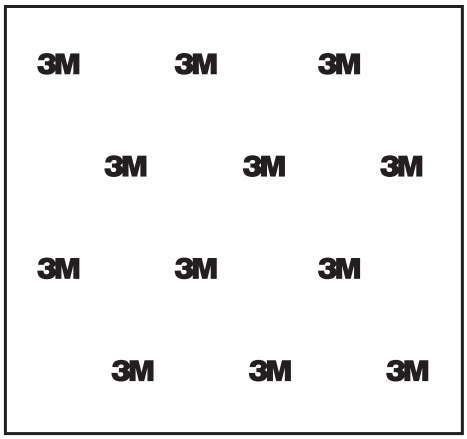
Effective: February 15, 2012

Vikuiti™ Enhanced Specular Reflector (ESR)

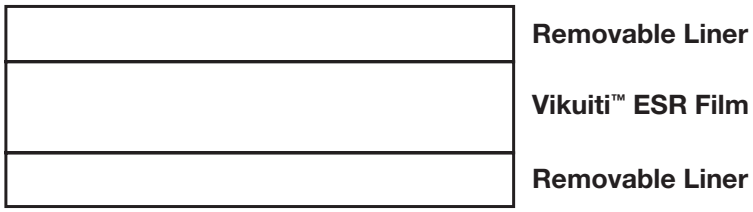
Description

Vikuiti™ Enhanced Specular Reflector (ESR) is an ultra-high reflectivity, mirror-like optical enhancement film. Utilizing 3M's multi-layer polymer technology, its non-metallic thin film construction lends itself to incorporation into a wide variety of configurations and applications. Designed primarily as the rear light guide reflector, to be used with other Vikuiti films for high efficiency brightness enhancement in light recycling LCD applications, it can also be used alone in any application requiring a high performance specular reflector.

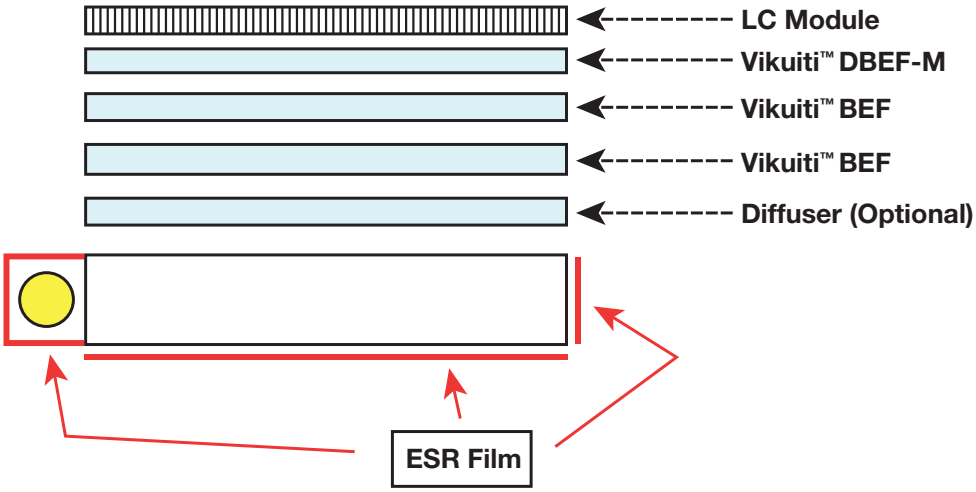
Film Configuration (Frontside)



Vikuiti™ ESR Construction



Typical Application



General Converting, Assembly, and Handling Recommendations

During converting operations, both the front and rear protective liners should remain on the film.

Die cutting is the recommended form of converting and will result in the cleanest edges, although shear cutting and laser cutting can also be acceptable. Whatever method used, you should insure that the part has clean, crisp edges without any raggedness or other damage.

The part may be left free-floating in the cavity to avoid warping or buckling, or it may be tacked down along edges or corners with an adhesive or double-backed tape. It may also be completely laminated across its entire width.

If left free-floating, the part should be precisely cut so as to provide a close fit in the cavity, yet not so close as to experience binding or warping problems from thermal expansion.

Remove both protective liners by tacking near an edge or corner with a piece of aggressive tape and pulling gently.

Be aware that handling any polymer film can generate electro-static charges which can attract dust and debris.

Remove any loose debris from the film by using compressed air.

Avoid fingerprints and debris by wearing clean latex gloves and holding the product at the edges.

Keep the area very clean to lessen the likelihood of debris contamination. Maintaining class 1000 cleanroom condition is recommended.

Using anti-static measures, such as ionized air blowers whenever possible, is recommended.

As always, protect the film, especially the edges, from any undue shock or stress.

Storage

Material should be stored in its original packaging, laying in a horizontal orientation, away from direct sunlight. Heavy objects should not be piled on top of it to avoid damaging the product. Ambient temperature and humidity should be controlled to 10 – 30 degrees C at 50 ± 20% R.H.

3M

Optical Systems Division
3M Center, Building 235-1E-54
St. Paul, MN 55144-1000
www.3Mprivacyfilm.com

Minimum 10% Post-Consumer Fiber

Vikuiti and the Vikuiti "Eye" symbol are trademarks of 3M.
Scotch is a registered trademark of 3M.
Printed in U.S.A.
© 2012, 3M. All rights reserved
75-0500-5202-8
22583SA021512GL