# I N N O V A T I O N P R O V I D E R S INNOVATION PROVIDERS



## **TOOLING SOLUTIONS**



## DUNA-USA MANUFACTURES A VARIETY OF LOW AND HIGH-TEMPERATURE PRODUCTS FOR THE AEROSPACE, COMPOSITE, ARCHITECTURAL, MODELING, AND DESIGN INDUSTRIES.

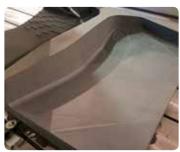
## Our tooling solutions include products for:

- Prototyping
- Vacuum Forming
- High-Temperature Prepreg Tooling
- Composite Lay-up Tooling
- Master Plugs and Molds
- Tool Proofing/CAD Design Verification









## **TOOLING BOARD**

## **CORAFOAM®** Series Polyurethane Tooling Boards

Easy to machine polyurethane foam for prototyping, model making, composite lay-up tooling, vacuum forming, and tool proofing applications. See back for sizing chart.

- Tightest cell structure on the market
- Densities including 4, 6, 8, 10, 15, 20, 28, and 31 lb/ft<sup>3</sup> (see back for available sizes)
- Will produce chips instead of dust
- Grain-free consistency
- Ultra-smooth surface makes for easier sealing/finishing

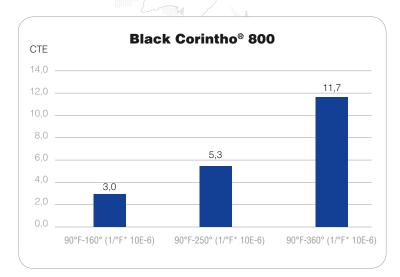




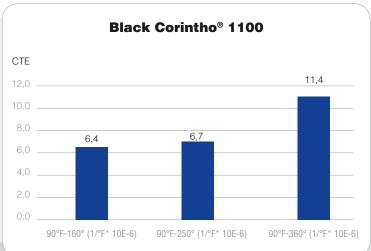
## **CORINTHO®** Series Polyurethane Tooling Boards

Our flagship line of high and low temperature boards for high-temperature curing prepregs, model making, prototyping, vacuum forming and CAD design verification. See back for sizing chart.

- BLUE CORINTHO® 700: 43.6 lb/ft³, can withstand up to 248°F.
- BLUE CORINTHO® HT 700: 43.6 lb/ft³, can withstand up to 400°F.
- BLACK CORINTHO® 800; 50 lb/ft3, Ultra-low CTE, high thermal conductivity, can withstand up to 400°F.
- BLACK CORINTHO® 1100, 68 lb/ft³, Ultra-low CTE, high thermal conductivity, can withstand up to 400°F.

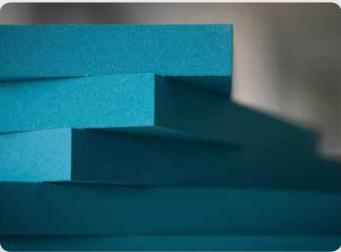












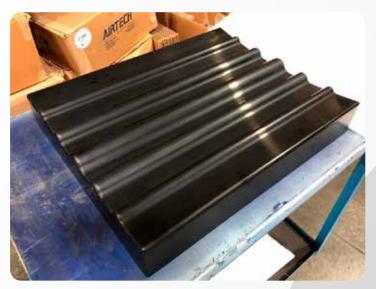
## **SEALER**

## **DUNAPOX™ SEA 125 High-Temp Epoxy Sealer (400°)**

High-temp sealer designed to seal polyurethane, epoxy and graphite to achieve vacuum integrity and an ultra-smooth, protective surface. Available in gallon kits.

- Can withstand up to 400°F
- Can be sprayed, brushed or rolled
- Cures to a tough, Shore D 85 protective surface
- Designed to expand and contract with the tool under temperature
  Available in both blue and black coloration







## **ADHESIVE**

## **DUNABOND Line of Polyurethane Adhesives**

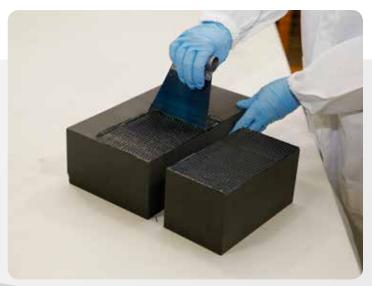
Single-part, waterproof, flexible polyurethane adhesives designed for structural and panel bonding of polyurethane, wood, metal, PVC, concrete, and almost any material. Available in 35 oz. bottles.

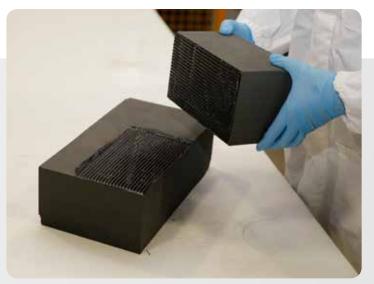
**DUNABOND 3206**: Working time of 15-18 minutes **DUNABOND 3140**: Working time of 35-40 minutes

#### **DUNAPOX™** Epoxy Adhesive

High-temperature epoxy adhesive for aerospace, automotive and other applications. Available in gallon kits.

**DUNAPOX™ AD 135**: High temperature (400°), thixotropic epoxy adhesive designed to expand and contract with the tool under temperature without cracking/degradation.









## **DENSITY AND SIZING CHART**

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Product	Density (lb/ft³)	Sheet Size	Thickness	CTE (1/°F-10E-6)	Operating Temp. (°F)	
CORAFOAM® U 40	4	48" x 96"	Up to 24"	32.77x10 <sup>-6</sup>	-300/+175	
CORAFOAM® U 60	6	48" x 96"	Up to 24"	27.75x10 <sup>-6</sup>	-300/+175	
CORAFOAM® U 80	8	48" x 96"	Up to 18"	27.75×10 <sup>-6</sup>	-300/+175	
CORAFOAM® U 100	10	48" x 96"	Up to 16"	27.75×10 <sup>-6</sup>	-300/+175	
CORAFOAM® U 150	15	48" x 96"	Up to 12"	27.75x10 <sup>-6</sup>	-300/+175	
		48" x 120"	Up to 12"			
		48" x 144"	Up to 12"			
		60" x 96"	Up to 9"			
		60" x 120"	Up to 9"			
		60" x 144"	Up to 9"			
CORAFOAM® U 200	20	48" x 96"	Up to 8"	24.98x10 <sup>-6</sup>	-300/+175	
CORAFOAM® U 280	28	48" x 96"	Up to 8"	24.98×10 <sup>-6</sup>	-300/+175	
CORAFOAM® U 310	31	48" x 96"	Up to 6"	25x10 <sup>-6</sup>	-300/+175	
BLUE CORINTHO® 700	43.6	59" x 19.68"	Up to 3.93"	27.75×10 <sup>-6</sup>	Up to 248°F	
BLUE CORINTHO® HT 700	43.6	59" x 19.68"	Up to 3.93"	22.55x10 <sup>-6</sup>	Up to 400°F	
BLACK CORINTHO® 800	50	59" x 19.68"	Up to 3.93"	3x10 <sup>-6</sup>	Up to 400°F	
BLACK CORINTHO® 1100	68	59" x 19.68"	Up to 3.93"	6x10 <sup>-6</sup>	Up to 400°F	

<sup>\*</sup>CTE values are based on specific temperature windows. Please contact us for more information.

## **ADDITIONAL PRODUCTS**

## **POLYISOCYANURATE FOAMS**

Rigid foams for thermal insulation, known for their low thermal conductivity values and high insulation properties. The insulation properties are best utilized for cold chain applications.

- Closed cell, will not absorb water
- Used to insulate cryogenic pipelines, tanks, and pipe and flange applications

Product	Density (lb/ft³)	Block Size	Thickness	Operating Temp. (°F)
CORAFOAM® P 20	2	48" x 36"	27"	-320/+300
CORAFOAM® P 25	2.5	48" x 36"	27"	-320/+300
CORAFOAM® P 30	3	48" x 36"	27"	-300/+258
CORAFOAM® PB 40 M1 HC	2.5	48" x 36"	27"	-310/+248
CORAFOAM® PB 45 M1 HC	2.8	48" x 36"	27"	-310/+248
CORAFOAM® PB 50 M1 HC	3	48" x 36"	27"	-310/+248
CORAFOAM® PB 55 M1 HC	3.4	48" x 36"	27"	-310/+248

<sup>\*</sup>All insulation products also available in 108" length

### **DUNAPOL™C POURABLE FOAMS**

Rigid, expanding polyurethane foams for cold shoe/pipe support, core, prop making, scenic and theming applications. Have similar machining characteristics to rigid CORAFOAM® HDU.

- Can be cut with anything that will cut wood, including hand tools
- 1:1 mix ratio
- Will produce chips instead of dust when cut with CNC router
- Non-toxic (dust mask recommended)

Product	Free Rise Density (lb/ ft³)	Applied Density (lb/ft³)	Mix Time	Size
DUNAPOL™C 045 L	2.8	4	43 seconds	55 gal. drums, totes
DUNAPOL™C 160 L	6.9	11.2	60 seconds	55 gal. drums, totes
DUNAPOL™C 224 L	9.7	16.2	60 seconds	55 gal. drums, totes
DUNAPOL™C 320 L	15	22.5	60 seconds	55 gal. drums, totes

<sup>\*</sup>All pourable products also available in custom cream time formulations.



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