



F30 - Granite[®] organic coated steels for outdoor building - basic range

Organic coated steel cladding is a modern material that allows architects to express new ideas and design new lightweight, high-performance facades.

F30

Properties

ArcelorMittal's Granite® range comprises a series of organic coated products, covering all possible applications for the outdoor building market. The grades of the steel substrates available, combined with the properties of the Granite® coating, make these products attractive alternatives that meet all the requirements of the construction sector.

F30

Advantages

The Granite® range combines all the requirements of the building sector in terms of solutions, aesthetic quality and properties such as flexibility, surface hardness, coating adhesion, corrosion and UV resistance etc.

Various types of paints, in a wide range of colours and surface finishes, can be used to coat the substrate.

ArcelorMittal offers these products in a wide range of standard colours.

The pre-painting process is environmentally friendly, economical and guarantees consistent product quality.

F30

Applications

The Granite® range is recommended for outdoor building applications such as cladding, roofing, architectural buildings, accessories, sandwich panels etc. The surface of these coatings can be smooth or grained.

Automatic guarantees are granted for Granite® range products used for exterior cladding and roofing of buildings located in Europe.

For information on the Automatic Guarantee: industry.arcelormittal.com/construction/buildingguarantees

Name	Main properties	Surface appearance	Examples of applications
Granite® Standard	Polyester with UV and corrosion resistance, suitable for non-severe rural and urban environments	Smooth	Roofing, cladding, accessories
Granite® HD	Good UV resistance, average corrosion resistance, Polyester high durability	Smooth, grained	Roofing, cladding, accessories, sandwich panels etc
Granite® HDS	Very good UV resistance, good corrosion resistance, Polyester very high durability		
Granite® HDX	Very good UV and corrosion resistance, very good colour stability, strong coating, suitable for buildings exposed to harsh climatic or environmental conditions	Grained	Roofing, cladding, architectural buildings, air conditioning units etc

F30

Standards

Granite® products are in compliance with standard EN 10169.

F30

Technical properties

The substrates used for these applications are galvanised steel or galfan. Substrates with Zn-Al-Mg metallic coatings are also available for Granite[®] Standard and Granite[®] HD. The choice of the paint system depends on the end use and the environment. Several products are suitable for highly aggressive environments, such as urban and coastal environments, hot and humid overseas climates, sand storms etc.

The technical properties are summarised in the table below. Please contact us for advice on the choice of the most suitable grade.

A temporary removable protective film can be applied on the top side, depending on the type of coating. Please contact us for further information.

F30

Mechanical properties

Granite[®] products are available with a wide range of mechanical properties, depending on the substrate used and the intended application. See properties of the different substrates.

F30

Fire resistance

A1 in accordance with standard EN 13501-1.

<https://industry.arcelormittal.com/catalogue/F30/EN>

F30

Recommendations for use

Granite[®] products can be processed by cold forming and deep drawing without damaging the top surface. They can be joined using techniques such as clinching, riveting and adhesive bonding.

F30

Brand correspondence

Granite [®] Standard
Granite [®] HD
Granite [®] HDS
Granite [®] HDX

F30

Dimensions

Thickness (mm)	Min width	Granite® Standard, Granite® HD, Granite® HDS, Granite® HDX	
		Max width	
0.20 ≤ th < 3.00	700	1850	

F30

Coating properties

The following table lists the guaranteed properties of the coating applied to a galvanised steel substrate with a zinc coating of minimum 225 g/m², or an equivalent weight of galfan (200 g/m² minimum). These properties are also valid on Optigal® (with a minimum of 100 g/m²) for Granite® Standard and Granite® HD.

	Granite® Standard	Granite® HD	Granite® HDS	Granite® HDX
Thickness	25 µm	25 µm	35 µm	55 µm
Surface appearance	Smooth	Smooth or grained	Smooth or grained	Grained
Gloss (Gardner 60°)	30 GU	30 GU	30 GU	30 GU
Condensation resistance (QCT)	1000 hours	1000 hours	1500 hours	1500 hours
Adhesion of the coating (T-bend)	≤ 2 T	≤ 1 T	≤ 1 T	≤ 1 T
Resistance to cracking on bending (T-bend)	≤ 3 T	≤ 2 T	≤ 2 T	≤ 1.5 T
UV resistance (QUV (UVA + H ₂ O) test (2000 hours))	Gloss retention ≥ 30%; Δ E ≤ 5	Gloss retention ≥ 60%; Δ E ≤ 3	Gloss retention ≥ 80%; Δ E ≤ 2	Gloss retention ≥ 80%; Δ E ≤ 2
Resistance to acids and bases	Good	Good to very good	Good to very good	Good to very good
Resistance to aliphatic and alcoholic solvents	Very good	Very good	Very good	Very good
Resistance to ketone solvents	Low	Low	Low	Low
Resistance to aromatic solvents	Good to very good	Good to very good	Good to very good	Good to very good
Resistance to mineral oils	Very good	Very good	Very good	Very good
Corrosion resistance (salt spray test)	360 hours	360 hours	500 hours	700 hours
Corrosion resistance category	RC3	RC3	RC4	RC5
UV resistance category	RUV2	RUV3	RUV4	RUV4
Scratch resistance (Clemen)	≥ 2 kg	≥ 2 kg	≥ 2.2 kg	≥ 3 kg

Any questions?

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

All details provided in the ArcelorMittal Flat Carbon Europe S.A. catalogue are for information purposes only. ArcelorMittal Flat Carbon Europe S.A. reserves the right to change its product range at any time without prior notice.