AIR INFILTRATION TEST RESULTS

Tests conducted by a leading independent testing laboratory.

HEAD & JAMB	THRESHOLD THRESHOLD	DOOR BOTTOM	25 MPH CFM RATING
DS62	NONE	321	.22
DS62	BOTTOM SEALED CLOSED		.13
DS70	S498A	NONE	.08
DS75	NONE	321	.25
DS75	BOTTOM SEAL CLOSED		.16
DS78	S498A	NONE	.13
DS79	S498A	330	.03
399	NONE	521	.23
499	NONE	521	.07
599	NONE	521	.04
770	S498A	330	.03
796	NONE	321	.23
797	NONE	321	.13
797	BOTTOM SEAL CLOSED		.02

E283-73 and SDI 116 Air

WEATHERSTRIPS SAVE ENERGY AND MONEY

In these energy conscious times, we understand that a door perimeter which leaks air, costs money. In addition, smoke can pose a life threatening hazard to anyone exposed.

Reese has tested many seal combinations to determine effectiveness against air and smoke infiltration. This was done in conformance with ASTM test procedure E283-73 and SDI 116, at a static pressure of 1.56 psf — the equivalent of a 25 mph wind. The results are shown on the chart at left.

SOUND PROOFING TESTS

Reese Enterprises, Inc. offers a wide variety of proven soundproofing door seals. Used in conjunction with sound rated doors, they will provide you with the sound reduction you require. Below are results of test conducted by a leading acoustical testing laboratory.

What is an STC Rating?

These letters stand for Sound Transmission Class — a single number rating devised by the American Society for Testing and Materials (ASTM). This rating provides the manufacturer or consumer with a measurement of the relative sound insulating performance of a barrier such as a wall, partition, or door and its seals, allowing performance ranking of competing products.

HEAD & JAMS STRIP	THRESHOLD	DOOR BOTTOM	DOOR CAULKED SHUT (Inoperable)	DOOR OPERABLE with REESE SEALS
599	None	521	STC 51	STC 46
599	S498A	330	STC 51	STC 45
499	None	521	STC 51	STC 44
499	S498A	330	STC 51	STC 43
99	None	330	STC 44	STC 37
770	None	330	STC 44	STC 37
DS79	S498A	330	STC 44	STC 41
792	None	321	STC 34	STC 28
793	None	321	STC 34	STC 28
796	None	321	STC 32	STC 27
797	None	321	STC 32	STC 28
DS75	None	321	STC 32	STC 29
DS70	None	320	STC 32	STC 28
By Door Manufacturer		371	---	STC up to 50

ASTM Standard E90-75

It is derived in accordance with exacting test procedures outlined on ASTM Standard E90-75. The specimen to be tested is mounted between two large reverberation rooms. These rooms are arranged and constructed so that the only significant sound transmission between them is through the test specimen. A sound signal, consisting of a series of eighteen 1/3 octave bands of random (pink) noise, is introduced into one room, called the source room. Then measurements are made to determine the Noise Reduction caused by the barrier — the source room sound level minus the receiving room sound level — at each test frequency. These noise reduction measurements are then mathematically converted to a Transmission Loss (TL) figure in decibels (dB) for each frequency band. The TL figures are then compared to standard ASTM STC reference contours (ASTM E313-73). These standard contours are designed to correlate TL figures with overall subjective impressions of the sound insulation provided by a barrier against the sounds of speech, radio, television, music, and similar sources of noise typical in offices and dwellings. The STC rating is the highest contour where the sum of the deficiencies (that is the deviations below the reference contour) is not greater than 32dB and the maximum deficiency at any single test frequency is 8dB. The higher the number, the greater the individual TL values of a barrier; consequently, the greater the sound insulation properties.It should be noted that this rating is a result of the average TL of many frequencies. If you have a noise control problem in just one frequency range, it would be better to look at individual TL values at that frequency range rather than just the STC rating when selecting products.