



**Product Ratings  
and Benefits**

**MultiPanel**



# Performance

The performance characteristics and benefits of our patented EnviroPly products are superior to any other product now on the market. By comparing MultiPanel to existing materials (drywall, plywood, OSB), it is quite evident of our superiority.

The governing agency in construction is **ASTM** (American Society of Testing Materials). Their standards are the foundation of materials and code requirements. It is their specification that all materials must meet to be used for safe construction.

## TECHNICAL DATA

| Performance Property                     | Test Method      | Value                             | Minimum requirement |
|--|------------------|-----------------------------------|---------------------|
| Compressive indentation                  | ASTM D2394       | 1600psi                           | 1250psi             |
| Flexural strength                        | ASTM C947        | 1200psi                           | 750psi              |
| Linear variation due to moisture content | ASTM D1037       | .04%                              | .07%                |
| Fastener pull-through                    | ASTM D1037       | 170lbs                            | 125lbs              |
| Shear bond strength                      | ANSI A118.1(Dry) | 150psi                            | 50psi               |
| Freeze-thaw cycling                      | ASTM C666        | No disintegration after 25 cycles |                     |
| Flame spread / Smoke development         | ASTM E84         | 2/0                               | 10/10               |
| Bacteria                                 | ASTM G22-76      | No Growth                         | No Growth           |
| Fungus resistance                        | ASTM G21-90      | No Growth                         | No Growth           |

### ASTM D2394 – Compressive Indentation (Falling Ball Test):

Tests the amount of pressure required to dimple or damage the product. Minimum requirement is that the board withstands 1,250psi (pounds per square inch). EnviroPly's test showed 1,600psi or 128% of the minimum standard.

**MultiPanel** 1,600psi  
required 1,250 psi

**MultiPanel has a 350psi HIGHER Comprehensive Indentation then required.**

### ASTM C947 – Flexural Strength:

Measure when the board will crack or break under pressure. Minimum requirement is 750psi. MultiPanel's test showed strength of 1,200psi or 160% of the minimum standard.

**MultiPanel** 1,200psi  
required 750psi

**MultiPanel has a 450psi HIGHER Flexural Strength then required.**

### ASTM D1037 – Linear Variation due to Moisture Content:

In linear installations, the shear strength of the board when moisture is present. Minimum requirement is no higher moisture of .07%. MultiPanel's test showed no higher moisture content than .04% or 175% of the minimum standard.

**MultiPanel** .04%  
required .07%

**MultiPanel has a 75% BETTER Linear Variation then required.**



**ASTM D1037  
Fastener Pull-through:**

Measures the amount of force necessary for the board to release from its mounting. Minimum requirement is 125 lbs. (pounds). EnviroPly's test results were 170 lbs. or 136% of the minimum standard.

**MultiPanel** 170 lbs.  
required 125 lbs.

**MultiPanel has a 35 lbs. STRONGER Fastener Pull-through then required.**

**ASTM A118.1 (Dry)  
Shear Bond Strength:**

Measures the amount of force necessary to destroy the board and cause it to fail. Minimum requirement is 50psi. MultiPanel's test showed that it would take 150psi or 200% of the minimum standard.

**MultiPanel** 150 psi  
required 50psi

**MultiPanel has a 100psi HIGHER Shear Bond Strength then required.**

**ASTM C666  
Freeze-Thaw Cycling:**

Measures cycles of freezing and thaw before product shows signs of disintegration. MultiPanel showed no disintegration after 25 cycles, which is far in excess of any other product.

**MultiPanel**  
other

**MultiPanel has the HIGHEST Freeze-Thaw Resistance.**

**ASTM 84  
Flame Spread –  
Smoke Development:**

Measures how rapidly flames spread and smoke develops from burning of the board. The results are based on a scale created where the higher the number, the greater the damage and danger. The minimum standards are 10/10. MultiPanel's results show 2/0. This means that MultiPanel has minimal flame spread and no smoke development or exceed the minimal standard 5 times/10 times respectively. The product cannot burn.

**MultiPanel**  
required

**MultiPanel has a 5/10 times HIGHER Flame and Smoke Resistance.**

**ASTM G22-76 & G21-90 –  
Bacteria and Fungus:**

MultiPanel will not support any growth because it does not contain any organic materials. Thus it is mold proof.

**MultiPanel**  
other

**MultiPanel is a STRONG and COMPLETE barrier against Bacteria and Fungus.**



# Environmental Issues

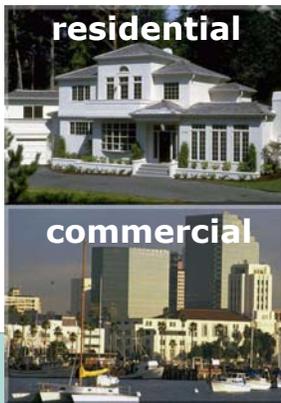
## Manufacturing:



MultiPanel cures Naturally and does not require any outside source of heat such as kilns or ovens. This is a major savings of energy. Using only natural materials, it is environmentally benign and non-toxic.

**MultiPanel is a NATURAL SUPERIOR product.**

## Durability:



MultiPanel is cementitious, using some Portland Cement (the same material as the Coliseum in Rome), thus water doesn't damage the product but causes it to strengthen over time. Barring actual physical destruction, the product is not subject to water damage caused by floods, leaks, etc. Because the board will not support any bacteria or mold, MultiPanel does not contribute to health risks. It is completely pest resistant. Being low impact resistant, windstorms and flying debris do not easily affect its structure or surface. The nature of our formulation makes the structure much stronger and will prevent punctures or shattering. Fire and smoke will not destroy the MultiPanel.

**MultiPanel provides the MAXIMUM values for building products.**

## Waste (Green) Material:



Part of our formulation uses fired clay. Bathtubs, commodes, bricks and other land fill items can and will be used in our product.

**MultiPanel is a valuable asset in RECYCLING.**

## Insurance Considerations:



EnviroPly's durability and safety means that water, fire and smoke damage are minimized. Accordingly, repair and insurance claims are reduced. The State of Florida has a published list of homeowner insurance company discounts available for using Disaster Resistant Construction. The average is 33%.

**MultiPanel has a HIGH Economical Impact for homeowners.**



EnviroPly Manufacturing, Inc.  
3240 Flightline Drive • Lakeland, Florida 33811, U.S.A.  
Phone: 863.687.6927 • Fax: 863.687.3329  
Email: Info@EnviroPly.com • Website: www.EnviroPly.com