

# HULL CORE COMPARISON

TYPE	EXAMPLES	WHO IS USING IT?	PROS	CONS
PLYWOOD	Brick cut 4" x 4" marine grade plywood	Hunter (deck)	Inexpensive, good for areas of high loading	Heavy, allows water to migrate
BALSA	Baltek SB 100, DIAB Probalsa, Nida-Core Balsalite	Catalina (deck), Tartan (deck)	Inexpensive, strong, stiff, resistant to heat and compression	Has the potential to absorb water, rot
STYRENE ACRYLONITRILE FOAM	SP Systems Corecell	Tartan, C&C, Morris, J-Boats	Tough foam with good mechanical properties, compatible with epoxy pre-preg	Higher cost
CROSS-LINKED PVC FOAM	DIAB Divinycell HT, Klegecell TR, Airex C70	Sabre Yachts, Hallberg-Rassy	High rigidity, heat resistant, resists water absorption	Lower relative impact resistance, some grades not pre-preg friendly
LINEAR-LINKED PVC	Airex R63	Shannon Yachts	Long history in hulls, impact resistance, resists fatigue, absorbs energy	Original linear PVC foam can be softened by heat, susceptible to styrene
HONEYCOMB	Nomex, Nidacore	Racing trimarans, America's Cup boats, custom boats	Extremely light, strong, potential for high elongation	Bonding area (in some types) vulnerable to fatigue, difficult to treat edges, expensive