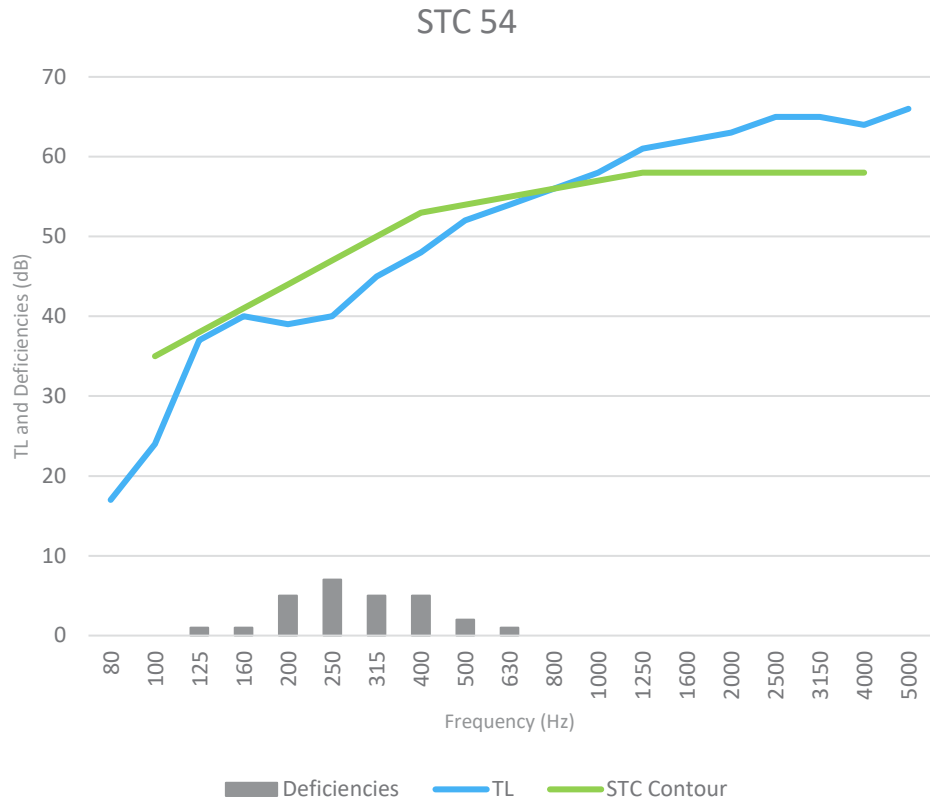


**Acoustic Data**

Test Site:	Orfield Laboratories, Inc. 2709 East 25th St., Minneapolis, MN 55406	Test Number:	OL 11-0320
Assembly Type:	Wall	Test Date:	3/04/2011
Method:	ASTM E90-09	Report Date:	3/31/2011

Frequency (Hz)	TL (dB)	Deficiencies (dB)
80	17	
100	24	
125	37	1
160	40	1
200	39	5
250	40	7
315	45	5
400	48	5
500	52	2
630	54	1
800	56	
1000	58	
1250	61	
1600	62	
2000	63	
2500	65	
3150	65	
4000	64	
5000	66	
<b>Total Deficiencies</b>		<b>27</b>



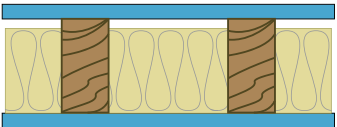






**Assembly Mass**

Building Element	Mass lb (kg)	Surface Weight PSF (kg/m <sup>2</sup> )
5/8" QuietRock ES®	170.6 (77.4)	2.64 (12.91)
2"x4" wood studs spaced 24" oc	56.0 (25.4)	0.87 (4.24)
3-1/2" glass fiber insulation	14.0 (6.4)	0.22 (1.06)
5/8" QuietRock ES®	175.7 (79.7)	2.72 (13.30)
<b>Total</b>	<b>416.3 (188.9)</b>	<b>6.45 (31.51)</b>

**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	Description	Acoustical	Fire
<p><b>PGD-02-10-090</b></p> 	<ul style="list-style-type: none"> <li> 1-5/8" Type S drywall screws 16" o.c. (for fire 1-7/8" Type W drywall screws 7" o.c.).</li> <li> One Layer 5/8" QuietRock® ES or QuietRock® ES MR type X gypsum panel applied vertically.</li> <li> 2 x 4 wood studs 24" o.c.</li> <li> 3-1/2" glass fiber insulation in stud space.</li> <li> One Layer 5/8" QuietRock® ES or QuietRock® ES MR type X gypsum panel applied vertically.</li> <li> 1-5/8" Type S drywall screws 16" o.c. (for fire 1-7/8" Type W drywall screws 7" o.c.).</li> </ul>	<p><b>STC 54</b> OL-TL-11-0320</p>	<p><b>1 Hour</b> UL U305</p>
<p>4-3/4" Thick, 6.5 lb/ft<sup>2</sup>, Load Bearing.</p>	<p>Vertical joints staggered on opposite sides.</p>		