

Product Data Sheet

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Nudo - Endurex 505

Architectural Panels

Endurex 505 panels are insulated composite panels, primarily used within a frame or extrusion. The panels are composed of an insulating foam core sandwiched between aluminum clad stabilizers on the inside and outside of the panel. The stabilizers are a moisture resistant recycled thermoplastic fused between two pieces of aluminum. The aluminum surface may be either embossed or smooth. A 2lb EPS (expanded polystyrene) foam is the standard insulating core. Also available are “closed-cell” extruded polystyrene foam or a fire resistant polyisocyanurate foam. The panel is also used for curtain walls and may be referred to as either an In-Fill panel or a Storefront panel. Endurex 505 is provided with a .032” aluminum skin finished with either a Kynar paint or Anodized aluminum. Dozens of standard Kynar colors are available as well as five different Anodized finishes. The panel has a Class “A” rating for flame spread and smoke developed when tested per ASTM E-84.

Table 1 – Physical Properties – Endurex 505

	Nominal Thickness	Nominal Panel Weight	Colors	Sizes
Item				
Endurex 505	1” 2” 3” 4”	3.1 psf 3.6 psf 4.1 psf 4.6 psf	Dozens of standard Kynar colors or custom colors. Anodized aluminum in four different finishes.	4’ x 8’ 4’ x 10’ 4’ x 12’ Cut to Size

Table 2 – Typical Foam Core Properties – Endurex 505

Type of Foam	Characteristics	R-Value Per Inch	Density
Expanded Polystyrene (EPS)	Lightweight - Most Affordable	4.8	2 Pound
Extruded Polystyrene (Closed-Cell)	Moisture Resistant and More Rigid	5.0	N/A
Polyisocyanurate (ISO)	Higher Fire Rating and R-Value	7.0 – 7.5	N/A

Typical Applications

As an exterior panel primarily used in a window frame, curtain-wall or storefront. The panel is generally glazed into the window channel in place of glass. Often used on schools, office buildings, retail stores, hi-rise apartments & commercial buildings.

Features

The Kynar paint finish comes in dozens of standard colors and almost any custom color. Anodized aluminum is available in Clear, Bronze, Extra Dark Bronze, Champagne and Black. The recycled solid thermoplastic core is water resistant, impact resistant and rigid. By choosing from the three insulating foams offered, and the foam thickness, an insulating value of up to R-30 can be reached.

Cut-To-Size

The Endurex 505 can be ordered in sizes cut to user provided dimensions. Nudo Products, Inc. offers optimization services but does not calculate take-offs.

Storage

Panels should always be stored flat on a smooth surface above the ground. A pallet with a smooth piece of plywood beneath the panels is best to avoid any warping or waviness. As with most building products, it is best to acclimate the panel on-site 48 hours before installation. Although the panels are moisture resistant, be sure panels are kept dry prior to installation to insure water is not trapped under the protective film.

Handling

Although Endurex 505 panels are rigid and have good impact resistance, the aluminum faces can be scratched or dented if not handled properly. Do not drop or bump the panel on its edges as this may cause unwanted bending of the aluminum. Do not slide the panel edges or face over rough surfaces that may cause bending or scratching. Pick panels up when handling as compared to sliding panels across each other. Sliding panels may cause scratches on one or both face.

Optimization

When performing panel optimizations for the purpose of cutting panels to size, always check to insure if the surface finish is "directional". Some finishes require the panels to be installed so all panel surfaces run the same direction.

Fabricating

Note: Use protective eyewear such as goggles or safety glasses, cover your nose and mouth with a filter mask when cutting Endurex 505.

Always position the panel so the saw blades enter the exterior side first to avoid chipping and damage.

Cutting: Use a 72-tooth circular saw with a carbide tipped blade.

Cleaning & Maintenance

The Endurex 505 requires almost no maintenance. If the surface does need to be cleaned, use a mild cleaning detergent with water.

Tolerances

Thickness: + or - 1/16"
Width: Plus 0", Minus 1/8"
Length: Plus 0", Minus 1/8"
Square: + or - 1/4"

Warranty

Endurex 505 has a 5 Year Warranty on the panel and a 20 Year Warranty on either the Kynar paint finish or Anodized aluminum finish.

We believe all information provided is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, the user assumes all risks. Nothing herein shall be considered as a recommendation for use that infringes on valid patent or as extending a license under valid permit.

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