

RenShape® 5035

Product Description

RenShape® 5035 board is a peach colored, syntactic polyurethane with a low density of approximately 28 lbs./ft.3. The board is easy to machine and features a good surface finish. RenShape® 5035 board can be hand carved as well as CNC machined for the production of visual, styling and temporary master models architectural master models, prototypes. It is also well suited for CAD design verification. RenShape® 5035 board features benefits including:

Key Features

- Easy to hand-work and machine
- Suitable for milling with fast cutting speeds
- Non-abrasive
- Good edge definition
- Good dimensional stability

Typical Properties

Typical Properties*		Test Method
Color	Peach	Visual
Density (lb./ft3)	28	ASTM D-1622
Hardness, Shore D	48	ASTM D-2240
Compressive Strength Parallel (70°F) psi	2,233	ASTM D-1621
Compressive Strength Perpindicular (70°F) psi	2,146	ASTM D-1621
Compressive Modulus Parallel (70°F) psi	58,015	ASTM D-1621
Compressive Modulus Perpindicular (70°F) psi	49,312	ASTM D-1621
Flexural Strength Parallel (70°F) psi	2,988	ASTM C-203
Flexural Modulus Parallel (70°F) psi	82,671	ASTM C-203
Tensile Strength, psi	1,523	ASTM D-1623
Heat Distortion Temp.,Met. A	136 -145 °F	ASTM D-648
CTE	ASTM D-696	40 x 10 ⁻⁶ °F 70 x 10 ⁻⁶ °C
Service Temperature °F**	Internal	-300/+176

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

** Actual service temperature limits vary considerably based on actual conditions and on client tolerance, contact us for further information.

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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 Product Management Department

MACHINING	Roughing Speed	Roughing Feed	Finishing Speed	Finishing Feed
	2,500 RPM	200 IPM (508cm/min)	15,000 RPM	200 IPM (508cm/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.

Storage

RenShape® 5035 should be stored in a dry place. Store boards flat in original cartons at temperatures between 2°C - 40°C (36°F - 104°F). Under these storage conditions the shelf life is 10 years from date of manufacture. The product should not be exposed to direct sunlight.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) 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 SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

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Main Offices:

Huntsman Corporation
10003 Woodloch Forest Dr
The Woodlands, TX 77380
888-564-9318

Huntsman Advanced Technology Center
8600 Gosling Rd.
The Woodlands, TX 77381
281-719-7400

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