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.

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

Technical Definitions:

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

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### Performance Data Summary

<table>
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<th>One-third Octave Band Center Frequency (Hz)</th>
<th>80</th>
<th>100</th>
<th>125</th>
<th>160</th>
<th>200</th>
<th>250</th>
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<th>1250</th>
<th>1600</th>
<th>2000</th>
<th>2500</th>
<th>3150</th>
<th>4000</th>
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<tbody>
<tr>
<td>Pilkington Optiphon™</td>
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<tr>
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</table>

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

<table>
<thead>
<tr>
<th>Pilkington Optifloat™ Clear</th>
<th>STC</th>
<th>OITC</th>
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</thead>
<tbody>
<tr>
<td>8 mm - Single Glass</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>10 mm - Single Glass</td>
<td>34</td>
<td>32</td>
</tr>
</tbody>
</table>

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
This publication provides only a general description of the product. 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 this product 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.