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 $\frac{1}{2}$ " 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.