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#### Review this document in conjunction with the National Building Code – 2023 Alberta Edition

|  | PART 5 – CODE UPDATE INFORMATION  |  |  |  |  |
|--|---|--|--|--|--|
| NBC(AE) 2019   | NBC(AE) 2023  |  |  |  |  |
| 5.4.1.1. Required Resistance to Air Leakage<br>(See Note A-5.4.1.1.)   | <b>5.4.1.1. Required Resistance to Air Leakage</b><br>(See Note A-5.4.1.1.)   |  |  |  |  |
| <ul> <li>1) Where a <i>building</i> component or assembly separates interior <i>conditioned space</i> from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as to <ul> <li>a)</li> <li>e) minimize the ingress of airborne radon from the ground with an aim to controlling the indoor radon concentration-to an acceptable level, and</li> <li>f)</li> </ul> </li> </ul> | <ul> <li>1) Where a <i>building</i> component or assembly separates interior <i>conditioned space</i> from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as to <ul> <li>a)</li> <li>e) minimize the ingress of airborne radon <u>and other <i>soil</i> gases</u> from the ground with an aim to controlling the indoor <del>radon concentration <u>concentrations</u> of these gases</del> to an acceptable level, and</li> <li>f)</li> </ul> </li> </ul> |  |  |  |  |
| <b>2)</b> Except as provided in Sentence (3), an <i>air barrier system</i> shall be installed to provide the principal resistance to air leakage.  | 2) Except as provided in Sentence ( <del>3</del> 7), an <i>air barrier system</i> shall be installed designed and constructer to provide the principal resistance to air leakage to meet the requirements of Sentence (1).  |  |  |  |  |
|  | 3) The air barrier system shall incorporate air barrier assemblies that meet the appropriate<br>Performance Class as defined in Table 5.4.1.1. (See Note A-5.4.1.1.(3).)  |  |  |  |  |
|  | <u>Table 5.4.1.1.</u><br><u>Maximum Air Leakage Rates for Air Barrier Assemblies</u><br>Forming Part of Sentences 5.4.1.1.(3) and (6) and 5.4.1.2.(1) and (2)   |  |  |  |  |
|  | Performance Class         Maximum Air Leakage Rate, L/(s×m²), at a<br>Pressure Differential of 75 Pa  |  |  |  |  |
|  | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  |  |  |  |  |
|  | <ul> <li>4) The air barrier system shall be designed and constructed to be continuous         <ul> <li>a) across construction, control and expansion joints,</li> <li>b) across junctions between different air barrier assemblies, and</li> <li>c) around penetrations through air barrier assemblies.</li> </ul> </li> <li>(See Note A-5.4.1.1.(4).)</li> <li>5) The structural design of air barrier assemblies, including junctions between air barrier assemblies, subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> </ul>   |  |  |  |  |
|  |   |  |  |  |  |
|  | <ul> <li>6) The maximum air leakage rates specified in Table 5.4.1.1. are permitted to be increased where it can be shown that the higher rate will not adversely affect any of</li> <li>a) the health or safety of the building users,</li> <li>b) the intended use of the building, or</li> <li>c) the operation of building services.</li> </ul>   |  |  |  |  |
| <ul> <li><b>3)</b> An <i>air barrier system</i> is not required where it can be shown that uncontrolled air leakage will not adversely affect any of</li> <li>a) the health or safety of <i>building</i> users,</li> </ul>   | <ul> <li>37) An <i>air barrier system</i> is not required where it can be shown that uncontrolled air leakage will not adversely affect any of</li> <li>a) the health or safety of <i>building</i> users,</li> </ul>  |  |  |  |  |

#### Comments

Inserted new Sentences (3) to (6).

Note: Sentences (3) to (6) have been relocated from Article 5.4.1.2. as follows:

Sentence 5.4.1.1.(3) was 5.4.1.2.(1) with revisions. Sentence 5.4.1.1.(4) was 5.4.1.2.(3) with revisions. Sentence 5.4.1.1.(5) was 5.4.1.2.(4) with revisions. Sentence 5.4.1.1.(6) was 5.4.1.2.(2) with revisions.

| Interference         Interference<  |   | PART 5 – CODE UPDATE INFORMATION  |
|---|---|---|
| <ul> <li>b) the interded use of the bioling, or</li> <li>c) the operation of building services.</li> <li>Centers 4.5.1.1.1.11</li> <li>5.1.2. Art barrier System Properties</li> <li>3.1.2. Art barrier System Properties</li> <li>3.1.2.2. Art barrier System Properties</li> <li>3.1.2.2.2.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.</li></ul>   | NBC(AE) 2019  | NBC(AE) 2023  |
| a) the operation of building services.       c) the operation of building services.         E4.12. Air farrier Sptem Properties       E4.12. Air farrier Sptem Properties (2), and barrier materials included to provide the principal resistance of a single specified and services.       Executes A.5.1.1711         E4.12. Air farrier Sptem Properties       E4.12. Air farrier Sptem Properties (2), and barrier materials include generation and control of a single specified and services.       Executes A.5.1.1711         E4.12. Air farrier Sptem Properties       E4.12. Air farrier Sptem Properties (2), and barrier strength and control of a single specified and services.       Executes A.5.1.271, and services (2), and barrier strength and control of a single specified and services.         (a) The variant feedoge of the Sptematic A.5.1.2.17, and services (2), and the specified and the specified and services (2), and the specified and services (2), and the specified and services (  | b) the intended use of the <i>building</i> , or   | b) the intended use of the <i>building</i> , or   |
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| <ul> <li>5.4.1.2. At Barrier System Properties</li> <li>3) Becards a provided in Sentence (2), at barrier materials intended to provide the principal resistance to site insign and intendence (2), at barrier materials intended to provide the principal resistance of 3-Fe. When sentence to Associate intendence (2), at barrier materials intended to provide the principal resistance of 3-Fe. When sentence to Associate intendence (2), at barrier materials intended to provide the principal resistance of 3-Fe. When sentence to Associate intendence (2), at barrier materials intended to provide the principal resistance of 3-Fe. When sentence to Associate intendence (2), at barrier materials intended to provide the principal resistance of 3-Fe. When sentence to Associate intendence (2), at barrier materials intended to provide the principal resistance of 3-Fe. When sentence to Associate intendence of 3-Fe. When sentence and a principal resistance of 3-Fe. When sentence is a provide intendence of 3-Fe. When sentence is a principal resistance of 3-Fe. When sentence is a previous intendence of 3-Fe. When sentence is a provide intendence of 3-Fe. When sentence is a provide intendence of 3-Fe. When sentence is a previous intendence of a fee i</li></ul>   |   | <u>(See Note A-5.4.1.1.(7).)</u>  |
| <ul> <li>5.1.2. At Partie's System Properties</li> <li>5.1.3. At Partie's System Properties</li> <li>5.1.4. Determine Partie</li> <li>5.1.4.2. At Partie's System Properties</li> <li>5.1.4.2. At Partie's System Properie</li></ul>  |   |   |
| <ul> <li>1) Encort so provided in Sentence [2], all barrier materials intended to provide the principal resistance to the file sentence [2], all barrier materials intended to provide the principal resistance of 55 Pa, when tested in accordance to ASTM 2278, "Air Permance of Building Materials," or</li></ul>  | 5.4.1.2. Air Barrier System Properties  | 5.4.1.2. Air Barrier-System Properties Assemblies   |
| 11 testing is provide in sense (i), air darm materias intende to provide the principal resistions of the principal resisting of the principal resistions of the princip   |   |   |
| Total reductor from an includage characteristic not greater than 0.001 [[]] conformed (CMULCS42], when stated in accordinate to STME 21/0, "Mir Permence of Building Wireholds," for a specification."         a)       Incertain (CMULCS42], "Mir Smire Materials - Specification."         b)       Conformed (CMULCS42], "Mir Smire Materials - Specification."         c)       The air leakage limit specification Sections of Development and Association Section Sections of Development and Associa   | 1) Except as provided in Sentence (2), air barrier materials intended to provide the principal resistance                 | <b>1)</b> Except as provided in Sentence (2), air barrier materials intended to provide the principal resistance  |
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| bit ends of bit of a second  | a) nave an air leakage characteristic not greater than 0.02 L/(s·m <sup>2</sup> ) measured at an air pressure             | a) - nave an air leakage characteristic not greater than 0.02 L/(S·M <sup>-</sup> ) measured at an air pressure<br>difference of ZE De when tested in accordance to ASTM E 2178. "Air Dermonnes of Duilding |
| b) contention convolute-S741_*** Barrier Materials - Specification."       b) environment of the provide instruction (2) is permitted to be increased where it can be shown that the higher rate of lexibage will not adversely affect any of a) the head hadron of the building, or:       c) the increased where it can be shown that the higher rate of lexibage will not adversely affect any of a) the head hadron of the building, or:       c) the head hadron of the building assemble, and       c) the head hadron of the building assemble, and       c) the head hadron of the building assemble, and       c) the head hadron of building assemble, and       c) the out hadron of building assemble, and       c) across particulation, control and sepanding pints, b) across particulation of building assembles, and       c) across particulation, control and sepanding pints, b) across particulation of avaliant sequentities building assembles, and       c) across particulation, control and sepanding pints, b) across particulation of avaliant sequentities building assemble, and       c) Execute as provided in Sentences (2) and (3), air barrier assembles not in contact with the ground shall comply with Article 51.4.1.1 and Subsection 5.2.2.         4) The structural design of air barrier systems installed in assemblies subject to air pressure loads shall comply with Article 51.4.1.1 and Subsection 5.2.2.       c) acros particulation, control  | Materials " or  | Materials " or  |
| (see Note A-5.4.1.2.(1) and (2).)       2) The air lexisge limit specified in Sertence (1) is permitted to be increased where it can be shown that the higher rate of lexisge will be address of affect any of a limit head to a diversely affect   | h) conform to CAN/LILC-S741 "Air Barrier Materials – Specification "  | b) conform to CAN/ULC-S741 "Air Parrier Materials - Specification"  |
| 1 The set is basing limit specified in Sentence (1) is permitted to be increased where it can be shown that the higher rate of realize will not adversely affect any of 3). the health or safety of the building services.       1) the intended use of the building services.         3) the cheater of realize will not adversely affect any of 3). The cheater of realize will not adversely affect any of 3). The cheater of realize will not adversely affect any of 3). The cheater of realize will not adversely affect any of 3). The cheater of realize will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of real material method is not adversely affect any of 3). The cheater of realizes will not adversely affect any of 3). The cheater of real material method is not adversely affect any of 3). The cheater of real material method is not adversely affect any of 3). The cheater of real material method is not adversely affect and 3). The cheater of real material method is not adversely affect and 3). The adversely affect and  | (See Note A-5.4.1.2 (1) and (2) )   | $\frac{1}{1000}$ See Note A-5.4.1.2 (1) and (2) )   |
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| that the higher rate of leakage will not adversely affect any of       i) the health or addy of the building users;         i) the health or addy of the building services;       is the health or addy of the building users;         i) the health or addy of the building services;       is the health or addy of the building users;         i) the intended use of the building services;       is end building services;         (see Note A-5.4.1.2.(1) and (?).)       is end building services;         i) a cross punctions between different building assemblies; and       is across punctions between different building assemblies; and         i) a cross punctions through the building assemblies subject to air pressure loads shall comply with Article 5.1.4.1 and Subsection 5.2.2.       is the health or adversely affect any of building estemblies; and end end end end end end end end end e   | 2) The air leakage limit specified in Sentence (1) is permitted to be increased where it can be shown                     | 2) The air leakage limit specified in Sentence (1) is permitted to be increased where it can be shown   |
| <ul> <li>in the health or safety of the building, or</li> <li>the indend use of the building, or</li> <li>the operation of building services.</li> <li>(See Note A 5.4.12 (1) and (2).)</li> <li>The oir borie system shall be continuous</li> <li>across construction, control and expansion joints,</li> <li>across exploration of bounding assemblies, and</li> <li>bacept as provided in Solution, control and expansion joints,</li> <li>across exploration of bounding assemblies, and</li> <li>bacept as provided in Solution, control and exploration of the building assemblies, and</li> <li>bacept as provided in Solution assemblies aspacing individe the primary resistrance to air leadance astruct</li></ul>  | that the higher rate of leakage will not adversely affect any of  | that the higher rate of leakage will not adversely affect any of  |
| <ul> <li>b) the intended use of the building, or</li> <li>c) the operation of building services.</li> <li>(See Note A 5.4.1.2 (1) and (2).</li> <li>3) The orbit between different building assembles, and</li> <li>c) across punctions through the building assembles, and</li> <li>c) around penetrations through the building assembles, and</li> <li>c) around penetrations through the building assembles, and</li> <li>d) across punctions through the building assembles, and</li> <li>d) across approximation, control and expansion joints,</li> <li>b) across punctions through the building assembles, and</li> <li>d) across punctions through the building assembles, and</li> <li>d) across approximation of a dependencies systems installed in assemblies subject to air pressure loads shall</li> <li>comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>4) The structural design of air barrier assemblies not in contact with the ground shall</li> <li>a) across for a dependencies (2) and (3), air barrier assemblies not in contact with the ground shall.</li> <li>a) across for a dependencies (2) and (3), air barrier assemblies on the contact with the ground shall.</li> <li>a) across for a dependencies (2) and (3), air barrier assemblies on the contact with the ground shall.</li> <li>a) across for a dependencies (2) and (3), air barrier assemblies - Specification," and building assembly.</li> <li>b) an et or exceed the selected Performance Class of Table 5.4.1.1, and subsection 5.2.2.</li> <li>b) and across are across on a air barrier material intended to provide the dimary resistance to air leakage of a barrier assemblies covered in Subsections 5.2.</li> <li>c) and (2) are across of the selected Performance Class of Table 5.4.1.1, and (2).</li> <li>c) and the across of a barrier assemblies in contact with the ground shall minimize the inarres of airbarre assemblies in contact with the ground shall minimize the inarres of airbarre assemblies ino</li></ul>  | a) the health or safety of the <i>building</i> users,   | a) the health or safety of the building users,  |
| <ul> <li>c) the operation of building services.</li> <li>(see Note A-S.4.1.2(1) and (2))</li> <li>(3) The <i>air barrier system</i> shall be continuous</li> <li>a) across construction, control and expansion joints,</li> <li>b) across junctions between different <i>building</i> assembles, and</li> <li>c) around penetrations through the <i>building</i> assembles.</li> <li>d) The structural design of <i>air barrier</i> systems installed in assemblies subject to air pressure loads shall</li> <li>comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>d) Except as provided in Sentences (2) and (3), air barrier assemblies not in contact with the ground shall</li> <li>a) contage with CAN/ULC 5742, "Standard for Air Barrier Assemblies - Specification," and</li> <li>b) meet the safetcad Performance Class of Table 5.4.1.1. and</li> <li>c) around penetrations of convolutions</li> <li>a) and constructured</li> <li>a) and constructured</li> <li>a) and constructured</li> <li>b) with Article 5.1.4.1.</li> <li>c) around penetrations of a constructured</li> <li>b) with Article 5.1.4.1.</li> <li>c) around penetrations of a constructured</li> <li>b) with Article 5.1.4.1.</li> <li>c) around penetrations of a constructured</li> <li>c) and constructured</li> <li>c) around penetrations of a constructure of a constructured</li> <li>c) around penetratis incoded to constructed<td>b) the intended use of the <i>building</i>, or</td><td><del>b) the intended use of the <i>building,</i> or</del></td></li></ul>   | b) the intended use of the <i>building</i> , or   | <del>b) the intended use of the <i>building,</i> or</del>   |
| (See Note A 5.4.1.2 (1) and (2).)       (See Note A 5.4.1.2 (1) and (2).)         3) The oir barrier system shall be continuous       a) arross construction, control and expansion joints,         a) arross junctions between different building assemblies, and       c) around penetrations through the building assemblies, and         c) around penetrations through the building assemblies subject to air pressure loads shall       d) The structural design of air barrier system sinstalled in assemblies subject to air pressure loads shall         d) The structural design of air barrier system sinstalled in assemblies subject to air pressure loads shall       d) The structural design of air barrier assemblies not in contact with the ground site for air barrier assemblies of air barrier assemblies on the contact with the ground shall         a) The structural design of air barrier system sinstalled in assemblies subject to air pressure loads shall       d) The structural design of air barrier assemblies not in contact with the ground shall         a) The structural design of air barrier system sinstalled in assemblies subject to air pressure loads shall       a) Longet on exceed the selected Performance Class of Table 5.4.1.1, and subject for Air Barrier Assemblies and constructed         a) Longet on exceed the selected Performance Class of Table 5.4.1.1, and built be air barrier system sinted in accordance with CAN/UIC 5742, "Standard for Air Barrier Assemblies and an intervalue on exceed the selected Performance Class of Table 5.4.1.1, and and all on exceed the selected Performance Class of Table 5.4.1.1, and and all on exceed the selected Performance Class of Table 5.4.1.1, and all and trair passemblies in contact with the ground shall minimize   | c) the operation of <i>building</i> services.   | c) the operation of <i>building</i> services.   |
| <ul> <li>a) The <i>ir barrier system</i> shall be continuous         <ul> <li>a) across construction, control and expansion joints,</li> <li>b) across junctions between different <i>building</i> assemblies, and</li> <li>c) around penetrations through the <i>building</i> assemblies around the <i>ground</i> shall</li> <li>conform with Article 51.4.1. and Subsection 5.2.2.</li> </ul> </li> <li>1) Except as provided in Sentences (2) and (3), air barrier assemblies not in contact with the ground shall</li> <li>a) conform with CAN/ULC 5742, "Standard for Air Barrier Assemblies - Specification," and b). meet the selected Performance Class of Table 5.4.1.1, and</li> <li>b) context or sceled the selected Performance Class of Table 5.4.1.1, and</li> <li>b) context or sceled the selected Performance Class of Table 5.4.1.1, and</li> <li>c) the arear or acceed the selected Performance Class of Table 5.4.1.1, and</li> <li>b) the arear or acceed the selected Performance Class of Table 5.4.1.2, and</li> <li>b) the arear or acceed the selected Performance Class of Table 5.4.1.2, and</li> <li>b) the arear or acceed the selected Performance Class of Table 5.4.1.2, and</li> <li>b) the arear or acceed the selected Performance Class of Table 5.4.1.2, and</li> <li>b) t</li></ul>  | (See Note A-5.4.1.2.(1) and (2).)   | (See Note A-5.4.1.2.(1) and (2).)   |
| <ul> <li>a) The drib burrier system shall be continuous</li> <li>a) across junctions between different building assembles, and</li> <li>c) around penetrations through the building assembles.</li> <li>4) The structural design of <i>ab burrier systems</i> installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>d) The structural design of <i>ab burrier systems</i> installed in assemblies subject to air pressure loads shall</li> <li>a) across punctions through the building assembly.</li> <li>d) The structural design of <i>ab burrier systems</i> installed in assemblies subject to air pressure loads shall</li> <li>comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>d) The structural design of <i>ab burrier systems</i> installed in assemblies and in contact with the ground shall</li> <li>a) across punctions of <i>ab burrier systems</i>.</li> <li>d) The structural design of <i>ab burrier systems</i>.</li> <li>d) The the selected performance class of Table 5.4.1.1, and burrier the sthe requireme</li></ul> |   |   |
| <ul> <li>a) across construction, control and expansion joints,</li> <li>b) across junctions between different building assemblies, and</li> <li>c) around penetrations through the building assembly.</li> <li>4) The structural design of air barrier systems installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>4) The structural design of air barrier systems installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>4) The structural design of air barrier assemblies not in contact with the ground shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>4) The structural design of air barrier assemblies not in contact with the ground shall</li> <li>a) conform with CAN/ULC-S742, "Standard for Air Barrier Assemblies - Specification," and b).</li> <li>b) with air least one air barrier assemblies not evaluated in accordance with CAN/ULC-S742, "Standard for Air Barrier Assemblies - Specification," and b).</li> <li>b) with air least one air barrier assemblies in contact with the ground shall mets the requerements of CAN/ULC-S742, "Standard for Air Barrier Assemblies, so the specification," and b).</li> <li>b) with air least one air barrier assemblies in contact with the ground shall meets the requerements of CAN/ULC-S742, "Standard for Air Barrier Assemblies, so the specification," and b).</li> <li>b) with air least one air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall meet the air barrier assemblies in contact with the ground shall min</li></ul>  | 3) The air barrier system shall be continuous   | 3) The air barrier system shall be continuous   |
| <ul> <li>b) across junctions between different building assembly.</li> <li>a) across junctions between different building assembly.</li> <li>a) across junctions between different building assembly.</li> <li>b) across junctions between different building assembly.</li> <li>d) the structural design of air barrier systems installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>d) Except as provided in Sentences (2) and (3), air barrier assemblies subject to air pressure loads shall al. a. conform with CAN/ULC-5742, "Standard for Air Barrier Assemblies - Specification," and bimet the selected Performance Class of Table 5.4.1.1. (see Note A-5.4.1.2.(1))</li> <li>2) Air barrier assemblies on evaluated in accordance with CAN/ULC-5742, "Standard for Air Barrier Assemblies - Specification," and bimet the selected Performance Class of Table 5.4.1.1, and</li> <li>b) the test of the selected Performance Class of Table 5.4.1.1, and</li> <li>b) the test of the selected Performance Class of Table 5.4.1.1, and</li> <li>b) the test on a convict the primary resistance to air leakage that meets the requirements of CAN/ULC-5741, "Standard for Air Barrier Assemblies - Specification," shall be designed and constructed</li> <li>a) to meet or exceed the selected Performance Class of Table 5.4.1.1, and</li> <li>b) that test on a air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-5741, "Standard for Air Barrier Assemblies - Specification," is all below grade in those Subsections.</li> <li>d) Below grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other subsections.</li> <li>d) The direct sound reduction index for the separating assembly in situ shall be determined using classe (a) or (b), depending on the type of construction:</li> <li>a) for a lightweight separating wall or floor assembly with</li></ul>   | a) across construction, control and expansion joints,   | a) across construction, control and expansion joints,   |
| <ul> <li>c) around penetrations through the building assembly.</li> <li>q) The structural design of <i>air barrier systems</i> installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>q) The structural design of <i>air barrier systems</i> installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>q) The structural design of <i>air barrier systems</i> installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.</li> <li>q) The structural design of <i>air barrier systems</i> installed in assemblies - Specification," and b). meet the selected Performance Class of Table 5.4.1.1. (See Note A-5.4.1.2.(11))</li> <li>(See Note A-5.4.1.2.(12))</li> <li>(Sh</li></ul>  | b) across junctions between different <i>building</i> assemblies, and   | b) across junctions between different <i>building</i> assemblies, and   |
| 4) The structural design of <i>air barrier systems</i> installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.       4) The structural design of <i>air barrier systems</i> installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.         1) Except as provided in Sentences (2) and (3), air barrier assemblies not in contact with the ground shall       a) conform with CAN/ULC-5742, "Standard for Air Barrier Assemblies - Specification," and b) meet to exceed the selected Performance Class of Table 5.4.1.1, (See Note A.5.4.1.2,(1).)         2) Air barrier assemblies not evaluated in accordance with CAN/ULC-5742, "Standard for Air Barrier Assemblies - Specification," shall be designed and constructed         a) to meet or exceed the selected Performance Class of Table 5.4.1.1, and         b) with Article 5.1.4.2.(2).)         3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier gerformance class of Table 5.4.1.2.(2).         3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier gerformance criteria defined in those Subsections.         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         a) for a lightweight separating will or floor assembly with wood or steel framing, the index shall be daten as equal to the sound transmission loss: without correction:         a) for a lightweight separating will or floor assembly with wood or steel framing, the index shall be daten as equal to the sound transensision loss: without correction: </td <td>c) around penetrations through the <i>building</i> assembly.</td> <td>c) around penetrations through the <i>building</i> assembly.</td>  | c) around penetrations through the <i>building</i> assembly.  | c) around penetrations through the <i>building</i> assembly.  |
| <ul> <li>The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:</li> <li>a) for a lightweight separating will or floor assembly with upd or steel framing, the index shall be determined using Clause (a) or (b), depending on the type of construction:</li> <li>a) for a lightweight separating will or floor assembly with upd or steel framing, the index shall be determined using Clause (a) or (b), depending on the type of construction:</li> <li>a) for a lightweight separating will or floor assembly with upd or steel framing, the index shall</li> </ul>   | <b>1)</b> The structural design of <i>air harrier systems</i> installed in assemblies subject to air pressure loads shall | A) The structural design of <i>air barrier systems</i> installed in assemblies subject to air pressure loads shall  |
| <ul> <li>Compty interviewe STATE the dedection State.</li> <li>1) Except as provided in Sentences (2) and (3), air barrier assemblies not in contact with the ground shall</li> <li>a) conform with CAN/ULC-S742, "Standard for Air Barrier Assemblies – Specification," and b). meet the selected Performance Class of Table 5.4.1.1. (See Note A.5.4.1.2.(1).)</li> <li>2) Air barrier assemblies not evaluated in accordance with CAN/ULC-S742, "Standard for Air Barrier Assemblies – Specification," shall be designed and constructed</li> <li>a) to meet to exceed the selected Performance Class of Table 5.4.1.1., and</li> <li>b) with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials – Specification,"</li> <li>(See Note A.5.4.1.2.(2).)</li> <li>3) Air barrier assemblies (covered in Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier performance criteria defined in those Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier radon and other soling pass. (See Note A.5.4.1.2.(2).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with used or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with used or steel framing, the index shall be taken as equal to the sound transmission loss. without correction:</li> </ul> </li> </ul>   | comply with Article 5.1.4.1 and Subsection 5.2.2  | 4) The structural design of <i>un burner systems</i> instance in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.  |
| 1) Except as provided in Sentences (2) and (3), air barrier assemblies not in contact with the ground shall       a) conform with CAN/ULC-5742, "Standard for Air Barrier Assemblies – Specification," and b) meet the selected Performance Class of Table 5.4.1.1. (See Note A-5.4.1.2.(1).)         2) Air barrier assemblies not evaluated in accordance with CAN/ULC-5742, "Standard for Air Barrier Assemblies – Specification," and b) meet the selected Performance Class of Table 5.4.1.1. (See Note A-5.4.1.2.(1).)         2) Air barrier assemblies not evaluated in accordance with CAN/ULC-5742, "Standard for Air Barrier Assemblies – Specification," shall be designed and constructed         a) to meet or exceed the selected Performance Class of Table 5.4.1.1. and         b) with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-5741, "Standard for Air Barrier Materials – Specification," (See Note A-5.4.1.2.(2).)         3) Air barrier assemblies covered in Subsections 5.9.25.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.         4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil pases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Classe (a) or (b), depending on the type of construction:         a) for a lightweight separating woll or floor assembly with wood or steel framing, the index shall be been as equal to the sound transmission loss. Without correction:         a) for a lightweight sep  |   | compty with Article 5.1.4.1. and Subsection 5.2.2.  |
| shall       a)       conform with CAN/ULC-S742, "Standard for Air Barrier Assemblies – Specification," and b)         meet the selected Performance Class of Table 5.4.1.1.       (See Note A-5.4.1.2.(1).)         2) Air barrier assemblies not evaluated in accordance with CAN/ULC-S742, "Standard for Air Barrier Assemblies - Specification," shall be designed and constructed         a)       to meet or exceed the selected Performance Class of Table 5.4.1.1., and         b)       with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials - Specification," (See Note A-5.4.1.2.(2).)         3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.         4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC       5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:       a) for a lightweight separating will or floor assembly with wood or steel framing, the index shall be as equal to the sound transmission loss, without correction:         a) for a lightweight separating wall or floor assembly with upond or steel framing, the index shall be as equal to the sound transmission loss. without correction:         a) for a lightweight separating wall or floo  |   | 1) Except as provided in Sentences (2) and (3), air barrier assemblies not in contact with the ground   |
| <ul> <li>a) conform with CAN/ULC-5742, "Standard for Air Barrier Assemblies – Specification," and b) meet the selected Performance Class of Table 5.4.1.1, (See Note A-5.4.1.2.(1).)</li> <li>2) Air barrier assemblies not evaluated in accordance with CAN/ULC-5742, "Standard for Air Barrier Assemblies – Specification," shall be designed and constructed a). to meet or exceed the selected Performance Class of Table 5.4.1.1, and b). with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-5741, "Standard for Air Barrier Materials – Specification."</li> <li>(See Note A-5.4.1.2.(2).)</li> <li>3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier performance criteria defined in those Subsections.</li> <li>4) Below-arade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other <i>soll</i> gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be determined using Clause (a) or (b), depending on the type of construction:             <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be determined using Clause (a) or (b), depending on the type of construction:</li></ul></li></ul></li></ul>   |   | shall   |
| b)mett the selected Performance Class of Table 5.4.1.1,         (See Note A-5.4.1.2.(1).)         2) Air barrier assemblies not evaluated in accordance with CAN/ULC-5742, "Standard for Air Barrier Assemblies - Specification," shall be designed and constructed         a) to meet or exceed the selected Performance Class of Table 5.4.1.1, and         b)with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-5741, "Standard for Air Barrier Materials - Specification,"         (See Note A-5.4.1.2.(2).)         3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.         4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taten as equal to the sound transmission loss, without correction:         a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taten as equal to the sound transmission loss.  |   | a) conform with CAN/ULC-S742, "Standard for Air Barrier Assemblies – Specification," and  |
| See Note A-5.4.1.2.(1).)         2) Air barrier assemblies not evaluated in accordance with CAN/ULC-S742, "Standard for Air Barrier Assemblies – Specification," shall be designed and constructed         a) to meet or exceed the selected Performance Class of Table 5.4.1.1., and         b). with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials – Specification,"         (See Note A-5.4.1.2.(2).)         3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.         4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         a) for a lightweight separating use of thoor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss. without correction:         a) for a lightweight separating use moly out transmission loss. without correction:  |   | b) meet the selected Performance Class of Table 5.4.1.1.  |
| <ul> <li>2) Air barrier assemblies not evaluated in accordance with CAN/ULC-S742, "Standard for Air Barrier Assemblies - Specification," shall be designed and constructed         <ul> <li>a) to meet or exceed the selected Performance Class of Table 5.4.1.1., and</li> <li>b) with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials - Specification."</li> <li>(See Note A-5.4.1.2.(2))</li> </ul> </li> <li>3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.</li> <li>4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other <i>soil</i> gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>5.8.1.4. Detailed Method for Calculating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with lightweight wood or steel framing, the index shall be taken as equal to the sound transmission loss.</li> </ul> </li> </ul>   |   | (See Note A-5.4.1.2.(1).)   |
| <ul> <li>2) Air barrier assemblies not evaluated in accordance with CAI/ULC-S742, "Standard for Air Barrier Assemblies - Specification," shall be designed and constructed</li> <li>a) to meet or exceed the selected Performance Class of Table 5.4.1.1, and</li> <li>b) with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials - Specification,"</li> <li>(See Note A-5.4.1.2.(2).)</li> <li>3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier performance criteria defined in those Subsections.</li> <li>4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating on the type of construction:</li> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss. without correction:</li> </ul> </li> </ul>  |   |   |
| Assemblies – Specification,"       Shall be designed and constructed         a)       to meet or exceed the selected Performance Class of Table 5.4.1.1., and         b)       with at least one air barrier material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials – Specification,"         Specification,"       Specification,"         (See Note A-5.4.1.2.(2).)       3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.         4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other <i>soil</i> gases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC       5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:       a) for a lightweight separating wall on floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:         a) for a lightweight separating wall on floor assembly with up to correction:       a) for a lightweight separating wall or floor assembly with up to correction:         a) for a lightweight separating wall on floor assembly with up to correction:       b) taken as equal to the sound transmission loss. without correction:   |   | 2) Air barrier assemblies not evaluated in accordance with CAN/ULC-S742, "Standard for Air Barrier  |
| <ul> <li>a)</li></ul>   |   | Assemblies – Specification," shall be designed and constructed  |
| <ul> <li>b) With at least one air partner material intended to provide the primary resistance to air leakage that meets the requirements of CAN/ULC-S741, "Standard for Air Barrier Materials – Specification."</li> <li>(See Note A-5.4.1.2.(2).)</li> <li>3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.</li> <li>4) Below-arade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating will or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss. without correction:</li> <li>a) for a lightweight separating wall or floor assembly with up of construction:</li> <li>b) taken as equal to the sound transmission loss. without correction:</li> </ul> </li> </ul>  |   | a) to meet or exceed the selected Performance Class of Table 5.4.1.1., and  |
| <ul> <li>Indicting description of the requirements of CAN/OLC-3741, Standard for Air Barrier Materials – Specification."</li> <li>(See Note A-5.4.1.2.(2).)</li> <li>3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.</li> <li>4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall</li> </ul> </li> </ul>   |   | b) with at least one air barrier material intended to provide the primary resistance to air leakage   |
| <ul> <li>Specification</li></ul>  |   | that meets the requirements of CAN/OLC-S741, Standard for Air Barrier Materials –   |
| <ul> <li>(See Note AS:4:12(2))</li> <li>3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.</li> <li>4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>5.8.1.4. Detailed Method for Calculating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>  |   | $\frac{\text{Specification.}}{(\text{See Note A = 4,1,2,(2)})}$   |
| 3) Air barrier assemblies covered in Subsections 5.9.2., 5.9.3. and 5.9.4. shall meet the air barrier performance criteria defined in those Subsections.         4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:   |   | ( <u>1966 Note A-3.4.1.2.(2).)</u>  |
| <ul> <li>performance criteria defined in those Subsections.</li> <li><u>4</u>) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li><b>5.8.1.4. Detailed Method for Calculating ASTC</b></li> <li><b>4)</b> The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>  |   | <b>3)</b> Air barrier assemblies covered in Subsections 5.9.2., 5.9.3, and 5.9.4, shall meet the air barrier  |
| 4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)         5.8.1.4. Detailed Method for Calculating ASTC         4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with use of or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> 4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with out correction:</li> <li>be taken as equal to the sound transmission loss, without correction:</li> </ul> 4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with out or rection:</li> <li>be taken as equal to the sound transmission loss.</li> </ul>  |   | performance criteria defined in those Subsections.  |
| <ul> <li>4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>   |   |   |
| <ul> <li>radon and other soil gases. (See Note A-5.4.1.2.(4).)</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction:         <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>   |   | 4) Below-grade air barrier assemblies in contact with the ground shall minimize the ingress of airborne   |
| <ul> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>   |   | radon and other soil gases. (See Note A-5.4.1.2.(4).)   |
| <ul> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> </ul> </li> <li>5.8.1.4. Detailed Method for Calculating ASTC</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>   |   |   |
| <ul> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> <li>be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall be taken as equal to the sound transmission loss, without correction:</li> </ul> </li> </ul>   | 5.8.1.4. Detailed Method for Calculating ASTC   | 5.8.1.4. Detailed Method for Calculating ASTC   |
| <ul> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) The direct sound reduction index for the separating assembly in situ shall be determined using</li> <li>4) Clause (a) or (b), depending on the type of construction:</li> <li>a) for a lightweight separating wall or floor assembly with use or steel framing, the index shall be taken as equal to the sound transmission loss without correction:</li> </ul>  | (1) The direct sound reduction index for the congrating assembly in situ shall be determined using                        | A) The direct sound reduction index for the constating accombly in gity shall be determined using   |
| <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing, the index shall</li> <li>be taken as equal to the sound transmission loss, without correction:</li> </ul>   | Gause (a) or (b) depending on the type of construction:   | (a) or (b) depending on the type of construction:   |
| be taken as equal to the sound transmission loss, without correction:   | a) for a lightweight senarating wall or floor assembly with wood or steel framing the index shall                         | a) for a lightweight separating wall or floor assembly with lightweight wood or steel framing the   |
|   | be taken as equal to the sound transmission loss, without correction:   | index shall be taken as equal to the sound transmission loss, without correction:   |

## Comments

All sentences have been deleted and replaced with new ones.

Note the contents of Article 5.4.1.2. have been moved to Article 5.4.1.1. with revisions. See Article 5.4.1.1. above for details.

|   | PART 5 – CODE UPDATE INFORMATION   |   |  |   |   |   |  |  |
|---|--|---|--|---|---|---|--|--|
|   |  | NBC(AE) 2019  |  |   | NBC(AE) 2023  |   |  |  |
| b) for a h<br>detern<br>presen<br>Buildin<br>Rooms  | eavyweight separating w<br>nined in accordance with<br>ted in ISO 15712-1, "Bu<br>gs From the Performand<br>." | vall or floor assembly of concrete or masonry, the index sha<br>in the detailed method for structure-borne transmission<br>ilding Acoustics - Estimation of Acoustic Performance of<br>ce of Elements - Part 1: Airborne Sound Insulation Between | be b) for<br>hor<br>for<br>Acc   | <ul> <li>b) for a heavyweight separating wall or floor assembly of concrete or masonry that behaves like homogeneous panel, the index shall be determined in accordance with the detailed method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation o Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Soun Insulation Between Rooms-" (see Note A-5.8.1.4.(4)(b)).</li> </ul>  |   |   |  |  |
| <ul> <li>5) The flanking sound reduction index for each flanking path at each edge of the separating assembly shall be determined using Clause (a), (b) or (c), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing and connected lightweight flanking assemblies with wood or steel framing, the index shall be taken as equal to the normalized flanking level difference re-normalized for the <i>ASTC</i> field situation in accordance with Annex F of ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms";</li> <li>b) for a heavyweight separating wall or floor assembly of concrete or masonry and connected flanking assemblies of concrete or masonry, the index shall be determined in accordance with the detailed method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms";</li> </ul> </li> <li>b) for a heavyweight separating wall or floor assembly of concrete or masonry and connected flanking assemblies of concrete or masonry, the index shall be determined in accordance with the detailed method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms";</li> <li>c) for a mixture of lightweight framed assemblies and heavyweight concrete or masonry assemblies, the index shall be determined in accordance with Clause (a) or (b).</li> </ul> |  |   | y <b>5)</b> The flanki<br>shall be deter<br>al com<br>al com<br>fiel<br>Acco<br>Insu<br>b) for<br>ith <u>hor</u><br>Esti<br>Airl<br>c) for<br>ma<br>ind  | <ul> <li>5) The flanking sound reduction index for each flanking path at each edge of the separating assembly shall be determined using Clause (a), (b) or (c), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with lightweight wood or steel framing and connected lightweight flanking assemblies with lightweight wood or steel framing, the index shall be taken as equal to the normalized flanking level difference re-normalized for the <i>ASTC</i> field situation in accordance with Annex F of ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms,";</li> <li>b) for a heavyweight separating wall or floor assembly of concrete or masonry that behaves like a homogeneous panel and connected flanking assemblies of concrete or masonry that behave like a homogeneous panel, the index shall be determined in accordance with the detailed method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms"; (see Note A-5.8.1.4.(4)(b)).</li> <li>c) for a mixture of assemblies with lightweight framed assemblies and heavyweight concrete or masonry wood or steel framing and assemblies that behave like a homogeneous panel, the index shall be determined in accordance with the detailed method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms"; (see Note A-5.8.1.4.(4)(b)).</li> </ul> </li> </ul> |   |   |  |  |
| 5.8.1.5. Simplified Method for Calculating ASTC   |  |   | 5.8.1.5. Sim   | 5.8.1.5. Simplified Method for Calculating ASTC   |   |   |  |  |
| <ul> <li>5) The weighted flanking sound reduction index for each flanking path at each edge of the separating assembly shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with wood or steel framing and connected lightweight flanking assemblies with wood or steel framing, the index shall be taken as equal to the weighted normalized flanking level difference re-normalized for the <i>ASTC</i> field situation in accordance with Annex F of ISO 15712-1, "Building Acoustics – Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms";</li> <li>b) for a heavyweight separating wall or floor assembly of concrete or masonry and connected flanking assemblies of concrete or masonry, the index shall be determined in accordance with the simplified method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms."</li> </ul> </li> </ul>   |  | g <b>5)</b> The weigh<br>assembly sh<br>al con<br>ion sha<br>the<br>Esti<br>Airl<br>b) for<br>ith <u>hor</u><br>g <u>like</u><br>me<br>Esti<br>Airl   | <ul> <li>5) The weighted flanking sound reduction index for each flanking path at each edge of the separating assembly shall be determined using Clause (a) or (b), depending on the type of construction: <ul> <li>a) for a lightweight separating wall or floor assembly with lightweight wood or steel framing and connected lightweight flanking assemblies with lightweight wood or steel framing, the index shall be taken as equal to the weighted normalized flanking level difference re-normalized for the <i>ASTC</i> field situation in accordance with Annex F of ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms";</li> <li>b) for a heavyweight-separating wall or floor assembly of concrete or masonry that behaves like a homogeneous panel and connected flanking assemblies-of concrete or masonry that behave like a homogeneous panel, the index shall be determined in accordance with the simplified method for structure-borne transmission presented in ISO 15712-1, "Building Acoustics - Estimation of Acoustic Performance of Buildings From the Performance of Elements - Part 1: Airborne Sound Insulation Between Rooms."</li> </ul> </li> </ul> |   |   |   |  |  |
| 5.9.1.1. Compli   | 5.9.1.1. Compliance with Applicable Standards 5.9.1.1. Compliance with Applicable Standards                    |   |  |   |   |   |  |  |
| Table 5.9.1.1.Standards Applicable to Environmental Separators and Assemblies Exposed to the ExteriorForming Part of Sentence 5.9.1.1.(1)   |  | Standa  | Table 5.9.1.1.           Standards Applicable to Environmental Separators and Assemblies Exposed to the Exterior           Forming Part of Sentence 5.9.1.1.(1)  |   |   |   |  |  |
| Issuing Agency  | / Document Number  | Title of Document   | Issuing Age  | ency Document Number  | Title of Document   |   |  |  |
|   |  |   | ANSI   | <u>A135.6</u>   | Engineered Wood Siding  |   |  |  |
|   |  |   | ASTM   | <u>C1280</u>  | Standard Specification for Application of<br>Exterior Gypsum Panel Products for Use as<br>Sheathing |   |  |  |
| CGSB  | CAN/CGSB-11.5-M  | Hardboard, Precoated, Factory Finished, for   | CGSB   | CAN/CGSB-11.5-M   | Hardboard, Precoated, Factory Finished, for   |   |  |  |
|   |  |   | CGSB   | <u>CAN/CGSB-12.9</u>  | Spandrel glass  | ] |  |  |
|   |  |   |  |   |   |   |  |  |

# Comments

Table of standards has been updated, some new standards have been added and some standards have been removed.

PART 5 – CODE UPDATE INFORMATION

| NBC(AE) 2019   |                          | NBC(AE) 2023  |  |                   |                          |  |       |
|--|--------------------------|---|--|-------------------|--------------------------|--|-------|
| CGSB   | CAN/CGSB-12.10-M         | Glass, Light and Heat Reflecting  |  | CGSB              | CAN/CGSB-12.10-M         | Glass, Light and Heat Reflecting                       |       |
| CGSB   | CAN/CGSB-12.11-M         | Wired Safety Glass  |  | CGSB              | CAN/CGSB-12.11-M         | Wired Safety Glass                                     |       |
| CGSB   | 37-GP-56M                | Membrane, Modified, Bituminous,   |  | CGSB              | <del>37-GP-56M</del>     | Membrane, Modified, Bituminous,                        |       |
|  |                          | Prefabricated, and Reinforced for Roofing   |  |                   |                          | Prefabricated, and Reinforced for Roofing              |       |
| CGSB   | CAN/CGSB-93.3-M          | Prefinished Galvanized and Aluminum-Zinc  |  | CGSB              | CAN/CGSB-93.3-M          | Prefinished Galvanized and Aluminum-Zinc               |       |
|  |                          | Alloy Steel Sheet for Residential Use   |  |                   |                          | Alloy Steel Sheet for Residential Use                  |       |
| CGSB   | CAN/CGSB-93.4            | Galvanized Steel and Aluminum-Zinc Alloy  |  | CGSB              | CAN/CGSB-93.4            | Galvanized Steel and Aluminum-Zinc Alloy               |       |
|  |                          | Coated Steel Siding, Soffits and Fascia,  |  |                   |                          | Coated Steel Siding, Soffits and Fascia,               |       |
|  |                          | Prefinished, Residential  |  |                   |                          | Prefinished, Residential                               |       |
| CSA  | A123.1/A123.5            | Asphalt Shingles Made From Organic Felt and   |  | <del>CSA</del>    | <del>A123.1/A123.5</del> | Asphalt Shingles Made From Organic Felt and            |       |
|  |                          | Surfaced with Mineral Granules/Asphalt  |  |                   |                          | Surfaced with Mineral Granules/Asphalt                 |       |
|  |                          | Shingles Made From Glass Felt and Surfaced  |  |                   |                          | Shingles Made From Glass Felt and Surfaced             |       |
|  |                          | with Mineral Granules   | _  |                   |                          | with Mineral Granules                                  |       |
|  |                          |   |  | <u>CSA</u>        | <u>A123.5</u>            | Asphalt shingles made from glass felt and              |       |
|  |                          |   | _  |                   |                          | surfaced with mineral granules                         |       |
|  |                          |   | _  | <u>CSA</u>        | <u>CAN/CSA-A123.16</u>   | Asphalt-coated glass-base sheets                       |       |
|  |                          |   |  | <u>CSA</u>        | <u>A123.23</u>           | Product specification for polymer-modified             |       |
|  |                          |   | 4  |                   |                          | bitumen sheet, prefabricated and reinforced            |       |
| CSA  | CAN3-A123.52-M           | Asphalt Shingle Application on Roof Slopes 1:6  |  | <del>CSA</del>    | CAN3-A123.52-M           | Asphalt Shingle Application on Roof Slopes 1:6         |       |
|  |                          | to Less Than 1:3  | _  |                   |                          | to Less Than 1:3                                       |       |
|  |                          |   |  | ULC               | <u>CAN/ULC-S717.1</u>    | Standard for Flat Wall Insulating Concrete Form        |       |
|  |                          |   |  |                   |                          | <u>(ICF) Units – Material Properties</u>               |       |
| <ul> <li>Notes to Table 5.9.1.1.:</li> <li>(1) See Note A-Table 5.9.1.1.</li> <li>(2) The <i>flame-spread rating</i> of gypsum board shall be determined in accordance with CAN/ULC-S102 in lieu of ASTM E 84 as indicated in ASTM C 1396/C 1396M.</li> <li>(3) The <i>flame-spread rating</i> of glass mat gypsum panels shall be determined in accordance with CAN/ULC-S102 in lieu of ASTM E 84 as indicated in ASTM C 1658/C 1658M.</li> <li>(4) For the purpose of compliance with Part 5, ASTM D 3019 shall only apply to the non-fibered and non-asbestos-fibered types of asphalt roll roofing.</li> </ul> |                          | <ul> <li>Notes to Table 5.9.1.1.:</li> <li>(1) See Note A-Table 5.9.1.1.</li> <li>(2) The <i>flame-spread rating</i> of gypsum board shall be determined in accordance with CAN/ULC-S102 in lieu of ASTM E-84 as indicated in ASTM C-1396/C-1396M.</li> <li>(3) The <i>flame-spread rating</i> of glass-mat-gypsum panels shall be determined in accordance with CAN/ULC-S102 in lieu of ASTM E-84 as indicated in ASTM C-1658/C-1658M.</li> <li>(4) For the purpose of compliance with Part 5, ASTM D-3019/D3019M shall only apply to the non-fibered and non-asbestos-fibered types of asphalt roll roofing.</li> </ul> |  |                   |                          |  |       |
| 5.9.2.3. Structural and Environmental Loads, Air Leakage and Water Penetration   |                          |   | 5.9.2.3. Structural and Environmental Loads, Air Leakage and Water Penetration                     |                   |                          |  |       |
| <b>1)</b> Windows, doors, skylights and their components shall be designed and constructed in accordance with  |                          | <b>1)</b> Windows, doors, skylights and their components shall be designed and constructed in accordance with   |  |                   |                          |  |       |
| a) Article 5.1.4.1., Section 5.4. and Section 5.6., or   |                          |   | a) Article 5.1.4.1., Section 5.4. and Section 5.6., where they are not covered in the scope of the |                   |                          |  |       |
|  |                          |   |  | standar           | ds listed in Sentence 5  | <u>.9.2.2.(1),</u> or                                  |       |
| b) Article   | 5.9.2.2., where they are | e covered in the scope of the standards listed in Se  | ntence   | b) Article 5      | 5.9.2.2., where they are | e covered in the scope of the standards listed in Sent | .ence |
| 5.9.2.2.(1).   |                          |   | 5.9.2.2.(1).   |                   |                          |  |       |
| (See Note A-5.9.   | .2.3.(1).)               |   |  | (See Note A-5.9.2 | 2.3.(1).)                |  |       |
|  |                          |   |  |                   |                          |  |       |

## Comments