

# **BLACK CORINTHO® 1100**

Rev. N° 6 - Date 01/14/2019

## Description

Polyurethane board for modelling

Good dimensional stability. Low coefficient of thermal expansion.

High temperature resistance in relationship to normal PU boards.

## **Typical characteristics**

Color			Black
Nominal density	ASTM D1622/EN 1602/EN ISO 845	lb/ft³ (kg/m³)	68.7 (1100)
Compressive strength – Parallel (74°F/23°C)	ASTM D1621/EN 826	psi (MPa)	5801 (40)
Compressive modulus - Parallel (74°F/23°C)	ASTM D1621/EN 826	psi (MPa)	78900 (544)
Compressive strength – Parallel (356°F/180°C)	ASTM D1621/EN 826	psi (MPa)	3625 (25)
Compressive modulus - Parallel (356°F/180°C)	ASTM D1621/EN 826	psi (MPa)	60915 (420)
Flexural strength - Parallel, Met.I (74°F/23°C)	ASTM C203/EN 12089	psi (MPa)	2465 (17)
Flexural modulus - Parallel (74°F/23°C)	ASTM C203/EN 12089	psi (MPa)	237862 (1640)
Max. flexural strain, Met.I (74°F/23°C)	ASTM C203/EN 12089	Length/length	0,014
Thermal conductivity - Initial (75°F/24°C)	ASTM C518/ASTM C177/EN 12667	BTU·in/hr·ft²·°F (mW/mK)	2.63 (380)
Coefficient of linear thermal expansion CTE (86/158°F, 30/70°C)	ASTM E228/EN13471	1/°F·10E-6 (1/K·10E-6)	6* (11*)
Coefficient of linear thermal expansion CTE (86/248°F, 30/120°C)	ASTM E228/EN 13471	1/°F·10E-6 (1/K·10E-6)	7* (12*)
Coefficient of linear thermal expansion CTE (86/356°F, 30/180°C)	ASTM E228/EN 13471	1/°F·10E-6 (1/K·10E-6)	11* (20*)
Fire reaction	DIN 4102	Class	B2
Fire reaction (maximum extent of burnt length)	EN ISO 3582	inches (mm)	<0.39 (<10)
Fire reaction (extinguishing time)	EN ISO 3582	S	<10
Fire reaction	UL 94-Horizontal Burning	Class	HBF
Fire reaction	UL 94-Vertical Burning	Class	V-0
Fire reaction	FAR 25.853A		12"/60" Passed
Fire reaction (blocks, sheets)	EN 13501/EN ISO 11925	Euroclass	E
Hardness	ASTM D2240/EN ISO 868	Shore D	60
Operating temperature		°F (°C)	+32/+400 (0/+200)
Glass transition temperature (Tg)	ASTM E1356/EN ISO 113572	°F (°C)	+464 (+240)
Dimensional stability (250°F/120°C) - Length/Width - Thickness	ASTM D2126/EN 1604	%	0,10; -0,10; -0,15

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Dimensional stability (275°F/135°C) - Length/Width -	ASTM D2126/EN 1604	%	-0,10; -0,10; -0,15
Thickness			
Dimensional stability (356°F/180°C) - Length/Width -	ASTM D2126/EN 1604	%	-0,20; -0,20; -0,25
Thickness			

#### Handling notice

The product may undergo a color change that does not affect the characteristics.

Terms "parallel" and "perpendicular" are referred to slab/specimen/block thickness direction.

In some applications polyurethane may present fire risks, e.g. if exposed to fire or to excessive heat in presence of oxygen or air, including when welding or cutting with torches.

It is the Customer's responsibility to determine if product described herein is appropriate for Customer's purposes and end-use and to ensure that working place, storage and disposal practices are in compliance with any applicable law.

#### Remarks

For usage information, personal protective equipment, transport, storage and disposal of waste it is essential to refer to the Material Safety Data Sheets.

Values shown are determined from laboratory tests and obtained under controlled conditions; they outline typical characteristics and they do not constitute anyhow a sales specification; they are based on DUNA-USA's current knowledge and experience of the products when properly stored, handled and applied in accordance with our recommendations.

This Technical Data Sheet cancels and replaces any other previous issue.

DUNA-USA does not any accept responsibility for incorrect use of its products as it cannot ensure the correct methods of application have been followed; we therefore specifically disclaim any liability for consequential or incidental damages of any kind, including lost profits.

DUNA-USA reserves the right to change the data in this information sheet without any prior notice.

<sup>\*</sup>Measurement conducted at the Laboratory of Thermal Analysis c/o Engineering Department "Enzo Ferrari" (University of Modena and Reggio Emilia)