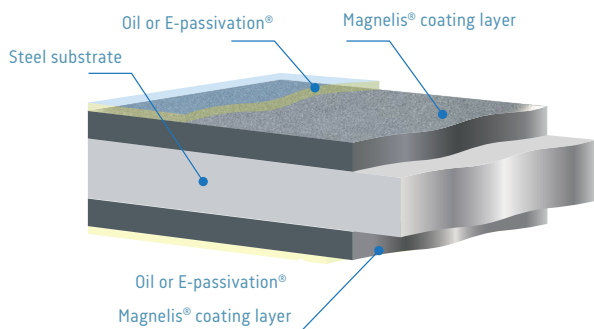




PRODUCT DESCRIPTION

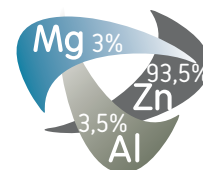
The two sides of the leaf consist of two covering sheets in Magnelis® galvanised steel, 1.5 mm thick. The four edges of these sheets are folded onto the rim of the leaf and screwed to the isolated framework, without welding. The covering sheets can be exchanged in the event of accidental damage. The door frame is made by folding a sheet of Magnelis® galvanised steel, 2 mm thick. The quality of Magnelis® galvanisation means that painting is not essential after fitting.



PROPERTIES OF GALVANISED STEEL SHEETS

The covering sheets are coated on both sides with an alloy: zinc 93.5% - aluminium 3.5% - magnesium 3%, by means of continuous hot-dip galvanisation. Thanks to its unique chemical composition, Magnelis® provides better corrosion resistance than conventional hot-dip galvanised steel.

European standard EN 10346 on hot-dip galvanised products was extended in July 2015 to include zinc-aluminium-magnesium coatings. When compliance with standards is a prerequisite, architects and engineers from consulting firms can now recommend the use of Magnelis®.



EXPOSURE TO CORROSION (Comparison between ZM 120 and ZM250)

Coating	Expected protective life in years for exposure in corrosivity category according to DIN EN ISO 55634-1			
	C2	C3	C4	C5-M
Magnelis® ZM120	24 to > 50	8 to 24	6 to 12	-
Magnelis® ZM250	≥ 50	17 to 50	13 to 25	6 to 13

According to DIBt report 86-1.30.11-7/21 of 06 September 2021.

The quality of the coating on the leaf and the frame of Heinen doors allows them to be exposed to a corrosive environment C5-M. The expected protective life in years for exposure in corrosivity category C5-M (according to DIN EN ISO 55634-1) is between 6 and 13 years. In order to extend this period Heinen Doors suggests additional protection by applying a standard paint.

TECHNICAL FEATURES

Composition:

Heinen opted for Magnelis® ZM 250 from ArcelorMittal. The coating thickness is 20 µm/side for 250g/m² (the Magnelis® coating density is 6.2g/cm³, taking account of its chemical composition).

Visual appearance:

In its original state, Magnelis® is dark grey, smooth and without spangle. The appearance of the sheet may vary and tends to darken over time (see EN 10346: 2015).

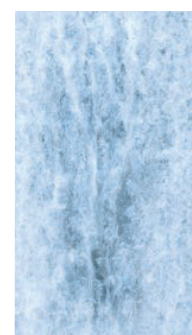
Advantages:

Magnelis® sheets provide improved corrosion protection on the surface as well as on buckled zones, sheared edges and perforations thanks to its self-healing property. Its specific composition means that Magnelis® develops dense anticorrosion protection in all types of natural environments.

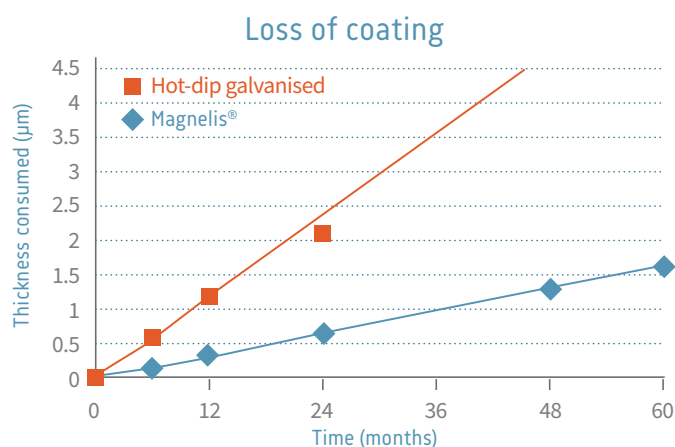
Magnelis® versus hot-dip galvanisation
(Test in saline environment)



Hot-dip galvanisation 20 µm
after 6 weeks



Magnelis 20 µm
after 34 weeks



Corrosion speed Magnelis® and galvanised product.
Outdoor exposure tests for five years in a high-chloride environment.



www.heinen-doors.com

For BIM files, please contact us.

Heinen accessory file | Covering steel sheets for door leaves and frames | 2022-04-07_FAHE-VAR-008 - V04EN

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