

## **CERTIFICATION LETTER**

We certify that Tremco Acoustical Sealant conforms to Canadian Specification CAN/CGSB-19-21-M87.

The STC, sound transmission class, values for Acoustical Sealant are shown in the attached tables.

**Table 1. Acoustic Performance of Tremco Sealants Material Properties** 

Material	Acoustical Sealant	TREMstop Acrylic	TremFlex 834
Shear Modulus* (G <sub>R</sub> ), N/m <sup>2</sup>	45,000	200,000	410,000
Loss Factor* $(tan(\delta_L))$ , dimensionless	0.33	0.56	0.67
Density (cured), kg/m <sup>3</sup>	1720	1100	1630
Depth after Shrinkage of 1/2" bead, inches	0.465	0.371	0.391
Predicted Aco	ustic Performan	ice of Sealant Al	one
Sound Transmission Loss (STC) of single 1/4", (as applied**) bead	30	24	28
Sound Transmission Loss (STC) of single 1/2", (as applied**) bead	36	30	34
STC of two 1/4", (as applied**) beads, separated by 3.5", with sound absorption material in between	48	36	44
STC of two 1/2", (as applied**) beads, separated by 3.5", with sound absorption material in between	60	48	56

 $<sup>^{*}</sup>$  based on tests at 25° C, and 100 rad/s.  $G_{R}$  is the real component of the complex shear modulus.

<sup>\*\*</sup> depth of bead before shrinkage.

Table 2. Acoustic Performance of Wall Systems		
Base Wall System (No Leaks)	STC	
Wall Type 1. One layer 5/8" gypsum board, with joints taped and filled, either side of 3-5/8" steel studs, spaced 24" on centre, with absorptive material in cavity.	45*	
Wall Type 2. Two layers 1/2" gypsum board, with joints overlapped, taped and filled, either side of 3-5/8" steel studs, spaced 24" on centre, with absorptive material in cavity.	53*	

## Predicted Acoustic Degradation due to Leakage and Performance of Tremco Sealant (STC)

Sealant Material	Acoustical Sealant	TREMstop Acrylic	TremFlex 834
Wall Type 1 with 1/4" gap along top or bottom of 8' high wall.	26 (no sealant)		
Above sealed with one 1/4" bead** on one side only.	44	41	43
Above sealed with one 1/4" bead on both sides.	45	45	45
Above sealed with two 1/4" beads on both sides.	45	45	45
Wall Type 2 with 1/4" gap along top or bottom of 8' high wall.	26 (no sealant)		
Above sealed with one 1/4" bead on one side only.	48	43	47
Above sealed with one 1/4" bead on both sides.	53	52	53
Above sealed with two 1/4" beads on both sides.	53	53	53

<sup>\*</sup> as per National Building Code of Canada, Table A-9.10.3.A.

<sup>\*\*</sup> depth of bead before shrinkage.