From:	Ruyffelaert, David	
То:	Jennifer Hager	
Cc:	Leo Leighton; Brad Walthall; Link Strickland; Daniel Feeney; Daniel Madrigal; Ruyffelaert, David; Grant, Jason	
Subject:	W138 Blackstone Logistics - Soundwall Substitution	
Date:	Wednesday, November 24, 2021 11:23:49 AM	
Attachments:	image001.png image002.png 20171011_110523.ipg 20131231_121439 (2).ipg DSC_0874.JPG Durisol Aluminum system.pdf	

Jen – Please see this email as a <u>product substitution request</u> for the sound wall. Scannell is requesting to furnish/install a "Durisol Aluminum Sound Wall" in lieu of the currently approved "ART Vinyl Silent Protector Sound Wall." Over the last couple months, PVC has been increasingly difficult to source so we are proposing to switch to a aluminum product which is more readily available. See attached for the durisol product brochure and pictures.

The only difference in the two products is the product type.

- ART Vinyl Sound Wall: PVC
- Durisol Aluminum Sound Wall: ALUMINUM

Sound Transmission Loss is the same for both products.

- ART Vinyl Sound Wall: 31 STC
- Durisol Aluminum Sound Wall: 31 STC
- See below for a side by side comparison of the specifications.

1. Art-Vinyl-BA Modular Sound Barrier Wall.

- Provide ~1,925 Linear Feet of sound wall.
 - o 800' at 8' wall height.
 - o 200' 10' wall height.
 - o 475' at 15' wall height.
 - o 450' at 22' wall height.
- All posts to be embedded on ~10'-12' centers.
- Structural steel columns to powder coated to match wall or galvanized.
- Wall to be 3" thick and weigh ~4.0 lbs. per square foot.
- STC rating is 31

7. Scope of Supply by Durisol

Materials

- Lightweight sound reflective panels, type AI-3b:
 - > Al sheet exterior, without perforated openings on both sides
 - Sound absorbing mineral wool interior; STC = 31
 - Tongue and groove design
 - Pattern = Smooth corrugated both sides
 - > Color = to be selected from available standard (closely match Beige) (coil coated)
 - Size = 17'-10" long x20" high
 - Est. Unit Weight = 3 lb /ft²
 - Panel adapters to suit W6 / W8 post opening
 - Steel angles welded to W16 post web to accommodate AI panels
- Ground-mounted steel posts:
 - > W6 / W8 / W16 hot dipped galvanized steel
 - > $1 \frac{3}{4}$ " dia. lifting hole
 - Max. post spacing = 18 ft OC
 - Includes 3 Deflection posts
 - > Concrete bearing blocks will be provided where changes in barrier elevation

Please review and let me know if you have any questions or need more information.

Thanks,

David Ruyffelaert | Project Manager | ARCO NATIONAL CONSTRUCTION | ARCO NEW ENGLAND 30 Speen St., Suite 300, Framingham, MA 01701 Corporate Headquarters: 900 N. Rock Hill Rd., St. Louis, MO 63119 Office: (508) 217.3131 Mobile: (617) 922.7576 Fax: (314) 963.7114

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DURISOL.COM



ALUMINUM NOISE BARRIER PRODUCT GUIDE

INTRODUCING THE DURISOL® ALUMINUM NOISE BARRIER SYSTEM - A LIGHTWEIGHT, ABSORPTIVE, STRUCTURE-MOUNTED NOISE BARRIER SYSTEM.

> LIGHTWEIGHT PANELS TONGUE & GROOVE INSTALL NOISE ABSORPTION ECONOMICAL VALUE

CUSTOM COLORS

Aluminum wall panels have been a viable noise barrier structure-mounted option. With the virtually limitless colors available, it is a lower cost material with complete design flexibility.

Another option that can be used in combination with other transparent or precast concrete Durisol systems, aluminum noise barriers are backed by the manufacturing quality of over 25 years.

INTRODUCING THE DURISOL® ALUMINUM NOISE BARRIER SYSTEM

A ready-made system prefabricated for a wide range of noise mitigation applications, Aluminum panels are lightweight and easy to work with - offering the installation advantage of tongue and groove assembly.

A durable aluminum profile with horizontal panels, our noise barrier systems can be completely customized with color variations and either perforated or smooth wall sides.

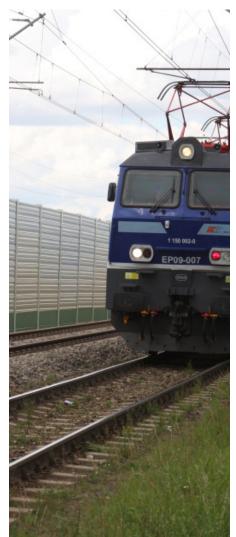
Built with perforations and a sound absorbing mineral wool interior to respond to specific noise absorption and/or reflection mitigation requirements.

Our MASH TL-4 crash-tested barrier system is now available!











FEATURES & BENEFITS

Lightweight

- Provides low dead load on structure
- >8 lbs / sq ft

Ease of Installation

- No special equipment or machinery required
- Tongue & groove joints

Durable

Panels have been in-use for 25+
years

In-house Design

• Engineering and design of the noise barrier system by Durisol in-house engineering team

SPECIFICATIONS

Thickness

• 125 mm / 5 inches thick

Post Detail

- Adapts well to W6 posts; Can be made to fit larger posts
- Structure-mounted hot dipped galvanized steel posts connected with steel cable option for improved safety.
- Available in a range of sizes from 3 ft to 16 ft long

Wall Height

- Panel height at 1.64 ft / 0.5 meter high
- With tongue and groove, can stack panels to desired project height



CAPTION: REAR-VIEW



TESTING

TEST NO.	RESULTS
ASTM E84	FLAME SPREAD = 0
Fire Testing	SMOKE DEVELOPED INDEX = 15
ASTM C423-17	0.90 NRC on both sides
Sound Absorption	
ASTM E90-09	33 STC
Sound Transmission Loss	
ASTM E1886	Passed = ±5219 Pa (±109.00 psf)
ASTM E1996	Passed = Missile Level D / Wind Zone 4
TAS 201, 202, 203	Impacts
ASTM C672	50 cycles completed with no scaling
Scaling Resistance	deleterious effects observed
ASTM C666 Freeze Thaw	No cracking, flaking and other deleterious
Durability	effects observed
ASTM G155 & ASTM B117	2,400 hrs of accelerated weathering with no
Exposure	deterioration observed.

CAPTION: BRIDGE-MOUNTED



CAPTION: ALUMINUM WITH TRANSPARENT STACKED

Drawings and product details are for information and/or illustrative purposes only, and may vary. Please contact your local Durisol representative for the most current product information.



Durisol* is the market leader in the noise barrier wall industry. We manufacture and supply a series of unique panel and post wall systems – including our Durisol* precast sound absorption panels and transparent ACRYLITE* Soundstop sheets, as well as narrow footprint retaining walls and fire-rated barriers. Our first noise barriers were installed in Canada in 1977 and in the US in 1986 and are all still in service today. With over 40+ million square feet of wall installed to date, Durisol* noise barriers stop the noise of industrial warehouses, utility enclosure sites and urban infrastructure of all kinds right across North America.

CANADA: 289-975-4402 | U.S.A.: 909-615-2037 | DURISOL.COM





