Section 4.5.   Objectives and Functional Statements

4.5.1.   Objectives and Functional Statements

4.5.1.1.   Attributions to Acceptable Solutions

1)   For the purpose of compliance with this By-law as required in Clause 1.2.1.1.(1)(b) of Division A, the objectives and functional statements attributed to the acceptable solutions in this Part shall be the objectives and functional statements listed in Table 4.5.1.1. (See Note A-1.1.2.1.(1).)

Table 4.5.1.1.
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[(1)]	
4.1.1.3. Design Requirements	
(1)	[F20-OS2.1]
(2)	[F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1] Applies to structural members where temporary overloading during construction may result in impairment of that or any other member.
(4)	[F20,F80,F82-OS2.1]
(5)	[F20-OP2.1] [F22-OP2.4]
	[F20-OS2.3,OS2.4]
4.1.1.5. Design Basis	
(2)	[F20-OS2.1] [F22-OS2.4,OS2.5]
	[F20-OP2.1] [F22-OP2.4,OP2.5]
	[F22-OH4]
4.1.2.1. Loads and Effects	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(2)	[F20-OS2.1]
(3)	[F20-OS2.1]
4.1.2.2. Loads Not Listed	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.3.2. Strength and Stability	
(1)	[F20-OP2.1] [F22-OP2.4]
	[F20-OS2.1]
(2)	[F20-OS2.1] [F22-OS2.4,OS2.5] Applies to the stabilizing resistance of the *dead load*.
	[F20-OP2.1] [F22-OP2.4,OP2.5]
(3)	[F20-OS2.1] [F22-OS2.4,OS2.5] Applies to the stabilizing resistance of the *dead load*.
	[F20-OP2.1] [F22-OP2.4,OP2.5]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[1]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1] [F22-OS2.4,OS2.5]
	[F20-OP2.1] [F22-OP2.4,OP2.5]
(8)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(11)	[F20-OS2.1] [F22-OS2.4,OS2.5]
(12)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.3.3. Fatigue	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
	[F22-OH4]
4.1.3.4. Serviceability	
(1)	[F22-OP2.4]
	[F22-OH4]
4.1.3.5. Deflection	
(1)	(b),(c),(d) [F22-OP2.4]
	[F22-OP2.4]
	[F22-OH4]
(2)	[F22-OS2.3,OS2.4]
	[F22-OP2.4]
(3)	[F22-OP2.4]
(5)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]
4.1.3.6. Vibration	
(1)	[F22-OP2.4]
	[F22-OH4]
(2)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
	[F22-OH4]
4.1.4.1. Dead Loads	
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

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Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
(6)	[F20-OS2.1] [F22-OS2.4,OS2.5]
4.1.5.1. Loads Due to Use of Floors and Roofs	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.2. Uses Not Stipulated	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.3. Full and Partial Loading	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.4. Loads for Occupancy Served	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.5. Loads on Exterior Areas	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.7. More Than One Occupancy	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.8. Variation with Tributary Area	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.5.9. Concentrated Loads	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.1.5.10. Sway Forces in Assembly Occupancies	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
4.1.5.11. Crane-Supporting Structures and Impact of Machinery and Equipment	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
4.1.5.12. Bleachers	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.4]
4.1.5.13. Helicopter Landing Areas	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.5.14. Loads on Guards	
(1)	[F20-OS2.1]
(2)	[F20-OS2.1]
(3)	[F20-OS2.1,OS2.4]
(4)	[F22-OS2.4]
(6)	[F20-OS2.1]
(7)	[F20-OS2.1]
4.1.5.15. Loads on Vehicle Guardrails	
(1)	[F20-OS2.1]
4.1.5.16. Loads on Walls Acting As Guards	
(1)	[F20-OS2.1]
4.1.5.17. Firewalls	
(1)	[F20-OS1.2]
	[F20-OP1.2]
	[F20-OP3.1]
(2)	[F04-OS1.2]
	[F04-OP1.2]
	[F04-OP3.1]
4.1.5.18. Loads for Building Maintenance	
(1)	[F30-OS3.1]
4.1.6.2. Specified Snow Load	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

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Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[1]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(8)	[F20-OS2.1] Applies to portion of By-law text: "The shape accumulation factor, C_a, shall be 1.0, …"
	[F20-OP2.1] [F22-OP2.4] Applies to portion of By-law text: "The shape accumulation factor, C_a, shall be 1.0,…"
	(a) to (e) [F20-OS2.1] Applies to roof shapes and configurations that call for a higher shape accumulation factor.
	(a) to (e) [F20-OP2.1] [F22-OP2.4] Applies to roof shapes and configurations that call for a higher shape accumulation factor.
(9)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.3. **Full and Partial Loading**	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.4. **Specified Rain Load**	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.5. **Multi-level Roofs**	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.6. **Horizontal Gap between a Roof and a Higher Roof**	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.1.6.7. Areas Adjacent to Roof Projections	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.8. Snow Drift at Corners	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.9. Gable Roofs	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.10. Arch Roofs, Curved Roofs and Domes	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.11. Snow Loads Due to Sliding	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.12. Valleys in Curved or Sloped Roofs	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[1]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.13.Specific Weight of Snow	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.14.Snow Removal	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.6.15.Ice Loading of Structures	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.7.1. Specified Wind Load	
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.7.2. Classification of Buildings	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.7.3. Static Procedure	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[1]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(8)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(10)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.7.4. Topographic Factor	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.7.5. External Pressure Coefficients	
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(5)	[F20-OS2.1]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]		
4.1.7.6. External Pressure Coefficients for Low Buildings		
(2)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(3)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(4)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(5)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(6)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(7)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(8)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(9)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
4.1.7.7. Internal Pressure Coefficient		
(1)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
4.1.7.8. Dynamic Procedure		
(1)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(2)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(3)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	
(4)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
	[F22-OH4]	

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.1.7.9. Full and Partial Wind Loading	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.7.10. Interior Walls and Partitions	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.7.11. Exterior Ornamentations, Equipment and Appendages	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.7.12. Wind Tunnel Procedure	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
4.1.8.1. Analysis	
(2)	(a) [F20-OS2.1]
	(a) [F20-OP2.1,OP2.3] [F22-OP2.4]
	(b) [F20-OS2.1]
	(b) [F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(8)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(10)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

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Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
(11)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(12)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(13)	[F20-OS2.1]
	[F20-OP2.3] [F22-OP2.3,OP2.4]
(14)	[F20-OS2.1]
	[F20-OP2.3] [F22-OP2.3,OP2.4]
4.1.8.3. General Requirements	
(2)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(8)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.4. Site Properties	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.5. Importance Factor	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.3] [F22-OP2.4]
4.1.8.6. Structural Configuration	
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.1.8.7. Methods of Analysis	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.8. Direction of Loading	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.9. SFRS Force Reduction Factors, System Overstrength Factors, and General Restrictions	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.10. Additional System Restrictions	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	(a) [F20-OP2.3] [F22-OP2.4]
	(b) [F20-OP2.3] [F22-OP2.4]
	(c) [F20-OP2.3] [F22-OP2.4]
	(d) [F20-OP2.3] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]
(7)	[F22-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.11. Equivalent Static Force Procedure for Structures Satisfying the Conditions of Article 4.1.8.7.	
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

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Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[1]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(8)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	(a) [F20-OS2.1]
	(a) [F20-OP2.1] [F22-OP2.4]
	(b) [F20-OS2.1]
	(b) [F20-OP2.1] [F22-OP2.4]
(10)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(11)	(a) [F20-OP2.1] [F22-OP2.4]
	(a) [F20-OS2.1]
	(b) [F20-OS2.1]
	(b) [F20-OP2.1] [F22-OP2.4]
(12)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.12. Dynamic Analysis Procedure	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	(a) [F20-OS2.1]
	(a) [F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1,OP2.3] [F22-OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1,OP2.3] [F22-OP2.4]
(8)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(10)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(12)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.13. Deflections and Drift Limits	
(1)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]
(2)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
(3)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]
4.1.8.14. Structural Separation	
(1)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]
	[F22-OP4.3]
(2)	[F20-OS2.1,OS2.3,OS2.4]
	[F20-OP2.1,OP2.3,OP2.4]
	[F20-OP4.3]
(3)	[F20-OS2.1,OS2.3,OS2.4]
	[F20-OP2.1,OP2.3,OP2.4]
	[F20-OP4.3]
(4)	[F20-OS2.1,OS2.3,OS2.4]
	[F20-OP2.1,OP2.3,OP2.4]
	[F20-OP4.3]
4.1.8.15. Design Provisions	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.3,OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1,OP2.3,OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1,OP2.3,OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1,OP2.4]
(6)	[F20-OS2.1,OS2.4]
	[F20-OP2.1,OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.16. Foundation Provisions	
(1)	[F22-OS2.3,OS2.4]
	[F22-OP2.3,OP2.4]
(2)	[F20-OS2.1] Applies to portion of By-law text: "*Foundations* shall be designed to resist the lateral load capacity of the SFRS…"
	[F20-OP2.1] Applies to portion of By-law text: "*Foundations* shall be designed to resist the lateral load capacity of the SFRS…"
(5)	[F20-OS2.2,OS2.4]
	[F20-OP2.2,OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[1]	
(6)	(a) [F22-OS2.4]	
	(a) [F22-OP2.4]	
	(b) [F22-OS2.4]	
	(b) [F22-OP2.4]	
	(c) [F20-OS2.4]	
	(c) [F20-OP2.4]	
(7)	[F20-OS2.1]	
	[F20-OP2.1,OP2.4]	
(8)	(a) [F20-OS2.1]	
	(a) [F20-OP2.1]	
	(b) [F22-OS2.4]	
	(b) [F22-OP2.4]	
(9)	[F20-OS2.4]	
	[F20-OP2.4]	
(10)	[F20-OS2.2] [F22-OS2.4]	
	[F20-OP2.2] [F22-OP2.4]	
4.1.8.17.	**Site Stability**	
(1)	[F20-OS2.1]	
	[F20-OP2.1] [F22-OP2.4]	
4.1.8.18.	**Elements of Structures, Non-structural Components and Equipment**	
(1)	[F20,F22-OS2.4]	
	[F20-OP2.3] [F22-OP2.3,OP2.4]	
(4)	[F20,F22-OS2.4]	
	[F20,F22-OP2.3,OP2.4]	
(5)	[F20,F22-OS2.1]	
	[F20,F22-OP2.1,OP2.4]	
(6)	[F20,F22-OS2.4]	
	[F20,F22-OP2.3,OP2.4]	
(7)	[F20,F22-OS2.4] Applies to portion of By-law text: "Connections to the structure of elements and components listed in Table 4.1.8.18. shall be designed to support the component or element for gravity loads, shall conform to the requirements of Sentence 4.1.8.18.(1) …"	
	[F20,F22-OP2.3,OP2.4] Applies to portion of By-law text: "Connections to the structure of elements and components listed in Table 4.1.8.18. shall be designed to support the component or element for gravity loads, shall conform to the requirements of Sentence 4.1.8.18.(1) …"	
(7)	(a) [F20,F22-OS2.4]	
	(a) [F20,F22-OP2.3,OP2.4]	
	(b),(c) [F20,F22-OS2.4]	
	(b),(c) [F20,F22-OP2.3,OP2.4]	
	(d) [F20,F22-OS2.4]	
	(d) [F20,F22-OP2.3,OP2.4]	
	(e) [F20,F22-OS2.4]	
	(e) [F20,F22-OP2.3,OP2.4]	
(9)	[F22-OS2.3,OS2.4]	
	[F22-OP2.3,OP2.4]	

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Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
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	Functional Statements and Objectives[1]
(10)	[F22-OS2.1,OS2.3,OS2.4]
	[F22-OP2.1,OP2.3,OP2.4]
(11)	[F20-OS2.1] [F22-OS2.4]
	[F20,F22-OP2.3,OP2.4]
(12)	[F20-OS2.1] [F22-OS2.3]
	[F20-OP2.1] [F22-OP2.3]
(14)	[F22-OS2.4]
(16)	[F20,F22-OS2.4]
	[F20-OP2.3] [F22-OP2.3,OP2.4]
4.1.8.19. Seismic Isolation	
(2)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.20. Seismic Isolation Design Provisions	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(9)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(10)	[F22-OS2.4]
	[F22-OP2.3,OP2.4]
4.1.8.21. Supplemental Energy Dissipation	
(2)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

	Functional Statements and Objectives[(1)]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.1.8.22.	**Supplemental Energy Dissipation Design Considerations**
(1)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(3)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(6)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
(8)	[F20-OS2.1] [F22-OS2.4]
	[F20-OP2.1] [F22-OP2.4]
4.2.2.1.	**Subsurface Investigation**
(1)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.6]
	[F21-OP4.1,OP4.4]
4.2.2.3.	**Field Review**
(1)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.5]
	[F21-OP4.1,OP4.4]
4.2.2.4.	**Altered Subsurface Condition**
(1)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.6]
	[F21-OP4.1,OP4.4]
(2)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.6]
	[F21-OP4.1,OP4.4]
4.2.3.2.	**Preservation Treatment of Wood**
(1)	[F80-OS2.3]
	[F80-OP2.3]
(2)	[F82-OS2.3]
	[F82-OP2.3]
4.2.3.4.	**Prevention of Deterioration of Masonry**
(1)	[F80-OS2.3]
	[F80-OP2.3]
4.2.3.6.	**Protection Against Chemical Attack**
(1)	[F80-OS2.3]
	[F80-OP2.3]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.2.3.8. Steel Piles	
(1)	[F20-OS2.3]
	[F20-OP2.3]
4.2.3.9. High Strength Steel Tendons	
(1)	[F20,F80-OS2.5,OS2.6]
	[F20,F80-OP2.6,OP2.5]
	[F20,F80-OP4.1,OP4.4]
4.2.3.10. Corrosion of Steel	
(1)	[F80-OS2.3]
	[F80-OP2.3]
	[F80-OP4.1]
4.2.4.1. Design Basis	
(1)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.5]
	[F21-OP4.1,OP4.4]
(5)	[F21-OS2.5]
	[F21-OP2.4,OP2.5]
4.2.4.2. Subsurface Investigation	
(1)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.6]
	[F21-OP4.1,OP4.4]
4.2.4.3. Identification	
(1)	[F20-OS2.2,OS2.6] [F21-OS2.6]
	[F20-OP2.2] [F21-OP2.6]
	[F21-OP4.1,OP4.4]
4.2.4.4. Depth of Foundations	
(1)	[F21-OP2.4] Applies to portion of By-law text: "… the *bearing surface* of a *foundation* shall be below the level of potential damage, including damage resulting from *frost action* …"
	[F21-OP2.4] Applies to portion of By-law text: "… the *foundation* shall be designed to prevent damage resulting from *adfreezing* and frost jacking."
(2)	[F21-OP2.4]
4.2.4.5. Sloping Ground	
(1)	[F21-OS2.2]
	[F21-OP2.2,OP2.6,OP2.4]
4.2.4.6. Eccentric and Inclined Loads	
(1)	[F20-OS2.1,OS2.2]
	[F20-OP2.1,OP2.2,OP2.4]
4.2.4.7. Dynamic Loading	
(1)	[F20-OS2.2]
	[F20-OP2.2,OP2.6,OP2.4]
	[F20-OH4]
4.2.4.8. Hydrostatic Uplift	
(1)	[F22-OP2.1,OP2.4]

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Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
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Functional Statements and Objectives[1]	
4.2.4.9. Groundwater Level Change	
(1)	[F21-OP4.1]
4.2.4.10. Permafrost	
(1)	[F20-OS2.2] [F21-OS2.5]
	[F20-OP2.2,OP2.4] [F21-OP2.6,OP2.4]
4.2.4.11. Swelling and Shrinking Soils	
(1)	[F21-OP2.6,OP2.4]
4.2.4.12. Expanding and Deteriorating Rock	
(1)	[F21-OP2.6,OP2.4]
4.2.4.13. Construction on Fill	
	(a) [F20-OS2.2] [F21-OS2.5]
(1)	(b) [F20-OP2.2,OP2.4] [F21-OP2.6,OP2.4]
	(c) [F01-OS1.1]
4.2.5.2. Excavation Construction	
(1)	[F21-OP4.1]
	[F20-OS2.6]
(2)	[F20-OP2.3]
	[F20,F21-OP4.1]
4.2.5.3. Supported Excavations	
(1)	[F20-OS2.6]
	[F21-OP4.1]
4.2.5.4. Unsupported Excavations	
(1)	[F20-OS2.6]
	[F21-OP4.1]
4.2.5.5. Control of Water around Excavations	
(1)	[F60-OS2.6]
	[F60-OP4.1,OP4.4]
4.2.5.6. Loss of Ground	
(1)	[F21-OP4.1]
4.2.5.7. Protection and Maintenance at Excavations	
(1)	[F80-OS2.6]
	[F80-OP4.1]
4.2.5.8. Backfilling	
	(a) [F21-OS2.1]
(1)	(a) [F21-OP2.1,OP2.4]
	[F21-OP4.1]
(2)	[F21-OP2.4]
4.2.6.2. Support of Shallow Foundations	
(1)	[F20-OS2.2]
	[F20-OP2.2,OP2.4] [F21-OP2.4]
4.2.6.3. Incorrect Placement of Shallow Foundations	
(1)	[F20-OS2.2]
	[F20-OP2.2,OP2.4] [F21-OP2.4]

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.2.6.4. Damaged Shallow Foundations	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
4.2.7.2. Design of Deep Foundations	
(3)	[F20-OS2.1,OS2.2] [F21-OS2.5]
	[F20-OP2.1,OP2.2] [F21,F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
(6)	[F20-OP2.1,OP2.4]
4.2.7.3. Tolerance in Alignment and Location	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
4.2.7.4. Incorrect Alignment and Location	
(1)	[F20-OS2.1]
	[F20-OP2.1,OP2.4] [F22-OP2.4]
4.2.7.5. Installation of Deep Foundations	
(1)	[F81-OS2.1] [F21-OS2.2,OS2.6]
	(c) [F21-OP4.1]
	(a),(b) [F81-OP2.1,OP2.4] [F21-OP2.2,OP2.4]
4.2.7.6. Damaged Deep Foundation Units	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
4.2.8.2. Use of Existing Foundations	
(1)	[F20-OS2.1,OS2.2]
	[F20-OP2.1,OP2.2] [F22-OP2.4]
4.3.1.1. Design Basis for Wood	
(1)	[F22,F21,F80-OH4]
	[F20-OS2.1] [F80-OS2.3]
	[F20-OP2.1] [F21,F22-OP2.4] [F80-OP2.3,OP2.4]
4.3.1.2. Glued-Laminated Members	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F21,F22-OP2.4]
	[F21,F22-OH4]
4.3.2.1. Design Basis for Plain and Reinforced Masonry	
(1)	[F21,F22,F80-OH4]
	[F20-OS2.1] [F80-OS2.3]
	[F20-OP2.1] [F22,F21-OP2.4] [F80-OP2.3,OP2.4]
4.3.3.1. Design Basis for Plain, Reinforced and Pre-stressed Concrete	
(1)	[F20-OS2.1] [F80,F81-OS2.3]
	[F20-OP2.1] [F21,F22-OP2.4] [F80,F81-OP2.3,OP2.4]
	[F21,F22,F80,F81-OH4]

Effective November 1, 2019 to December 31, 2020

Table 4.5.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4
Forming Part of Sentence 4.5.1.1.(1)

Functional Statements and Objectives[1]	
4.3.4.1. Design Basis for Structural Steel	
(1)	[F20-OS2.1] [F80-OS2.3]
	[F20-OP2.1] [F20,F22-OP2.4] [F80-OP2.3,OP2.4]
	[F22,F80-OH4]
4.3.4.2. Design Basis for Cold-Formed Steel	
(1)	[F20-OS2.1] [F80-OS2.3]
	[F20-OP2.1] [F20,F22-OP2.4] [F80-OP2.3,OP2.4]
	[F22,F80-OH4]
4.3.5.1. Design Basis for Aluminum	
(1)	[F20-OS2.1] [F80-OS2.3]
	[F20-OP2.1] [F20,F22-OP2.4] [F80-OP2.3,OP2.4]
	[F22,F80-OH4]
4.3.6.1. Design Basis for Glass	
(1)	[F20-OS2.1]
	[F20-OP2.1]
4.4.1.1. Design Basis for Air-Supported Structures	
(1)	[F20-OS2.1] [F80-OS2.3]
	[F20-OP2.1] [F22-OP2.4] [F80-OP2.3]
	[F22-OH4]
4.4.2.1. Design Basis for Parking Structures and Repair Garages	
(1)	[F21,F61,F80-OS2.3]
	[F21,F61,F80-OP2.3,OP2.4]
	[F21,F61,F80-OH4]

Notes to Table 4.5.1.1.:

See Parts 2 and 3 of Division A.