

GLASSING MATERIALS & TECHNIQUES  
(Updated: 8/2009)

CLOTH:

2 plus layers. . . . .	d 1960. . . . .	present
26 oz: (Australian Surf Shop & Tom Hale). . . . .	c 1964. . . . .	d 1964
20 oz: . . . . .	d 1960. . . . .	d 1964
13 oz: . . . . .	d 1963. . . . .	d 1964
2 x 13 oz. . . . .	c 1963. . . . .	d 1964
10 oz: . . . . .	d 1961. . . . .	d 1964
2 x 10 oz: . . . . .	d 1964. . . . .	d 1960's
3 x 10 oz: One reported by Olson. . . . .	c 1964. . . . .	c 1964
8 oz: . . . . .	d 1962. . . . .	present
2 x 8 oz: . . . . .	d 1964. . . . .	present
6 oz: . . . . .	d 1962. . . . .	present
2 x 6 oz: . . . . .	d 1964. . . . .	present
4 oz: experimental, (Joe Quigg). . . . .	c 1946. . . . .	c 1947
4 oz: production. . . . .	c 1980's. . . . .	present
3 oz: (Rusty). . . . .	c 1989. . . . .	d 1989
2 oz: experimental. . . . .	c 1990's. . . . .	present
1 oz: (Rusty). . . . .	c 1989. . . . .	d 1989
Bamboo, 95% natural fiber . . . . .	s 2007. . . . .	present
C-Beam: Printed cotton, rayon, polyester & hemp rail wrap. . . . .	c 1996. . . . .	present
Patented by Billy Hamilton, #5,816,876		
Chromium treated flat weave (Precision Glassing). . . . .	c 2002. . . . .	present
Colored by Color Flo: . . . . .	d 1972. . . . .	d 1973
Flat weave: . . . . .	d 1962. . . . .	present
Linear reinforced: more strands fore & aft. . . . .	c 1999. . . . .	present
Mixed type: Volan/silene. . . . .	d 1969. . . . .	d 1969
Mixed weight: . . . . .	d 1970. . . . .	present
MPV hybrid (modified polyvinyl), clear, similar to kevlar. . . . .	c 1972. . . . .	c 1975
Tightly woven plastic fabric, claimed to have 4 times the impact strength of fiberglass cloth.		
Oriented Fiber?: . . . . .	d 1998. . . . .	present
Rotationally molded polyethylene shell (Aitken). . . . .	c 1986. . . . .	c 1986
Semi-directional: . . . . .	d 1971. . . . .	d 1971
Silene: . . . . .	d 1964. . . . .	present
Skin saturated: (no cloth). . . . .	c 1986. . . . .	c 1986
Hybrid foam shape was saturated with foaming epoxy to 3/4" deep was then baked until cured.		
Textured deck: (Wave Riding Vehicles). . . . .	d 1978. . . . .	present
"Tuflite" . . . . .	c 1989. . . . .	present
NOTE: PVC sheet foam sandwiched between multiple layers of cloth and wrapped around a shaped E.P.S. core.		
Volan: . . . . .	d 1964. . . . .	d 1964
Warp: by Hexcel. . . . .	d 1995. . . . .	present
This cloth contains about 40% more fibers from nose to tail than conventional cloth.		
Wide cloth wrapped from bottom to within 2" of deck stringer for knee patches. . . . .	1969. . . . .	1969
See Surf Systems by Thrailkill.		

LOGOS:

Wood: Not common. . . . .	d 1964. . . . .	present
Offset: . . . . .	d 1965. . . . .	present
Rice paper: (Greg Noll). . . . .	late 1950's. . . . .	present

LAMINATING:

Cut lap. . . . .	c 1950's. . . . .	d 1968
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Dry lam lay up:..... d 1969..... d 1969  
 Free lap: (Fox, Archie)..... c 1952..... present  
 Sandwiched epoxy:..... c 1989..... present

PATCHES:

Deck: (Fox, Archie)..... c 1952..... present  
 2/3 deck:..... d 1969..... present  
 Mat deck: neoprene insert patd.. d 1971..... d 1970's  
 Nose: (South Bay)..... c 1964..... d 1964  
 Nose & tail re-enforcement: (Fox., Archie). c 1952..... c 1960  
 Tail:..... d 1964..... present

RAILS:

Staggered lap:..... d 1961..... 1961  
 Beaded: unfinished gloss coat..... d 1965..... 1960's  
 50 oz: Stratoglas..... d 1971..... 1971

WEIGHTS:

100 lbs.:..... pre 1920's  
 50 lbs.:..... 1940's  
 30 lbs.:..... 1960  
 28 lbs.:..... 1965  
 20 lbs.:..... 1967  
 8 lbs.:..... 1971  
 9 3/4 lb to 13 lb:..... 1974

RESINS

Generic laminating resin..... c 1950' s..... c 1960's  
 Laminators used what resins were available to them at the time with Riechold becoming the most common.  
 Silmar<sup>?</sup>  
 249-A Orthophthalic surfboard laminating resin..... c 1961..... present  
 This formula was the first laminating resin formulated for the surfboard industry. The crystal clear appearance was instrumental in replacing the cut lap with the freelap glassing technique.  
 969 Isophthalic surfboard laminating resin..... c 1991..... present  
 This formula does impart some color and is a little tougher than 249-A. It has become the industry standard for the cut lap retro look.  
 Epoxy  
 Generic..... late 1940's..... c 1980's  
 The use of polystyrene foam required epoxy resins for chemical compatibility. The early epoxy formulas were difficult to work with and imparted a golden brown hue to the foam. The refinement and popularity of polyester resin compatible polyurethane foam in the late 1950's dramatically reduced the use of epoxies.  
 Surfboard formulation..... c 1980's..... present  
 Improved formulation has resulted in an epoxy that is easier to use, is clear and stronger than polyester resins.  
 Sun Cured: (Joe Quigg)..... c 1947..... c 1950's  
 Resurfaced under trade name of Solar Rez..... d 1980's..... present  
 Epoxy/polyester: (Hix)..... d 1998..... present  
 Isophthalic:..... d 1961..... present  
 Polished rail seam: (Hobie)..... c 1961..... present  
 Vinyl ester: Highly toxic..... c 1970's..... c 1980's

FINISHES:

"C" finish: (unsanded hot coat)..... d 1969..... present  
 "Dripless gloss":..... c 1960's..... c 1960's  
     First side: taped, bead sanded. Second side: no tape, brush close to first & finish with finger, no further labor.  
 Speed beading: Surfer V10#2p86..... d 1969..... d 1969  
 Speed spray: by Dolphin Skin..... d 1972..... d 1972  
 Speed wipe on: Fluoropolymer surface coating by Ultra Glide..... d 1992..... d 1990's  
 Squeegee deck: (Surfcenter Hawaii)..... d 1968..... present  
 Flat: (sanded):..... d 1969..... present  
 Gloss:  
     Unpolished, with rail bead:..... c 1950's..... c 1962  
     Unpolished, razor trimmed rail bead..... c 1962..... c 1963  
     Unpolished, polished rail..... c 1963..... c 1964  
     Polished:..... c 1964..... present  
 Groove ridge: Photo, Surfer V15#2P74..... d 1974..... end unk

OTHER:

Starch based leash plugs..... s 2007..... present