

AcoustaShieldTM

By Carsonite[®]



AcoustaShield Sound Barrier System reduces noise and light pollution along highways and mass transit lines, and around retail, commercial and industrial facilities. It delivers more noise reduction per square foot per dollar than concrete, wood or metal, and it looks better, installs faster, and lasts longer.

 **CARSONITE[®]**
COMPOSITES

Ten Good Reasons



By C

1 Value. Simply put, Carsonite Composites' AcoustaShield Sound Barrier delivers more noise reduction per square foot per dollar than any other comparable concrete, wood or metal sound wall. It looks better, installs the easiest, lasts longer and gives you the best value for your noise reduction investment. Great.



2 Speed.

AcoustaShield installs four times faster than concrete, wood or metal sound walls. It requires no expensive heavy lifting equipment to install or repair. The result is less cost, less mess and less time your highways need to be shut down for construction. If an AcoustaShield Sound Barrier is impacted by an out of control vehicle, it can be repaired year-around. Easily.

3 Aesthetics. Take a hard look at the photos in this brochure. AcoustaShield not only looks great when installed, it continues to look great year after year... unlike concrete, wood or metal walls which deteriorate, becoming eyesores in just a few years. We've definitely got good looks on our side. Beautifully.

4 Flexibility. Concrete, wood and metal walls cannot be used in: (1) difficult terrain (because heavy equipment can't reach the area) or (2) on bridges without costly structural work. Carsonite AcoustaShield, on the other hand, can be installed virtually anywhere and at any time of the year. Use it wherever you need it. For maximum sound mitigation, AcoustaShield can be ordered filled with shredded crumb rubber from recycled tires. Versatile.



5 Environmentally Sound. AcoustaShield is so environment-friendly that it won the Federal Highway Administration's Environmental Award of Excellence for Innovation for its contribution to helping deal with this country's growing scrap tire problem. Filling a Carsonite AcoustaShield wall with crumb rubber enhances the sound transmission qualities of the wall *and* recycles more than 21,000 scrap tires for every mile constructed. Nice.



Reasons To Choose

AcostaShield

Carsonite

6 Maintainability. Inevitably, accidents happen. That's why a sound wall's repairability is critically important. If a concrete, wood or metal wall is damaged, you will need to schedule heavy equipment and close traffic lanes to repair it. Two workers with hand tools and step ladders can fix a Carsonite AcostaShield Sound Barrier in just minutes. Inexpensively.



7 Cost Effectiveness. There are three types of costs to consider: installation, maintenance, and total lifecycle. While the installed cost of concrete, wood and metal walls can be comparable to FRP (Fiberglass Reinforced Polymer) walls, when you add maintenance expenses their cost increases dramatically. This gives FRP the lowest total lifecycle cost of all. Result: The best performance is also the most cost efficient wall you can buy. Easily.

8 Performance. When you buy a sound wall, you're buying noise reduction, not materials. To get the best wall, look for results. The chart at right shows how well each material does its job. The numbers speak for themselves. Loudly.

Decibel Reduction Comparison Chart						
Material	STC Rating	Highway Noise Level	-	STC Rating	=	Noise Level After Wall Installation
AcostaShield	37	90 dBA	-	37	=	53 dBA
Concrete	28	90 dBA	-	28	=	62 dBA
Metal	27	90 dBA	-	27	=	63 dBA
Wood	26	90 dBA	-	26	=	64 dBA

Highway noise is normally about 90 dBA. A neighborhood is considered quiet at 45-55 dBA. As this chart shows, Carsonite's AcostaShield Sound Barrier is the only wall that will make your neighborhood quiet.



9 Experience. We know sound walls. Our product has the dual advantage of superior materials and expert design, plus the best looks and performance. When you want noise control, you want Carsonite AcostaShield Sound Barrier System. Period.



10 Confidence. Carsonite's extensive line of highway safety products is preferred by many state Departments of Transportation for a reason: We do it best. We have been in the traffic safety business for more than 30 years, and most importantly, we'll be here tomorrow. That means you can buy with confidence. Always.

AcostaShield features our tongue and groove design and can be filled with ground, recycled tire waste.

How To Choose A Sound Wall

Sound walls come in many sizes, shapes and materials. Selecting the right system requires understanding their design, installation, maintenance and cost. The charts below compare the different types of sound walls.

Design Factors				
	AcoustaShield	Concrete	Wood	Metal
Type of System	Post/Panel	Post/Panel	Post/Panel	Post/Panel
Moisture Resistance	Excellent	Good	Poor	Poor
Freeze/Thaw Resistance	Excellent	Fair	Poor	Poor
Service Life	50+ Years	50 Years	25 Years	25 Years
Structurally Self-Supporting	Yes	Yes	Yes	Not All
Fire Resistance	Excellent	Excellent	Poor	Excellent
Graffiti Resistance	Excellent	Poor	Poor	Excellent
Weight Per Sq. Ft.	5-8 lbs.	100-125 lbs.	30-45 lbs.	5-7 lbs.

Which would you rather see every day?



Carsonite® AcoustaShield™



Metal

Installation Issues				
	AcoustaShield	Concrete	Wood	Metal
Heavy Equipment Needed	No	Yes	Some	Some
Works On Bridges	Yes	No	Yes	Yes
Works In Challenging Terrain	Yes	No	No	No
Speed of Installation*	4,000	1,000	1,000	750
Onsite Changes/Adjustments	Yes	No	Yes	No

*Average feet per man per day.



Wood



Concrete

Ratings & Approvals				
	AcoustaShield	Concrete	Wood	Metal
Type of System	Reflective	Reflective	Reflective	Reflective
STC Rating *	37	28	26	27
NRC Value	.15	.0	.85	1.0

* The higher the Sound Transmission Class (STC) rating the better the sound reduction

Wide Choice of Colors

Carsonite AcoustaShield Sound Barrier can be ordered in an array of standard colors. You can “stack” more than one color to achieve dramatic stripe effects like some of the walls pictured here. We can also match any color, and architectural colors are available.



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