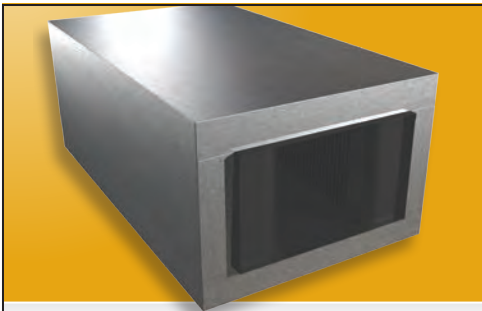


STC

SOUND TRANSMISSION CLASS SILENCERS

Sound Transmission Class (STC) rated silencers meet specific noise requirements for acoustically sensitive applications. Price STC silencers provide STC 40, 45, 50, and 55 ratings and include as required, a high transmission loss casing to reduce noise flanking through the sides of the silencer.

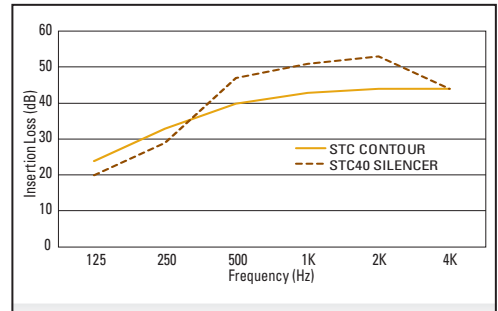
Effective noise solution for acoustically sensitive applications.



Double Wall Casing Option



Ideal for noise sensitive spaces such as interrogation rooms and recording studios.



Available STC ratings of 40-55

Product Information

Models

Rectangular STC Silencers

Rectangular Sound Transmission Class **R-STC**

Price R-STC Silencers are designed to provide noise reduction performance meeting STC 40, 45, 50 and 55 ratings, and as required, include a high transmission loss casing to maintain the acoustic integrity of the unit. An STC rating is a single number value indicating the sound transmission loss provided by a building assembly. A specific STC rating is commonly specified for the wall construction between adjacent acoustically sensitive rooms, such as interrogation rooms and recording studios. The STC rating of the R-STC silencers has been determined based on insertion loss performance obtained using the latest ASTM E477-13 test method and rated according to ASTM 413.

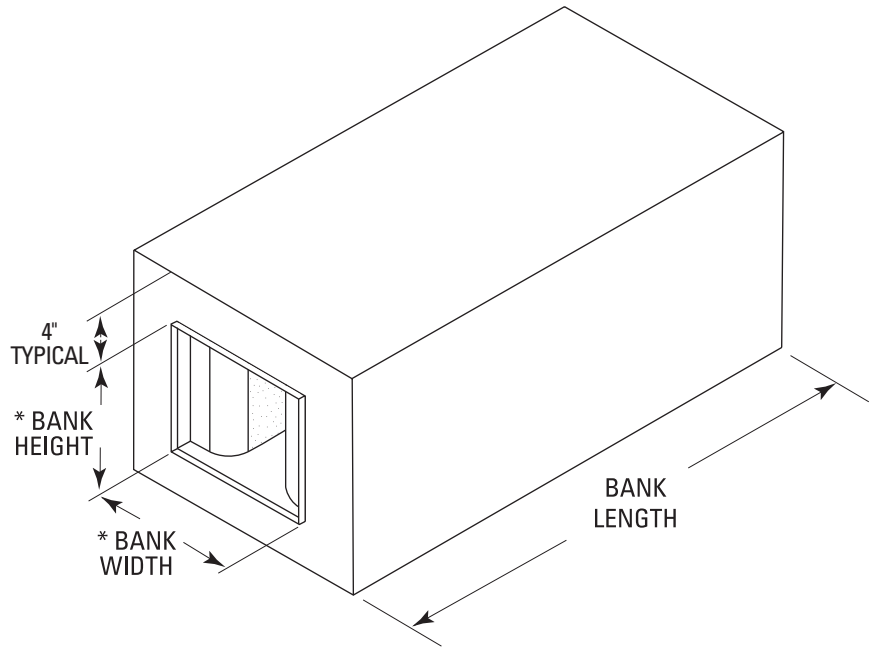
Features

- Provide STC40, 45, 50 and 55 ratings
- Double wall construction as needed for high transmission loss casing
- Welded construction to provide the highest quality. Mechanical fasteners used only when absolutely necessary
- 2" slip connection on both ends

R-STC Silencers Applications

Price R-STC silencers are typically designed for medium-low velocity applications. This medium-low velocity configuration provides the highest insertion loss levels across the full range of frequencies.

R-STC40	
Configuration	STC Rating
R-Rectangular	40
	45
	50
	55



* Bank width & height typically equal the duct dimensions.

Standard Dimension Limits

Bank Width		Bank Height		Length		Component Width		Component Height	
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6	48	6	48	84	144	6	48	6	48

- All dimensions are in inches
- Standard sizes are based on raw material sizes and acceptable structural engineering practices.
- For sizes outside the standard range, please contact your local Price sales rep.
- Add 8 inches to Bank width and Bank height dimensions for double wall construction.

Construction

Price STC silencers consist of solid metal casing, minimum 26 gauge perforated metal liner, and acoustic fiberglass media. Various classifications are available to meet the specific requirements of each project.

Material

- STC40** – 16 Gauge casing
- STC45** – 10 Gauge Casing
- STC50** – Double Wall Casing
- STC55** – Double Wall Casing

Dimensional Data

Price R-STC silencers are built to match the duct dimensions, therefore the width, height and length dimensions for the silencer must always be specified. Please consult the Stand Dimension Limits chart for available sizes.

Accessories & Custom Options

To meet project requirements, Price can provide additional features such as:

- Elbow and Circular configurations
- Fiberglass Cloth
- Paint
- Flanges
- Slip and Drive Connections
- Access Doors
- Plastic covered ends for shipping

Contact your local Price sales rep for additional custom options and accessories.

Sound Transmission Class Silencers STC Series



Performance Data - Model R-STC

Dimensional Data — Imperial (in.) / Metric (mm)

	Available Duct Widths											Duct Height	Silencer Length
Imperial	6	12-13	24-26	36-39	48-52	60-65	72-78	84-91	96-104	108-117	120-240	6-144	36-144
Metric	150	300-325	600-650	900-975	1200-1300	1500-1625	1800-1950	2100-2275	2400-2600	2700-2925	3000-6000	150-3600	900-3600

Dynamic Insertion Loss (DIL)

STC Rating	Length in. (mm)	Face Velocity fpm (m/s)	Pressure Drop in. w.g. (Pa)	Octave Band Dynamic Insertion Loss (dB)							
				1	2	3	4	5	6	7	8
				63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
STC40	84 (2100)	+750 (+3.81)	0.31 (77)	11	18	27	46	51	53	45	31
		+500 (+2.54)	0.14 (35)	12	19	28	47	51	53	45	31
		0	0.00	12	20	29	47	51	53	44	29
		-500 (-2.54)	0.14 (35)	14	22	31	48	51	53	44	28
		-750 (-3.81)	0.31 (77)	15	23	32	48	51	52	43	28
STC45	108 (2700)	+750 (+3.81)	0.33 (82)	15	25	33	54	54	55	54	37
		+500 (+2.54)	0.15 (37)	16	25	34	54	54	55	54	37
		0	0.00	16	26	35	53	54	55	54	36
		-500 (-2.54)	0.15 (37)	19	28	36	53	54	55	53	35
		-6000 (-30.48)	0.33 (82)	20	29	38	53	54	55	53	35
STC50	120 (3000)	+750 (+3.81)	0.34 (85)	18	29	37	55	55	55	55	40
		+500 (+2.54)	0.16 (39)	18	28	37	55	55	55	55	40
		0	0.00	19	29	38	55	55	55	55	40
		-500 (-2.54)	0.16 (39)	21	31	39	55	55	55	55	39
		-6000 (-30.48)	0.34 (85)	23	32	41	55	55	55	55	39
STC55	144 (3600)	+750 (+3.81)	0.36 (90)	25	36	45	55	55	55	55	46
		+500 (+2.54)	0.17 (41)	24	36	45	55	55	55	55	46
		0	0.00	25	36	46	55	55	55	55	47
		-500 (-2.54)	0.17 (41)	26	38	46	55	55	55	55	47
		-6000 (-30.48)	0.36 (90)	29	39	47	55	55	55	55	47

Generated Noise (dB)

Length	Face Velocity fpm (m/s)	Octave Band Generated Noise (dB re 10 ⁻¹² Watts)							
		1	2	3	4	5	6	7	8
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
All Lengths	+750 (+3.81)	50	38	30	38	38	36	32	28
	+500 (+2.54)	39	24	15	28	31	25	18	14
	-500 (-2.54)	32	20	15	29	34	31	28	18
	-750 (-3.81)	44	21	24	37	41	41	41	32

Generated Noise Corrections (dB)

Silencer Face Area (ft ²) (+)	0.5	1	2	4	8	16	32	64	128
dB Addition or Reduction (-)	-9	-6	-3	0	+3	+6	+9	+12	+15

Weights (lbs.)

Model	Length (in)	Width (in)	12								24								36								48							
			18	24	30	36	42	48	18	24	30	36	42	48	18	24	30	36	42	48	18	24	30	36	42	48								
R-STC40	84		142	173	202	231	260	289	221	261	302	343	385	427	300	352	405	457	510	562	379	443	508	572	636	700								
R-STC45	108		339	405	471	537	603	669	497	579	660	741	822	903	654	750	846	942	1038	1134	813	924	1035	1146	1256	1365								
R-STC50	120		428	498	565	634	703	774	583	670	754	839	925	1012	738	842	943	1044	1147	1250	893	1013	1131	1249	1368	1485								
R-STC55	144		506	592	670	751	832	917	694	797	897	996	1097	1201	879	1003	1123	1244	1363	1487	1063	1209	1347	1488	1630	1768								

Performance Notes:

- Data derived in strict accordance with ASTM E477-13.
- "+" indicates data for forward flow (supply).
- "-" indicates data for reverse flow (return).
- Dynamic Insertion Loss is limited to 55 dB due to flanking. Contact Price if insertion loss above 55 dB is required.
- Generated noise data is based on a face area of 4 ft². Corrections in chart provided must be applied for other sizes.
- Performance data is based on a 24" x 24" component.
- For performance data specific to a size not cataloged, please use Price All-In-One Selection Software.
- STC ratings are determined according to ASTM E413.