



Noise Control Glass  
Pilkington **Optiphon™**



## Pilkington **Optiphon™**

### Laminated glass for transparent noise insulation.

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.

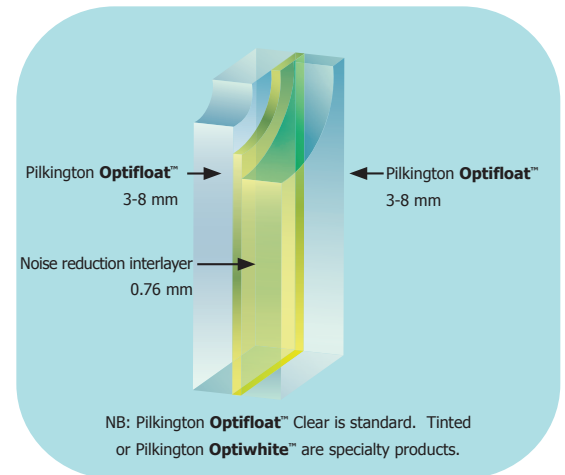
Pilkington **Optiphon™** is the ideal choice of glass in situations where there is excess noise from road, rail or air traffic, or various other sources, for example factories or nightclubs.

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.

#### Technical Definitions:

##### Sound Transmission Class -

Method for ranking sound reduction in decibels over the frequency range of 125-4,000 Hz.



The desired acoustic performance can be achieved through combining various thicknesses of glass with a PVB interlayer. Pilkington **Optiphon™** offers the opportunity to achieve specific noise reduction requirements.

#### Benefits

- Special PVB interlayer for enhanced sound insulation performance
- A thinner and lighter glass for the equivalent acoustic performance
- Available in jumbo and lehr end sizes
- All products achieve at least safety class 1(B)1 (EN 12600)
- A high acoustic performance can be achieved when used in Insulating Glass Units (IGUs)
- Can also be used to improve noise insulation in a triple glazing construction

#### Types of Noise Sources:

- Urban and highway traffic
- Railway traffic
- Aircraft (propeller and jet)
- Factory equipment
- Living activities (talking, music, radio, television)
- Children playing





Pilkington **Optiphon™** can be combined with other Pilkington products for a multi-functional noise-reduction glass or a multi-functional noise-reduction IGU providing additional benefits, such as:

- Thermal insulation with Pilkington **Energy Advantage™**
- Solar control with Pilkington **Eclipse Advantage™** (coating in position 2 in IGU)
- Self-cleaning with Pilkington **Activ™** (coating in position 1 in IGU)



Pilkington **Optiphon™**  
Metropolitan Office Building,  
Warsaw, Poland

## Performance Data Summary

One-third Octave Band Center Frequency (Hz)																				
	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	STC	OITC
Pilkington Optiphon™	Sound Transmission Loss																			
8.8 mm laminate	20	28	30	30	28	30	31	31	32	34	35	36	37	38	38	38	40	43	36	32
10.8 mm laminate	21	29	31	31	30	32	32	33	33	35	36	37	38	38	38	40	43	47	37	34

8.8mm Pilkington **Optiphon™** Single Laminated Glass = 4mm Pilkington **Optifloat™** Clear + 0.8mm Pilkington **Optiphon™** interlayer + 4mm Pilkington **Optifloat™** Clear  
 10.8mm Pilkington **Optiphon™** Single Laminated Glass = 5mm Pilkington **Optifloat™** Clear + 0.8mm Pilkington **Optiphon™** interlayer + 5mm Pilkington **Optifloat™** Clear  
 Other configurations are available through special order.

### Approximate Values - For Reference

Pilkington <b>Optifloat™</b> Clear	STC	OITC
8 mm - Single Glass	33	30
10 mm - Single Glass	34	32

Sound Transmission Loss measurements based on ASTM E90-09  
 STC values are calculated based on ASTM E413-10  
 OITC values are calculated based on ASTM E1332-10a



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