

Durisol®

LEADER IN THE NOISE BARRIER
INDUSTRY SINCE 1977

ACRYLITE® SOUNDSTOP TRANSPARENT NOISE

EXTREMELY RESISTANT TO WEATHERING, RETAINS CLARITY AND
STRENGTH THROUGH DECADES OF SUNLIGHT EXPOSURE

VISIBILITY

LIGHT ALLOWANCE

WEATHERABILITY

LIGHTWEIGHT

VERSATILE

ACRYLITE® Soundstop Transparent Noise Barrier sheet is used as noise barrier material along roads and railroads. It is easy to install, form and fabricate. The sheet is extremely resistant to weathering from UV exposure and retains a high transparency for many years—providing architecturally appealing structures.

Visibility

Allows businesses and scenic vistas to remain visible to the travelling public

Light Allowance

Allows light into backyards that would otherwise be blocked by a precast wall

Guaranteed Performance

Industry leading 30-year warranty against yellowing despite decades of exposure to sunlight and other elements (ASTM D 1003 & E 313 test methods)

Weatherability

Extremely resistant to weathering

Lightweight

Minimal deadload on structure

Versatile

Compatible with other noise barrier materials

TYPICAL APPLICATIONS

- Roads and highways
- Commercial and residential developments
- Railways
- Airports

SPECIFICATIONS

- Typical panel weight of 3.66psf
- Panel heights of 4', 6' and 8'
- Fits post spaces from 6' through 20'
- Available in colorless and seven standard colors, with other colors available upon request
- Optional bird-deterrent markings available

PRODUCT OFFERING

ACRYLITE® Soundstop

Standard, clear and lightweight noise barrier sheet.

ACRYLITE® Soundstop GS CC

Incorporates polyamide filaments and is typically used on bridges and overpasses. In the event of impact by a vehicle, the imbedded filaments will hold the broken sheet, preventing fragments from falling below.

Because the ACRYLITE® Soundstop GS CC grade is self-containing, safety netting is not necessary.

PRODUCT OVERVIEW

Grade	Thickness (mm)	Standard Sheet Size (mm)
ACRYLITE® Soundstop	15 [19/32"], 20 [25/32"] & 25 [1"]	2,030 [80"] x up to 6,000 [236"] 2,500 [98"] x up to 6,000 [236"]
ACRYLITE® Soundstop GS CC	15 [19/32"], 20 [25/32"] & 25 [1"]	2,030 [80"] x 2,500 [98"] 2,030 [80"] x 3,050 [120"] 2,030 [80"] x 4,050 [159"] 2,030 [80"] x 5,050 [198"] 2,380 [93"] x 3,300 [130"]

- Non-standard and larger sizes available by request
- Polyamide filaments (GS CC) run vertically or horizontally
- Black or clear filaments available by request



RT18 NEW BRUNSWICK, NJ

GASKETS

We offer EPDM gaskets compatible with our material for installing ACRYLITE® Soundstop sheet

SERVICES

- Cut-to-size sheets
- Surface-treated sheets (eg., with matte stripes)
- Sheets can be line-bent and/or thermoformed
- Hands-on technical support



CARMEL, IN



CALGARY, AB



UNIVERSITY OF PENNSYLVANIA, PA



ST. CATHARINES, ON

TECHNICAL DATA

Mechanical

Physical Properties	Test Method	ACRYLITE® Soundstop	ACRYLITE® Soundstop GS CC
Specific Gravity	ASTM D-792	1.19	1.19
Tensile Strength	ASTM D-638	10,000psi (69MPa)	10,000psi (69MPa)
Elongation at Break (%)		4.5	4.8
Modulus of Elasticity		400,000psi (2,800 MPa)	400,000psi (2,800MPa)
Flexural Strength	ASTM D-790	17,000psi (117MPa)	16,500psi (114MPa)
Modulus of Elasticity		480,000psi (3,300MPa)	475,000psi (3,300MPa)
Compressive Strength (Yield)	ASTM D-695	17,000psi (117MPa)	18,000psi (124MPa)
Resistance Against Stone Projectiles (15mm thickness)	EN 1794-1	Pass	Pass
Impact - Windborne Debris in Hurricanes	ASTM E-1996	Pass	Pass

Optical (Colorless)

Physical Properties	Test Method	ACRYLITE® Soundstop	ACRYLITE® Soundstop GS CC
Refractive Index	ASTM D-542	1.49	1.49
Light Transmission, Total	ASTM D-1003	92%	92%
Weathered 5 years AZ		92%	92%
Haze	ASTM D-1003	1%	1%
Weathered 5 years AZ		1.5%	1.5%
Yellowness Index	ASTM E-313	< 1	< 1
Weathered 5 years AZ		1.5	1.5

Thermal Properties

Physical Properties	Test Method	ACRYLITE® Soundstop	ACRYLITE® Soundstop GS CC
Resistance to Brushfire (15mm thickness)	EN 1794-2	Class 2	Class 2
Deflection Temperature Under Load, 264psi	ASTM D-648	195°F (91°C)	210°F (99°C)
Co-efficient of Linear Expansion	ASTM D-696	0.000040in/in°F (0.072mm/m°C)	0.000040 in/in°F (0.072 mm/m°C)
Vicat Softening Temperature	ASTM D-1525	220°F (105°C)	239°F (115°C)
Flammability, Burning Rate (15mm thickness)	ASTM D-635	0.6 in/min (14mm/min)	0.8in/min (20 mm/min)
Self Ignition Temperature	ASTM D-1929	850°F (455°C)	910°F (490°C)
Smoke Density Rating (15mm thickness)	ASTM D-2843	20%	20%
Service Temperature	-	≤ 160°F (71°C)	≤ 180°F (82°C)

- Typical values: should not be used for specification purposes
- Values shown are for 0.25" (6mm) thickness unless noted otherwise
- Some values will change with thickness



LOS ANGELES, CA



NEWPORT BEACH, CA



CROSTOWN, MN

SOUND TRANSMISSION LOSS

Test Method	ACRYLITE® Soundstop	ACRYLITE® Soundstop GS CC
ASTM E-90	15mm 32dB	15mm 32dB
	20mm 34dB	20mm 34dB
	25mm 36dB	25mm 36dB

WEIGHT PER SQUARE FOOT

Thickness	ACRYLITE® Soundstop	ACRYLITE® Soundstop GS CC
15mm (19/32")	17.9Kg/m² (3.66lb/ft²)	17.9Kg/m² (3.66lb/ft²)
20mm (29/32")	23.8Kg/m² (4.86lb/ft²)	23.8Kg/m² (4.86lb/ft²)
25mm (1")	29.8Kg/m² (6.10lb/ft²)	29.8Kg/m² (6.10lb/ft²)

CHEMICAL RESISTANCE

The table below gives an indication of the chemical resistance of ACRYLITE® Soundstop and Soundstop GS CC sheet. Chemical resistance is influenced by a number of factors—these include methods of fabrication, conditions of exposure, as well as the manner in which the chemicals are applied. Even R coded chemicals can influence the material’s condition.

Fabrication

Stress generated while sawing, sanding, machining, drilling, and/or forming.

Application of Chemicals

Chemicals contacting the sheet, by rubbing, wiping, spraying, etc.

Exposure

Length of exposure, stresses due to various loads, changes in temperatures, etc.

Chemical	Code
Acetone	N
Ammonium Chloride	R
Ammonium Hydroxide (Concentrated)	R
Aromatic Based Graffiti Removers	N
Battery Acid	R
Benzene	N
Butyl Acetate	N
Calcium Chloride (100%)	R
Calcium Hypochlorite	R
Calcium / Magnesium Acetate	R
Citric acid (20%)	R
CMAK (Potassium Acetate/ Calcium Magnesium acetate)	R
Diesel Oil	R
Ethyl Alcohol (30%)	LR
Ethyl Alcohol (95%)	N
Ethylene Glycol	R
Gasoline	LR

Chemical	Code
Heptane	R
Hexane	R
Hydrochloric Acid	R
Ice Ban® Ultra™ M	R
Isopropyl Alcohol	LR
Kerosene	R
Lacquer Thinner	N
Magnesium Chloride	R
Methyl Alcohol (30%)	LR
Methyl Alcohol (100%)	N
Methyl Ethyl Ketone (MEK)	N
Methylene Chloride	N
Potassium Acetate	R
Sodium Acetate	R
Sulphuric Acid (3%)	R
Sulphuric Acid (30%)	R
Sulphuric Acid (Concentrated)	N
Toluene	N

This table should only be used as a general guide and should be supplemented by tests made under actual working conditions.

The codes used to describe chemical resistance are:

R = Resistant

ACRYLITE® Soundstop sheet withstands this substance for long periods and at temperatures up to 120°F (49°C).

LR = Limited Resistance

ACRYLITE® Soundstop sheet only resists the action of this substances for short periods at room temperatures. The resistance for a particular application must be determined.

N = Not Resistant

ACRYLITE® Soundstop sheet is not resistant to this substance. It is either swelled, attacked, dissolved or damaged in some manner.



MISSION VIEJO, CA

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Durisol Ltd. is a leader in the noise barrier industry accross North America.
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Please contact your local Durisol representative for the most current product information.