

1512 S BATAVIA AVENUE GENEVA, IL 60134

630-232-0104

An MALION Technical Center

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Test Report

WALLACE CLEMENT SABINE

### FOR: Commercial Acoustics

Tampa, FL

CONDUCTED: 2018-06-18

ON: Steel stud gypsum board wall, 0.6 psf ethylene vinyl acetate Wall Blokker on source side

### TEST METHOD

Riverbank Acoustical Laboratories<sup>™</sup> is accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) as an ISO 17025:2005 Laboratory (NVLAP Lab Code: 100227-0) and for this test procedure. The test reported in this document conformed explicitly with ASTM E90-09 (2016): "Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements." The single number rating of the specimen was calculated according to ASTM E413-16: "Classification for Rating Sound Insulation." A description of the measuring procedure and room qualifications is available upon request. The transmission loss values are for a single direction of measurement. The product designation used in this report was provided to RAL by the sponsor and attributed to the specimen under test.

### DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as Steel stud gypsum board wall, 0.6 psf ethylene vinyl acetate mass-loaded vinyl on source side. A full internal inspection performed on the test specimen by Riverbank personnel verified the manufacturer's description.

The building contractor and RAL staff compiled a detailed construction specification as follows:

### **Plates/Base Track**

Material:	Clark Dietrich 25 ga EQ steel track
Dimensions:	2 @ 2438.4 mm (96 in.) long x 31.75 mm (1.25 in.) high x 92.07
	mm (3.625 in.) deep
Installation:	Friction fit to test frame over foam sill sealer
Overall Weight:	2.15 kg (4.75 lbs)
Mass per Unit Length:	0.44 kg/m (0.30 lb/ft)

### Studs

Material:	Clark Dietrich 25 ga EQ steel studs			
Dimensions:	5 @ 2743.2 mm (108 in.) long x 31.75 mm (1.25 in.) wide x 92.07			
	mm (3.625 in.) deep			
Stud Spacing:	609.6 mm (24 in.) on center			
Installation:	Crimped at top and bottom to tracks			
	Side studs screwed to test frame at midpoint, one screw per side			
Fasteners:	Type W bugle head drywall screw, 31.75 mm (1.25 in.) length			
Overall Weight:	7.14 kg (15.75 lbs)			
Mass per Unit Length:	0.52 kg/m (0.35 lb/ft)			
Note: A 6.35 mm (0.25 in.	) bead of sealant was applied around both sides of the perimeter where			
framing members contact the test frame (0.91 kg (2 lbs) total).				



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Sound Transmission Loss <u>RAL-TL18-392</u>

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### **Source Side**

Layer I	
Material:	Ethylene vinyl acetate Wall Blokker
Dimensions:	2 @ 1219.2 mm (48 in.) x 2743.2 mm (108 in.)
Thickness:	3.18 mm (0.125 in.)
Installation:	Screwed to studs, six screws per sheet
	Center seam treated with duct tape
Fasteners:	#8 wafer head stud screws
Overall Weight:	19.96 kg (44 lbs)
Mass per Unit Area:	Nominal @ 2.93 kg/m <sup>2</sup> (0.6 lb/ft <sup>2</sup> )
	Measured @ $2.98 \text{ kg/m}^2 (0.61 \text{ lb/ft}^2)$
Layer 2	
Material:	Type X gypsum board
Dimensions:	1 @ 1219.2 mm (48 in.) x 2743.2 mm (108 in.)
	2 @ 609.6 mm (24 in.) x 2743.2 mm (108 in.)
Thickness:	15.88 mm (0.625 in.)
Installation:	Screwed through Layer 1 to studs
Fasteners:	Type S bugle head drywall screws, 31.75 mm (1.25 in.) length
Fastener Spacing:	406.4 mm (16 in.) on center, perimeter and field
Overall Weight:	73.03 kg (161 lbs)
Mass per Unit Area:	$10.92 \text{ kg/m}^2 (2.24 \text{ lb/ft}^2)$

#### Cavity

Material:	R-13 unfaced fiberglass insulation
Installation:	Friction fit into stud cavities
Overall Weight:	7.71 kg (17 lbs)
Density:	12.97 kg/m <sup>3</sup> (0.81 lb/ft <sup>3</sup> )

### **Receive Side**

Material:	Type X gypsum board
Dimensions:	2 @ 1219.2 mm (48 in.) x 2743.2 mm (108 in.)
Thickness:	15.88 mm (0.625 in.)
Installation:	Screwed to studs
Fasteners:	Type S bugle head drywall screws, 31.75 mm (1.25 in.) length
Fastener Spacing:	406.4 mm (16 in.) on center, perimeter and field
Overall Weight:	72.69 kg (160.25 lbs)
Mass per Unit Area:	$10.87 \text{ kg/m}^2 (2.23 \text{ lb/ft}^2)$
Note: A thin layer of sealant	t and metal tape was applied to joints and screw heads on both sides





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#### **Physical Measures**

2.44 m (96.00 in.) wide by 2.74 m (108.00 in.) high
127.00 mm (5.00 in.)
184.05 kg (405.75 lbs.)
$6.69 \text{ m}^2 (72.00 \text{ ft}^2)$
27.54 kg/m <sup>2</sup> (5.64 lbs./ft <sup>2</sup> )

### **Test Aperture**

Size: 2.74 m (9.0 ft.) by 4.27 m (14.0 ft.) Filler Wall: Yes Sealed: Entire periphery (both sides) with dense mastic

#### **Test Environment**

Source Room	
Volume:	177.1 m <sup>3</sup> (6254.5 ft <sup>3</sup> )
Temperature:	23±0°C (74±0°F)
Humidity:	55±0%

#### Receive Room

Volume:	$178.3 \text{ m}^3 (6297.6 \text{ ft}^3)$
Temperature:	22±0°C (72±0°F)
Humidity:	55±0%

### Requirements

Femperature:	$22^{\circ}$ C +/- $2^{\circ}$ C, not more than $3^{\circ}$ C change over all tests.
Humidity:	$\geq$ 30% RH, not more than +/- 3% change over all tests.



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Figure 1 - Completed specimen mounted in test opening, as viewed from source room



Figure 2 – Framing members installed



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Figure 3 - Wall Blokker layer installed



Figure 4 – Stud cavity insulation installed, receive side gypsum board partially installed



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### TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the transmission loss test data is within the limits set by the ASTM Standard E90-09 (2016).

<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>		<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	DEF.
				_				
100	• •	1			0.0.0		0.4.2	
100	20	0.71			800	57	0.13	
125	32	0.68	7		1000	60	0.14	
160	37	0.50	5		1250	61	0.18	
200	41	0.39	4		1600	60	0.12	
250	46	0.40	2		2000	56	0.09	3
315	49	0.19	2		2500	55	0.10	4
400	52	0.27	2		3150	59	0.11	
500	53	0.16	2		4000	61	0.09	
630	55	0.22	1		5000	62	0.09	

STC=55

### ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)

- T.L. = TRANSMISSION LOSS, dB
- C.L. = SAMPLING PRECISION DURING TEST IN dB, FOR A 95% CONFIDENCE LIMIT
- DEF. = DEFICIENCIES, dB<STC CONTOUR (SUM OF DEF = 32)
- STC = SOUND TRANSMISSION CLASS

Tested by Dean Victor

Senior Experimentalist

Approved by

Report by Malcolm Kelly

Acoustician

Eric P. Wolfram Laboratory Manager



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### SOUND TRANSMISSION REPORT

Specimen: Steel stud gypsum board wall, 0.6 psf ethylene vinyl acetate Wall Blokker on source side (See Full Report)



### TRANSMISSION LOSS SOUND TRANSMISSION LOSS CONTOUR



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### **APPENDIX A: Extended Frequency Range Data**

Specimen: Steel stud gypsum board wall, 0.6 psf ethylene vinyl acetate Wall Blokker on source side (See Full Report)

The following non-accredited data were obtained in accordance with ASTM E90-09 (2016), but extend beyond the defined frequency range of 100Hz to 5,000Hz. These unofficial results are representative of the RAL test environment only and intended for research & comparison purposes. Sampling precision observed during this procedure is reported below.

1/3 Octave Band Center Frequency (Hz)	Sound Transmission Loss (dB)	Sampling Precision (95% ±)
31.5	13	1.39
40	20	0.56
50	16	0.68
63	13	0.55
80	13	0.43
100	20	0.71
125	32	0.68
160	37	0.50
200	41	0.39
250	46	0.40
315	49	0.19
400	52	0.27
500	53	0.16
630	55	0.22
800	57	0.13
1000	60	0.14
1250	61	0.18
1600	60	0.12
2000	56	0.09
2500	55	0.10
3150	59	0.11
4000	61	0.09
5000	62	0.09
6300	64	0.10
8000	65	0.14
10000	65	0.16
12500	63	0.22



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### **APPENDIX B: Instruments of Traceability**

Specimen: Steel stud gypsum board wall, 0.6 psf ethylene vinyl acetate Wall Blokker on source side (See Full Report)

<b>Description</b>	Model	Serial <u>Number</u>	Date of <u>Certification</u>	Calibration <u>Due</u>
Bruel & Kjaer Pulse Analyzer - System4	Туре 3560-С	2639093	2017-08-02	2018-08-02
Bruel & Kjaer Mic And Preamp D	Type 4943-B-001	2311440	2017-09-22	2018-09-22
Bruel & Kjaer Pistonphone EXTECH_62 EXTECH_63	Type 4228 SD700 SD700	2781248 A.083662 A.083663	2017-08-02 2017-11-20 2017-11-20	2018-08-02 2018-11-20 2018-11-20

END



### 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: Initials:Marcel

Job No.: Date.:7/26/2018 File Name:

### System description

Panel 1 : 1 x 0.63 in Type X Gypsum Board

Frame: Steel Stud (25g); Cavity Width 6 in ,Stud spacing 24 in , 1 x fiberglass (1.4 lb/ft3) Thickness 6.0 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	12	13		
80	19			
100	26			
125	33	30		
160	38			
200	43			
250	47	45		
315	50			
400	52			
500	55	54		
630	57			
800	59			
1000	60	60		
1250	62			
1600	63			
2000	62	62		
2500	61			
3150	62			
4000	64	64		
l 5000	68			

#### 80 75 70 65 60 Sound Transmission Loss (dB) 55 50 45 40 35 30 25 20 15 10 5 0 63 125 500 1000 2000 4000 250 Frequency (Hz)

Flanking Limit

Transmission Loss (dB) ---- STC 57



Notes:



Mass-air-mass resonant frequency = =52 Hz Panel Size = 8.9 ft x 13.1 ft Partition surface mass = 6.02 lb/ft2

+ 1 x 0.06 in Wall Blokker Lite

	13		
	12	13	
	19		
	26		
	33	30	
	38		
	43		
	47	45	
	50		
	52		
	55	54	
	57		
	59		
0	60	60	
0	62		
0	63		

## Technical Data

# COMMERCIAL ACOUSTICS

### **Commercial Acoustics Wall Blokker Lite**

Most Cost Effective Construction Material to Achieve STC 50-55

Commercial Acoustics Wall Blokker Lite is a specially designed EVAbased 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 lightweight, 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
  - o 2 Man Crew Hang Sheets Every 3-5 Minutes
  - $\circ$  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
- Fllammability 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
  - o 4' by 25' roll size
  - Standard Tolerances
  - Width: + 0.5" 0"
  - Length: +1% 0"
  - Nominal Thickness: ±0.10"

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



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### 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.



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### 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).
  - 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. <u>Wood Studs:</u>
  - 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.

- 1. Acclimate Wall Blokker Lite for a minimum of 24 hours at temperatures 60°F or greater to reduce material stiffness when handling;
- Step 2 Install Wall Blokker Lite
- 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 widecrown 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 BlokkerLite 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 ¼" 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]