MAXXON®



FIRE & SOUND MANUAL

AUGUST 2026

DESIGNING FOR SAFETY & SOUND CONTROL

Streamline the process of specifying products to meet your project's requirements for fire safety and acoustical performance. Use this Fire & Sound manual to help determine the right assembly, along with correct codes and resources, based on your project's construction type.

Maxxon® Gyp-Crete® underlayments are available in more than 140 UL and ULC fire-resistance rated designs. Maxxon® Acousti-Mat® products are available in over 140 UL fire-resistant rated designs and backed by thousands of third-party sound tests.

For questions or personalized support, contact Maxxon at (800) 356-7887.


CORNELL
Innovative door solutions
CORNELL

MAXXON®

DELIVERING ACOUSTICAL INNOVATIONS

In 1972, Maxxon® revolutionized the construction industry by inventing Gyp-Crete®. We were also the first company to introduce sound mats to Multifamily construction, with our line of Acousti-Mat® products.

Fast forward more than 50 years, and Maxxon continues to lead the way with new technologies and innovations. Today's Acousti-Mat products can be used to mitigate impact and airborne noise in all types of floor goods including LVT, exposed concrete, tile, or hardwood without sacrificing sound control. And our recently launched Commercial Pro VersaTop™ Wear Surface delivers the on-trend look of polished concrete with a streamlined installation process. This innovative hydraulic cement underlayment produces an exposed aggregate surface with no mechanical prep, less grinding, and no polishing.

We recently built North America's largest, accredited floor/ceiling sound transmission test lab, enabling us to measure the lowest frequencies considered for building acoustics, down to 50 Hz. Now we're equipped to develop more products to block a wider range of impact and airborne sounds to meet occupants' increasing demand for acoustical privacy.



OPEN WEB TRUSS

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16.
For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Truss Depth	Insulation	Resilient Channel	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings	Similar ULs
							STC**	IIC	Test Number		
18"	Yes	Yes	5/8" (16 mm)	3/4" (19 mm)	None	Bare or VersaTop	58	35	H6130.01	L528 L529 L534 L546 L542 L558 L562 L563 L574 L576 L577 L579 L581 L583 L585 L592 M500 M503 M508 M510 ICC ESR #2540 UL ER #8477-01	L521 L550
						LVT		41	H6130.02		
						Carpet & Pad		71	I0101.02		
					Acousti-Mat 1/8	Bare or VersaTop		47	I0101.06		
						Sheet Vinyl		52	I0101.09		
						LVT	58	50	I0101.07		
						Ceramic Tile***		52	I0101.30		
						Carpet and Pad		72	I0101.11		
				1" (25 mm)	Acousti-Mat 1/4	Bare or VersaTop		51	I0106.17		
						Sheet Vinyl	59	54	I0106.20		
						LVT		53	I0106.18		
						Ceramic Tile***		55	I0106.24		
						Engineered Wood		55	I0106.21		
						Carpet and Pad		71	I0106.22		
					Acousti-Mat 1/4 Premium	Bare or VersaTop		53	I0101.14		
						Sheet Vinyl		55	I0101.17		
						LVT	59	54	I0101.15		
						Ceramic Tile***		55	I0101.21		
						Engineered Wood		55	I0101.18		
						Carpet and Pad		76	I0101.19		
					Acousti-Mat 3/8	Bare or VersaTop		53	I0106.25		
						Sheet Vinyl		56	I0106.28		
						LVT	59	55	I0106.26		
						Ceramic Tile***		57	I0106.32		
						Engineered Wood		56	I0107.05		
						Carpet and Pad		75	I0106.30		
					Acousti-Mat 3/8 Premium	Bare or VersaTop		54	I0107.25		
						LVT		57	I0107.27		
						Ceramic Tile***	59	58	I0107.32		
						Engineered Wood		58	I0107.29		
						Carpet and Pad		79	I0107.30		
				1½" (38 mm)	Acousti-Mat 3/4	Sheet Vinyl		57	I0101.25		
						LVT	59	56	I0101.23		
						Ceramic Tile***		59	I0101.29		
						Engineered Wood		57	I0101.26		
						Carpet and Pad		77	I0101.27		
					Acousti-Mat 3/4 Premium	Sheet Vinyl	58	58	I0107.20		
						LVT		59	I0107.19		
						Ceramic Tile***		60	I0107.24		
						Engineered Wood		60	I0107.21		
						Carpet and Pad		79	I0107.22		

Other Open Web Truss ULs: For special assemblies and other burn ratings including 2 hr designs, additional Open Web Truss UL Fire Ratings exist. Refer to page 14 for a list of these assemblies.
*** Ceramic tile tested with an anti-crack membrane, per manufacturer instructions.

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



I-JOIST

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Truss Depth	Insulation	Resilient Channel	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings
							STC**	IIC	Test Number	
14"	Yes	Yes	2 Layers 5/8" (2x 16 mm)	3/4" (19 mm)	None	Bare or VersaTop	58		TL 96-250	L518 L530 L547 L570 L581 L583 L589 M502 M506 M535 WH J20050694 ICC ESR 1141 ICC ESR 1153 ICC ESR 1305 ICC ESR 1336 ICC ESR 2450 ICC ESR 2994 UL ER 8477
						Bare or VersaTop		29	IN 86-1	
						Sheet Vinyl		40	IN 86-2	
						Carpet and Pad		70	IN 86-6	
12"					Acousti-Mat 1/8	Bare or VersaTop	59	47	I0110.17	
						Sheet Vinyl		50	I0108.09	
						LVT		52	I0110.18	
						Ceramic Tile***		50	I0110.24	
						Engineered Wood		51	I0108.10	
						Carpet and Pad		77	I0110.22	
				1" (25 mm)	Acousti-Mat 1/4	Bare or VersaTop		51	I0109.17	
						Sheet Vinyl	58	55	I0109.20	
						LVT		54	I0109.18	
						Ceramic Tile***		56	I0109.24	
						Engineered Wood		56	I0109.21	
						Carpet and Pad		81	I0109.22	
					Acousti-Mat 1/4 Premium	Bare or VersaTop		51	I0108.30	
						Sheet Vinyl	59	55	I0108.33	
						LVT		55	I0108.32	
						Ceramic Tile***		57	I0108.37	
						Engineered Wood		56	I0108.34	
						Carpet and Pad		83	I0108.35	
					Acousti-Mat 3/8	Bare or VersaTop		51	I0110.09	
						Sheet Vinyl	58	56	I0110.12	
						LVT		55	I0110.10	
						Ceramic Tile***		59	I0110.16	
						Engineered Wood		58	I0110.13	
						Carpet and Pad		77	I0110.14	
					Acousti-Mat 3/8 Premium	Bare or VersaTop		55	I0110.25	
						Sheet Vinyl	61	59	I0110.28	
						LVT		57	I0110.26	
						Ceramic Tile***		60	I0110.32	
						Engineered Wood		59	I0110.29	
						Carpet and Pad		84	I0110.30	
				1½" (38 mm)	Acousti-Mat 3/4	Sheet Vinyl	60	58	I0108.25	
						LVT		57	I0108.24	
						Ceramic Tile***		59	I0108.29	
						Engineered Wood		59	I0108.26	
						Carpet and Pad		79	I0108.27	

Other I-Joist ULs: For special assemblies and other burn ratings, additional I-Joist UL Fire Ratings exist. Refer to page 15 for a list of these assemblies.
***Ceramic tile tested with an anti-crack membrane, per manufacturer instructions.

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



2X10 JOIST

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Min. Truss Depth per UL	Insulation	Resilient Channel	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings
							STC**	IIC	Test Number	
10"	Yes	Yes	5/8" (16 mm)	3/4" (19 mm)	None	None	56	38	I0111.01	L006 L522 L201 L523 L202 L525 L206 L526 L209 L533 L210 L535 L211 L536 L212 L537 L501 L539 L502 L540 L503 L541 L504 L545 L505 L556 L506 L557 L507 L569 L509 L581 L510 L583 L511 L588 L512 L590 L513 L593 L514 M514 L515 M517 L516 M518 L517 M519 L519 M530 L520 M531
						Backed LVT		45	I0111.03	
						Carpet and Pad		67	I0111.02	
				1" (25 mm)	Acousti-Mat 1/4	Bare or VersaTop		46	I0112.17	
						Sheet Vinyl	57	51	I0112.20	
						LVT		51	I0112.19	
						Ceramic Tile***		52	I0112.24	
						Engineered Wood		51	I0112.21	
						Carpet and Pad		73	I0112.22	

Other 2x10 ULs: For special assemblies and other burn ratings including 2 hr designs, additional 2x10 Joist UL Fire Ratings exist. Refer to page 15 for a list of these assemblies.
*** Ceramic tile tested with an anti-crack membrane, per manufacturer instructions.



HEAVY TIMBER RENOVATION

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Truss/Joists	Insulation	Resilient Channel	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating		
							STC**	IIC	Test Number
Dimensional Lumber	No	No	N/A	N/A	None	Wood Subfloor	30 FSTC		3018-02-31573.7
								33 FIIC	3018-02-31573.5
				1-1/2" (38 mm)	Acousti-Mat 3/4	Tile	47 FSTC		3018-02-31573.6
						Engineered Wood on Pad		52 FIIC	3018-02-31573.4
						Vinyl		46 FIIC	3018-02-31573.3
				1-3/4" (44 mm)+	Acousti-Mat 3/4 + Acousti-Mat SBR	Bare or VersaTop	52 FSTC	51 FIIC	30160-04-62432
				3" concrete (76 mm)	Acousti-Mat 3/4 Premium	Bare or VersaTop		47 FIIC	D7299.02-13

+1-3/4" is the minimum acceptable pour thickness over Acousti-Mat 3/4 Premium + Acousti-Mat SBR. Assembly tested with 1-1/2" Gyp-Crete topping slab and results should be considered a minimum acoustic performance for the required system.

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



CONCRETE

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Concrete Depth	Insulation	Resilient Channel	Suspended Ceiling	Drywall	Min. Topping Depth	Encapsulated Sound or Topical Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings
								STC**	IIC	Test Number	
4"	No	No	No	No	1" (25 mm)	Acousti-Mat 1/4	Bare or VersaTop		50 FIIC	30160-03-57761	J804 J805
					2" (51 mm)	Acousti-Mat 3/4	Bare or VersaTop		59 FIIC	30160-03-57761	
6"	No	No	No	No	N/A	None	Bare Concrete	55	28	0031-81.1	N/A***
						Acousti-Top	Tile		50	0031-84.1	
									Δ 20		
							LVT		51	0031-70.2	
									Δ 23		
8"	No	No	No	No	N/A	None	Bare Concrete	62 FSTC		18-0-0607.1	
									39 FIIC	18-0-0607.3	
					1" (25 mm)	Acousti-Mat 1/4	LVT	62 FSTC		18-0-0607.2	
									64 FIIC	18-0-0607.5	
							Hardwood		60 FIIC	18-0-0607.7	
							Tile		61 FIIC	18-0-0607.6	
					1-1/2" (38 mm)	Acousti-Mat 3/8	Tile		65 FIIC	30160-05-72550-7	
						Acousti-Mat 3/4	Tile		70 FIIC	30160-05-72550-9	
					2" Concrete (51 mm)		Bare or VersaTop		61 FIIC	30160-03-56381-5	
			Yes	5/8" (16 mm)	N/A	None	Bare Concrete	62 FSTC		30160-06-77973-1	
									42 FIIC	30160-06-77973-2	
					1/2" (13 mm)	Acousti-Top	Hardwood		60 FIIC	30160-06-77870	
							Tile		54 FIIC	30160-06-77870	
					1" (25 mm)	Acousti-Mat 1/4	Tile		60 FIIC	30160-05-67282-2	
					1-1/2" (38 mm)	Acousti-Mat 3/8	Tile		66 FIIC	30160-05-67282-1	
						Acousti-Mat 3/4	Tile		74 FIIC	30160-05-67282-3	

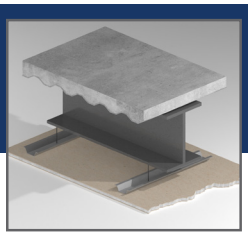
*** Fire Ratings over 6"+ concrete do not require gypsum concrete.



PRECAST HOLLOW CORE CONCRETE

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Concrete Depth	Insulation	Resilient Channel	Suspended Ceiling	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings
								STC**	IIC	Test Number	
6"	Yes	Yes	Yes	5/8" (16 mm)	1" (25 mm)	Acousti-Mat 1/4	Tile	59		RAL TL 98-108	J917 J919 J920 J924 J927 J931 J957 J958 J991 J994 ICC ESR # 2540 UL ER # 8477-01
									57	RAL IN 98-12	
8"	No	No	No	None	1/2" (13 mm)	None	Bare or VersaTop	58 FSTC		5-896	
							Carpet		75 FIIC	5-896-2	
					3/4" (19 mm)	None	Bare Gypsum		18 FIIC	B2863.13	
						Acousti-Mat 1/8	Tile		54 FIIC	B2863.04	
							LVT		56 FIIC	B2863.05	
							Engineered Wood		58 FIIC	B2863.06	
					1" (25 mm)	Acousti-Mat 1/4	Bare or VersaTop	61 FSTC		B5011.04	
							Tile		59 FIIC	B5011.04	
							LVT		57 FIIC	B5011.04	
						Acousti-Mat 3/8	Tile		61 FIIC	B2863.07	
							Wood		61 FIIC	B2863.09	

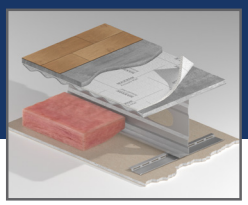


COMPOSITE CONCRETE WITH CORRUGATED STEEL DECK

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Concrete Depth	Insulation	Ceiling	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings
							STC**	IIC	Test Number	
3½" Concrete over Steel Deck	No	Hat Channel Attached to Joist	5/8" (16 mm)	None	None	Bare Concrete	57	28	TL 01-213, IN 01-8	G561
3" Concrete over 9/16" Corrugated Steel Deck	Yes	Wire Hung Grid 17½" Airspace Deck to Ceiling	5/8" (16 mm) Drywall	None	None	Bare Concrete	55	47	3193995CRT-001.8	
				None	Acousti-Top	Engineered Wood		64	3193995CRT-001.5	
			5/8" (16 mm) Ceiling Tile	None	Acousti-Top	Engineered Wood		62	3193995CRT-001.28	
2½" Lightweight Concrete over Steel Deck	Yes	Wire Hung Grid 34" Airspace Deck to Ceiling	5/8" (16 mm)	None	Acousti-Top	Tile		66 FIIC	NAC Centerpoint	D502
				3/8" (10 mm)	Acousti-Top	Engineered Wood		64 FIIC	NAC Centerpoint	
				1" (25 mm)	Acousti-Mat 1/4	Engineered Wood		64 FIIC	NAC Centerpoint	

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.

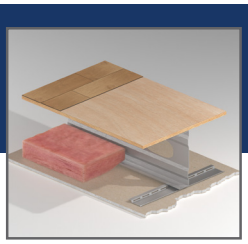


LIGHT-GAUGE STEEL JOIST/ STEEL DECK SUBFLOOR

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Joist	Subfloor	Insulation	Resilient Channel	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings	Similar ULs
								STC**	IIC	Test Number		
18" Open Web Truss	9/16" (14mm) Steel Deck	Yes	Yes	5/8" (16 mm)	1-3/8"**** (25 mm)	Acousti-Mat 1/4	Bare or VersaTop	60	51	R0737.07	G551 G553 G560 G563 G566 G574 G587 G592 G597 H502 M511 ICC ESR # 2540 UL ER # 8477-01	G564 G577 G578 G579 G580 G581 G582
							Sheet Vinyl		57	R0737.09		
							LVT		56	R0737.08		
							Tile***		59	R0737.12		
					1-3/8" (34 mm)	Acousti-Mat 3/8 Premium	Bare or VersaTop	61	51	R0737.01		
							Sheet Vinyl		59	R0737.03		
							LVT		57	R0737.02		
							Tile***		61	R0737.06		

*** Ceramic tile tested with an anti-crack membrane, per manufacturer instructions. **** 1-3/8" is the minimum acceptable pour thickness when the flutes are left unfilled. Assembly tested with 1" Gyp-Crete topping slab and results should be considered a minimum acoustic performance for the required system.



LIGHT-GAUGE STEEL JOIST/ PLYWOOD SUBFLOOR

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

Joist	Subfloor	Insulation	Resilient Channel	Drywall	Min. Topping Depth	Encapsulated Sound Mat	Floor Covering*	Sound Rating			Maxxon UL Fire Ratings
								STC**	IIC	Test Number	
C-Joists	3/4" Wood Subfloor	Yes	Yes	5/8" (16 mm)	3/4" (19 mm)	None	Carpet & Pad	51 FSTC		4140-94-2168.1	L527 L564 L567 L573
									73 FIIC	4140-94-2168.2	
							LVT		49 FIIC	4140-94-2278	
					1-1/2" (38 mm)	Acousti-Mat 3/4	Tile		57 FIIC	FIIC 04-22-1	
							Vinyl		57 FIIC	FIIC 04-22-2	
							Hardwood		58 FIIC	FIIC 04-22-3	
			Acoustic Clips	2 layers 5/8" (2 x 16 mm)	1" (25 mm)	Acousti-Mat 1/4	Tile		56 FIIC	06-24-1	
							Carpet & Pad		71 FIIC	06-24-2	
Open Web Truss			Yes	5/8" (16 mm)	3/4" (19 mm)	Acousti-Mat 1/8	Bare or VersaTop	61	43	M3052.12	
							LVT		52	M3052.06	
							Engineered Wood		56	M3052.08	
							Tile		50	M3052.10	
							Carpet & Pad		80	M3052.09	
					1" (25 mm)	Acousti-Mat 1/4	Bare or VersaTop	61	50	M3052.11	
							LVT		56	M3052.01	
							Engineered Wood		58	M3052.03	
							Tile		55	M3052.05	
							Carpet & Pad		84	M3052.04	

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



MASS TIMBER

CROSS LAMINATED TIMBER (CLT)

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

CLT

EXPOSED



DRYWALL DIRECT



SUSPENDED CEILING



Ceiling Configuration	CLT Assembly	Gypsum Pour	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed CLT	5-ply 6-7/8" (175 mm)	1" (25 mm)	None	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	50	40	K1279.17
							LVT		43	K1279.18
						AcoustiTop			46	K1279.19
		2" (51 mm)	None	N/A		None	Bare or VersaTop	55	47	Q7356.01
							LVT		48	Q7356.03
						1.5 mm Foam Mat	LVT		51	G2463.08
						None	5.5 mm LVT with Attached Pad		51	Q7356.02
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	58	49	P4428.01
							LVT		52	P4428.02
						1.5 mm Foam Mat			54	P4428.03
DRYWALL DIRECT 2 Layers 5/8" (16 mm) directly applied to CLT		1" (25 mm)	None	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	52	46	K1279.01
							LVT		48	K1279.02
							Engineered Wood		47	K1279.04
		2" (51 mm)†	None	N/A	Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	59	52	K1277.01
						Acousti-Top	LVT on Concrete		55	K1277.02
SUSPENDED CEILING 2 Layers 5/8" (16 mm) directly applied to CLT + 1 layer 5/8" (16 mm) hung		0.75" (19 mm)	Wire Hung, Armstrong IIC Clip + 6" Air Space	No	Acousti-Mat 1/8	None	Bare or VersaTop	59	51	K1278.01
							LVT		54	K1278.02
							Engineered Wood		55	K1278.04
		1" (25 mm)		Yes	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	63	60	K1279.05
							LVT		63	K1279.06
							Engineered Wood		62	K1279.08

† Normal-weight concrete topping slab.

CLT COMPOSITE

EXPOSED



Ceiling Configuration	CLT Assembly	Gypsum Pour	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Composite CLT	2.25" (57 mm) Concrete + 5-ply 5.4" (137 mm) Composite Panel	1" (25 mm)	None	n/a	Acousti-Mat 3/8	None	Bare or VersaTop	52	50	K3094.97
							Engineered Wood		52	K3094.69
		1-3/4" (44 mm)+	None	n/a	Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	56	57	K3094.98
						Acousti-Top	Engineered Wood		61	K4507.06

+1-3/4" is the minimum acceptable pour thickness over Acousti-Mat 3/4 Premium + Acousti-Mat SBR. Assembly tested with 1-1/2" Gyp-Crete and results should be considered a minimum acoustic performance for the required system.

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



MASS TIMBER

CROSS LAMINATED TIMBER (CLT)

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

CLT

EXPOSED



Ceiling Configuration	CLT Assembly	Gypsum Pour (in)	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed CLT	3-ply 4-1/8" (104 mm)	2" (51 mm)	None	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	50	41	T3630.01
						1.5 mm Foam Mat	LVT		45	T3630.02
						5 mm mat			47	T3630.04
						None	5.5 mm LVT with attached pad		50	T3630.05
							4.4 mm LVT with attached pad		48	T3630.06
							Carpet Tile with backing		47	T3630.07
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	58	54	T3630.03
						1.5 mm Foam Mat	LVT		48	T3631.01
						5 mm mat			50	T3631.02
						None	5.5 mm LVT with attached pad		51	T3631.04
							4.4 mm LVT with attached pad		51	T3631.05
							Carpet Tile with backing		51	T3631.06
									50	T3631.07
									54	T3631.03

EXPOSED



Ceiling Configuration	CLT Assembly	Gypsum Pour (in)	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed CLT	7-ply 7-3/4" (197 mm)	2-1/4" (57 mm)	None	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	58	47	T3594.25
						1.5 mm Foam Mat	LVT		50	T3594.11
						5 mm mat			51	T3594.04
						None	5.5 mm LVT with attached pad		51	T3594.10
							SPC with attached pad		52	T3594.01
							Carpet Tile with backing		50	T3594.02
									58	T3594.05

EXPOSED



Ceiling Configuration	CLT Assembly	Gypsum Pour (in)	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed CLT	4-ply 5-1/2" (140 mm)	1" (25 mm)	None	N/A	Acousti-Mat 3/8	Tate STONEWORKS	Tate STONEWORKS	61	51	P7973.11
						Tate RAF System	Exposed RAF	55	49	P7973.02
							Engineered Wood	61	51	P7973.07
							Carpet Tile		55	P7973.03

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



MASS TIMBER

LAMINATED VENEERS (VLT)

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

VLT

EXPOSED



DRYWALL DIRECT



SUSPENDED CEILING



Ceiling Configuration	VLT Assembly	Gypsum Pour	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed VLT	6-3/8"	2" (51 mm)	No	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop		41	L3827.03
							Engineered Wood	52	48	L3827.08
							LVT		45	L3827.04
						1.5 mm Foam Mat	LVT		50	P2528.02
						None	Carpet and Pad		83	L3827.10
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop		49	L3827.55
							Engineered Wood		53	L3827.60
						Acousti-Top	Engineered Wood	57	54	L3827.61
						None	LVT		52	L3827.56
						Acousti-Top	LVT		54	L3827.57
						None	Carpet and Pad		79	L3827.62
DRYWALL DIRECT 2 Layers 5/8" (16 mm) directly applied to VLT		2" (51 mm)†	No	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop		43	L3827.11
							Engineered Wood		48	L3827.16
							LVT		46	L3827.12
						Acousti-Top	LVT	52	50	L3827.13
						None	Carpet and Pad		83	L3827.18
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop		51	L3827.63
							LVT		54	L3827.64
						Acousti-Top	LVT		56	L3827.65
						None	Engineered Wood	58	53	L3827.68
						Acousti-Top	Engineered Wood		55	L3827.69
						None	Carpet and Pad		79	L3827.70
SUSPENDED CEILING 2 Layers 5/8" (16 mm) directly applied to VLT + 1 layer 5/8" (16 mm) hung		1" (25 mm)	Wire Hung, Armstrong IIC Clip + 6" Air Space	No	Acousti-Mat 1/8	None	Bare or VersaTop	58	51	L3827.37
							Engineered Wood		54	L3827.39
							LVT		53	L3827.38
		2" (51 mm)			Acousti-Mat 3/8 Premium	None	Bare or VersaTop		58	L3827.19
							Engineered Wood	62	59	L3827.23
							LVT		59	L3827.20
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	61	60	L3827.71
							Engineered Wood		62	L3827.73
							LVT		62	L3827.72
		1" (25 mm)		Yes	Acousti-Mat 1/8	None	Bare or VersaTop	60	61	L3827.45
							Engineered Wood		64	L3827.47
							LVT		64	L3827.46
		2" (51 mm)			Acousti-Mat 3/8 Premium	None	Bare or VersaTop	61	61	L3827.27
							Engineered Wood		63	L3827.31
							LVT		64	L3827.28
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	62	64	L3827.79
							Engineered Wood		65	L3827.81
							LVT		66	L3827.80

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



MASS TIMBER

DOWEL LAMINATED TIMBER (DLT)

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

DLT

EXPOSED



DRYWALL DIRECT



Ceiling Configuration	DLT Assembly	Gypsum Pour (in)	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed DLT	6"	1-1/2" (38 mm)	No	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	54	45	K1274.01
							LVT		47	K1274.02
							Engineered Wood		47	K1274.04
		2-1/2" (64 mm)			Acousti-Mat 3/4 Premium	None	Bare or VersaTop	55	45	M8796.02
						1.5 mm Rubber Mat	LVT		51	M8796.03
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	57	51	Q1631.01
							LVT		54	Q1631.06
						1.5 mm Foam Mat			55	Q1631.03
DRYWALL DIRECT 2 Layers 5/8" (16mm) directly applied to DLT		1-1/2" (38 mm)			Acousti-Mat 3/8 Premium	None	Bare or VersaTop	56	47	K1275.01
							LVT		49	K1275.02
							Engineered Wood		49	K1275.04



MASS TIMBER

MASS PLYWOOD PANEL (MPP)

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

MPP

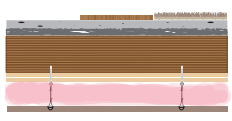
EXPOSED



DRYWALL DIRECT

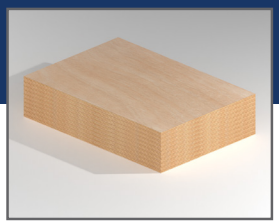


SUSPENDED CEILING



Ceiling Configuration	MPP Assembly	Gypsum Pour (in)	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed MPP	5"	1-1/2" (38 mm)	No	N/A	Acousti-Mat 3/4 Premium	None	Bare or VersaTop	54	41	K1283.07
						Acousti-Top	LVT		44	K1283.01
DRYWALL DIRECT 2 Layers 5/8" (16mm) directly applied to MPP				No		None	Bare or VersaTop	54	44	K1283.08
						Acousti-Top	LVT		46	K1283.02
SUSPENDED CEILING 2 Layers 5/8" (16mm) directly applied to MPP + 1 layer 5/8" (16 mm) hung			Wire Hung, Armstrong IIC Clip + 6" Air Space	No		None	Bare or VersaTop	61	52	K1283.03
						None	LVT		55	K1283.04
						None	Engineered Wood		55	K1283.06
EXPOSED Exposed MPP		2" (51 mm)***	No	N/A	Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	57	47	K1282.01
						Acousti-Top	LVT on Concrete		51	K1282.02

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.

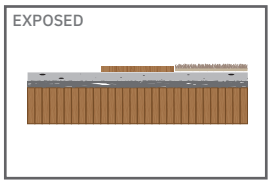


MASS TIMBER

GLUED LAMINATED TIMBER (GLT)

The sound tests below are examples of the many sound tests we have on file. Please refer to the disclaimer on page 16. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

GLT



Ceiling Configuration	GLT Assembly	Gypsum Pour (in)	Resilient Channel	Insulation	Encapsulated Sound Mat	Topical Mat	Floor Covering*	Sound Rating		
								STC**	IIC	Test Number
EXPOSED Exposed GLT	6"	2" (51 mm)	None	N/A	Acousti-Mat 3/8 Premium	None	Bare or VersaTop	56	43	0031-130.22
							LVT		46	0031-130.21
						1.5 mm Foam Mat			50	0031-130.19
						None	5.5 mm LVT with attached pad		49	0031-130.23
					Acousti-Mat 3/4 Premium + Acousti-Mat SBR	None	Bare or VersaTop	60	47	0031-140.9
							LVT		53	0031-140.8
						1.5 mm Foam Mat			54	0031-140.7
						None	5.5 mm LVT with attached pad		53	0031-140.10



*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.

MISCELLANEOUS UL FIRE DESIGNS

OPEN WEB TRUSS

UL #	Unique Assembly Details
L529	Suspended Ceiling
L542	Furring Channels/Drywall Screwed Direct
L556	2HR/4 Layers of Drywall
L577	2HR/3 Layers of Drywall
L581	Kinetics ICW Clip, Batt Insulation, 2 Layers 5/8" Gypsum Board
L583	Kinetics Isomax Clip, Batt Insulation, 2 Layers of 5/8" Gypsum Board
M500	2HR/3+ Layers of Drywall
M510	2HR/3 Layers of Drywall - 1 Layer Screwed Direct

2X10

UL #	Unique Assembly Details
M504	0.75 HR/Drywall Screwed Direct
M514	Sound Break Gypsum Board from National Gypsum
L581	Kinetics ICW Clip, Batt Insulation, 2 Layers 5/8" Gypsum Board
L583	Kinetics Isomax Clip, Batt Insulation, 2 Layers of 5/8" Gypsum Board

ULC DESIGN

#	Hour Rating	Type of Construction
I530	1.5, 2	TotalJoist by iSPAN®
L003	1	2" x 10" Wood Joist
L201	1	2" x 10" Wood Joist
L511	2	2" x 10" Wood Joist
L512	1	2" x 10" Wood Joist (Commercial Construction Only)
M500	1	2" x 10" Wood Joist
M501	1	2" x 10" Wood Joist
M503	2	2" x 10" Wood Joist
M514	2	Open Web Truss or Steel Frame
M520	1	TotalJoist by iSPAN®
M521	1	TotalJoist by iSPAN®

Canada also accepts all UL Fire Designs listed in this manual. For verification of a UL Fire Design for Canada, refer to the UL Environment document CCOX7.R8477 "Floor- and Roof-topping Mixtures Certified for Canada", which can be obtained by contacting your Maxxon Regional Representative or at www.ul.com.

For assistance determining the right systems and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

I-JOIST

UL #	Unique Assembly Details
L518	TJL®/Resilient Channel
L530	TJI® /Simpson Strong Clips
L538	2HR/3 Layers of Drywall
L547	TJI®/Resilient Channel
L556	2HR/Wilamette I Beam Truss/4 Layers of Drywall
L581	Kinetics ICW Clip, Batt Insulation, 2 Layers 5/8" Gypsum Board
L583	Kinetics Isomax Clip, Batt Insulation, 2 Layers of 5/8" Gypsum Board

STEEL JOIST

UL #	Steel Joist Manufacturer
G230	2HR/Midcon MetalEdge concrete T&G plank
G516	2HR/Midcon MetalEdge concrete T&G plank
G592	1, 2HR/Plycem Board
H502	1, 1½, 2HR/Plycem Board

*Contact Maxxon for specific brand, thickness, and installation details. ** All tested assemblies will achieve a minimum of the published result. Specific STC value of the tested assembly listed in the corresponding sound test.



ADDITIONAL INFORMATION

MAXXON STANDARD UNDERLAYMENTS Evaluation Report R8477	MAXXON HIGH-STRENGTH UNDERLAYMENTS Evaluation Report R8477	MAXXON ENCAPSULATED SOUND MATS Evaluation Report R8477
• Maxxon Gyp-Crete® Basic • Maxxon Gyp-Crete® 2000 Multifamily • Maxxon Gyp-Crete® Radiant • Maxxon Rapid Floor® Basic • Maxxon Rapid Floor® Multifamily	• Maxxon Gyp-Crete® High Performance • Maxxon Commercial Pro Level-Right® • Maxxon Commercial Pro Level-Crete™ • Maxxon Commercial Level EZ™ • Maxxon Commercial EZ Crete™ • Maxxon Commercial Gyp-Fix EZ™	• All Maxxon Acousti-Mats® • Maxxon Acousti-Top®

NOTE REGARDING CANADIAN PROJECTS: Canada accepts all UL Fire Designs listed in this manual. For additional information on Canadian Fire Designs, refer to page 15.

DISCLAIMER: For complete assembly information for a specific fire design, click on the UL number or visit Underwriters' Laboratories website. While the assemblies of the sound tests were constructed to best represent the most commonly built version of the UL fire design, some variances in construction may have occurred (i.e. within a particular UL rating there can be the allowances for different joist spacing and joist depths, different thicknesses and types of insulation or even no insulation, different types of channel, etc). The sound tests are a representation of what can be expected for sound control ratings when building a floor/ceiling assembly with a specific floor joist assembly that relates to a UL fire design using the designated sound control mat. However, due to the many variables beyond our control (for example quality control of drywall installation, type of resilient channel, density and selection of other building materials, flanking paths, etc.), the sound tests in this resource should not be considered a guarantee of performance. For this same reasoning and the fact that the sound tests were run in different buildings, different laboratories, and different environments, this data can be used for comparison and design evaluation but should not be considered a guarantee of performance. All acoustical testing was done by Architectural Testing; Riverbank Testing Laboratories; Intest, Inc.; Intertek Laboratories; Maxxon Acoustics Lab; Twin City Testing Corporation; D.L. Adams Associates, L.T.D.; Veneklasen Associates; or Stewart Acoustical Consultants. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

MAXXON®

920 Hamel Road PO Box 253
Hamel, Minnesota 55340
800-356-7887
maxxon.com
info@maxxon.com

View the Mass Timber Brochure

Underwriters Laboratories Inc.® Listed

GREENGUARD GOLD

GREENGUARD

@Maxxon.Corporation
maxxon-corporation

★MADE IN USA★

©2026 Maxxon Corporation. All Rights Reserved. Maxxon, Gyp-Crete, Level-Right, Level-Crete, Level EZ, EZ Crete, Acousti-Mat, Acousti-Top, VersaTop/Decorative Topping* and associated logos are registered trademarks of Maxxon Corporation, Hamel, MN, USA. TJI Joists are manufactured by and are registered trademarks of Trus Joist MacMillan. Thermafiber, Sheetrock and Firecode C are trademarks of US Gypsum Company. SpaceJoist is a registered trademark of Truswal Systems Corporation. TotalJoist by iSpan is a trademark of Genesis TP. Printed in the USA. BR001-08/26.