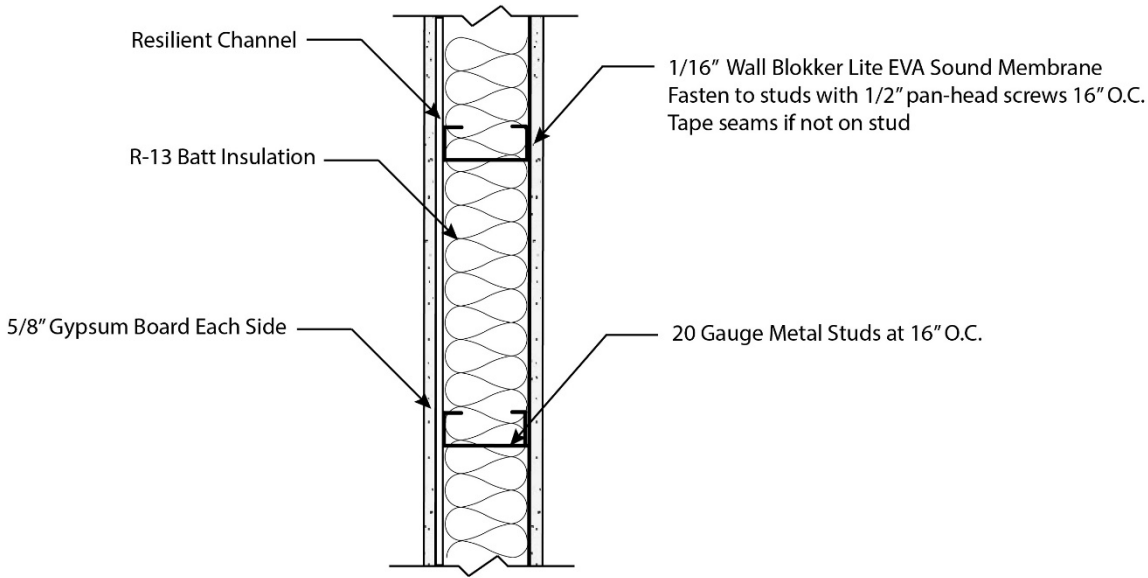


### Partition Type CA 5



Partition	Stud Size	Fire Rating	UL	STC Rating	STC Test	Partition Thickness
CA 5-1	3-5/8"	1 hr	UL U419	STC 53	INSUL v9.0.8	5-9/20"
CA 5-2	6"	1hr	UL U419	STC 57	INSUL v9.0.8	7-8/25"

# Sound Insulation Prediction (v9.0.8)

Program copyright Marshall Day Acoustics 2017

margin of error is generally within STC +/- 3 dB

- Key No. 4851

Job Name:

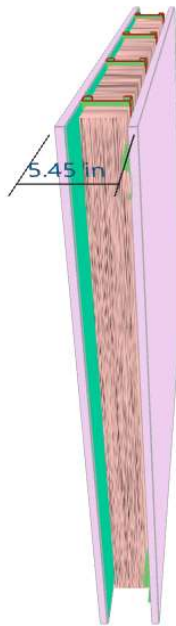
Job No.:

Date: 6/9/2020

File Name:

Initials: Marcel

Notes:



STC 53  
OITC 33

Mass-air-mass resonant frequency = 64 Hz

Panel Size = 8.9 ft x 13.1 ft

Partition surface mass = 5.79 lb/ft<sup>2</sup>

## System description

Panel 1 : 1 x 0.63 in Type X Gypsum Board

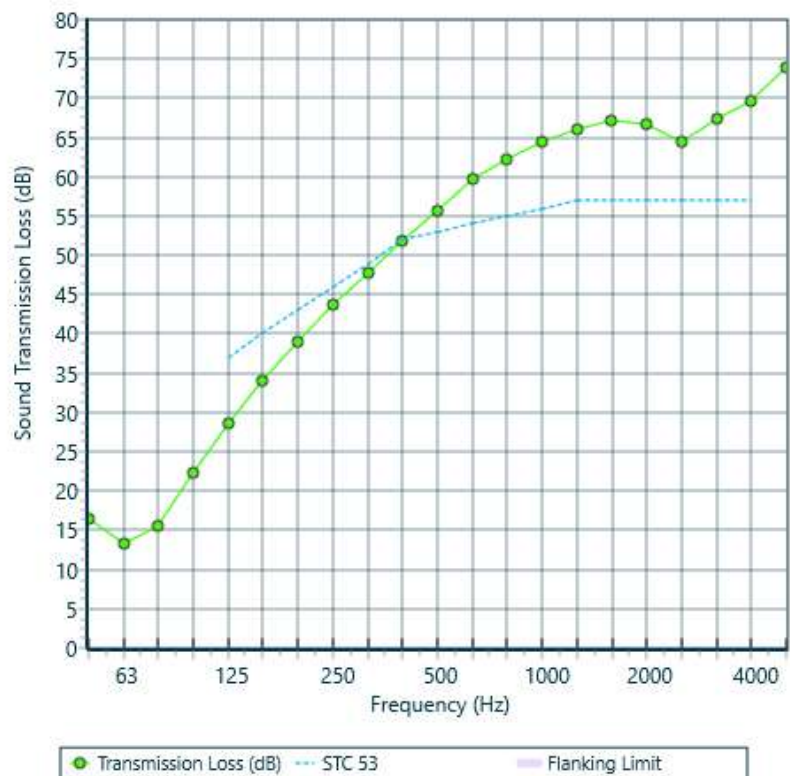
+ 1 x 0.08 in Wall Blokker 0.6psf

Frame: Steel Stud + resil. rail; Cavity Width 4.11 in, Stud spacing 16 in, 1 x fiberglass (0.6 lb/ft<sup>3</sup>) Thickness 3.5 in

Panel 2 : 1 x 0.63 in Type X Gypsum Board

Floor Cover: Thickness 0.02 in

freq.(Hz)	TL(dB)	TL(dB)
50	16	
63	13	15
80	15	
100	22	
125	29	26
160	34	
200	39	
250	44	42
315	48	
400	52	
500	56	55
630	60	
800	62	
1000	64	64
1250	66	
1600	67	
2000	67	66
2500	64	
3150	67	
4000	70	70
5000	74	



# Sound Insulation Prediction (v9.0.8)

Program copyright Marshall Day Acoustics 2017

margin of error is generally within STC +/- 3 dB

- Key No. 4851

Job Name:

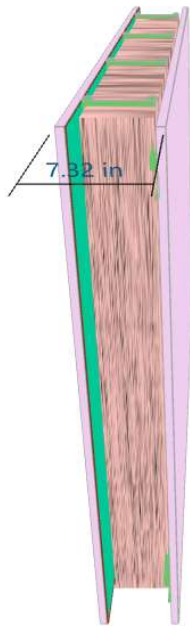
Job No.:

Date: 6/22/2020

File Name:

Initials: Marcel

Notes:



STC 57  
OITC 38

Mass-air-mass resonant frequency = 53 Hz

Panel Size = 8.9 ft x 13.1 ft

Partition surface mass = 5.89 lb/ft<sup>2</sup>

## System description

Panel 1 : 1 x 0.63 in Type X Gypsum Board

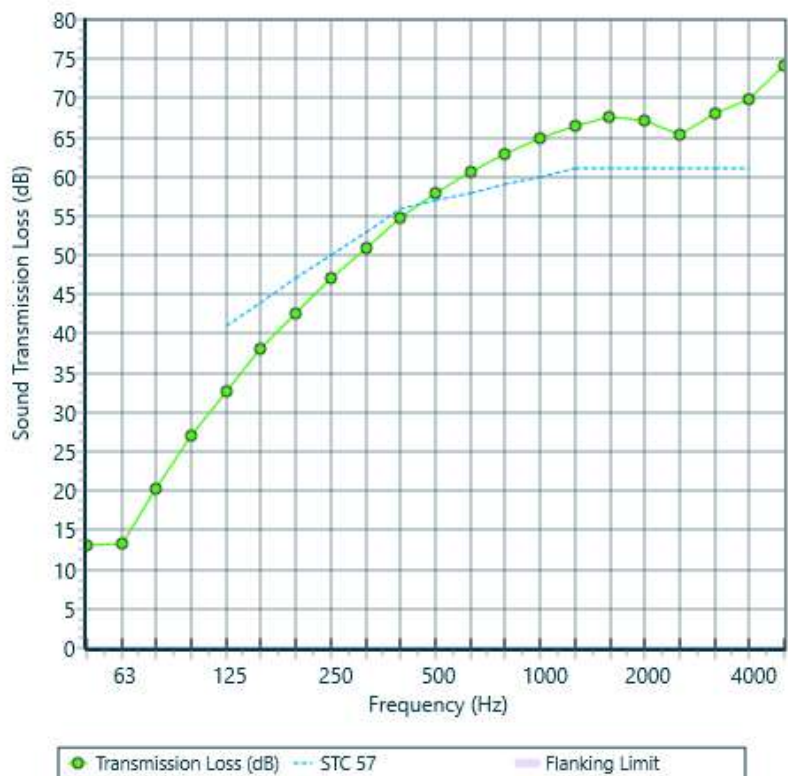
+ 1 x 0.08 in Wall Blokker 0.6psf

Frame: Steel Stud + resil. rail; Cavity Width 5.98 in, Stud spacing 16 in, 1 x fiberglass (0.6 lb/ft<sup>3</sup>) Thickness 5.5 in

Panel 2 + 1 x 0.63 in Type X Gypsum Board

Floor Cover: Thickness 0.02 in

freq.(Hz)	TL(dB)	TL(dB)
50	13	
63	13	14
80	20	
100	27	
125	33	30
160	38	
200	43	
250	47	46
315	51	
400	55	
500	58	57
630	61	
800	63	
1000	65	65
1250	67	
1600	68	
2000	67	67
2500	65	
3150	68	
4000	70	70
5000	74	



# Technical Data

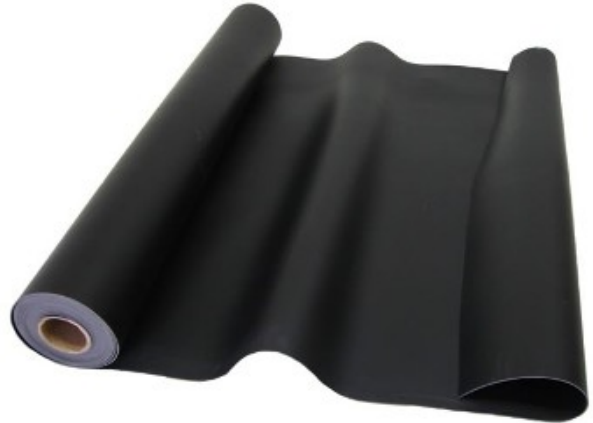
## Commercial Acoustics Wall Blokker Lite

*Most Cost Effective Construction Material to Achieve STC 50-55*

Commercial Acoustics Wall Blokker Lite is a specially designed EVA-based product engineered to block the transmission of sound waves. The membrane combines sufficient Mass to reflect airborne sound energy, and Flexibility to dampen structure-borne noise.

Wall Blokker Lite soundproofing material is a high density, non-porous material that exhibits a non-resonant quality due to its elastic nature. Wall Blokker Lite is simply stapled or nailed directly to metal or wood studs, and drywall is installed directly on top.

Durable and Resilient, Wall Blokker Lite was designed to as a light-weight, affordable alternative to other sound membranes, tested on assemblies most common in the Hospitality and Multi-Family industries.



### Engineered Applications:

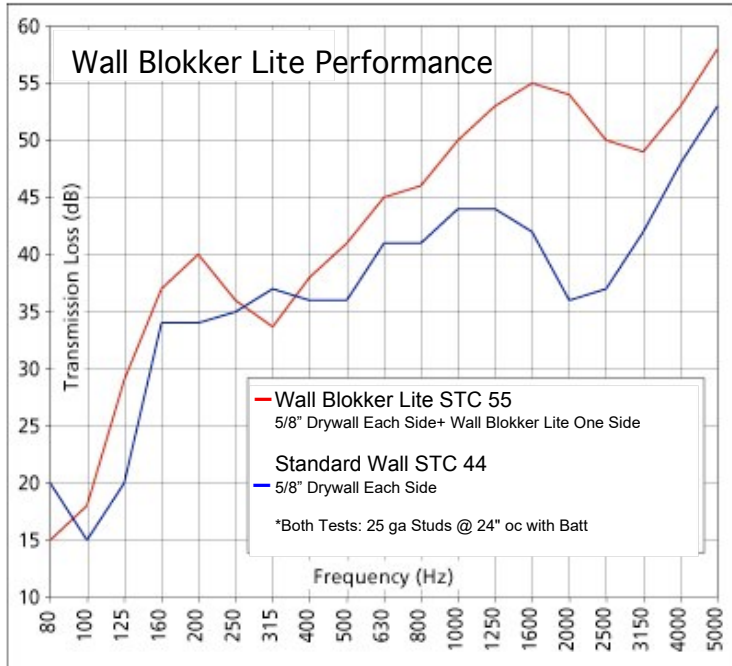
- Walls Requiring STC from 50 to 55 (Hospitality & Multi-Family)
- Cost Effective Alternative to Multiple Layers of Drywall
- Low-Frequency Performance: Significant improvement over Conventional Construction Methods below 500 Hz
- Tested on Metal Studs (20-Gauge & 25-Gauge) with STC Improvement of 6-11 Points
- Designed for Optimized Installation Efficiency -
  - 2 Man Crew Hang Sheets Every 3-5 Minutes
  - Factory Cut to Exact Wall Length to Minimize Scrap and Piecing

### Product Specifications

- Fire Resistance: Rated for 1hr and 2 hr walls per ASTM E 119-08.
- Acoustic Properties: Minimum STC 21 per ASTM E 90-02
- Flammability rating: Class 1 per ASTM E 84
- Mold & Mildew: No fungal or algae growth per ASTM D2373 and ASTM G 21
- Sheet Dimensions
  - 4' by 8' sheet size
  - 4' by 25' roll size
- Standard Tolerances
  - Width: + 0.5" - 0"
  - Length: +1% - 0"
  - Nominal Thickness:  $\pm 0.10$ "

Tested and approved for use in all wall designs of the U300, U400, and V400 series.

## Technical Specifications



## Physical Properties of Wall Blokker Lite:

- Weight 0.5-0.6 lb./sq. ft.
- Tensile Strength 2,750 KPa (400 psi)
- Tear Strength 12.5 Kg/cm (70 psi)
- Thickness .100"
- Ultimate Elongation 200%
- Flammability SE "O" in/min.
- Temperature Range -40° F to 180° F

Full test report library and specification packets available on request

Frequency	125	250	500	1000	2000	4000	STC	RAL Test
20-ga Studs, 24" o.c. 0.6 psf*	32	42	51	56	53	64	52	RAL-TL18-585
25-ga Studs, 24" o.c. 0.5 psf*	34	46	52	55	54	60	52	RAL-TL18-214
25-ga Studs, 24" o.c. 0.6 psf*	32	46	53	60	56	61	55	RAL-TL18-392

## General Installation Guidance

Commercial Acoustics Wall Blokker Lite can be installed directly over existing drywall or over bare studs. Easily cut with a utility knife and secured with 4 staples or nails along the top header (every 12"), then fastened to the studs every 24" down to the base track.

A 1/8" gap should be left around the perimeter of the barrier membrane to be sealed with acoustical caulking, often during drywall installation.

\*Detailed Installation Instructions Available Upon Request



Tested and approved for use in all wall designs of the U300, U400, and V400 series.

# Commercial Acoustics Wall Blokker Lite Specification

## Division 09 – Finishes

### Section 09500 – Acoustical Treatment

#### PART 1 – GENERAL

##### 1.1 SUMMARY

- A. Section includes:
  - 1. Wall Blokker Lite by Commercial Acoustics soundproofing membrane.

##### 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including supplements and addendums.
- B. Applicable Specification Sections: Division 01 – General and Division 09 – Finishes.

##### 1.3 REFERENCES

- A. International Building Code (IBC) 2012:
  - 1. Section 1207 – *Sound Transmission*
- B. ASTM Tests:
  - 1. E90 – *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.*
  - 2. E413 – *Classification for Rating Sound Insulation.*
- C. ASTM Specifications:
  - 1. C840 – *Standard Specification for Application and Finishing of Gypsum Board.*

##### 1.4 SUBMITTALS

- A. For each product indicated:
  - 1. Product Data Sheet: manufacturer’s specifications including laboratory test summary.
  - 2. Installation Instructions: manufacturer’s detailed installation procedure including jobsite condition requirements, surface preparation requirements, and approved products.

##### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. All materials shall be delivered in original unopened packaging.
- B. Wall Blokker may be stored in a wet or dry environment and may be stored outdoors for up to three months on construction sites without special tarps or covering.
  - 1. If stored below freezing temperatures, material may require up to 48 hours of acclimation to regain pliability.
  - 2. Acclimate Wall Blokker Lite for a minimum of 24 hours at temperatures 60 degrees (F) or greater to reduce material stiffness when handling.
  - 3. If material stiffens, it may be softened more rapidly using a heat gun.

##### 1.6 PROJECT CONDITIONS

- A. Wall Blokker Lite is typically installed after framing, insulation, and electrical are complete. Insulation should be installed in the wall cavity in addition for optimal performance.
- B. Ensure that all applicable inspections are completed prior to installation of Wall Blokker Lite.
- C. Wall Blokker Lite may be installed prior to “drying in” the building (prior to installation of windows and doors).
  - 1. Drywall should be installed within 2-4 weeks afterwards to prevent excessive wear.
    - a. For longer delays, washers should be installed for securely fasten the material.

2. Drywall installation permanently attaches Wall Blokker Lite to the stud.

## PART 2 – PRODUCTS

### 2.1 WALL BLOKKER LITE BY COMMERCIAL ACOUSTICS

- A. Materials:
  1. Engineered sound reduction membrane.
  2. Flexible Ethylene Vinyl Acetate (EVA) product made from post-industrial recycled material.
- B. Dimensions:
  1. Thickness: nom. 0.063”- 0.075”
  2. Weight: 0.5-0.6 lb/sq.ft.
  3. Standard Sizes: 4’x25’ rolls; 4’x8’ sheets; custom length rolls available.
  4. Tolerances:
    - a. Width: +/- 0.5”; Length: +/- 1%
    - b. Nominal Thickness: +/- 0.05”
- C. Performance:
  1. RAL Lab Test Data:
    - a. 25ga Studs, 24”o.c. 0.5psf: **STC = 52** RAL-TL18-391
    - b. 25ga Studs, 24”o.c. 0.6psf: **STC = 55** RAL-TL18-392
  2. UL Classified Assemblies:
    - a. 300, 400, 500 Series
  3. Flammability Rating:
    - a. Class 1 (ASTM E84 Rev. A)
    - b. 1-Hour fire resistance wall rating (ASTM E119)
    - c. 0.3 Thermal Resistance coefficient (ASTM C518)
    - d. SE “O” in/min.
  4. Strength:
    - a. Tensile Strength: 400 psi
    - b. Tear Strength: 70 lbs./in.
    - c. Ultimate Elongation: 200%
  5. Environmental:
    - a. Mold/Mildew resistant. No fungal/algae growth and no visible disfigurement (ASTM D3273 & ASTM G21).
    - b. Impermeable air and moisture barrier.
    - c. Non-PVC: no off-gassing.
    - d. HIPPA Compliant.
    - e. 100% recyclable at end of life.

## PART 3 – EXECUTION

### 3.1 PREPARATION

- A. Wall and/or stud assembly to receive Wall Blokker must be structurally sound prior to installation.
- B. Wall must be clean and free of debris.
  1. Protrusions greater than 1/16” shall be scraped from the surface to avoid puncturing.
- C. See Section 1.6 for additional project condition requirements.

### 3.2 INSTALLATION

- A. Starting in one corner of the room, install Wall Blokker Lite flush with the top of the top plate, and hang it vertically.
- B. Wood Studs:
  - 1. Attach Wall Blokker Lite to the top of the wood top plate using wide-crown ½" staples or pan head screws.
  - 2. Fasten every 12" horizontally along the top plate.
  - 3. Straighten Wall Blokker Lite from the top down so that it is flush against the studs.
  - 4. Attach Wall Blokker Lite to the center of each vertical wood stud using ½" staples or pan head screws.
  - 5. Fasten every 36" vertically along the center of each stud using an exterior fastener pattern, only fastening to the stud where the seam falls.
- C. Metal Studs:
  - 1. Attach Wall Blokker Lite directly to the light gauge metal studs using drywall screws.
  - 2. Fasten every 12" horizontally along the top.
    - a. Wall Blokker Lite installed on walls greater than 15' in height shall be secured with washers along the top to prevent the fasteners from tearing the material.
    - b. Fasteners shall be used on intermediate studs (in addition to exterior studs) every 12' vertically.
  - 3. Straighten Wall Blokker Lite from the top down so that it is flush against the studs.
  - 4. Attach Wall Blokker Lite to the center of each vertical stud using drywall screws.
  - 5. Fasten every 36" vertically along the center of each stud.

### 3.3 PROCEDURE

- A. Install Wall Blokker Lite as required on all walls.
- B. Keep fasteners as flush as possible to prevent protrusion into the finished wallboard.
  - 1. Fasteners shall not protrude more than 1/16" from Wall Blokker Lite surface.
- C. Do NOT overlap the seams of separate sheets.
  - 1. Tightly butt the side of the next sheet of Wall Blokker Lite to the edge of the existing attached sheet.
- D. For seams that do not fall on a stud, tape with "Seam-Seal" or equivalent.
  - 1. If seams fall on the stud with gaps greater than 1/8", then taping is also required.
  - 2. Ensure that there are no bubbles or wrinkles in the tape. Commercial tape alternatives include commercial duct tape.
  - 3. The tape is semi-permanent and will be permanently sealed in position when drywall is installed. Drywall installation will seal Wall Blokker against the existing studs.
- E. Cut Wall Blokker Lite to fit around irregular objects and penetrations including outlets, switches, and junction boxes.
  - 1. Gaps shall be less than 1/8".
  - 2. Gaps greater than 1/8" shall be sealed with acoustical or non-hardening caulk.
  - 3. Gaps greater than 1/4" may be filled with backer rod or fiber batting.
  - 4. Putty pads should be installed on the back of all electrical boxes.
- F. Caulk the bottom of the floor plate at the floor line with acoustical sealant.
- G. Install drywall per normal technique (ASTM C840).
  - 1. Wall Blokker Lite will be fastened permanently when the gypsum board is installed.

END OF SECTION



Wall Blokker Lite is a mass loaded, limp vinyl sound damping material designed for commercial, industrial, and residential applications to reduce sound transmission. It is used primarily behind finished wall or ceiling surfaces to block and damp noise through the entire sound spectrum.

***Wall Blokker Lite Installation Instructions***

***DO NOT USE WALL BLOKKER LITE TO SURROUND OR ENCLOSE ANY LIGHT FIXTURES CUT WALL BLOKKER BACK A MINIMUM OF 12" AWAY FROM ANY CANNED LIGHTS***

Preparation:

1. Wall Blokker Lite is typically installed after framing, insulation and electrical are complete. Insulation should be used in the wall cavity in addition for optimal performance.
2. Ensure that all applicable inspections are completed prior to installation of Wall Blokker Lite
3. Wall Blokker Lite may be installed prior to “drying in” the building (prior to installation of windows and doors)

**Step 1**  
Preparation  
& Storage

Drywall should be installed within 2-4 weeks of Wall Blokker Lite to prevent excessive wear. If longer delays are expected, washers should be installed to securely fasten Wall Blokker Lite. Drywall installation permanently attaches the Wall Blokker to the stud.

Storage:

Wall Blokker Lite may be stored in wet or dry environment, and may be stored outside for up to 3 months on construction sites without special tarps or covering. If stored below freezing temperatures, material may require 24-48 hours of acclimation to regain pliability.

**Step 2**  
Install  
Wall Blokker  
Lite

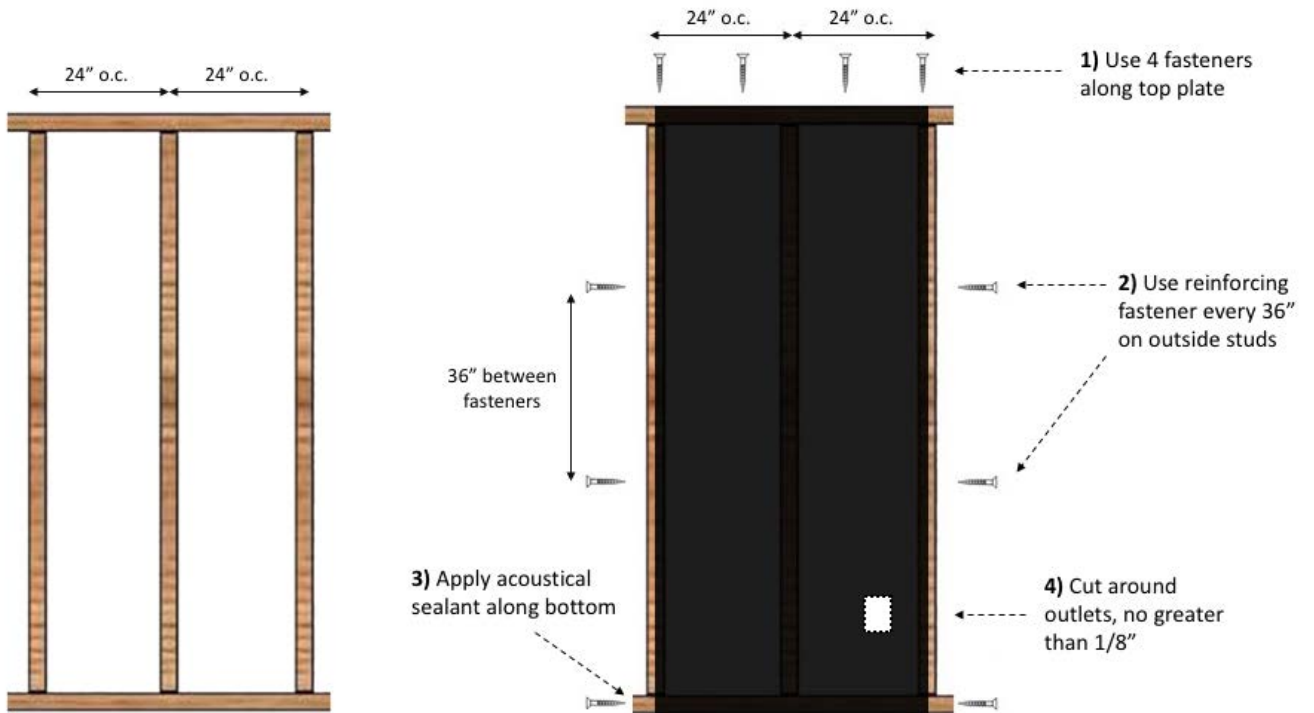
1. Acclimate Wall Blokker Lite for a minimum of 24 hours at temperatures 60°F or greater to reduce material stiffness when handling;
2. Starting in one corner of the room, install Wall Blokker Lite flush with the top of top plate, and hang it vertically.
3. **Wood Studs:** Attach Wall Blokker Lite directly to the top of the wood top plate using wide-crown ½” staples or pan head screws. A fastener every 12” horizontally is recommended along the top. Straighten Wall Blokker so that it is flush against the wood studs, and apply from the top down. Using staples or pan head screws, attach Wall Blokker to each stud in the center of the stud. Only 1 fastener is required every 36” for each vertical stud (refer to Diagram 1). Use an exterior fastener pattern, only fastening to the studs where the seam falls.
  - **NOTE:** Hammer Stapler may be best way to attach staples through Wall Blokker Lite into stud.

[See Figure 1 for details]
4. **Metal Studs:** Attach Wall Blokker Lite directly to the metal stud using drywall screws. A screw

every 12" is recommended along the top. Straighten Wall Blokker Lite so that it is flush against the metal studs. Using drywall screws, attach Wall Blokker Lite to the stud in the middle of the stud. Only 1 fastener is required every 36" for each vertical stud. [See Figure 1 for details]

5. **NOTE: High Walls**

- Wall Blokker Lite on walls higher than 15' shall be secured with washers along the top to prevent the fasteners from pulling through the material
  - Fasteners should also be used on intermediate studs (in addition to exterior studs) every 12' vertically
6. Install Wall Blokker Lite on all required walls;
  7. Keep fasteners as flush as possible, since all protrusions will put a dimple into the finished wallboard. Fasteners shall not protrude more than 1/16" from Wall Blokker Lite surface.
  8. Tightly butt the side of the next sheet of Wall Blokker Lite to the edge of the attached sheet. Do not overlap seams;
  9. Tape all seams with "Seam-Seal" or equivalent. Ensure that there are no bubbles or wrinkles in the tape. The tape is semi-permanent, and will be permanently sealed in position when drywall is hung.
    - If seams fall on the stud, with no gaps >1/8", then no taping is required. Drywall installation will seal the Wall Blokker Lite against the existing studs.
    - Commercial Tape Alternatives include commercial duct tape
  10. Wall Blokker Lite is easily cut to fit around irregular objects and electrical boxes. The material should be cut around outlets, switches, and junction boxes. Gaps shall be less 1/8". If greater, they shall be sealed with acoustical caulk. Gaps greater than 1/4" may be filled with backer rod or fiber batting.
  11. Putty pads should be installed on the back of all electrical boxes;
  12. Caulk the bottom plate at the floor line with acoustical sealant;
  13. Install drywall per normal technique (ASTM# C840 – Standard Specification for Application and Finishing of Gypsum Board). Wall Blokker Lite will be fastened permanently when the gypsum board is hung.



[Figure 1]