TECHNICAL BULLETIN No. 202

Date: January 1, 2020

Subject: SoundStop® Substitution for Homasote 440 SoundBarrier®

The purpose of this bulletin is to help customers understand the similarities of Blue Ridge Fiberboard's SoundStop and Homasote's 440 SoundBarrier toward making substitution decisions in replacing 440 SoundBarrier with SoundStop.

The tables below include a Guide Spec comparison table and a table of other comparative product attributes. These tables are provided for those requiring reference to particular product details. Since this technical detail may not be readily understood by all, please note the following primary comparative points.

Primary Comparative Points: (See Comparative Product Summary table below)

1. SoundStop is more broadly available throughout the USA.
2. SoundStop is priced considerably less than Homasote 440 SoundBarrier.
3. Both products are manufactured to conform with ASTM C 208 Standard Specification for Cellulosic Fiber Insulating Board, Type 1, Sound deadening board.
4. Both products can be expected to perform similarly toward reducing airborne sound transmission in walls and floor/ceiling assemblies.
5. Homasote promotes a "decoupling" installation method for improved STC performance. Decoupling refers to drywall fastener attachment to the underlying Homasote only, with no direct drywall attachment to the studding. Blue Ridge does **not recommend decoupling** due to drywall fasteners eventually "popping". **The Gypsum Association does not recommend this decoupling technique.**
6. Both products are UL Classified. Homasote 440 SoundBarrier does have more fire rated assemblies.
7. SoundStop is a lighter weight product, and thus may be handled more easily by one person.
8. SoundStop has a favorably high vapor permeability and favorably high mold resistance; neither property is published by Homasote.

9. Both products have LEED credit contribution value.
10. Both products have a Class C Flame Spread Index of less than 200. However, SoundStop has tested at an 85 FSI, and Homasote 440 SoundBarrier does not publish its tested FSI.

SoundStop Guide Spec Comparison to Homasote 440 SoundBarrier Guide Spec

Property	Homasote 440 SoundBarrier	SoundStop	Comments
Sound Transmission Class (STC)	None published	23	Homasote does not disclose STC
* Decoupling Installation	Yes, Decoupling	No Decoupling, fasten drywall directly to studs	Decoupling not recommended due to risk of drywall fasteners "popping".
Flame Spread Index	Class C	Class C 85 FSI	Homasote does not disclose a FSI
Smoke Developed	None published	65 SDI	65 SDI considered a low result
Thickness	½", 5/8", 3/4"	½"	
Sizes	4' x 4', 8' and 10'	4' x 8' and 9'	
Density	26-28 pcf	15-18 pcf	
Conformance to ASTM C208	Yes	Yes	ASTM C208 Type 1, Sound deadening board conformance
Transverse	None published	12 lbf	
Hardness - Janka Ball	230 lbs	None published	Irrelevant property for acoustical performance
Water Absorption 2 hour	7% max	7% max	
Water Absorption 24 hour	15% max	None published	Not a published property requirement in ASTM C208
Composition	Recycled News	Wood chips	

Property	Homasote 440 Sound Barrier	SoundStop	Comments
R-value ½"	1.2 h·ft²·°F/Btu	1.3 h·ft²·°F/Btu	
Expansion 50/90 RH	0.25% max	0.50% max	
R-value 5/8"	1.33 h·ft²·°F/Btu	5/8" not manufactured	
R-value ¾"	1.4 h·ft²·°F/Btu	¾" not manufactured	
k-value Thermal Conductivity	0.512 Btu-in/ h·ft²·°F	0.38 Btu-in/ h·ft²·°F	The lower the k-value, the better.
Moisture Content	None published	10% max	
Noise Reduction Coefficient	0.20	None published	Irrelevant property since the recommended installation is behind drywall.
Installation Gapping	1/8"	1/8"	
Resistance to Mold Growth	None published	10 Rating, Highest resistance	
Vapor Permeance	None published	32 Perms	32 perms, a favorably high rate
UL Classified	Yes, File R16381	Yes, File R25702	
Forest Stewardship Certified	Yes	No	
ICC-ES Report	ESR-1374	No	
Installation Precautions	None published	Precaution as to proximity to heat sources	

***Decoupling refers to drywall fastener attachment to the underlying Homasote only, with no direct drywall attachment to the studding. As stated above, this decoupling technique is not recommended due to drywall fastener eventual "popping".**

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Comparative Product Summary: SoundStop and Homasote 440

Attribute	Homasote 440	SoundStop
Price	$$$	$
Pieces per package (1/2” thickness)	60	46
Weight per ½” x 4’ x 8’ sheet (lbs)	38	22
Cutting	Saw	Knife
STC Contribution	Equivalent	Equivalent
LEED Credit Contribution	Good	Good
Availability and Supply	Limited	Readily Sourced in USA
Conformance to ASTM C 208	Yes	Yes
R- Value	1.2	1.3
Vapor Permeability	Good	Better
Flame Spread Index	Class C	Class C, 85 FSI
Installation Method	Similar	Similar

Thomas Verrill
Technical Manager