

ESCO *LINE*

INTERIORFILM

Renew your world with Esco Line. The ideal way to redesign your environment with little or no downtime. Esco Line is used extensively for interiors, in shopping malls, company lobbies and elevators, kitchen etc. With its light weight and robust surface, Esco Line is also a popular choice for cruise ships and hotels renovation. Esco Line offers hundreds of decors in different

variations such as single colors, abstract pattern, as well as natural reproductions such as wood and stone.

Esco Line's original pressure-sensitive adhesive ensures clean, quick installation on a variety of substrates. With its flexibility and deformability, Esco Line can be installed on detailed and 3D surfaces as well.

PRODUCT CONSTRUCTION

Esco Line is a printed film with an adhesive layer

1ST LAYER: Embossing and printing

2ND LAYER: Adhesive layer (acrylic plastic)

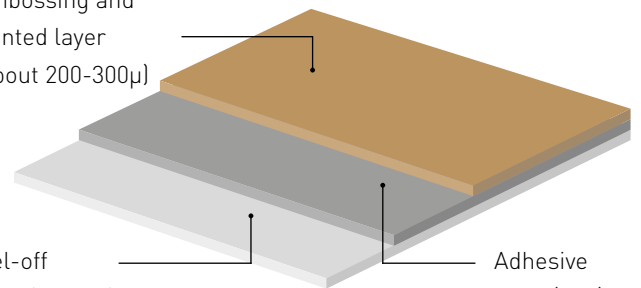
3RD LAYER: Peel-off paper

Actual structures and materials may be slightly different for each series (batch).

Embossing and printed layer
(about 200-300 μ)

Peel-off paper (160 μ)

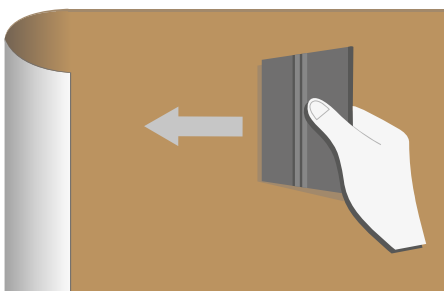
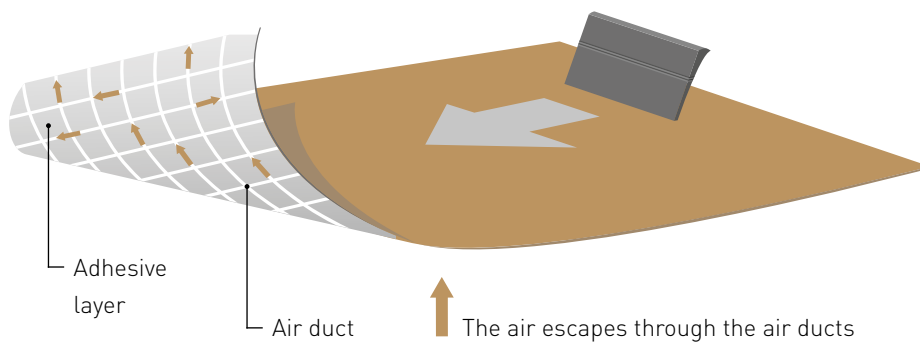
Adhesive layer (60 μ)



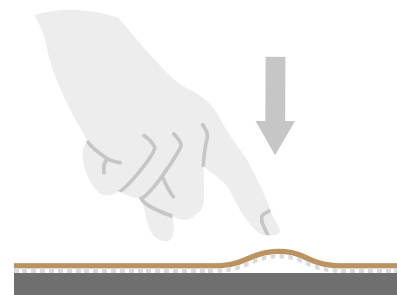
INSTALLATION WITH AIRBUBBLE CONTROL

Esco Line is applied using an Acryl type adhesive, which has an adhesive surface with grid grooves for air-bleeding airbubbles between the film and the substrate. The airbubbles are released

along those grooves, enabling the film to be quickly and easily affixed to large or complex surfaces. This provides a higher and easy quality finish.



In this way, the film can be applied quickly and easily.



Just squeeze out the bubbles.

INTERIORFILM AND ENVIRONMENT

We care about nature. Esco Line is an environmentally eco friendly film.



Free from harmful heavy metals (lead, cadmium, mercury, chromium, etc.).



Formaldehyde free; the substance that causes sick building syndrome is not released.



Excellent antimicrobial and anti-mildew function.



Minimized release of volatile organic compounds (TVOC).



Meets the safety requirements for hazardous chemicals in the Common Safety Standards of Children's Products.

HEAVY METAL [Pb, Cd, Hg, CrVI]

[Pb] 5mg / kg [Cd] 0,5mg / kg [Hg] 2mg / kg [CrVI] 1mg / kg	None detected
------------------------------------------------------------------------------	---------------

FORMALDEHYDE [HCHO]

0,12mg / kg	None detected
-------------	---------------

HAZARDOUS SUBSTANCES [Sb, As, Ba, Cd, Pb, Hg, Se]

[Sb] 60mg / kg [As] 25mg / kg [Ba] 100mg / kg [Cd] 75mg / kg [Cr] 60mg / kg [Pb] 90mg / kg [Hg] 60mg / kg [Se] 500mg / kg	Satisfactory
----------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------

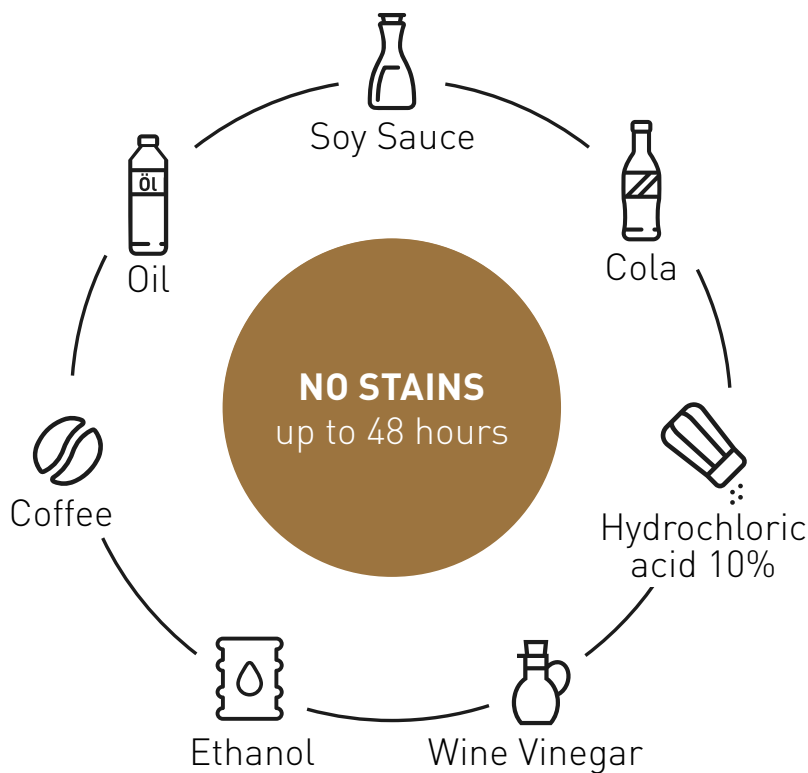
PHTALATE

[DEHP] < 0,1% [DBP] < 0,1% [BBP] < 0,1%	None detected
-----------------------------------------------------	---------------

TECHNICAL INFORMATION

We pay attention to safety! Esco Line is a safe interior film, with excellent flame retardancy and quality stability in any environment.

STAIN RESISTANCE			
Classification	Solvent	Result	Reference
Water	Water	No change after 24 hours	Institutional certificate
Acid	Acetic Acid (44%)		
Ketone	Acetone		
Chemical solution	Aqueous Ammonia (10%)		
	Sodium Carbonate (10%) Sodium Chloride (15%)		
Alcoholic	Ethanol		
Chemical	Cleaning agent iodine		
Contaminant	Coffee		
	Concentrated milk		
Oil	Olive Oil		
	Palm Oil		



TECHNICAL INFORMATION

PRODUCT FEATURES

Criteria	Property
Material	PVC
Surface	Depending on decor
Thickness	200 - 300 µ
Width	122cm / 50 running meters per roll
Adhesive	Acrylate adhesive transparent - permanent
Release Paper	PE coated paper - siliconized on one side
Weight film	26kg / 50 LFM (m ² =400g)
Production	Polymer

ADHESION

Subsurface	Adhesive Strength
Stainless Steel	37
Mortar	4
Coated sheet steel	44
Aluminum	29
Veneer	5
Acrylic Glass	38
Melamine	30

**Adhesive strength - approx.
N/25 mm Peel strength at 180°C**

**CONDITION:
24 hours at 25°C / 50% RH°**

APPLICATION AND REMOVAL

Work step	Information on the work step
Application	Dry bonding only
Application temperature	15°C - 25°C
Removal	Removal without residue. Removal with the help of heat (approx. 80° C) hot air gun. For large areas, it is advisable to cut the film into strips and then start removing. In the case of pre-treated surfaces (with adhesion promoter / paint), the original surface can be damaged or pulled off with it. No guarantee for easy or fast removal. Should there still be adhesive residue we recommend our adhesive residue remover.

TECHNICAL INFORMATION

PRIMER

Primer / Adhesion Promoter	Object / Use
Solvent based / adhesive strengthener Esco Line TO-ZU-067	<ul style="list-style-type: none"> • When the material is stretched • on edges that are not folded over (we generally recommend overlapping edges) • General low surface tension • Gluing butt joints (we always recommend an overlap)
Water-based / adhesion promoter Esco Line TO-ZU-070	<ul style="list-style-type: none"> • Untreated non-resistant surfaces • Plasterboard, plastered walls, multiplex panels • Concrete, raw MDF

NOTICE:

The Esco Line film is usually applied without the support of primers.

ANTIBACTERIAL EFFECT

Bacteria	The sample is inoculated with a defined amount of a germ suspension. Result after 24 hours.
E. coli - coliform bacteria	Antibacterial activity score 2.0 or greater
Staphylococcus aureus	Antibacterial activity score 3.0 or greater

NOTICE:

- The bacterium was tested for 24 hours at 35°C ± 1°C and at a relative humidity of 90%
- The actual antimicrobial activity is higher than 2.0 (value below / less than 2.0 no antibacterial effect)

TECHNICAL INFORMATION

OTHER PROPERTIES

Criteria	Property
Storage	<ul style="list-style-type: none"> • 3 years • Clean and dry environment approx. 20° degrees • No direct exposure to the sun - rest material should always be „fixed“ or roll up on a core
Durability	Indoors min. 10 years + ; with proper installation
Cleaning	<ul style="list-style-type: none"> • The material can be easily cleaned and disinfected without affecting the Surface structure. • The durable surface can be cleaned with conventional disinfectants • Esco Line films contain antibacterial preservatives, and protect the product from degradation by microbes such as mold and fungus.
Print	<ul style="list-style-type: none"> • Among other things, the material can be printed/coated with UV varnish. • Please check compatibility and print quality - before each application test the pattern.
Cutting - plotting	<ul style="list-style-type: none"> • The Esco Line film can be cut with a cutting plotter. • Before each use, test configuration and knife settings on a test material

NOTICE:

When applying several meters, the material must be used from the same roll. Should more than one roll (50LFM) be required, please use only material from the same batch / production date. Slightly color deviations of materials from different batches have to be considered before each application. All information are based on existing empirical values. It is up to the processor to check the use before - whether its purpose is suitable for the application.

FIRE RETARDANT CERTIFICATION

Certified by state-approved MPA NRW Materials Testing Office Germany	
Carbonization length less than 20 cm	Building material class B1 (DIN 4102-1) not burning falling off
Carbonization area less than 30 cm ²	
Flame remaining - less than 3 seconds	
Smoke density 200 Ds	

TECHNICAL INFORMATION

OVERVIEW OF SUITABLE / UNSUITABLE SURFACES (COMPATIBILITY)

	Surface	Esco Line
Wood	Hard plywood	✓
	Porcelain veneer	✓
	Particle board	✓
	MDF	✓
	Pure wood	✗
	Plasterboard	✓
Mortar	Volcanic Silicate board	✗
	Silicate Calcium board	✗
	Mortar	✗
Metal	Baked enamel steel finish	✓
	Galvanized steel plate	✓
	Paint-coated steel plate	✓
	Aluminium	✓
	Stainless steel	✓
	Copper	✓
	Tin	△
	Overlap	✓
Decorative film	Melamine board	✓
	Plastic laminate	△
Glass	Glass	✓
Plastic	Smooth glassy surface	✓
	Artificial Marble	✓
	Acrylic	△
	ABS	✗
	Hard PVC	✓
	Soft PVC	✗
	Polycarbonate	✗
	Polyethylene	✗
	Nylon	✗
	Flour resin	✗
	Rubber	✗
	Sealing	△

TECHNICAL INFORMATION

RESISTANCE TO SOLVENTS AND CHEMICALS

Specification	Solvent	Exposure	Result
Water	Water	24 hours	no irregularities
Acid	Chloride (10%)	24 hours	no irregularities
Base (Alkaline)	sodium hydroxide (10%)	24 hours	no irregularities
Alcohol	Ethanol	24 hours	no irregularities
Ester	Ethyl acetate	5 minutes	Deteriorates*
Ketone	Methyl Ethyl Ketone	5 minutes	Deteriorates*
Aryl group	Toluene	5 minutes	Deteriorates*

NOTICE:

Information on physical and chemical properties is based on reproducible investigations however, does not constitute a guarantee. The values listed are to be regarded as guide values. Given the wide range of uses and the ongoing development of new uses, it is advisable for the user to check suitability and quality for each use; he bears the sole risk for this use. The seller is liable for damages only up to the amount of the purchase price excluding all indirect and accidental damages.

with ❤️ from **Esco Line**