

# TRANSPARENT PANELS

LAMINATED GLASS panels for roads motorways



Where do I use this kind of panel?

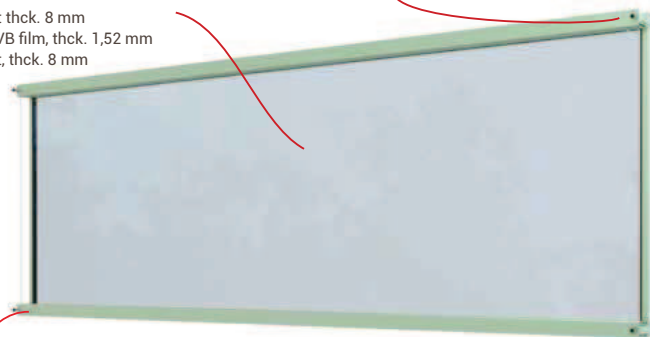
WITH HE-PROFILES	WITH LATTICE STEEL STRUCTURE	WITH SHAPED PROFILES
✓	✓	X

The transparent panel is composed of:

Laminated glass sheets, total thickness 17,52 mm, composed of:

- tempered float thck. 8 mm
- transparent PVB film, thck. 1,52 mm
- tempered float, thck. 8 mm

Fastening elements thrust bolts for assembly on HE-profiles (patented system of Cir Ambiente)



Frame in self-passivating Corten steel or galvanized and painted steel, the frame can be painted in all RAL chart colours



Frame detail



Anti bird impact devices possible supply

The panel can be used for railways and High-speed railway lines; in order to reduce the vibrations and to increase the acoustic performance, U-shaped EPDM gaskets may be installed between glass panels and frame. It is possible to provide the glass panels with 3 side perimeter frame in order to satisfy aesthetic requirements, leaving free the top frame side.

#### NOMINAL DIMENSIONS

length: up to 4.000 mm

variable height: up to 2.000 mm

plate thickness: 8+1,52 PVB+8 mm

## TRANSPARENT GLASS PANEL WITH FRAME

FEATURES	HARMONIZED NORMS	PLATE PERFORMANCE 8 MM, TEMPERED + 1.52 MM (PVB) + 8 MM; POST DISTANCE 3 M	CLASSE	PLATE PERFORMANCE 8 MM, TEMPERED + 0,76 MM (PVB) + 8 MM NOT TEMPERED; POST DISTANCE 4 M	CLASSE
Sound-insulation DLR	UNI EN 1793- 2 e 3 - UNI EN ISO 717-1	DLr =31 dB RW=31 dB	cat. B3	DLr =31 dB RW=31 dB	cat. B3
Self weight resistance: dry weight and reduced wet weight	UNI EN 1794	dry weight: reduced wet weight: NA	-	dry weight: reduced wet weight: NA	-
Wind load resistance	UNI EN 1794 App. A	1,96 kN/mq (panel 3x1 m)	-	1,3 kN/m2 (panel 4x1 m)	-
Wind load resistance	UNI EN 1794 App. A	1,96 kN/mq (panel 3x2m)	-	1,6 kN/m2 (panel 4x2m)	-
dynamic load resistance due to snow clearance	UNI EN 1794 App. E	10 kN/2m x 2m (panel 3x1 m) sp. 1,5 mm	-	10,3 kN/2m x 2m (panel 4x1 m) thck. 1,5 mm	-
dynamic load resistance due to snow clearance	UNI EN 1794 App. E	10 kN/2m x 2m (panel 3x2 m) sp. 1,5 mm	-	10,27 kN/2m x 2m (panel 4x2 m) thck. 2,5 mm (4x2 m)	-
Light reflection	UNI EN 1794 - 2	NPD		NPD	
Release of dangerous substances		NPD		NPD	
risk of falling debris	UNI EN 1794 - 2 App. B	Fragments meet the criteria	2	NPD	
Shatterproof glass test	UNI EN 356	Positive result	P2A	-	

## FINISHING

Possibility of completing the product with additional patented accessories to personalize the panels of the barrier, like:

- wood-like effect painting treatment (various colours/essences)
- silk-screen printed, coloured sheets or bird-of-prey dummies/adhesives can be used to minimise bird impact
- self-cleaning treatment to remove impurities on surface
- thermal HST-treatment (Heat Soak Test) to reduce spontaneous glass-breaks

## ADVANTAGES

- high noise-insulation performance
- green product (LCA certificate)
- durability: the glass crystal-like transparency will be preserved over time
- excellent fire resistance
- compatible with other panels of Cir Ambiente used for railway lines (stainless steel, concrete and expanded clay)

## ADDITIONAL ACCESSORIES

- retainer cables
- watertight EPDM seal
- "lip" type seal also acting as an electric insulator between frame and profile
- locking system with thrust parts
- different thickness of glass sheets

