



BUILD A BETTER WORLD™



*Above: Railroad bridge built with ECOTRAX® Composite Railroad Ties and STRUXURE® Composite Infrastructure Products in Fort Eustis, VA.
Opposite: Installed ECOTRAX® Composite Railroad Ties on a transit line near Dallas, Texas.*

AXION INTERNATIONAL

Build a Better World

AXION is changing the world in which we live.

Our ECOTRAX® Composite Railroad Ties and our STRUXURE® Composite Infrastructure Products are made from 100% recycled plastic composites. Using our patented processes and formula, our products keep millions of pounds of plastic bottles and waste from ending up in oceans and landfills. Economically and environmentally savvy, AXION products are proving to be a smart choice in bridge and railway infrastructure projects around the world.

They install quickly, using traditional methods, and are virtually impervious to the elements. They will not rust, splinter, crumble, rot, absorb moisture or leach toxic chemicals into the environment. AXION products are completely impervious to infestation by insects, marine borers and other marine parasites. Made from our patented formula and requiring virtually no maintenance, they yield a dramatically lower total lifetime cost.

Not only is AXION committed to changing the world in which we live, but we intend to leave it a better world than it is today.





ABOUT AXION INTERNATIONAL

Focused Vision & Planning Builds Success

Not just building the world's infrastructure – building it better.

AXION has a focused vision. The world needs infrastructure in order to live, work, and travel. New projects are being engineered and existing infrastructure is being replaced. We are a technology company holding a portfolio of patents that we use to manufacture and sell our innovative products. AXION Products will ensure that the infrastructure will be able to be built better.

We plan for success – success that is happening right now. We continue to maintain a diversified range of customers throughout the world, as exemplified by our recent purchase orders in Australia, the Caribbean, North America, South America, and Europe. AXION's STRUXURE® Composite Building Products are installed in the very first recycled plastic bridge in use on a public highway in the United States of America. We plan to expand upon that success.

There is always room for improvement. In order to provide a more diverse and streamlined supply chain, along with greater cost efficiencies, AXION has a broad network for sourcing high-quality plastic material from re-processors and recyclers. AXION also accepts post-industrial and post-consumer plastics



*Above: The site of a 'heavy-goods' vehicular bridge built using our STRUXURE® Pre-Built Bridge Panels in Peebleshire, Scotland.
Opposite: Various installed ECOTRAX® Composite Railroad Ties and STRUXURE® Composite Infrastructure Products.*

ABOUT AXION INTERNATIONAL

Focused Vision & Planning Builds Success

in larger quantity bales, straight from municipalities and waste recovery centers. Further, we have expanded our future prospects by adding to our intellectual property patent portfolio within the area of fire retardants. Planning for success also means planning ahead.

The success of AXION's products in the infrastructure market has not gone unnoticed. AXION was chosen by the American Chemistry Council to receive its inaugural *Innovation in Plastics Recycling Award*. AXION was also selected as a winner of the *Environmental Stewardship Awards* by the Plastics Environmental Division of the Society of Plastics Engineers (SPE). Also, AXION's Technology was recognized and named one of the top 3 worldwide innovations of 2011 at the *R&D 100 Awards* in Orlando, Florida.



Although we are proud and honored to be recognized as a leader in the field, our focus at AXION will remain on bringing our 'green' infrastructure products to the global marketplace.



Above: A 'heavy-goods' vehicular bridge built using our STRUXURE® Pre-Built Bridge Panels in Peebleshire, Scotland.



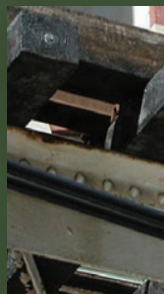
Above: Manufactured from 100% recycled plastic composite material, our products keep millions of pounds of plastic out of landfills and oceans.

HISTORY OF A PROVEN TECHNOLOGY

From Landfill... To University Laboratory... To Global Market

Our technology and products are lab-tested, field-proven, and out-performing in the marketplace. To understand where AXION is going, it is helpful to look at where we have been. By looking at a brief history of the proven technology behind AXION's recycled composite formula, you will see why AXION is here to stay.

- ◆ In the 1980's, Dr. Tom Nosker began working with federally funded research at Rutgers University on an exciting development in polymer science. Using 100% recycled plastics and composite materials, he achieved and patented an incredibly strong and durable material formula.
- ◆ The Class 1 Railroad industry was interested. In the 1990's, representatives met with Dr. Nosker and worked out specifications for composite railroad ties.
- ◆ By the mid-1990's, the formula for the recycled composite railroad tie was developed and ready. The AAR (American Association of Railroads) test track in Pueblo, Colorado put the composite tie to the test where it proved to resist plate wear, hold spikes, and maintain gauge - after more than 13 years at the TTCI (Transportation Technology Center, Inc.) High Tonnage Loop (HTL) test track, accumulating over 1,800 MGT of 39-ton axle loads. ECOTRAX® Composite Railroad Ties currently meet and exceeded all AREMA (American Railway Engineering and Maintenance-of-Way Association) standards.
- ◆ The U.S. Army Corps of Engineers was also interested in a material that never rotted and was virtually maintenance-free. In 1998, they worked with Dr. Nosker's and built the first vehicular recycled composite bridge at Fort Leonard Wood, Missouri.



1980's

Dr. Tom Nosker, at Rutgers University, began work on recycled polymer blends in the late 1980's

1990's

Met with Major Class 1 Railroads to Determine Specifications for Composite Railroad Ties

1996

Ties begin 13 years of successful testing at the AAR/TTCI test track in Pueblo, Colorado

1998

First vehicular recycled composite bridge built at Ft. Leonard Wood



1999

ASTM Approves Standards for Polymers and Composites. 30,000 ties sold to the Chicago Transit Authority

2009

Axion STRUXURE® Composite bridges at Ft. Bragg, NC support 70+ ton M1 Abrams Tanks

2010

Live load of 130+ ton locomotive on rail bridge at Ft. Eustis, VA

2011

Axion sells ECOTRAX® Composite Railroad Ties to Major Class 1 Railroad in North America and Internationally

HISTORY OF A PROVEN TECHNOLOGY

From Landfill... To University Laboratory... To Global Market



◆ In 1999, ASTM International, formerly known as the American Society for Testing and Materials (ASTM), approved the standards for polymers and composites. Later that year, 30,000 composite railroad ties were sold to the Chicago Transit Authority for transit rail application.

◆ In 2009, AXION Recycled Structural Composite beams, boards, and pilings were again used by the U.S. Army Corps of Engineers to build two heavy-load bridges at Fort Bragg, North Carolina. The completed tank-bridges support 70+ ton M1 Abrams Tanks.



Top: The Rutgers University campus in New Jersey.

Above: AXION ECOTRAX® Composite Railroad Ties at the TTCI Test Track in Pueblo, Colorado.

HISTORY OF A PROVEN TECHNOLOGY

From Landfill... To University Laboratory... To Global Market



◆ In 2010, AXION International, licensee of the patented formula, put product into applications in the field. In a high-profile and dramatic proof-of-concept project, AXION recycled composite products were used to build two 130+ ton live-load rail bridges at Fort Eustis, Virginia.

◆ In 2011, AXION landed a multi-year, and multi-million dollar, contract to sell ECOTRAX® Composite Railroad Ties to a Class 1 Railroad company. By year's end, additional sales and purchase orders were completed in the U.S., North and South America, Europe, the Caribbean and other parts of the world.



*Top: A heavy-load bridge built with STRUXURE® Composite Infrastructure Products at Fort Bragg, NC.
Above: A railroad bridge built with ECOTRAX® and STRUXURE® Composite Infrastructure Products in Fort Eustis, VA.*



Above: A 12-inch STRUXURE® Recycled Structural Composite Piling.

Opposite: The site of Europe's first 'heavy-goods' vehicular bridge built using our STRUXURE® Pre-Built Bridge Panels in Peebleshire, Scotland.

GREEN PRODUCTS GO TO MARKET

Our Proven Technology is Installed Around the World

From the Northern forests in Maine to the scorching heat in Morocco - from the wide open Texas landscape to the rolling countryside of Scotland, AXION's industrial-strength, ECOTRAX® Composite Railroad Ties and our STRUXURE® Recycled Structural Composite building products are successfully installed around the planet.

Made entirely from recycled plastic composites, using our patented formula, our products keep millions of pounds of plastic bottles from ending up in oceans and landfills. We sell our products to the railroad industry, military, and industrial engineering and contracting firms.

We are expanding our sales in the United States and internationally, while increasing our production capabilities to meet demand. Because all of our products are made from 100% recycled materials, we are reducing the amount of post-consumer and industrial waste that would otherwise harm our planet.

The more AXION grows - the more clean and green our planet will be.

It's a win-win.





*Above: A freight train running on ECOTRAX® Composite Railroad Ties outside of Dallas, Texas.
Opposite: An ECOTRAX® Composite Railroad Tie.*

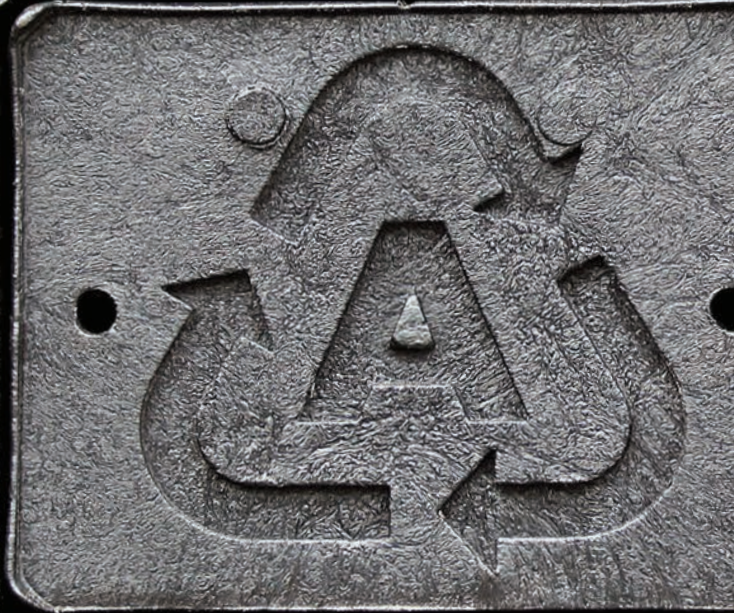


ECOTRAX[®]

Made from 100% Recycled Plastic Composite Material

Our ECOTRAX[®] Composite Railroad Ties are sold to international and major US Class 1 rail companies. Because they meet and exceed all AREMA standards, the ECOTRAX[®] Tie is also a perfect 'green' solution for Light Rail and Transit lines. Made using our patented formula, the virtually indestructible ECOTRAX[®] ties thrive in extreme, wet, and caustic conditions - like the harsh demands found in the mining industry.

BRIDGE TIES · CROSSING TIES · MAIN LINE TIES · SWITCH TIES · TUNNEL TIES



ECOTRAX[®]
COMPOSITE RAILROAD TIES





ECOTRAX®

COMPOSITE RAILROAD TIES



Installed ECOTRAX® Ties, Clockwise from Top-Left: Railroad switch being pre-assembled in yard; A train crossing a railroad bridge in Fort Eustis, VA; Product being installed near Dallas, TX; Installed ties on transit line overpass outside Dallas, TX; Elevated track in Chicago, IL; Freight train outside Dallas, TX; Level crossing in Calgary, Canada.



*Above: STRUXURE® Pre-Built Bridge Panels for a 'heavy-goods' vehicular bridge in Peebleshire, Scotland.
Opposite: Examples of STRUXURE® Recycled Structural Composite products.*

STRUXURE®

RECYCLED STRUCTURAL COMPOSITE



STRUXURE®

Made from 100% Recycled Plastic Composite Material

Our STRUXURE® Composite Building Product line includes: structural composite I-beams, tongue & groove planking, and boards of various sizes for use in engineered design solutions, such as rail track, rail and tank bridges, pedestrian and recreation bridges, marinas, boardwalks, and bulk heading. STRUXURE® Products have had successful installations in numerous maintenance-free, heavy-load bridges built by the U.S. Army, and STRUXURE® Pre-Built Bridge Panels installed in heavy-goods vehicular bridges in Europe and the United States.

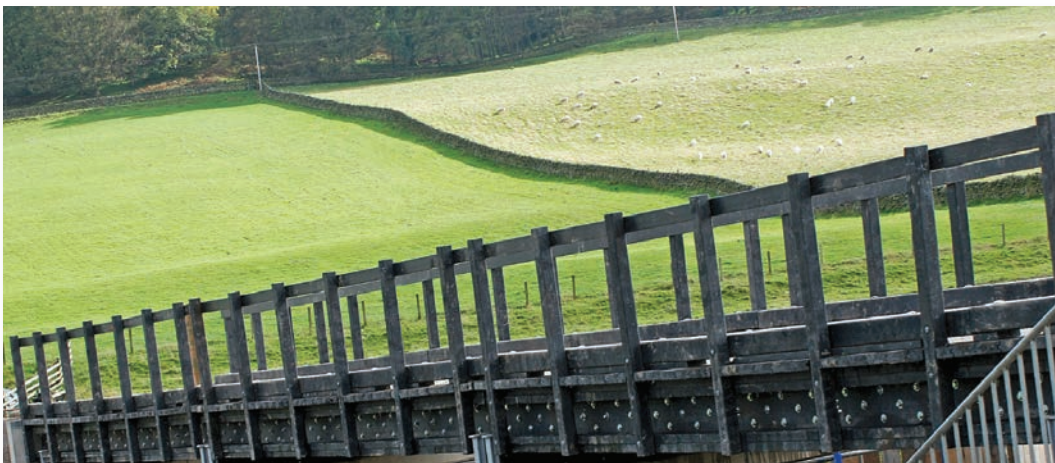
• I-Beams • Tongue & Groove Boards • Pilings • Dimensional Boards • Railroad Ties • Pre-Built Bridges •

STRUXURE®

Made from 100% Recycled Plastic Composite Material



There are many reasons for choosing to build with our STRUXURE® building products. They can outlast traditional building materials. Even when wet, our products will never rot nor warp. They are impervious to insect infestation and can not rust. They are environmentally safer than some traditional, treated-wood products because AXION's proprietary Recycled Structural Composite (RSC) material is inert and contains no toxic materials, and will never leach toxic chemicals into the soil. Lighter than traditional materials, transporting our product is less expensive and reduces energy costs. In addition to being made from recycled materials, STRUXURE® products themselves are completely recyclable at the end of their long, functional lives.





Above & Opposite: A STRUXURE® Pre-Built 'heavy-goods' vehicular bridge in Peebleshire, Scotland.



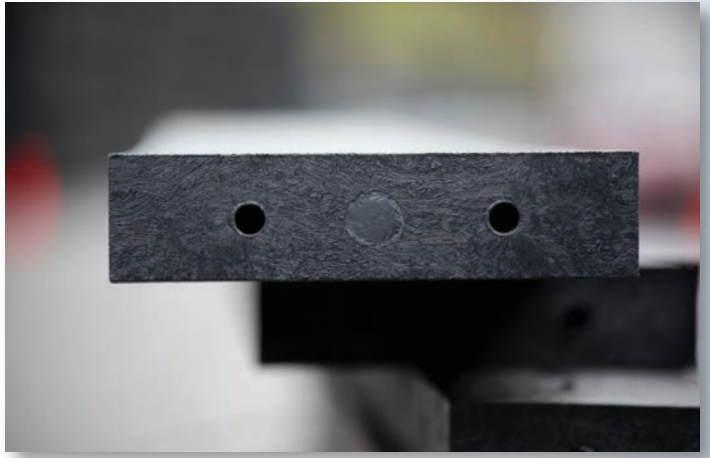
STRUXURE®

RECYCLED STRUCTURAL COMPOSITE

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STRUXUR®

RECYCLED STRUCTURAL COMPOSITE





STRUXURE® Products, Clockwise from Above: Pre-Built Bridge Panels in Peebleshire, Scotland; A completed 'heavy-goods' bridge in Peebleshire, Scotland; Heavy-load railroad bridge in Fort Eustis, Virginia; 'heavy-goods' bridge in Peebleshire, Scotland; Center: Heavy-load tank bridge in Fort Bragg, North Carolina.

STRUXURE®

RECYCLED STRUCTURAL COMPOSITE



EXPAND YOUR GLOBAL REACH

Grow Using AXION's Intellectual Property Portfolio

AXION INTERNATIONAL IS A TECHNOLOGY COMPANY.

Our strategic goal is to leverage and exploit our technology across as many applications and geographies as possible.

Products in the Marketplace

- 100% Recycled Structural Composite (RSC)
- Plastic Composite Materials are Structural in Nature
- Used by Railroads, Municipalities, Engineering Firms, and the U.S. Army

Advanced Patented Technology Portfolio

- Eight (8) Polymer Blend Patents
- Four (4) Fire Retardant Patents
- Process and Structural Shape Patents

Entering Aggressive Growth Phase

- Leveraging Proven Applications of Technology
- Active Sales Cycle Yields Domestic and International Contracts
- Launched Three Divisions to Target: Rail, Construction, and Building Materials

LET'S DISCUSS OUR GROWTH STRATEGY

Joint Ventures:

Share AXION Technology and Deploy It Globally

Strategic Partnerships:

Develop then Deploy - From Pilings to Fire Retardant



EXPAND YOUR GLOBAL REACH

Grow Using AXION's Intellectual Property Portfolio



CONTACT AXION INTERNATIONAL

Axion International, Inc.
4005 All American Way
Zanesville, Ohio 43701
Ph: 908.542.0888
info@axih.com





CALL 908.542.0888 **EMAIL** info@AXIH.com **ONLINE** www.AXIH.com