

Noise Control Glass

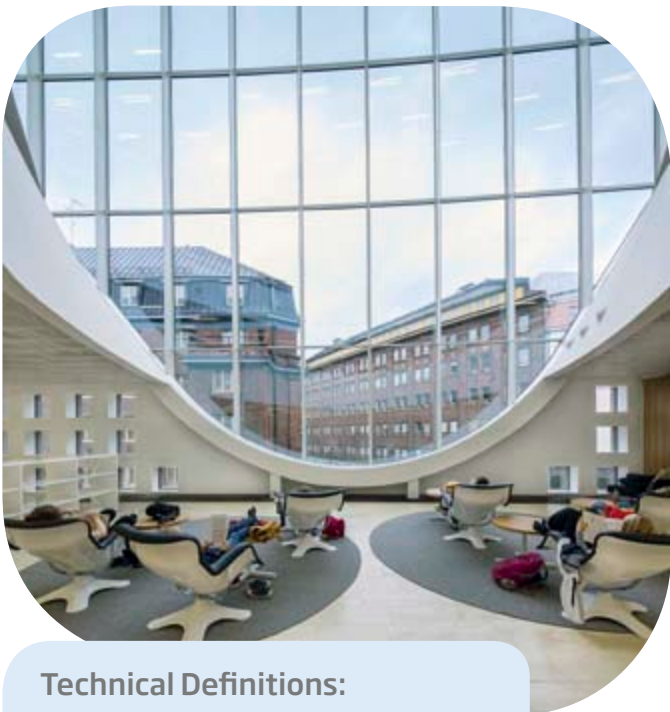
Pilkington **Optiphon™**

Pilkington **Spacia™**

Glass Solutions for Noise Control

Regular and consistent exposure to elevated sound levels has been shown to cause both physical and psychological health consequences including hearing loss, hypertension, anxiety, and others.

With increasing traffic on the road, rail and in the air, noise insulation has become a very important topic. It is not a question of it being a luxury anymore; it is essential that noise reduction is considered in the specification of the glazing. With regard to employment law, comfort and medical necessity, noise insulation in building construction is an undisputed requirement to decrease stress and noise-related illnesses.



Technical Definitions:

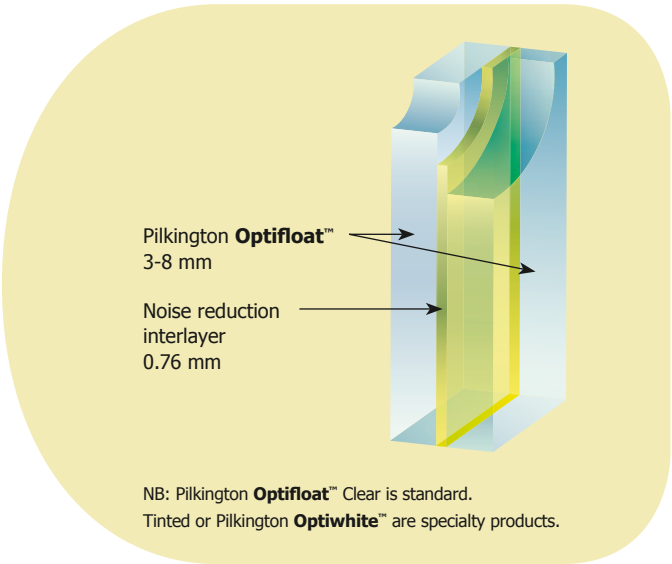
Sound Transmission Class (STC) -
Method for ranking sound reduction in decibels over the frequency range of 125-4,000 Hz.

Pilkington **Optiphon™**

By using a special PVB (polyvinyl butyral) interlayer, Pilkington **Optiphon™** is a high quality acoustic laminated glass that offers excellent noise reduction without compromising on light transmittance or impact performance. Pilkington **Optiphon™** can also be combined with other Pilkington glass products for a multi-functioning noise reduction glass configuration.

- Benefits**
- Special PVB interlayer for enhanced sound insulation performance
 - Safety glass
 - Available in jumbo and lehr end sizes
 - Can be combined with Pilkington **Activ™** for self-cleaning purposes
 - Can be combined with Pilkington **Energy Advantage™** for improved thermal control

- Applications**
- Hospitals
 - Airports
 - Schools
 - Offices



Pilkington **Optiphon™**

| Glass Type | Thickness (mm) | Frequency (Hz) | | | | | | | | | | | | | | | | | STC | OITC |
|--|----------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|------|
| | | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | | |
| Monolithic | 8 | 30 | 28 | 29 | 29 | 28 | 30 | 31 | 33 | 34 | 35 | 34 | 32 | 31 | 32 | 36 | 39 | 41 | 34 | 30 |
| | 10 | 29 | 27 | 29 | 30 | 31 | 32 | 32 | 33 | 35 | 34 | 33 | 32 | 32 | 36 | 39 | 42 | 44 | 35 | 32 |
| Pilkington Optiphon™ (Laminate) | 8.8 | 28 | 30 | 30 | 28 | 30 | 31 | 31 | 32 | 34 | 35 | 36 | 37 | 38 | 38 | 38 | 40 | 43 | 36 | 32 |
| | 10.8 | 29 | 31 | 31 | 30 | 32 | 32 | 33 | 33 | 35 | 36 | 37 | 38 | 38 | 38 | 40 | 43 | 47 | 37 | 34 |

Pilkington Spacia™

Pilkington **Spacia™** is the world's first commercially available vacuum insulated glazing. It offers the thermal performance of conventional double glazing in the same thickness as single glass. In addition to improving thermal performance, Pilkington **Spacia™** offers improved acoustic attenuation.

Pilkington **Spacia™** provides the solution to the problem of balancing historical preservation with modern comfort and environmental requirements, making it ideal for upgrading historic buildings or new buildings where a thinner, light weight glazing is desired.

Benefits

- Improved thermal efficiency
- Thin profile for special window requirements
- Custom sizes ranging from 8"×14" to 54"×95"

Applications

- Historic building renovations
- New buildings requiring a thin profile window



Pilkington Spacia™

| Glass Type | Thickness (mm) | Frequency (Hz) | | | | | | | | | | | | | | | | | | STC | OITC |
|----------------------------|----------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|------|
| | | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | | |
| Monolithic | 6 | 28 | 25 | 28 | 24 | 25 | 27 | 27 | 29 | 31 | 33 | 34 | 35 | 33 | 29 | 28 | 32 | 36 | 40 | 31 | 28 |
| | 8 | 30 | 28 | 29 | 29 | 28 | 30 | 31 | 33 | 34 | 35 | 34 | 35 | 31 | 32 | 36 | 39 | 41 | 44 | 34 | 30 |
| | 10 | 29 | 27 | 29 | 30 | 31 | 32 | 32 | 33 | 35 | 34 | 33 | 32 | 32 | 36 | 39 | 42 | 44 | 47 | 35 | 32 |
| Pilkington Spacia™ | 6.2 | 15 | 25 | 24 | 24 | 25 | 27 | 28 | 30 | 33 | 33 | 35 | 36 | 38 | 39 | 39 | 37 | 30 | 33 | 33 | 27 |
| | 8.2 | 23 | 24 | 26 | 27 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 39 | 39 | 39 | 34 | 29 | 34 | 38 | 35 | 30 |
| | 10.2 | 19 | 28 | 28 | 28 | 29 | 30 | 33 | 34 | 35 | 36 | 38 | 40 | 40 | 38 | 32 | 34 | 38 | 42 | 36 | 30 |
| Pilkington Spacia™ Shizuka | 9.2 | 24 | 25 | 24 | 26 | 28 | 29 | 32 | 34 | 35 | 36 | 38 | 37 | 37 | 41 | 41 | 39 | 40 | 45 | 36 | 31 |
| | 9.7 | 25 | 25 | 24 | 27 | 28 | 30 | 33 | 34 | 35 | 36 | 38 | 37 | 37 | 42 | 42 | 39 | 41 | 46 | 37 | 31 |
| | 10.7 | 26 | 26 | 25 | 27 | 29 | 30 | 33 | 34 | 36 | 36 | 36 | 35 | 39 | 43 | 43 | 41 | 42 | 47 | 37 | 32 |
| | 11.7 | 26 | 27 | 25 | 28 | 30 | 31 | 34 | 35 | 36 | 36 | 35 | 36 | 40 | 45 | 45 | 42 | 44 | 47 | 38 | 32 |

This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it. Pilkington, "Optiphon", "Energy Advantage", "Eclipse Advantage" and "Activ" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.



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