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## Advanced Materials

# RenShape<sup>®</sup> 473

### FIXTURE BOARD

#### DESCRIPTION :

RenShape<sup>®</sup> 473 board is a light gray, syntactic polyurethane material. This product has a density of approximately 50 lb./ft.<sup>3</sup>. RenShape<sup>®</sup> 473 machines easily and finishes to a good surface. Features of RenShape<sup>®</sup> 473 board include:

<b>ADVANTAGES</b>	<ul style="list-style-type: none"> <li>• Low density</li> <li>• Good dimensional stability</li> <li>• Easy to machine</li> </ul>
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<b>ACCESSORIES</b>	<b>Matched Epoxy Adhesive</b>	<b>Polyurethane Repair Paste</b>
	Ren-Weld <sup>®</sup> 103	RenCast <sup>®</sup> 6426-1/DT 081 Filler

ADVANTAGES*	Test Method	Test Values
Color	Visual	Light Grey
Density, lb./ft. <sup>3</sup> (g/cm <sup>3</sup> )	ASTM D-792	50 (0.8)
Hardness, Shore D	ASTM D-2240	70-75
Ultimate Flexural Strength, psi (MPa)	ASTM D-790	4,000 (27.6)
Flexural Modulus, psi (MPa)	ASTM D-790	200,000 (1,379)
Ultimate Tensile Strength, psi (MPa)	ASTM D-638	2,500 (17.2)
Tg by DMA, E", °F(°C)	ASTM D-4065	212(100)
Compressive Strength, 0.2% offset, psi (MPa)	ASTM D-695	3,500 (24.1)
Compressive Modulus, psi (MPa)	ASTM D-695	210,000 (1,448)
Coefficient of Thermal Expansion -22° to 86°F, in/in/°F -30° to 30°C, in/in/°C	ASTM D-3386	30 x 10 <sup>-6</sup> 54 x 10 <sup>-6</sup>

Tested @ 77°F (25°C) unless otherwise noted.

**NOTE :** These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed in establishing product specifications, please consult with our Quality Control Department.

MACHINING	Roughing Speed	Roughing Feed	Finishing Speed	Finishing Feed
	1,600 RPM	40 IPM (101cm/min.)	10,000 RPM	100 IPM (254cm/min.)

**Cutters :** **Roughing** 1 in. (2.5cm) Hog Ball End Mill 4-Flute HS Steel 8% cobalt  
**Finishing** 5/8 in (16mm) Ball End Mill 2-Flute Carbide  
**Depth** Roughing varies from 0.25 in. to 2.5 in. (6mm to 6.35cm) with a 40% stepover  
 Finishing depth is 1/8 in. (3mm) leaving a 0.002 in. (0.05mm) scallop height

**These machining parameters are represented as starting points.** Cutter type and material, spindle speed, feed rate, machine power and rigidity all affect machining results. User must determine the best parameters for specific situations.



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**PACKAGING :**

RenShape® 473 board is available in a limited number of standard combinations of 2 in., 4 in., and 6 in. (5cm, 10cm, 15cm) thicknesses, width of 16 in. (40cm) and length of 60 in. (152cm). Boards are finished on top and bottom faces and on all edges. Please contact Customer Service (800) 367-8793 for currently available options, price and availability.

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**STORAGE :**

RenShape® 473 boards should be stored flat in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+35.6°F and 104°F). Under these storage conditions, the shelf life is 10 years. The product should not be exposed to direct sunlight.

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**PRECAUTIONARY STATEMENT :**

Huntsman Advanced Materials Americas LLC maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

**First Aid!**

Refer to MSDS as mentioned above.

**KEEP OUT OF REACH OF CHILDREN**

**FOR PROFESSIONAL**

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