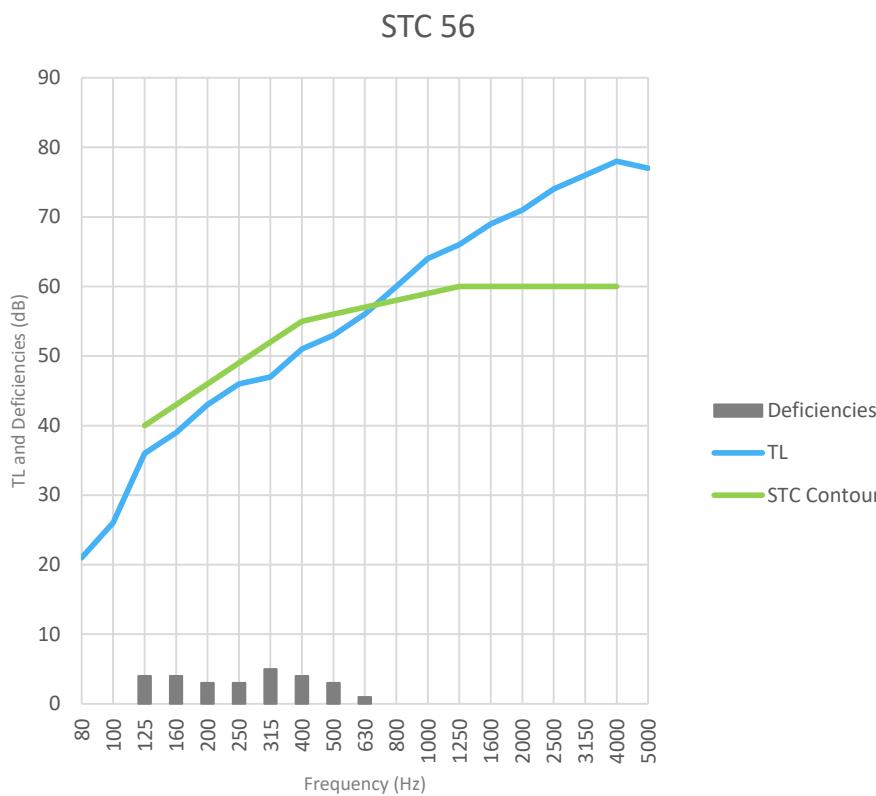


**Acoustic Data**

Test Site:	North Orbit Acoustic Laboratories P.O. Box 6948 Minneapolis, MN 55406-0948	Test Number:	NOAL 20-0409
Assembly Type:	Wall	Test Date:	4/02/2020
Method:	ASTM E90-09	Report Date:	6/15/2020

Frequency (Hz)	TL (dB)	Deficiencies (dB)
80	21	
100	26	
125	36	4
160	39	4
200	43	3
250	46	3
315	47	5
400	51	4
500	53	3
630	56	1
800	60	
1000	64	
1250	66	
1600	69	
2000	71	
2500	74	
3150	76	
4000	78	
5000	77	
Total Deficiencies		27


**Assembly Mass**

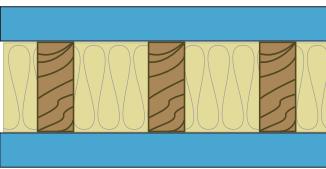
Building Element	Mass lb (kg)	Surface Weight PSF (kg/m <sup>2</sup> )
1-3/8" QuietRock® 545 gypsum panel	569.4 (258.3)	5.93 (28.96)
2x4 wood studs spaced 16" oc	113.6 (51.5)	1.18 (5.78)
3-1/2" glass fiber insulation	22.8 (10.3)	0.24 (1.16)
1-3/8" QuietRock® 545 gypsum panel	567.4 (257.4)	5.91 (28.86)
Total	1,273.2 (577.5)	13.26 (64.76)

**Test Methods**

Test methods follow the published standards listed below. All values derived for single-direction transmission loss measurements.

ASTM E90-09: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.  
 ASTM E413-16: Classification for Rating Sound Isolation

**Design Details**

<b>PGD-W-397-16</b>  <b>STC 56</b> NOAL 20-0409 - 16" o.c.	 2" Type S or W drywall screws 16" o.c. (for fire 2" screws spaced 8" in perimeter and 12" o.c in the field).						
<b>Low Frequency Transmission Loss</b>	 One layer 1-3/8" QuietRock® 545 applied vertically or horizontally.						
<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Hz</th> <th style="text-align: right;">TL</th> </tr> <tr> <td style="text-align: left;">80</td> <td style="text-align: right;">21</td> </tr> <tr> <td style="text-align: left;">100</td> <td style="text-align: right;">26</td> </tr> </table>	Hz	TL	80	21	100	26	 2 x 4 wood studs 16" o.c.
Hz	TL						
80	21						
100	26						
	 3-1/2", R-13 glass fiber insulation friction fit into stud cavity.						
<b>Fire: 1 Hour - UL U305</b>	 One layer 1-3/8" QuietRock® 545 applied vertically or horizontally.						
<b>Thickness: 6-1/8"</b> <b>Approx weight: 13.3 lb/ft<sup>2</sup></b>	 2" Type S or W drywall screws 16" o.c. (for fire 2" screws spaced 8" in perimeter and 12" o.c in the field).						
Load Bearing Vertical joints staggered on opposite sides							


**QuietRock® 545**
**PABCO® Fire and Installation Support**

800-282-9298

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