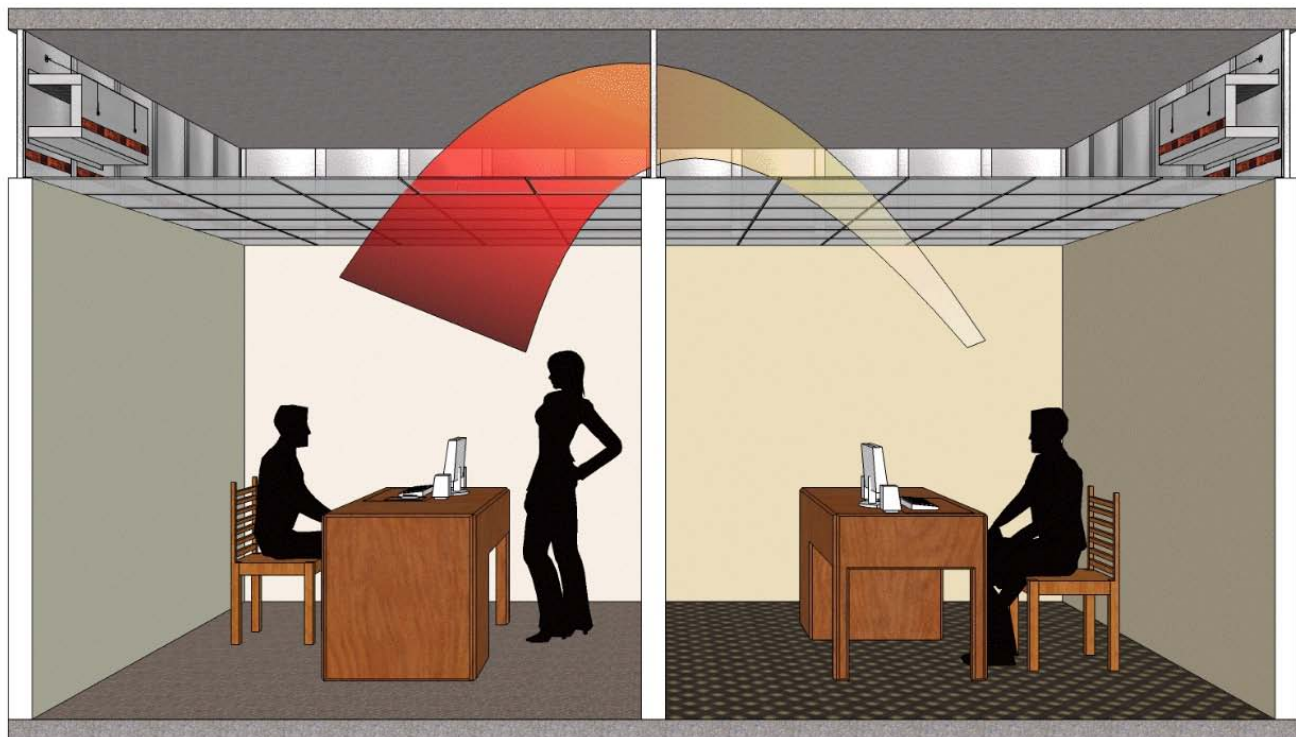


**AcoustiGuard™ Sound Control for Buildings**

# PRIVACY BOARD™

and RETURN-AIR SILENCERS



*A Pre-engineered Acoustical Extension Wall for Blocking Sound Transfer Above Partition Walls for a Higher Degree of Privacy*

When office spaces share a common plenum, most often the walls do not continue all the way to the floor / ceiling structure above. Regardless of the acoustical integrity of wall partitions or ceiling systems, unwanted sound (noise) can travel through non-ducted plenum spaces and return-air grilles.

Uncontrolled noise and lack of speech privacy can irritate, distract and affect productivity. The **AcoustiGuard™ Privacy Board™** system blocks the area between the top of the partition wall and the structure above without interfering with the air distribution. It is an easy to install effective barrier that provides acoustic privacy.

**AcoustiGuard™**  
SOUND CONTROL FOR BUILDINGS



SPECIALIZING IN  
SOUND & VIBRATION  
CONTROL SINCE 1977

# PRIVACY BOARD™ with Return-Air Silencers

**The AcoustiGuard™ Privacy Board™ System** solves the problem of airborne sound transmission through suspended (dropped) ceilings and over interior partition walls.

The standard practice of an open plenum above the dropped 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 office areas or healthcare examination rooms to waiting rooms, will typically only achieve an STC rating of 35 dB, and even less when the return-air register is present.

The specified STC rating of the wall assembly is immaterial when the sound flanking path is through the suspended ceiling and over the incomplete partition wall.

**AcoustiGuard™ Privacy Board™** barrier solves all of these problems with a product that is quicker and easier to install and much less messy than the installation of gypsum wall board (GWB) extension walls.

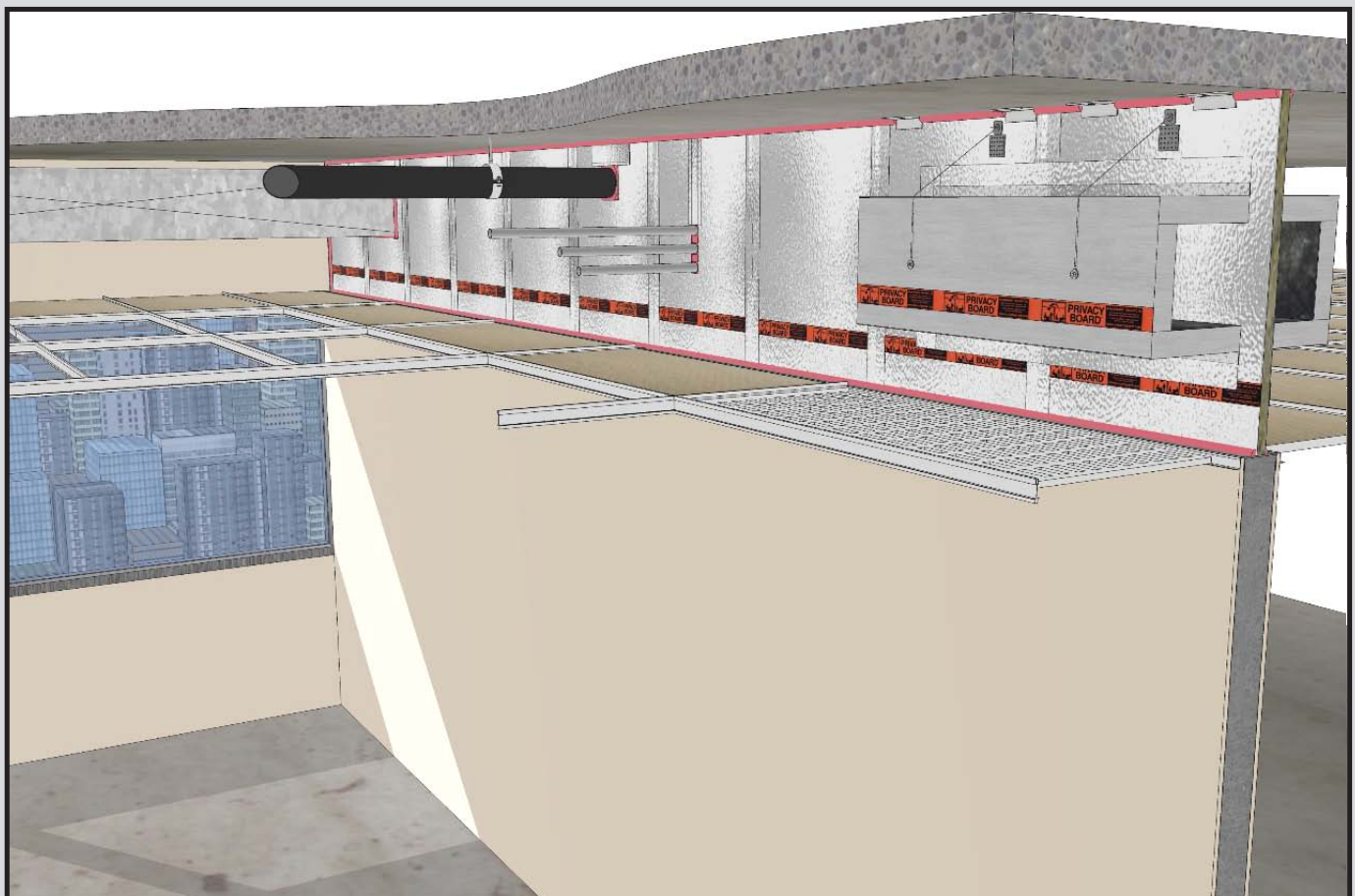
**AcoustiGuard™ Return-Air Silencers** solve the problem of HVAC return-air ensuring that the acoustic treatment "does no harm" to the HVAC system while maintaining acoustic isolation through the **Privacy Board™** barrier.

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

1. A sound barrier partition-wall extension board; 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 50 mm (2") high-density rigid Mineral Fiber panel with a non-woven acoustic liner on the air-flow side. The entire exterior of **Return-Air Silencer** is encased within a 28 Ga. galvanized metal housing to ensure structural integrity and Class-1 fire rating.

## SPECIAL FEATURES

- Enhances speech privacy and listening conditions
- Fast and easy field installation
- Will not interfere with return-air flow
- Assists with property leasing sound issues
- Does not encumber the installation of data cables
- LEED investment (virtually 100% recyclable)



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

## ACOUSTICAL DATA

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

TEST	Sound Transmission Loss (dB)						Sound Transmission Class (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 Return-Air Silencer	12.2	20.0	23.2	21.6	24.0	30.3	27
Privacy Board™ & 2 Return-Air Silencers	23.1	26.7	29.0	27.8	28.6	35.1	32

## STANDARDS CONFORMANCE

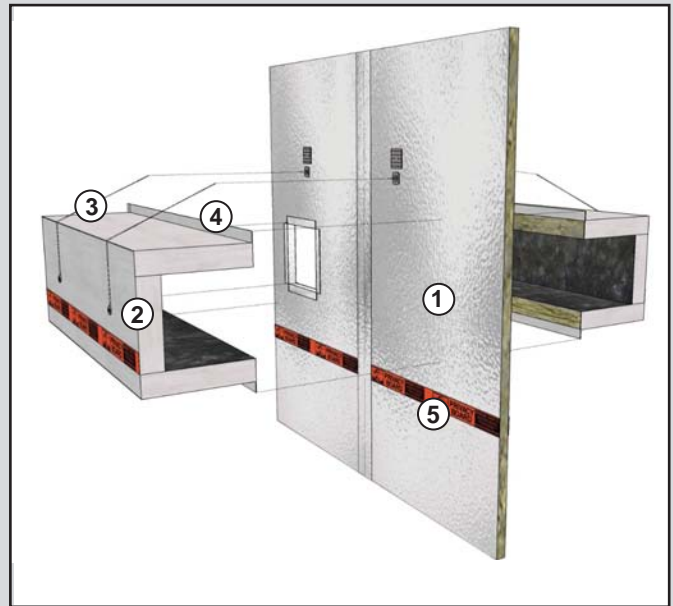
(Privacy Laws, Guidelines & Codes)

Noise Control, Speech Privacy and Speech Security have all found new importance and consideration since the enactment of multiple Federal, State or Provincial laws, statutes or codes 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 codes and guidelines.

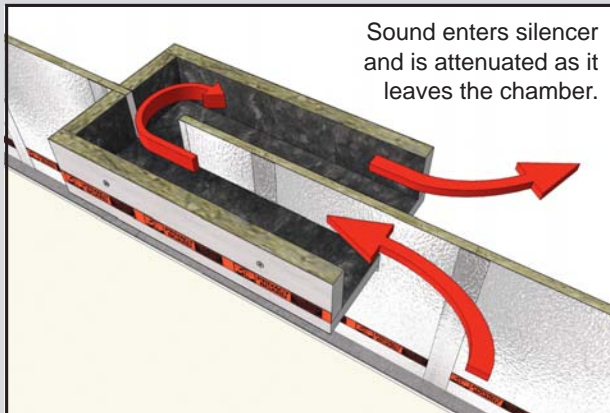
See:

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

## PRODUCT SYSTEM ASSEMBLY



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



Sound enters silencer and is attenuated as it leaves the chamber.

### SECTION VIEW SHOWS AIRFLOW PATTERN

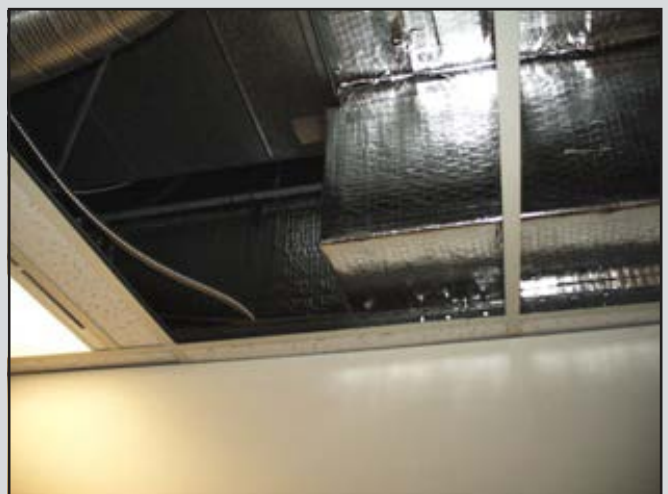
The **Return-Air Silencers** allow passive air exchange between separated plenum areas.

The highly absorptive inner surface of the silencers act as a broadband acoustic muffler.

The **Return-Air Silencers** do not interfere with the air distribution. (Recommended - minimum 1 **Return-Air Silencer** per air diffuser).



**Privacy Board™** sealed at duct penetration



**Privacy Board™** is easy to cut & install in tight spaces



## 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

#### Fire Performance:

ASTM E 136	Behaviour 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 Smoke Developed = 0
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0

#### Maximum Service Temperature:

ASTM C411	Hot Surface Performance	In Compliance with ASTM C612 @ 650° C (1200° F)
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### FOIL FACING

#### Flame Spread:

UL 723 / ASTM E 84	Foil side = 10	Paper side = 30
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#### Smoke Developed:

UL 723 / ASTM E 84	Foil side = 0	Paper side = 5
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**ACOUSTIC LINER:** Black Scrim Liner

## AVAILABILITY & COST

For availability and pricing, contact Wilrep Ltd. at 1-888-625-8944.

## DESIGN ASSISTANCE

Wilrep 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 Form)

*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/m<sup>2</sup> (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.

Supplied by Wilrep Ltd., 1515 Matheson Blvd. East, Unit C-10, Mississauga, ON L4W 2P5.

Tel: 905-625-8944; Toll Free 1-888-625-8944; Email: [info@wilrep.com](mailto:info@wilrep.com); Web: [www.acoustiguard.com](http://www.acoustiguard.com) or [www.wilrep.com](http://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.

**WILREP LTD.** 1515 Matheson Blvd. East, Unit C-10 Mississauga, Ontario L4W 2P5  
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Websites: [www.acoustiguard.com](http://www.acoustiguard.com) & [www.wilrep.com](http://www.wilrep.com)