

## Application Note

### Solid Colored Glass Can Provide Just the Right Hue to Fit the Desired Mood

Abrisa Technologies carries a large inventory of cost-effective solid colored glass for aesthetic use in the lighting and entertainment, architectural, and landscaping applications. The soda lime glass can be heat strengthened “tempered” for additional thermal shock resistance. The solid color glass can be fabricated to any shape, drilled, sandblasted and screen printed.

The color is actually part of the composition of the glass and is produced by mixing various metal oxides into the glass at the time of manufacture. Solid colored glass is not meant to be utilized as a precision optic. If precise control of spectral bands or operation at high temperature is required, a dichroic filter will be a better option.

1/8” thick MR11 (1.370”) and MR16 (1.965”) diameter glass for halogen lights and LED fluorescent lamps and fixtures are stocked for quick order fulfillment. It is recommended that glass which will be exposed to temperatures over 300°F use a dichroic filter as they can endure temperatures up to 375°C.

Solid colored glass for decorative purposes and applications other than lighting can be custom ordered in dimensions up to 24” x 48” and in thicknesses up to 3mm. Heat tempering can be done for most colors on sheet sizes of up to 24” x 24” and thickness of 3mm.

These solid color glass discs (MR11 and MR16) give lighting just the right hue to fit the mood desired.



#### Soda Lime Glass Based Colors: (standard stocked colors)

- **1/8” thick RED** – Abrisa Technologies #201 corresponds to Rosco #26 – Used to project primary red colored light, good for holiday/ theme lighting.
- **1/8” thick YELLOW** – Abrisa Technologies #203 corresponds to Rosco #312 – A vibrant warm yellow good for special effects and accents. Brings out the natural colors in brick, stone, and rock landscapes.
- **1/8” thick PINK** – Abrisa Technologies #205 corresponds to Rosco #38 – A pale pink, good for washing and toning. Used to pull out the red in rich colored woods, also used to eliminate a green cast.
- **1/8” thick GREEN** – Abrisa Technologies #206 corresponds to Rosco #90 – A dark yellow green used for holiday lighting. Used for holiday lighting, Christmas tree green. Also used as primary green.

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- **1/8" thick MEDIUM AMBER** – Abrisa Technologies #207 corresponds to Rosco #20 – Primary amber. Used in landscape lighting often to bring out the color in brick, stone, rock landscapes. Also used for creating sunsets, candlelight or eliminated unwanted blue light.
- **1/8" thick MEDIUM BLUE** – Abrisa Technologies #208 corresponds to Rosco #364 – Creates Naturalistic Daylight. Converts tungsten to daylight. Eliminates amber quality of incandescent.
- **1/8" thick DARK BLUE** – Abrisa Technologies #209 corresponds to Rosco #83 – Good for non-realistic night skies or creating dramatic effects. Can be used as a primary blue.
- **1/8" thick LIGHT BLUE CORRECTION** – Abrisa Technologies #211 corresponds to Rosco #60 – Used in landscape lighting as a correction filter. Makes the green in foliage “pop”. Also used for mood lighting. Helps maintain white light and eliminate amber hues. Cool area light.
- **1/8" thick LAVENDER** – Abrisa Technologies #401 corresponds to Rosco #54 – Can be used for color correction or to bring out the reds or browns in wood.
- **1/8" thick MERCURY VAPOR GREEN** – Abrisa Technologies #402 corresponds to Rosco #3304 Used in landscape lighting to duplicate the output of a mercury vapor lamp. Brings out the green in foliage.



**1/8" thick LIGHT AMBER** – Abrisa Technologies #403 corresponds to Rosco #11 – Warm Pale Yellow. Create fire effects or bring out the warm colors in brick, stone, “rockscapes”.

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### Glass Fabrication



### Coating Deposition



### CNC Machining



### Strengthening - Chemical & Heat



### Screen Printing of Graphics



Abrisa Technologies, a member of HEF Photonics, is a globally recognized technology glass fabrication and optical thin film coating company with expertise in high volume manufacturing and engineering capabilities, delivering Total Solutions that provide excellent performance, fitness-for-use and economies of scale.

Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.



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