EVERTUFF™
TESTING

All the test results are based on a 75mm x 45mm profile using a 75mm depth. Cosset's recycled wood plastic composite material has undergone rigorous testing in National Association of Testing Authorities (NATA) laboratories in the following categories:

Dry Flexural Strength Testing
Test method: ASTM D790
Loading speed: 30mm/min Support span: 900mm
Maximum Flexural Strength: 3.86kN or 393.6kgf

Wet Flexural Strength Testing
Test method: ASTM D790
Loading speed: 30mm/min Support span: 900mm
Maximum Flexural Strength: 3.88kN or 395.6kgf

These tests showed that Cosset products have a very high capacity to flex without breaking. What's more, this capacity actually increases when wet, making them ideal for both dry and marine environments.

Compressive Strength Testing
Test method: ASTM 6108
Maximum Stress face: 27.8 MPa

How much does the product compresses under strain? It takes a large amount of force to dent or damage the surface of an Cosset product!

Water Absorption Testing
Test method: ASTM D570
Water absorption after 21 days: 5.1%

Cosset's products absorb very little water when fully submerged, and what water is absorbed actually makes them stronger!

Chemical Resistance (28 days exposure)
Test method: ASTM D543

Chemical	Absorption %	Peak Load (kN)
Control – 21°C in air	0.2	22.4
Oil – vanellus multigrade diesel engine oil SAE 15w/40	1.1	22.0
Acid – 10% HCl	7.0	21.0
Alkali – 10% NaOH	25.5	15.6
Chlorine – 5% bleach	7.3	20.7
Oxidising Agent – 5% H_2O_2	6.6	21.1

Cosset products are highly resistant to most external chemical influences, and retain their flexural strength particularly well in most conditions.

Screw Pullout Testing
Test method: ASTM D6117
Maximum Force face: 1749 MPa

How much force is required to pull a screw vertically outwards? Few natural forces can exert the amount of force required to remove a screw from a Cosset product.

Tensile Testing
Test method: AS I391-2007
Sample dimensions 51.0mm x 44.5 mm to 51.5mm x 44.5mm
Failure load: 25.5kN
UTS: 11.2 MPa
Elongation: 2.0%

To what degree will the product stretch? Essentially, Cosset products will not stretch!

Flammability Testing
Test method: AS/ISO 9239.1-2003
Critical Radiant Flux: less than or equal to 1.1kW/m²
Smoke Value: 652% min

The combination of recycled plastic and recycled wood flour makes the material far more resistant to fire than wood or plastic individually.

Complete tests details available by request. All figures indicated in this summary sheet are the average results from multiple test samples. Specifications or results are likely to change due to to continual improvement. All tests performed in a NATA accredited laboratory.