

ACRYLITE® Soundstop

BirdGuard

Product

ACRYLITE® Soundstop BirdGuard is a highly transparent specialty grade of acrylic that helps to prevent bird collisions.

Properties

In addition to the well-known and proven properties of ACRYLITE®, such as

- excellent light transmission and brilliance
- extremely high weather resistance
- ease of fabrication
- high surface hardness
- low weight – half the weight of glass
- 11 times the impact strength of glass
- 100% recyclability,

ACRYLITE® Soundstop BirdGuard offers the following special features:

- It prevents drivers feeling they are driving through a “tunnel”.
- ACRYLITE® Soundstop BirdGuard offers a superior sound reduction rating (STC) of 32 dB or higher by ASTM E 90.
- Large noise barrier elements reduce the need for steel supporting structures and enhance the transparency of the noise barrier.
- ACRYLITE® Soundstop BirdGuard is available in transparent colors.
- The embedded black stripes reduce the likelihood of bird collisions.

Applications

These properties make ACRYLITE® Soundstop BirdGuard especially suitable for

- noise control along roads and railways
- wind barriers on bridges
- impact resistant glazing for pedestrian bridges/greenways

Machining

- ACRYLITE® Soundstop BirdGuard can be machined just like standard ACRYLITE®.

Physical forms

ACRYLITE® Soundstop BirdGuard is available in the following sizes and thicknesses:

Length: up to 20ft

Width: up to 6.5ft

Thicknesses: 15 – 20 – 25 mm

Other lengths and thicknesses are available on request.

Stripe specification on request.



Typical Values – ACRYLITE® Soundstop BirdGuard

| Property | Test Standard | Value |
|---|---------------|----------------------------|
| Specific Gravity | ASTM D-792 | 1.19 |
| Weight per unit area | 15 mm thick | 3.66 lbs / ft ² |
| Sound Transmission Coefficient | ASTM E-90 | 32 dB at 15mm |
| Sound Transmission Coefficient | ASTM E-90 | 34 dB at 20mm |
| Sound Transmission Coefficient | ASTM E-90 | 36 dB at 25mm |
| Refractive Index | ASTM D-542 | 1.49 |
| Light Transmission, Total Weathered 5 years AZ | ASTM D-1003 | 92% 92% |
| Haze Weathered 5 years AZ | ASTM D-1003 | 1% 1.5% |
| Yellowness Index Weathered 5 years AZ | ASTM E 313 | <1 1.5 |
| Tensile Strength | | 10,000 psi (69 MPa) |
| Elongation at Break (%) | ASTM D-638 | 4.5 |
| Modulus of Elasticity | | 400,000 psi (2,800 MPa) |
| Flexural Strength | ASTM D-790 | 17,000 psi (117 MPa) |
| Modulus of Elasticity | | 480,000 psi (3,300 MPa) |
| Compressive Strength (Yield) | ASTM D-695 | 17,000 psi (117 MPa) |
| Resistance Against Stone Projectiles (15 mm thickness) | EN 1794-1 | Pass |
| Impact-Windborne Debris in Hurricanes | ASTM E-199 | Pass |

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