Section 5.10. Objectives and Functional Statements

5.10.1. Objectives and Functional Statements

5.10.1.1. Attributions to Acceptable Solutions

1) For the purpose of compliance with this By-law as required in Clause 1.2.1.1.(1)(a) 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 5.10.1.1. (See Note A-1.2.1.1.(1)(a).)

Table 5.10.1.1.
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5
Forming Part of Sentence 5.10.1.1.(1)

Functional Statements and Objectives[1]	
5.1.4.1. Structural and Environmental Loads	
(1)	(a) [F55,F61,F63-OH1.1,OH1.2,OH1.3]
	[F20-OS3.1] Applies to snow fences and sloped glazing.
	[F61-OH4]
	(a) [F60,F61,F63-OS2.2,OS2.3]
	(a) [F20,F51,F55-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
	(b) [F20-OS2.1] [F21,F22-OS2.3,OS2.4]
	(b) [F20,F21,F22-OH1.1,OH1.2,OH1.3]
	(b) [F20-OH4]
(4)	[F20-OS2.1] [F21,F22-OS2.3,OS2.4]
	[F20,F21,F22-OH1.1,OH1.2,OH1.3]
(5)	(a) [F20-OS2.1] [F21,F22-OS2.3,OS2.4]
	(a) [F20,F21,F22-OH1.1,OH1.2,OH1.3]
	(b) [F20-OS2.1] [F21,F22-OS2.3,OS2.4]
	(b) [F20,F21,F22-OH1.1,OH1.2,OH1.3]
(6)	[F20,F21,F22-OH1.1,OH1.2,OH1.3]
	(a) [F20-OS2.1,OS2.3] (b) and (c) [F21,F22-OS2.3]
	(b) and (c) [F22-OH4]
5.1.4.2. Resistance to Deterioration	
(1)	[F80,F81-OH1.1,OH1.2,OH1.3]
	[F80,F81-OS3.1] Applies to floor assemblies.
	[F80,F81-OH4] Applies to floor assemblies.
	[F80,F81-OS2.3]
	[F80,F81-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
5.2.1.1. Exterior Environmental Loads	
(2)	[F40,F20-OH1.1] [F20-OH1.2,OH1.3]
	[F20-OS2.1]
5.2.1.2. Interior Environmental Loads	
(1)	[F51,F55,F61,F63-OH1.1,OH1.2]
	[F55,F61,F63-OS2.3]
	[F51,F61,F63,F55-OS1.4] Applies where required life safety systems are incorporated in environmental separators.

Table 5.10.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5
Forming Part of Sentence 5.10.1.1.(1)

	Functional Statements and Objectives[1]
5.2.1.3. Environmental Load and Transfer Calculations	
(1)	[F56-OH3.1] Applies to sound transmission calculations.
	[F61,F51,F63,F55-OH1.1,OH1.2] [F51,F61-OH1.3] Applies to heat, air and moisture transfer calculations.
	[F61,F51,F63-OS2.3] Applies to heat, air and moisture transfer calculations.
(3)	[F61,F63,F55-OH1.1,OH1.2] [F61,F55-OH1.3]
	[F20-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
	[F20-OS2.1]
5.2.2.1. Determination of Structural Loads and Effects	
(1)	[F20-OS2.1] [F21,F22-OS2.3,OS2.4]
	[F20,F21,F22-OH1.1,OH1.2,OH1.3]
	[F20,F21,F22-OH4]
(3)	[F20-OS2.1] [F21,F22-OS2.3,OS2.4]
	[F20,F21,F22-OH1.1,OH1.2,OH1.3]
	[F20,F21,F22-OH4]
5.2.2.2. Determination of Wind Load	
(2)	[F20-OS2.1] [F22-OS2.3,OS2.4]
	[F20,F22-OH1.1,OH1.2,OH1.3]
	[F20,F22-OH4]
(3)	[F20-OS2.1] [F22-OS2.3,OS2.4]
	[F20,F22-OH1.1,OH1.2,OH1.3]
	[F20,F22-OH4]
(4)	[F20,F55,F61-OH1.1,OH1.2,OH1.3]
	[F20,F55,F61-OS2.1,OS2.3]
5.2.2.3. Design Procedures	
(1)	[F20-OS2.1] [F22-OS2.3,OS2.4]
	[F20,F22-OH1.1,OH1.2,OH1.3]
	[F20,F22-OH4]
5.3.1.1. Required Resistance to Heat Transfer	
(1)	[F63-OH1.1] [F51,F63-OH1.2]
	[F63-OS2.3]
	[F51,F63-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
5.3.1.2. Properties to Resist Heat Transfer or Dissipate Heat	
(1)	(a),(b) [F51,F63-OH1.1] (c) [F51-OH1.2]
	(b) and (d) [F51,F63-OS2.3]
	(b) [F51,F63-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
	(d) [F30-OS3.1]
5.3.1.3. Location and Installation of Materials Providing Thermal Resistance	
(1)	[F51,F63-OH1.1]
	[F63-OS2.3]

Table 5.10.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5
Forming Part of Sentence 5.10.1.1.(1)

Functional Statements and Objectives[1]	
(2)	[F51,F63-OH1.1,OH1.2]
	[F63-OS2.3]
	[F51,F63-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
5.4.1.1. Required Resistance to Air Leakage	
(1)	(a),(b),(f) [F51,F52,F54,F55-OH1.2] (a),(b),(c),(e) [F40,F55-OH1.1] (c) [F55,F61,F63-OH1.3]
	(c) and (d) [F61,F62,F63,F55-OS2.3]
	(d) [F55,F62-OS3.1]
	(f) [F55,F62-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
(2)	[F40-OH1.1] [F52,F54-OH1.2] [F51,F55,F61,F63-OH1.1,OH1.2,OH1.3]
	[F61,F63-OS2.3]
	[F51,F55-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
5.4.1.2. Air Barrier System Properties	
(1)	[F55-OH1.1,OH1.2,OH1.3]
	[F55-OS2.3]
	[F55-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
(3)	[F61,F51,F63,F55-OH1.1,OH1.2] [F55,F61-OH1.3]
	[F61,F63-OS2.3]
	[F61,F51,F63-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
5.5.1.1. Required Resistance to Vapour Diffusion	
(1)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
(2)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
5.5.1.2. Vapour Barrier Properties and Installation	
(1)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
(2)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
(3)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
5.6.1.1. Required Protection from Precipitation	
(1)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
5.6.1.2. Installation of Protective Materials	
(1)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
(2)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]

Table 5.10.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5
Forming Part of Sentence 5.10.1.1.(1)

Functional Statements and Objectives[1]	
5.6.2.1. Sealing and Drainage	
(1)	[F61,F62-OH1.1,OH1.2,OH1.3]
	[F61,F62-OS2.3]
5.6.2.2. Accumulation and Disposal	
(1)	[F30-OS3.1]
(2)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
(3)	[F61-OH1.1,OH1.2,OH1.3]
	[F60-OS2.3] [F21-OS2.2]
	(b) [F21-OP2.6]
(4)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
5.7.1.2. Required Protection	
(1)	[F60-OH1.1,OH1.2,OH1.3]
	[F60-OS2.3]
(2)	[F60-OH1.1,OH1.2,OH1.3]
	[F60-OS2.2,OS2.3]
5.7.3.2. Required Protection	
(1)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
5.7.3.3. Waterproofing	
(1)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
5.7.3.4. Where Dampproofing is Permitted	
(1)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
(2)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
5.8.1.1. Required Protection	
(1)	[F56-OH3.1]
(2)	[F56-OH3.1]
5.8.1.2. Determination of Sound Transmission Ratings	
(1)	[F56-OH3.1]
(2)	[F56-OH3.1]
5.8.1.4. Detailed Method for Calculating ASTC	
(1)	[F56-OH3.1]
(2)	[F56-OH3.1]
(3)	[F56-OH3.1]
(4)	[F56-OH3.1]
(5)	[F56-OH3.1]
(6)	[F56-OH3.1]
(7)	[F56-OH3.1]

Table 5.10.1.1. *(continued)*
Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5
Forming Part of Sentence 5.10.1.1.(1)

Functional Statements and Objectives[1]	
5.8.1.5. Simplified Method for Calculating ASTC	
(1)	[F56-OH3.1]
(2)	[F56-OH3.1]
(3)	[F56-OH3.1]
(4)	[F56-OH3.1]
(5)	[F56-OH3.1]
(6)	[F56-OH3.1]
5.9.1.1. Compliance with Applicable Standards	
(1)	[F20,F22,F51,F54,F55,F61,F63,F80-OH1.1,OH1.2] [F41,F55-OH1.1] [F55,F61,F80-OH1.3]
	[F20,F80-OS2.1] [F20,F22,F51,F61,F63,F80-OS2.3] [F51-OS2.5]
	[F80,F61,F63-OS3.1]
	[F80,F61,F63-OH4] Applies to floor assemblies.
	(a) [F61,F63-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
	[F20,F80-OP2.1,OP2.3] [F22,F80-OP2.4]
	[F42-OH2.5]
5.9.2.2. Applicable Standards	
(1)	[F20,F55,F61,F63-OH1.1,OH1.3] [F20,F55,F61,F63,F81-OH1.2]
	[F20,F55,F61-OS2.3]
	[F20,F55,F61-OP2.3]
5.9.2.4. Heat Transfer	
(2)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
5.9.3.3. Heat Transfer	
(2)	[F63-OH1.1,OH1.2]
	[F63-OS2.3]
5.9.3.4. Air Leakage	
(2)	[F55,F63-OH1.1,OH1.2,OH1.3]
	[F55,F63-OS2.3]
	[F55-OS1.4] Applies where required life safety systems are incorporated in environmental separators.
5.9.3.5. Water Penetration	
(2)	[F61-OH1.1,OH1.2,OH1.3]
	[F61-OS2.3]
5.9.4.1. Structural Loads, Heat Transfer, Air Leakage, Vapour Diffusion and Water Penetration	
(1)	(b) [F61,F62-OH1.1,OH1.2,OH1.3]
	(b) [F61,F62-OS2.3]

Notes to Table 5.10.1.1.:

(1) See Parts 2 and 3 of Division A.

BUILDING BY-LAW 2019 – CITY OF VANCOUVER

Building Permit No._____
(for Building Official's use)

SCHEDULE D

Forming Part of Sentence 5.1.2.2.(2), Division B of the Building By-law

COMMITMENT FOR BUILDING ENVELOPE PROFESSIONAL REVIEW

Notes:

i) This letter must be submitted before issuance of a *building permit*.
ii) This letter is endorsed by: Architectural Institute of B.C. and the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
iii) In this letter the words in italics have the same meaning as in the Building By-law.

To: The *Chief Building Official*

RE: _____

Address of Project (Print)

The undersigned *Building Envelope Professional* has been retained with respect to the above referenced *project*, and gives a commitment of responsibility for *Building Envelope Professional* design review and enhanced *field review* for components and assemblies as required **in Article 5.1.2.2. in Part 5 of Division B**, of the Building By-law, and as the *Building Envelope Professional* in their professional discretion considers to be necessary, for the *project* designed by,

_____
Name of *registered professional* signing for 'Architectural' items of Schedule B letter (Print)

who is providing the *Chief Building Official* with a Schedule B 'ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW' letter covering 'Architectural' items. The undersigned will sign and provide copies of all reports to the *registered professional* responsible for 'Architectural' items, and copies of these reports shall also be available on site, for review by the City of Vancouver District Building Inspector. The undersigned undertakes to notify the *Chief Building Official* in writing as soon as practical if their contract is terminated at any time.

Professional's Seal and Signature

_____
Name (Print)

_____
Address of (Print)

_____
City Postal Code

_____
Telephone Email (Print)

Certified Professional's Stamp and Signature

(if applicable)

(If the *Building Envelope Professional* is a member of a firm, complete the following.)

I am a member of the firm; _____and I sign this letter on behalf of the firm.
(Print Name of Firm)

NOTE: The above letter must be signed by a *Building Envelope Professional*. The Building By-Law defines a *Building Envelope Professional* to mean a person who is a member of the Architectural Institute of British Columbia or the Association of Professional Engineers and Geoscientists of the Province of British Columbia qualified by virtue of training or experience to provide building enclosure services.

_____
CRP's Initials

1 of 1

BUILDING BY-LAW 2019 – CITY OF VANCOUVER

Building Permit No._____
(for Building Official's use)

SCHEDULE C-D

Forming Part of Sentence 5.1.2.2.(3), Division B of the Building By-law

COMPLETION OF BUILDING ENVELOPE PROFESSIONAL REVIEW

Notes:

i) This letter must be submitted after the completion of the *project* at final inspection.
ii) This letter is endorsed by: Architectural Institute of B.C. and the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
iii) In this letter the words in italics have the same meaning as in the Building By-law.

To: The *Chief Building Official*

RE: _____

Address of Project (Print)

I have fulfilled my obligations for Building Envelope Professional design review and enhanced field review as per my previously submitted letter of COMMITMENT FOR BUILDING ENVELOPE PROFESSIONAL REVIEW. The components and assemblies of the *project* reviewed substantially comply with Article 5.1.2.2. in Part 5 of Division B, of the Building By-law, and with the plans and supporting documents, including all amendments thereto, which were accepted by the City of Vancouver in support of the application for the building permit.

Professional's Seal and Signature

_____
Name (Print)

_____
Address of (Print)

_____
City Postal Code

_____
Telephone (Print) Email

Certified Professional's Stamp and Signature
(if applicable)

(If the *Building Envelope Professional* is a member of a firm, complete the following.)

I am a member of the firm; _____and I sign this letter on behalf of the firm.
(Print Name of Firm)

NOTE: The above letter must be signed by a *Building Envelope Professional*. The Building By-Law defines a *Building Envelope Professional* to mean a person who is a member of the Architectural Institute of British Columbia or the Association of Professional Engineers and Geoscientists of the Province of British Columbia qualified by virtue of training or experience to provide building enclosure services.

_____
CRP's Initials

1 of 1