

# E Screen™ | WITH **KOOLBLACK** TECHNOLOGY

## Reduced Cooling Costs & Improved Comfort

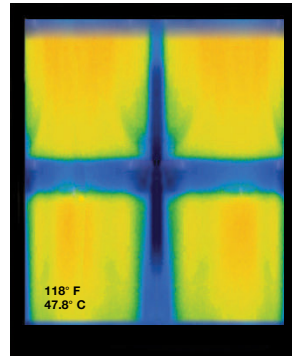
With the glare control and view-through benefits of dark fabrics

KOOLBLACK® Technology eliminates the trade-offs between aesthetics and performance by incorporating near-infrared, heat reflective properties into dark color screen fabrics. This feature, coupled with the other benefits of dark colored fabrics, provides excellent contrast for a clear view through, uniformed exterior building design, maximized energy savings and optimized occupant comfort.



Standard Dark Screen Fabrics

- high contrast for clear & sharp view through
- coordinated exterior building design
- exceptional glare control



E Screen™ with KOOLBLACK® Technology

- same great features as standard dark screen fabrics
- improved near-infrared reflectance of 64% in comparison to 3% for conventional charcoal/charcoal fabric
- excellent acoustic absorption with an NRC up to 0.45
- improved heat control and energy savings

## Total Screen Benefits

Only E Screen™ with KOOLBLACK® Technology can achieve all screen benefits

- increased IR reflectance = less re-radiated heat = lower cooling costs & enhanced occupant comfort
- superior view through and glare control
- coordinated exterior building design and aesthetics when incorporated with glazing



More information on Mermet's full line of KOOLBLACK® Technology fabrics, E Screen™ with KOOLBLACK® Technology and T Screen with KOOLBLACK® Technology, can be found at [www.mermetusa.com](http://www.mermetusa.com).



High Performance | 1% 3% 5% openness

# E Screen™ | WITH **KOOLBLACK** TECHNOLOGY





High Performance | 1% 3% 5% openness

# E Screen™ WITH KOOLBLACK™ TECHNOLOGY

## Specifications

Item Number	1%: 007701   3%: 007703   5%: 007705
Product Category	High Performance
Fabric Style	Basketweave
Openness Factor	1%, 3%, & 5%
Composition	36% Fiberglass   64% Vinyl
UV Blockage	Approximately 95% - 99%
Standard Packaging	Rolls of 30 ly (27 lm)
Width	98 in (250 cm), 122 in (310 cm)
Weight	1%: 12.95 oz/yd <sup>2</sup> (439 g/m <sup>2</sup> ) ±5% 3%: 11.3 oz/yd <sup>2</sup> (382 g/m <sup>2</sup> ) ±5% 5%: 10.6 oz/yd <sup>2</sup> (358 g/m <sup>2</sup> ) ±5%
Thickness	1%: 0.021 in (0.53 mm) ±5% 3%: 0.020 in (0.51 mm) ±5% 5%: 0.019 in (0.47 mm) ±5%

## Classifications

Fire Classifications	NFPA 701-10 TM#1, California U.S. Title 19; CAN/ULC-S109-03 Small & Large Flame Test
Bacterial Resistance	ASTM E2180, ASTM G21
Environment	RoHS - Lead Free, GREENGUARD Gold
Acoustic	1%: NRC 0.45, SAA: 0.46 3%: NRC 0.15, SAA: 0.17 5%: NRC 0.10, SAA: 0.12

## Fabrication

**E Screen™ with KOOLBLACK**  
1%: 007701 | 3%: 007703 | 5%: 007705  
High Performance

Basketweave
1%, 3%, & 5%
36% Fiberglass   64% Vinyl
Approximately 95% - 99%
Rolls of 30 ly (27 lm)
98 in (250 cm), 122 in (310 cm)
1%: 12.95 oz/yd <sup>2</sup> (439 g/m <sup>2</sup> ) ±5% 3%: 11.3 oz/yd <sup>2</sup> (382 g/m <sup>2</sup> ) ±5% 5%: 10.6 oz/yd <sup>2</sup> (358 g/m <sup>2</sup> ) ±5%
1%: 0.021 in (0.53 mm) ±5% 3%: 0.020 in (0.51 mm) ±5% 5%: 0.019 in (0.47 mm) ±5%

**E Screen™ Original**  
1%: 007701 | 3%: 007703 | 5%: 007705  
Conventional

Basketweave
1%, 3%, & 5%
36% Fiberglass   64% Vinyl
Approximately 95% - 99%
Rolls of 30 ly (27 lm)
78 in (200 cm), 98 in (250 cm), 122 in (310 cm)
1%: 13.3 oz/yd <sup>2</sup> (452 g/m <sup>2</sup> ) ±5% 3%: 11.6 oz/yd <sup>2</sup> (393 g/m <sup>2</sup> ) ±5% 5%: 10.7 oz/yd <sup>2</sup> (363 g/m <sup>2</sup> ) ±5%
1%: 0.020 in (0.52 mm) ±5% 3%: 0.017 in (0.43 mm) ±5% 5%: 0.016 in (0.41 mm) ±5%

NFPA 701-10 TM#1, California U.S. Title 19; CAN/ULC-S109-03 Small & Large Flame Test
ASTM E2180, ASTM G21
RoHS - Lead Free, GREENGUARD Gold
1%: NRC 0.45, SAA: 0.46 3%: NRC 0.15, SAA: 0.17 5%: NRC 0.10, SAA: 0.12

NFPA 701-10 TM#1, California U.S. Title 19; CAN/ULC-S109-03 Small & Large Flame Test
ASTM E2180, ASTM G21
RoHS - Lead Free, GREENGUARD Gold
1%: NRC 0.50, SAA: 0.50 3%: 0.017 in (0.43 mm) ±5% 5%: NRC 0.10, SAA: 0.12

**Cutting:** Cold, Ultrasonic or Crush | **Welding:** Radio Frequency, High Frequency, Impulse, Hot Air or Wedge  
We recommend testing all cutting and welding methods prior to use to confirm they meet your individual fabric specifications.

## E Screen™ WITH KOOLBLACK™ TECHNOLOGY

ITEM	COLOR
035035	Charcoal/Charcoal
00K122	Charcoal/Grey-Stone
035131	Charcoal/Grey
035032	Charcoal/Cocoa
035071	Charcoal/Apricot

## E Screen™ Original

ITEM	COLOR
030030	Charcoal/Charcoal
00M122	Charcoal/Grey-Stone
030001	Charcoal/Grey
030061	Charcoal/Cocoa
030071	Charcoal/Apricot

## Warranty

## Care & Handling

Mermet Corporation  
5970 N. Main Street ■ Cowpens, SC 29330  
Ph 1.866.902.9647 ■ info@mermetusa.com



[mermetusa.com](http://mermetusa.com)

FABRIC												FABRIC + GLASS								
Rs IR   %	thermal						optical						SHGC % Improvement							
	Rs   %		As   %		Ts   %		Rv   %		Tv   %		SHGC % Improvement									
1	3	5	1	3	5	1	3	5	1	3	5	1	3	5						
64	61	60	35	34	33	53	49	49	12	17	18	9	10	10	2	6	6	18	16	16
63	60	58	38	38	36	50	46	45	12	16	19	17	19	18	3	7	9	24	24	21
67	65	62	40	40	38	49	46	45	11	14	17	16	18	17	2	5	7	24	24	21
64	61	57	36	35	32	52	48	49	12	17	19	11	12	11	2	6	7	21	16	16
62	58	59	39	38	37	47	44	42	14	18	21	19	22	19	3	6	9	24	21	18

FABRIC												FABRIC + GLASS								
Rs IR   %	thermal						optical						SHGC % Improvement							
	Rs   %		As   %		Ts   %		Rv   %		Tv   %		SHGC % Improvement									
1	3	5	1	3	5	1	3	5	1	3	5	1	3	5						
3	5	6	4	5	6	95	91	90	1	4	4	4	5	5	1	4	4	13	13	13
11	13	11	11	13	12	87	80	79	2	7	9	11	13	12	2	6	9	18	18	18
9	11	11	9	10	10	88	85	83	3	5	7	8	10	10	2	5	7	16	16	16
5	7	6	5	7	6	93	89	87	2	4	7	5	7	6	2	3	7	16	13	13
13	18	15	13	18	15	86	75	78	1	7	7	14	18	16	1	7	6	18	18	18

5 Year Exterior & 10 Year Interior

Remove dust with vacuum cleaner or compressed air. Do not scrub. Do not use solvents or any abrasive substance which might damage the coating of the fabric. Clean with a sponge or a soft brush dipped in soapy water using mild detergent. Rinse with clean water. Leave the blind down until completely dry. You can also very gently rub the fabric with a clean white pencil eraser to remove small stains.

The fabric performance tests were conducted in accordance with ASTM E891 & ASTM E903-96: Total Solar Transmittance (Ts), Total Solar Reflectance (Rt), Solar Reflectance in Infrared (R<sub>s</sub> IR), Total Solar Absorbance (As), Visible Reflectance (Rv), and Visible Transmittance (Tv), Glass performance tests for Solar Heat Gain Coefficient (SHGC) were conducted using the Lawrence Berkeley National Laboratory Window 7.3 NFRC certified software. SHGC % improvement for commercial applications is based on a standard commercial glass makeup of Double Glazing 6 mm 1/8" air / 6 mm with low E on surface #2. Results for SHGC were obtained using the center of glass. Acoustical performance was tested in accordance with ASTM C423-09a: NRC is Noise Reduction Coefficient, SAA is Sound Absorption Average. For residential SHGC data and the most up-to-date test results, performance specifications, and larger samples, contact the Mermet Technical Department: [www.mermetusa.com](http://www.mermetusa.com)

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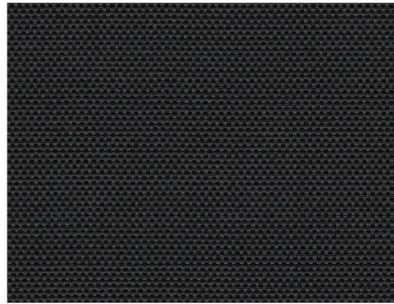
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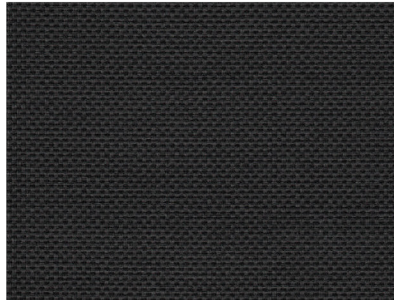
[www.shadesbymatiss.com](http://www.shadesbymatiss.com) | T. 800 493 2040 | email: [info@shadesbymatiss.com](mailto:info@shadesbymatiss.com)

# E Screen™ | WITH **KOOLBLACK** TECHNOLOGY

High Performance | 1% 3% 5% openness



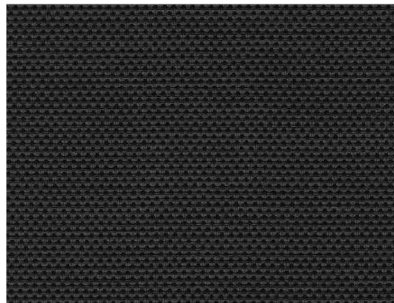
1% 035035 | Charcoal/Charcoal



00K122  
Charcoal/  
Grey-Stone

3% 035131 | Charcoal/Charcoal

035131  
Charcoal/  
Grey

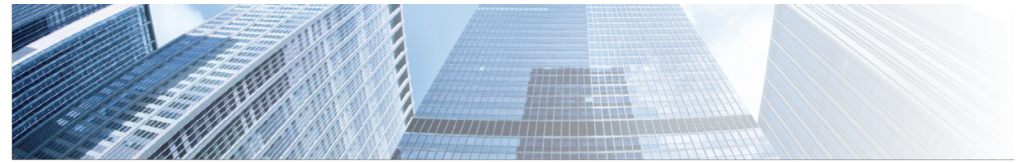


035032  
Charcoal/  
Cocoa

5% 035071 | Charcoal/Charcoal

035071  
Charcoal/  
Apricot

Fabrics sampled on the left are 5% openness. All colors are available in 1%, 3% and 5% openness factors.



## Perfect Commercial Solution

A combination of E Screen™ with KOOLBLACK® Technology & E Screen™ Original

**where** Southern & Western Exposures  
**what** E Screen™ with KOOLBLACK® Technology  
**why** Improved Comfort & Energy Savings

**where** Northern & Eastern Exposures  
**what** E Screen™ Original  
**why** Value Offering & Seamless Coordination

The combination of E Screen™ with KOOLBLACK® Technology and E Screen™ Original, in coordinating colors, achieves a seamless exterior design appearance and cost savings solution for commercial applications.

### Benefits of dark screens with KOOLBLACK® Technology

- excellent glare control
- crisp, clear view to the outside
- coordinated exterior building design



### Benefits of standard dark screen fabrics

- reflects NIR solar energy
- improved comfort
- energy savings

- excellent glare control
- crisp, clear view to the outside
- coordinated exterior building design

