

The benefits of the Clear Distortion Free (CDF) Adhesive Mounting System...

CPFilms' Clear Distortion Free (CDF) adhesive technology is based on a chemistry that is quite different from traditional pressure-sensitive technology. In most ways, it is superior for the solar control film applications.

Traditional pressure-sensitive adhesive (PSA) utilized in the window film industry is primarily based on acrylic copolymer, acrylic-vinyl acetate and/or vinyl ether polymer systems. These are characterized by their permanently tacky nature and are usually easy to mount. This permanently tacky nature also forms the basis of its' longevity problems.

PSA's, being tacky, have to rely on specific and mechanical adhesion mechanisms for the development of bonding characteristics. These systems also have Tg's (glass transition temperatures) below room temperature, which are responsible for their tacky nature.

The CDF adhesive has built into its' backbone proprietary chemistry that is activatable by the installation solution. This allows it to be mounted with greater ease and chemically bond to the glass. This chemical bond is much more stable than specific or mechanical bonds, affording it durability and longevity.

The CDF polymer is much harder and has some crystallinity as opposed to the soft amorphous nature of PSA systems. This allows for more chemical and environmental resistance. This harder nature also means greater mounting solution removability. Squeegeeing is easier and more complete, less water/soap remains behind to soften and degrade the adhesive. This is critical

for initial appearance and longevity. PSA's are much softer, making mounting solution removal difficult. The residual monomers, solvents, catalyst, and soaps/water left behind are free to react with heat/(IR)/sunlight/(UV) to degrade adhesion and product longevity.

The CDF chemistry is cleaner. It has much less variation in its' molecular weight and less residuals in the form of monomers.

CDF technology, based on its unique chemistry and mounting solution, offers superiority in application, facility, and longevity. It offers a harder, thinner, more crystalline adhesive that yields little or no distortion initially or under the pressure of environmental stress.

The CDF offers a chemistry that bonds directly to glass. This bonding system is more durable and reliable than mechanical bonding which is less resistant to environmental stress.

CPFilms has never had an adhesive failure with CDF adhesive!