



SPECIFICATION INFORMATION TRANSPORTATION GRADE LAMINATE

1. PRODUCT IDENTIFICATION

NEVAMAR[®] Transportation Grade Laminate

2. MANUFACTURER

NEVAMAR DECORATIVE SURFACES

One Nevamar Place

Hampton, South Carolina 29924

Phone: (803) 943-7200 or (800) 638-4380

www.nevamar.com

3. PRODUCT DESCRIPTION

Basic Uses:

Nevamar Transportation Grade Laminate is a high pressure laminate designed for interior surfaces requiring impact resistance, low surface flammability and smoke generation. Nevamar Transportation Grade Laminate meets the applicable requirements set forth in NFPA 130, and the Code of Federal Regulations. It also provides excellent resistance to abrasion and stains, with ease of maintenance and excellent design flexibility. Nevamar Transportation Grade Laminate is ideal for use as walls, paneling, curved ceilings, windscreens, door panels, and countertops in mass transit applications. One of the 1/8" products (F80) is designed to be postformable for the curved ceiling application.

Limitations:

Nevamar Transportation Grade Laminate is not a structural material and is not recommended for exterior use. The laminate should not be bonded to plaster board, gypsum board, plaster, concrete blocks or similar materials.

Composition and Materials:

Nevamar Transportation Grade Laminate is manufactured in various thicknesses in balanced or sanded back configurations. These special purpose laminates are composed of the same basic components as regular Nevamar HPL with the addition of fire retardant materials to yield a laminate to meet the needs of the transportation industry for low flame spread and smoke generation.

Sheet Sizes:

Widths – 36" (914 mm), 48" (1219 mm), 60" (1524 mm)

Lengths – 96" (2438 mm), 120" (3048 mm), 144" (3658 mm)

These are nominal dimensions obtainable from oversized sheets.

Thickness:

Transportation Grade = 1/32", 1/16", 1/10", 1/8", and 1/4"

1/32" Product Code K32

1/16" Product Codes K63, KD4

1/10" Product Codes D14, G01, G99, K10, K14, KD8 (K product meet Docket 90 and NFPA 130)

1/8" Product Codes F80, K13, K18, KD9

1/4" Product Codes D44, D45

These are nominal thicknesses. Some products are offered with sanded back, balanced, or with a decorative surface on both sides. Products with D in the product code are double sided with the same décor on both sides. Please contact Nevamar for further information or special applications.

Finishes:

Textured (E) finish is standard.

Applicable Standards:

Nevamar Transportation Grade Laminate meets the applicable requirements for Low Flame Spread and Smoke Generation set forth in NFPA 130 *Fixed Guideway Transit Systems*, and the Department of Transportation Federal Railroad Administration Code of Federal Regulations Title 49 Part 238.103, Motor Vehicle Safety Standard 302, and FTA Docket 90-A.

4. INSTALLATION



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Nevamar Transportation Laminates should be bonded to suitable substrates as required. Substrates satisfactory for use with Transportation Laminates are plywood, particleboard, inorganic fiberboard, composition board, or metal. Recommended adhesives are PVA, epoxy and contact cement. Laminates and substrates should always be acclimated prior to use. Recommended acclimation conditions are 72 °F (25 C) and a relative humidity of 50%. Fabrication can be done generally with conventional woodworking or metalworking equipment using carbide tipped tooling. Sawing, drilling, edge filing, sanding and routing should be done with the decorative side up to prevent cracking or chipping of the laminate surface. Transportation Laminate should be drilled with a wood backing to prevent breakout of the drilled hole. To minimize stress concentration, all inside corners should have a minimum radius of 1/8".

5. CARE and CLEANING

Use a damp cloth or sponge and a mild soap or detergent to clean the surface. Difficult stains such as coffee or tea can be removed using a mild household cleaner/detergent and a soft bristle brush. If a stain persists, use a paste of baking soda and water; apply with a soft bristled brush or soft cloth. Light scrubbing for 10 to 20 strokes should remove most stains.

6. TECHNICAL DATA

Table 1 and Table 2 Fire Performance Properties

TABLE-1 SURFACE FLAMMABILITY PERFORMANCE PROPERTIES per ASTM E-162	
TEST	TYPICAL NEVAMAR VALUES
Surface Flammability	$I_s < 30$

I_s – Flame Spread Index

TABLE-2 - SMOKE GENERATION PERFORMANCE PROPERTIES per ASTM E-662				
TEST	Smoldering		Flaming	
	D_s 90 sec.	D_s 4 min.	D_s 90 sec.	D_s 4 min.
Smoke Generation	< 1.0	< 100	< 15	< 140

D_s – Specific Optical Density

All Nevamar Transportation Laminates are designed to meet the performance requirements of the Standard HPL NEMA Grade Laminates.

7. LIMITATION OF WARRANTY AND LIABILITY

(a) We warrant solely to the original Buyer that the Products will be free from defects in materials and workmanship, when given normal, proper and intended usage, for a period of one year from the date of sale to the Buyer.

(b) At our expense, we agree to repair or replace at our option all defective Products not performing substantially in accordance with applicable Product specifications, provided that Buyer has given us written notice of such warranty claim within the one year warranty period. If we are unable, after reasonable efforts, to repair or replace such defective Product, Buyer's sole remedy shall be the refund of an amount not to exceed the actual payments received by us for such Product. All replaced items shall become our property.

(c) Buyer is responsible for inspection of the product upon receipt and prior to any cutting, gluing or attaching of the product to any other material ("Fabrication"). Any claim by Buyer for breach of warranty shall be deemed waived to the extent it could have been determined by such inspection and any



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Fabrication was delayed until we have been notified of a claim and have had an opportunity to resolve it in accordance with this warranty.

(d) We shall have no obligation to make repairs, replacements or corrections which result, in whole or in part, from (i) normal wear and tear, (ii) fault or negligence of Buyer, (iii) improper or unauthorized use of the Products, (iv) use of the Products in a manner for which they were not designed, (v) modifications of the Products by anyone other than us, (vi) any act of nature, act of God, fire, casualty, flood or war, (vii) any other causes external to the Products, or (viii) use of the Products in combination with equipment or materials not supplied by us.

(e) If notified within 10 days in writing of any action (and all prior related claims) brought against Buyer based on a claim that a Product infringes any valid United States patent, copyright or trade secret, we shall defend such action at our expenses and pay all costs and damages finally awarded in such action or settlement which are attributable to such claim. We shall have sole control of the defense of any such action and all negotiations for its settlement or compromise. Buyer shall cooperate fully with us in the defense, settlement or compromise of any such action. In the event that a final injunction is obtained against Buyer's use of a Product by reason of infringement of a valid United States patent, copyright or trade secret, or if in our opinion any Product is likely to become the subject of a successful claim of such infringement, we may, at our option and expense, (i) procure for Buyer the rights to continue using the Product, (ii) replace or modify the Product so that it becomes non-infringing (so long as its functionality is essentially unchanged), or (iii) accept the return of the Product and refund the Buyer the purchase price therefore. We may withhold further shipments of any such Products.

(f) We shall not have any liability to Buyer to the extent that any infringement or claim thereof is based upon (i) the use of a Product in combination with equipment or materials not supplied by us where the Product would not itself be infringing, (ii) compliance with Buyer's designs, specifications or instructions, (iii) use of the Product in an

application or environment for which it was not designed, (iv) modifications of the Product by anyone other than us, or (v) any claims of infringement of any patent, copyright or trade secret in which Buyer or any affiliate or customer of Buyer has an interest or license.

(g) Buyer shall not bring any suit or action against us for any reason whatsoever more than one year after the related cause of action has accrued.

EXCEPT AS STATED ABOVE, WE DISCLAIM ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, WITH RESPECT TO THE PRODUCT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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duration of the implied warranties for consumers. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages. Therefore, the above warranty limitations may not apply to you.

8. TECHNICAL SERVICES

Nevamar maintains trained sales personnel to servicing all sections of the country. Contact Nevamar Decorative Surfaces, One Nevamar Place, Hampton, South Carolina 29924

Phone: (803) 943-7200 or (800) 638-4380.

Website: www.nevamar.com