

AMERICAN SOURCED. AMERICAN MADE.



**NATURAL & SUSTAINABLE SINGLE USE DINNERWARE
FOR HEALTHIER FAMILIES AND A HAPPIER PLANET.**

WHAT MAKES US SPECIAL?!

Designed from the ground up with the environment in mind, EarthShell® answers the growing demand for a green alternative to paper, plastic, Styrofoam molded fiber, sugarcane and bamboo dinnerware. This revolutionary, patented technology delivers convenience, quality and environmental responsibility. Our benefits include:

- » American Made. American Sourced – *potatoes are grown in all 50 states*
- » Made from natural resources
- » Biodegradable
- » Compostable
- » Reduces global warming
- » Designed to take less space in landfills
- » Low carbon footprint
- » Reduces reliance on oil
- » Microwave safe
- » GMO FREE– *does not contain Genetically Modified Organisms*
- » Heavy duty – *no need to double or triple up*
- » Soak proof
- » Uses “bio waste” potato starches from excess potato waste stream of potato chips and french fries
- » Cut resistant
- » Grease resistant
- » Freezer ready
- » Naturally white – *no bleach or chemicals*
- » Insulates hot or cold foods
- » Freezer safe



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NATURAL & SUSTAINABLE SINGLE USE DINNERWARE FOR HEALTHIER FAMILIES AND A HAPPIER PLANET.

EarthShell® plates and bowls are completely American-made, including all of its natural, raw materials, using starch from renewable potatoes and other vegetables, mixed with abundant limestone, water and air.

EarthShell® answers the growing demand for a green alternative to paper, plastic and foam. Our revolutionary, patented technology delivers convenience, quality and environmental responsibility.

PREMIUM PERFORMANCE. QUALITY & RESPONSIBILITY

- » Strong and sturdy for heavy, often messy meals
- » Microwave-safe so it doesn't melt like plastic
- » Cut-resistant and soak-proof
- » Environmentally responsible compared to traditional paper, plastic and foam disposables that take years longer to biodegrade (or never biodegrade)
- » Made primarily from abundant, renewable resources
- » Uses less energy to produce, generates lower greenhouse gasses
- » A true and transparent minimal carbon footprint and lifecycle

Designed from the ground up with the environment in mind, EarthShell® answers the growing demand for a green alternative to paper, plastic and Styrofoam. This revolutionary, patented technology delivers convenience, quality and environmental responsibility.

EarthShell® serves the consumer, grocery and food service markets and is proud to be part of the growing green revolution. Whether at home, at school, or at work, Earthshell's truly disposable dinnerware is a smart and sustainable choice.

MADE FROM NATURAL, RENEWABLE INGREDIENTS. 100% AMERICAN SOURCED & AMERICAN MADE

Unlike plastic and foam packaging made from petroleum or paper products made from trees, EarthShell® is not only made in the USA – but all of our revolutionary new materials are also procured domestically, including:

- » Limestone, an abundant resource
- » Air and water
- » A very small amount of recycled fiber and other processing agents
- » A micro-thin, biodegradable coating





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EARTHSHELL OFFERS THREE QUALITY PRODUCTS:



9" Premium Strength Plates



6" Premium Strength Plates



12 oz. Premium Strength Bowls

MINIMIZE YOUR FOOTPRINT. MAXIMIZE YOUR IMPACT. MAKE A REAL DIFFERENCE.

EarthShell® completes its lifecycle by providing environmentally responsible disposal benefits:

- » 100% biodegradable through composting
- » Take up less landfill space than traditional paper, plastic or foam due to immediate degrading of renewable materials
- » Breaks down completely in water and is not harmful to marine life

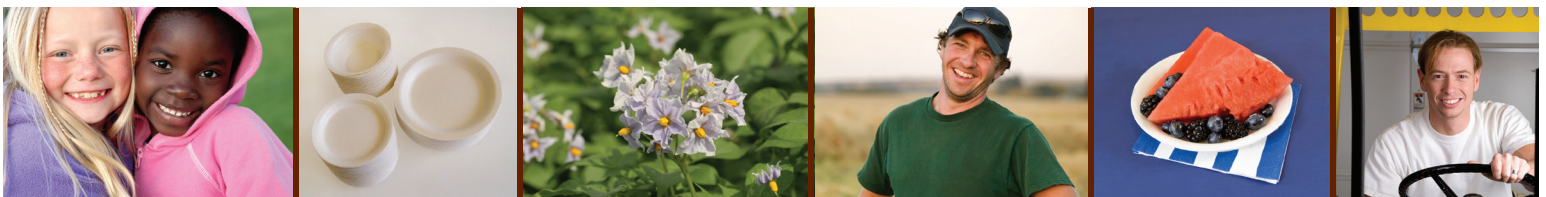
EarthShell® will quickly break down in a commercial compost environment and then biodegrade completely in compost or soil within a two-year period. 92% of the product will degrade within 90 days with the remaining 8% breaking down within 2 years.

Knowing that the main objective of anyone buying a green product is to minimize the overall carbon footprint and lifecycle, we have stayed true to the course by eliminating the fossil fuel expenditure caused by acquiring raw materials or manufacturing overseas.

INNOVATION SPARKED BY INSPIRATION – KINDER TO THE PLANET, BETTER FOR PEOPLE

EarthShell's® patented technology delivers many environmental advantages compared to traditional paper, plastic and foam disposables:

- » Requires less total energy to make.
- » Generates fewer greenhouse gas emissions
- » Uses fewer fossil fuels in production
- » Produces lower amounts of a wide variety of air and water emissions
- » Responsible disposal
- » Domestically made to lower the reliance on fossil fuels for transportation





WHAT MAKES US SPECIAL?

- We use American sourced-potatoes and vegetable starches.
- Our products are made from natural resources including “bio waste” starches that would normally go to a land fill.
- Biodegradable and compostable
- Naturally white – no bleaching
- Heavy duty-no need to double or triple up.
- Microwave safe
- Leak proof, cut and grease resistant
- Insulates hot or cold foods
- Freezer safe and ready

OUR PRODUCTS

- Reduce global warming and reliance on oil
- Are designed to take less space in landfills
- Have a low carbon footprint
- Are third party certified.










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FEEL OUR STRENGTH!

We tested EarthShell® plates against all major competitors. Each plate was put in a real-life situation that simulated a person holding a plate with food. Weight – or “food” – was then gradually added to each plate until it broke and collapsed. The same test was used for each competitor’s plate, with five separate tests done for each manufacturer.

(The five results were then averaged together)

Type of Product Tested	Weight Before Failure	% Stronger than Competition	Strength Comparison
EarthShell	3.13 lbs		
Double Laminate Foam	2.44 lbs	28.2 %	
Hi-Impact Plastic	2.37 lbs	32.1 %	
Bagasse/Bamboo	2.27 lbs	37.9 %	
Molded Fiber (Premium)	1.66 lbs	88.6 %	
Single Laminate Foam	1.59 lbs	96.9 %	
Single Laminate Paper	1.33 lbs	135.3 %	

Legend

 1/2 pound



Earthshell vs. Bagasse (sugarcane) Comparison Matrix

	Earthshell	Bagasse
Carbon Footprint/ Life Cycle	<p>Extremely low due to manufacturing efficiencies, close proximately to all US based raw materials, and US distribution</p> <p>Potatoes are also one of the world’s most abundant resources, harvest cycle is approximately 10 months</p> <p>EarthShell also uses “Bio Mass” potato starches from the excess potato waste stream of potato chips and French fries</p>	<p>Higher carbon footprint than Earthshell due to the harvesting process, manufacturing, and distribution transportation</p> <p>We have reports from bagasse manufactures that the sugarcane is purchase from Thai farmers, shipped to China for manufacturing, and ship to the United States for distribution.</p> <p>Sugarcane takes approximately 14-18 months to harvest</p>
Microwave Safe	Earthshell is completely safe in the microwave due to thermal properties	Bagasse product will turn brown after approximately 2.5 minutes leading to a potential fire hazard.
Cut Resistant	Micro-thin biodegradable film provides a layer for cutting that does not penetrate into the product	No barrier exists which allows cuts to be made into product exposing material to food; this is also a negative for wet foods, needing to double or triple up plates
Bleaching	No bleaching is used in the manufacture of Earthshell products. All ingredients are natural	Some bagasse products are bleached in order to maintain consistency in color and appearance
Quality	Very consistent due to consistent supply of raw materials from a stable source. Year round production of raw material ensures consistent sourcing	Potentially inconsistent quality due to variations in bagasse raw material supply. Bagasse is seasonal – alternative materials may be used to supplement bagasse yielding changes in product



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Comparison Matrix cont'd

	Earthshell	Bagasse
Leak proof	Micro-thin biodegradable film prevents liquids from leaking through product	No leak-proof barrier, product will absorb liquids leading to potential failure
Grease Resistant	Yes	Potential failure due to lack of barrier
Space in Landfills	Takes up less space in landfills due to foam structure. Product breaks down by using less material	Product will not break down as fast and will take up more space in landfill
Global Warming Effect	Reduces global warming due to low carbon footprint and low emissions	Increases global warming due to higher carbon footprint (compared to Earthshell)
Reliance on Oil	Lower reliance on oil due to lower harvest (no milling with potatoes), and transportation footprint	Higher reliance on oil due to harvest (milling into bagasse is a energy consuming process) and transportation footprint
Production Environment	Production is clean and non-harmful due to common natural ingredients	Production of bagasse (sugarcane) can be hazardous to the welfare of employees producing raw materials (see report on pulmonary fibrosis and bagassosis from bagasse fibers)



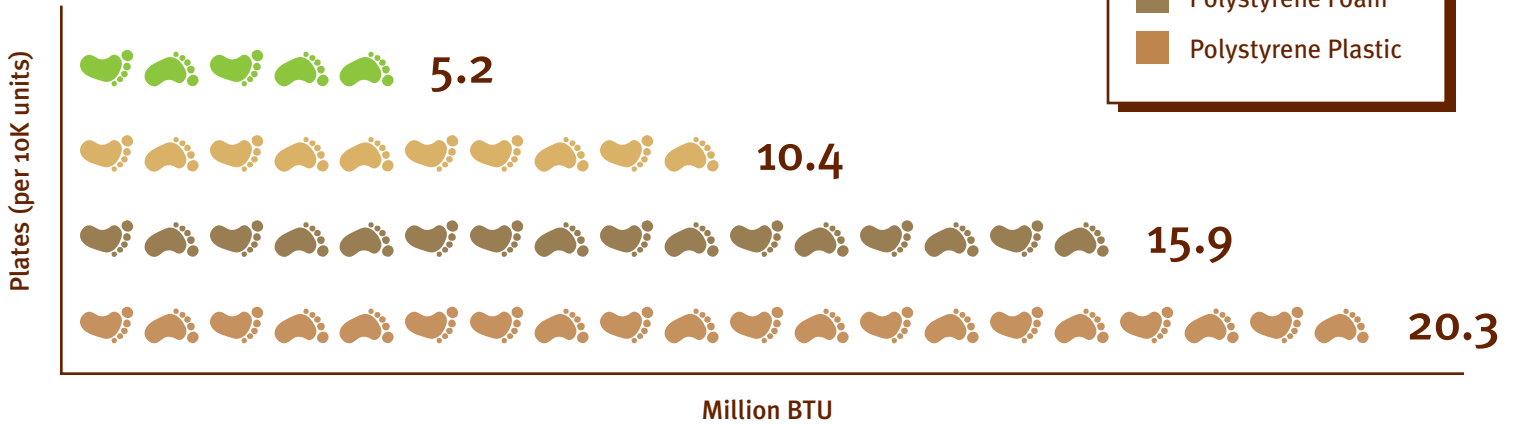
LIFE CYCLE INVENTORY

The Environmental Loadings From Raw Material Extraction And Production, Manufacturing, Use And Final Disposal.

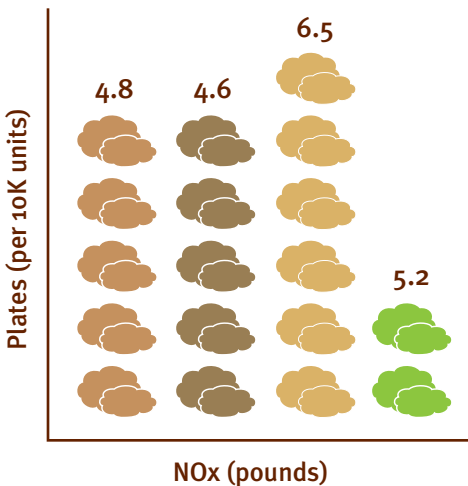
LEGEND

- EarthShell®
- Paper
- Polystyrene Foam
- Polystyrene Plastic

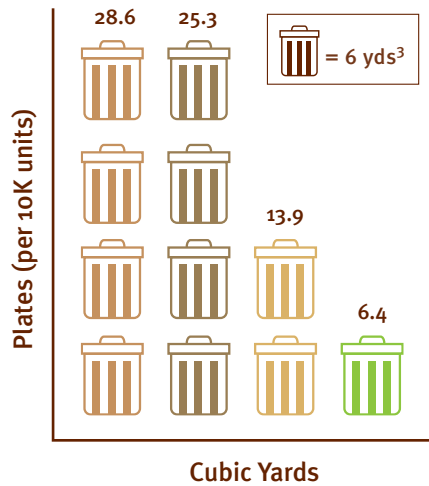
TOTAL ENERGY



URBAN SMOG FORMATION



SOLID WASTE VOLUME



GREENHOUSE GAS EMISSIONS

