

# CURTAINS & SHEERS

manual





The use of curtains and sheers in interiors has a myriad of advantages. They can help to determine the atmosphere and identity of a space, imbuing it with tactility and comfort while regulating light and temperature. They can soften reverberation and the space itself; connect or divide a room. They give us the opportunity to adjust our spaces to support productivity and wellbeing.

Made in Vescom's on-site weaving mill in Germany – giving us complete control over the manufacturing process – our curtains and sheers look and feel completely natural yet are made from flame retardant polyester to meet the strictest global standards for public buildings.

A comprehensive guide to Vescom curtains and sheers, this manual explains the strict testing procedures they undergo, outlines their technical specifications, and illustrates their potential spatial solutions.



# contents

## 01 quality control and tests 4

flame retardancy	6
colorfastness to crocking and light	7
seam slippage	8
STANDARD 100 by OEKO-TEX®	9
IMO certification	10

## 02 the benefits of curtains & sheers 11

visual comfort	13
thermal comfort	14
black out and dim out curtains	15
darkening/blocking of light	16
acoustic sheers	17
sound absorption	18
floor-to-ceiling curtains and sheers	19

## 03 maintenance and care instructions 21

shrinkage	22
disinfection	23

## 04 overview technical specifications 24



A close-up photograph showing a person's hands wearing white gloves. The person is using tweezers to inspect a piece of light-colored, textured fabric. The background is a blurred, light-colored surface. The text '01 quality control and tests' is overlaid in white on the image.

# 01 quality control and tests



## quality control and testing procedures

Vescom has spent decades developing, manufacturing and distributing curtains and sheers for the contract market, providing us with a wealth of in-house knowledge and expertise.

Because we produce everything in our on-site weaving mill, our in-house team runs each fabric through extensive quality control procedures, both during and after production. To meet the strict global technical requirements of the contract market, **all Vescom curtains and sheers undergo both in-house and external testing.** These tests determine the development of quality standards for our in-house production.

### **flame retardancy**

Fabric's ability to resist burning.

### **colorfastness to crocking and light**

Fabric's ability to retain colour when exposed to light and to resist colour transfer onto another surface.

### **seam slippage**

Fabric's ability to resist opening at the seam under pressure.



## FLAME RETARDANCY

Vescom curtains and sheers look and feel completely natural yet are made from flame retardant polyester to meet the strictest global standards for public buildings. Within these standards, Vescom has determined its own set of minimum standards. Our products are tested worldwide in accordance with country-specific requirements, including European and North American standards. The fire retardant chemistry is inherent in the fiber, and therefore will remain robust and consistent throughout the life of the product; even after washing and cleaning.

### **Vescom curtains and sheers pass:**

EN 13773, class 1  
 BS 5867-2, type C  
 NF P 92 / 503-507, M1\*  
 DIN 4102, B1  
 UNI VF 8456-8457, class 1  
 IMO 2010 FTP part 7  
 NFPA 701  
 CAN/ULC S109

\* except black out curtains Elba and Sotra



Official test certificates for each product are available for download on our website [www.vescom.com](http://www.vescom.com).



## COLORFASTNESS TO CROCKING

ISO 105-X12 (scale 1-5)

AATCC 8

This test is designed to determine the resistance of the colour of textiles to rubbing off and staining a dry or wet test cloth. The result depends on the nature of the colour and the depth of the shade. Tests are normally made on light, medium and dark colours. A score of 5 = negligible transfer.

**Vescom curtains and sheers achieve a score of 4-5.**

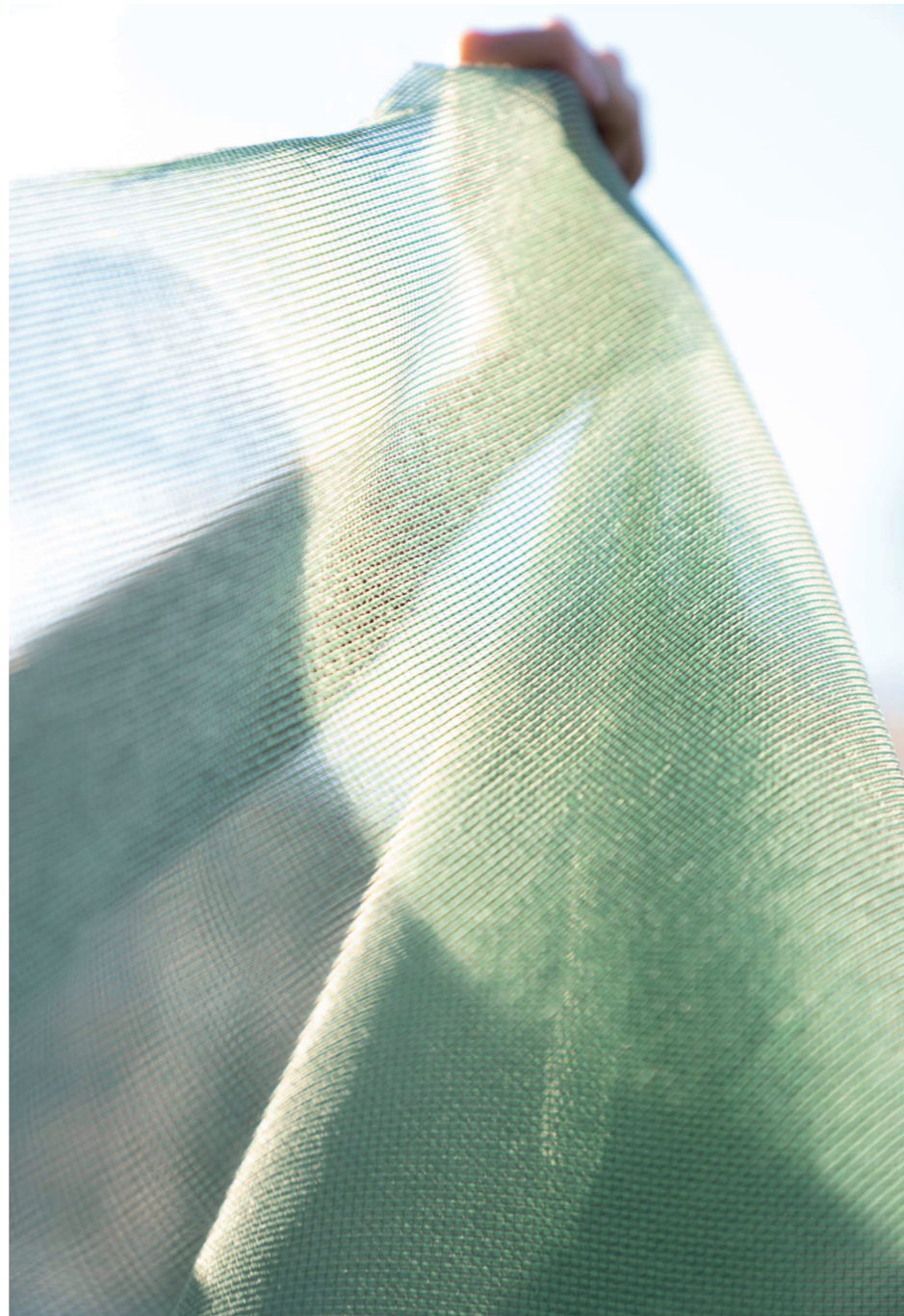
## COLORFASTNESS TO LIGHT

ISO 105-B02 (scale 1-8)

AATCC 16.3

To test a fabric's colorfastness to light, a swatch is exposed to a controlled light source that simulates the sun's rays. At timed intervals, the test swatch is compared with a grey scale and the degree of fading is rated on a score of 0-8 for ISO 105-B02, and on a score of 0-5 for AATCC 16.4. A score of 8 = negligible fading.

**Vescom curtains and sheers achieve a minimum score of 5-6 for the ISO 105-B02, and 3-4 for AATCC 16.4.**



## SEAM SLIPPAGE

**ISO 13936-2**, warp and weft in mm

**ASTM D4034**, minimum of 25 lbs. in warp and weft

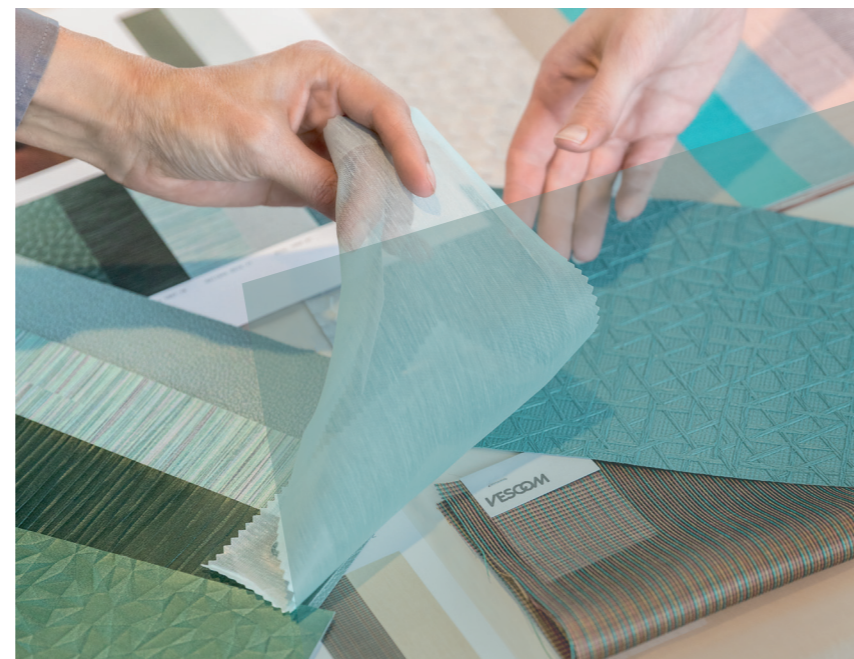
This test determines the slippage resistance of yarns at a seam in woven fabrics. **Good resistance to seam slippage means curtains are protected against damage caused by handling, including opening and closing.** This quality should already be embedded into the end result during production/confection and sewing. Vescom is able to balance a fabric's soft hand and supple drapery with its technical demands.

**Most of Vescom curtains standard is below 6 mm, sheers standard is below 4 mm, and sheers with an open weave (Dreher) standard is below 8 mm. Fabrics that are lighter than 6 oz./square yard, such as sheers, are also not required to be tested.**



## STANDARD 100 by OEKO-TEX®

STANDARD 100 by OEKO-TEX® is a global certification system which ensures that every component of a product is tested for the presence of several hundred harmful substances, including pesticides, carcinogenic colourants and heavy metals. Textiles that carry the STANDARD 100 label are 100% certified to have absolutely no adverse impact on human health.



Official test certificates are available for download on our website [www.vescom.com](http://www.vescom.com).



## IMO certification

The International Maritime Organization (IMO) sets standards for the safety of international shipping, including which materials are allowed to be used on board. Only products that receive IMO certification – meaning they pass the most stringent of testing procedures – can be safely used aboard waterborne vessels, including cruise ships.

Vescom curtains and sheers are tested with the fire test IMO 2010 FTP part 7.

**Vescom is a certified IMO supplier.**



Official test certificates are available for download on our website [www.vescom.com](http://www.vescom.com).

# 02 the benefits of curtains & sheers



## visual and thermal comfort

Light and warmth have both benefits and disadvantages, depending on the situation. Curtains and sheers can regulate the natural light and heat that enter a space, greatly improving its comfort and contributing to people's wellbeing. But achieving the right light and temperature within a space is a delicate balance, and each space has its own requirements. Vescom curtains and sheers undergo various tests to prove their level of light and temperature regulation, making it clear which product is the best fit for which conditions.

**Vescom curtains and sheers are tested according to the European standard EN 410/ EN 14501, on light, medium and dark colours.**



## VISUAL COMFORT EN 410/EN 14501

The visual performance of a fabric can be assessed by measuring its capacity to optimize or minimize the available daylight. Vescom curtains and sheers are tested on these criteria:

### **light transmission degree**

Indicates the percentage of visible light transmitted through the fabric.

### **light remission/reflection degree**

Indicates the percentage of visible light reflected by the fabric.

### **darkening/blocking of light**

Indicates the light that is blocked to darken a room. This part of the test is only available for black outs and dim outs.

Official test certificates are available for download on our website [www.vescom.com](http://www.vescom.com).



## THERMAL COMFORT EN 410/EN 14501

The thermal performance of a fabric can be assessed by measuring the solar energy (light and heat) on these criteria:

### **solar transmission**

Indicates the percentage of solar radiation transmitted through the fabric. A low percentage means the fabric performs well at reducing solar energy.

### **solar absorption**

Indicates the percentage of solar radiation absorbed by the fabric. A low percentage means the fabric absorbs little solar energy thus less heat.

### **solar reflection**

Indicates the percentage of solar radiation reflected by the fabric. A high percentage means the fabric performs well at reflecting solar energy back towards the outside.



### **total solar factor (gtot)**

Gtot value indicates the proportion of heat that affects a room in relation to the solar energy. The gtot value is calculated with a combination of double glazing with air interspace and the fabric. A low value means that this combination contributes to good thermal comfort.

### **reduction factor (Fc value)**

Fc value indicates the effectiveness of the fabric against solar energy and evaluates the fabric on its thermal protection performance. The lower the reduction value is, the better the fabric performs.

Official test certificates are available for download on our website [www.vescom.com](http://www.vescom.com).

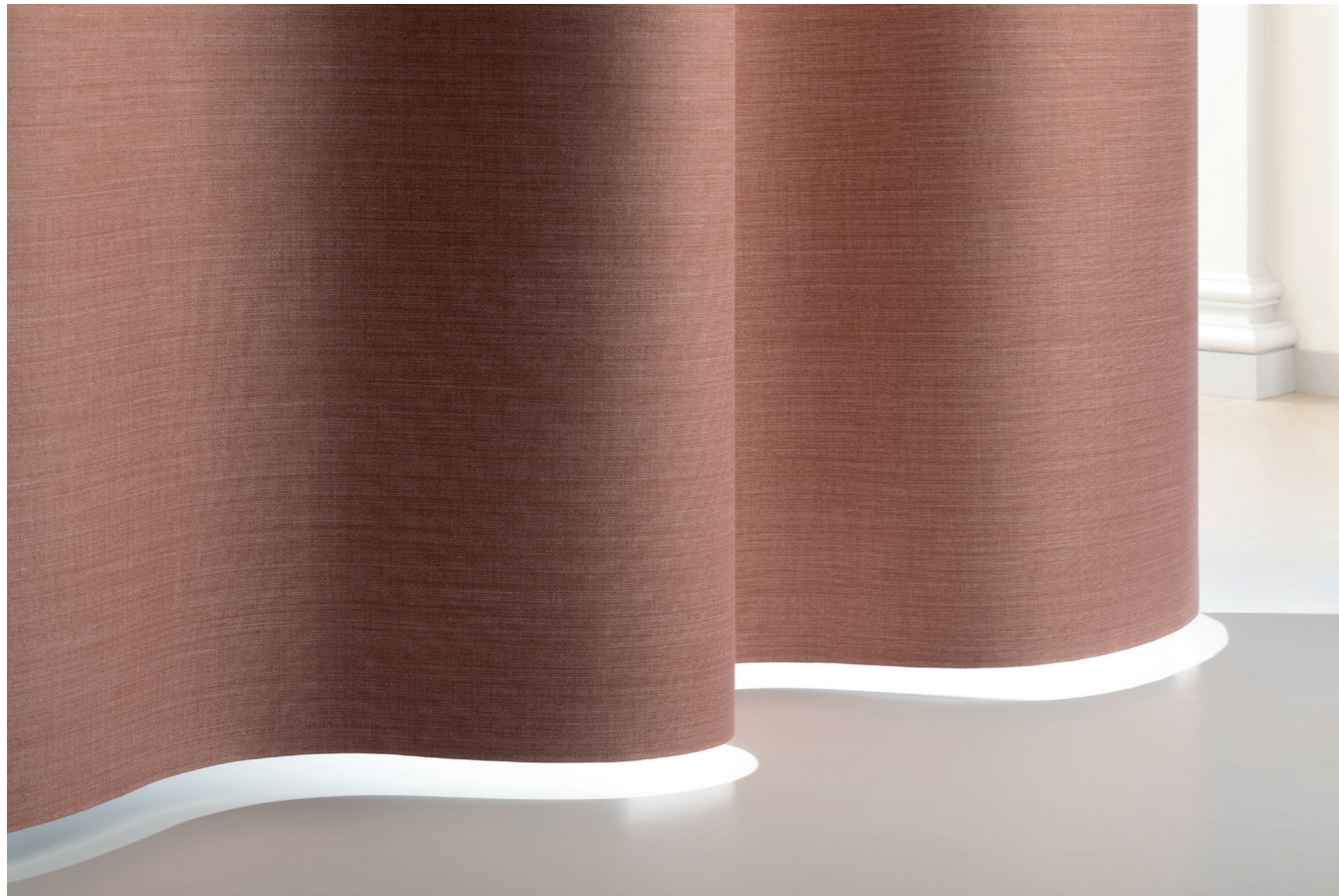


## VISUAL AND THERMAL COMFORT OF BLACK OUT AND DIM OUT CURTAINS

Black out or dim out curtains can greatly contribute to wellbeing. Think of hotel rooms and hospitals – places where the necessities of rest and sleep are often interrupted by light pollution. Vescom black out and dim out curtains offer a floor-to-ceiling solution, ensuring the best possible coverage. These solutions are also beneficial for spaces like conference rooms, classrooms and lecture theatres, where projectors demand certain lighting conditions.

**All of our black out fabrics have a light-coloured reverse side, which means that the curtains appear harmoniously uniform from the outside. Additionally, since lighter tones reflect light better, these curtains will keep out as much heat as possible.**





## **DARKENING/BLOCKING OF LIGHT** **EN 410/EN 14501** **AATCC 148**

Our black out and dim out curtains are tested on their lightblocking performance measured under 1.000 lux and 100.000 lux for EN 410/EN 14501 and 5,774 lux for AATCC 148 respectively.

**Vescom's black out curtains block 100% of the light from entering a space.**

**Vescom's dim out curtains block 99% of the light from entering a space.** They are tightly woven with a very dense black warp; the denser the warp and weft, the better the dim out function.

Official test certificates are available for download on our website [www.vescom.com](http://www.vescom.com).



## acoustic sheers

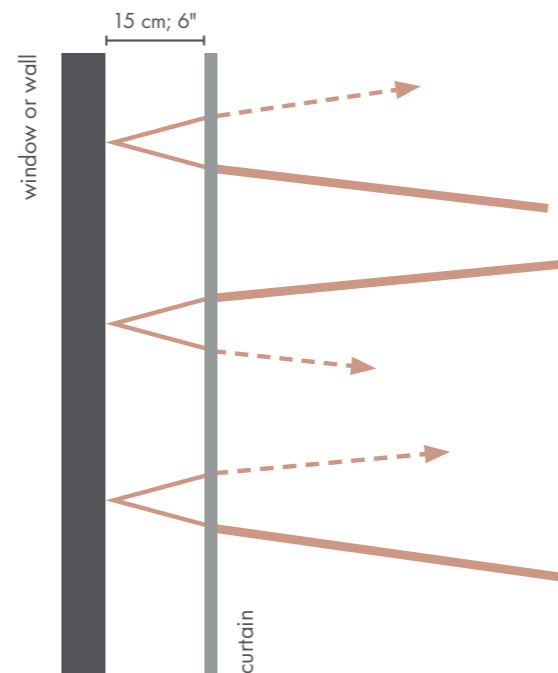
Noise is disruptive. It hinders communication, reduces job performance and causes fatigue. Vescom's acoustic sheers are designed to combat sound pollution and its negative health effects. These productivity and wellbeing-focused solutions reduce echo time, absorb sound and improve comprehension; making them ideal for today's interiors rich in sound-reflective surfaces such as concrete, glass and marble.

The porosity of Vescom's acoustic sheers combined with the special weaving and yarn technology used in their production enable them to absorb up to five times more sound than other sheers. The use of the unique yarn creates a subtle sheen in the fabric.

**Vescom's technologically advanced transparent acoustic sheers minimize sound disturbance while maximizing visual connections and daylight.**



effect of acoustic sheers



## SOUND ABSORPTION ISO 354 ASTM C423

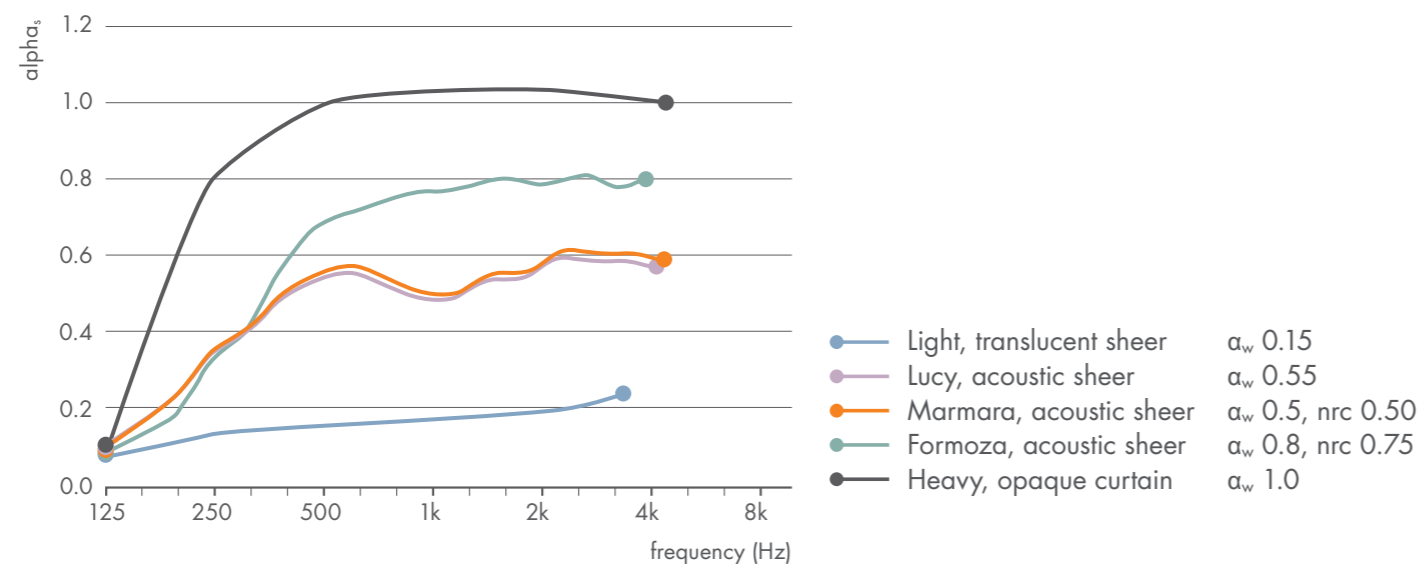
This test measures the sound absorption of an acoustic material in a reverberation room. It is measured using the sound absorption coefficient alpha ( $\alpha$ ), which has a value between 0 and 1.00. Zero represents no absorption (total reflection) and 1.00 represents total absorption of the incident sound.

**Vescom acoustic sheers have a sound absorption coefficient alpha between  $\alpha_w$  0.5 and  $\alpha_w$  0.8 in the optimal installation 15 cm away from the reflective surface and fully pleated.** In the same installation conditions, a standard lightweight sheer has an alpha of  $\alpha_w$  0.15.

The ASTM C423 test is accomplished by measuring frequencies ranging from 80 to 5000 hertz and the time it takes for the sound level to drop 25 decibels.

The NRC (Noise Reduction Coefficient) rating is the average of the absorption coefficients at 250, 500, 1000 and 2000 hertz, rounded to the nearest multiple .05.

comparison of fabrics



15 cm (6") gap between sheer and window or wall, fully pleated.

Official test certificates are available for download on our website [www.vescom.com](http://www.vescom.com).



## floor-to-ceiling curtains and sheers

Some of our curtains and sheers are woven on a double loom, giving them a width of between 270 cm (106") and 317 cm (125").

To achieve a seamless and cost-effective floor-to-ceiling solution, double width fabrics can be rotated 90° so that their width covers the height of the room. This is also called **railroaded installation**.





Fogo, floor-to-ceiling installation



Fogo, regular installation, design direction rotates

Enclosed is a list of Vescom double width curtains and sheers and their suitability for dual direction use, if necessary for spaces higher than the fabric's width.

product name	product number	width	floor-to-ceiling installation	regular installation
<b>sheers</b>				
<b>chira</b>	8053	± 317 cm, ± 125 inches	✓	✓
<b>clare</b>	8052	± 300 cm, ± 118 inches	✓	✓*
<b>fogo</b>	8051	± 308 cm, ± 121 inches	✓	✓*
<b>mira</b>	8094	± 307 cm, ± 121 inches	✓	✓*
<b>nias</b>	8086	± 315 cm, ± 124 inches	✓	no
<b>swan</b>	8071	± 300 cm, ± 118 inches	✓	✓
<b>teon</b>	8085	± 306 cm, ± 121 inches	✓	✓*
<b>toby</b>	8088	± 307 cm, ± 121 inches	✓	✓*
<b>acoustic sheers</b>				
<b>capri</b>	8056	± 306 cm, ± 120 inches	✓	✓*
<b>corsica</b>	8055	± 305 cm, ± 120 inches	✓	no
<b>elara</b>	8089	± 302 cm, ± 119 inches	✓	✓*
<b>formoza</b>	8090	± 295 cm, ± 116 inches	✓	no
<b>lucy</b>	8092	± 307 cm, ± 121 inches	✓	✓*
<b>marmara</b>	8025	± 300 cm, ± 118 inches	✓	✓
<b>curtains</b>				
<b>ellis</b>	8079	± 300 cm, ± 118 inches	✓	✓
<b>rona</b>	8080	± 301 cm, ± 118 inches	✓	✓
<b>dim out</b>				
<b>bedra</b>	8059	± 295 cm, ± 116 inches	✓	✓
<b>rani</b>	8067	± 294 cm, ± 116 inches	✓	✓
<b>tavira</b>	8009	± 300 cm, ± 118 inches	✓	✓
<b>black out</b>				
<b>elba</b>	8069	± 277 cm, ± 109 inches	✓	✓
<b>moroni</b>	8060	± 280 cm, ± 110 inches	✓	✓
<b>sotra</b>	8070	± 283 cm, ± 111 inches	✓	✓*

✓\* design direction rotates

# 03 maintenance and care instructions



## SHRINKAGE

### EN 6330/EN 25077

This test determines the dimensional changes of fabrics when subjected to laundering procedures, with results indicated as a percentage of the original width and length.

**Vescom curtains and sheers are tested at 30°C (86 F), 50°C (122 F) and 70°C (158 F), an acceptable level of shrinkage should be less than 3% in both directions.**

## maintenance and care instructions

The ability to wash and clean curtains is crucial for contract interiors – spaces like hotels, for instance, which experience a high turnover of individuals, as well as hospitals, where hygiene is non-negotiable. **Vescom curtains and sheers are washable, tested at 30°C (86 F), 50°C (122 F) and 70°C (158 F).**

**Most of our curtains and sheers are washable at 70°C and up to 170 F. Textiles must be washed at a minimum temperature of 60°C (140 F) to kill bacteria, viruses and dust mites.**

The care instructions for each article are a good guideline for washing or dry-cleaning. In order to understand these instructions, please have a look at the following symbols:



These symbols indicate that the fabric can be washed at a maximum of degrees of the number indicated. The underscore line indicates that the washing should be carried out with care, meaning half load and low spin cycle.



This symbol indicates that the fabric should not be washed with bleach cleanable agent.



A cross indicates that the fabric should not be dried in a tumbler dryer.



The iron symbol indicates that a fabric can be ironed, the dots indicate the temperature. (1 dot = cool iron, 2 dots = medium iron, 3 dots = hot iron)



Dry-cleaning: a product can be gently cleaned with PCE.




## DISINFECTION

While Vescom recommends washing curtains and sheers at a high temperature for hygiene purposes, polyester FR can also be disinfected with alcohol-based disinfectants. Therefore we advise to use an ethanol based spray in a concentration between 70% and 80%. **Internal testing with an ethanol based spray at 73% with a period of 24 hours treatment has proven no change or damage of colour, structure or hand of the fabric.**

Furthermore, Vescom curtains and sheers can be disinfected by using chlorine-based detergents during washing. **Internal testing with chlorine-based detergents and hygiene rinse at 30°C (86 F) and 70°C (158 F) washing during 30 minutes has proven no change or damage of colour, structure or hand of the fabric.**

- Always pre-test a small area with the detergents before use.
- Always follow the instructions on the label of the manufacturer for the correct mixture of solution when using a concentrated sanitizer.
- All fabrics must be rinsed with clean water and wiped dry with a clean cloth when using a spray sanitizer. Do not oversaturate the fabric.



# 04 overview technical specifications

product name	product composition	width	weight	floor-to-ceiling installation	flame retardancy	color-fastness to light	color-fastness to crocking	OEKO-TEX®	maintenance	sound absorption	light transmission*	light remission/reflection*	uv transmission*	solar transmission*	solar reflection*	solar absorption*	gtot*	Fc value*	
																			ISO 105-B02 (scale 1-8)
<b>sheers</b>																			
<b>chira</b>	8053	100% polyester FR	± 317 cm, ± 125 inches	± 143 gr/m <sup>1</sup> ± 5 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -0.8%/weft -0.5%	76% 68% 53%	21% 17% 8%	66% 57% 52%	77% 71% 65%	21% 18% 15%	3% 11% 20%	64% 65% 66%	84% 85% 87%	
<b>clare</b>	8052	100% polyester FR	± 300 cm, ± 118 inches	± 174 gr/m <sup>1</sup> ± 6 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2%/weft -2%	63% 59% 49%	33% 31% 8%	56% 52% 48%	63% 59% 53%	33% 30% 15%	4% 11% 32%	57% 58% 65%	75% 76% 86%	
<b>fogo</b>	8051	69% recycled polyester FR 31% polyester FR	± 308 cm, ± 121 inches	± 237 gr/m <sup>1</sup> ± 8 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -3.8%/weft -0.8%	66% 53% 50%	29% 17% 7%	61% 51% 49%	66% 58% 57%	29% 24% 19%	5% 18% 24%	59% 61% 63%	78% 80% 83%	
<b>mira</b>	8094	63% recycled polyester FR 37% polyester FR	± 307 cm, ± 121 inches	± 375 gr/m <sup>1</sup> ± 12 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2%/weft -1.5%	54% 43% 30%	38% 24% 5%	40% 34% 28%	54% 48% 41%	37% 30% 20%	8% 22% 38%	54% 57% 61%	71% 75% 81%	
<b>nias</b>	8086	78% recycled polyester FR 22% polyester FR	± 315 cm, ± 124 inches	± 375 gr/m <sup>1</sup> , ± 12 oz/yd <sup>1</sup>	✓	✓	6-7	wet 4-5 dry 4-5	✓	shrinkage: warp -3%/weft -0.4%	46%	17%	42%	52%	24%	24%	60%	80%	
<b>swan</b>	8071	100% polyester FR	± 300 cm, ± 118 inches	± 285 gr/m <sup>1</sup> ± 9 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2%/weft -0.4%	53% 47% 26%	43% 41% 18%	44% 35% 27%	53% 47% 38%	43% 42% 32%	4% 12% 30%	51% 51% 56%	67% 67% 73%	
<b>teon</b>	8085	100% polyester FR	± 306 cm, ± 121 inches	± 214 gr/m <sup>1</sup> ± 7 oz/yd <sup>1</sup>	✓	✓	6-7	wet 5 dry 5	✓	shrinkage: warp -2.6%/weft -1%	48%	1,5%	51%	58%	16%	27%	65%	86%	
<b>toby</b>	8088	85% recycled polyester FR 15% polyester FR	± 307 cm, ± 121 inches	± 491 gr/m <sup>1</sup> ± 16 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2.6%/weft -1%	46% 33% 25%	43% 22% 6%	32% 27% 24%	48% 41% 36%	43% 32% 23%	9% 27% 40%	51% 56% 60%	67% 73% 79%	
<b>acoustic sheers</b>																			
<b>capri</b>	8056	100% polyester FR	± 306 cm, ± 120 inches	± 303 gr/m <sup>1</sup> ± 10 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -0.6%/weft -1.2%	pleated α <sub>w</sub> 0.65	44% 32% 21%	52% 40% 22%	8% 6% 3%	43% 37% 31%	50% 43% 35%	8% 21% 35%	47% 50% 54%	62% 66% 71%
<b>corsica</b>	8055	100% polyester FR	± 305 cm, ± 120 inches	± 323 gr/m <sup>1</sup> ± 10 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -0.7%/weft -1%	pleated α <sub>w</sub> 0.65	47% 43% 28%	40% 37% 18%	8% 6% 4%	46% 44% 37%	39% 37% 26%	15% 19% 37%	53% 53% 58%	69% 70% 77%
<b>elara</b>	8089	100% polyester FR	± 302 cm, ± 119 inches	± 338 gr/m <sup>1</sup> ± 11 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -1.5%/weft -1%	pleated α <sub>w</sub> 0.65	45% 36% 28%	53% 39% 33%	23% 16% 13%	44% 39% 35%	52% 45% 43%	4% 16% 22%	46% 49% 50%	60% 64% 65%
<b>formoza</b>	8090	58% polyester FR 42% recycled polyester FR	± 295 cm, ± 116 inches	± 392 gr/m <sup>1</sup> ± 13 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -0.7%/weft -0.9%	pleated α <sub>w</sub> 0.80	50% 39% 23%	45% 33% 17%	13% 7% 4%	49% 43% 36%	43% 38% 29%	8% 19% 35%	51% 53% 57%	67% 70% 75%
<b>lucy</b>	8092	60% recycled polyester FR 40% polyester FR	± 307 cm, ± 121 inches	± 494 gr/m <sup>1</sup> ± 16 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -0.9%/weft -0.5%	pleated α <sub>w</sub> 0.55	46% 32% 21%	41% 29% 7%	11% 7% 4%	46% 38% 33%	42% 37% 26%	12% 25% 40%	51% 53% 58%	67% 70% 76%
<b>marmara</b>	8025	100% polyester FR	± 300 cm, ± 118 inches	± 318 gr/m <sup>1</sup> ± 11 oz/yd <sup>1</sup>	✓	✓	5	wet 4-5 dry 4-5	✓	shrinkage: warp -0.4%/weft -0.8%	pleated α <sub>w</sub> 0.50	51% 43% 17%	45% 39% 13%	20% 16% 9%	51% 46% 35%	44% 40% 28%	6% 13% 38%	50% 52% 58%	66% 68% 76%
<b>tinós</b>	8078	100% polyester FR	± 154 cm, ± 61 inches	± 153 gr/m <sup>1</sup> ± 5 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -0.4%/weft -0.9%	pleated α <sub>w</sub> 0.60	50% 34% 23%	45% 28% 13%	10% 6% 4%	49% 43% 33%	44% 36% 23%	8% 22% 44%	50% 54% 60%	66% 71% 79%

\* Tested on light, medium and dark colours.

product name	product number	composition	width	weight	floor-to-ceiling installation	flame retardancy	color-fastness to light	color-fastness to crocking	OEKO-TEX®	maintenance	sound absorption	light transmission*	light remission/reflection*	uv transmission*	solar transmission*	solar reflection*	solar absorption*	gtot*	Fc value*
							ISO 105-B02 (scale 1-8)	ISO 105-X12 (scale 1-5)				ISO 354	EN 410/EN 14501	EN 410/EN 14501	EN 410/EN 14501	EN 410/EN 14501	EN 410/EN 14501	EN 410/EN 14501	EN 410/EN 14501
<b>curtains</b>																			
<b>delos</b>	8082	68% polyester FR 32% recycled polyester FR	± 136 cm, ± 54 inches	± 354 gr/m <sup>1</sup> , ± 11 oz/yd <sup>1</sup>		✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2.1%/weft -1.5%		20% 4% 0.2%	73% 34% 6%	11% 0.9% 0.3%	20% 12% 10%	72% 51% 35%	8% 37% 55%	34% 44% 52%	44% 58% 68%
<b>dolin</b>	8048	100% polyester FR	± 138 cm, ± 55 inches	± 407 gr/m <sup>1</sup> , ± 13 oz/yd <sup>1</sup>		✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2.8%/weft -2%	pleated α <sub>w</sub> 0.85	10% 2% 0.3%	53% 30% 10%	5% 0.6% 0.3%	13% 8% 6%	58% 45% 30%	30% 47% 65%	41% 47% 54%	54% 62% 72%
<b>ellis</b>	8079	100% polyester FR	± 300 cm, ± 118 inches	± 795 gr/m <sup>1</sup> , ± 26 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2%/weft -2.9%	pleated α <sub>w</sub> 0.80	11% 8% 1%	43% 38% 16%	6% 5% 1%	19% 17% 14%	55% 53% 42%	26% 30% 44%	43% 43% 49%	56% 57% 64%
<b>heather</b>	8091	56% polyester FR 44% recycled polyester FR	± 145 cm, ± 57 inches	± 289 gr/m <sup>1</sup> , ± 9 oz/yd <sup>1</sup>		✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -1%/weft -1.2%									
<b>mioko</b>	8057	100% polyester FR	± 140 cm, ± 56 inches	± 413 gr/m <sup>1</sup> , ± 12 oz/yd <sup>1</sup>		✓	6-7	wet 5 dry 5	✓	shrinkage: warp -1.7%/weft -0.6%		18% 2% 0.1%	63% 26% 6%	9% 1% 0.1%	21% 13% 11%	66% 49% 36%	13% 38% 53%	37% 45% 51%	49% 59% 68%
<b>naltar</b>	8083	100% polyester FR	± 144 cm, ± 57 inches	± 273 gr/m <sup>1</sup> , ± 9 oz/yd <sup>1</sup>		✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -1.4%/weft +1.5%	pleated α <sub>w</sub> 0.50	24% 6% 0.3%	60% 28% 4%	12% 2% 0.7%	25% 16% 7%	61% 46% 28%	14% 39% 65%	40% 47% 55%	53% 62% 73%
<b>rona</b>	8080	100% polyester FR	± 301 cm, ± 118 inches	± 762 gr/m <sup>1</sup> , ± 25 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2.1%/weft -1.8%	pleated α <sub>w</sub> 0.75	27% 8% 3%	57% 33% 14%	15% 5% 3%	28% 19% 15%	58% 49% 40%	14% 33% 45%	41% 46% 50%	54% 60% 66%
<b>sindo</b>	8027	100% polyester FR	± 140 cm, ± 55 inches	± 297 gr/m <sup>1</sup> , ± 10 oz/yd <sup>1</sup>		✓	6-7	wet 4-5 dry 4-5	✓	shrinkage: warp -1.8%/weft -1.2%		24% 13% 1%	59% 43% 7%	16% 9% 2%	27% 21% 14%	62% 54% 36%	11% 25% 50%	39% 43% 52%	52% 57% 68%
<b>tula</b>	8081	60% recycled polyester FR 40% polyester FR	± 149 cm, ± 59 inches	± 395 gr/m <sup>1</sup> , ± 13 oz/yd <sup>1</sup>		✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2%/weft -1.6%	pleated α <sub>w</sub> 0.75	7% 3% 2%	34% 16% 12%	3% 2% 2%	9% 4% 4%	36% 19% 16%	56% 77% 80%	52% 60% 61%	68% 79% 81%

\* Tested on light, medium and dark colours.

product name	product number	composition	width	weight	floor-to-ceiling installation	flame retardancy	color-fastness to light	color-fastness to crocking	OEKO-TEX®	maintenance	sound absorption	light transmission*	darkening / blocking of light	light remission / reflection*	uv transmission*	solar transmission*	solar reflection*	solar absorption*	gtot*	Fc value*
							ISO 105-B02 (scale 1-8)	ISO 105-X12 (scale 1-5)				ISO 354	EN 410/ EN 14501	EN 410/ EN 14501	EN 410/ EN 14501	EN 410/ EN 14501	EN 410/ EN 14501	EN 410/ EN 14501	EN 410/ EN 14501	EN 410/ EN 14501
<b>dim out</b>																				
<b>bedra</b>	8059	100% polyester FR	± 295 cm, ± 116 inches	± 782 gr/m <sup>1</sup> , ± 25 oz/yd <sup>1</sup>	✓	✓	5	wet 5 dry 5	✓	shrinkage: warp -2.5%/weft -1.5%	pleated α <sub>w</sub> 0.70	0.07% 0% 0%	EN 410/EN 14501: 99.95%/99.99%/100% AATCC 148: 99% light blocked	52% 39% 7%	0% 0% 0%	0.30% 0.30% 0.30%	53% 46% 30%	47% 54% 70%	42% 46% 54%	56% 60% 71%
<b>rani</b>	8067	100% polyester FR	± 294 cm, ± 116 inches	± 861 gr/m <sup>1</sup> , ± 28 oz/yd <sup>1</sup>	✓	✓	5	wet 4-5 dry 4-5	✓	shrinkage: warp -1.6%/weft -0.7%		0.93% 0.67% 0.50%	EN 410/EN 14501: 99.53%/99.59%/99.75% AATCC 148: 99% light blocked	67% 67% 67%	0% 0% 0%	1% 1% 1%	61% 61% 61%	37% 38% 37%	38% 38% 38%	50% 50% 50%
<b>tavira</b>	8009	100% polyester FR	± 300 cm, ± 118 inches	± 906 gr/m <sup>1</sup> , ± 29 oz/yd <sup>1</sup>	✓	✓	6	wet 4-5 dry 4-5	✓	shrinkage: warp -2%/weft -0.5%		0.10% 0.10% 0%	EN 410/EN 14501: 99.93%/99.91%/100% AATCC 148: 99% light blocked	32% 34% 13%	0% 0% 0%	7% 7% 7%	54% 54% 44%	39% 39% 49%	42% 42% 47%	56% 55% 62%
<b>black out</b>																				
<b>elba</b>	8069	100% polyester FR acrylic coating	± 277 cm, ± 109 inches	± 1075 gr/m <sup>1</sup> , ± 35 oz/yd <sup>1</sup>	✓	✓	5	wet 4-5 dry 4-5		shrinkage: warp -1.5%/weft -1.2%	pleated α <sub>w</sub> 0.35	0% 0% 0%	EN 410/EN 14501: 100% AATCC 148: 100% light blocked	75% 75% 75%	0% 0% 0%	0.03% 0.03% 0.03%	67% 67% 67%	33% 33% 33%	35% 35% 35%	46% 46% 46%
<b>moroni</b>	8060	100% polyester acrylic coating	± 280 cm, ± 110 inches	± 761 gr/m <sup>1</sup> , ± 25 oz/yd <sup>1</sup>	✓	✓	5-6	wet 4 dry 4		shrinkage: warp -1.6%/weft -0.6%		0% 0% 0%	EN 410/EN 14501: 100% AATCC 148: 100% light blocked	80% 80% 80%	0% 0% 0%	0.1% 0.1% 0.1%	68% 65% 71%	32% 35% 29%	35% 36% 33%	46% 48% 44%
<b>sotra</b>	8070	100% polyester FR acrylic coating	± 283 cm, ± 111 inches	± 778 gr/m <sup>1</sup> , ± 25 oz/yd <sup>1</sup>	✓	✓	5	wet 4-5 dry 4-5		shrinkage: warp -1.2%/weft -0.4%	pleated α <sub>w</sub> 0.35	0% 0% 0%	EN 410/EN 14501: 100% AATCC 148: 100% light blocked	82% 82% 82%	0% 0% 0%	0.1% 0.1% 0.1%	70% 74% 70%	30% 26% 30%	34% 31% 34%	44% 41% 44%

\* Tested on light, medium and dark colours.