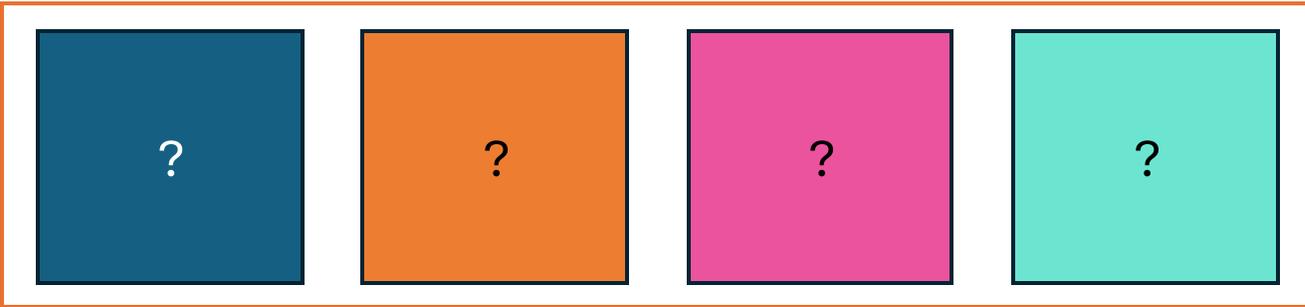
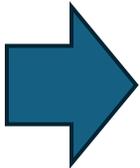
Section 9.23:
Wood-Frame Construction



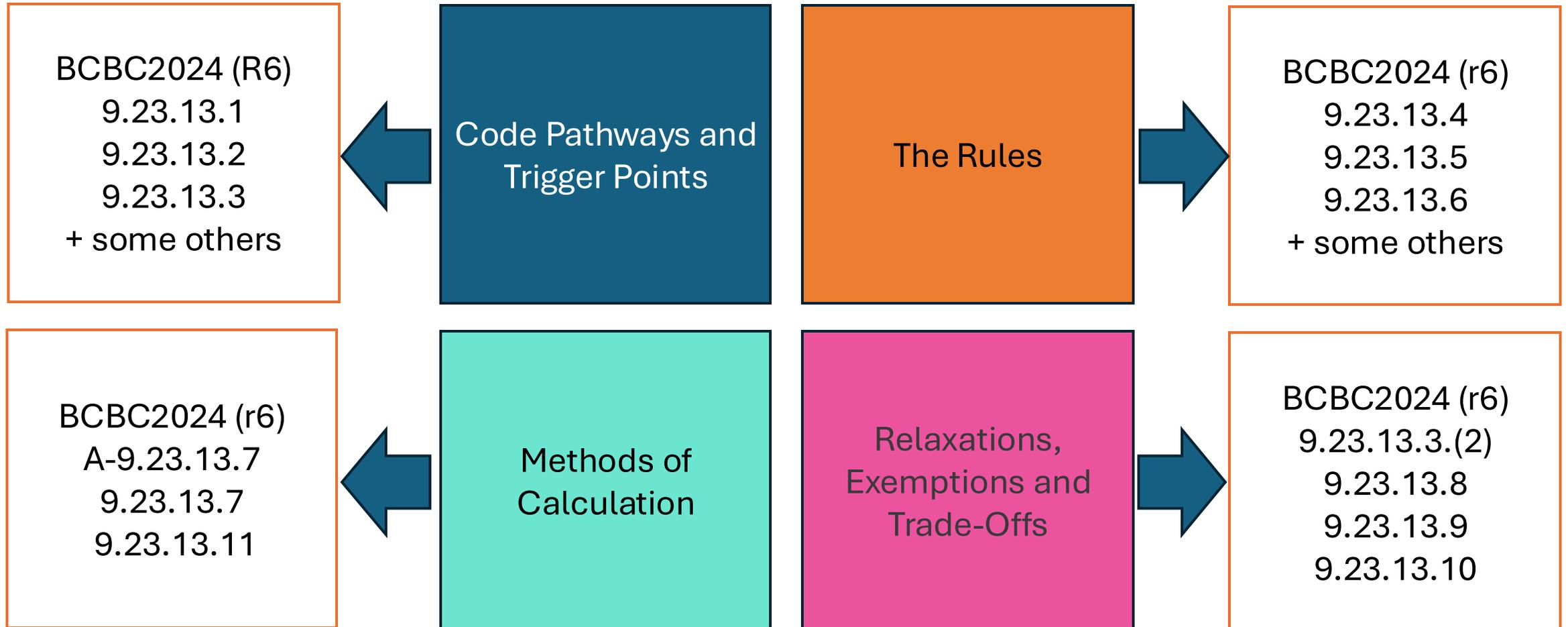
Generally comprised of lumber frames of small repetitive structural members @ <2ft o.c and clad, sheathed or braced on one side



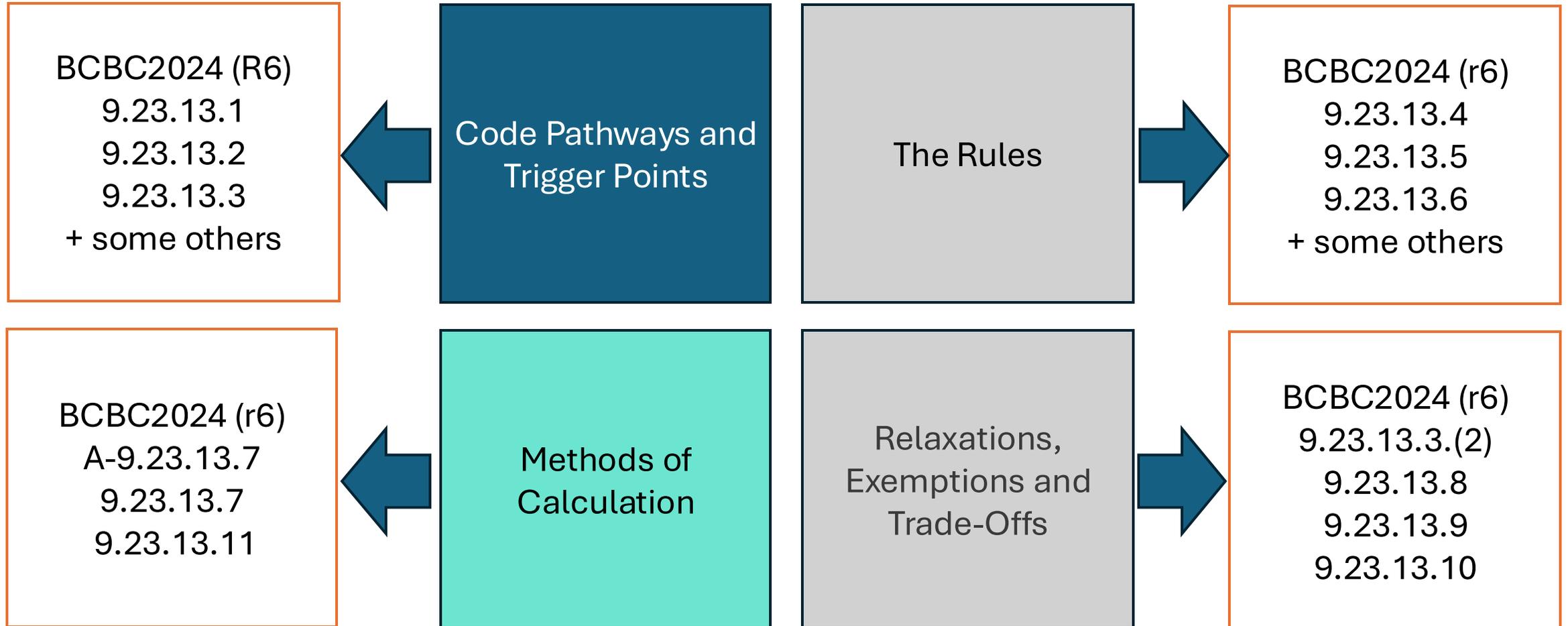
Subsection 9.23.13:
Bracing to Resist Lateral Loads due to Wind and Earthquake



Subsection 9.23.13 Framework **RECAP+**



Subsection 9.23.13 Framework **RECAP+**



Subsection 9.23.13 Framework **RECAP+**

Box 1: Code Pathways and Trigger Points

Compliance with 9.23.13
for Part 9 Buildings

Engineered Design

Prescriptive Design (Part 9 Lateral Bracing)



Part 4 Design

CWC Guide

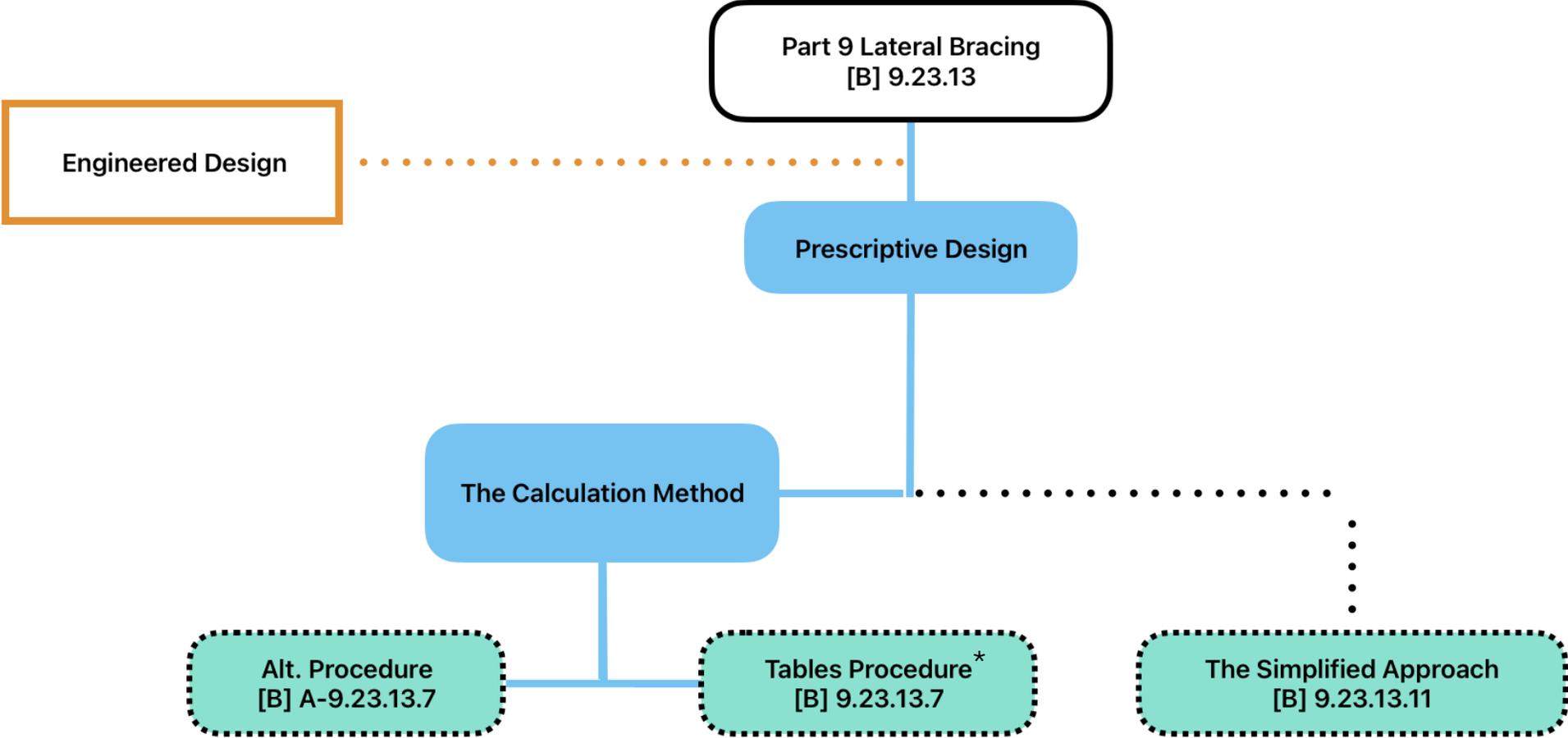
Calculation Method

Simplified Approach

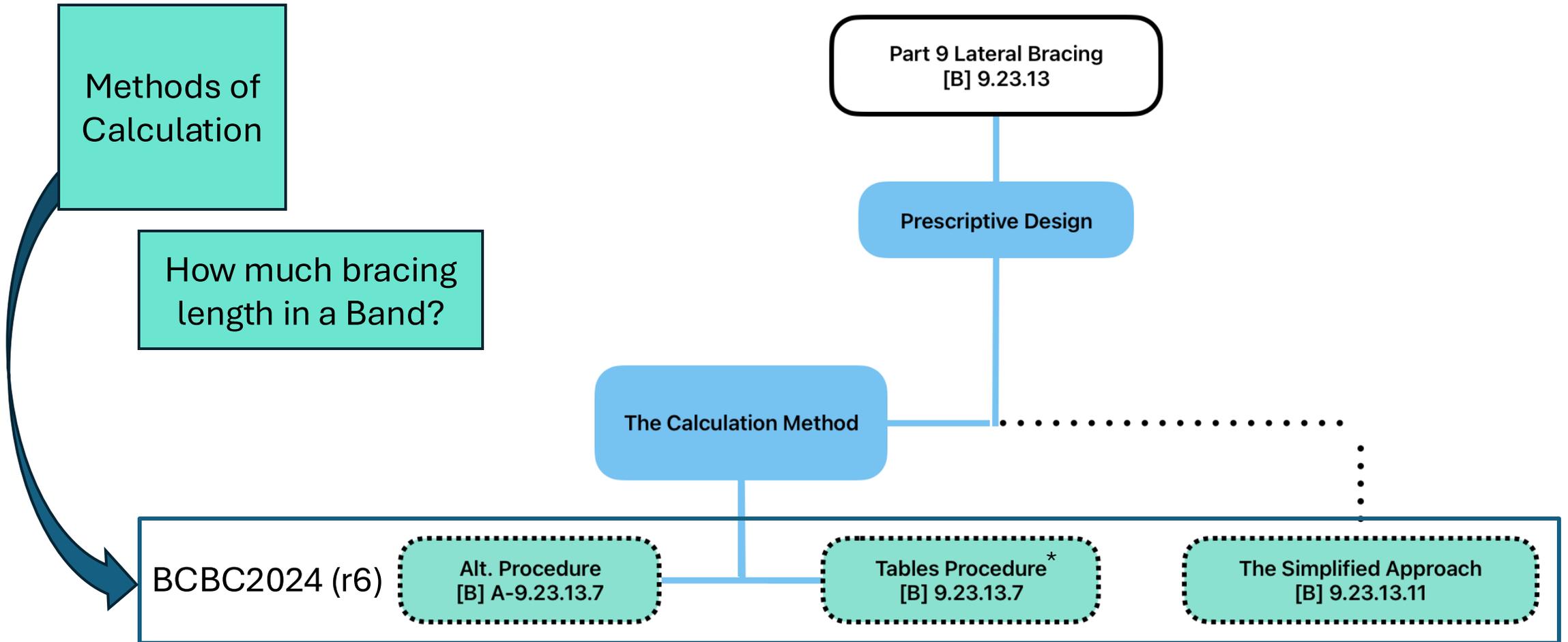
Alternative Method

Table Method

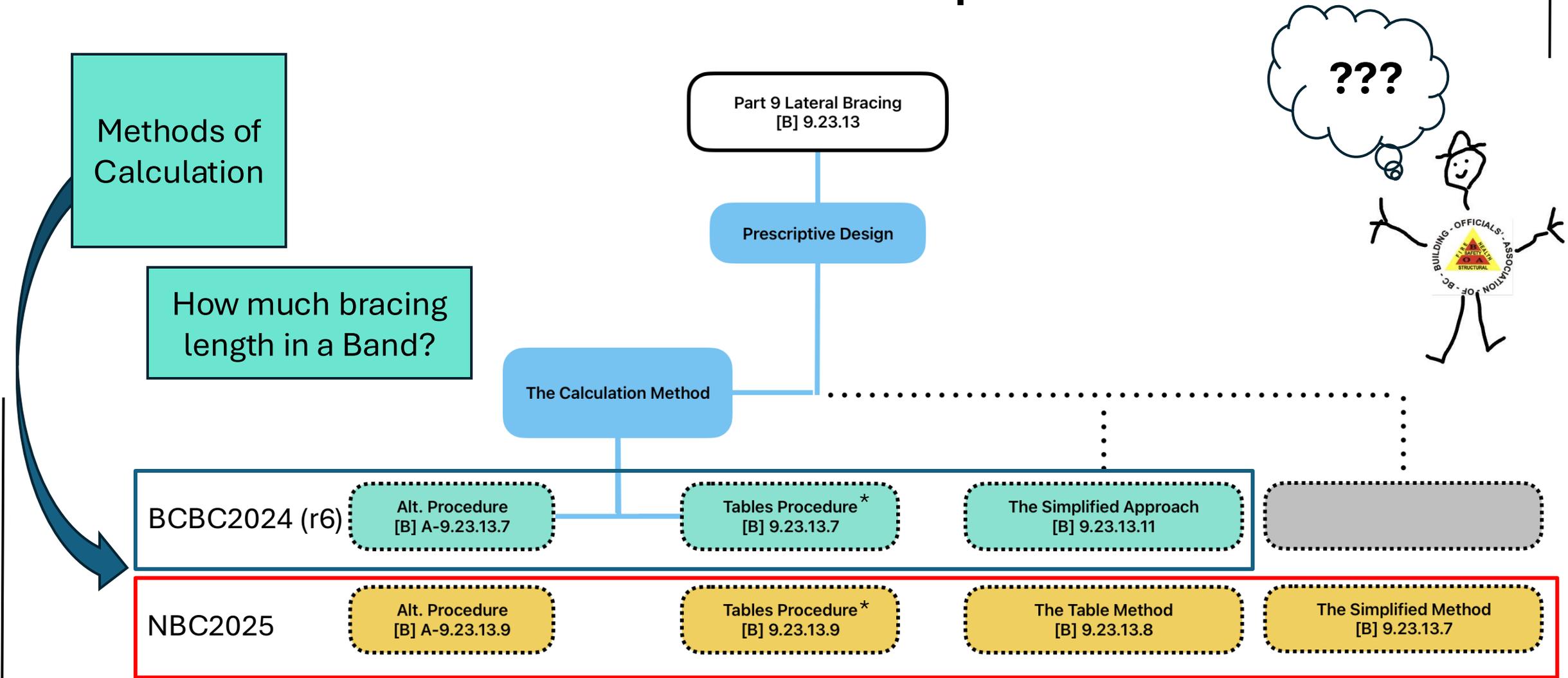
Subsection 9.23.13 Framework **2026**



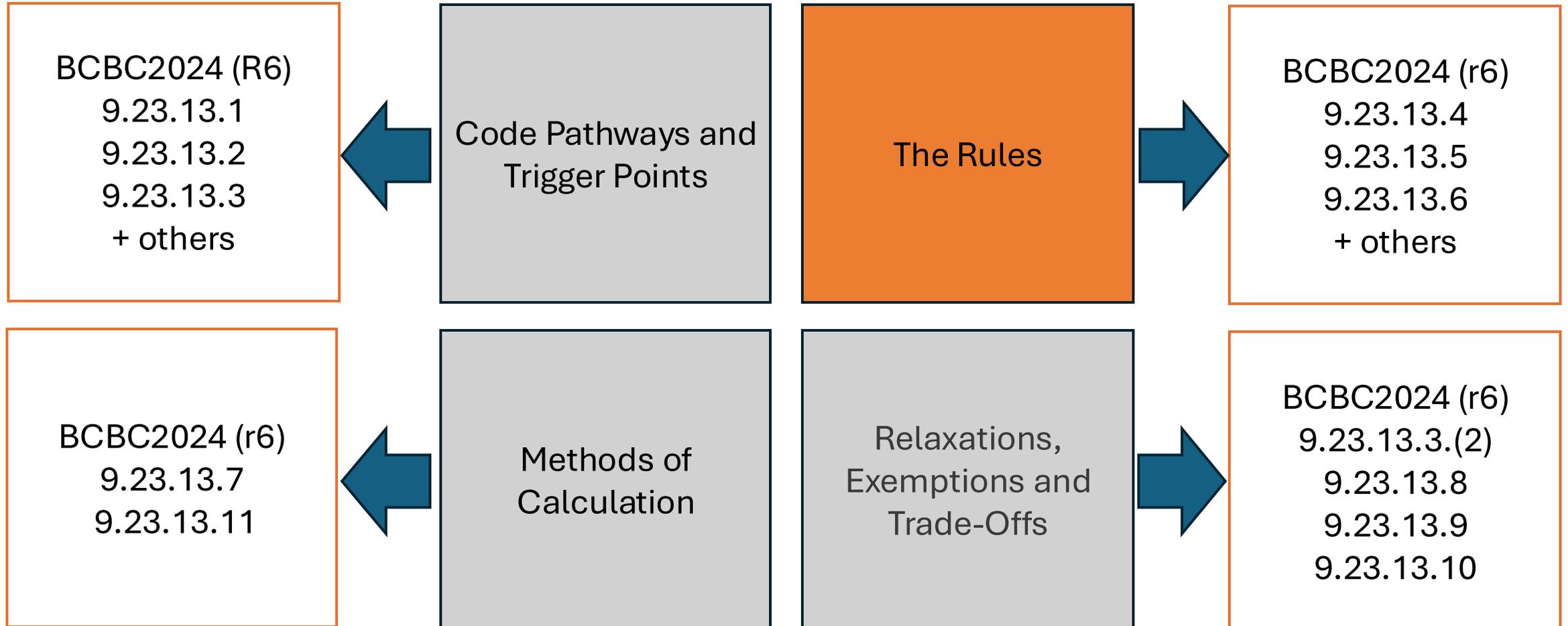
Subsection 9.23.13 Framework **2026**



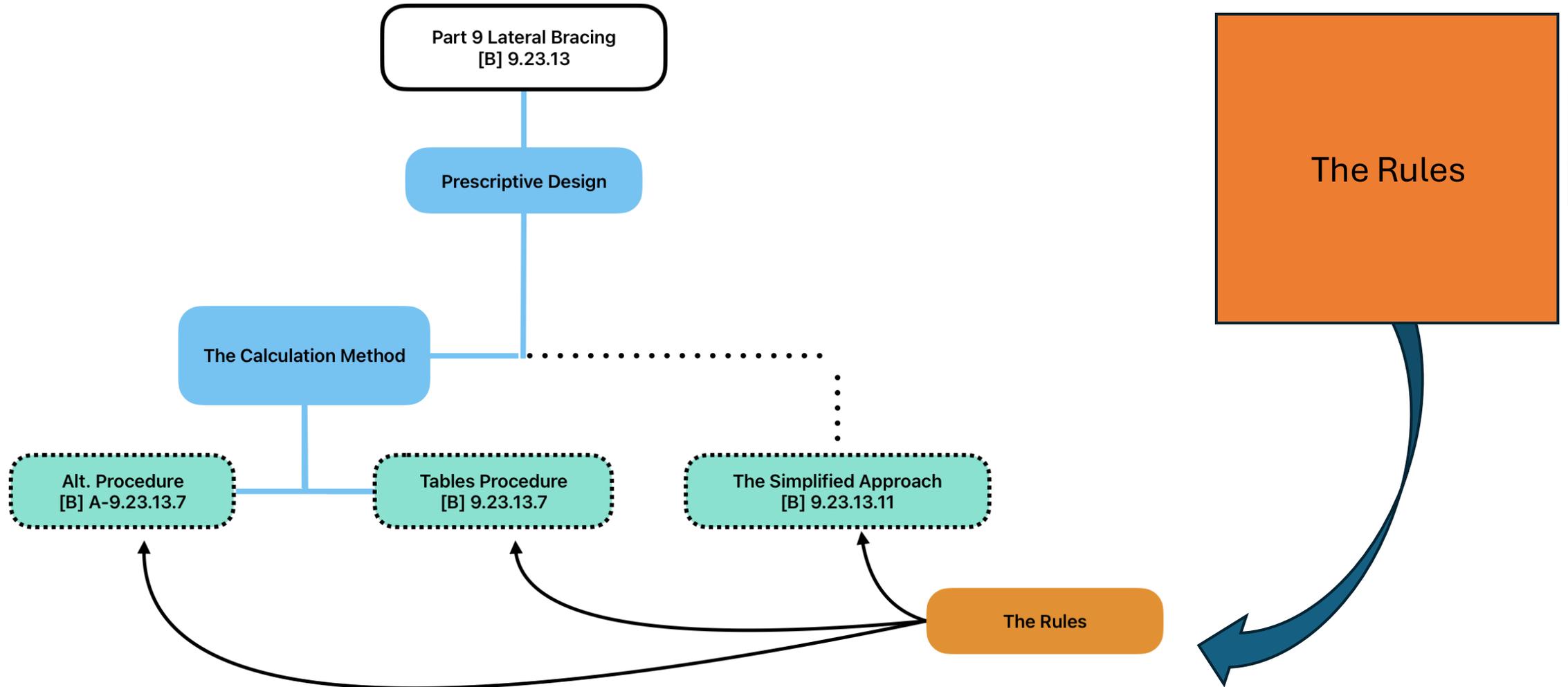
BCBC2024 v NBC2025 Comparison 2026



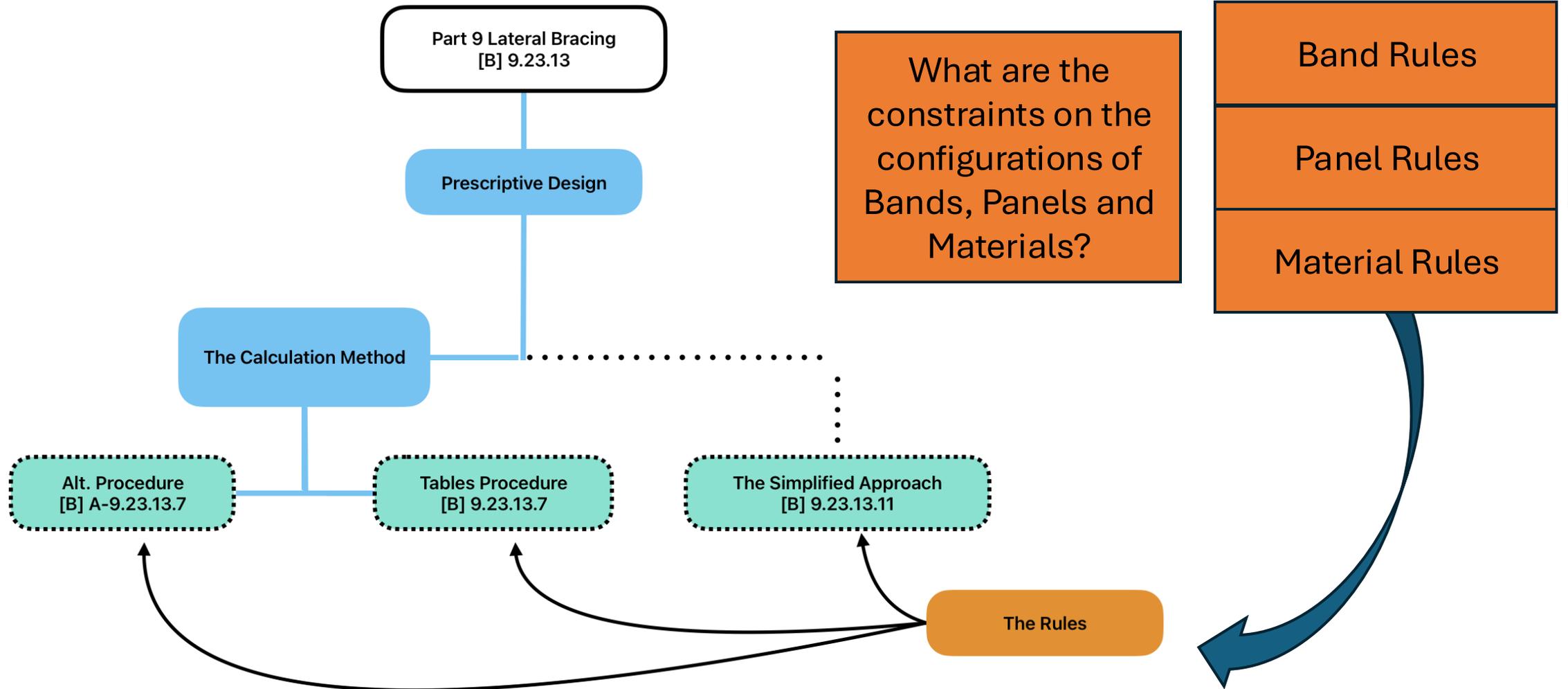
Subsection 9.23.13 Framework **RECAP+**



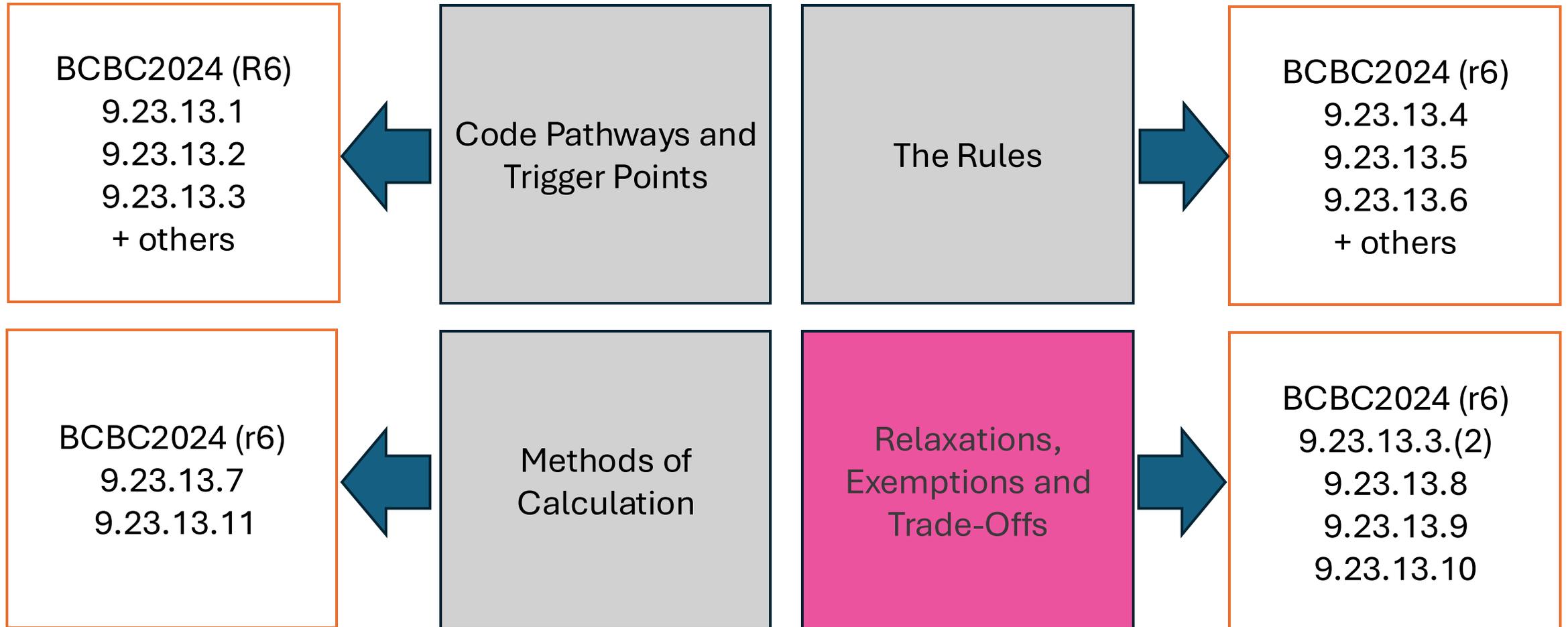
Subsection 9.23.13 Framework **2026**



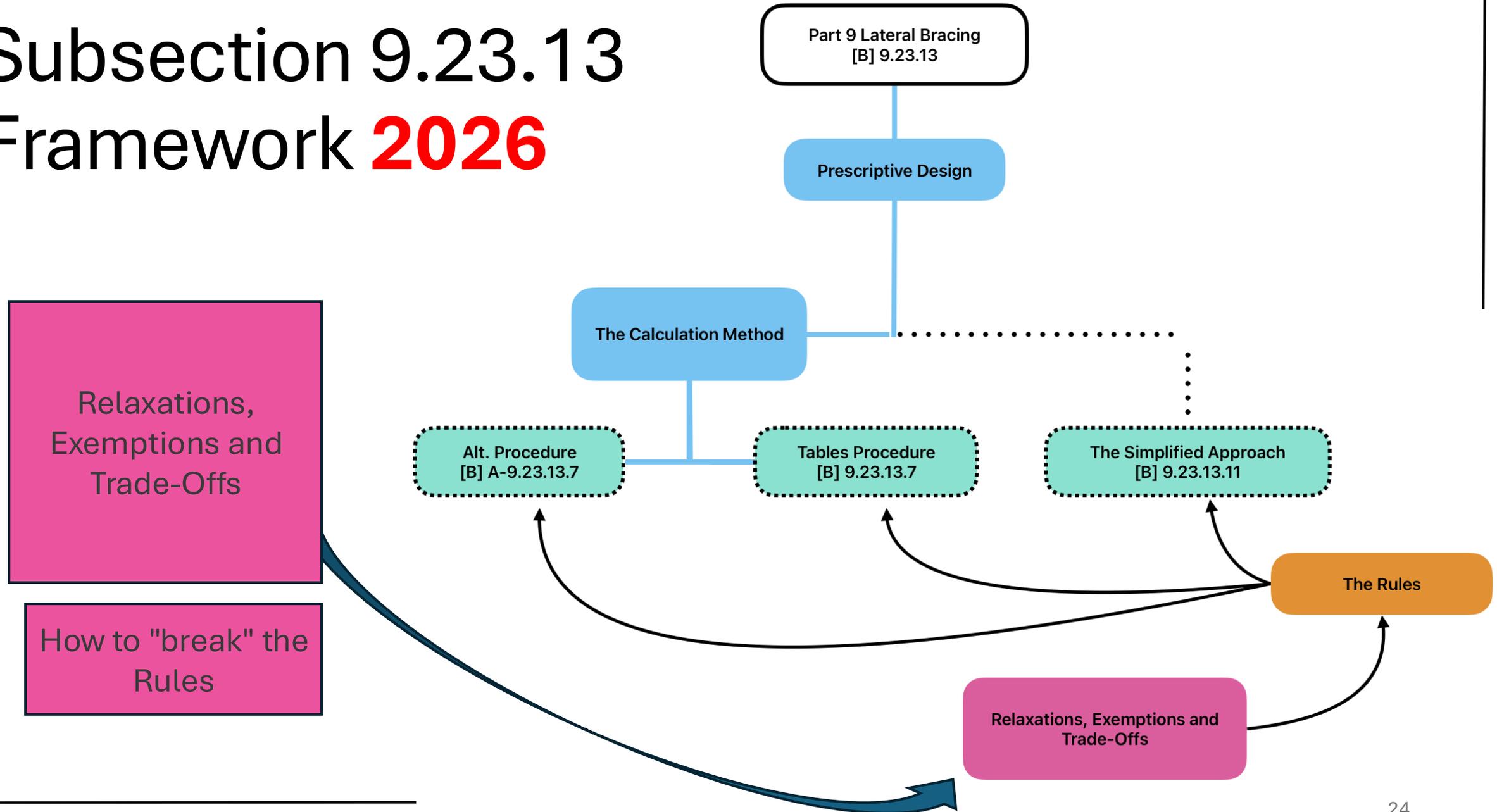
Subsection 9.23.13 Framework **2026**



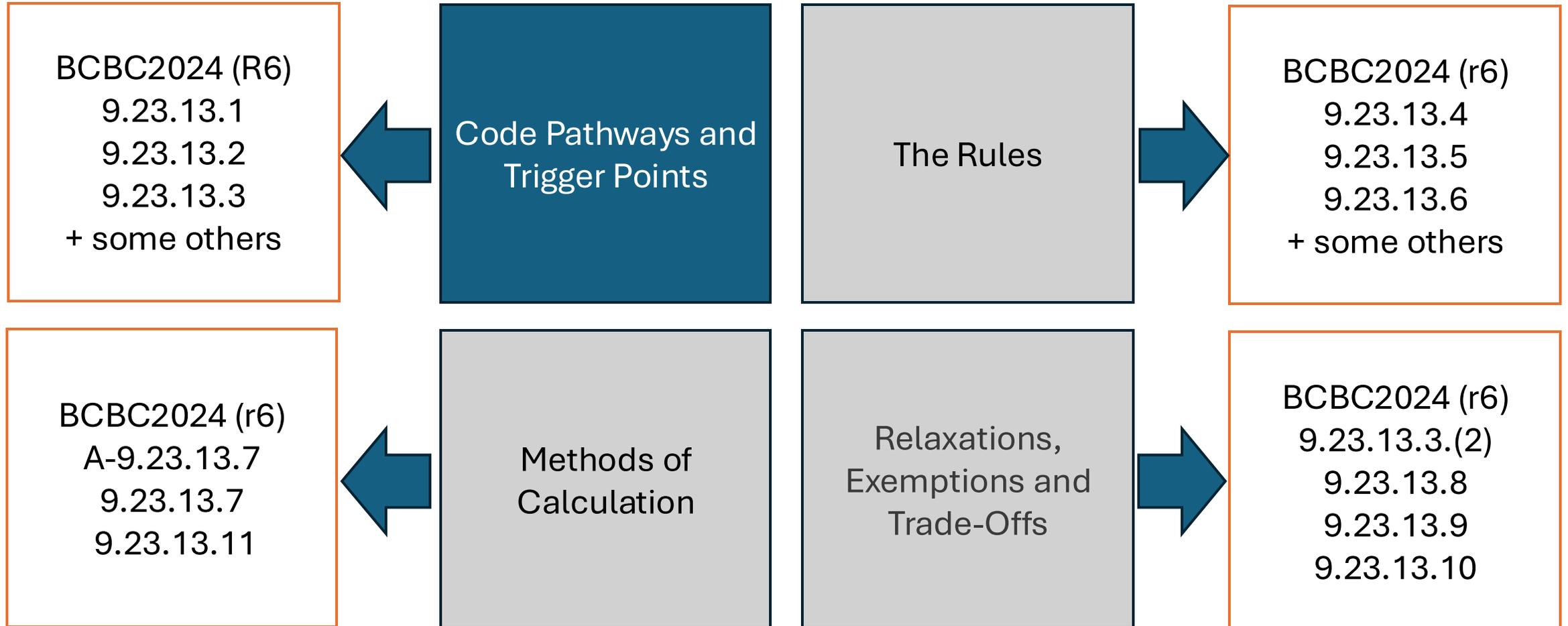
Subsection 9.23.13 Framework **RECAP+**



Subsection 9.23.13 Framework **2026**



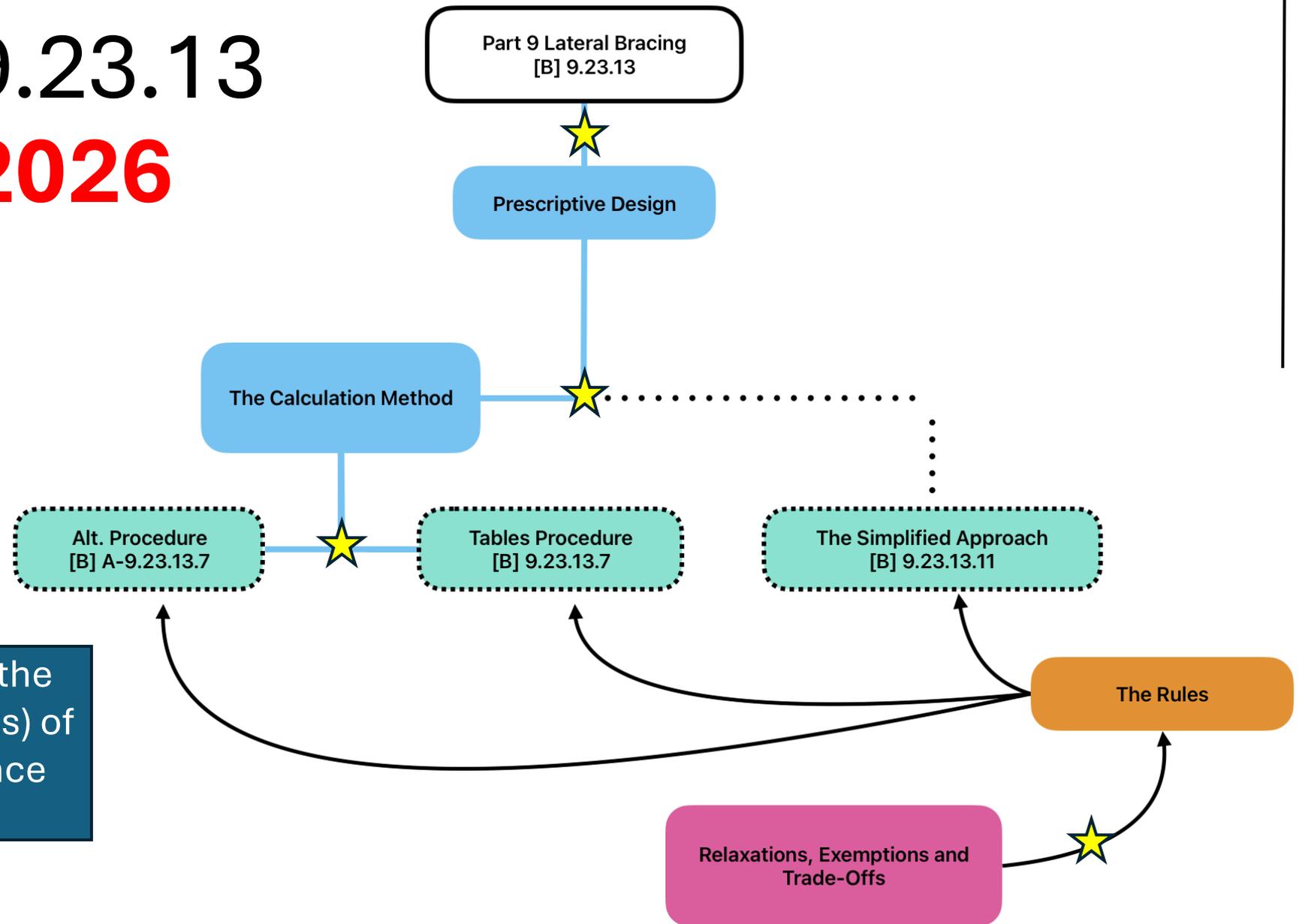
Subsection 9.23.13 Framework **RECAP+**



Subsection 9.23.13 Framework **2026**

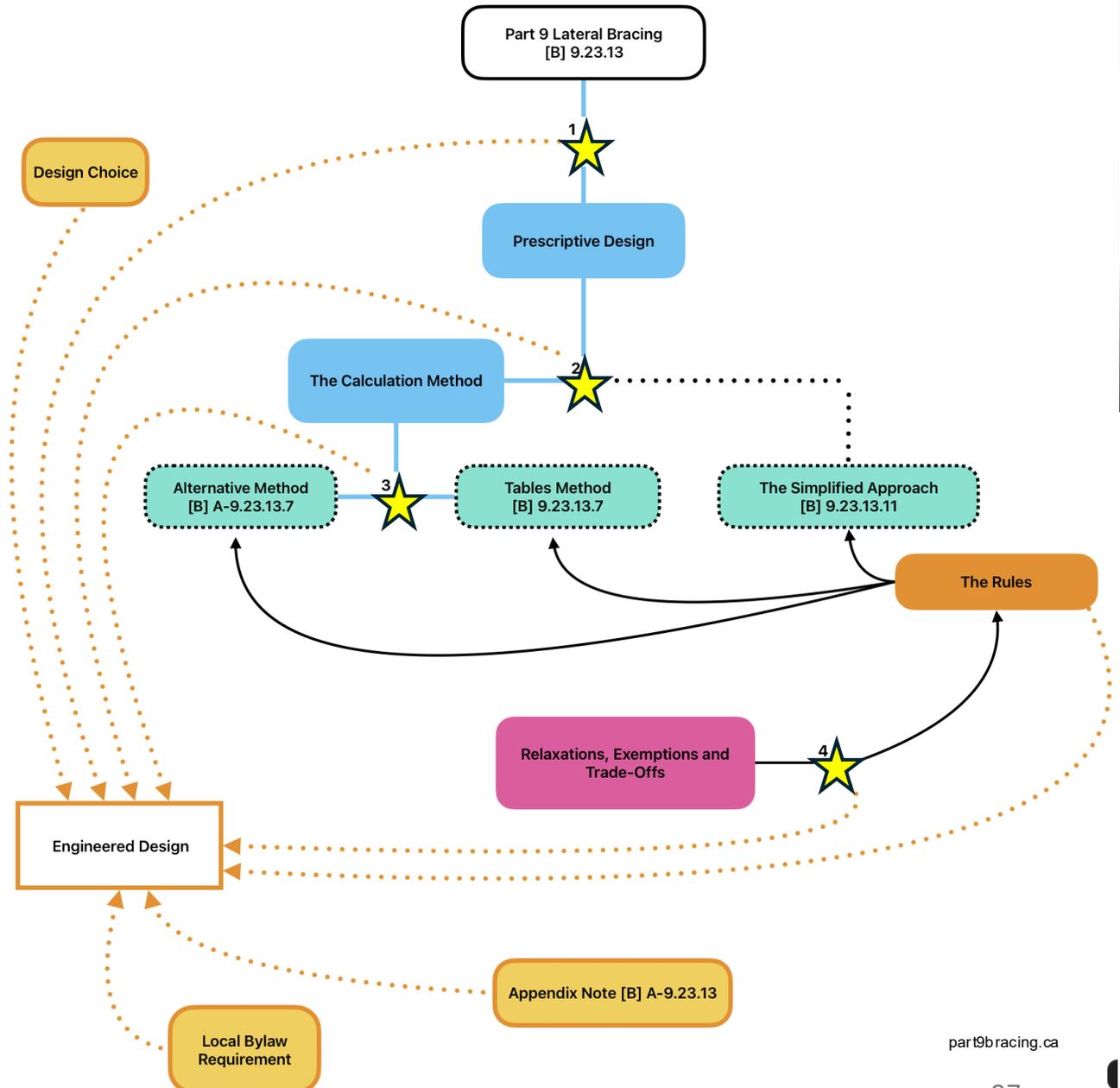
Code Pathways and
Trigger Points
★

How do we figure out the
acceptability (and limits) of
a particular compliance
path?

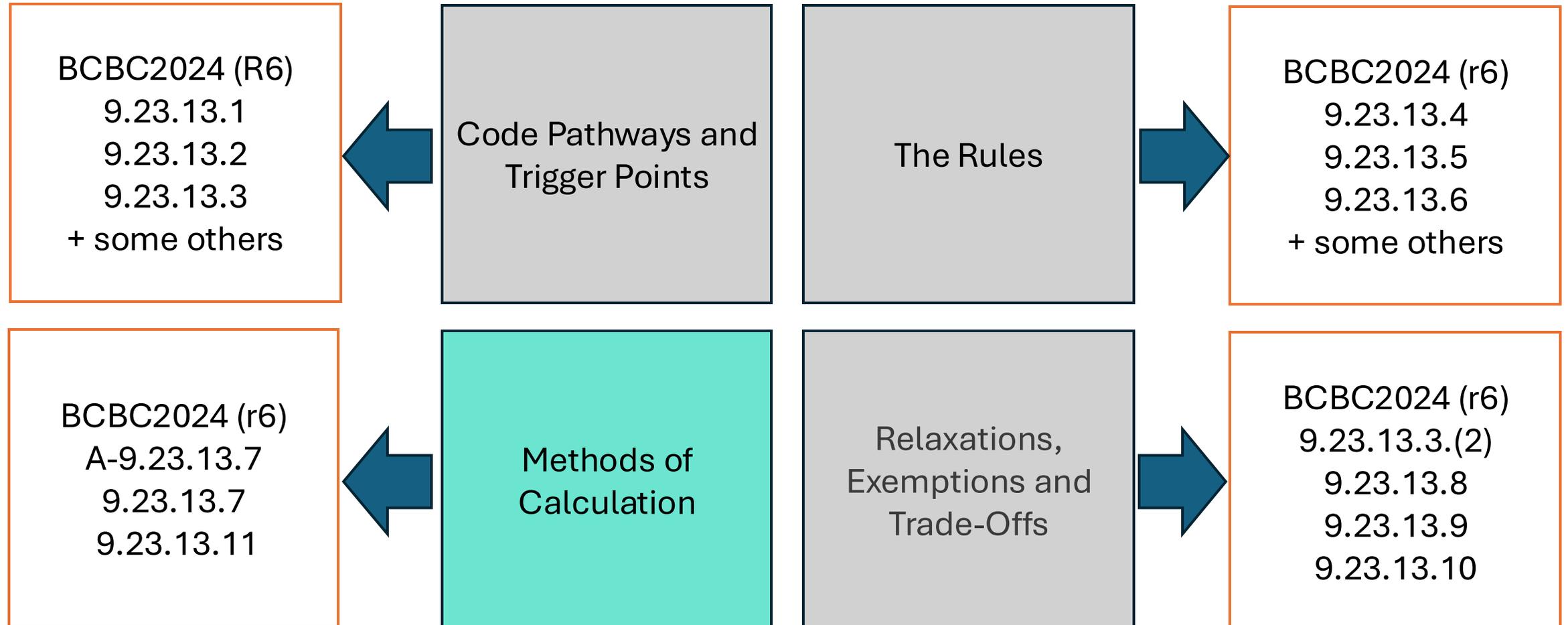


Subsection 9.23.13 Framework 2026

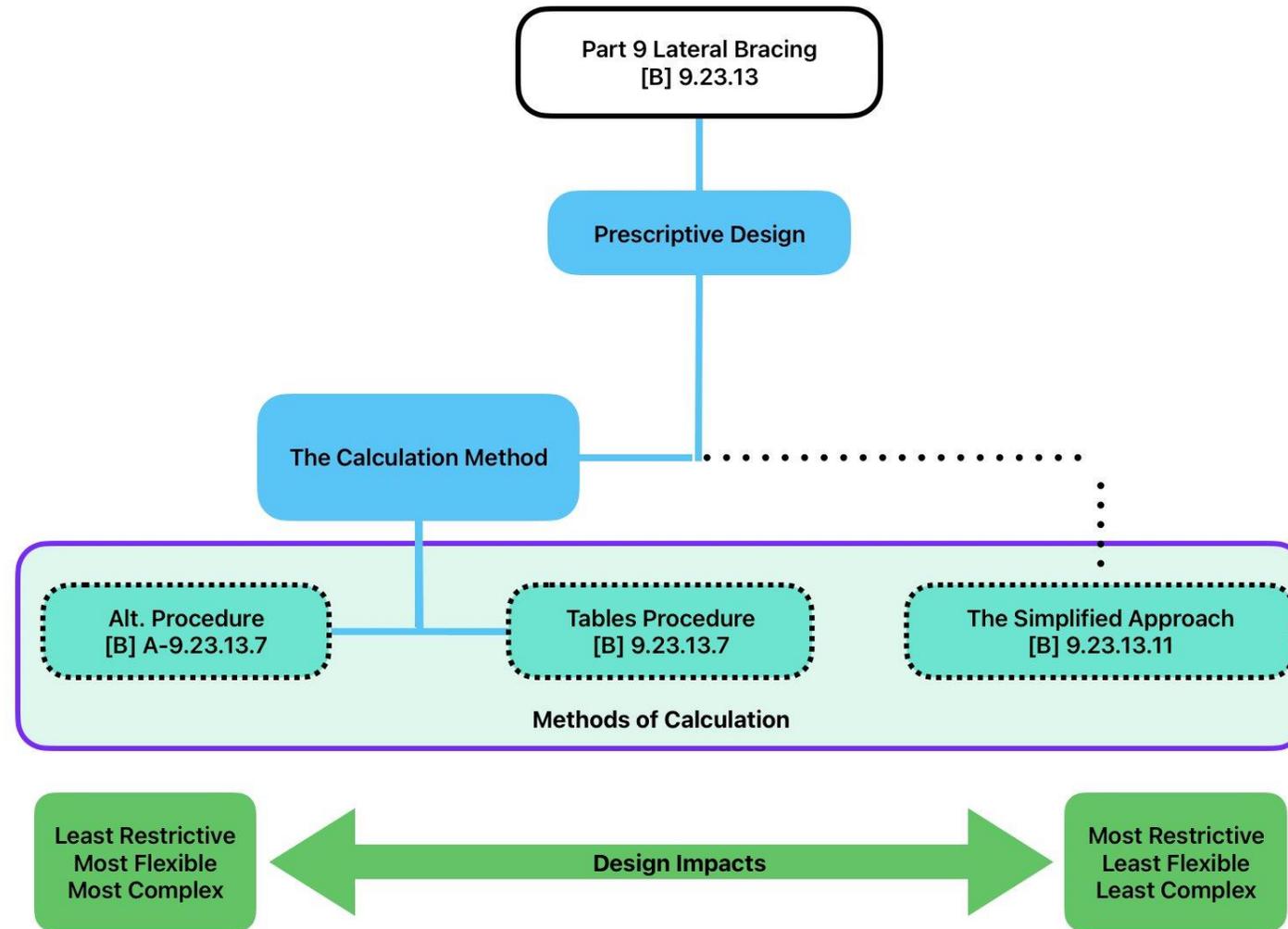
When is an Engineer Required?



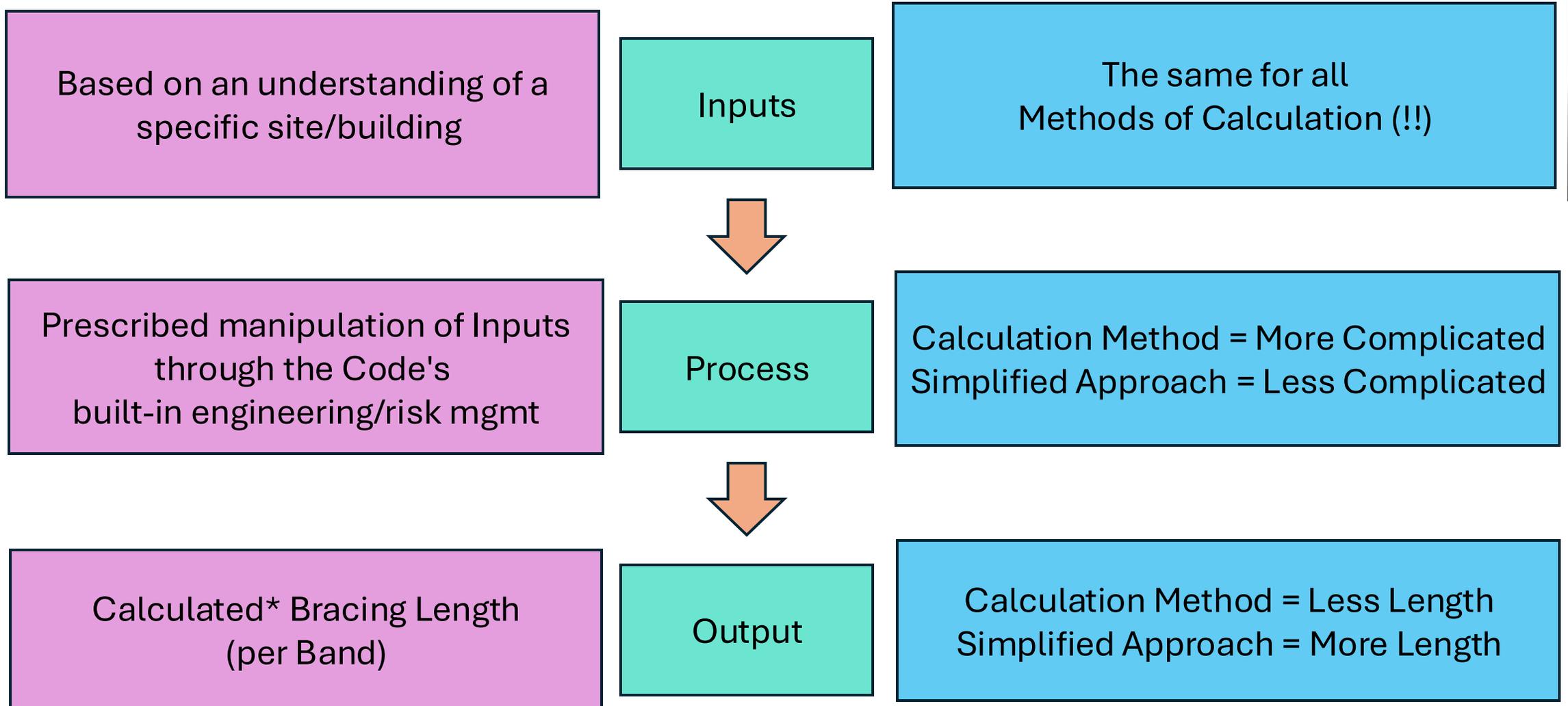
Methods of Calculation Comparison 2026



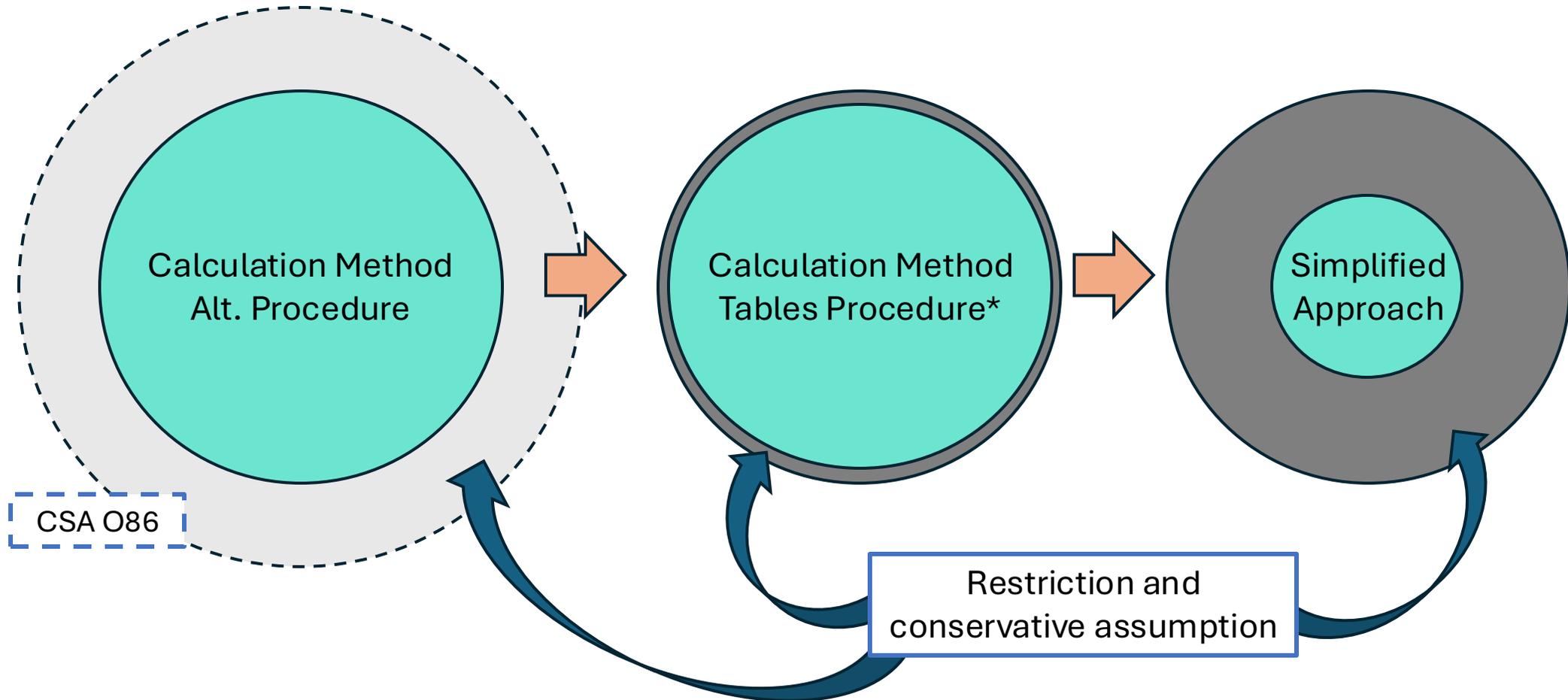
Methods of Calculation Comparison 2026



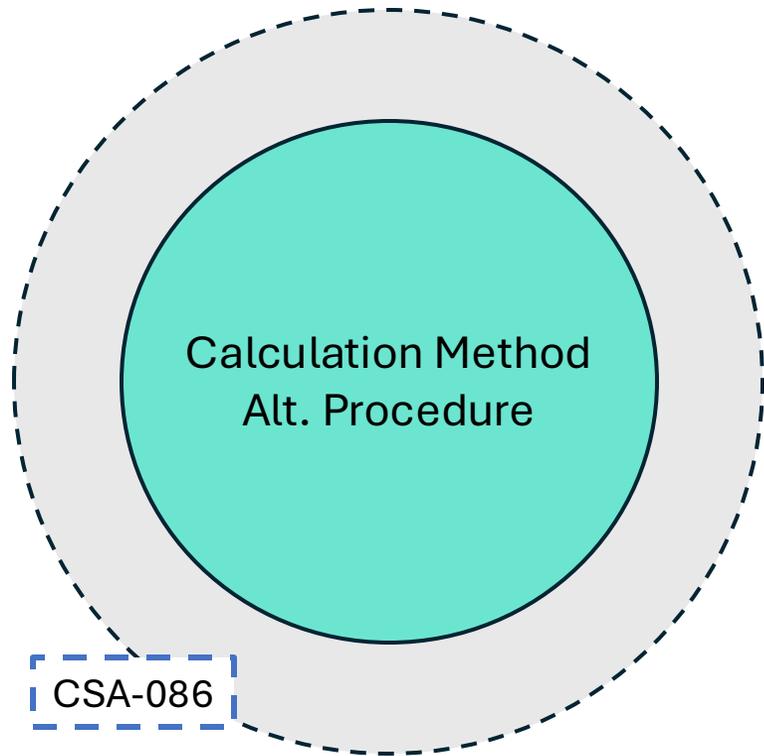
Methods of Calculation Comparison 2026



Methods of Calculation Comparison 2026



Methods of Calculation Comparison **2026**



Restrictions and conservative assumptions

Building Height

HWP \leq 1.2kPa

S_{max} \leq 2.6

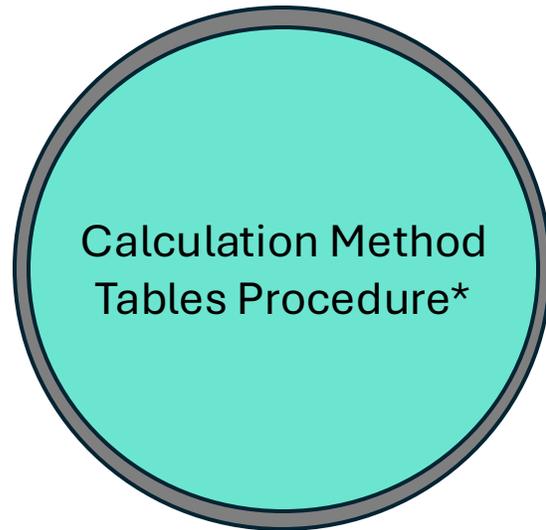
Snow ?

Roof Height \leq 6m

Reference Framing Types

Exact Values

Methods of Calculation Comparison **2026**



Restrictions and conservative assumption

Building Height

HWP \leq 1.2kPa

S_{max} \leq 2.6

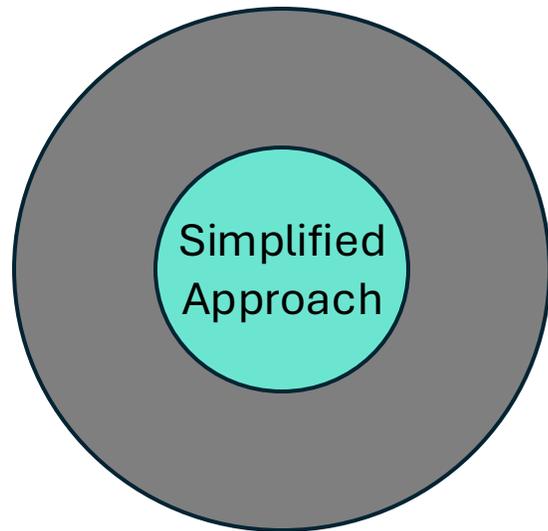
Snow \leq **6kPa**

Roof Height \leq 6m

Reference Framing Types

Bracketed
(Conservative Assumptions)

Methods of Calculation Comparison **2026**



Restrictions and conservative assumption

Building Height

HWP \leq **0.47kPa**

S_{max} \leq **0.6**

Snow \leq **2kPa**

Roof Height \leq **3m**

Normal Weight Construction

Continuous Sheathing

Building Plan Dimensions
21.2m x 21.2m

Rough Terrain

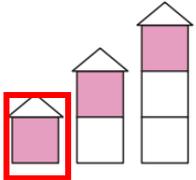
"Interior" Drywall

Reference Framing Types

Methods of Calculation Comparison 2026

- Kimberley
- HWP 0.330
- Rough Terrain
- Unknown
- S_{max} 0.311
- S = 1.85
- Normal Weight
- Single Storey
- WSP-A
- Continuously Sheathed
- Interior Drywall

Table 9.23.13.11.-B
Minimum Total Length of Braced Wall Panels where $HWP \leq 0.6 \text{ kPa}$ and $S_{max} \leq 0.47$
 Forming Part of Sentence 9.23.13.11.(2)

		Minimum Total Length <i>Braced Wall Panels</i> , m									
		Gypsum-Sheathed Framing Type (with gypsum board on only one side) ⁽²⁾					Wood-Sheathed Framing Type (with gypsum board on opposite side) ⁽¹⁾				
<i>Storey</i>	Diagonal-Lumber-Sheathed Framing Type (with gypsum board on opposite side) ⁽¹⁾	DWB	GWB-A	GWB-B	GWB-C	GWB-D	WSP-A	WSP-B	WSP-C	WSP-D	WSP-E
			2.27	11.36(5.68)	6.60(3.30)	4.89(2.45)	3.98(1.99)	3.98	2.11	1.83	1.67

Methods of Calculation Comparison **2026**

Calculation Method Alt. Procedure	Kimberley	Simplified Approach				
Bracing Per Band	<table border="1"> <tr> <td>S = 1.85</td> <td>HWP 0.330</td> </tr> <tr> <td>Unknown</td> <td>Smax 0.311</td> </tr> </table>	S = 1.85	HWP 0.330	Unknown	Smax 0.311	
S = 1.85	HWP 0.330					
Unknown	Smax 0.311					
5.1'	<p>69.5' x 69.5'</p>	Bracing Per Band				
Total Bracing N/S Orth. Direction		13' (3.98m)				
15.3'		Total Bracing N/S Orth. Direction				
		39'				
Total Bracing E/W Orth. Direction		Total Bracing E/W Orth. Direction				
15.3'		39'				

Methods of Calculation Comparison **2026**

Calculation Method
Alt. Procedure

Kimberley

Simplified
Approach

S = 1.85	HWP 0.330
Unknown	Smax 0.311

Bracing Per Band
4'

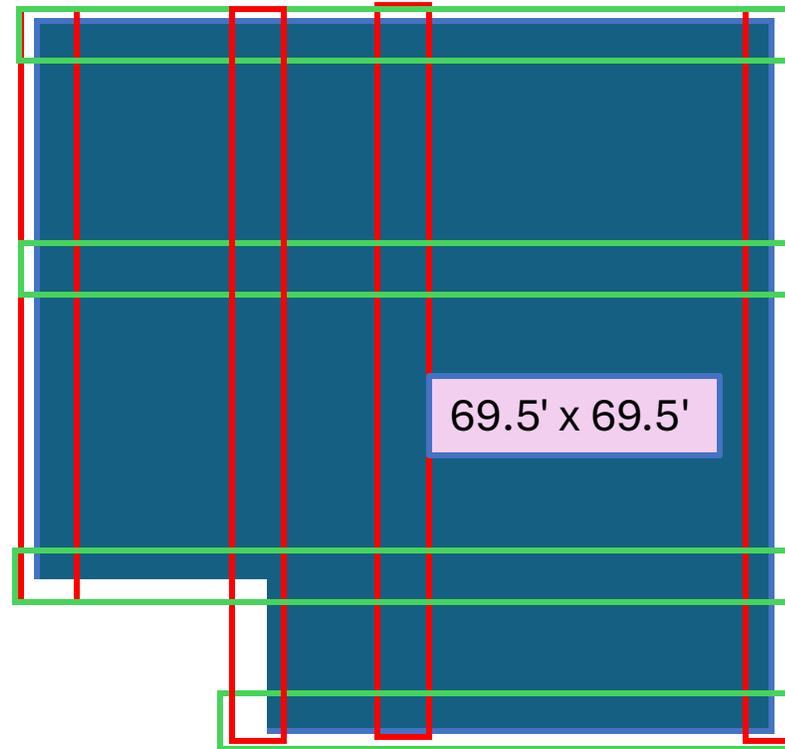
Bracing Per Band
13' (3.98m)

Total Bracing N/S
Orth. Direction
16'

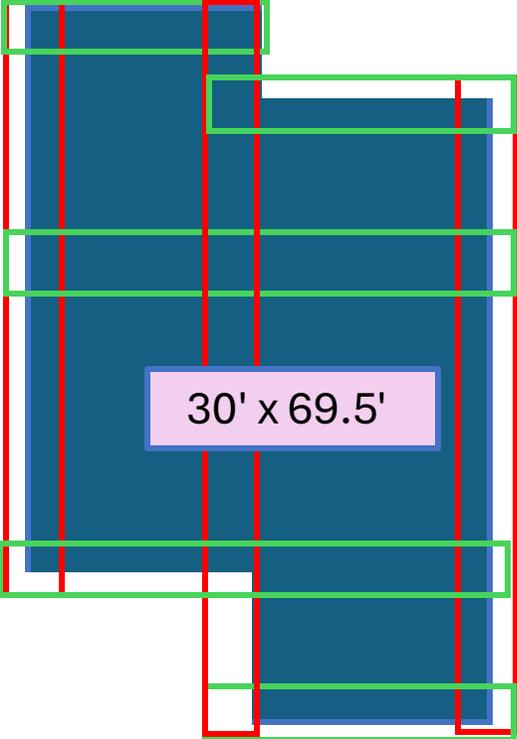
Total Bracing N/S
Orth. Direction
52'

Total Bracing E/W Orth.
Direction
16'

Total Bracing E/W Orth.
Direction
52'



Methods of Calculation Comparison **2026**

Calculation Method Alt. Procedure	Kimberley	Simplified Approach				
Bracing Per Band 2.7'/2.1'	<table border="1"> <tr> <td>S = 1.85</td> <td>HWP 0.330</td> </tr> <tr> <td>Unknown</td> <td>Smax 0.311</td> </tr> </table>	S = 1.85	HWP 0.330	Unknown	Smax 0.311	Bracing Per Band 13' (3.98m)
S = 1.85	HWP 0.330					
Unknown	Smax 0.311					
Total Bracing N/S Orth. Direction 8.1'		Total Bracing N/S Orth. Direction 52'				
Total Bracing E/W Orth. Direction 10.5'		Total Bracing E/W Orth. Direction 52'				

Methods of Calculation Comparison **2026**

Calculation Method
Alt. Procedure

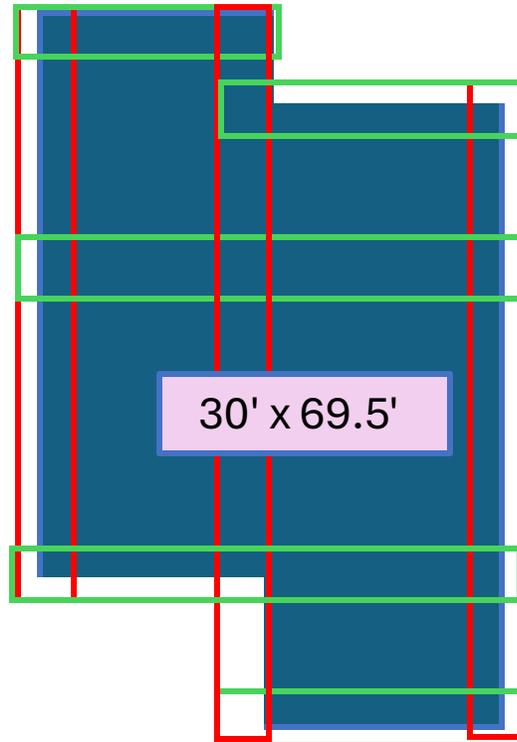
Kimberley

S = 1.85	HWP 0.330
Unknown	Smax 0.311

Bracing Per Band
2.7'/2.1'

Total Bracing N/S
Orth. Direction
8.1'

Total Bracing E/W Orth.
Direction
10.5'

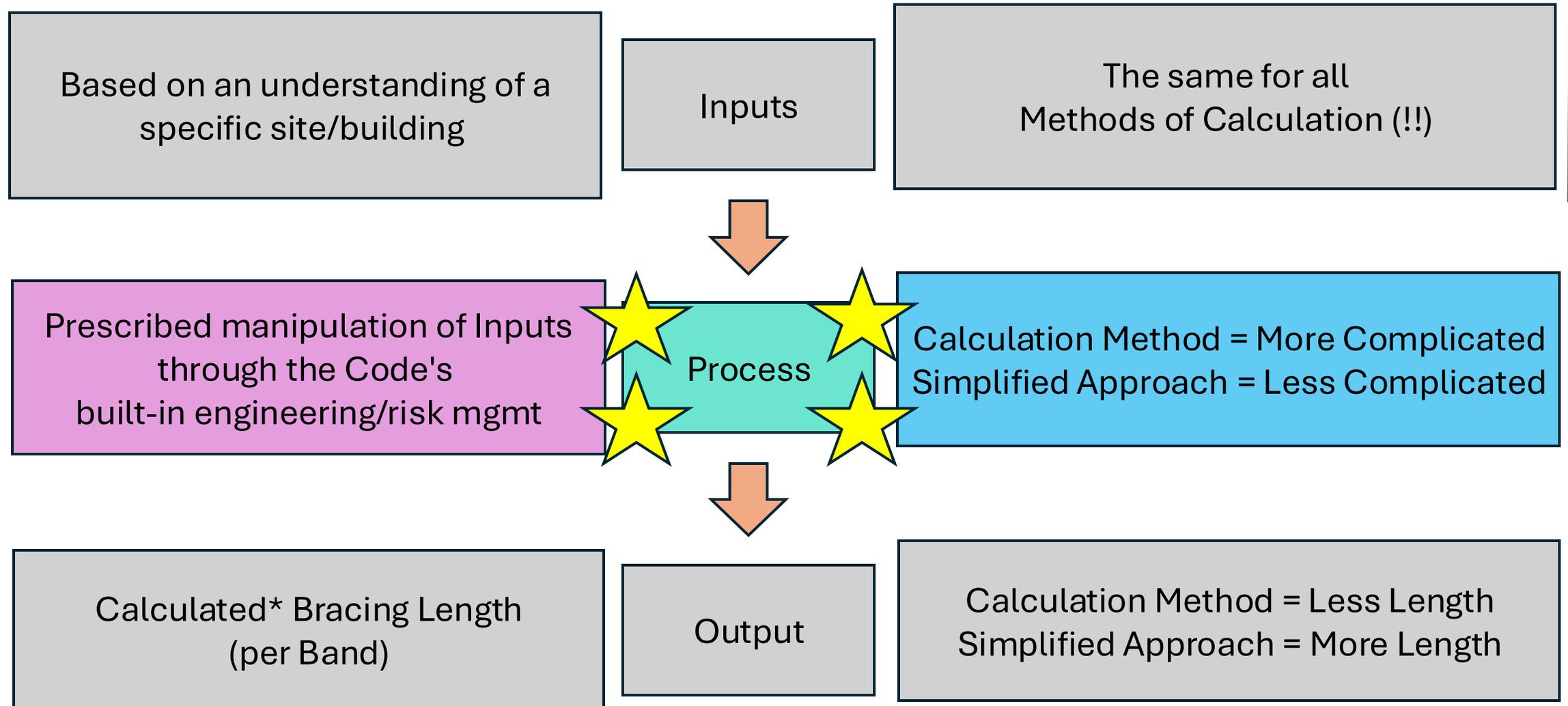


Band Optimization

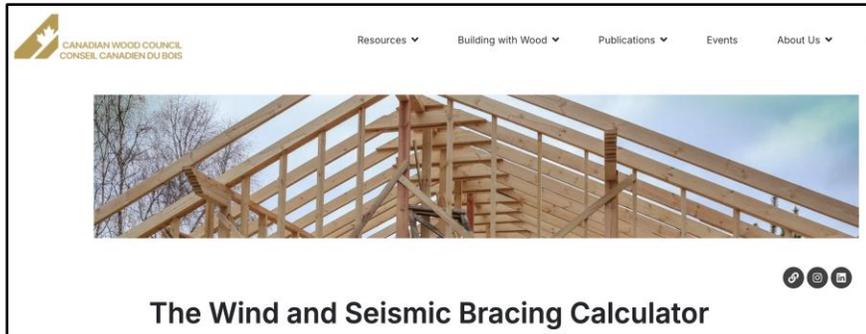
USER INPUT SHEETS:				
I-1	I-2	I-3	I-4	R-4
Calculator Feedback: NEW! Optimizations in blue text (see hover note) Per Band: WIND: +10% SEISMIC: +1% Per Orthogonal Direction: WIND: ✓ SEISMIC: ✓				
NOTE: Additional System Considerations available				
Per Band: WIND: +26% SEISMIC: +20% Per Orthogonal Direction: WIND: ✓ SEISMIC: +3%				
NOTE: Additional System Considerations available				

User Entries			
3			
30	feet	inches	30.000 feet
15.000	feet		4.572 m
5			
68	feet	inches	68.000 feet
17.000	feet		5.182 m

Methods of Calculation Comparison 2026



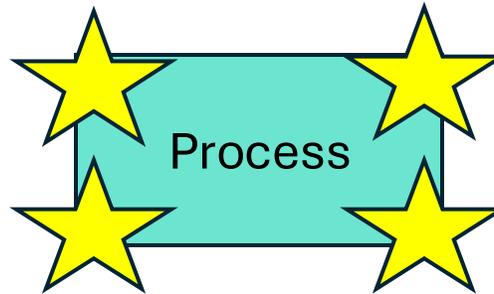
Methods of Calculation Comparison 2026



<https://cwc.ca/design-tool/bracing-tool/>



Under Development



www.part9bracing.ca



Learning Part 9 Lateral Bracing

Learn the Code Framework

Learn the Design Process

Learn the Rules

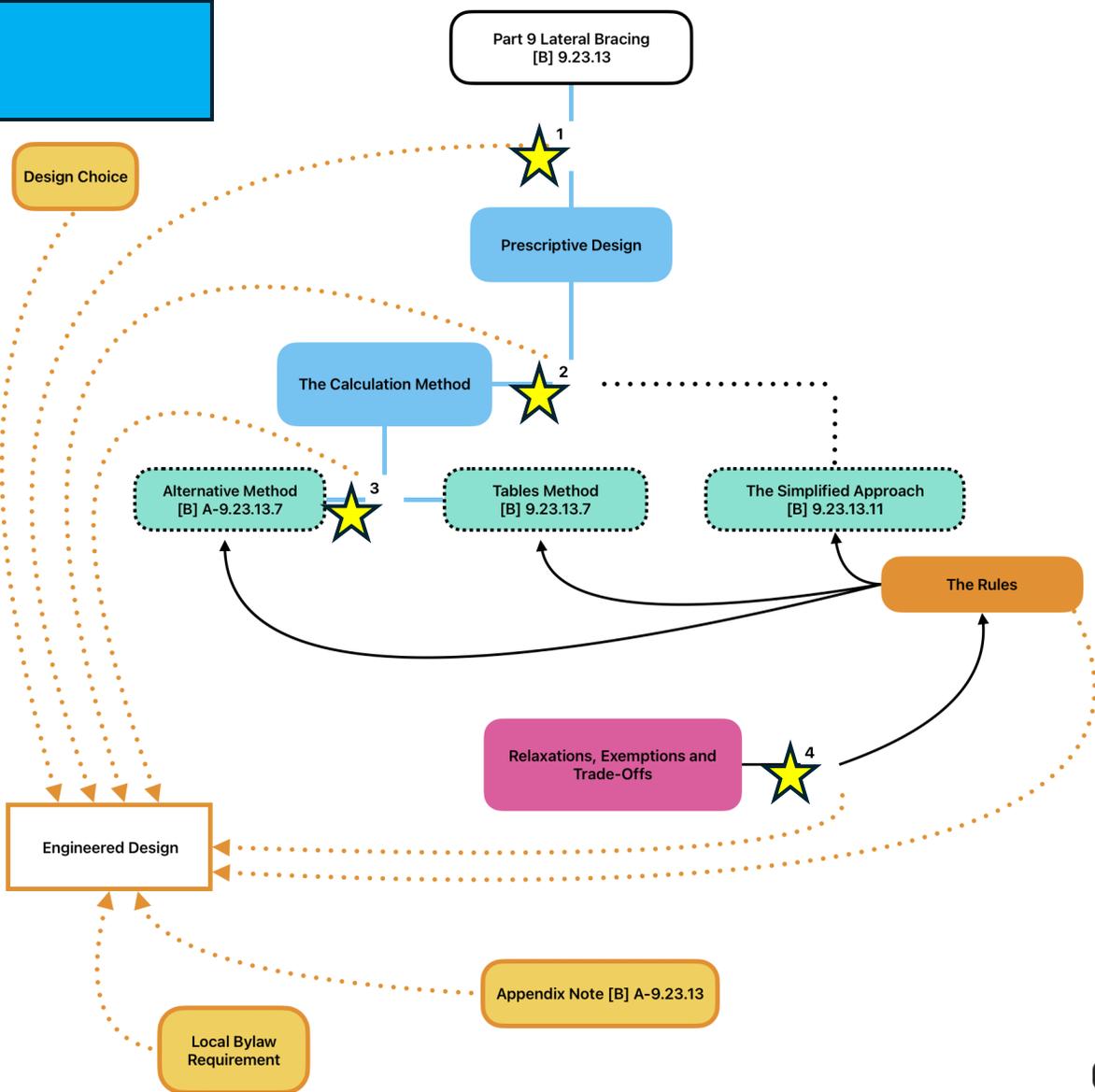
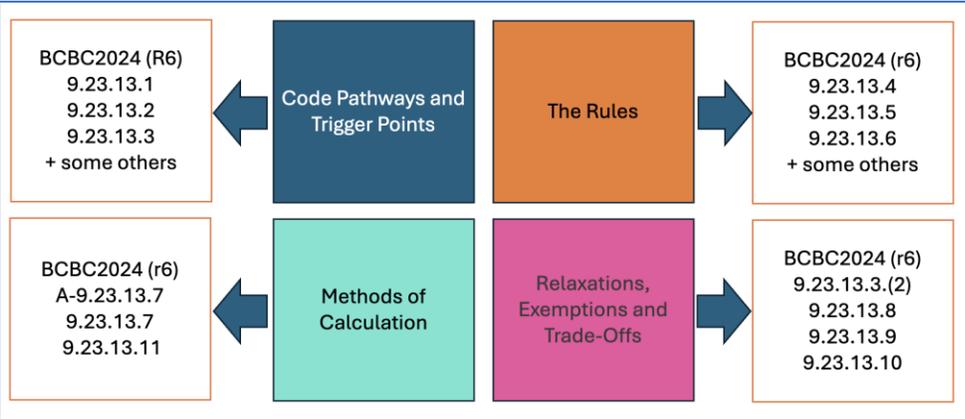
Learn the Relaxations, Exemptions and Trade-Offs

Learn the Inputs

Learn the Methods of Calculation Processes
(or lean on the available tools)

Learning Part 9 Lateral Bracing

Learn the Code Framework



Learning Part 9 Lateral Bracing

Learn the Design Process

Conceptualize

Conceptualize the Band layout

Calculate

Calculate the bracing length for each Band

Locate

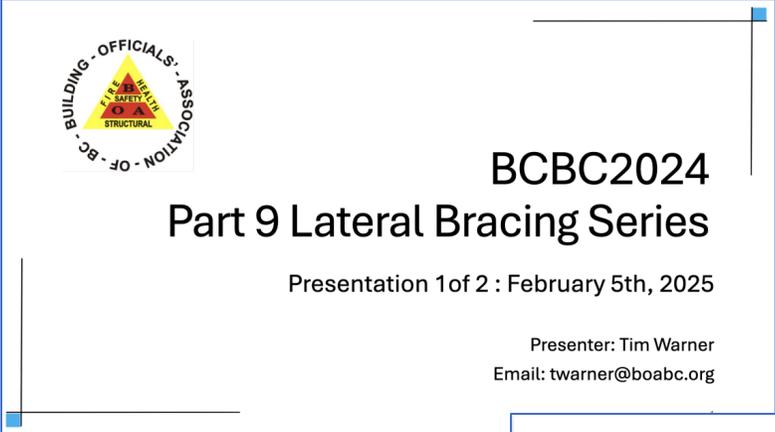
Locate the bracing lengths on the plan

Iterate

Iterate -- recognize that the desing process is iterative

Learning Part 9 Lateral Bracing

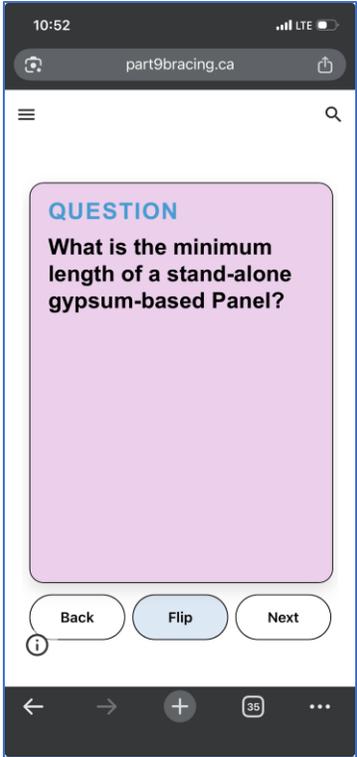
Learn the Rules



BCBC2024
Part 9 Lateral Bracing Series
Presentation 1 of 2 : February 5th, 2025
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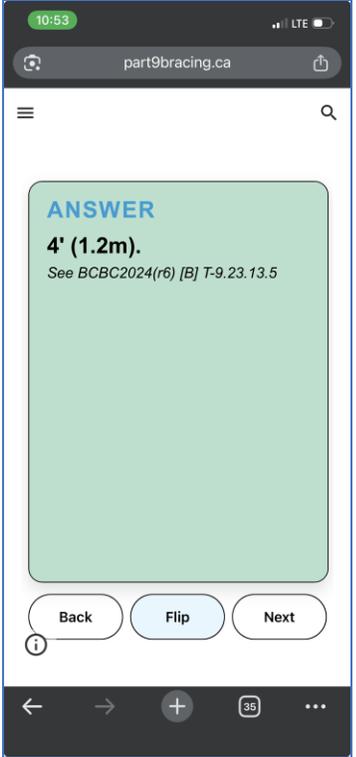
BCBC2024
Part 9 Lateral Bracing Series
Presentation 2 of 2 : February 27th, 2025
Presenter: Tim Warner
Email: twarner@boabc.org



10:52 part9bracing.ca

QUESTION
What is the minimum length of a stand-alone gypsum-based Panel?

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ANSWER
4' (1.2m).
See BCBC2024(r6) [B] T-9.23.13.5

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www.part9bracing.ca/tutorials/flash-cards

Learning Part 9 Lateral Bracing

Learn the Inputs

STEP 1: INFORMATION

Project Information

Project Name

Address

Builder

What load will you be calculating?

Choose or enter information

Please choose or enter all items indicated in *.

Location*

1 in 500 year hourly wind pressure (in kPa)*

Reference hourly wind pressure (in kPa)

Site Class*

Basic snow load roof factor (C_s)*

1 in 1000 year ground snow load (S_g) (in kPa)*

1 in 1000 year rain load (S_r) (in kPa)*

Specified Snow Load (in kPa)*

S_{max}*

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<https://cwc.ca/design-tool/bracing-tool/>



INFORMATION BULLETIN

January 15, 2026

Lateral Bracing for Simple Part 9 Buildings 2024 BC Building Code

Purpose and Application

This bulletin provides information on the permit requirements for the lateral bracing of simple Part 9 buildings in the 2024 BC Building Code (BCBC) which came into effect on March 10, 2025. Only the prescribed solutions found in Section 9.23 of the 2024 BCBC are discussed.

This bulletin applies to the wood-frame construction of:

- Single-family dwellings
- Houses with secondary suites
- Duplexes
- Accessory buildings serving any of the above

Note: Consult with your contractor or a professional to ensure your proposed design meets Part 9 seismic requirements without the services of a structural engineer. Where a structural engineer is required, the engineer must complete the design for the entire building. Submit the engineer's sealed drawings and letters of assurance with your online permit application.

Introduction

The introduction of the new, enhanced seismic requirements presented in the 2024 BC Building Code is a significant change from previous versions of the code. The new version of the code has introduced an entirely new way of calculating the required amount of braced wall panels based on the greater effect from either the seismic or wind considerations.

When designing a building to the seismic requirements of Part 9 under this new code, special consideration must be given to how the information is presented to both enable efficient review of the design during the permit review process and to ensure accuracy during construction.

The following information will be discussed within this bulletin:

- [What's New?](#)
- [Permit Application Submittal Requirements](#)
- [Calculations](#)
- [Braced Wall Panel Construction Schedule](#)
- [Construction Details](#)

Building Inspection Services
Regional District of Nanaimo
250-390-6530
building@rdn.bc.ca

www.rdn.bc.ca

Why Have Seismic Requirements Changed?

The primary intent of the seismic requirements in the BC Building Code is to prevent loss of life during strong shaking from an earthquake and to minimize building damage during low to moderate shaking from an earthquake.

The seismic requirements in the 2024 version of the code utilize new knowledge of the active faults discovered near Victoria, BC and new data on the Cascadia great earthquakes.

In addition, large teams of American and Canadian seismologists have developed modern ground motion models for all types of tectonic regions in Canada. All these factors have been incorporated into the current seismic requirements.

Get Involved RDN!

<https://rdn.bc.ca/notice-2026-01-19>

Learning Part 9 Lateral Bracing

<https://www.bchousing.org/sites/default/files/rcg-documents/2022-04/IG-Seismic-Design-Houses.pdf>

Learn the Relaxations, Exemptions and Trade-Offs

Part 9 Bracing Calculator Last Updated: 20 September 2025

Decks and Other Related Structures — Interpretation Worksheet

Index

No.	Drawing	Category	Description	Pathway
1		Patio	Only walking surface is at grade.	N/A
2		Deck over Patio	Lower walking surface is at grade, with additional wood-framed walking surface elevated above. Upper walking surface may or may not serve as a Roof to walking surface below.	Pathway 2
3		Stacked Deck over Patio	Lower walking surface is at grade, with two additional wood-framed walking surfaces elevated above. Intermediate walking surface may or may not serve as a Roof to walking surface below. Upper walking surface may or may not serve as a Roof to walking surface below.	Pathway 3
4		Covered Patio (or Carport)	Only walking surface is at grade. Walking surface is covered by a Roof.	Pathway 4

www.part9bracing.ca/resources

BC BUILDING CODE INTERPRETATION COMMITTEE
A joint committee with members representing
AIBC, EGBC, BOABC

File No: 18-0226 INTERPRETATION Page 1 of 1

Interpretation Date: December 13, 2022

Building Code Edition: **BC Building Code 2018**

Subject: Braced Wall Panel at Porch with 2 Open Sides

Keywords: braced, wall, panel, porch

Building Code Reference(s): 9.23.13.5.(3)

Question:
Where a covered porch is open on 2 sides and each open side is aligned with exterior walls containing braced wall panels, does the porch have to meet the requirements of Sentences 9.23.13.5.(1) & (3)?

Interpretation:
No

Sentence 9.23.13.5.(3) waives the requirement for braced wall panels along the open side of small porches where the entire porch is projected beyond the exterior wall that contains a braced wall panel. Refer to BCIC Interpretation 18-0070.

A porch that is created with cantilevered roof trusses with 2 open sides where both open sides are in the same plane as the exterior walls containing braced wall panels need not comply with the requirements of Sentences 9.23.13.5.(1) & (3).

Note that, due to the cantilever, the roof trusses must be designed to Part 4 using Part 9 loading.

Patrick Shek
Patrick Shek, P.Eng., CP, FEC, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local Authority Having Jurisdiction. The views of the joint committee should not be construed as legal advice.

2022-12-28

<https://boabc.org/building-and-plumbing-code-interpretations-2018/>

ILLUSTRATED GUIDE

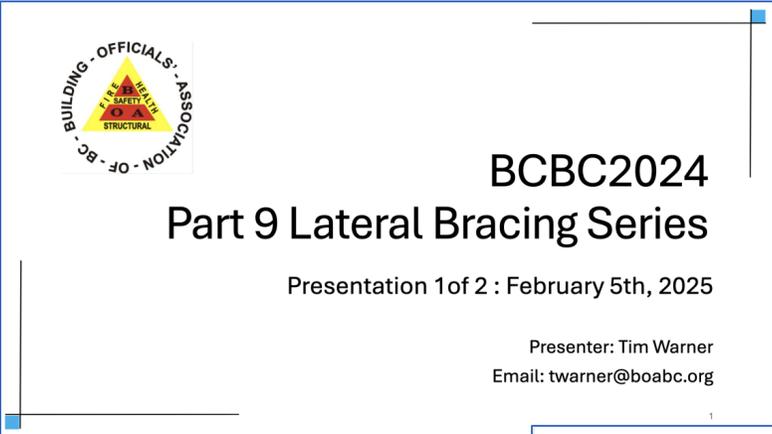
Seismic Bracing Requirements
(2019 Edition)

BC Building Code Part 9 2018

This guide has been developed to assist wood-frame house designers and builders in British Columbia to understand and comply with lateral load provisions under Part 9 of the BC Building Code.

Learning Part 9 Lateral Bracing

Learn the Methods of Calculation Processes
(or lean on the available tools)



**BCBC2024**
Part 9 Lateral Bracing Series
Presentation 1 of 2 : February 5th, 2025
Presenter: Tim Warner
Email: twarner@boabc.org

Practice

Practice

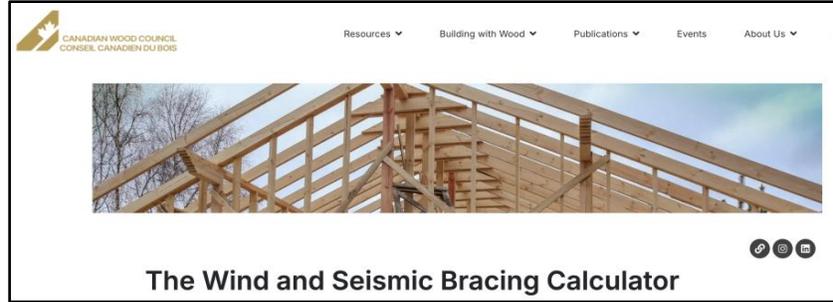
Practice



**BCBC2024**
Part 9 Lateral Bracing Series
Presentation 2 of 2 : February 27th, 2025
Presenter: Tim Warner
Email: twarner@boabc.org

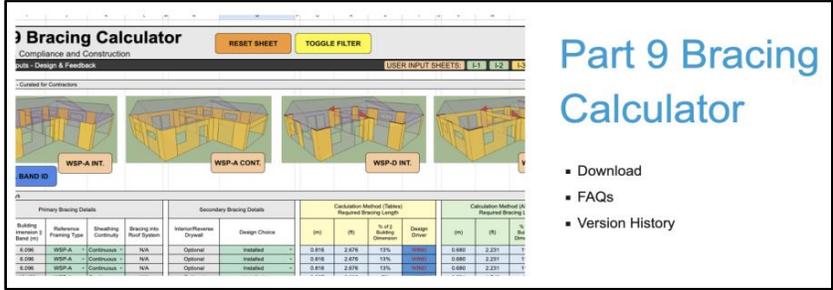


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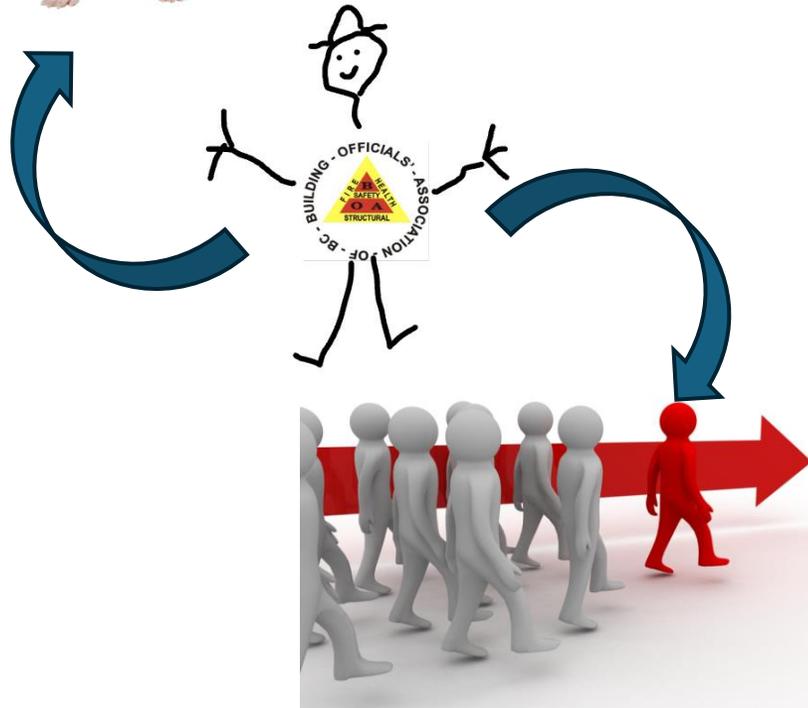
The Wind and Seismic Bracing Calculator



Bracing Calculator
Compliance and Construction
USER INPUT SHEETS: 01 12 15
Part 9 Bracing Calculator
Download
FAQs
Version History

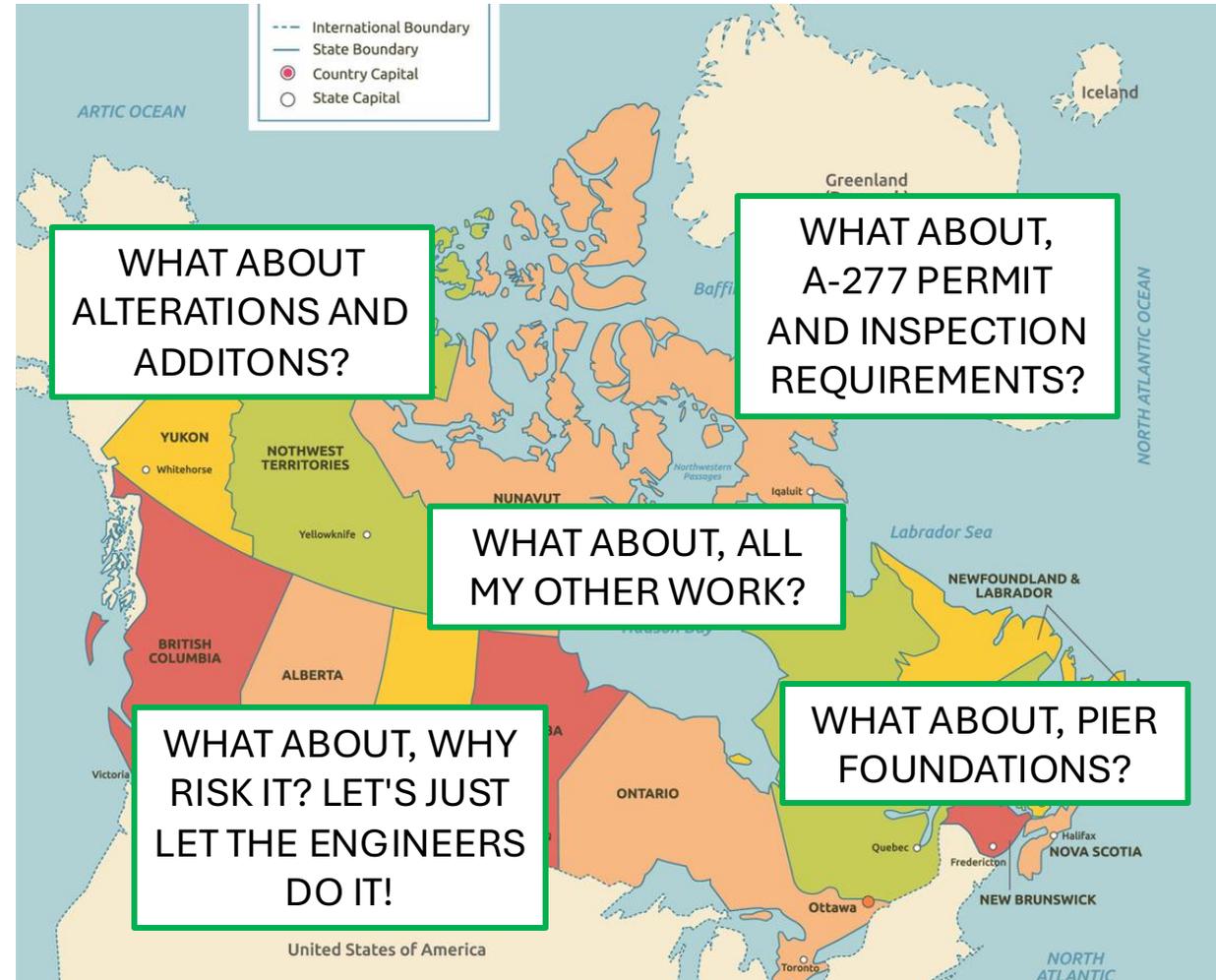
Building Reference (Bridging Code)	Shedding (Roof System)	Bracing into (Roof System)	Wind/Seismic Driver	Calculation Method (Tables)			Calculation Method (Tables)			
				Design Choice	Req'd	Met	Design Choice	Req'd	Met	
6.006 WSP-A	Continuous	N/A	Outdoor	Installed	0.816	2.016	17%	0.816	2.231	1
6.006 WSP-A	Continuous	N/A	Outdoor	Installed	0.816	2.016	17%	0.816	2.231	1
6.006 WSP-A	Continuous	N/A	Outdoor	Installed	0.816	2.016	17%	0.816	2.231	1

Round Table Discussion



<https://www.petsmart.ca/>

<https://draravindan.com/articles/leading-the-way-inspirational-leadership>



www.vector4free.com

End/Questions:



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