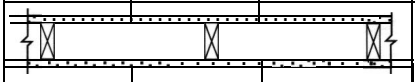
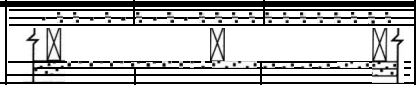
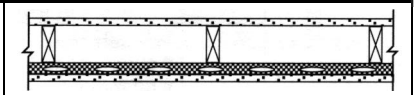
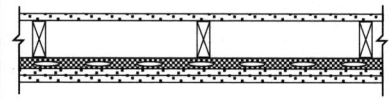
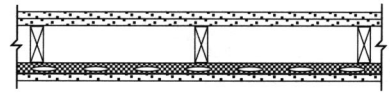
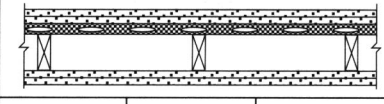
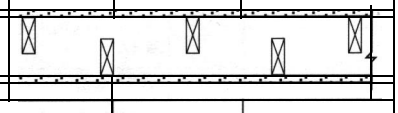
Table 4 - Fire and Sound Resistance of Walls
(Excerpt from Table A-9.1 0.3.1 .A 1995 National Building Code of Canada)

Type of Wall	Wall No.	Description	Fire Resistance Rating (9)		Typical Sound Transmission Class (3,4,9)
			Load-Bearing	Non-Load Bearing	
WOOD STUDS SINGLE ROW LOAD-BEARING OR NON-LOAD-BEARING	Wl	. 38 mm x 89 mm studs spaced 400 mm or 800 mm o.c. . with or without absorptive material .1 laver of gypsum board on each side			
	Wla	Wl with .89 mm thick absorptive material (5) .15.9 mm Type X gypsum board (1)	l h	l h	38
	Wlb	Wl with .89 mm thick absorptive material (5) ▪ 12.7 mm Type X gypsum board (1)	45 min [l h (6)]	45 min [1 h (6)]	34
	Wlc	Wl with .89 mm thick absorptive material (5) . 12.7 mm regular gypsum board (1,7)	30 min	30 min [45 min (6)]	32
	Wld	Wl with . no absorptive material .15.9 mm Type X gypsum board (1)	l h	l h	32
	Wle	Wl with . no absorptive material ▪ 12.7 mm Type X gypsum board (1)	45 min	45 min	32
	w2	.38 mm x 89 mm studs spaced 400 mm or 600 mm o.c. . with or without absorptive material .2 layers of gypsum board on each side			
	W2a	W2 with .89 mm thick absorptive material (5) .15.9 mm Type X gypsum board (1)	1.5h	2 h	38
	W2b	W2 with .89 mm thick absorptive material (5) ▪ 12.7 mm Type X gypsum board (1)	l h	1.5h	38
	W2c	W2 with .89 mm thick absorptive material (5) . 12.7 mm reaular gypsum board (1)	45 min	l h	36
	W2d	W2 with . no absorptive material . 15.9 mm Type X gypsum board (1)	1.5 h	2 h	36
	W2e	W2 with ▪ no absorptive material ▪ 12.7 mm Type X gypsum board (1)	l h	1.5 h	35
	W2f	W2 with . no absorptive material ▪ 12.7 mm'regular gypsum board (1)	45 min	l h	34
	W3	. 38 mm x 89 mm studs spaced 400 mm or 600 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels on one side spaced 400 mm or 600 mm o.c. .1 laver of gypsum board on each side			
	W3a	W3 with . studs spaced 400 mm o.c. .15.9 mm Type X gypsum board (1)	45 min	l h	45
	W3b	W3 with . studs spaced 600 mm o.c. .15.9 mm Type X gypsum board (1)	45 min	l h	48

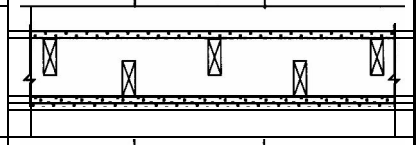
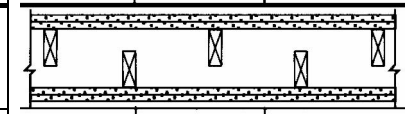
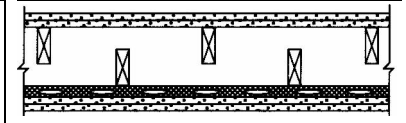
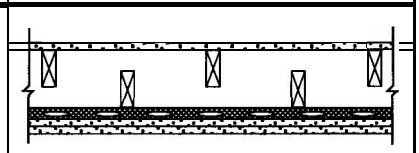
Fire and Sound Resistance of Walls *(cont'd)*

Type of Wall	Wall No.	Description	Fire Resistance Rating (9)		Typical Sound Transmission Class (3,4,9)
			Load-Bearing	Non-Load Bearing	
WOOD STUDS SINGLE ROW LOAD-BEARING OR NON-LOAD-BEARING	W3c	W3 with ■ studs spaced 400 mm or 600 mm o.c. ■ 12.7 mm Type X gypsum board (1)	45 min	45 min	43
	W4	■ 38 mm x 89 mm studs spaced 400 mm or 600 mm o.c. ■ 89 mm thick absorptive material (5) ■ resilient metal channels on one side spaced 400 mm or 600 mm o.c. ■ 2 layers of gypsum board on resilient metal channel side ■ 1 layer of gypsum board on other side			
	W4a	W4 with ■ studs spaced 400 mm o.c. ■ 15.9 mm Type X gypsum board (1)	1 h	1 h [1.5 h (6)]	51
	W4b	W4 with ■ studs spaced 600 mm o.c. ■ 15.9 mm Type X gypsum board (1)	1 h	1 h [1.5 h (6)]	54
	W4c	W4 with ■ studs spaced 400 mm o.c. ■ 12.7 mm Type X gypsum board (1)	45 min [1 h (6)]	1 h	49
	W4d	W4 with ■ studs spaced 600 mm o.c. ■ 12.7 mm Type X gypsum board (1)	45 min [1 h (6)]	1 h	53
	W5	■ 38 mm x 89 mm studs spaced 400 mm or 600 mm o.c. ■ 89 mm thick absorptive material (5) ■ resilient metal channels on one side spaced 400 mm or 600 mm o.c. ■ 1 layer of gypsum board on resilient metal channel side ■ 2 layers of gypsum board on other side			
	W5a	W5 with ■ studs spaced 400 mm o.c. ■ 15.9 mm Type X gypsum board (1)	45 min	1 h	51
	W5b	W5 with ■ studs spaced 600 mm o.c. ■ 15.9 mm Type X gypsum board (1)	45 min	1 h	54
	W5c	W5 with ■ studs spaced 400 mm o.c. ■ 12.7 mm Type X gypsum board (1)	45 min	1 h	49
	W5d	W5 with ■ studs spaced 600 mm o.c. ■ 12.7 mm Type X gypsum board (1)	45 min	1 h	53
	W6	■ 38 mm x 89 mm studs spaced 400 mm or 600 mm o.c. ■ with or without absorptive material ■ resilient metal channels on one side ■ 2 layers of gypsum board on each side			
	W6a	W6 with ■ studs spaced 400 mm or 600 mm o.c. ■ 89 mm thick absorptive material (5) ■ resilient metal channels spaced 400 mm o.c. ■ 15.9 mm Type X gypsum board (1)	1.5 h	2 h	55
	W6b	W6 with ■ studs spaced 400 mm or 600 mm o.c. ■ 89 mm thick absorptive material (5) ■ resilient metal channels spaced 600 mm o.c. ■ 15.9 mm Type X gypsum board (1)	1.5 h	2 h	58

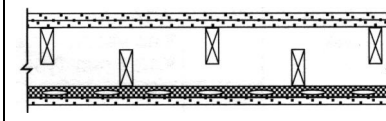
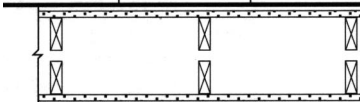
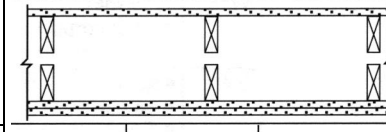
Fire and Sound Resistance of Walls (cont'd)

Type of Wall	Wall No.	Description	Fire Resistance Rating (9) Load-Bearing	Fire Resistance Rating (9) Non-Load Bearing	Typical Sound Transmission Class (3,4,9)
WOOD STUDS SINGLE Row LOAD-BEARING OR NON-LOAD-BEARING	W6c	W6 with . studs spaced 400 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels spaced 400 mm o.c. ■ l2.7 mm Type X gypsum board (1)	l h	1.5 h	53
	W6d	W6 with . studs spaced 400 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels spaced 600 mm o.c. ■ l2.7 mm Type X gypsum board (1)	l h	1.5 h	55
	W6e	W6 with . studs spaced 600 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels spaced 400 mm o.c. ■ l2.7 mm Type X gypsum board (1)	l h	1.5 h	55
	W6f	W6 with . studs spaced 600 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels spaced 600 mm o.c. ■ l2.7 mm Type X gypsum board (1)	l h	1.5 h	58
	W6g	W6 with . studs spaced 400 mm or 600 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels spaced 400 mm o.c. . 12.7 mm regular gypsum board (1)	45 min	l h	50
	W6h	W6 with ▪ studs spaced 400 mm or 600 mm o.c. .89 mm thick absorptive material (5) . resilient metal channels spaced 600 mm o.c. . 12.7 mm regular gypsum board (1)	45 min	l h	52
	W6i	W6 with . studs spaced 400 mm or 600 mm o.c. . no absorptive material ▪ resilient metal channels spaced 400 mm or 600 mm o.c. ■ l5.9 mm Type X gypsum board (1)	1.5 h	2 h	47
	W6j	W6 with . studs spaced 400 mm or 600 mm o.c. m no absorptive material ▪ resilient metal channels spaced 400 mm or 600 mm o.c. ■ l2.7 mm Type X gypsum board (1)	l h	1.5 h	46
WOOD STUDS Two Rows STAGGERED On 38 MM X 140 MM PLATE _OAD-BEARING OR NON-LOAD-BEARING	**W7**	▪ two rows 38 mm x 89 mm studs each spaced 400 mm or 600 mm o.c. staggered on common 38 mm x 140 mm plate . with absorptive material .1 layer of gypsum board on each side			
	W7a	W7 with .89 mm thick absorptive material on one side or 65 mm thick on each side (5) ■ l5.9 mm Type X gypsum board (1)	**Ih**	Ih	47
	W7b	W7 with .89 mm thick absorptive material on one side or 65 mm thick on each side (5) ■ l2.7 mm Type X gypsum board (1)	45 min [1 h (6)]	45 min [1 h (6)]	45
	W7c	W7 with . 12.7 mm regular gypsum board (1,7) .89 mm thick absorptive material on one side or 65 mm thick on each side (5)	30 min	4	2

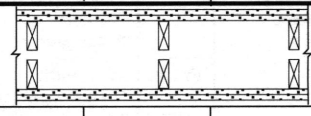
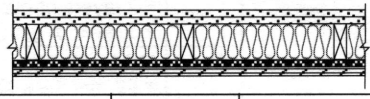
Fire and Sound Resistance of Walls *(cont'd)*

Type of Wall	Wall No.	Description	Fire Resistance Rating (9) Load-Bearing	Fire Resistance Rating (9) Non-Load Bearing	Typical Sound Transmission Class (3,4,9)
Wood Studs Two Rows Staggered On 38 mm X 140 mm Plate Load-Beaaine OR Non-Load-Bearing	W8	▪ Two rows 38 mm x 89 mm studs each spaced 400 mm or 600 mm O.C. staggered on common 38 mm x 140 mm plate ▪ 89 mm thick absorptive material on one side or 65 mm thick on each side (5) .2 layers of gypsum board on one side .1 layer of gypsum board on other side			
	W8a	W8 with .15.9 mm Type X gypsum board (1)	1 h	1.5 h	52
	W8b	W8 with ■ l2.7 mm Type X gypsum board (1)	45 min	1 h	50
	W9	. two rows 38 mm x 89 mm studs each spaced 400 mm or 600 mm o.c. staggered on common 38 mm x 140 mm plate . with or without absorptive material ■ 2 layers of gypsum board on each side			
	W9a	W9 with .89 mm thick absorptive material on one side or 65 mm thick on each side (5) ▪ 15.9 mm Type X gypsum board (1)	1.5 h	2 h	56
	W9b	W9 with .89 mm thick absorptive material on one side or 65 mm thick on each side (5) ● l2.7 mm Type X gypsum board (1)	1 h	1.5h	55
	w9c	W9 with .89 mm thick absorptive material on one side or 65 mm thick on each side (5) . 12.7 mm reaular gypsum board (1)	45 min	l h	53
	W9d	W9 with ▪ no absorptive material ▪ 15.9 mm Type X gypsum board (1)	1.5h	2h	48
	W10	. two rows 38 mm x 89 mm studs each spaced 400 mm or 600 mm o.c. staggered on common 38 mm x 140 mm plate . with or without absorptive material . resilient metal channels on one side spaced 400 mm or 600 mm o.c. .2 layers of gypsum board on each side			
	W10a	W10 with ▪ 89 mm thick absorptive material on one side or 65 mm thick on each side (5) ▪ 15.9 mm Type X gypsum board (1)	1.5h		62
	W1Ob	W10 with ▪ 89 mm thick absorptive material on one side or 65 mm thick on each side (5) ▪ 12.7 mm Tvpe X gypsum board (1)	1 h	1.5 h	60
	W10c	W10 with . no absorptive material ■ l5.9 mm Type X gypsum board (1)	1.5h	2h	50
	W1Od	W10 with ▪ no absorptive material ▪ 12.7 mm Type X gypsum board (1)	l h	1.5 h	48
	W11	. two rows 38 mm x 89 mm studs each spaced 400 mm or 600 mm o.c. staggered on common 38 mm x 140 mm plate . 89 mm thick absorptive material on one side or 65 mm thick on each side (5) . resilient metal channels on one side spaced 400 mm or 800 mm o.c. . 2 layers of gypsum board on resilient channel side ▪ 1 layer of gypsum board on other side			

Fire and Sound Resistance of Walls *(cont'd)*

Type of Wall	Wall No.	Description	Fire Resistance Rating (9) Load-Bearing	Fire Resistance Rating (9) Non-Load Bearing	Typical Sound Transmission Class (3,4,9)
WOOD STUDS Two Rows STAGGERED On 38 MM x 140 MM PLATE LOAD-BEARING OR NON-LOAD-BEARING	W11a	W11 with ▪ 15.9 mm Type X gypsum board (1)	1 h	1 h	56
	W11b	W11 with ▪ 12.7 mm Type X gypsum board (1)	45 min [1 h (6)]	1 h	54
	W12	. two rows 38 mm x 89 mm studs each spaced 400 mm or 600 mm o.c. staggered on common 38 mm x 140 mm plate .89 mm thick absorptive material on one side or 65 mm thick on each side (5) ▪ resilient metal channels on one side spaced 400 mm or 600 mm o.c. ▪ 1 layer of gypsum board on resilient metal channel side ▪ 2 layers of gypsum board on other side			
	W12a	W12 with ▪ 15.9 mm Type X gypsum board (1)	45 min	1 h	56
	W12b	W12 with ▪ 12.7 mm Type X gypsum board (1)	45 min	1 h	54
WOOD STUDS Two Rows ON SEPARATE PLATE LOAD-BEARING OR NON-LOAD-BEARING	w13	▪ two rows 38 mm x 89 mm studs, each spaced 400 mm or 600 mm o.c. on separate 38 mm x 89 mm plates set 25 mm apart ▪ with or without absorptive material ▪ 1 laver of gypsum board on each side			
	W13a	W13 with ▪ 89 mm thick absorptive material on each side (5, 8) ▪ 15.9 mm Type X gypsum board (1)	1 h	1 h	57
	W13b	W13 with ▪ 89 mm thick absorptive material on each side (5, 8) ▪ 12.7 mm Type X gypsum board (1)	45 min [1 h (6)]	45 min [1 h (6)]	57
	W13c	W13 with ▪ 89 mm thick absorptive material on one side only (5, 8) ▪ 15.9 mm Type X gypsum board (1)	lh	lh	54
	W13d	W13 with . 89 mm thick absorptive material on one side only (5, 8) ▪ 12.7 mm Type X gypsum board (1)	45 min	45 min	53
	W13e	W13 with ▪ no absorptive material ▪ 15.9 mm Type X gypsum board (1)	1 h	1 h	45
	W13f	W13 with • no absorptive material ▪ 12.7 mm Type X gypsum board (1)	45 min	45 min	45
	w14	. two rows 38 mm x 89 mm studs, each spaced 400 mm or 600 mm o.c. on separate 38 mm x 89 mm plates set 25 mm apart ▪ with or without absorptive material ▪ 2 layers of gypsum board on one side ▪ 1 layer of gypsum board on other side			
	W14a	W14 with ▪ 89 mm thick absorptive material on each side (5, 8) ▪ 15.9 mm Type X gypsum board (1)	1 h	1 h [1.5 h (6)]	61
	W14b	W14 with ▪ 89 mm thick absorptive material on each side (5, 8) • 12.7 mm Type X gypsum board (1)	45 min	1 h	61
	w14c	W14 with . 89 mm thick absorptive material on one side only (5, 8) . 15.9 mm Type X gypsum board (1)	lh	1 h	57

Fire and Sound Resistance of Walls *(cont'd)*

Type of Wall	Wall No.	Description	Fire Resistance Rating (9)		Typical Sound Transmission Class (3,4,9)
			Load-Bearing	Non-Load Bearing	
WOOD STUDS TWO ROWS ON SEPARATE PLATE LOAD-BEARING OR NON-LOAD-BEARING	W14d	W14 with ■ 89 mm thick absorptive material on one side only (5, 8) ■ 12.7 mm Type X gypsum board (1)	45 min	1 h	57
	W14e	W14 with ■ no absorptive material ■ 15.9 mm Type X gypsum board (1)	1 h	1 h	51
	W14f	W14 with ■ no absorptive material ■ 12.7 mm Type X gypsum board (1)	45 min	1 h	51
	W15	■ two rows 38 mm x 89 mm studs, each spaced 400 mm or 600 mm o.c. on separate 38 mm x 89 mm plates set 25 mm apart ■ with or without absorptive material ■ 2 layers of gypsum board on each side			
	W15a	W15 with ■ 89 mm thick absorptive material on each side (5, 8) ■ 15.9 mm Type X gypsum board (1)	1.5 h	2 h	66
	W15b	W15 with ■ 89 mm thick absorptive material on each side (5, 8) ■ 12.7 mm Type X gypsum board (1)	1 h	1.5 h	65
	W15c	W15 with ■ 89 mm thick absorptive material on each side (5, 8) ■ 12.7 mm regular gypsum board (1)	45 min	1 h	61
	W15d	W15 with ■ 89 mm thick absorptive material on one side only (5, 8) ■ 15.9 mm Type X gypsum board (1)	1.5 h	2 h	62
	W15e	W15 with ■ 89 mm thick absorptive material on one side only (5, 8) ■ 12.7 mm Type X gypsum board (1)	1 h	1.5 h	60
	W15f	W15 with ■ 89 mm thick absorptive material on one side only (5, 8) ■ 12.7 mm regular gypsum board (1)	45 min	1 h	57
	W15g	W15 with ■ no absorptive material ■ 15.9 mm Type X gypsum board (1)	1.5 h	2 h	56
	W15h	W15 with ■ no absorptive material ■ 12.7 mm Type X gypsum board (1)	1 h	1.5 h	55
	W15i	W15 with ■ no absorptive material ■ 12.7 mm regular gypsum board (1)	45 min	1 h	51
EXTERIOR WOOD STUDS SINGLE ROW LOAD-BEARING AND NON-LOAD-BEARING	EW1	■ 38 mm x 89 mm studs spaced 400 mm or 600 mm o.c. ■ 89 mm thick absorptive material (6) ■ 1 or 2 layers of gypsum board on inside ■ exterior sheathing and siding			
	EW1a	EW1 with ■ 15.9 mm Type X gypsum board (1,2)	1 h	1 h	N/A
	EW1b	EW1 with ■ 12.7 mm Type X gypsum board (1,2)	45 min	45 min	N/A
	EW1c	EW1 with ■ 2 layers of 12.7 mm regular gypsum board (1,2)	45 min	45 min	N/A