

SPASA CERTIFICATION APPLICATION

Version: 23 Nov 18

Applicant Details

Applicant company name: _____ Contact Name: _____
Address: _____
Phone: _____ Fax: _____
Email: _____ Website: _____
Product Name: _____

Certification Results

1. Minimum Gauge Test

Test Method TM-1001

a. Minimum requirement total thickness at selvage and between bubbles 400 microns

Test Result: fail (under 400um) pass (400um or above)

Test performed by (laboratory): _____

b. Minimum requirement thickness measured anywhere on product

Test Result fail (under 90um) pass (90um or above)

Test performed by (laboratory): _____

2. Tensile Strength

Test Method ASTM D 412

Test Result: fail (under 15 MPa) pass (15MPa or above)

Test performed by (laboratory): _____

3. Tear Strength

Test Method ASTM 1938

Test Result: fail (under 35N) pass (35N or above)

Test performed by (laboratory): _____

4. Puncture Resistance

Test Method ASTM D 1709 Falling Dart Impact Test

Test Result: fail (under 700 grams) pass (700 grams or above)

Test performed by (laboratory): _____

5. Light Exposure Performance Criteria

4 weeks exposure to AS 2001.4.21 (known as MBTF light barrel test). Samples tested before and after exposure for breaking force and elongation to AS 2001.2.3.2 in machine direction and cross direction.

a. Tensile strength – no more than 10% braking force loss MD or CD after MBTF exposure

Test Result: fail (over 10%) pass (10% or under)

Test performed by (laboratory): _____

b. Elongation – no more than 65% loss of elongation in MD or CD after MBTF exposure

Test Result: fail (over 65%) pass (65% or under)

Test performed by (laboratory): _____

6. Buoyancy

Test Method TM-1002

Test Result: fail (under 1.5lit/m2) pass (1.5lit/m2 or above)

Test performed by (laboratory): _____

7. Thermal Performance

Test Method ISO 9302 Guarded Hot Plate or Thermal Resistance test ASTM C518

Test Result: fail (under 0.05m2K/W) pass (0.05m2K/W or above)

Test performed by (laboratory): _____

8. Lamination

Test Method AS 4201.1 Dry Delamination

Test Result: fail pass

Test performed by (laboratory): _____

NOTES:

- All tests must be carried out by an independent NATA approved testing facility. MBTF test to be carried out by AWTA, Flemington VIC
- SPASA automatic fit-for-purpose certification with 8 authorised passes above with supporting testing documentation attached

POOL COVER MINIMUM SPECIFICATIONS

Gauge

Blanket total layer thickness at selvedge and between bubbles: 400-micron
Minimum thickness measured anywhere on the product: 90 micron.

Test Method TM-1001

Tensile Strength

Recommendation: Minimum 15MPa
Test Method: ASTM D 412

Tear Strength

Recommendation: Minimum 35N
Test Method: ASTM 1938

Puncture Resistance

Method: ASTM D1709 Falling dart impact test.
Recommendation: Minimum 700 grams

Light exposure Performance Criteria

4 weeks exposure to AS 2001.4.21 (known as MBTF light barrel test).

Samples tested before and after exposure for breaking force and elongation to AS 2001.2.3.2 in machine direction and cross direction.

- No more than 10% breaking force loss MD or CD after MBTF exposure
- No more than 65% loss of elongation in MD or CD after MBTF exposure

Type of stabilizers used.

A letter from the stabilizer Manufacturer stating their product contains no materials harmful to health (eg no heavy metals, PCB's etc).

Buoyancy

Recommendation: 1.5lit/m² Minimum buoyancy (displaced volume/m²).
Test Method: TM-1002

Warranty

The blanket must be protected by a written warranty covering a minimum four-year period. The warranty shall be :

- 12 months repair or replace
- Pro-rated year by year for the remaining 3 years

Thermal Performance (R value) *Updated 23rd November 2018*

ISO 8302 Guarded Hot Plate or ASTM C518 Thermal Resistance test
Minimum R Value 0.05m² K/W

Lamination

Recommendation: Pass.
Test Method: AS 4201.1 Dry Delamination.

NOTES:

- All tests must be carried out by an independent NATA approved testing facility. MBTF test to be carried out by AWTA, Flemington VIC
- SPASA automatic fit-for-purpose certification with 8 authorised passes above with supporting testing documentation attached

TEST METHOD TM-1002

BOUYANCY TEST

Equipment

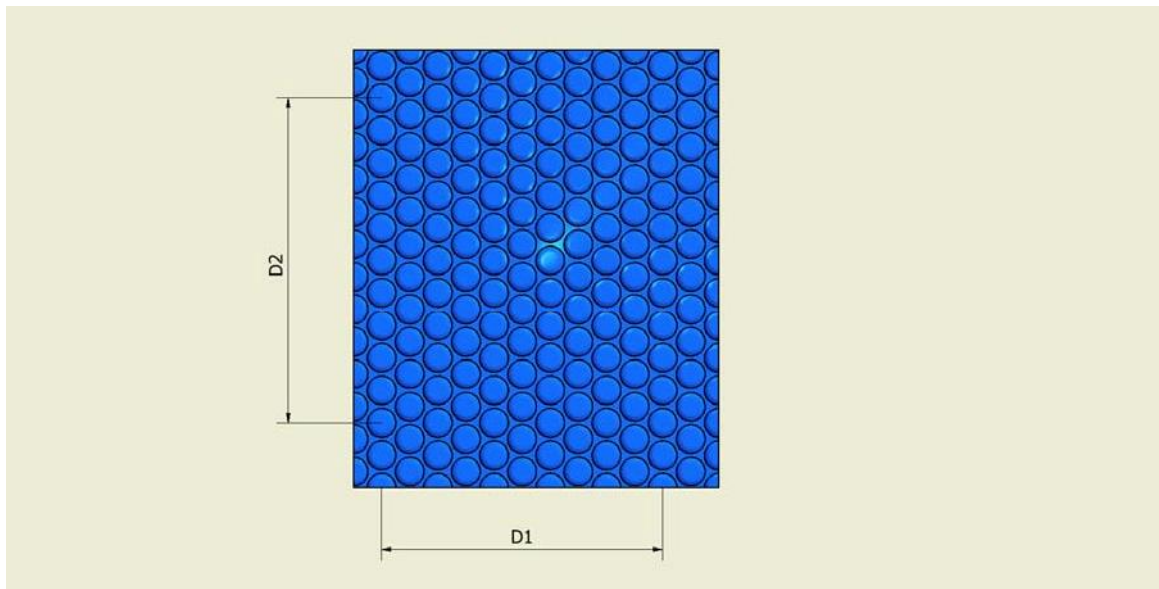
- 250cc graduated measuring cylinder
- 300mm Rule
- Laboratory balance
- Thermometer

Conditions

23C +/-1C

Method.

Determine bubble density. Measure the centre distance between 10 bubbles in each of the machine and cross directions. Record as D1 and D2 (in mm). The values are generally different for each direction. Note that these measurements are to be taken at right angles to each other.

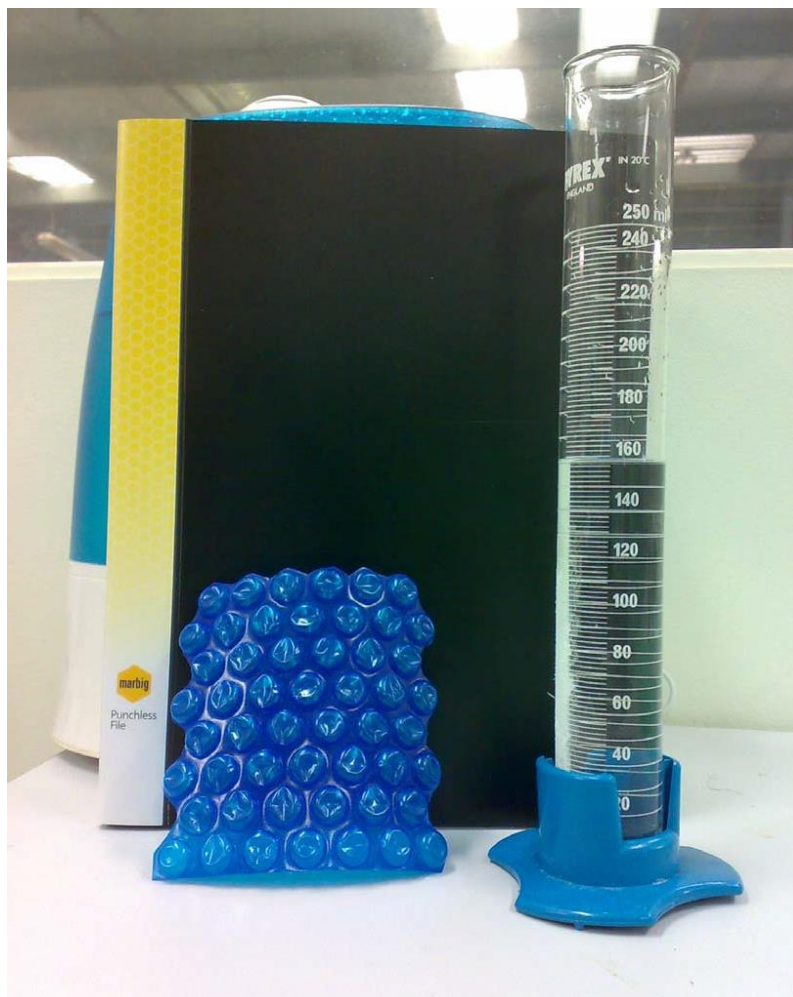


The number of bubbles per square metre is:

$$N = \frac{100,000,000}{D1 \times D2}$$

Cut a 125 x 125mm sample of the test material. Remove bubbles at the edge that are cut through as per photo below. Count the number of full bubbles in the specimen and record as B. Weigh the sample and record as W (gm).

Fill the measuring cylinder with water to a depth of approximately 150mm (so it is greater than the sample to be tested). The water must be between 22-24C when the readings are taken. Record the first reading to the nearest cc as V1 (cc).



Fully submerge the sample in the water and ensure that there are no bubbles trapped on the surface of the material. Record the reading of the new volume of liquid including the sample as V2 (cc). The displaced volume of air in the sample material is $V2 - V1 - W$

The unit displacement per square metre or buoyancy is: $\frac{N \times (V2 - V1)}{B \times 1000}$ lit/m²

The minimum pass value is: 1.5 lit/m²

TEST METHOD TM-1001

MINIMUM GAUGE TEST

Equipment

Digital Micrometer with 3 micron accuracy or better fitted with 2.5mm dia tip and foot with 3.5mm dia ball. Measuring force 1.5N. Use of a cable release as shown below is recommended.



Sample

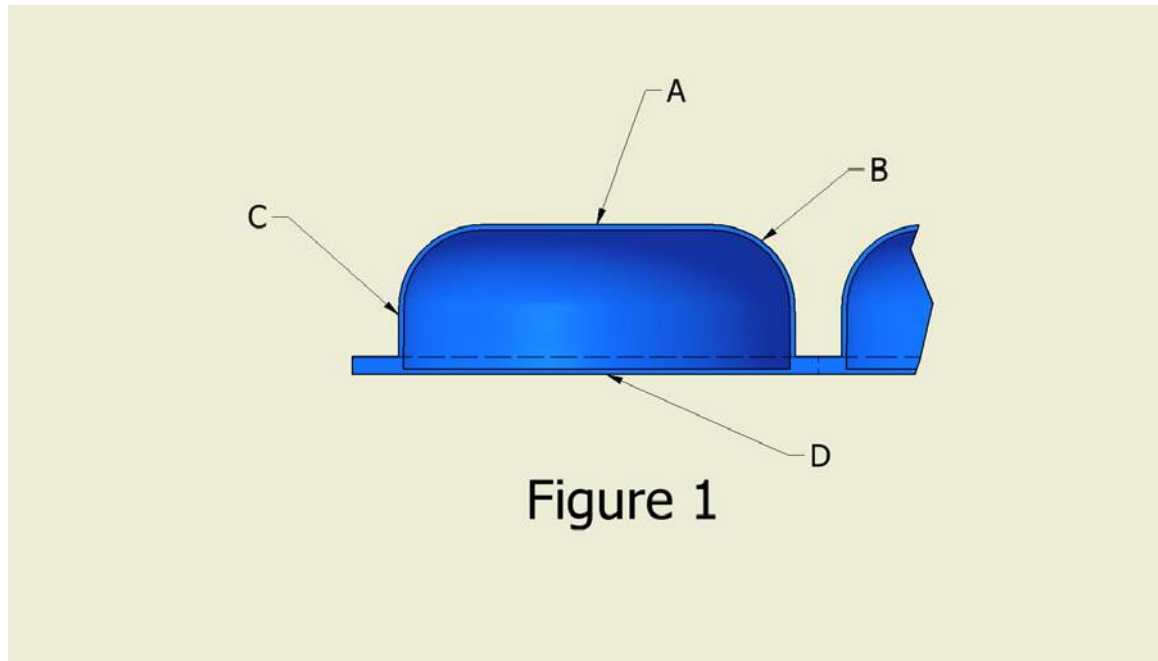
Full width of bubble material, 100mm wide.

Preparation of test specimen

Condition samples in controlled atmosphere 23C +/- 1 for 2hrs

Method

Cut ten bubbles at even spacing across the sample. Cut the top off the bubble and measure the thickness around the bubble in locations shown in Fig 1. Move the bubble piece around the micrometer tips to find the minimum thickness anywhere on the bubble. This is normally found in the corner of the bubble (location B). Check the flat side D of the bubble also in case it is a lower reading than A, B or C. Take the average of the 10 readings and report that as the result.



Result

The average minimum value must be equal to or greater than 90 microns to pass the test.