



## SOUND SEPARATION BETWEEN SIDE-BY-SIDE DWELLING UNITS

Semi-Detached House and 3-4 unit Row House. See NBC-2019(AE):B:9.11 for detailed requirements  
 Sound Separation within a House with Secondary Suite

### COMPLETE AND SUBMIT THIS LETTER WITH THE BUILDING PERMIT APPLICATION

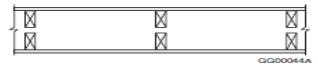
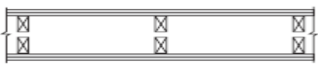
TO: City of Edmonton

Safety Codes Permits and Inspections  
 3<sup>rd</sup> Floor, 10111 – 104 AVE NW  
 Edmonton, AB T5J 0J4

DATE: \_\_\_\_\_

RE: PROJECT ADDRESS (or LEGAL DESCRIPTION) \_\_\_\_\_

Sound Transmission Class (STC) is a rating of sound isolation of a building wall or floor/ceiling assembly. Apparent Sound Transmission Class (ASTC) quantifies sound transmission directly through separating assembly and indirectly via adjoining construction. Higher ratings indicate better sound isolation.

SELECT ↓	Sound separation from another dwelling and other spaces in which noise may be generated will be provided by the following:		
<input type="radio"/>	STC 50+ Assembly with Adjoining Construction per Tables 9.10.3.1.-A & -B & footnotes, and 9.11.1.4.		
<input type="radio"/>	SELECT ↓	Wall #	Shortened Description from NBC(AE) Table 9.10.3.1.-A(1)
			<b>Fire-Resistance Rating<sup>(2)(3)</sup></b>
			<b>Load-bearing</b> <b>Non-Load-bearing</b>
<input type="radio"/>	<input type="radio"/>	W13a	2 rows 2x4@16oc or 24oc on separate 2x4 plates set 1" apart With <b>3½"</b> batts <b>each side</b> <sup>(6)(10)</sup> <b>1 layer of ½"</b> Type X gypsum board <sup>(7)</sup> <b>each side</b>
			
			<b>1h</b> <b>1h</b>
<input type="radio"/>	<input type="radio"/>	W14	2 rows 2x4@16oc or 24oc on separate 2x4 plates set 1" apart <b>2 layers gypsum board one side;</b> <b>1 layer gypsum bd other</b>
		W14a	<b>3½"</b> batts <b>each side</b> <sup>(6)(10)</sup> / <b>all ½"</b> Type X gypsum board <sup>(7)</sup>
		W14c	<b>3½"</b> batts <b>one side</b> <sup>(6)(10)</sup> / <b>all ½"</b> Type X gypsum board <sup>(7)</sup>
		W15	2 rows 2x4@16oc or 24oc on separate 2x4 plates set 1" apart <b>2 layers gypsum board each side</b>
		W15b	<b>3½"</b> batts <b>each side</b> <sup>(6)(10)</sup> / <b>all ½"</b> Type X gypsum board <sup>(7)</sup>
		W15e	<b>3½"</b> batts <b>one side</b> <sup>(6)(10)</sup> / <b>all ½"</b> Type X gypsum board <sup>(7)</sup>
		W15h	<b>No batts / all ½"</b> Type X gypsum board <sup>(7)</sup>
			
			<b>1 h</b> <b>1½ h</b>
			<b>1 h</b> <b>1½ h</b>
			<b>1 h</b> <b>1½ h</b>
<b>Shortened footnotes (See NBC-(AE) for complete footnotes and Table contents)</b> (2) FRR and STC ratings for 2x4, or 2x6 with 5½" batts; also to HRA-finger-joined lumber (See A-9.23.10.4.(1)). (3) For all fire-resistance ratings, the given spacing for framing is a maximum value. (4) STC per installation details required for gypsum board in CSA A82.31-M. <b>Assemblies with STC of 50 or more require acoustical sealant around electrical boxes and other openings, and at the junction of intersecting walls and floors. Gasket-flanged boxes may be exempted.</b> (5) There can be no visible cracks/ voids on surfaces. (6) Sound absorptive material includes fibre processed from rock, slag, glass or cellulose fibre <b>filling at least 90% of the cavity</b> thickness but NOT overfilling to point of causing outward pressure on the finishes. (7) ½" regular, ½" Type X, ½" Type X gypsum board must conform to 9.29.5.2.; fastener type/spacing per 9.29.5. or CSA A82.31-M. Surface gypsum board layer on both sides of the wall must have its <b>joints taped and finished</b> . (8) Absorptive material required for the higher fire-resistance rating is rockwool; mass of at least 4.8 kg/m <sup>2</sup> for 5½" thickness or 2.8 kg/m <sup>2</sup> for 3½" thickness in the stud cavities on both sides and completely filling the wall cavity,			
<input type="radio"/>	Prescriptive method STC50+ derived via <a href="#">NRC Soundpaths</a> or equivalent <b>submitted with application</b>		
<input type="radio"/>	Acoustical Engineer Design for ASTC47+ <b>submitted with application</b> per NBC(AE): B:5.8.1.4. / 5.8.1.5		
<input type="radio"/>	Acoustical Engineer As-Built Test for ASTC47+ <b>to be submitted</b> prior to the final building inspection		
I will notify the Building Permit issuer if the construction intention is modified during the project.			
Type name to sign OR print form and sign			
SIGNATURE OF BUILDING PERMIT APPLICANT		PRINT NAME	