



***Eco-friendly pavements:  
a clear innovation for road surfaces***

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# What is it?



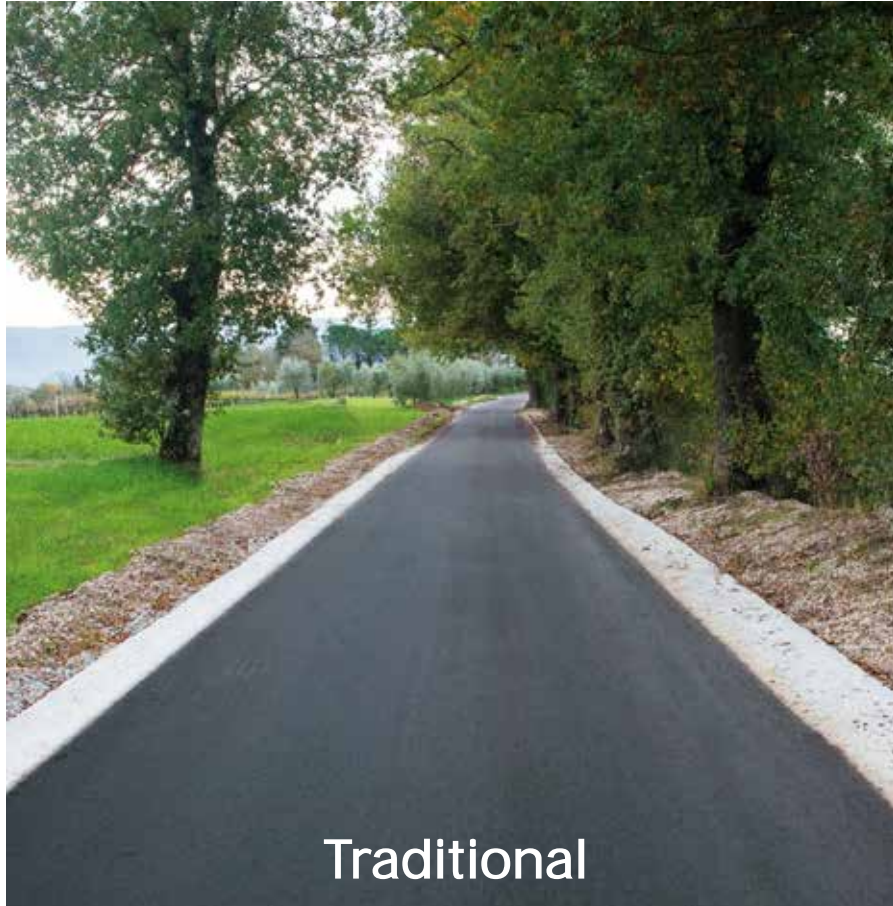
**EVI**zero is an innovative clear polyolefin –based binder for clear road surface enhancing the natural colour of the surrounding environment



Technical characteristics	Typical value
Dynamic Viscosity at 160°C	> 700 mPa*s
Penetration at 25°C	25 - 55 dmm
Softening point	> 75 °C
Flash point	> 220 °C
Density at 25°C	850 kg/m3
Mixing temperature	160 -180 °C
Cold flexibility -Fraas	< - 25 °C
Pakaging	PE bags 15 Kg

**evizero** is a single-component Polyolefinc Resin in chips forms

Patent N. 0001422317



**EVI**zero gives to road paving a natural colour respecting the environment.

# ECO<sup>VI</sup>pav with natural aggregates



The **EVI**zero transparency enhances the natural colors of the inert material used



ECO<sup>VI</sup>pav with pigments

or pre-colored aggregate

Colours are accentuated by the transparency of the **EVI**zero binder.



# Applications **ECO**pav



- CYCLE AND FOOTPATH
- PARK
- VILLAS AND PRIVATE HOUSE
- RURAL AREAS
- TRAFFICABLE AREAS
- OLD TOWN CENTRES



# Certification

**EVI**zero has been studied and tested in collaboration with Italian University research Institutes and test center, TPA za održavanje kvalitete i inovacije d.o.o.



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA



UNIVERSITÀ  
POLITECNICA  
DELLE MARCHE

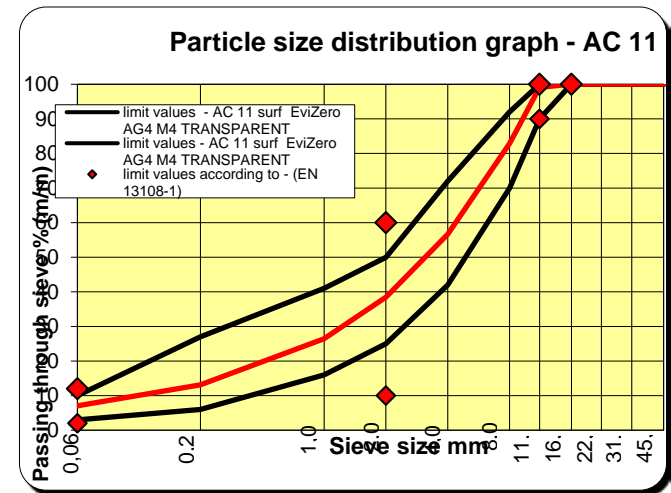
UNIVERSITÀ  
DELLA CALABRIA 



## RESEARCH DONE BY

TPA za održavanje kvalitete i inovacije d.o.o.  
Zagreb CENTRALNI LABORATORIJ DUGOPOLJE

- CHARACTERIZATION OF RAW MATERIAL
- OPTIMIZATION OF MIX DESIGN
- PERFORMANCE TESTS





# TPAC Case Study

	EVIZERO		
	EVIZERO	with Red pigment	EVIZERO
Max aggregate size (mm)	11	11	22
% of EVIZERO	5,2	5,2	3,8
% Voids	4,1	3,5	5,4
ITS (kPa)	981	1490	1230
ITSR (%)	97	96,6	93,5

**EviZero is suitable for building walkways and bicycle lanes, and wearing layers on roads in the group of very light, light and middle traffic load**

# *Applications gallery*

Cycle path Gallery, S. Cristina (BZ)



Privat Villa (Ancona)



Pedestrian area, S. Cristina (Bolzano)



Rural road, Massa Martana (Perugia)



Parking area, Monteveglio (Bologna)



Footpath in the park, Aosta





Research is the base of the innovation

# EVIzero is a Partner of:



**SAFER UP!**  
Thinking Beyond the Pavement



*This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 765057*

***ESR6: Cool pavements for Urban heat island effect Mitigation (COOLUM)***

***ESR15: Nanotechnologies for self-sensing & self-inspecting Smart Urban Pavements (NANOSUP)***

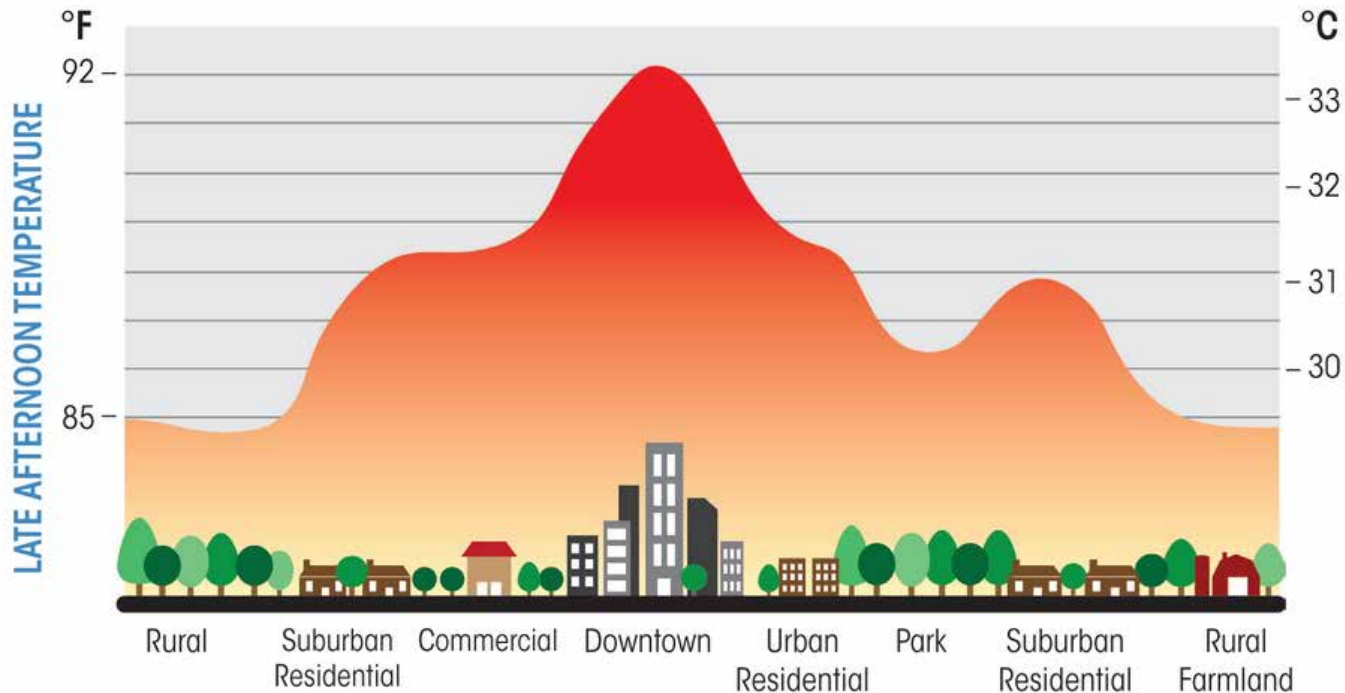
**EVI**zero.

Giving your projects added value

Project:

## URBAN HEAT ISLAND

An Urban Heat Island (UHI) is an urban area that is significantly warmer than its surrounding rural areas due to human activities. The main cause of the urban heat island effect is from the modification of land surfaces (pavements, roofs, etc.)

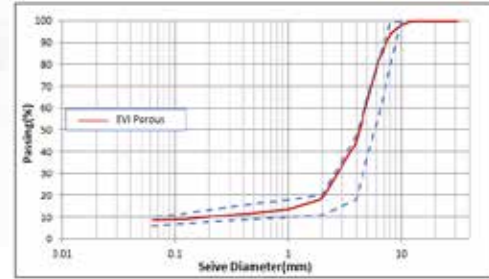


**EVI**zero with light colour aggregate gives a high effect mitigation in heat island

# ***EVlzero: future developments***

## **SEMI-POROUS Asphalt Concrete:**

- Air voids between 12 and 16 %;
- Good drainability;
- Noise absorption properties;
- Suitable for roads, cycle-lane and parking areas;
- In single or multiple layers for pervious pavements.



## **INNOVATIVE POROUS MIXTURE PREPARED WITH SYTHETIC AGGREGATE PRODUCED FROM WASTE MATERIALS**

An experimental application of synthetic aggregates from waste materials for the production of semi-porous asphalt concretes **with low visual impact** will be presented at the **International Conference on Smart Cities (ICSC2019)** in Seoul (17-19, July).



## **3000-MILE-LONG BIKE LANE FORM MAINE TO FLORIDA, USA**

A special EVlzero mixture prepared with green colored aggregates is under study for the possible supply to the construction of parts of the wearing course of a 3000 mile long cycle lane from Maine to Florida, in US.



**EVI**zero its benefit are

- transparent
- Aesthetic
- Eco-friendly
- Long lasting
- Easy and practical
- Safe for workers and users



Thank you  
For your Attention  
We wait you at our  
booth

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