

## DOBEL® Endure

Keeping the outside out and the inside safe





Our brand new **DOBEL® Endure** utilises the highest quality of film-laminated steel to build exterior doors able to withstand both the everyday and the exceptional. The steel sheets are finished with UV and scratch resistant laminates to cope with daily wear and tear so that we can call them Endure with complete confidence.

Following Metalcolour's commitment to lowering its environmental impact we now offer **DOBEL® Endure** using a phthalate-free and bio-sourced PVC called Biovyn™. This product offers the exact same quality, durability and performance as our standard films at the same time as significantly reducing our carbon footprint.

#### INTRODUCTION

DOBEL Endure film-laminated steel is 100% Made in Sweden – We have some of the most extreme weather conditions on the planet, from frozen glaciers above the arctic circle to sunny beaches in the south. So we developed a product that can withstand this demanding environment and extensively tested it far beyond the typical standards. The steel used is the highest grade on the market and offers total reliability in the most exceptional circumstances. At the same time we finish the steel sheets with UV and scratch resistant laminates to cope with daily wear and tear so that we can call them Endure with complete confidence.

We have over 50 years of experience working with coated metals and the evolution into exterior doors has been both natural and logical. Our products can be found all over the world resisting the elements and offering the highest standards of reliability.

#### MADE BY SWEDEN

For the past 5 years we have been collaborating very closely with a number of our clients to realise a vision. We wanted to develop the very best laminated steel on the market suitable for building doors capable of resisting everything man and nature could throw at them. And Sweden just happens to be the best place to make it.

Sweden's unique geographical position generates an extraordinary range of different weather conditions. The four distinct seasons from north to south include some of the hottest summers in the region to the darkest and coldest in the far north. DOBEL Endure will perform just as well when the temperatures drop far below zero as on a hot midsummer afternoon.

It's not just the weather we need to take into consideration, in this country of extremes there's also the light. Daylight hours range from 0 in the winter to 24 six months later. That's why we have tested the UV resistance of all our laminates far beyond typical industry standards giving our customers, and the end user, assurance that our colours remain exactly the same year in and year out.





#### PHthalate-free and Plant-based VINyls

Following Metalcolour's commitment to lowering its environmental impact we now offer laminated metals using a phthalate-free and bio-sourced PVC called Biovyn™. This product offers the exact same quality, durability and performance as our standard films at the same time as significantly reducing our carbon footprint. Biovyn™ uses renewable pine oil which is a by-product of the wood pulping industry and sourced from sustainably managed forests. Biovyn™ is dropped directly into the production process of our film laminates with no adjustments required to make the shift to an even more sustainable PVC. Our standard film laminates already have a limited environmental impact however Biovyn™ is able to lower this carbon footprint by 90%.

#### QUALITY AND SECURITY

We use 100% high-grade European steel in all our products and this is where the reliability begins – in the raw materials. The consistency and quality of Swedish iron ore is the highest in Europe as it has been for centuries. This ore in turn creates a stiffer, thicker steel that does not compromise on workability when used in the formation of doors. These characteristics ensure that doors built with DOBEL Endure are tougher and stronger than any other suitable steel on the market. And it can be used in the same production techniques with minimal adjustments to the machinery.

The high quality of our steel brings with it reliability and a reassured confidence in the final product. Even under the most extraordinary circumstances doors made from Endure will keep what is outside out and what's inside safe.

However, we have not only accounted for the dramatic and the unexpected, we have also taken into account the importance of the ordinary everyday. We pride ourselves on the scratch resistance of the laminates we use and have tested them to prove it. Doors built with DOBEL Endure can withstand the typical daily impact of keys, nails, pets and even small children, both from the outside and inside.

#### METALCOLOUR SERVICE

The development of DOBEL Endure is a story of confidence. We have been working with door manufacturers for many years and it has been through their collaboration that we recognised the opportunity for a high quality, laminated steel specifically for exterior doors. Our customers had the confidence in our skills and material and we in turn had the confidence that their final products would sell. This is why we operate on extremely short turnaround times, continuously replenish stock items and are able to offer quick deliveries.

This confidence runs throughout the entire supply chain right the way down to the final user. Each stage is a confirmation that the best materials are being handled by the best partners. This in turn is an assurance that when a door made with DOBEL Endure is fitted it will be one of the highest quality on the market.

Our customer service is well known to be one of the most efficient in the industry, able to accommodate requests not possible for many others in the sector. We have over 50 years experience working with metal coatings and our support team are confident dealing with all kinds of requests. Over the years we have learned that access to real product samples is crucial to a productive collaboration so we have established routines for quickly getting samples into your hands.

Metalcolour service even extends to post purchase where our supplier is able to offer on-location replacement lamination either through damage or a change of colour. This is by far the most convenient option for the end user and a highly sustainable solution to a simple aesthetic problem.

#### AVAILABLE DESIGNS



DOBEL® 4125  
NCS S 2500-N



DOBEL® 4112  
NCS S 4500-N



DOBEL® 4015  
NCS S 6502-N



DOBEL® 4412  
NCS S 8000-N



DOBEL® 4111  
NCS S 9000-N

# DOBEL® Endure

## PROPERTIES

Specification	Data	Test method
Film thickness	150 µm	ISO 4593
Min bending radius	Steel 0 T*/Aluminium 1 T*	
Adhesion	No remark	ISO 1520
Impact resistance	18 J	ISO 6272
Max application temp	60°C**	

\* T is the metal sheet thickness. \*\* Temperatures exceeding 60°C may cause discolouration with time.

## DIMENSIONS – SHEETS CUT TO SIZE

Specification	Thickness (mm)	Width (mm)	Length (mm)	Zn thickness (g/m <sup>2</sup> /side)
Steel	0.50 – 1.50	– 1280	– 3700	100*, 275
Aluminium	0.70 – 1.50**	– 1250	– 3700	

\* Standard Zn thickness. Maximum bundle weight: 3.0 tonnes (steel). \*\* 2,00 mm thickness available for min. order quantity of 7 tons

## COILS

Specification	Thickness (mm)	Width (mm)	Zn thickness (g/m <sup>2</sup> /side)
Steel	0.50 – 1.00	– 1280	100*, 275

\* Standard Zn thickness. Inside diameter: 610 mm or 508 mm. Max coil weight: 5 tons.

## TOLERANCES, STEEL

Thickness* (mm)	Tolerance (± mm)
0.50 – 0.60	0.06
0.61 – 0.80	0.07
0.81 – 1.00	0.08
1.01 – 1.20	0.09
1.21 – 1.50	0.13

\* According to SS – EN 10 143 (steel).

Dimensions	Tolerance (mm)
Width (mm)	-0/+6
Length (mm)	-0/+2

There can be up to 5 mm naked edge (without film), on material with standard dimension tolerances.

**Flatness:** 5 mm standard deviation.

**Straightness:** 5 mm maximum deviation on a gauge length of 2000 mm.

**Squareness:** The squareness is expressed as the maximum allowable difference in length of diagonals. 3 mm up to length of 3000 mm.



Visit our download centre to download our brochures, product sheets and technical specifications:



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