



April 28, 2019

ClarkDietrich

9050 Centre Point Drive, Suite 400
 West Chester, Ohio 45069

Attention: Mr. Adam Shoemaker

Subject: **ProSTUD Acoustical Performance
 Acoustical Performance of Stud Depth Modifications
 Laboratory Testing Evaluation
 VA Project Number 5123-019**

Dear Adam:

This letter presents Veneklasen Associates, Inc. (VA) review of the anticipated STC rating change when installed with the ProSTUD metal studs in laboratory tests conducted at Western Electro-Acoustic Laboratory (WEAL). To perform this analysis, the STC rating from walls tested at the lab were reviewed in conjunction with acoustical test data available within the industry.

The table below summarizes the results of the acoustical tests for ProSTUD Pro 25 gauge studs at 24 inches on center with different stud depths. The walls measured include resilient channel and insulation in the stud cavity.

Stud Depth	STC Rating	
	1 layer of gypsum board each side of wall	2 layers of gypsum board each side of wall
2-1/2	51	62
3-5/8	52	62
6	52	63

Based on the information currently available with the presence of a resilient channel, the acoustical performance of the walls tested when the ProSTUD depth is modified from 2-1/2 to 6 inches (and all other elements are held constant) will result in a STC rating increase of 0 to 1 STC points.

In reviewing data with gypsum board directly attached to the studs (no resilient channel), the acoustical performance of the ProSTUD system when the depth is modified from 2-1/2 to 6 inches will result in a STC rating increase of 0 to 2 STC points.

If you have any questions or comments, please do not hesitate to call.

Sincerely,
Veneklasen Associates, Inc.

John LoVerde, FASA
 Principal