



V1 2020 This document outlines wine shipping solutions insulated with ClimaCell offered by TemperPack, a sustainable packaging company for the Perishable Foods market.



# Seeking to solve the world's packaging problems through sustainable design.

TemperPack was borne out of a desire to reduce the amount of unsustainable packaging that correlated with the growing world of e-commerce delivery.

Our founders saw an opportunity in perishable delivery where innovation had stagnated and companies were still using insulation products that had been developed over 60 years ago.

Today, TemperPack operates two manufacturing facilities in Virginia and Nevada and is rapidly expanding its reach in the perishable and cold chain shipping market, all with the goal of reducing the amount of packaging that ends up in landfills.



In the last year, TemperPack has ended the creation of 25 million pounds of CO<sub>2</sub>E from being produced.



We've helped protect over 20 million of our clients' shipments, making us the largest EPS alternative supplier in the country.



In 2018, we helped our clients divert 10 million pounds of plastic foam from entering the Earth's landfills.



At TemperPack, we believe that you shouldn't have to compromise quality or performance to also be sustainable. Our thermal packaging solutions offer 1:1 R-Value comparison to EPS of similar thickness.

We're in a race to become the market leader in sustainable thermal packaging and insulation that doesn't harm the planet. It's a multi-billion dollar category and it's dominated by Styrofoam.

> - BRIAN POWERS, CO-FOUNDER & CO-CEO OF TEMPERPACK

At TemperPack, we've found a niche in developing thermal packaging solutions for clients shipping perishable goods. We focus on understanding the logistical headaches and consumer pain points of delivering and receiving perishable goods.

We combine our expertise in Packaging Design, Material Science, and Custom Manufacturing to build products that perform as well as or better than conventional shipping insulation but are more environmentally friendly.



#### BEST-IN-CLASS ENGINEERING

We have designed custom profiles, packouts, conceptual prototypes, and performed ISTA thermal qualification for companies like Diplomat Specialty Pharmacy and HelloFresh.





#### LEADERS IN SUSTAINABILITY

TemperPack is the only thermal packaging manufacturer endorsed by Closed Loop Partners, WMU's Pilot Plants Program, and the Sustainable Packaging Coalition.



#### ENTERPRISE-LEVEL PARTNER

We partner with companies to offer innovative solutions that lower their overall operating costs by looking at the entire cold chain delivery supply chain.

# MEET THE TEAM



JAMES MCGOFF
CO-FOUNDER & CPO

James graduated from McGill University with a degree in Materials Engineering. He spent time at Boeing Aerospace & Defense before founding TemperPack.

We've built a team of innovators from many of the top companies in the country, all with the goal of designing and manufacturing a more sustainable alternative to EPS foam.



BRIAN POWERS
CO-FOUNDER & CEO

Brian worked in investment banking at Moelis & Company before founding TemperPack. He holds a degree in finance from the Wharton School of Business.



LOU MARMO
CHIEF OPERATING OFFICER

Lou joined TemperPack in 2019 after advising the co-founders for two years. He was previously the CFO of Liqui-Box and has 25 years of manufacturing industry experience.



CHARLES VINCENT
CO-FOUNDER & CTO

Charles graduated from McGill University with a degree in Materials Engineering. He worked at Crosschasm, an autonomous automotive company before starting TemperPack.



BOB BECKLER
CHAIRMAN

Bob has over 30 years of experience working in the packaging industry. He previous served as President of Packaging at WestRock and joined TemperPack in 2017.

# EVERY GREAT BUSINESS STARTS WITH AN IDEA

91% of all plastic that has been created will never be recycled. Consumers don't think this is sustainable, and neither do we.

TemperPack was started by three entrepreneurs who wanted to make a difference in the way we package things. Our company is deeply rooted in research and development, and our people value sustainable design that doesn't sacrifice quality and performance.

We're always looking for clients who share these values.



Not all food is shipped the same. We develop shipping solutions to meet the needs of our clients, whether they're shipping seafood on ice, chocolate in the middle of summer, or meal kits with lots of parts.



#### **MEAT & POULTRY**

We have solutions that help butchers and meat distributors maintain frozen or below 40°F for up to 3 days in the mail, cutting down on shipping costs.



#### **SEAFOOD**

Fresh seafood shipments require maintaining cold temperatures in high moisture. ClimaCell is hydrophobic to hold up to increased moisture.



#### **MELTABLES**

Many companies can't ship chocolate and other meltables in the summer due to high temperatures. We've developed solutions to help companies ship year round.



#### **MEAL KITS**

We service the packaging needs of many of the largest meal kit companies in the country.



#### **BEER & WINE**

We've developed shipping options that maintain temperature and provide added protection during shipping for wine and beer.



#### FROZEN MEALS

We've qualified ClimaCell to work with dry ice, keeping your shipments frozen for extended delivery windows.



Proving Ground is TemperPack's in-house thermal design and testing lab. It is one of the largest packaging labs in the United States, and one of the only ISTA-certified thermal transport labs in all of North America.

At Proving Ground, we have designed and tested over 500 thermal packaging systems for a wide variety of applications. Our world-class packaging engineers have the ability to rapidly design around almost any payload size, temperature range, or transit duration.

Proving Ground

01

#### RAPID PROTOTYPING

Are you looking for samples to present to a manager for a meeting next week? At Proving Ground, TemperPack can produce and ship samples in days, not weeks. 02

#### **READY-ENGINEERED SOLUTIONS**

With ready-engineered solutions for 2-8C, CRT, and frozen applications, we're ready when you need a solution quickly.

03

#### QUALIFIED PERFORMANCE

TemperPack's systems come with the documentation you need to stay compliant with URAC, manufacturer requirements, regulating bodies, and the demands of your patients.

04

#### **DESIGN & MESSAGING**

Re-shipping due to perceived temperature excursions? The look and feel of packaging can determine a patient's confidence in a medication. We ensure that packaging communicates confidence.

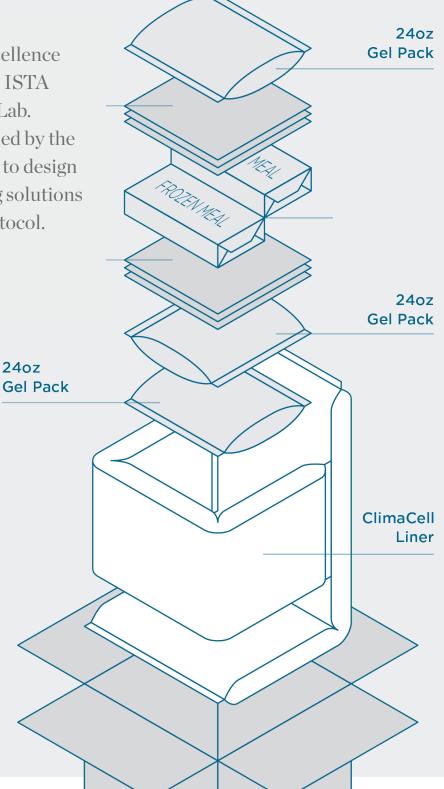
# ISTA® LABORATORY CERTIFICATION

We've demonstrated a strong commitment to packaging excellence by making Proving Ground an ISTA Certified Thermal Transport Lab.

Specifically, our team is certified by the highest authorities in the field to design and qualify thermal packaging solutions per the ISTA Standard 20 protocol.

## \$1MM+

WE'VE INVESTED OVER
A MILLION DOLLARS
INTO BUILDING A STATEOF-THE-ART THERMAL
TRANSPORT LAB TO
BETTER SERVE OUR
CLIENTS' NEEDS.







## HIGH THERMAL PERFORMANCE

Want to move away from EPS foam without changing your pack-out? You can keep your current coolant configuration in a ClimaCell cooler, which performs just like EPS foam.



#### LOW COST STRUCTURE

Sustainability is great, but at the end of the day, we understand that budget is always a factor. ClimaCell systems are on par with EPS in cost.



### PACKS AND SHIPS FLAT

ClimaCell packs flat and is easy to assemble, which means lower inbound and storage costs. Pre-kitted systems are available upon request.



ClimaCell is made from renewable plant-based components and paper. With excellent thermal performance and a competitive cost structure, it is the ideal replacement for unsustainable insulators, like Styrofoam®. ClimaCell represents our understanding of the insulation market and seeks to improve the category by pushing it toward a more sustainable future.



#### **CURBSIDE RECYCLABLE**

Many packaging products claim curbside recyclability, but ClimaCell is the real deal. It's compliant with re-pulping standards developed by the Fibre Box Association, it's received the "Widely Recyclable" designation from How2Recycle®, and it has been endorsed by Closed Loop Partners.



#### CERTIFIED THERMAL PERFORMANCE

You don't have to take our word for it. With live distribution studies, ISTA-compliant chamber tests, and third-party R-Value evaluations, ClimaCell has been proven to perform on par with EPS foam.



#### **BIO-BASED MATERIAL**

While most insulators on the market are derived from petroleum, ClimaCell is composed of rapidly renewable, bio-based materials.



#### WIDELY CUSTOMIZABLE

ClimaCell can accommodate any payload size, can be customized to hold frozen temperatures, 2-8C, or controlled-room-temperatures, and can last for 12-72+ hours.



#### COMPETITIVELY PRICED

ClimaCell systems are cost-competitive with conventional thermal packaging, and while EPS gets more expensive every year, we're working to make our products even more affordable. "We've been looking for an alternative to EPS foam for 10 years, but we haven't been able to find anything cost-competitive that also performs. We are thrilled to have finally found a solution that works with TemperPack."

- CORPORATE
SUSTAINABLE EXECUTIVE,
FORTUNE 500 LIFE
SCIENCES COMPANY

# **CLIMACELL FEATURES**



#### Off-the-Shelf Solutions

Regardless of whether you're shipping frozen or refrigerated, 2 or 3-Day delivery, in the winter or summer, we have solutions that meet your perishable shipping needs.



#### Moisture Resistant

Unlike other EPS foam alternatives, ClimaCell is built to hold up to coolant condensation while in transit.



fewer emissions

Looking to show reduced CO<sub>2</sub>E emissions on this year's Corporate Responsibility Report? ClimaCell requires far less energy to manufacture than EPS foam.



#### Tooling-Free Manufacturing

Process

Need to bring on a new cooler size? Don't worrywe can customize ClimaCell on the fly with no new tooling, which means there are no up front costs to customization.



#### Ships & Packs Flat

Tired of paying to ship air every time you purchase molded foam coolers? ClimaCell ships and stores flat, meaning lower inbound freight and storage costs.



#### **ISTA-Tested**

We offer design testing for any product to optimize pack-out size and shipping duration in our in-house ISTA-certified Thermal Transport Lab, Proving Ground.



#### Supply Continuity

Want a sustainable solution but can't find a national provider? We make millions of units a month across the US, and we stock ClimaCell with distributors throughout North America and Europe.



#### **Custom Branding**



Lightweight



#### Class 3 **Packaging**

Styrofoam® is a class 1 material, meaning it can go up in flames pretty quickly. For this reason, there are restrictions on how it is stored, and requirements for expensive fire-mitigation systems. With ClimaCell, you can say goodbye to these headaches.



# WINE SHIPPING SOLUTIONS

# 4-PACK (H)

#### 4-PACK (H) 84+ hrs

The Horizontal 4-Pack shipping solution is rated to 84+ hours against an ISTA-7E 96 hour Heat profile. It was tested in TemperPack's ISTA-certified laboratory using TR-71 series temperature loggers in SM-32C and SM-16C Thermotrons.

# Ambient Upper Threshold Top Bottom 95°F 90°F 80°F 75°F 70°F 60°F 50°F 60°F 50°F 0h 20h 40h 60h 80h Time (h)

# PRODUCT SPECIFICATIONS

**Internal Dimensions** 

15.75" × 9.75" × 10.75"

**External Dimensions** 

17.75" × 11.75" × 12.75"

**Primary Insulation** 

1" ClimaCell (2pc)

Coolant

4 x 24oz Gel Packs

Coolers per FTL

3900 Flat Packed Units

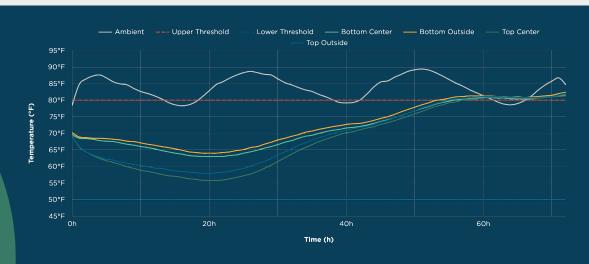
Pallets per FTL



# 6-PACK (H)

# 6-PACK (H) 56+ hrs

The Horizontal 6-Pack shipping solution is rated to 56+ hours against an ISTA-7E 72 hour Heat profile. It was tested in TemperPack's ISTA-certified laboratory using TR-71 series temperature loggers in SM-32C and SM-16C Thermotrons.



# PRODUCT SPECIFICATIONS

**Internal Dimensions** 

15.75" × 9.75" × 10.75"

**External Dimensions** 

21" × 14.75" × 13.25"

**Primary Insulation** 

1" ClimaCell (2pc)

Coolant

4 x 24oz Gel Packs

Coolers per FTL

3120 Flat Packed Units

Pallets per FTL



# 6-PACK(V)

# 6-PACK (V) 72+ hrs

The Vertical 6-Pack shipping solution is rated to 72+ hours against an ISTA-7E 72 hour Heat profile. It was tested in TemperPack's ISTA-certified laboratory using TR-71 series temperature loggers in SM-32C and SM-16C Thermotrons.

# PRODUCT SPECIFICATIONS

**Internal Dimensions** 

13.75" × 9.5" × 16.5"

**External Dimensions** 

15.75" × 11.5" × 18.5"

**Primary Insulation** 

1" ClimaCell (2pc)

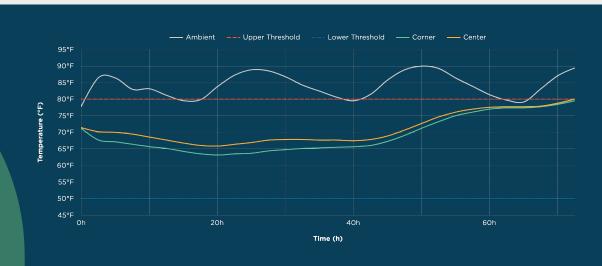
Coolant

3 x 48oz Gel Packs

Coolers per FTL

3600 Flat Packed Units

Pallets per FTL





# 12-PACK (H)

# 12-PACK (H) 72+ hrs

The Horizontal 12-Pack shipping solution is rated to 72+ hours against an ISTA-7E 72 hour Heat profile. It was tested in TemperPack's ISTA-certified laboratory using TR-71 series temperature loggers in SM-32C and SM-16C Thermotrons.

## PRODUCT SPECIFICATIONS

**Internal Dimensions** 

19" × 12.25" × 19.25"

**External Dimensions** 

21" × 14.25" × 21.25"

**Primary Insulation** 

1" ClimaCell (2pc)

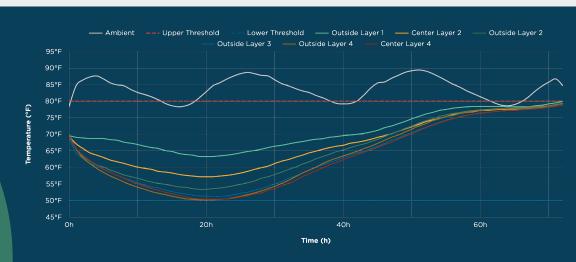
Coolant

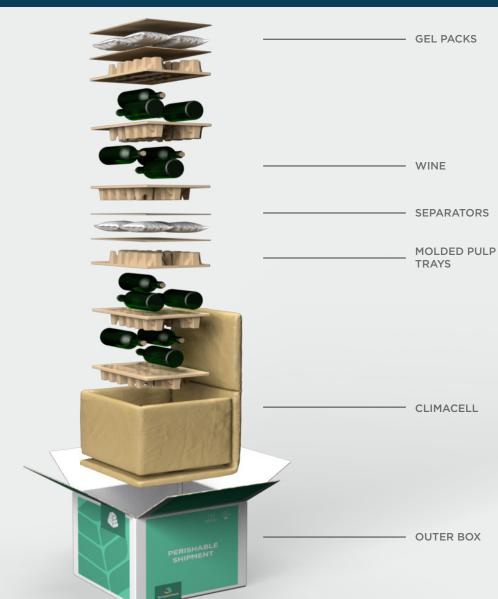
8 x 24oz Gel Packs

Coolers per FTL

2520 Flat Packed Units

Pallets per FTL





# 12-PACK (V)

#### 12-PACK (V) 69+ hrs

The Vertical 12-Pack shipping solution is rated to 69+ hours against an ISTA-7E 72 hour Heat profile. It was tested in TemperPack's ISTA-certified laboratory using TR-71 series temperature loggers in SM-32C and SM-16C Thermotrons.

# PRODUCT SPECIFICATIONS

**Internal Dimensions** 

17.75" × 11.5" × 13.25"

**External Dimensions** 

19.75" x 13.5" x 15.25"

**Primary Insulation** 

1" ClimaCell (2pc)

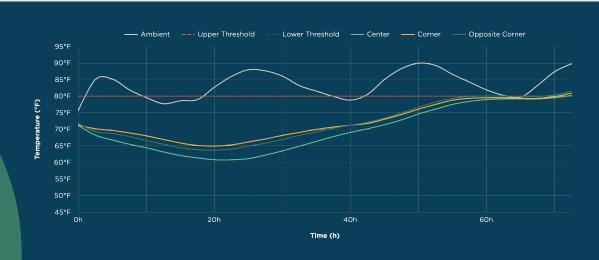
Coolant

6 x 24oz Gel Packs

Coolers per FTL

3500 Flat Packed Units

Pallets per FTL







Often, patients will ask to re-ship medications due to a perceived temperature excursion. Companies see this all the time with specialty drugs in the coldest months of winter and hottest months of summer. In the great majority of cases, these drugs are still potent, but the shipper must process a re-ship.

While our highest priority is real-world performance and patient safety, we believe it's imperative to communicate with patients that their medications are safe. That's why we work with our customers to design on-package messaging that inspires confidence.



#### PACKAGING INSERTS

When a patient receives a shipment, that's a key moment of truth. We can work with you to ensure it's a positive one by developing an insert that explains the benefits of your new packaging. It's an easy and effective way to make a positive impression.



#### **CUSTOM BRANDING**

Packaging is valuable brand real estate. Our design team can add brand graphics and messaging to the ClimaCell™ cooler, as well as the exterior and interior of the shipping container. That's advertising that's guaranteed to reach your target.



#### COMPONENT MESSAGING

Shipping temperature-sensitive drugs requires a sophisticated pack-out consisting of several core components. We can work with our sourcing partners to add your branding to cooling elements and other parts of the complete package.

#### HOW IT WORKS: ACCEPTING DELIVERY

ClimaCell can be delivered via two half gaylord boxes per pallet or in full gaylords with parts separated. In each format, TemperPack fits 60 pallets per truckload. Overall measurements of each pallet are 48" x 40" x 54".





#### JUST-IN-TIME DELIVERIES

Need a high volume of coolers but don't have a lot of space? With our network of manufacturing sites, third-party logistics partners, and distributors, we can deliver as little as a pallet or as much as a truckload on short notice.

#### VENDOR-MANAGED INVENTORY

Tired of counting inventory every week? Give us access to your sales data, and we'll do the counting for you to ensure that you always have the right amount of thermal packaging in-house.

#### PRE-KITTED SYSTEMS

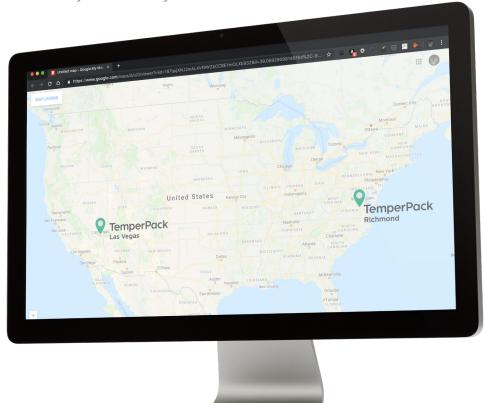
Don't have the labor setup to kit your ClimaCell shipping systems in-house? We can deliver pre-kitted systems anywhere in North America or Europe.

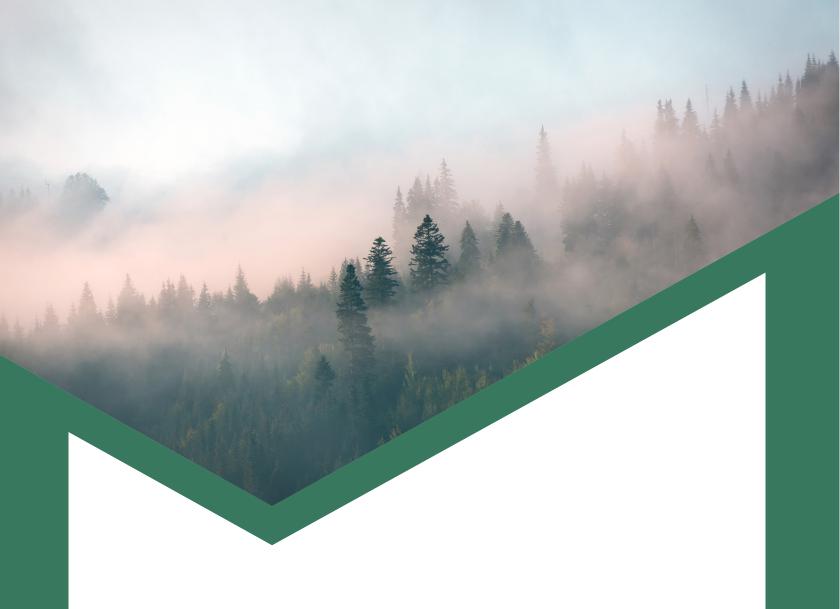
#### 64 ENVIRONMENTAL IMPACT REPORTS

We offer complimentary consulting, including customer-friendly deliverables, to ensure that your marketing and PR teams have exactly what they need to be loud and proud about your switch to recyclable, low-emission packaging.

#### SERVING BOTH COASTS, AND EVERYWHERE IN BETWEEN

We manufacture ClimaCell across two facilities in Richmond, Virginia and Las Vegas, Nevada. That means, regardless of where your facilities are located, we can always have a shipment of ClimaCell coolers delivered to you within 1 day.







V1 2020

TEMPERPACK TECHNOLOGIES, INC.







