

TECHNICAL DATA 4

Subject: Release of STC (Sound Transmission Class) Ratings

The purpose of the Sound Transmission Class (STC) is to provide a single figure rating that can be used for comparing the sound-insulating properties of partition elements used for general building design purposes. The higher the rating (STC) the greater the sound insulation properties of the partition.

In order for the door to reach the rated performance, the door must be installed correctly. The door frame itself needs to be fitted into the wall avoiding cracks or voids that could transmit sound. The sound insulation depends on not only the door panel but also the acoustical seals provided around the opening. In an effort to clarify the effect of hardware gasketing and sealing products, we have included test results in the table below. In testing, we used Pemko S773 seal kits in the operable column below.

In accordance with the American Society for Testing and Materials designation ASTM E413-2004, classification for Rating Sound Insulation, the following are the ratings achieved by our doors per ASTM E90-90 as conducted by Intertek Testing Services and testing per ASTM E90-04, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions, by Western Electro-Acoustic Laboratory.

Door Series	Door	Core	Testing Installation Method		
	Thickness	Туре	Inoperable	Operable	Operable
				(without seal)	(with S773
					seal kit)
Infinity RM or FM **	1-3/4"	28# particle board core	STC 34	STC 21	STC 30
Encore	1-3/4"	EPS Foam core	STC 26	STC 19*	STC 23*
Encore	1-3/4"	44# particle board core	STC 36	STC 21	STC 33
Ovation	1-3/8"	3/8" flat panel	STC 30	STC 19*	STC 25*
Ovation	1-3/8"	9/16" or 7/8" raised panel	STC 29	STC 21*	STC 24*
Ovation	1-3/4"	1-1/4" raised panel – 20 Min	STC 34	STC 22*	STC 29*
Ovation	1-3/4"	11/16" flat panel – 20 Min	STC 32	STC 20	STC 30
Ovation	1-3/4"	5/8" flat panel Intumescent Layered Core- 45-90 Min	STC 39	STC 20	STC 34

^{*} ESTIMATED - These doors were not tested with installation and are based only on calculations

stc rating



^{**} Infinity, Designer or Architectural raised or flush moldings.