

## Important Technical Characteristics

1. **Minute elastic cell structure** — This provides fatigue resistance, as well as excellent vibration dampening and energy-absorbing properties.

2. **Excellent flotation values**, ranging from 50 to 58 lbs./cu. ft. This feature, coupled with high strength, thermal and sound insulation, has led to rapidly-expanding application of CONTOURKORE in the marine industry.

3. **Economy** — A low-cost, CONTOURKORE-cored sandwich has the greatest strength per pound ratio of any lightweight material. In hand-layup, reinforced plastic molding operations, CONTOURKORE minimizes or eliminates supplementary stiffeners (ribs, stringers, etc.) and reduces the amount of higher cost fiberglass and resin normally required to obtain similar stiffness, strength and rigidity. Labor savings also result from faster installation and rapid mold turnover.

4. **Impact resistance** — End-grain CONTOURKORE has excellent resistance to impact with compressive strengths up to 2,500 psi. As a solid core material, CONTOURKORE provides uniform support in sandwich construction, and thus resists high compressive and/or impact loads by absorbing and distributing such loads.

5. **Increased stiffness in FRP structures** — CONTOURKORE sandwich structures will withstand substantially greater bending loads than all-glass laminate structure of equivalent cost. Tests of a straight fiberglass laminate vs. a CONTOURKORE core with fiberglass facings have demonstrated that maximum loads applied to the cored section are approximately 9 to 10 times those which can be applied to the uncored laminate. Deflection is **reduced** by more than 280% in the cored section, with **nearly 10 times the load** applied to the all-glass laminate.

6. **Moisture resistance** — CONTOURKORE, because of its end-grain cell construction, will not transmit moisture across the grain. If the sandwich is punctured, moisture is limited to the damaged area.

Now that you have read all about CONTOURKORE and its amazing qualities, we're sure you will insist that your next boat be built as a CONTOURKORE sandwich — hull, decks, cabin tops, bulkheads, and transoms.

If your dealer's boats do **not** include CONTOURKORE, ask him why they don't. When you invest a lot of dollars in a boat, you want the lightest, strongest, best insulated, longest-lasting craft on the market.

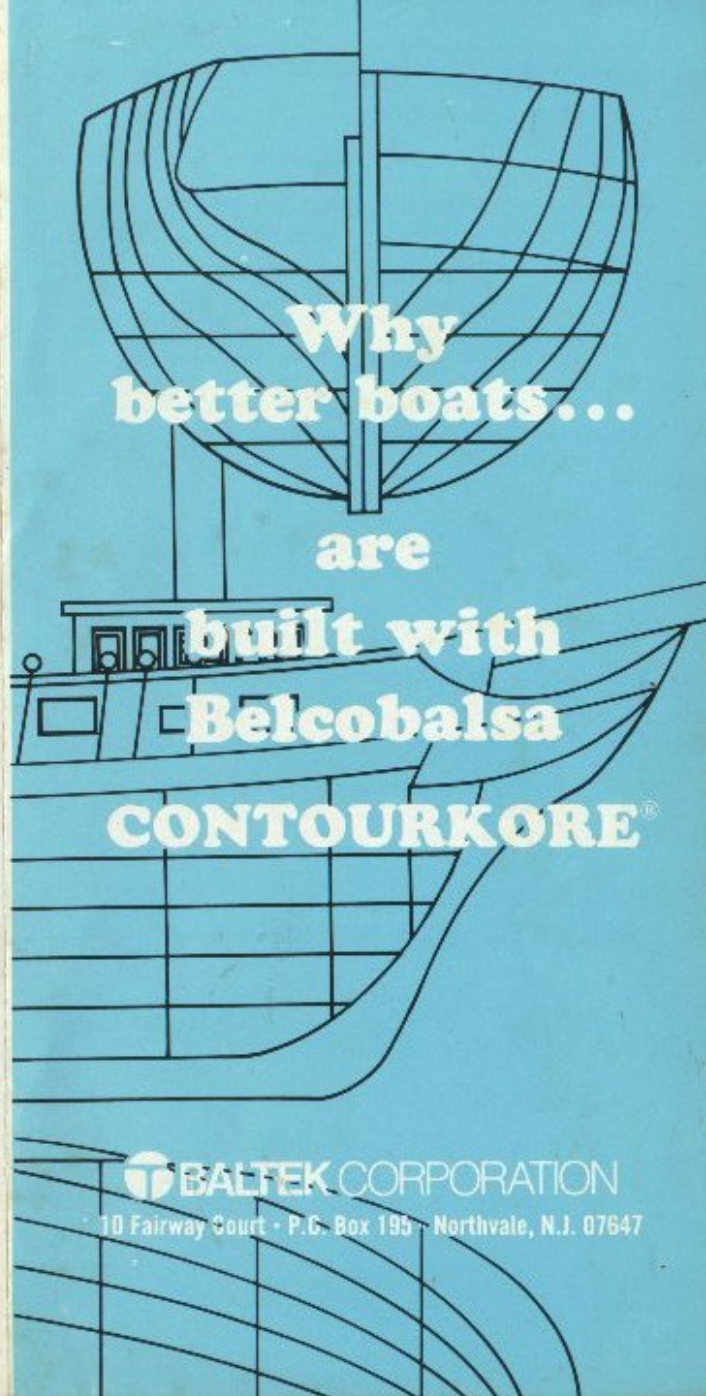
The only way you can get these qualities is to **make sure** that CONTOURKORE qualities are built into your next boat.

CONTOURKORE® is covered by patents issued by the United States, Canada, England and France.



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Why better boats...

are

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## What is a CONTOURKORE® sandwich?

A structural sandwich panel consists of strong, thin facings or skins (such as reinforced fiberglass) on either side of a low-density core material. In the 19th Century the concept of "removing material doing the least work" was developed and led to the I-beam.



A sandwich panel is an I-beam, with the skins of the sandwich serving the same functions as the flanges of an I-beam. The high-density web of the I-beam, however, is replaced by a low-density continuous core in a structural sandwich.

**Objective:** To space the strong, thin facings or skins far enough apart to assure a stiff structure. The core must be stiff enough and strong enough to hold the facings flat by means of a bonding material (adhesive) and have adequate shearing resistance.

The lowest cost, lightest weight, highest strength core material is CONTOURKORE, a product of Baltek Corporation. CONTOURKORE is a blanket formed of small, end-grain balsa blocks attached to an open-weave fiberglass scrim . . . the ideal core material for reinforced plastic laminates in marine applications.

## Where is a CONTOURKORE® sandwich used in a boat?

In thousands of both sail and power boats BELCOBALSA CONTOURKORE is used by more than 300 manufacturers in decks, hulls, transoms, canopies, cabin walls, and any other areas where strength and lightweight are critical, where space is at a premium, and heat and sound insulation are distinct advantages.

## Superior Performance

Unlike composite, matted or synthetic materials, BELCOBALSA CONTOURKORE combines the unique fiber arrangement and cell structure of a natural wood product to offer exceptional rigidity and strength. Balsa is also the world's lightest commercial wood, averaging less than 9 lbs./cu. ft. — or 1/2 the weight of the lighter common domestic species. CONTOURKORE's natural cell structure and buoyancy properties will support more than 55 pounds dead weight per cubic foot. Through scientifically controlled kiln drying and its inherent properties and inertness, CONTOURKORE offers stability of product and long service life. Bonding to plastic skins is positive, with no entrapment of air. BELCOBALSA CONTOURKORE is also completely drapable and fits easily to all contours, such as a shaped hull.

This sleek, luxurious fiberglass 50-foot motor launch has gone from original all-fiberglass molds (heavy, unwieldy, and very thick) to CONTOURKORE sandwich molds for a rigid, lightweight, non-yielding shape. The entire top deck is one sandwich, saving higher cost fiberglass and eliminating the need for space-robbing stringers. Forward and aft bulkheads, cabin walls, transoms, and canopies are also sandwiched with CONTOURKORE.

The "Red Jacket," trophy-winning Canadian racing yacht, has a one-piece sandwich hull of CONTOURKORE and fiberglass skins . . . with the same construction in her decks. The excellent insulating qualities of CONTOURKORE help to prevent "sweating" (a highly desirable advantage, particularly when sailing in cold waters).

Specifying CONTOURKORE in outboards and small craft has been instrumental in extending structural warranties by boat builders, in addition to providing lower cost, light weight, increased stiffness, improved flotation, sound and vibration deadening.

