Sound Performance Selector Guide

SHEETROCK® UltraLight Panels FIRECODE® 30



SHEETROCK® UltraLight Panels FIRECODE® 30 are 15.9 mm (5/8") thick panels that have been independently evaluated for acoustical performance in the assemblies listed below. Sound transmission loss tests were conducted under laboratory conditions in accordance with ASTM E90 and ASTM E413. All tests were generated by Riverbank Acoustical Laboratories, an internationally recognized, accredited laboratory. 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 anyplace 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 SHEETROCK® 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 the Gypsum Association publication, *GA 600, Fire Resistance Design Manual.*

Tested Assemblies

Steel Frame	System Thickness	STC	Sound Test	Description
000000000000000000000000000000000000000	124 mm (4-7/8")	44	RAL-TL11-078	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30, 92 mm (3-5/8") 25 Gauge Steel Studs, 610 mm (24") o.c., R-11 Fiberglass Sound Batt
1000010111000001	124 mm (4-7/8")	45	RAL-TL11-127	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30, 92 mm (3-5/8") 25 Gauge Steel Studs, 610 mm (24") o.c. 76 mm (3") Mineral Wool Insulation
	137 mm (5-3/8")	48	RAL-TL11-089	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30, 92 mm (3-5/8") 25 Gauge Steel Studs, 610 mm (24") o.c., R-11 Fiberglass Sound Batt, Resilient channel or equivalent one side
	140 mm (5-1/2")	49	RAL-TL11-128	15.9 mm (5/8") SHEETROCK® Brand UltraLight Panels FIRECODE® 30, 92 mm (3-5/8") 25 Gauge Steel Studs, 610 mm (24") o.c., R-11 Fiberglass Sound Batt or 76 mm (3") Mineral Wool Insulation, Double layer one side
000000000000000000000000000000000000000	156 mm (6-1/8")	52	RAL-TL11-080	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30, 92 mm (3-5/8") 25 Gauge Steel Studs, 610 mm (24") o.c., R-11 Fiberglass Sound Batt, Double layer both sides



Wood Frame	System Thickness	STC	Sound Test	Description
	120 mm (4-7/8")	33	RAL-TL11-086	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30 2 x 4 Wood Studs 406 mm (16") o.c. R-11 Fiberglass Sound Batt
	137 mm (5-3/8")	35	RAL-TL11-087	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30 2 x 4 Wood Studs 406 mm (16") o.c. R-11 Fiberglass Sound Batt Double layer one side
	133 mm (5-1/4")	45	RAL-TL11-085	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30 2 x 4 Wood Studs 406 mm (16") o.c. R-11 Fiberglass Sound Batt Resilient channel or equivalent one side
	199 mm (5-7/8")	49	RAL-TL11-131	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30 2 x 4 Wood Studs 406 mm (16") o.c. R-11 Fiberglass Sound Batt Double layer and resilient channel or equivalent one side
	165 mm (6-1/2")	52	RAL-TL11-132	15.9 mm (5/8") SHEETROCK® UltraLight Panels FIRECODE® 30 2 x 4 Wood Studs 406 mm (16") o.c. R-11 Fiberglass Sound Batt Resilient channel or equivalent one side Double layer both sides

General Acoustic Performance Guidelines

STC of Partition	Perception	Rating
Below 30	Normal speech can be understood quite easily and distinctly through the wall.	Poor
30-35	Loud speech can be understood fairly well. Normal speech cannot be easily understood.	Fair
35-40	Loud speech can be heard, but is hardly intelligible. Normal speech can be heard only faintly, if at all.	Marginal
40-45	Loud speech can be faintly heard but not understood. Normal speech is inaudible.	Good
45-50	Very loud speech is only faintly audible. Loud sounds such as musical instruments or audio equipment may be faintly heard.	Very Good
50-55	Loud speech is not heard. Very loud sounds such as brass musical instruments and audio equipment played at full volume are only faintly audible in the low-frequency (bass) range.	Excellent
Above 55	Most sounds, other than loud bass noises, cannot be heard.	Superior

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)		

Product Information

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

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Note

Products described here may not be available in all geographic markets.

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/industrial hygiene practices during installation. Wear appropriate personal protection equipment. Read MSDS and literature before specification and installation.

