Underlayment Sound Ratings — Tested Assemblies

	Underlayment	Insulation	Ceiling Susp. on Channel	Ceiling Drywall	Floor Covering	Rating*	Test
Wood Joist w/ ⅝" (16 mm) Plywood Subfloor, 2" x 10" (51 mm – 254 mm) Joists							
	¾" (19 mm)	Yes	Yes	½" (13 mm)	None	60-STC	TL81-16
	¾" (19 mm)	No	Yes	½" (13 mm)	None	58-STC	TL81-17
	1" (25 mm)	No	No	½" (13 mm)	None	50-STC	TL81-19
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Carpet & Pad	79-IIC	5-761-2
	¾" (19 mm)	No	Yes	⅝" (16 mm)	Carpet & Pad	75-IIC	5-761-4
	1" (25 mm)	No	No	½" (13 mm)	Carpet & Pad	56-IIC	IN81-6
	1 ⅜" (35 mm)	Yes	Yes	½" (13 mm)	Foam-Back Parquet	55-IIC	IN81-11
	¾" (19 mm)	No	Yes	½" (13 mm)	Cushioned Vinyl	50-IIC	IN81-3
	1 ⅜" (35 mm)	Yes	Yes	½" (13 mm)	Vinyl Composition Tile	51-IIC	IN81-13
	1 ⅜" (35 mm)	Yes	Yes	½" (13 mm)	Vinyl	51-IIC	IN81-14
Wood Joist w/ ⅝" (16 mm) Plywood Subfloor, 2" x 10" (51 mm – 254 mm) Joists, .4" (10.2 mm) Enkasonic®							
	1½" (38 mm)	Yes	Yes	⅝" (16 mm)	Ceramic Tile	57-IIC	IN88-2
Wood Joist w/ ¾" (19 mm) OSB Subfloor, 2"x 10"(51 mm – 254 mm) Joists							
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Wood Flooring	53-FIIC	90-0156.2
TJL® Truss w/ ⅝" (19 mm) Plywood Subfloor							
	¾" (19 mm)	No	Yes	⅝" (16 mm)	None	62-FSTC	5-905
	¾"(19 mm)	No	Yes	⅝" (16 mm)	Cushioned Vinyl	61-IIC	5-905-2
	1" (25 mm)	No	No	⅝" (16 mm)	None	51-FSTC	5-905-1
	1" (25 mm)	No	No	⅝" (16 mm)	Cushioned Vinyl	52-IIC	5-905-3
TJI® Joist w/ ¾" (19 mm) T&G OSB Subfloor							
	¾" (19 mm)	Yes	Yes	⅝" (16 mm), 2 Layers	None	58-STC	TL96-250
	¾" (19 mm)	Yes	Yes	⅝" (16 mm), 2 Layers	Cushioned Vinyl	54-IIC	IN96-28
	¾" (19 mm)	Yes	Yes	⅝" (16 mm), 2 Layers	Cushioned Vinyl	50-IIC	IN96-30
	¾" (19 mm)	Yes	Yes	⅝" (16 mm), 2 Layers	Cushioned Vinyl	51-IIC	IN96-29
Parallel Chord Truss 2" x 4" (51 x 102 mm) 12" deep w/ ¾" (19 mm) T&G OSB Subfloor, .4" (10.2 mm) Enkasonic®							
	1½" (38 mm)	Yes	Yes	⅝" (16 mm)	None	59-FSTC	87-729-13
	1½" (38 mm)	Yes	Yes	⅝" (16 mm)	Carpet & Pad	83-FIIC	87-729-7
Truss Plate Institute w/ ¾" (19 mm) T&G Plywood Subfloor							
	¾" (19 mm)	Yes (blown-in)	Yes	⅝" (16 mm)	Vinyl	57-FSTC	98.67280.10
	¾" (19 mm)	Yes (blown-in)	Yes	⅝" (16 mm)	Vinyl	50-FIIC	98.67280.1
	¾" (19 mm)	Yes (blown-in)	Yes	⅝" (16 mm)	Ceramic	46-FIIC	98.67280.12
Precast Concrete							
	½" (13 mm)	No	No	No	None	58-FSTC	5-896
	½" (13 mm)	No	No	No	Cushioned Vinyl	66-IIC	5-896-1
	½" (13 mm)	No	No	No	Direct Glued Carpet	75-IIC	5-896-2
Metal Joist 9½" (247 mm) w/ ¾" (19 mm) T&G OSB Subfloor							
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Vinyl	49-FIIC	94-2278
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Carpet & Pad	51-FSTC	94-2168.1
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Carpet & Pad	73-FIIC	94-2168.2
SpaceJoist® Metal Web Truss 16" deep w/ ¾" (19 mm) T&G OSB Subfloor							
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Vinyl	51-FIIC	51210-4
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Manington ⅜" laminate floating floor over Quietwalk	54-FIIC	51210-5
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Carpet & Pad	70-FIIC	51210-3
	¾" (19 mm)	Yes	Yes	⅝" (16 mm)	Carpet & Tile	52-FSTC	51210-1

***NOTE:**

FSTC — Field Sound Transmission Class in accordance with ANSI/ASTM E 336 and E 413.
STC — Sound Transmission Class in accordance with ASTM E 90 and E 413.
IIC — Impact Insulation Class in accordance with ASTM E 492.
FIIC — Field Impact Insulation Class in accordance with ASTM E 1007 and E 989.

All acoustical testing was done by Riverbank Testing Laboratories; Intest, Inc.; or Twin City Testing Corporation or D.L. Adams Associates, L.T.D. For type of floor covering used, channel spacing and other information, contact Maxxon for test reports by number. For good acoustical performance, the selection of a floor/ceiling system attaining a minimum 60 STC and IIC is recommended. Systems attaining ratings less than 55 STC and IIC provide only marginal acoustical performance. The Maxxon floor underlayments and Acousti-Mat® are but single components of an effective sound control system. No sound control system is better than its weakest component. Care must be taken in the installation of all components of construction to assure the ultimate designed acoustical performance.