



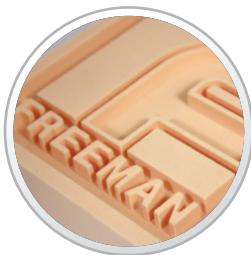
CORAFOAM® URETHANE BOARDS

▶ CORAFOAM® Low Density Foam Boards offer excellent workability with a broad range of densities to be used in a variety of applications, such as modeling, aerospace, composite, architectural and design industries, signage and low density substrates. These boards lead the industry in providing the perfect balance of machinability, surface finish, edge definition, stability, and durability, all available from the largest modeling board distributor in the world, Freeman.



CORAFOAM® HPT-35

This board features a very low density of 2 lb./ft.³. It is our most economical and lightest weight foam styling board, excellent for machining lightweight styling and appearance models, plugs, and molds.



CORAFOAM® U40

Formerly RenShape 5014, this board features a very low density of 4 lb./ft.³. It is our most cost-effective foam styling board, excellent for machining lightweight styling models and appearance models.



CORAFOAM® U60

Formerly RenShape 5015, this board features a 6 lb./ft.³ density for cost-effective and lightweight styling models. It is excellent for machining lightweight styling models and appearance models.



CORAFOAM® U80

Formerly RenShape 5018, this board is a rigid board with an 8 lb./ft.³ density for cost-effective, lightweight styling and appearance models.



CORAFOAM® U100

Formerly RenShape 5020, this board offers a 10 lb./ft.³ density. It is a very cost-effective board, but still produces a good machined surface finish.



CORAFOAM® U150

Formerly RenShape 5025, this board features a medium density of 15 lb./ft.³ and offers a better surface finish than CORAFOAM® U100.



CORAFOAM® U200

Formerly RenShape 5030, this sienna-colored board features a 20 lb./ft.³ density. It machines easily and produces a very good surface finish. Features include a moderate price, excellent edge definition, workable by hand or machine, and it is non-abrasive to cutting tools.



CORAFOAM® U280

Formerly RenShape 5035, this 28 lb./ft.³ board can be hand carved or CNC machined. It is non-abrasive, and offers good surface finish and edge definition. Ideal for master models, prototypes, and CAD design verification.



CORAFOAM® U310

Formerly RenShape 5045, this brown, 31 lb./ft.³ density board features the best edge definition and most superior surface finish available in a foam styling board.

General Specifications

	Hardness Shore D	Density g/cc	Density lb./ft. ³	Tensile Strength (psi)	Compressive Strength (psi)	Compressive Modulus Elasticity (psi)	Flexural Strength (psi)	Flexural Modulus (psi)	Glass Transition Temp (°F)	Coefficient Thermal Expansion (in./in./°F)	Color
Foam Boards											
CORAFOAM® HPT-35	-	0.035	2.2	68.2	39.2	-	-	-	-	-	Lt. Yellow
CORAFOAM® U40	-	0.064	4	105	95	-	116	-	-	33.0 x 10 ⁻⁶	Caramel
CORAFOAM® U60	-	0.09	6	160	148	-	190	-	-	27.75 x 10 ⁻⁶	Green
CORAFOAM® U80	-	0.13	8	290	230	-	310	-	-	28.0 x 10 ⁻⁶	Lt. Yellow
CORAFOAM® U100	27	0.16	10	350	280	-	350	-	-	28.0 x 10 ⁻⁶	Lt. Gray
CORAFOAM® U150	25	0.24	15	623	638	-	928	-	-	27.75 x 10 ⁻⁶	Green
CORAFOAM® U200	35	0.32	20	928	1,044	-	1,450	-	-	24.98 x 10 ⁻⁶	Peach
CORAFOAM® U280	48	0.45	28	1,523	2,233	-	2,988	-	-	25.0 x 10 ⁻⁶	Peach
CORAFOAM® U310	42	0.48	31	1,250	2,200	-	2,400	-	-	25.0 x 10 ⁻⁶	Brown
ASTM	D-2240	D-792	D-792	D-638	D-695	D-695	D-790	D-790	D-4065	D-3386	-

Matched Adhesives & Repair Materials Guide

● = Ideal ◐ = Acceptable ○ = Not recommended

Application	HPT-35	U40	U60	U80	U100	U150	U200	U280	U310
CNC Proofing	●	●	●	●	●	●	●	●	●
Models (Architectural, styling, temporary)	●	●	●	●	●	●	●	●	●
Low-density Substructure	●	●	●	●	●	●	●	●	●
Tooling Aids & Fixtures	○	○	○	○	○	○	○	○	○
Foundry Patterns	○	○	○	○	○	○	○	○	◐
Vacuum-Form Molds	○	○	○	○	○	○	○	○	◐

Machining Parameters

	Roughing Speed (RPM)	Roughing Feed (IPM)	Finishing Speed (RPM)	Finishing Feed (IPM)
CORAFOAM® HPT-35	2,500	200	15,000	200
CORAFOAM® U40	2,500	200	15,000	200
CORAFOAM® U60	2,500	200	15,000	200
CORAFOAM® U80	2,500	200	15,000	200
CORAFOAM® U100	2,500	200	15,000	200
CORAFOAM® U200	2,500	200	15,000	200
CORAFOAM® U150	2,500	200	15,000	200
CORAFOAM® U200	2,500	200	15,000	200
CORAFOAM® U280	2,500	200	15,000	100
CORAFOAM® U310	2,500	200	15,000	100

Cutters

Roughing: 1" Ball End mill, 4-Flute, Carbide

Finishing: 5/8" Ball End mill, 2-Flute, Carbide

Depth

Roughing: Varied from 1/4" to 2-1/2" deep with 40% stepover

Finishing: 1/8" deep leaving 0.002" scallop height

Please note: These machining parameters are starting points.

Cutter type, material, spindle speed, feed rate, machine power, and rigidity all affect machining results. User must determine best parameters for specific applications.

Matched adhesives and repair materials for CORAFOAM® Urethane Foam Boards include Repro Light, Repro Ultra Light, Dunabond 3206, and TUF-CARV. See complete product specifications on our website.

For part numbers, technical documents, and ordering, visit our website at www.FreemanSupply.com.



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Your Freeman Customer Number can be found on any invoice.

