# Designer Laminate Collection







The extensive offering of the exciting and economical **Designer Laminate Collection** incorporates cutting edge technology with the newest finishes and textures that will transcend trends with timeless design. These HPL laminates are GREENGUARD Gold Certified, contributing to sustainability.

## **Light Wood Grains:**













**Dark Wood Grains:** 













**Graphic:** 





DSKEX340









DSKEX402













View collection web page for the complete offering including additional product options, corresponding Spec ID# and updates.

## **SPECIFICATIONS**

**SIZE:** 48" x 96" standard **THICKNESS:** .028" standard

**OPTIONS:** Wood Grains, Graphic, Fabric, and Stone

FINISH: Matte

**APPLICATION:** Vertical and Horizontal

- GREENGUARD Gold Certification
- Can contribute to LEED®
- In Stock products are subject to availability
- Please note that variations in color and texture may occur due to the nature of the material



# **INSTALLATION METHOD**

#### Storage:

Designer Laminates should be properly conditioned to the ambient conditions of the surroundings before they are used. For e.g., Designer Laminates and the substrate need at least 48 hours to get acclimatized.

Provision should be made for the circulation of air around the components. Optimum conditions for use:

- 23°C (73°F)
- Relative humidity of 45% to 55%

Sheets should be stored horizontally with the top sheet turned face down and a thick hard board placed on top to protect the material from possible damage and reduce the chances of getting warped. Stored laminate stock should be rotated such that older sheets will be used first. Laminate sheets should be protected from moisture, and should never be stored where they may meet the floor or

outside wall. Always carry the sheets vertically. Never slide the sheet but, lift it while moving it from one place to another. We recommend that ideally two people should carry a full-size sheet as carelessness can damage the decorative surface.

## **Fabrication and Tooling**

Sawing: To avoid chipping, it is important that the saw blade teeth cut into the decorative face. Circular sawing: Always provide support to the material near the point of blade contact to avoid vibration that causes chipping.

Blades with trapezoid tooth configuration and both tungsten carbide and diamond tip blades have proved to be excellent tools for sawing high-pressure decorative laminates.

Routing: Routing may be done with electric or air powered carbide tip routers. Router speed should be maintained at 16000 to 22000 rpm. It is important to use a router having adequate horsepower to maintain cutting speeds (based on the type and amount of material to be cut). For special edge trimming, very high-speed routers are available which produce smooth-edge chip-free work.

Sharpness of the router cutters should be maintained.

## **Edge finishing**

Belt sanders may be used to flush the self-edge before the laminate top is applied. However, care should be taken to direct the sanding operation away from or parallel to the decorative surface.

#### **Adhesives**

A variety of adhesives have been found satisfactory for bonding decorative laminates to core materials. The choice of adhesive should be based on the service for which the assembly is intended and upon the bonding facilities available. In all cases, the adhesive manufacturer's instructions for use should be followed closely.

Contact adhesives: Contact adhesives may be used for bonding laminates to a variety of substrates. Contact adhesives do not restrict the movement of the laminate caused by varying humidity conditions to the same extent as thermosetting adhesives. They are particularly useful for application to metal or other impervious surfaces. There are two primary types of contact adhesives; solvent based and water-based. Water-based adhesives are not suitable for bonding laminates to non-porous substrates. The solvent or the water must be evaporated before satisfactory bonding can be accomplished.

Polyvinyl acetate types (White glue): Polyvinyl acetate (PVA) emulsion adhesives may be used for bonding laminates to wood substrates where resistance to moisture and high heat are not required in the application (e.g. furniture, kitchen cabinets and office partitions).



They may be both room temperature and hot-pressed setting adhesives requiring only that the water in the emulsion be absorbed by the components. Catalyzed PVA offers improved moisture and heat resistance.

Thermosetting types: Urea-formaldehyde adhesives are satisfactory for most applications. Resorcinol and phenol-resorcinol adhesives are recommended for use when moisture resistance and heat resistance are required. Epoxy adhesives are liquids with no volatile components. They have good gap-filling and low shrinkage properties and are used mainly for bonding laminates to impervious cores such as steel.

Hot melt types: Hot melt adhesives are suitable for use only in edge banding operations because of their low heat resistance.

Urethane types: Urethane adhesives are liquids with 100% solids and no volatile components. They have good gap filling and low shrinkage properties. These are used mainly for bonding laminates to impervious cores such as metal, glass etc.

Protective film: The protective film where applied should be removed as soon as the application is complete. If the film is left in place after fabrication, exposure to strong lights for a period may cause a pale residue and make it difficult to remove the protective film.

## **Proper bonding recommendations**

- 1) The surfaces should be clean, dry, and free of oils or other contaminants, such as dust, synthetic particles, and so forth. The adhesive film should have full contact with the surface to which it is applied in order to give maximum adhesion.
- 2) The adhesive should always be stirred or agitated before use. Sufficient amount of adhesive should be applied on either or both the surfaces to be bonded. When ready for bonding, the spread film of most contact adhesives will exhibit a uniform semi-gloss appearance over the entire surface of the materials to be bonded. Marked variation in appearance will generally indicate an improper or non-uniform adhesive spread. The substrate can generally be seen more readily through those areas where insufficient adhesive has been applied. If this occurs, re-coating the surfaces should achieve a uniform coating Double coating the edges with adhesive is advisable because of the higher porosity of the substrate edge.
- 3) Sufficient bonding pressure to ensure intimate contact is necessary for an adequate bond. Sufficient pressure should be applied over the entire area using as much pressure as possible without damaging the assembly. Pinch rollers (rotary press) and heavy weighted rollers are ideal for such purposes. Hand rolling should be done from the center to the edges to ensure the removal of all air bubbles. The edges should be rolled twice.
- 4) Care should be taken to follow the manufacturer's recommendations concerning the allowable tack range of the adhesive. If assembly is made before the adhesive is dry or after the allowable open time is exceeded, the bond may not have satisfactory results.
- 5) Unless otherwise indicated by the manufacturer, the temperature of the gluing area and all materials should be maintained around 21°C (70°F) or above.
- 6) Experience has shown that when the relative humidity is above 80% at temperatures of 21°C (70°F) or lower, moisture may condense on the surface during drying (known as blushing) and this will prevent an acceptable bond. Hot spray or forced air drying may be used to help prevent this condition.
- 7) It is recommended that the maximum sheet size used for vertical field application be limited to  $610 \times 2440$  mm ( $2 \times 8$  ft). If larger panels are required, these should be fabricated in the shop.
- 8) A gap of minimum 2 mm should be maintained between two laminates while pasting side by side.



## **MAINTENANCE**

#### Cleaning and Maintenance of Laminates:

Designer Laminates are resistant to stains belonging to Group 1 and 2 but may take stains of reagents of Group 3 and 4. Group 3 and 4 reagents should not be allowed to spill on the surface, and in case of spillage should be immediately wiped off.

## Classifications of the reagents:

**Group 1** Acetone, trichloromethane, toothpaste, hand cream, urea, alcoholic beverage, natural fruit, fruit drink, meat, vegetable oil, water, NaCl (solution), mustard, soap solution, paint remover (kerosene), phenol and citric acid.

**Group 2** Coffee, black tea, milk (condensed and evaporated), cola beverages, vinegar, hydrogen peroxide (3% solution), ammonia (10% solution of commercial concentrate), nail polish remover, lipsticks, water color, laundry marking ink, ball point ink.

**Group 3** Sodium hydroxide (25% solution), hydrogen peroxide (30% solution), concentrated vinegar

(30% acetic acid), acid based metal cleaners, shoe polish, hair coloring, iodine, boric acid, lacquers. **Group 4** Citric acid (10% solution), acetic acid (5% solution).

#### Cleaning:

- To clean the surface, use a damp cloth or sponge and a mild soap or detergent.
- Stains belonging to group 2 such as coffee or tea can be removed using a mild household cleaner/detergent and a soft bristle brush.
- If a stain persists, apply a paste of baking soda and water with a soft bristled brush. Light scrubbing, 10 to 20 strokes should remove most stains. Although baking soda is a low abrasive, excessive scrubbing or exerting too much force may damage the decorative surface, especially if it has a gloss finish.
- Stubborn stains belonging to Group 3 and 4, which resist any of the above cleaning methods, may require the use of undiluted household bleach or nail polish remover. Apply the bleach or nail polish remover to the stain and let it stand no longer than two minutes. Rinse thoroughly with warm water and wipe dry. This step may be repeated if the stain appears to be going away and the color of the laminate has not been affected.

**WARNING:** Prolonged exposure of the laminate surface to bleach will cause discoloration. Acid based cleaners will permanently damage the laminates. Never allow these cleaners, or bottles, rags or other items contaminated with these cleaners, to come in contact with the laminates. Wipe such areas immediately and rinse thoroughly with water.

Sharp objects: Never use knives or other sharp objects directly on the decorative surface. Use of chopping block or counter saver is recommended.

Impact: Even though High-Pressure Designer Laminates have excellent impact resistance, chipping or cracking may occur. Do not abuse the High-Pressure Designer Laminate by dropping heavy objects such as cans, dinnerware, or glasses or deliberately hammering directly on the surface.



# WARRANTY

Architectural Systems warrants that, under normal use and service, the material and workmanship of its products shall conform to the standards set forth on the applicable technical data sheets of the respective products for a period of one year from the date of sale to the first consumer purchaser, subject to following conditions:

- a. The warranty shall cover only the specific standards of material and workmanship of the product as set forth in the applicable technical data sheets of the respective products and shall not cover the merchantability of the product or the fitness thereof for any particular purpose whatsoever.

  b. The warranty shall be for a period of one year only from the date of sale to the first consumer purpose.
- c. Any resale, transfer, assignment or deviation of any nature whatsoever from the first / original installation of the product shall render this warranty void.
- d. This warranty shall be absolutely non-transferable and any resale or transfer of any kind whatsoever, of the product by the first consumer purchaser shall render this warranty void. e. This warranty shall not cover any damage or deviation from the standards set forth on the applicable technical data sheets of the respective product, in case such damage or deviation is caused by: (i) accidents, abuse or misuse; (ii) exposure to extreme temperatures or to non-conducive natural or artificial environments; (iii) improper fabrication or installation; or (iv) improper maintenance, and Architectural Systems shall have the sole and absolute right to determine the reason for such damage or deviation.
- f. This warranty shall be void, subject to other terms and conditions contained herein, upon nonproduction of the original warranty document, duly sealed and stamped on the date of purchase of the product by Architectural Systems or by any of its authorized dealers / distributors. g. Under no circumstances shall Architectural Systems be liable for any loss or damage arising from the purchase, use or inability to use this product or for any special, indirect, incidental, or consequential damages and in the event that the product does not perform as warranted, the first consumer purchaser's remedy shall be solely limited to repair or replacement of all or any part of the product which is defective, at the Architectural Systems sole discretion.
- h. These terms of warranty are non-amendable and may be modified or changed only by Architectural Systems and any assurance of modification or change of the terms of warranty which may be given to the First Consumer Purchaser by any fabricator, installer, dealer, distributor, agent or employee of Architectural Systems shall be without any authority to do the same and hence non-enforceable.
- i. In case of any disputes or differences which arise out of these warranty terms, the same shall be exclusively subject to the jurisdiction of the laws of the United States of America.
- j. These terms of warranty shall be deemed to have been accepted upon purchase of the product by the first consumer purchaser.

# **TECHNICAL DATA**

Please contact sales@archsystems.com.

