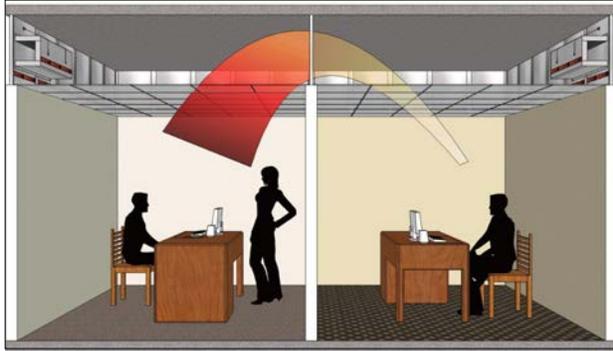


Privacy Board

And Return-Air Silencers



Routinely office space shares a common return-air plenum where the individual partition walls do not continue all the way to the ceiling structure above. Regardless of the acoustical rating of the wall partitions below the drop ceiling or ceiling systems themselves, unwanted sound (noise) will enter and travel through this non-ducted plenum spaces.

Uncontrolled noise and lack of speech privacy can irritate, distract and greatly affect productivity. The AcoustiGuard™ Privacy Board™ System, blocks the area between the top of the partition walls and the structure above without interfering with the return-air distribution. It is an easy to install effective barrier that increases acoustic privacy and confidentiality by controlling the passage of sound in the plenum



View from above a suspended ceiling showing a complete Privacy Board™ installation with Return-Air Silencers

PRIVACY BOARD

The AcoustiGuard™ Privacy Board™ System solves the problem of flanking airborne sound transmission above the suspended (drop) ceilings and over interior partition walls. The standard practice of an open plenum above the drop ceiling grid has provided for much lower cost return-air duct construction – unfortunately at the expense of sound transmission, speech privacy and work-place comfort. Sound attenuation through two layers of ceiling tiles from office to office or boardroom to open office areas or health care examination rooms to waiting rooms will typically only achieve a CAC rating of approximately 35 dB. Even less when a return-air register (egg crate grill) is present. The specified STC rating of a partition wall assembly is irrelevant when the sound-flanking path between rooms is through the suspended ceiling and over the incomplete partition wall.

The AcoustiGuard™ Privacy Board™ barrier solves this problem with a product that is quicker and easier to install and much less messy than the installation of gypsum wallboard (GWB) extension walls.

RETURN-AIR SILENCER

The AcoustiGuard™ lined Return-Air Silencers solve the problem of open plenum HVAC sound flanking. They ensure that the Privacy Board™ "does no harm" to the return-air flow of the HVAC system, while maintaining acoustic isolation through the plenum.

THE SYSTEM

The AcoustiGuard™ Privacy Board™ system consists of 2 components:

1. A partition-wall extension board sound barrier; made of a 25 mm (1") thick foil-faced high-density rigid mineral fiber panel, that meets Class-1 fire rating.
2. A prefabricated Return-Air Silencer made of a 28 Ga. galvanized metal housing to ensure structural integrity and Class-1 fire rating, is lined with a 50 mm (2") thick high-density rigid mineral fiber board. The airflow face of the mineral fiber board is covered with a Class-1 fire rated non-woven, non-respirable acoustic liner.

SPECIAL FEATURES

- Enhances speech privacy and confidentiality
- Fast and easy field installation
- Will not interfere with HVAC return-air flow
- Does not encumber the installation of data cables
- LEED investment (virtually 100% recyclable)

Special Features

Sound Transmission Loss (dB) tests on the AcoustiGuard Privacy Board & Return-Air Silencer.

Test	Sound Transmission Loss (dB)						STC**
	125	250	500	1000	2000	4000	
Privacy Board™ Only	15.1	20.6	19.6	19.8	20.2	27.1	24
Privacy Board™ & 1 RAS*	12.2	20.0	23.2	21.6	24.0	30.3	27
Privacy Board™ & 2 RAS*	23.1	26.7	29.0	27.8	28.6	35.1	32

SPECIAL FEATURES

Speech Privacy, Speech Security and Oral Privacy have all found new importance and consideration since the enactment of multiple Federal, State or Provincial legislation in the United States, Canada and the European Union. Privacy Board™ and Return-air Silencers are products that can help achieve compliance with these various legislations, codes and guidelines.

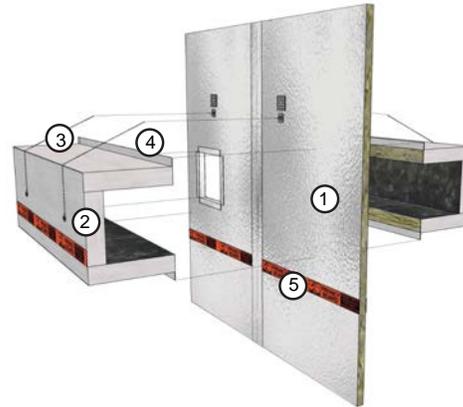
See:

PIPEDA, Bill 198 - Ontario, GLBA, HIPAA - HITECH, SOX, EISA, UFC & USGBC / LEED

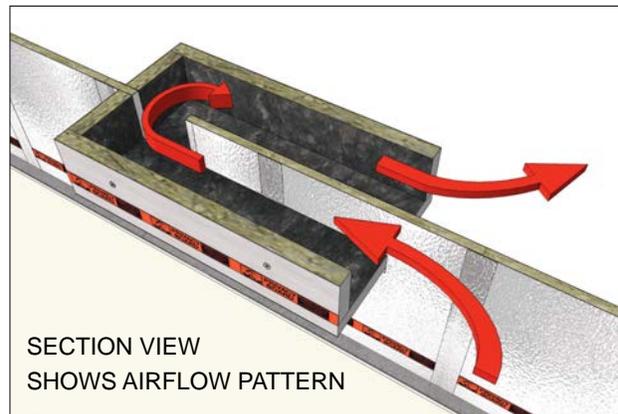


Privacy Board sealed at duct penetration

PRODUCT SYSTEM ASSEMBLY



1. Privacy Board™
2. Return-Air Silencer
3. Support Wire (two total)
4. Silencer Tape Edge
5. Privacy Board™ Identification Tape



Section View:

Sound and return air enters the silencer where it is attenuated as it passes through the chamber

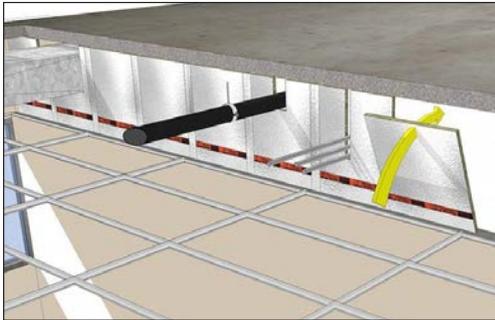
The Return-Air Silencer passive air exchange helps isolate separate open plenum areas.

The highly absorptive inner surface of the silencer performs as a broadband acoustic absorber.

The Return-Air Silencers do not interfere with the air distribution. (Minimum Recommended: 1x double sided Return-Air Silencer per supply air feed duct).

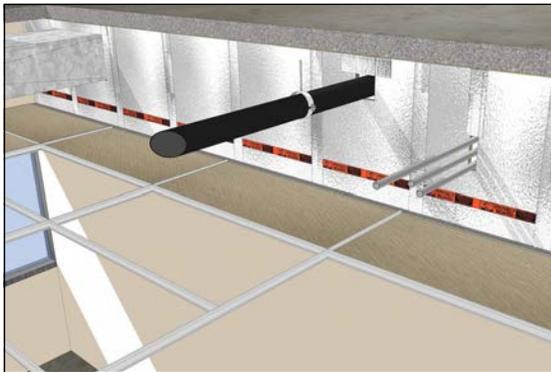
INSTALLATION INSTRUCTIONS (Short Description)

For complete installation instruction please download the Privacy Board™ IIG (Illustrated Installation Guide) located at www.acoustiguard.com



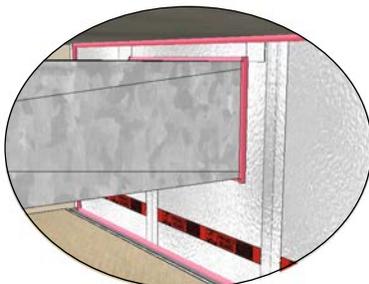
Cut Privacy Board™ to length to achieve a 'pressure fit' between the top of the partition wall and the underside of the structural slab. Cut the Privacy Board™ for 'Best Fit' around the penetrations that enter the plenum space. Secure all panel edges with FSK Tape on both sides of the partition wall.

Note: For dimensions less than 24-inches between the top of the partition wall and the underside of the structural slab above, AcoustiGuard™ recommend using the Privacy Board™ horizontally.

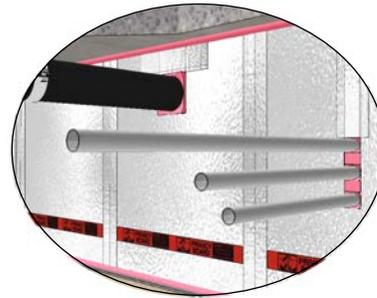


Fill voids in the Privacy Board™ with pieces of off-cut. Secure off-cut filler pieces with FSK tape. Apply the FSK tape to both sides of the filler pieces.

If T-Bar grids cross over the top of the partition wall AcoustiGuard recommends that the bottom edge of the Privacy Board™ be notched to accept the T-bar.



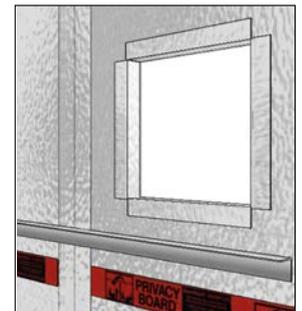
Install Class-1 fire rated, low expansion spray foam or caulking to seal all perimeter boundaries or voids.



AcoustiGuard™ recommends that both sides of the Privacy Board™ be sealed with foam or caulking.

Select a location for placement of the return-air silencer.

(See Directions on the template).



Seal all cut edges with FSK Tape.

Align the Return-Air Silencer with the 3-lines that are traced around the exterior of the template. Ensure the hole in the Privacy Board™ aligns with the inside edges of the RAS.



Secure the 3 tape edges of the RAS (closed end & 2 long sides) to the Privacy Board™ with FSK tape supplied.

The RAS is supplied with 2 anchor wires screwed to the back. From the reverse side push stickpins through the Privacy Board™ approximately 4-inches up from the top edge of the RAS.

Push the washers in towards the Privacy Board to adjust the tension on the support wires.

PHYSICAL PROPERTIES

Compliance and Performance:

ASTM	Mineral Fibre Block & Board Thermal Insulation	Type IVB, Complies
MEA Approval	New York City Approval	333-97-M

Mineral Wool

ASTM E	136Behavior of Materials at 750°C (1382°F)	Non-Combustible
CAN4 S114	Test for Non-Combustibility	Non-Combustible
ASTM E 84 (UL 723)	Surface Burning Characteristics	Flame Spread = 0
		Smoked Developed = 0
CAN/UIC S102	Surface Burning Characteristics	Flame Spread = 0 Smoked Developed = 0

Maximum Service Temperature:

ASTM C411	Hot Surface Performance	In Compliance with ASTM @ 650°C (1200°F)
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Foil Facing

Flame Spread:		
UL 723 / ASTM 84	Foil Side = 10	Paper Side = 30
Smoke Developed:		
UL 723 / ASTM E 84	Foil Side = 0	Paper Side = 5

Acoustic Liner:	Black Scrim Liner
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AVAILABILITY & COST

For availability and pricing, contact WILREP LTD.
1-888-625-8944

DESIGN ASSISTANCE

AcoustiGuard™ - WILREP LTD. staff is available to provide technical assistance (quantities of materials, custom specifications, and budget pricing) for both new projects and renovations.

WARRANTY

Normal one-year warranty against faulty materials.

MAINTENANCE

No maintenance required. Cleaning of foil covered panels, if necessary or desired, may be performed by wiping with damp cloth or a solution of mild detergent and water.

SPECIFICATION (Short Forms)

SPEC NOTE: Upon request, a long form 3-Part CSI/CSC format specification is available in Microsoft Word.

2.02 MATERIALS

A. Plenum space sound control system: AcoustiGuard™ Privacy Board System is pre-engineered high performance acoustical extension wall for noise control within the ceiling plenum above partition walls, and consisting of: 1) Non-combustible, rigid high density mineral fiber insulation board to ASTM C-612, size 25 mm (1") thickness x 610 mm (24") x 1220 mm (48") having scrim reinforced foil facing vapor retarder both sides to UL 723/ASTM E-84 (FS 10 and SD 0 foil side), density (weight) of 4.4 kg/m² (0.9 lbs/sq ft), 24 STC.2)A compatible AcoustiGuard™ Return-Air silencer; 50 mm (2") thick with foil exterior, and black absorptive interior liner 0.29 mm (11.3 mil) thickness. Tel: 905-625-8944; Toll Free 1-888-625-8944; Email: info@wilrep.com; Web: www.acoustiguard.com or www.wilrep.com

B. Quality assurance: Ensure specified plenum space sound control system is marked with Privacy Board identification tape for easy field inspection and verification. Supplied by WILREP Ltd., 1515 Matheson Blvd. East, Unit C-10, Mississauga, ON L4W 2P5.