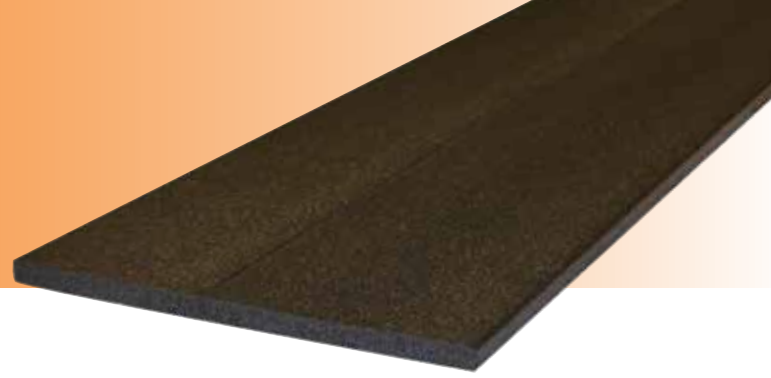


HERCULEAN™ STRUCTURAL FOAM

Co-Polymer Foam Core



Herculean™ is an innovative structural foam that can replace wood in boat building, transportation and recreational vehicles, construction and more. This revolutionary product can inherently withstand common elements that break down wood. Unlike wood, Herculean closed-cell foam does not splinter and is resistant to ultraviolet rays, moisture, mold, mildew, rot, and insects. Through our strategic partners' fiber reinforced offerings and lamination capabilities, Herculean foam acts as a key component of the TransCore™ composite "sandwich" panel, delivering an engineered solution as a replacement for wood-like products.

HERCULEAN™

Transfoamed by  NOMACO™

DESCRIPTION

Herculean can be used as a stand-alone structural foam or as a core material for laminates to provide high-strength structure in a variety of applications. Nomaco has the capability to provide extruded profiles, planks, and sheet stock in multiple thicknesses and densities, designed to performance specifications required. Nomaco can produce large, one-piece sheet stock with fabrication equipment for cut-to-size needs, providing our customers with a vast scope of design possibilities.

APPLICATIONS

Herculean is ideal for structural applications in industries such as marine, RV, tractor-trailer transportation, material handling, construction, and much more. All traditional thicknesses are available in planks or with welding capability to produce sheet stock in various different sizes and cut according to specification.

Features

- Closed-cell
- Fire resistant (FMVSS 302)
- UV resistant
- Surface temperature up to 135°C
- Waterproof
- Insulative
- Lightweight
- Chemical resistant
- Mold resistant
- Durable
- Impact resistant
- Recyclable
- Reusable
- Made in USA

ADVANTAGES



Resistant

- High mechanical resistance & low weight
- No water absorption
- High chemical resistance
- Water vapor & weather resistant



Simple

- Similar processing to wood, i.e. nailing, screwing, gluing
- One-piece panel



Strong

- High stiffness
- Multiple densities available for specified strength to weight ratio



Clean

- Environmentally friendly
- 100% recyclable

STRUCTURAL FOAM

PHYSICAL PROPERTIES - FOAM ONLY

PROPERTIES	TEST METHOD	UNITS	H140 14mm	H220 14mm	H80 19mm	H140 19mm	H220 19mm	H140 25mm
Density	ISO 845	kg/m ³	140	220	80	140	220	140
Compression strength @ 25%	ASTM D695	kPa	1383	2299	272	1250	3584	1391
Compression modulus	ISO 1922	kPa	21750	33000	4200	18000	58250	24200
Flexural strength @ 24°C	ASTM D1037	kPa	2335	3172	1475	2459	3430	1876
Screw Retention #10 Screw	ASTM D1037	N	269	504	135	420	930	546
Nail Retention	ASTM D1037	N	30	51	11	45	121	60
Flammability	FMVSS 302	Pass or Fail	Pass	Pass	Pass	Pass	Pass	Pass
Thermal Conductivity @ 24°C	ASTM D5930	W/mK	0.045	0.051	0.043	0.046	0.058	0.051
R-Value	ASTM D2844	Per Inch	3.4	2.8	3.4	3.2	2.5	2.8
Water Absorbtion	ASTM D3575	kg/m ²	0.51	0.17	.29	0.18	0.09	0.32