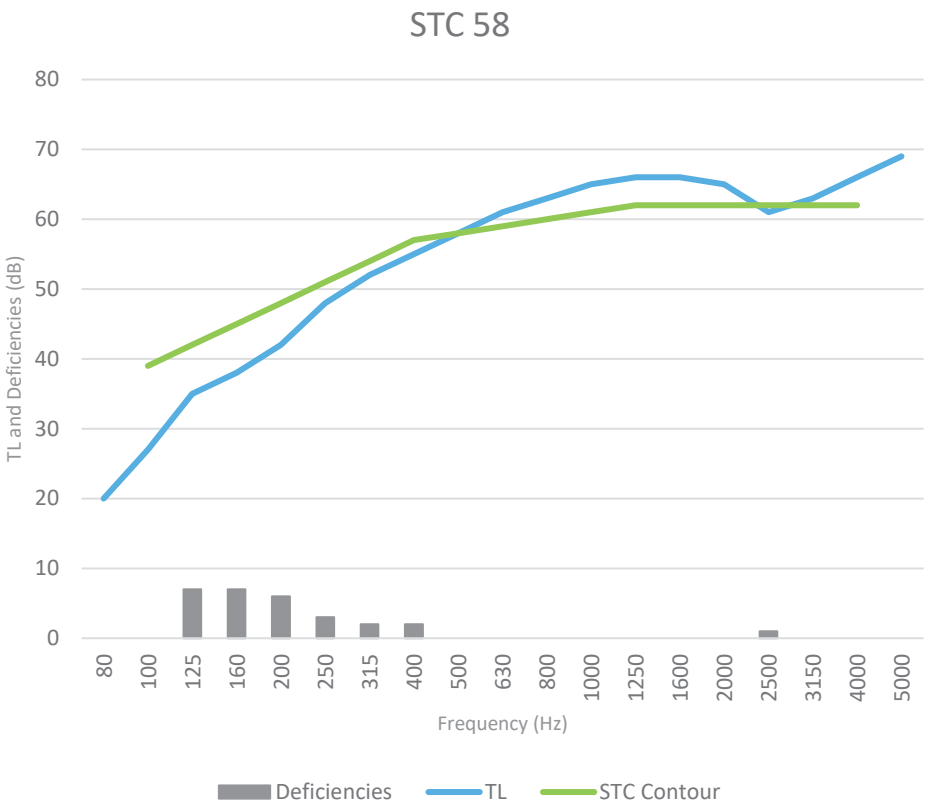
QuietRock® by PABCO® Gypsum

# Summary Assembly and Acoustic Data Report
PGD-01-10-135

## Acoustic Data

| | | | |
|---|---|---|---|
| Test Site: | North Orbit Acoustic Laboratories<br>P.O. Box 6948 Minneapolis, MN 55406-0948 | Test Number: | NOAL 18-0841 |
| Assembly Type: | Wall | Test Date: | 8/20/2018 |
| Method: | ASTM E90-09 | Report Date: | 10/26/2018 |

| Frequency (Hz) | TL (dB) | Deficiencies (dB) |
|---|---|---|
| 80 | 20 | |
| 100 | 27 | |
| 125 | 35 | 7 |
| 160 | 38 | 7 |
| 200 | 42 | 6 |
| 250 | 48 | 3 |
| 315 | 52 | 2 |
| 400 | 55 | 2 |
| 500 | 58 | |
| 630 | 61 | |
| 800 | 63 | |
| 1000 | 65 | |
| 1250 | 66 | |
| 1600 | 66 | |
| 2000 | 65 | |
| 2500 | 61 | 1 |
| 3150 | 63 | |
| 4000 | 66 | |
| 5000 | 69 | |
| Total Deficiencies | | 28 |



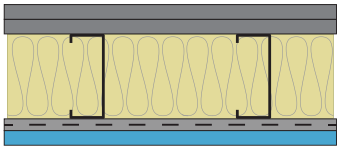

## Assembly Mass

| Building Element | Mass lb (kg) | Surface Weight PSF (kg/m2) |
|---|---|---|
| 5/8” QuietRock® ES Type X gypsum panel | 255.0 (115.7) | 2.66 (12.97) |
| Resilient Channels 24” oc | 13.4 (6.1) | 0.14 (0.68) |
| 3-5/8” 33 mil (20 ga.) steel studs spaced 16” oc | 90.0 (40.8) | 0.94 (4.58) |
| 3-1/2” glass fiber insulation | 20.6 (9.3) | 0.21 (1.05) |
| 5/8” Flame Curb® Type X gypsum panel | 203.8 (92.4) | 2.12 (10.36) |
| 5/8” Flame Curb® Type X gypsum panel | 203.8 (92.4) | 2.12 (10.36) |
| Total | 786.60 (356.80) | 8.19 (40.01) |

## 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 |
|---|---|---|---|
| **PGD-01-10-135**<br>  | 1-5/8" Type S screws spaced 8" o.c. at edges and 12" o.c. in the field.<br>Face layer 5/8" type X (FLAME CURB®, WATER CURB®, MOLD CURB® Plus, ABUSE CURB®, PABCO® High Impact, PABCO® Glass Sheathing or PABCO® Gypsum Sheathing) gypsum panel applied vertically.<br>1" Type S screws spaced 8" o.c. at edges and 12" o.c. in the field.<br>Base layer 5/8" type X (FLAME CURB®, WATER CURB®, MOLD CURB® Plus, ABUSE CURB®, PABCO® High Impact, PABCO® Glass Sheathing or PABCO® Gypsum Sheathing) gypsum panel applied vertically.<br>3-5/8" 33 mil (20 ga.) steel studs, 24" o.c.<br>3-1/2" glass fiber insulation in stud space.<br>Resilient channel applied at right-angle, 24" o.c.<br>1/2" Type S screws attaching resilient chanel to stud at each intersection.<br>One Layer 5/8" QuietRock® ES or QuietRock® ES MR type X gypsum panel applied vertically.<br>1" Type S screws spaced 12" o.c. in the field. | **STC 58**<br>NOAL 18-0841 | **1 Hour**<br>UL U425 |
| 6" Thick, 8.2 lb/ft$^2$, Load Bearing. | Vertical joints staggered on opposite sides. | | |