

Squid is a self-adhesive transparent textile for covering glass windows and doors, and glass partitions.

# **PRODUCT SPECIFICATIONS**

Material

Fabric: 100% woven Polyester (PES) Liner: Polypropylene (PP)

Made in BELGIUM

Weight

Fabric: 105 g/m<sup>2</sup> Liner: 35 g/m<sup>2</sup> Total: 140 g/m<sup>2</sup> **Fabric dimensions** 

Thickness: 0,3 mm Width: 130 cm

Length: standard roll size 50 m

# **CHARACTERISTICS**

- Transparency level: transparent
- · Color fastness: 6-7
- Self-adhesive (water-based acrylic pressure sensitive glue)
- Digitally printable with UV and Ecosolvent
- Digitally cuttable on flatbed cutter (Zund/Esko/Summa)
- Application tape: Paper: R-TAPE 4885 Film: R-TAPE AT 75.1

- · Damp-proof
- HR++(+) glass compatible (not for printed or for Coal)
- · UV resistant
- · Cooling effect
- PVC-free
- · Halogen-free
- · Interior application only
- Service life: minimum 5 years

# **CERTIFICATES**

Fire classification

Antibacterial - Antifungal

PVC Free

Oeko-Tex standard 100









# **SPECIFICATIONS PER COLOR**

	CHALK	BONE	OAK	ASH	ROCK	COAL
	white	cream	light brown	cool grey	dark grey	black
Light reflectance	38%	34%	23%	20%	17%	2%
Light transmission	60%	57%	49%	47%	42%	23%
Light absorption	2%	9%	28%	33%	41%	75%
Solar reflectance	36%	33%	28%	25%	25%	18%
Solar transmission	60%	59%	56%	54%	52%	41%
Solar absorption	4%	8%	16%	21%	23%	41%
UV transmission factor	46%	49%	42%	42%	38%	25%
Cooling effect	-3.0°C	-1.0°C	-0.2°C	-0.5° C	-0.2°C	-
Visual contact with the outside	2	2	2	2	3	4
Daylight utilisation	4	4	3	3	3	2
Openness factor (%)	17,1	13,5	14,9	11,8	13,1	17,7



	CHALK white	BONE cream	OAK light brown	ASH cool grey	ROCK dark grey	COAL black	
Total energy transmittance and reduction factors							
Single glass $U_g = 5.8 \text{ W/(m}^2\text{K)} \text{ g} = 0.85$							
$g_{tc}$	o,58	0,60	0,61	0,62	0,62	0,66	
F	0,68	0,70	0,71	0,73	0,73	0,78	
Airfilled double glass U <sub>g</sub> =2,9 W/(m²K) g=0,76							
$g_{tc}$	o,55	0,56	0,57	0,58	0,59	0,63	
F	0,72	0,74	0,75	0,77	0,78	0,83	
Argon filled double layered glass $U_g$ =1,2 W/(m $^2$ K) g=0,59							
$g_{tc}$	o,46	0,47	0,48	0,49	0,49	0,52	
F	0,78	0,80	0,81	0,83	0,84	0,88	
Argon filled triple layered glass $U_g$ =0,8 W/(m $^2$ K) g=0,55							
$g_{tc}$	0,44	0,45	0,46	0,46	0,47	0,49	
F	0,80	0,82	0,83	0,84	0,85	0,89	

#### Colour fastness

As per DIN EN ISO 105-B02 (2014). Categorisation is from 1 (very low) to 8 (excellent).

### Fire classification

B1: Standard DIN 4102-1\*

M1: Standard NF P92 501-7 \*\*

B-s1 d0: classified following NBN EN 13501-1 (test method: NF EN 13823+A1 2015 / NF EN ISO 11925-2 2013) \*\*\*

- \*if bonded onto glass with a thickness of 3mm on one side and if this composite is mounted in a distance of >40mm to the same or other plain materials.
- \*\* With Squid® glued on a non-combustible (Class M0) substrate.
- \*\*\* These tests are performed with Squid® attached to an A1 Class substrate (a non-combustible material like glass, glazed bricks, plaster, ...).

### Suitable for damp locations

Fabrics with this finishing ensure the greatest resistance in a warm and humid climate.

# Antibacterial/antifungal

This fabric has been treated with active agents that prevent the growth of various micro-organisms and is therefore particularly suitable for application in hospitals, nursing homes, surgeries, laboratories, etc. It can also be used in rooms with high humidity.

### **PVC-free**

For the treatment of this fabric, no use at all was made of PVC, i.e. it's free of any emollients or stabilisers.

# Halogen-free

The fabric has had no treatment containing halogens.

## Oeko-Tex® Standard 100

The Oeko-Tex® Standard 100 guarantees that successfully tested and certified textiles are free from harmful substances.

#### Computer workstation

Suitable for computer workstation environment.

#### **Textile production**

The fabric is 100% produced in Belgium (BE).

### Light reflectance %

380nm-780nm

The visible amount of the light's radiation that gets reflected back by the sun blind. The higher a fabric's level of reflectance, the smaller the amount of light that gets through.

### Light transmission %

380nm-780nm

The visible amount of the light's radiation that gets let through by the sun blind. The higher a fabric's level of transmittance, the greater the amount of light that gets let through.

## Light absorption %

380nm-780nm

The visible amount of the light's radiation that gets absorbed by the sun blind and transformed into heat and given off again in the form of long-wave infra-red rays.

### Solar reflectance %

280-2500nm

The fraction of the total incident sunlight (visible and infra-red) which is reflected by the sun protection. The higher the solar reflectance, the less the room is heated by incident sunlight.

### Solar transmission %

280-2500nm

The fraction of the total incident sunlight (visible and infra-red), which is transmitted by the sun protection. The higher the level of solar transmittance, the greater the amount of solar energy that gets through.



### Solar absorption %

280-2500nm

The fraction of the total incident sunlight (visible and infra-red), which is absorbed by the sun protection and converted to heat. The greater the solar absorbency, the more the room is heated by incident sunlight.

#### Visual contact with the outside

The extent to which you can see outside. (DIN EN 14501: 2006-02) (0= very small effect / 4=very high effect)

This means that with Coal you have the best visual contact with the outside.

### **Daylight utilization**

The degree to which daylight enters the room.

(DIN EN 14501: 2006-02) (0= very small effect / 4=very high effect) This means that Chalk and Bone transfer the most daylight into the room.

#### **Openness Factor**

Relative area of the openings in the fabric (hole).

#### UV transmission factor %

280-380nm

The degree of UV transmission as defined by DIN EN 410 indicates how much ultraviolet light is being allowed through. UV light destroys pigmentation, resulting, for instance, in faded furniture and carpets.

### Total energy transmittance g

The g-total is the measured total energy transmittance of the glass including sun protection. The smaller the g-total, the less the room temperature increases due to incident sunlight.

### **Reduction factor**

Relationship between total energy transmittance of glazing with sun protection (g-total) and glazing without sun protection (g). The lower the value, the greater the reduction in incident sunlight intensity by the sun protection.

### Fc Value explanation

The decisive value defining the energy-efficiency characteristics of a fabric is the Fc value which describes the efficiency of the sun protection in intercepting the incident sunlight in relation to the sun protection used and glazing type. When consistently used, a considerable minimisation of energy consumption for heating and cooling is achieved. The lower the energy class, the greater is the efficiency and thus the energy saving.

CLASS	FC VALUES OF CLASSES	IMPROVEMENT IN ROOM'S THERMAL COMFORT
1	0,20 - 0,39	very high
2	0,40 - 0,59	high
3	0,60 - 0,79	medium
4	0,80 - 0,89	low
5	> 0.90	neutral

### Cooling effect

When you are standing behind a Squid® covered window on a sunny day, you can feel the cooling effect of Squid®. Thanks to the partial reflection of the sun, less radiation is entering through the window. The cooling effect is expressed in degrees celsius and describes the difference between the temperature you feel behind a Squid® covered window in comparison with the temperature you feel behind the same window without Squid®.

# HR++(+) glass compatible

Compared with vinyl window films, unprinted Squid® itself can never lead to thermal stress that cause the glass to crack. The open structure allows the heat to escape. In combination with a number of other factors (bad installation, spot heating or partial exposure of the light) there is an increased chance of cracks. <a href="Important: Printed Squid®">Important: Printed Squid®</a> and colour Coal can not be applied onto HR++(+) glass.

## Digitally printable with UV and Ecosolvent

Squid® can be printed roll to roll with UV and Ecosolvent inks. We will soon release a new version that is also HP Latex compatible.

### Digitally cuttable on flatbed cutter

ESKO tests were successful on Kongsberg 50-100m/min. settings: speed: 100% / 0.56G to 1.7G. Best cutting results with blade ref. BLD sr6150 (code G42445494). For more information please contact your local ESKO centre.

ZUND tests were successful with cutter G3\_L2500 / module UM-ZS / UCT-tool / speed: 70 / Standard glideshoe / acceleration level: 2 / Z-lower: 200 / cutting underlay: grey conveyor belt / software: ZCC. Best cutting results with an oscillating blade (Z16). For more information please contact your local ZUND centre.

Summa tests were successful on a F series F1612 (table cutter) with kiss cutting knife. Parameters: slot position: auto / speed: 800mm/s / lift up angle: °35 / overcut: 0.1mm / pause job after current tool: Off / segment helper: Off

Remark: The material will allow kiss cutting only for bigger objects +/-3mm between corners. For more information please contact your local Summa centre.

### **Application tapes**

Paper: R-TAPE 4885 / Film: R-TAPE AT 75.1



# SERVICE LIFE, STORAGE, APPLICATION AND MAINTENANCE

#### **Product characteristics**

Squid® is a textile solution that results from a series of production processes. Despite the harmonised standards in the weaving process and post-treatment, different productions may fluctuate on certain parameters. Small deviations and imperfections are inevitable and typical of the development of the Squid® textile solution and are therefore accepted. A maximum of 3 weaving errors (marked with a red sticker) are accepted on a roll of 50m.

#### Storage

Squid® can be stored in a horizontal position in its original packaging for a period of 2 years in an area with the following characteristics:

- Temperature from 15°C to 25°C
- Relative humidity from 10% to 55%

In order to avoid air bubbles and tunneling which could cause permanent deformations, Squid® must always be kept tight around its carton core, with its beginning and end fastened by tape in three evenly distributed places on the roll, i.e. far left, middle and far right.

Squid® rolls can be stored vertically and horizontally. In the latter case, the surface must be chosen so that (imprint) damage is avoided.

# **Correct application**

### **Acclimatization**

Prior to installation (or printing), Squid® rolls must rest for at least 1 hour, outside of their original packaging, at a stable temperature comprised between 15°C and 22°C. Squid® must be kept tightly rolled onto its carton core. In case Squid® was transported or stored at a temperature below 15°C, the acclimatization duration must be at least 4 hours.

### Preparation

The windows to which Squid® is applied must be thoroughly cleaned and degreased using water with a small amount of ammonia or alcohol and then dried with a dust-free cloth.

## **Application**

Squid® should always be installed on the inside of the window and according to the guidelines given in the instructional videos that are publicly available on the Squid® web site and YouTube channel.



The temperature of the room must be between 15°C and 22°C and must remain stable. The temperature of the window surface (inside) or glass surface must be at least 10°C, in order to ensure a good adhesion of Squid®.

#### Maintenance

To ensure Squid®'s service life, please also follow the following recommendations:

# Normal maintenance

Squid® must not be removed for maintenance. Consequently, the inside of the window on which Squid® was placed should no longer be cleaned with water. Squid® itself can be cleared of dust regularly using a microfibre cloth or a vacuum cleaner with a soft brush.

Washing in a washing machine or chemical cleaning destroys the adhesive strength. This must be avoided at all cost.

#### Removing stains

Always avoid the formation of stains on Squid®. The following guidelines are recommended for removing stains.

- Remove excess liquids using an absorbent cloth and/or carefully scrape away hardened particles.
- Remove grease-free stains using a lukewarm microfibre cloth.
- Remove grease stains using a solvent-free stain remover.
  Solvents should not be used, as they reduce the strength of the glue.

We recommend that you always test the cleaner on a piece of Squid® to avoid unwanted effects.

Avoid using detergents or cleaners used for hard surfaces. Avoid excessive pressure, tensile force or abrasion force on Squid® during maintenance. These can permanently damage the textile.

These recommendations are for guidance only and cannot guarantee the complete removal of stains.

### Service Life

Squid® has a service life of minimum 5 years providing that Squid® is correctly installed on a vertical glass surface and used without any removal and repositioning after the activation of the glue. Strict compliance with the storage, application and maintenance instructions is necessary to ensure the service life of Squid®.