



F10 - Estetic[®] Casa organic coated steels for domestic appliances

These products are ideal for casing applications such as front and side panels, doors, covers etc.

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Properties

The Estetic® Casa range of organic coated steels for domestic appliances meets the specific requirements of manufacturers in terms of colour, gloss and surface appearance. The range is divided into three categories:

- Estetic® Casa Access
- Estetic® Casa Classic
- Estetic® Casa Protect

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Advantages

Compared with products obtained by means of post-painting (where the paint layer is applied by a wet or dry process after forming), ArcelorMittal's Estetic® Casa range of organic coated steels is the best choice for combining technical and economic advantages with respect for the environment. A wide variety of surface appearances, textures, colours and gloss levels is available. These organic coated steels are also characterised by a level of performance designed to meet the technical requirements expected during the manufacturing process and to preserve product quality during the lifetime of the appliance.

The whole Estetic® Casa range of products has been developed in compliance with European environmental standards and regulations. The composition of all organic paint layers meets the requirements of the W.E.E.E. and R.o.H.S. European directives.

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Applications

Estetic® Casa products are ideal for applications such as front and side panels, doors, lids, covers and control panels of domestic appliances, e.g. refrigerators, washing machines, tumble dryers, dishwashers and cookers. Each product in the range has its own specific field of application to ensure optimum technical performance. For example:

- Estetic® Casa Access: entry-level product perfectly suited to built-in appliances
- Estetic® Casa Classic: good compromise in terms of flexibility and surface hardness, suitable for a wide range of domestic appliance applications
- Estetic® Casa Protect: this product offers superior corrosion protection and superior resistance to detergents for demanding applications

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Recommendations for use

Estetic® Casa products can be processed by cold forming and deep drawing without damaging the top surface. Product formability is determined by the mechanical properties of the steel substrate. Gloss and surface appearance of the coating remain intact during the forming process. Estetic® Casa products are suitable for bending and deep drawing on automatic production lines. A temporary removable protective film can be applied on the top side. Estetic® Casa products can be joined using techniques such as clinching, riveting and adhesive bonding.

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Technical properties

Estetic® Casa coil coated steel products offer several advantages:

- Economic advantages: reduction in manufacturing, energy and storage costs
- Ecological advantages: no effluents from surface treatment of the steel and reduction of waste in the workplace
- Technological advantages: consistent quality from batch to batch

Estetic® Casa products are designed to meet technical requirements during implementation and end use in terms of flexibility, stain and corrosion resistance, surface hardness, resistance to detergents, solvents, heat, scratches etc.

The backing coat of the Estetic® Casa range can be formulated to meet specific requirements, such as good foam adherence for applications requiring good thermal insulation, high gloss or chemical resistance.

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Standards

Estetic® products are in compliance with standard EN 10169.

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Brand correspondence

Estetic® Casa Access
Estetic® Casa Classic
Estetic® Casa Classic Flex
Estetic® Casa Protect

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Dimensions

Thickness (mm)	Min width	Estetic® Casa Access, Estetic® Casa Classic, Estetic® Casa Classic Flex, Estetic® Casa Protect	Max width
$0.20 \leq th < 1.50$	700		1530

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Mechanical properties

Estetic® Casa products are available with a wide range of mechanical properties. They can be applied to cold rolled steel and to electrogalvanised and hot dip galvanised steel substrates.

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Coating properties

The following table lists the guaranteed properties of the coating applied to a galvanised steel substrate with a coating of minimum 100 g/m². Tests are in compliance with standard EN 13523.

	Estetic® Casa Access	Estetic® Casa Classic	Estetic® Casa Classic Flex	Estetic® Casa Protect
Thickness	17 µm	25 µm	25 µm	25 µm
Gloss (Gardner 60°)	40 - 80 GU	30 - 90 GU	30 - 90 GU	30 - 90 GU
Surface appearance	Smooth	Smooth, orange peel effect	Smooth, grained, orange peel effect	Smooth, orange peel effect
Adhesion of the coating (T-bend)	≤ 2 T	≤ 1 T	≤ 0.5 T	≤ 0.5 T
Resistance to cracking on bending (T-bend)	≤ 2 T	≤ 2 T	≤ 1 T	≤ 1 T
Surface "pencil" hardness	HB - H	HB - H	F - H	HB - H
Resistance to acids and bases		Good	Good to very good	Good to very good
Resistance to aliphatic and alcoholic solvents		Good	Good to very good	Good to very good
Resistance to aromatic solvents		Good	Good to very good	Good to very good
Resistance to mineral oils		Very good	Very good	Very good
Adherence (Erichsen test)	6 mm (with no cracks)	6 mm (with no cracks)	6 mm (with no cracks)	6 mm (with no cracks)
Impact resistance	18 J	18 J	18 J	18 J
Stain resistance		Good	Good	Good
Corrosion resistance (salt spray test)	192 hours	240 hours	240 hours	360 hours
Condensation resistance (QCT)	500 hours	1000 hours	1000 hours	1500 hours
Corrosion resistance category	CPI2	CPI3	CPI3	CPI4
Adhesion on cross-cut	100%	100%	100%	100%
UV resistance		120 hours	120 hours	500 hours

Any questions?

Ask them via our contact form on <https://industry.arcelormittal.com/getintouch>

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