

Performance Films

Enhancing Optical, Electrical & Environmental Performance

Display Protect Solutions supplies and qualifies specialist performance films that improve the optical, electrical and environmental performance of polymer and glass cover lenses.

Material selection is based on the application's optical requirements, operating environment and long-term reliability.

Applications

- Display cover lenses
- Touchscreen interfaces
- Medical equipment
- Industrial HMI
- Automotive displays
- Defence electronics
- Marine equipment
- Scientific instrumentation
- Consumer electronics
- Outdoor displays

Available Performance Films

Typical solutions include:

- Anti-Glare (AG)
- Anti-Reflective (AR)
- Anti-Static
- ITO Conductive Films
- EMI Shielding Films
- UV Protection Films
- Anti-Fingerprint (AF)
- Privacy Films
- Diffuser Films
- Shatter Protection Films

Performance Benefits

Performance films can provide:

- Reduced reflections
- Improved sunlight readability
- Enhanced optical clarity
- Static charge dissipation
- Touch sensor compatibility
- EMI reduction
- Increased scratch resistance
- UV protection
- Improved product durability
- Enhanced user experience

Compatible Materials

Suitable for application to:

- Hard coated PMMA
- Hard coated Polycarbonate
- Clear PMMA
- Clear Polycarbonate
- Chemically strengthened glass
- Soda-lime glass
- Acrylic laminates
- Display assemblies

Design Considerations

Our engineering team can advise on:

- Optical performance
- Surface finish selection
- Haze requirements
- Light transmission
- Conductivity requirements
- Environmental durability
- Touchscreen compatibility
- Optical bonding compatibility
- Manufacturing optimisation
- Cost-effective material selection

Early design involvement helps achieve the optimum balance between performance, appearance and cost.

Typical Industries

- Medical
- Industrial
- Automotive
- Defence
- Marine
- Scientific
- Consumer Electronics
- Test & Measurement
- Telecommunications
- Building Controls

Common Material Selection Mistakes

- Choosing Anti-Glare when Anti-Reflective is required
- Specifying AR films for harsh industrial environments
- Selecting incorrect haze levels
- Ignoring optical transmission requirements
- Using conductive films where insulation is required
- Incompatible with optical bonding adhesives
- Specifying unnecessary high-performance coatings
- Under-specifying environmental durability
- Not considering UV exposure
- Ignoring chemical resistance requirements
- Choosing films without considering touch performance
- Selecting materials based on cost rather than application

Need Advice?

Selecting the right performance film can significantly improve display readability, durability and long-term reliability. Our engineering team is here to help specify the most appropriate solution for your application, reducing development time and helping to avoid costly redesigns.

Design Reminder

Performance films should be selected according to the optical, electrical and environmental requirements of the application—not simply by cost or familiarity. Early material selection reduces development risk and improves product performance.