



The Fusion Of Science And Art™

TECHNICAL DATA SHEET

Steel Series™

2019-21_{ver01}

About A40 Galvannealed Steel Laminates

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- Standard Sizes And Colors
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Deco Technologies Inc.

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decotechnologiesinc.com

Deco Technologies Corporation

Steel A40G



Steel A40G Series

General Description

DECO Steel A40G Series laminates are a decorative polymer finish applied to premium Steel A40G sheet or coil ideally suited for use in partitions, door skins, architecture shapes, ceiling panels, office furniture, fixtures and casework, column cladding, interior wall applications, displays, signage, and other decorative and functional applications.

Basic Limitations

DECO Steel A40G are a veneered laminate series meant for decorative or non-critical structural applications. They are not intended for use as a structural component in any application regarding safety, support for humans, or in applications where metal fatigue or failure could result in injury, death, or ancillary property damage. DECO Steel A40G Series laminates should not be subjected to temperatures higher than 150F for substantial periods of time.

Finishes

DECO Steel A40G Series laminates are available in many standard and hundreds of special order finishes including 3D woodgrains, metallic, abstracts, and stones. Custom matched finishes are available.

Standard Sheet Sizes

Deco Steel A40G Series laminates are manufactured in master sheet form. Standard thicknesses and lengths stocked. Custom routed sizes and shapes available.

Sheet/Coil	Width	Length	Gauges
Sheet	24", 36", 48"	96", 120"	24ga, 26ga
Coil	24", 36"	96", 120"	24ga, 26ga

Typical Properties Surface

Test	Standard	Deco Steel A40G
Surface Abrasion	JAS Abrasion A	Less than .1g abrasion loss in 100 cycles
Anti-Scratch 1	Pencil Hardness JIS-K5400 (500 grams of weight)	B-2B
Anti-Scratch 2	Hoffman Scratch Test (WT)	200-300g No Appreciable Change
Steel Wool	Steel Wool #0000 1.5kg of WT	No Appreciable Change
Color Fastness	Xenon Meter	No Appreciable Change 300 hrs (E codes 5000hrs)



At A Glance

Premium Steel A40G Sheets
Contributes LEED v4
Highly Formable
No VOC In Production



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Test	Standard	Deco Steel A40G
Heat Stability	NEMA 11-14-95	No Appreciable Change
Chemical Resistance Benzene Ethanol n-Hexane HCl - 10% NaOH - 10% H2SO4 - 10% Ca(OH)2 - Saturated	NEMA 11-14-95	No Appreciable Change
Solvent Resistance Toluene MEK Ethyl Acetate Acetone	NEMA 11-14-95	Some Change
Abrasion Resistance	ASTM D-1044	5000 cycles min
Impact Resistance	8 oz Steel Ball Dropped 2"	No Change
Stain Resistance Distilled Water Orange Peel Lemon Peel Mineral Oil Cloudy Ammonia Chlorox (Cleaning) Milk Cola Coffee Tea Ketchup Prepared Mustard Bacon Grease Hamburger Grease	EN 438/2.15 and NEMA LD3.4	No Appreciable Change

Typical Properties Substrate

Test/Condition	Standard
Coating Weight	40g sq ft
Elongation	33-51 KSI Typical
Tensile Strength	45-64 KSI Typical
Tension Leveled	Yes
Length Tolerance Of Sheet	-0/+ .125"



Many Uses

- Ceiling Systems
- Wall Panels
- Signage
- Vertical Panels
- Partition Skins
- RV And Equine Trailers
- Transportation Interiors



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Test/Condition	Standard
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Fire Rating

Non-flammable

Use And Machining

DECO Steel A40G Series laminates may be used with most manufacturing equipment including; auto-benders, perforators, saws, curf bending, laminators, routers, etc..

DECO Steel A40G laminates should not be applied directly to non-reinforced gypsum, concrete, masonry, or other similar surfaces as warping and bond failure may occur. Steel A40G laminates may not be used as structural members or supporting components.

For laminating applications virtually any adhesive that is compatible with Steel A40G will perform well. Follow the techniques recommended by the adhesive manufacturer. Even edge-to-edge coating is recommended for best results. Roll coating with PUR adhesives work well.

When routing or sawing, use of carbide-tipped saw and router blades is advisable. High tool speed and medium-fast feed rate will produce the best results. To prevent tearing of the surface or the substrate layer, use clamps or other hold-down devices when sawing, routing, or drilling.

For metal bending or forming the artwork surface layer should be heated to approx. 60C to soften the surface and prevent stressing or whitening along the bend line or radius. This can most easily be accomplished with infrared heaters in-line before the in-feed rolls of most formers, stamping, presses, etc. Other methods of heating include hot air guns, heat tents, hot air blowers, etc. If stressing or whitening has occurred along a bend line, it can usually be removed by heating the material after forming using the same methods as listed above. NOTE: certain deep-grained high definition finishes within the Deco Technologies Inc. standard fan-deck behave differently when heated after whitening has occurred. For consistency of processing all finishes, it recommended that every attempt be made to prevent whitening from occurring by preheating the laminate prior to forming.

Protective Polyfilm Use

Protective removable polyfilm will be applied only when directed by the customer. Deco Technologies Inc. does not recommend the use of protective polyfilm unless other means of scratch or abrasion prevention prove unsuccessful in the manufacturing or final installation. The use of polyfilm in general leads to increased cost, waste when removed, and can prove difficult to remove after manufacturing if heat was used in processing.

Light Fastness

Standard laminates are for interior or shrouded exterior applications such as soffits, overhangs, ceilings, or other installations that are not in direct sunlight. The use of DECO laminates in direct sunlight applications should be avoided unless used for temporary applications as fading can occur. Direct sunlight rated laminates are available on special order basis.



Easily Machined

- Cold Bonding
- Pressing
- Routing
- Sawing
- Perforating
- Drilling
- Sawing
- Auto-Folding



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Warranty Statement

DECO Technologies warrants that, DECO Steel A40G Series laminates under normal use, will conform to the standards set forth by this technical data sheet for a period of sixty (60) months from the date of sale to the first consumer purchaser. DECO Technologies Inc. will also warrant for a period of LIFETIME years against de-lamination of the artwork from the backer substrate. In the event that this product does not perform as warranted, the first purchaser's sole remedy shall be limited to repair or replacement of all or any part of the laminate product that is defective, at the manufacturer's sole discretion. This warranty applies only to product in its original installed form from the first consumer buyer. This warranty is not transferable, and expires upon resale or transfer by the first consumer purchaser. This warranty shall not apply to defects or damage arising for any of the following caused by accidents, abuse, improper installation or fabrication, misuse, or failure to properly prepare the bonding surface.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE MADE. UNDER NO CIRCUMSTANCES SHALL DECO TECHNOLOGIES INC. 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. NO FABRICATOR, INSTALLER, DEALER AGENT OR EMPLOYEE OF DECO TECHNOLOGIES INC. HAS THE AUTHORITY TO MODIFY THE OBLIGATIONS OR LIMITATIONS OF THIS WARRANTY.

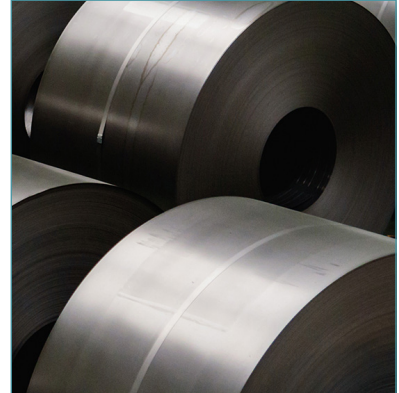
This warranty gives you specific legal rights, and you also may have other rights that vary from state to state; therefore, some of the limitations stated above may not apply to you. It is to your benefit to save your documentation upon purchase of a product

Care And Maintenance

The decorative surface may be cleaned with warm water and mild detergents or dishwashing soaps. Do not use cleansers that contain abrasives, they will scratch or damage the decorative surface. Household cleaners such as Fantastik, 409, and other like products may be used on stubborn stains. Always test any new cleaner in an inconspicuous spot to ensure no degradation of the surface will occur.

Do not allow any of the following chemicals to remain in prolonged contact with the decorative surface:

- Acetone
- Bleach (except for disinfecting)
- Greater than 10% solutions of hydrochloric, sulfuric, or nitric acid
- Caustic solutions containing lye (drain cleaners commonly use lye)
- Sodium bisulfate
- Potassium permanganate
- Juice from staining berries
- Violet (genetian)
- Bluing
- Fabric dye
- Alcohol containing iodine
- Hydrogen peroxide solutions



Easy Maintenance

- Moisture Resistant
- Surface Easily Cleaned
- Resistant To Most Stains
- No Off Gassing
- Graffiti Resistant
- Repairable



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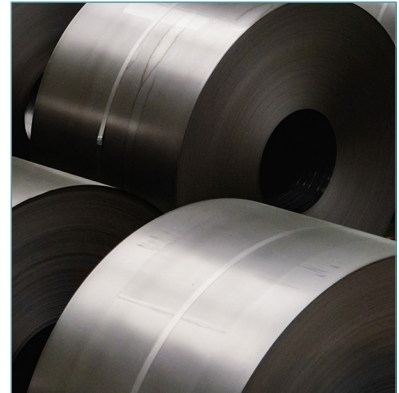
Repair and Finishing

DECO laminates can be finished with topcoats for higher gloss and durability. Finishing steps must be in accordance with the manufacturers' application instructions and performed when the laminate is in its final bonded position. Cracking, crazing, or complete de-lamination of the topcoat may occur if applied to sheet prior to bonding or forming. Always test any topcoat bond and finish on a sample to ensure topcoat meets desired finish quality. Surface should be 40 dyne minimum before applying topcoat. Corona, blown plasma, and/or flame treating may be needed to raise surface above 40 dyne. Care should be taken to not scorch surface.

Repair of scratches and gouges can be done through the use of high-quality furniture repair kits. Follow repair kit instructions. Avoid repair kits that use an iron in direct contact with the veneer surface as this may increase the gloss level of the finish in that area. Please note that this method will not provide a complete repair if damage is extensive.

Technical Questions

For technical assistance with any of the following technical specifications, please contact us at 866-757-9845, Monday through Friday, 8 a.m. – 5 p.m. EST.



Excellent Properties

Impact Resistant
Highly Formable
Recycleable/Recycled
Economical



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