

FABRICATING EMI SHIELDS FROM AgHT™ PRODUCTS

CPFilms' AgHT™ Products provide a combination of high visible transmittance, low surface resistance and nearly neutral color, which makes them ideal as EMI shielding films for electronic displays. CPFilms has tested the compatibility of AgHT™ with numerous materials that are useful in the fabrication of EMI shields. We list those materials that have been found not to adversely affect AgHT™ products in this product note. We also describe how they may be used to fabricate EMI shields and list the companies that produce them. Finally, we recommend handling and cleaning techniques that will help to lower production losses.

GROUNDING EMI SHIELDS

To be effective as an EMI shield, the conductive AgHT™ coating must be grounded. That is best done by running a conductive adhesive around the perimeter of the conductive side of the film and then bonding the adhesive to an electrically grounded frame. CPFilms recommends two conductive transfer adhesives for that purpose, Adhesive Research's #8006 and 3M's #9703. Additional shielding effectiveness is obtained when a metal foil tape is used in the same manner. 3M's #1182 two-side conductive adhesive coated copper foil tape is recommended for that purpose.

HANDLING AgHT™ PRODUCTS

CPFilms recommends that non-dusted latex gloves be used when handling the film, since the salts in fingerprints can cause visible defects in the conductive coating under high humidity conditions. The conductive film can be safely cleaned by using either isopropyl alcohol (IPA) or deionized water and soft tissue paper.

SOURCES OF MATERIALS

ARclad #8006
Adhesive Research, Inc.
P.O. Box 100
Glen Rock, PA 17327
Telephone #(717) 235-7979

3M's #1182 Copper Foil Tape
3M Electrical Specialties Div.
6801 River Place Road
Austin, TX 78769
Telephone #(512) 984-1800

3M's #9703
3M Industrial Specialties Div.
3M Center Bldg. 220-7E-01
St. Paul, MN 55144-1000
Telephone #(800) 227-5085

Note: To the best of our knowledge, all information contained in this document is accurate. However, CPFilms does not assume liability whatsoever for the accuracy or completeness of the information contained herein.

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