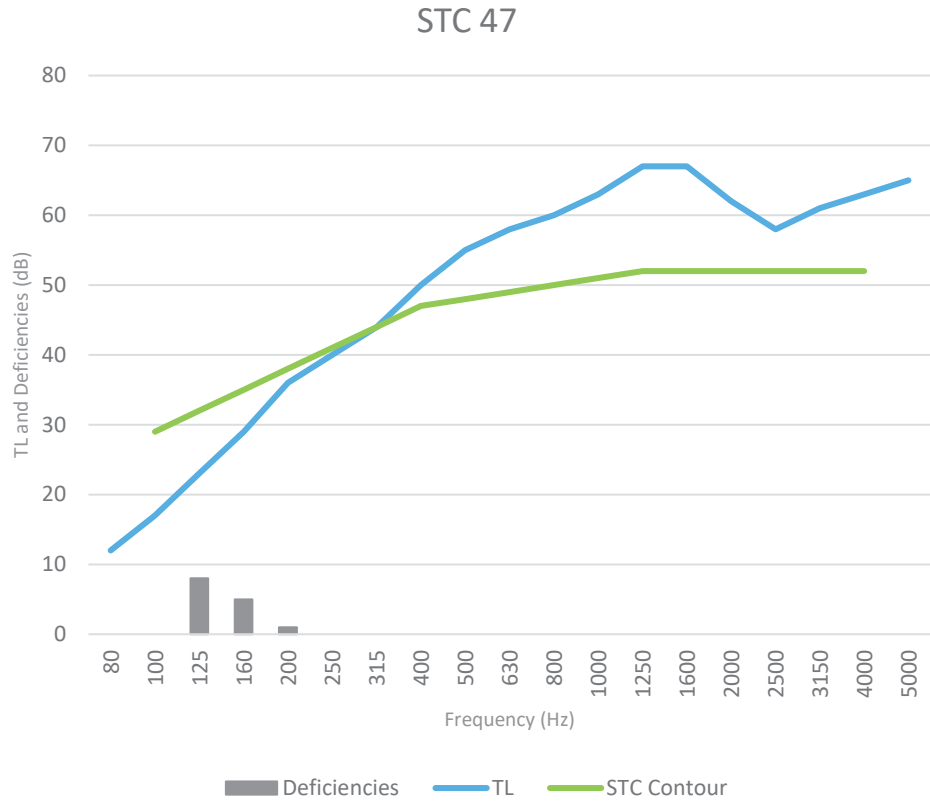


**Acoustic Data**

|                |   |              |              |
|----------------|---|--------------|--------------|
| Test Site:     | North Orbit Acoustic Laboratories<br>P.O. Box 6948 Minneapolis, MN 55406-0948 | Test Number: | NOAL 17-0454 |
| Assembly Type: | Wall  | Test Date:   | 4/20/2017    |
| Method:        | ASTM E90-09   | Report Date: | 6/1/2017     |

| Frequency (Hz)            | TL (dB) | Deficiencies (dB) |
|---------------------------|---------|-------------------|
| 80                        | 12      |                   |
| 100                       | 17      |                   |
| 125                       | 23      | 8                 |
| 160                       | 29      | 5                 |
| 200                       | 36      | 1                 |
| 250                       | 40      |                   |
| 315                       | 44      |                   |
| 400                       | 50      |                   |
| 500                       | 55      |                   |
| 630                       | 58      |                   |
| 800                       | 60      |                   |
| 1000                      | 63      |                   |
| 1250                      | 67      |                   |
| 1600                      | 67      |                   |
| 2000                      | 62      |                   |
| 2500                      | 58      |                   |
| 3150                      | 61      |                   |
| 4000                      | 63      |                   |
| 5000                      | 65      |                   |
| <b>Total Deficiencies</b> |         | <b>14</b>         |



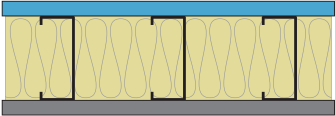






**Assembly Mass**

| Building Element                                 | Mass lb (kg)           | Surface Weight PSF (kg/m <sup>2</sup> ) |
|--|------------------------|---|
| 5/8" QuietRock® ES Type X gypsum panel           | 265.6 (120.5)          | 2.77 (13.51)                            |
| 3-5/8" 15 mil (25 ga.) steel studs spaced 16" oc | 27.4 (12.4)            | 0.29 (1.39)                             |
| 3-1/2" glass fiber insulation                    | 14.2 (6.4)             | 0.15 (0.72)                             |
| 5/8" Flame Curb® Type X gypsum panel             | 201.2 (91.3)           | 2.10 (10.23)                            |
| <b>Total</b>                                     | <b>508.40 (230.61)</b> | <b>5.30 (25.86)</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-01-10-111</b></p>  | <ul style="list-style-type: none"> <li> 1" Type S screws (for fire minimum 1-14" Type S screws) spaced 8" o.c. at edges and 12" o.c. in the field.</li> <li> One Layer 5/8" QuietRock<sup>®</sup> ES or QuietRock<sup>®</sup> ES MR type X gypsum panel applied vertically.</li> <li> 3-5/8" 15 mil (25 ga. EQ) steel studs, 16" o.c.</li> <li> 3-1/2" glass fiber insulation in stud space.</li> <li> One layer: 5/8" type X (FLAME CURB<sup>®</sup>, WATER CURB<sup>®</sup>, MOLD CURB<sup>®</sup> Plus, ABUSE CURB<sup>®</sup>, PABCO<sup>®</sup> High Impact, PABCO<sup>®</sup> Glass Sheathing or PABCO<sup>®</sup> Gypsum Sheathing) gypsum panel applied vertically.</li> <li> 1" Type S screws (for fire minimum 1-14" Type S screws) spaced 8" o.c. at edges and 12" o.c. in the field.</li> </ul> | <p><b>STC 47</b><br/>NOAL 17-0454</p> | <p><b>1 Hour</b><br/>UL V464</p> |
| <p>4-7/8" Thick, 5.3 lb/ft<sup>2</sup>, Non-Load Bearing.</p>   | <p>Vertical joints staggered on opposite sides.</p>   |                                       |                                  |