



 N° IE5925x

## Novosuelo/Novopared ASTRA® Kombu



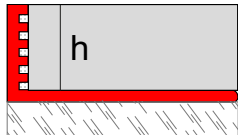
Profile of straight lines manufactured in EMAC®'s exclusive material: ASTRA® – an extra-tough polymer. This is a multi-purpose profile, and can be installed as a finish to protect and decorate the borders of ceramic cladding, as a paving separator, or as a counter top finish. And it offers an innovative grooved finish, giving it a rustic aesthetic and improving performance in bad weather.

The profile is installed during the tiling work and is integrated into the cladding. Furthermore, the material offers excellent resistance to impact, meaning it can reliably be used as a profile in paving and borders. It comes in four colours that are stable and long-lasting outdoors.

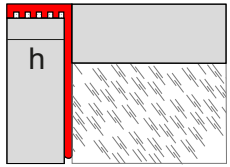
ASTRA® is the result of the constant innovation in EMAC®, always working to offer highly functional and decorative products.

Available in four colors that can integrate with the most trendy finishes in floorings in the markets or make a contrast with them.

## General Features



Stair nosing



Edge protector / stair nosing

Material:	Astra®
Length:	2,5 ml
Dimensions:	a: 10 / 12 mm
Packaging:	80 u/box

### Finishes:



Cinnamon-163



Cement-164



Black-165



Almond-168



Ash - 170

## Applications

Emac®'s Novosuelo/Novopared ASTRA® Kombu is a profile suitable for all kind of environments, both indoors and outdoors. The profile has been designed as an edge protector and can also be installed as a stair nosing both the footprint or the riser in stairs.

Thanks to its excellent features, this profile is specially indicated to be installed outdoors in its different applications and even as a stair nosing profile inside pool's stairs. It can also be curved by applying controlled heat.

## Technical features

Tensile strength	55-80 MN/m <sup>2</sup>
Flexural strength	50-100 MN/m <sup>2</sup>
Modulus of elasticity	3-4 GN/m <sup>2</sup>
Impact resistance	3-10 kJ/m <sup>2</sup>
Elongation to break	10-50%
Thermal dilat. coeff.	6x10 <sup>-5</sup> / °C

Moisture resistance	Excellent
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Tensile strength	Excellent
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Impact resistance	Very good
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Appearance and color	Stable
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### Chemical resistance

- Ammonium chloride (household cleaner)
- Sodium hypochlorite (swimming pools)
- Hydrochloric acid low c. (3% v/v)
- Citric acid low c. (100 g/l)
- Pottasium hydroxide low c. (30 g/l)
- Hydrochloric acid high c. (18% v/v)
- Lactic acid high c. (5% v/v)
- Pottasium hydroxide high c. (100 g/l)

Partial immersion.  
No visible effects in any of the samples.

UNE-EN-ISO 10545 Parte 13:2017



**LABORATORIO CARPI**



Water absorption	0,2 %	UNE-EN-ISO 10545-3
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Frost resistance	No damage after 100 cycles	UNE-EN-ISO 10545-12
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Stain resistance	In all cases, the stain has been removed with running hot water for 5 minutes	UNE-EN-ISO 10545-14
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- Chromium oxide stain in light oil
- Alcoholic iodine solution stain
- Olive oil stain

## Materials

The Emac®'s Astra® material is an extra resistant polymer specially developed to obtain the best benefits in all kind of environments. Not only indoors but also in submerged or humid environments or outdoors. Thanks to the addition of biocides, which prevent from mold growing, it stands stable in humid and submerged environments. This material has a great impact resistance, improved in the formulation with several additives and a perfect balance of mineral reinforcer, which allows its use in floorings with guarantees.

The colors available are stable and durable, thanks to the studied dosage of maximum solidity dyes, preserving its appearance along the time. Astra® is the result of the constant innovation in Emac®, always working to offer highly functional and decorative products.

## Installation



To visualize the video, capture this image with your mobile (QR code reader software is required) or just click on it.

1. Tile one of the sides of the wall to be tiled. Then, spread a big amount of thin-set mortar on the other side.
2. Place the Novosuelo/Novopared on the corner and press to let the thin-set mortar pass through the holes of the anchoring wing. Coloque el Novosuelo/Novopared sobre el ángulo y presione para que el material de agarre pase a través de los agujeros mecanizados del ala de fijación.
3. Place tiles along the anchoring wing and then press them softly to get an optimal adhesion.
4. Continue tiling until the installation is finished
5. Clean the possible leftover and let dry.



To install the profile as a stair nosing, follow the same steps and place it in one direction or another depending on whether you want to place it on the footprint or riser.

Novopared/Novosuelo ASTRA® Kombu can be bent in both directions by applying heat. Please, follow these steps for bending:

1. Using a manual cutting tool, make cuts in the section of the fixing wing to be curved by opening the holes in the die. Be sure you use cut protection gloves.
2. Then, take the hot air gun and put heat protection gloves on your hands
3. Apply heat constantly and in a controlled way on the section to bend. Be sure that heat is applied on the non visible side of the profile. Leave the air gun and force gently the profile with both hands to shape the profile curve. In the case of having help, both tasks can be performed simultaneously.
4. When you reach the desired curve, proceed to install the profile.



## Cleaning and maintenance

ASTRA® is resistant to most of the common cleaners, although is recommended cleaning it preferably with neutral cleaners and water. The correct use of bleach does not affect it and it is resistant to the most common acids. If you need to clean the striated surface deeply, you can use a brush to clean.

It is not recommended using organic solvents such as ethyl acetate, acetone or toluene, so they could damage the surface appearance.

## Technical Information

You can find out more information about the technical features of Emac®'s products by downloading their Technical File from [www.emac.es](http://www.emac.es).

If you have any query please contact our Technical Department in [tecnico@emac.es](mailto:tecnico@emac.es)



EXTERIOR  
OUTDOOR  
EXTERIEUR  
ESTERNO



INTERIOR  
INDOOR  
INTERIEUR  
INTERNO



PAVIMENTOS  
FLOORING  
PAVEMENTS  
PAVIMENTI



SUMERGIDO  
SUBMERGED  
IMMERSE  
SOMMERSO



CURVABLE  
BENDABLE  
COURVABLE  
CURVABILE



RECYCLABLE  
RECYCLABLE  
RICICLABILE  
RICICLABILE

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