



Noble® Select | NS

Product:

Noble Select is an all-composite, wood-free exterior panel with superior surface and weathering performance. CCI uses a patent pending system to make the high-gloss, high-performance panel. The all-composite panel is comprised of various layers of high-performance gel-coat reinforcement and resins.

Purpose:

The panel is an increasingly popular exterior finish choice for many Class A, fifth wheel, and travel trailer manufacturers. The Noble Select panel is designed to be painted on with any color. Noble Select High Strength (substrate C85) is specifically used for free-hung assembly processes.

Table One: Physical Properties

Typical Values				
Property	NS E85 0.155"	NS D85 0.185"	NS C85 0.200"	Test Method
Flexural Strength	14.3 x 10 ³ psi 99 MPa	14.7 x 10 ³ psi 101 MPa	15.7 x 10 ³ psi 108 MPa	ASTM - D790
Flexural Modulus	0.69 x 10 ⁶ psi 4757 MPa	0.71 x 10 ⁶ psi 4895 MPa	0.80 x 10 ⁶ psi 5516 MPa	ASTM - D790
Bending Stiffness	214 lb-in 24.2 N-m	310 lb-in 35.0 N-m	583 lb-in 65.8 N-m	Calculated
Tensile Strength	7.8 x 10 ³ psi 54 MPa	8.2 x 10 ³ psi 57 MPa	8.9 x 10 ³ psi 61 MPa	ASTM - 638
Tensile Modulus	0.67 x 10 ⁶ psi 4620 MPa	0.77 x 10 ⁶ psi 5309 MPa	0.80 x 10 ⁶ psi 5516 MPa	ASTM - 638
Impact Strength (IZOD) **	11.02 ft-lb/in 0.60 J/mm	12.3 ft-lb/in 0.66 J/mm	13.2 ft-lb/in 0.70 J/mm	ASTM - D256
Coefficient of Linear Thermal Expansion	0.90 x 10 ⁻⁵ in/in/°F 16 µm/m/°C	0.90 x 10 ⁻⁵ in/in/°F 16 µm/m/°C	0.90 x 10 ⁻⁵ in/in/°F 16 µm/m/°C	ASTM - E228
Water Absorption	<1%/24hrs@77°F 25°C	<1%/24hrs@77°F 25°C	<1%/24hrs@77°F 25°C	ASTM - D570

** Un-notched

Table Two: Physical Properties

Product Code	Substrate / Laminate	Nominal Thickness	Nominal Weight	Finish	Length	Width
NS	E85 2.0 mm / 85 mil	0.155" 3.9 mm	0.85 lbs/ft ² 4.15 kg/m ²	Smooth	Max length of 50' 16.7 m	10" - 120" 0.254 mm - 3.05 m
	D85 2.7 mm / 85 mil	0.185" 4.7 mm	0.95 lbs/ft ² 4.60 kg/m ²			
	C85 2.7 mm / 85 mil	0.200" 5.1 mm	1.15 lbs/ft ² 5.62 kg/m ²			

SPECIFICATIONS

Crane Composites panels are manufactured in lengths and widths as required.

COMPOSITION

Reinforcement: Random chopped fiberglass roving.

Resin Mix: Modified polyester resin and inorganic fillers and pigments.

FINISHED PANEL QUALITY

Panels shall have smooth finish on the front side. Color shall be uniform throughout. Backside imperfections, which do not affect functional properties, are not cause for rejection.

Physical properties shall be as set forth in Table 1.

Dimensions shall be as specified on purchase order, subject to the following tolerances:

Width: $\pm 1/8''$ (± 3.2 mm)

Length: $\pm 1/8''$ (± 3.2 mm) up to 8' (2.4 m)

$\pm 1/4''$ (± 6.4 mm) up to 40' (12.2 m)

Squareness: $\pm 1/8''$ (3.2 mm) in 48" (1.2 m) of width

Disclaimer: Crane Composites, Inc. (called CCI hereafter) does not make any claims to the combustibility rating of the products listed on this data sheet. Not intended for interior applications.

FABRICATING RECOMMENDATIONS

Note: Protect your eyes with goggles; cover your nose and mouth with a filter mask; cover exposed skin when cutting CCI panels.

Hand Fabricating: Drilling—High speed drill bit (60° cutting angle, with 12°-15° clearance) or hole saw.

Stapling: Standard pneumatic stapler.

Cutting: Sheet metal shears or circular saw with reinforced carborundum or carbide-tipped blade.

Production fabricating: Use carbide-tipped tools. Straight cuts can be sheared (90° cutting edge with 0.002" [0.05 mm] clearance) or sawed. For irregular cuts, use die punch or band saw.

Painting preparation: To properly prepare the panel surface for painting, make sure the surface is clean, dry, and free from all oils, grease, silicones, dust, and other contaminants. Alkaline detergents or clean water may be used for this purpose. Sanding or roughening of the panel surface is recommended to achieve acceptable paint adhesion. Use 600 grit or finer sand paper or a 3M "Ultrafine" Scotch-Brite® pad should be used.

RV Cleaning Instructions: Available from CCI.

STORAGE REQUIREMENTS

Crane Composites panels are designed for peak performance prior to and after the panels have been applied. Careful handling during the manufacturing process is important. Avoid excessive clamping, dropping and scraping. Keep contents dry. Store indoors in a well ventilated area.

PLEASE NOTE THE FOLLOWING PRODUCT USE INFORMATION:

Products manufactured by CCI will provide a clean, aesthetically pleasing finished installation. However, by nature, fiberglass reinforced plastic panels may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation or lamination and original CCI skid tag/ticket number removed and retained. If any portion of material will not provide an acceptable appearance, CCI should be notified at once. Please report the non-conforming product utilizing the retained skid tag/ticket number. Upon verification of unacceptability, CCI will replace or refund the purchase price of the non-conforming product.

This product is not intended for Interior use that requires a Class C fire rating.

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Crane Composites is the manufacturer of Noble, Filon and a variety of other fiberglass reinforced plastic (frp) composite panels. Crane Composites has over 55 years of experience and is the recognized industry leader in frp applications.

We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, all risks are assumed by the user. Nothing herein shall be construed as a recommendation for uses which infringe on valid patents or as extending a license under valid patents.

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