CGC SHEETROCK® BRAND ULTRALIGHT PANELS FIRECODE® X

Sound transmission loss tests were conducted by an accredited laboratory for acoustical performance under laboratory conditions in accordance with ASTM E90 and ASTM E413. It is important to follow best practices for sound control design and installation in order to obtain optimal installed acoustical performance. A basic rule is that sound performance is compromised any place where air can pass. Best practices include but are not limited to:

- All perimeters not covered with joint compound and tape shall be sealed with acoustical sealant, including between the floor and the base of the wallboard.
- The number and size of penetrations in a partition should be minimized and all openings should be completely sealed.
- Electrical boxes installed on adjacent sides of a partition should not be back-to-back or in the same stud cavity. Any unused openings in boxes should be sealed.
- Solid wood or mineral core doors with gasketed frames can help the acoustical performance of the system.
- Use of lightweight steel framing instead of wood studs.
- Addition of fiberglass or mineral wool sound control insulation in the stud cavities.
- Use of resilient channels to structurally isolate the wallboard panels from the framing.

More specific information regarding sound control design and construction can be found in the *CGC Gypsum Construction Handbook* and Gypsum Association publication, *Fire Resistance Design Manual* (GA-600).

GENERAL ACOUSTIC PERFORMANCE GUIDELINES

While some differences in STC value may be seen in the comparison data for wall assemblies, the differences are minimal and likely due to standard variations[1] in laboratory testing. Additionally, it has been found that the human ear cannot detect variances in sound levels that are less than 3 dB, as shown in the following chart.

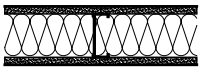
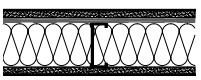
Change in Sound Level	Change in Apparent Loudness
1-2 dB	Indiscernible
3 dB	Just perceptible
5 dB	Clearly noticeable
10 dB	Twice as loud (or quiet)
20 dB	Four times as loud (or quiet)

Note:

1. Based on an inter-laboratory comparison, the reproducibility standard deviation for reference specimens tested per ASTM E90, *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element*, was found to be 2 dB or less in the test frequency range.

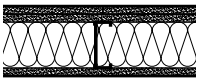
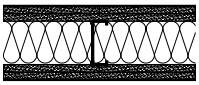
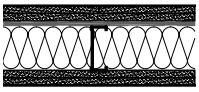
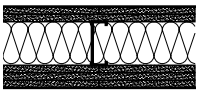
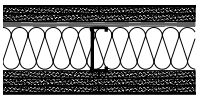
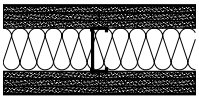
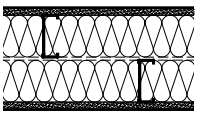
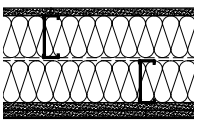
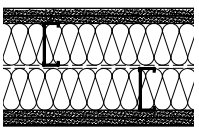
TESTED ASSEMBLIES

25-GAUGE STEEL STUDS

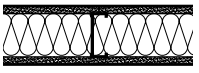
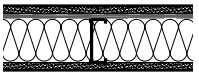
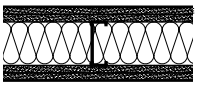
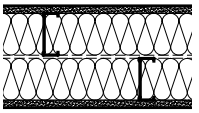
Description	Plan View	System Thickness	STC	Sound Test	UL Type Designation[2]
15.9 mm (5/8") CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8") 25 ga. steel studs 610 mm (24") o.c., 89 mm (3-1/2") fiberglass insulation		124 mm (4-7/8")	48	RAL-TL15-064	ULX/ULIX
			48	RAL-TL11-074	SCX
15.9 mm (5/8") CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8") 25 ga. steel studs 610 mm (24") o.c., 89 mm (3-1/2") fiberglass insulation, Resilient channel or equivalent one side		137 mm (5-3/8")	51	USG-151202	ULX/ULIX
			52	RAL-TL11-073	SCX

TESTED ASSEMBLIES CONT.

25-GAUGE STEEL STUDS CONT.

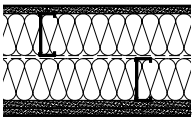
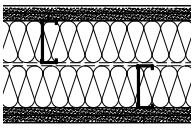
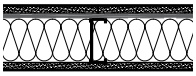
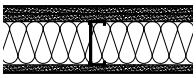
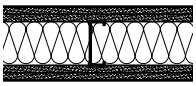
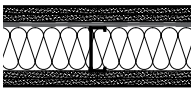
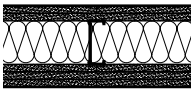
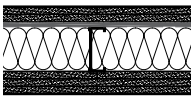
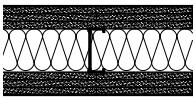
Description	Plan View	System Thickness	STC	Sound Test	UL Type Designation[2]
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass or mineral wool insulation, Double layer one side		140 mm (5-1/2″)	51	RAL-TL15-041	ULX/ULIX
			52	RAL-TL11-126	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Double layer both sides		156 mm (6-1/8″)	54	RAL-TL15-042	ULX/ULIX
			53	RAL-TL11-126	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel, double layer both sides		168 mm (6-5/8″)	57	USG-161006	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Double layer, triple layer		172 mm (6-3/4″)	55	USG-160723	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel, double layer, triple layer		184 mm (7-1/4″)	57	USG-161007	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Triple layer both sides		187 mm (7-3/8″)	56	USG-160724	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs staggered 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities		219 mm (8-5/8″)	58	USG-160904	ULX/ULIX
			61	USG-160912	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs staggered 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities, Double layer one side		258 mm (10-1/8″)	62	USG-160905	ULX/ULIX
			64	USG-160915	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 25 ga. steel studs staggered 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities, Double layer both side		273 mm (10-3/4″)	65	USG-160906	ULX/ULIX
			66	USG-160918	SCX

20-GAUGE STEEL STUDS

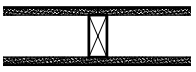
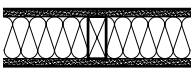
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation		124 mm (4-7/8″)	44	USG-150919	ULX/ULIX
			45	RAL-TL12-194	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel or equivalent one side		137 mm (5-3/8″)	49	USG-151205	ULX/ULIX
			50	RAL-TL12-197	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation Double layer one side		140 mm (5-1/2″)	46	USG-150807	ULX/ULIX
			47	RAL-TL12-195	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs staggered 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities		219 mm (8-5/8″)	59	USG-160848	ULX/ULIX
			60	USG-160901	SCX

TESTED ASSEMBLIES CONT.

20-GAUGE STEEL STUDS CONT.

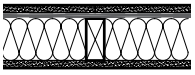
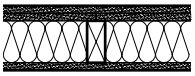
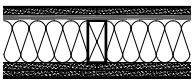
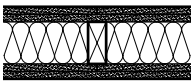
Description	Plan View	System Thickness	STC	Sound Test	UL Type Designation[2]
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs staggered 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities, Double layer one side		258 mm (10-1/8″)	62	USG-160849	ULX/ULIX
			63	USG-160902	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs staggered 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities, Double layer both side		273 mm (10-3/4″)	64	USG-160850	ULX/ULIX
			65	USG-160903	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation		124 mm (4-7/8″)	48	USG-150923	ULX/ULIX
			45	RAL-TL12-202	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel or equivalent one side		137 mm (5-3/8″)	50	USG-151203	ULX/ULIX
			51	RAL-TL12-203	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities, Double layer one side		140 mm (5-1/2″)	50	USG-160727	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation both cavities, Double layer both side		156 mm (6-1/8″)	52	USG-160730	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel, double layer both sides		168 mm (6-5/8″)	57	USG-160839	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Double layer, triple layer		172 mm (6-3/4″)	54	USG-160731	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel, double layer, triple layer		184 mm (7-1/4″)	58	USG-160843	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 92 mm (3-5/8″) 20 ga. steel studs 610 mm (24″) o.c., 89 mm (3-1/2″) fiberglass insulation, Triple layer both sides		187 mm (7-3/8″)	55	USG-160732	ULX/ULIX
			Not Tested		SCX

WOOD STUDS

15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 2 x 4 wood studs 406 mm (16″) o.c.		120 mm (4-3/4″)	33	USG-151234	ULX/ULIX
			32	RAL-TL11-129	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 2 x 4 wood studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation		120 mm (4-3/4″)	36	USG-151235	ULX/ULIX
			34	RAL-TL11-130	SCX

TESTED ASSEMBLIES CONT.

WOOD STUDS CONT.

Description	Plan View	System Thickness	STC	Sound Test	UL Type Designation[2]
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 2 x 4 wood studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel or equivalent one side		133 mm (5-1/4″)	47	USG-151240	ULX/ULIX
			48	RAL-TL11-083	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 2 x 4 wood studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation, Double layer one side		137 mm (5-3/8″)	38	USG-151236	ULX/ULIX
			37	RAL-TL11-084	SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 2 x 4 wood studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation, Double layer and resilient channel or equivalent one side		149 mm (5-7/8″)	50	USG-151238	ULX/ULIX
			Not Tested		SCX
15.9 mm (5/8″) CGC Sheetrock® Brand Type X Gypsum Panels, 2 x 4 wood studs 406 mm (16″) o.c., 89 mm (3-1/2″) fiberglass insulation, Resilient channel or equivalent one side, Double layer both sides		165 mm (6-1/2″)	54	RAL-TL15-063	ULX/ULIX
			Not Tested		SCX

Note:

2. CGC Sheetrock® Brand UltraLight Panels Firecode® X are available in one of two UL Type Designations (Type ULX and Type ULIX). Check with your local CGC representative for the panel that is available in your market.

   CGC Sheetrock® Brand Firecode® X Panels are available in UL Type Designation SCX.

PRODUCT INFORMATION
See cgcinc.com for the most up-to-date product information.

NOTE
Products described here may not be available in all geographic markets. Consult your CGC Inc. sales office or representative for information.

NOTICE
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!
Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read Safety Data Sheets and related literature on products before specification and/or installation.

800.387.2690
cgcinc.com

Manufactured by:
CGC Inc.
350 Burnhamthorpe Rd. W, 5th Floor
Mississauga, ON L5B 3J1

EWB2602/rev. 4-17

CGC
IT'S YOUR WORLD. BUILD IT.™