

Innovative Panel Technology



## Content

#### "CellTech is a revolutionary material for the trailer industry."

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#### Chris Lee VP-R&D, Engineering



Applications

CellTech Case Studies

CellTech Testing

CellTech Cargo Trailers

Connect with Us



# About the Company

Lightweight Sandwich Panel Technology



**Transportation Industry** 

# Introduction 🕸

Lightweight Sandwich Panel Technology

CellTech Metals is a lightweight sandwich metal company offering the most advanced solutions in metal technology. Established in 2005, CellTech has advanced its technology through strategic partnerships with experts in adhesives, manufacturing processes, and precision tooling design. We offer complete customization of sandwich metal products to not only meet your design needs but also provides you with cost and weight savings.



# Key Management

### Developing Panel Technology Since 2005



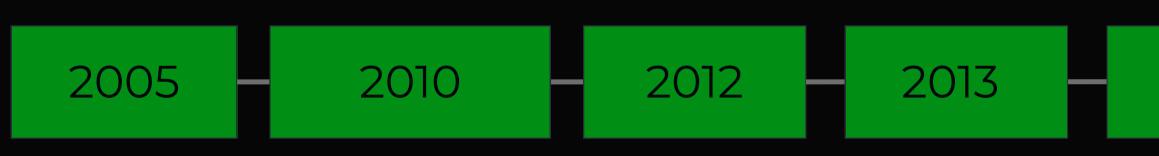


#### Doug Cox Chief Executive Officer

#### Fabien Ebnoether Chief Engineer

# Our Milestones

### CellTech's Exploration of Panel Technology



Founded by Doug Cox as an initiative to provide affordable Honeycomb soltution

PHD Engineer Fabien Ebnoether develops a unique bi-directional corrugated design -CellTech's patented technology

Manufacturing equipment was Commercialized designed to mass produce CellTech technology

lst Product-CellTech Panel, testing began with Hyundai

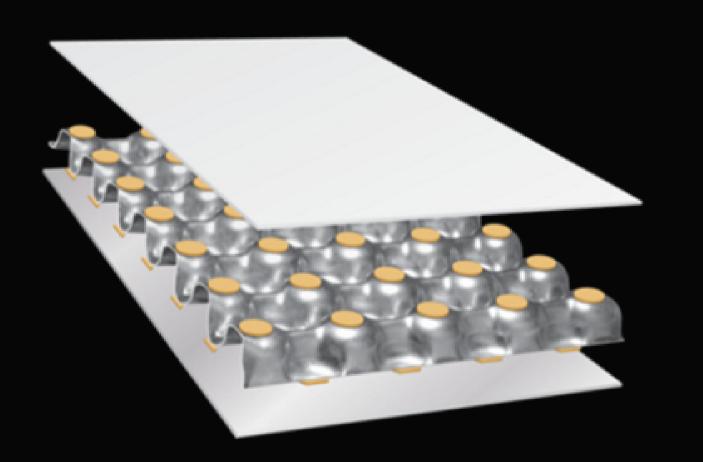
CellTech Metals began manufacturing & Selling their Patented technology in Searcy, AR for **XPO & TMI** 

#### 2018 2020 2022

CellTech Metals relocates plant to Waco, TX to begin partnership with Forest River

CellTech Trailers LLC is formed

# Our Technology

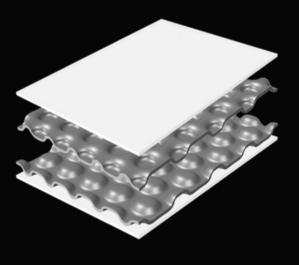


Patented Sandwich

A patented breathable, bi-directional opencell design which creates opportunities for a variety of enhancements; acoustic, structure, thermal, air-flow, etc.

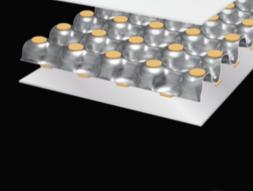
### Sandwich Panel Technology

# Product Portfolio



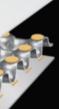
### CellTech® Sheet

- 4 metal layers
- Thin sandwich material
- Brazing or adhesive
- Excellent formability
- Substitute for sheet metal









### CellTech® Panel

- 3 metal layers
- Thick sandwich material
- Adhesive
- Limited formability
- Used as flat panel





# CellTech® Panel

High bending stiffness to weight ratio

Cost-efficient mass production

Ability to use low cost galvanized steel sheets

Bonding with a high-performance aerospace grade structural adhesive

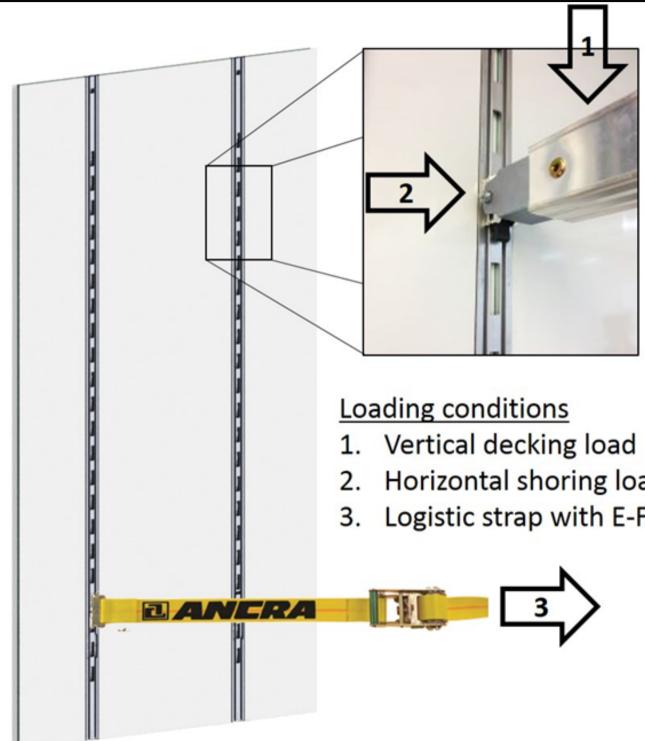
Customizable E-Track System

Numerous Idustrial Cargo Applications

Engineered for ustainability & 100% Recyclable



### CellTech® Track System Integrated ANCRA LADII System



- Horizontal shoring load
- Logistic strap with E-Fitting pulling

# Applications

### Industries of Focus





### Transportation

#### Construction

### Elevator

## Semi Trailer Case Study Exterior CellTech Panel vs. Composite







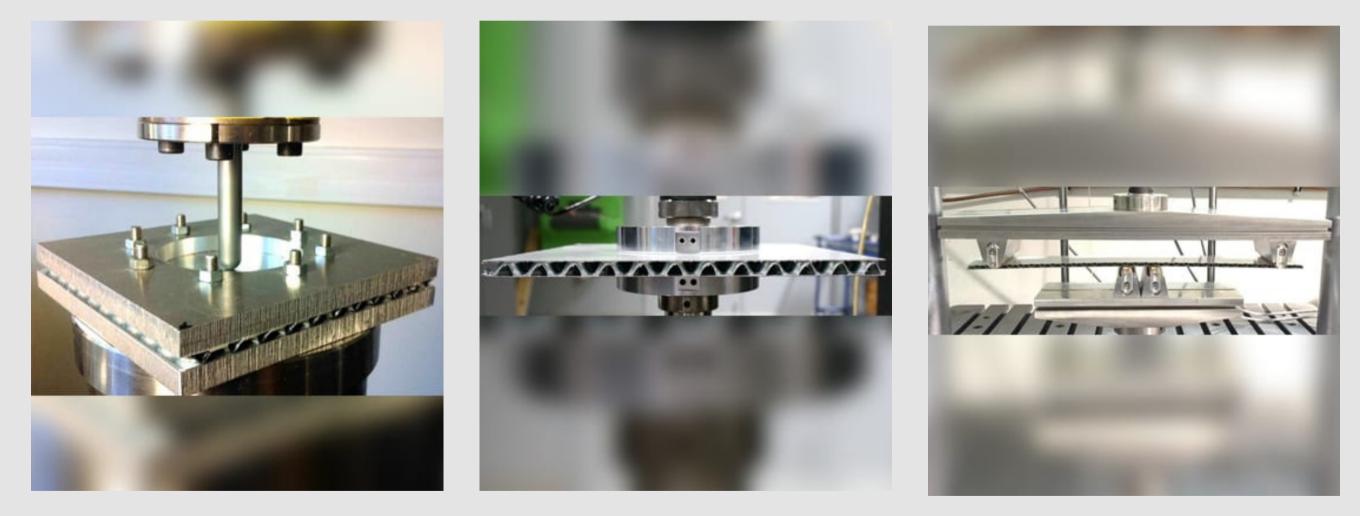
## Semi Trailer Case Study Interior CellTech Panel vs. Composite





Standard

### CellTech Testing Mechanical Properties



### PUNCTURE/DENT TESTS COMPRESSION TESTS BENDING TESTS



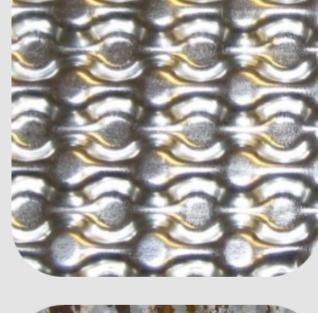


### CellTech Testing Mechanical Properties

### **Galvanized Steel G90**

Intitial







### G90+ corrosion protection system





# CellTech Testing-Validated & Road Tested

- Whiting Doors has over 20,000 CellTech panel rear swing doors that have been on 53' van trailers since 2014 – no issues
- Hyundai Translead built ten 53' vans that have been on the road since 2013 no issues
- XPO Logistics Since 2015 LTL trailers have been built with extensive daily use no issues
- TMI since 2016 over 1000 adhesively bonded 53'vans and truck bodies on Mexican roads – no issues CellTech Cargo Trailers- since 2018 over 2000 cargo trailers on the road-
- no issues



### Product Portfolio CellTech® Cargo Trailer

- Increased Strength An all steel trailer using CellTech's revolutionary panel technology. CellTech panels are manufactured with a patented technology engineered for the enclosed cargo trailer
- Weight Savings The weight savings is created by the unique bi-directional panel core structure, whereby an air flow wall structure has been developed to reduce weight.
- Aesthetics Due the stiffness of the walls and roof design, the trailer is very aesthetically attractive
- Cargo The walls and roof panels been designed with e tracks to carry significant loads and help manage and organize; equipment, tools and materials.



### Key Features



Lightest ALL STEEL Trailer

Toughness & Longevity

Strength & Durability

E-Track Cargo Solutions

Increased Cargo Cube Space

Significant Wall Loading Capabilites

Outstanding Aesthetic Appearance

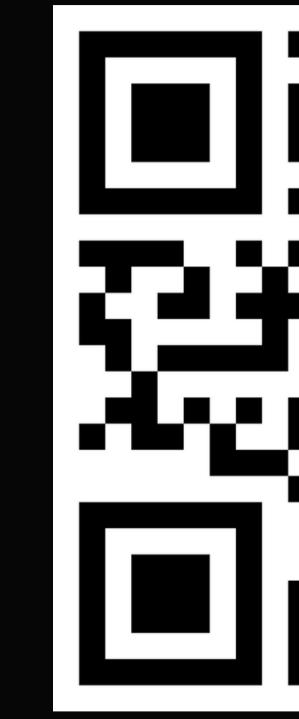
Aerodynamic Wall & Roof System

100% Recyclable

### CellTech trailer survives flip on icy highway!

Would your aluminum trailer hold up like this after flipping on the highway?

<u>https://youtu.b</u> e/JIbC4RfLoLc







# Connect with us.

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