Our material is a unique closed cell, lightweight composite product, manufactured with cross-linked polymer foam and fiberglass, that offers high specific strength and toughness. The non-absorbent material is extremely durable, provides excellent bonding surface, has good impact strength, sound and thermal insulation, and is resistant to contamination. Offered in sheets or cut into parts, our material is built for lifetime performance, and is ideal for endless coring applications subjected to static and dynamic loads.

There are numerous suitable adhesives, sealants, paints, coatings and fairing compound products currently on the market that our customers have found to perform successfully with our coring material. We offer that information here; as well as hardware suggestions, techniques, and methods you may find helpful as you prep our Thermo-Lite Board® for your application.

**ADHESIVES AND SEALANTS**

Thermo-Lite Board® is non-absorbent, so water-based adhesives are not recommended. Best results are achieved with a polyurethane-based adhesive or sealant. We offer the listed contacts and their company products. Please consult them with your bonding questions. Qualification must be established on the user level.

SpaceAge Synthetics, Ltd. does not use, sell, distribute, or promote any brand of adhesive, sealant, paint, coating, fairing compound, or fastener hardware. This document is created for the purpose of listing those products that have proved to perform successfully in past customer applications. The user is solely responsible for evaluating and qualifying products applied to or used with our Thermo-Lite Board® to ensure they are fit for a particular purpose, and suitable for user’s method of application.

- **3M United States**
  Kevin Hooley
  Adhesives Sealants Marketing Manager
  651.733.8840 Cell
  kphooley@mmm.com
  www.3M.com

- **3M™ Contact Cements & Adhesives**: Scotch-Weld™ 94CA - Green
  3M™ Polyurethane Adhesives & Sealants: 500-Series
  3M™ Hybrid Adhesives & Sealants: 700-Series - Green Product
  3M™ Nitrile-Based Adhesive: Scotch-Weld™ 4491
  Ask about 3M’s environmentally-friendly products.

- **Sika Corporation**
  Shawn McNulty Sr., Marine Business Unit
  954.520.3578 Cell
  mcnulty.shawn@sika-corp.com
  Tony Gray
  Midwest Region Sales Manager
  Transportation & Components Business Unit
  574.361.8424 Tel
  gray.tony@sika-corp.com
  www.sikaindustry.com

- **Sika Marine Polyurethane Adhesives**: SikaFlex® 291, 291LOT, 292, 295UV
  2-Component Products:
  SikaForce® and SikaFast®
  Sika Transportation Polyurethane Adhesives:
  SikaFlex® 252, SikaFlex® 221,
  Hybrid Adhesive:
  SikaFlex® 552
  Please call for the appropriate Sika adhesive recommended for your application.

- **IPS Corporation**
  Karen Brock Amoah
  Sales & Marketing Mgr. Structural Adhesives
  600 Ellis Road
  Durham, NC 27703
  919.598.2400 Ext. 380 HQ Office
  Karen.Amoah@ipscorp.com
  www.ipscorp.com

- **Weld-On® Methacyrlate Adhesives**: SS300 Series
  SS1100 Series
  NEW Weld-On® adhesive testing performed with Thermo-Lite Board®.

- **Lord**
  866.567.3234
  www.lord.com

- **Gorilla Glue**
  800.966.3458
  www.gorillaglue.com

- **Lonseal**
  800.832.7111
  www.lonseal.com

- **Loctite Products**
  800.321.0253
  www.loctiteproducts.com

- **Henkel Australia PTY**
  300.88.555.6
  www.teroson.com.au

- **Forgeway, U.K. recommendation**: For bonding ‘Thermo-Lite Board’ where a ‘flexible’ bond is required, we recommend you prime the ‘Thermo-Lite Board’ using Formoa Premier PG and bond using Formoa 063 or Formoa 017FE.
  For bonding ‘Thermo-Lite Board’ where a ‘rigid’ bond is required, we recommend you prime the ‘Thermo-Lite Board’ using Formoa Premier PG and bond using Purok VX61

**Processing Thermo-Lite Board®**

All SpaceAge Synthetics’ products are manufactured by skilled employees under a Quality Management System that is registered to ISO 9001:2008, ensuring every tough sheet meets the highest approved international standards.
PAINTS AND COATINGS

When using paints and coatings with Thermo-Lite Board®, the best results are achieved with polyurethane-based products. We invite you to consult the listed contacts with your questions. Qualification must be established on the user level.

• For Paints, Please Contact:
  Sherwin Williams Company
  Mark Edmonds
  Great Lakes Regional Marine Specialist
  715.551.3899 Tel
  swrep5835@sherwin.com
  POLANE® SprayFil
  D61A23
  POLANE® S Plus
  Polyurethane Enamel

• Quantum Group
  Tony LaGrange, President
  780.458.3355 #224 Tel

• For Sound Damping Options, Please Contact:
  American Acoustics
  Ken Rodger
  720.635.1294 Tel

FAIRING COMPOUNDS

Lightweight and sand-able fairing compounds (epoxy putties, surface fillers) may be used to create a further refined and smoother surface on our products in prepping them for other paints, coatings, and surface finishes. Please contact the provided sources for those fairing compounds that have proved to perform well with our product.

• Akzo Nobel
  31.20.502.7555
  www.akzonobel.com
  AWL Grip Fairing Compound
  & Coatings

• 3M Bondo Corporation
  800.3M.Helps
  www.bondo.com
  Bondo Marine

FASTENER HARDWARE

Thermo-Lite Board® will accept standard tooling and hardware. We suggest through-bolting and up-sizing the washer/head diameter if possible. In comparrison to plywood, user must reduce the torque when fastening into the material. The fastener performance varies with fastener style, size, and torque as well as with product series and density. Hardware qualification must be established on the user level.

Reputable Bus OEM’s and Transit Authorities world-wide use Thermo-Lite Board® in the flooring of their public transit buses. Here, they share fastener and installation methods:

FASTENER/ADHESIVE

1. Floor screws with up-sized washers
   Install at low RPM, and do not over tighten; this may create too large a hole, or draw the head through the material.

2. Countersink
   Fill head of screws, and sand to create a smooth surface.

3. Screw system
   (Self-tapping seam screw (M6 #14) with 1” washer/ 1” flat head screw with slot on end of thread shank)
   Allows mechanic to tighten the bolt to the screw from underneath the bus.

4. Fasten with adhesive (for additional securement) or without adhesive
   Clean surface (Sika®Cleaner-205.) Apply adhesive (SikaFlex® 221, SikaFlex® 555) or construction adhesive, to sub-frame before composite is set in place.

5. Huck bolts, Grade 5 Floor Bolts,
   5/16” Grade 8 Torx Bolts

UNDERBODY COATING

Protects the steel parts and chassis framework from corrosion.
Provides additional protection for the flooring material. (Tectyl 121BN)
Underbody wax system seals off water trap areas.
Little to some acoustical advantages.
Reduces some heat transfer.