

noise
LE DIFESE
SLIM



SOUND INSULATING AND SOUND ABSORBING BARRIER



WE BUILD SILENCE:

Sound absorbing and sound insulating
barriers made of recycled PVC compound.



TECHNICAL DATASHEET

NOISE Le Difese® SLIM

SLIM is based on a monocoque shell.
The panel is equipped with 2 internal sound-absorbing mat.
Soundproof end caps on both ends of the panel facilitate easy installation and provide more structural reinforcement.

SLIM is produced through a process of **single-phased tubular co-extrusion** and can be cut to almost any length. The panel is single sided perforated with various diameters Large holes for maximum sound absorption and ventilation (long life sound absorption).

The core of the shell is made of recycled PVC. The thin outer layer (skin) is made of co-extruded virgin UV proof PVC offering a **wide range of colors** and easy to clean.

Slim panels are exceptionally easy to install **on site**. The alignment and acoustic sealing are guaranteed by a geometrical U-shaped coupling (tongue and groove) securing and firmly connecting upper and lower panels.

More reinforcement by longitudinal grooves on the sides combined with a stiffening alveolar structure add flexural and mechanical strength.

Rigid and X-shaped end caps on both ends of the panel are produced with a single-phase 2K injection molding technology (PP + thermoplastic rubber). They also are **fully recyclable** and provide extra structural reinforcement in terms of vertical load from the upper panels.

The inner sound absorbing mat is made with **recycled polyester fiber (PET)** coming from recycled plastic bottles. The mat is hydrophobic, insect free, dirt repellant and is protected by a thermal treatment to tackle dirt.





Made of +90% of recycled PVC
They are produced of recycled PVC (>90%) coming from recovered plastic components (shutters, window frames, pipes, etc.).



Entirely recyclable
“Le Difese® SLIM” is made of 100% recyclable plastic (body, end caps, sound-absorbing mats).

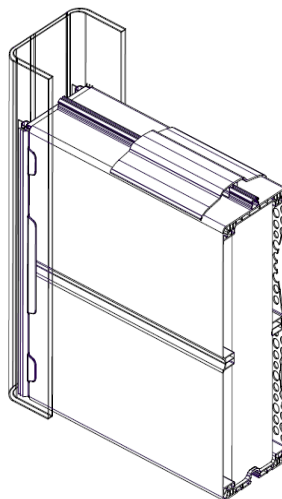


Finishing without paint
NOISE Le Difese® SLIM do not require any painting process: the color of the skin is obtained directly by dyeing the rough material during plasticization. This procedure prevents any dispersion of residual traces of paint in the external environment at both manufacturing and recycling stage. Consequently, the environmental impact is significantly reduced.

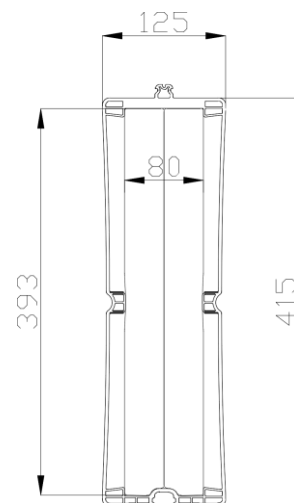


Acoustic/mechanics according to European Standards
Our sound-absorbing barriers meet European Standards on acoustic performance, mechanical performance and stability requirements, general safety rules and environmental standards, product specifications, as well as long-term performance.

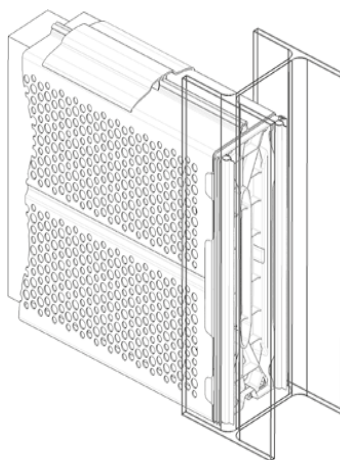
TECHNICAL DRAWINGS



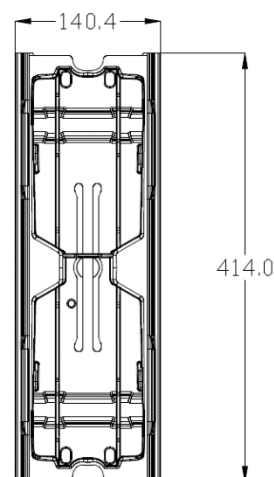
Cutaway view.



Dimensions of the panel and sound absorbing mats.



Assembly view of the panel from cap side.



Overall dimensions of the cap

Due to its size, Le Difese SLIM is particularly suitable for maintenance and/or replacement of existing installations without intervening on the support structures.



PERFORMANCE :

STANDARD RAL COLOUR PROPOSED

Noise srl reserves the right to freely change the composition of this sheet. For other extra standard pastel colors the technical feasibility must be evaluated.

TESTED PERFORMANCES	Noise LE DIFESE® - SLIM Polyester Fiber 50 kg/m³	REFERENCES STANDARD
Sound Absorption	A3 (DL α 10 dB)	UNI EN 1793-1:1999
Sound Insulation	B3 (DLR 29 dB)	UNI EN 1793-2:2018 UNI EN 1793-3:1999
Wind and Static Load (meters long panel 3.7)	1.6 kN/m²	UNI EN 1794-1:2018 Appendix A
Dynamic load from Snow Clearance (meters long panel 3.7)	15.0 kN (2mx2m)	UNI EN 1794-1:2018
Self-Weight : Dry Reduced Wet (meters long panel 3.7)	34.0 Kg 58.0 Kg	UNI EN 1794-1:2011 Appendix B
Load from Upper Elements	1.5 kN/m	UNI EN 1794-1:2011 Appendix B
Risk of Falling Debris	Class C2	UNI EN 1794-2:2011 Appendix B
Light Reflectivity	Rif. Bianco RAL: 9016 Front side 5.5 – 26.6 – 53.6 Class 2 Rear side 8.1 – 40.0 – 83.2 Class 1	UNI EN 1794-2:2011 Appendix E
Brush Fire	Class 1 Class 3 (above 80 cm concrete wall)	UNI EN 1794-2:2011 Appendix A
Impact of Stones	Meet requirements	UNI EN 1794-1:2011 Paragraph C.2

RAL code	Color name	RGB	Sample
RAL-1000	green beige	200 186 128	
RAL-1001	pale beige	206 177 129	
RAL-1012	lemon yellow	220 181 43	
RAL-6019	pastel green	175 207 170	
RAL-6021	pale green	130 156 120	
RAL-6027	turkish green	116 184 181	
RAL-7038	agate grey	172 174 166	
RAL-7044	silk grey	182 178 166	
RAL-7047	telegrey 4	198 198 197	
RAL-9002	grey white	215 214 202	

