

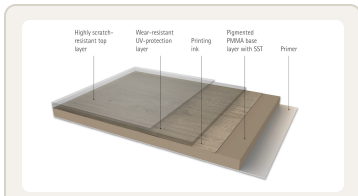


# TrueGrain Deck™ Construction

Manufactured by Patwin Plastics. Laminated with RENOLIT PMMA film.

The TrueGrain deck board is manufactured by Patwin Plastics in Linden, New Jersey: a cellular PVC core with a Patwin-formulated proprietary ASA capstock, finished with a five-layer PMMA decorative film supplied by RENOLIT and laminated to the wear face. Patwin extrudes the board and laminates the film in one facility. RENOLIT is the single external partner Patwin selected for the surface layer. American Pro Building Products is the consumer decking line Patwin sells under. This sheet documents the full construction for architects, specifiers, dealers, and distributor partners.

● **FILM ENGINEERED BY RENOLIT**



**FIGURE 1.**  
TRUEGRAIN LAMINATE  
CROSS-SECTION. LAYERS  
SHOWN IN TRUE STACKING  
ORDER, TOP TO BOTTOM.

PRODUCT	TrueGrain Deck™ capped cellular PVC
MANUFACTURER	Patwin Plastics, Linden, NJ, USA
BRAND	American Pro Building Products
WEAR-FACE FILM	Five-layer PMMA laminate supplied by RENOLIT
FILM CHEMISTRY	PMMA (acrylic) with SST
BONDING	Primer-assisted permanent lamination
WARRANTY	25-year limited residential

**BUILT BY THE MANUFACTURER**  
**PATWIN PLASTICS BUILDS THE BOARD**

**CAPSTOCK** Patwin proprietary ASA, formulated and co-extruded in-house. Caps all four sides of the profile.

**CORE** Cellular PVC with 30% in-house regrind. Closed-loop American material, single facility.

**PROCESS** PVC compound mixed in-house. Dies designed and machined in-house. Cellular PVC decking under one roof since 2001.

**01 Highly scratch-resistant top layer** SURFACE DURABILITY

Clear, high-hardness exterior surface film engineered to resist abrasion from foot traffic, patio furniture, pet claws, sand, and grit. Defines the wear face of the board and protects the printed decor against everyday mechanical contact in residential service.

**02 Wear-resistant UV-protection layer** WEATHERING & COLOR HOLD

Dedicated UV stabilizer film formulated to absorb solar radiation before it can reach the print or the polymer substrate. Preserves color fidelity on the decorative wood-grain and shields the underlying chemistry from photo-oxidative degradation.

**03 Printing ink** PHOTOREALISTIC DECOR

High-resolution rotogravure decor print laid down between the protective films above and the pigmented PMMA base below. Reproduces variegated grain, pore structure, and tonal depth of premium hardwoods with edge-to-edge registration on every board.

**04 Pigmented PMMA base layer with SST** HEAT REFLECTION & FILM BACKBONE

Acrylic (PMMA) base layer carrying RENOLIT's Solar Shield Technology (SST). SST reflects the near-infrared portion of the solar spectrum so the board runs measurably cooler under direct sun, while the PMMA chemistry provides the dimensional stability and weatherability specified for exterior cladding.

**05 Primer** SUBSTRATE ADHESION

Engineered tie-coat applied to the underside of the film stack. Forms the chemical bond that locks the laminate to the capped cellular PVC substrate, producing a permanent lamination rather than a surface-applied coating.

Patwin Plastics manufactures the TrueGrain board in Linden, New Jersey: cellular PVC core, proprietary ASA capstock, and a permanent lamination of the five-layer RENOLIT PMMA film on the wear face. **RENOLIT** is the single film-science partner Patwin selected for the surface layer. **American Pro Building Products** is the decking line Patwin sells under, and the twenty-five-year board specified through it.