Ivins City Staff Report
City Council Meeting 12/21/2023

Agenda Item: Consider and Approve a change to Ivins Cemetery ordinance to include polypropylene to the allowed materials for burial vaults.

Submitted by: Benny Sorensen

Recommended City Council Action: Consider and Approve changing ordinance 11.03.112 Vaults Required, to include polypropylene as an allowed material for burial vaults.

BACKGROUND: Staff has been approached by a vendor who is considering selling burial vaults made of light weight, high density, water resistant, non-porous, non-biodegradable polypropylene. We have been able to look at the Atlas II and Maximus burial vaults by Polyguard & Company and they appear to be of solid enough construction to be used as burial vaults in our cemetery. Compression test data from the manufacturer indicates that they have certified load bearing capacity to meet and exceed industry standards and cemetery requirements.

FINDINGS AND ANALYSIS:

- Vaults have certified load bearing capacity to meet and exceed industry standards and cemetery requirements. Vaults are lightweight but can support 5,000 lbs. applied to a 12-inch square plate in the center of the lid. Has a certified load bearing capacity of 12,100 lbs. across the length of the vault.
- Vaults will not degrade in the ground, seal to be watertight.
- Very light and can be moved by one or two people and does not require special equipment to move it.
- Comes in the same size as the concrete vault and can accommodate the same caskets and will offer another option for consumers that is less expensive but still meets their needs.

SUPPORT MATERIALS:

- Brochures for both the Atlas II and Maximus burial vaults.

FINANCIAL IMPACT: No financial impact on the city

Respectfully Submitted: Benny Sorensen

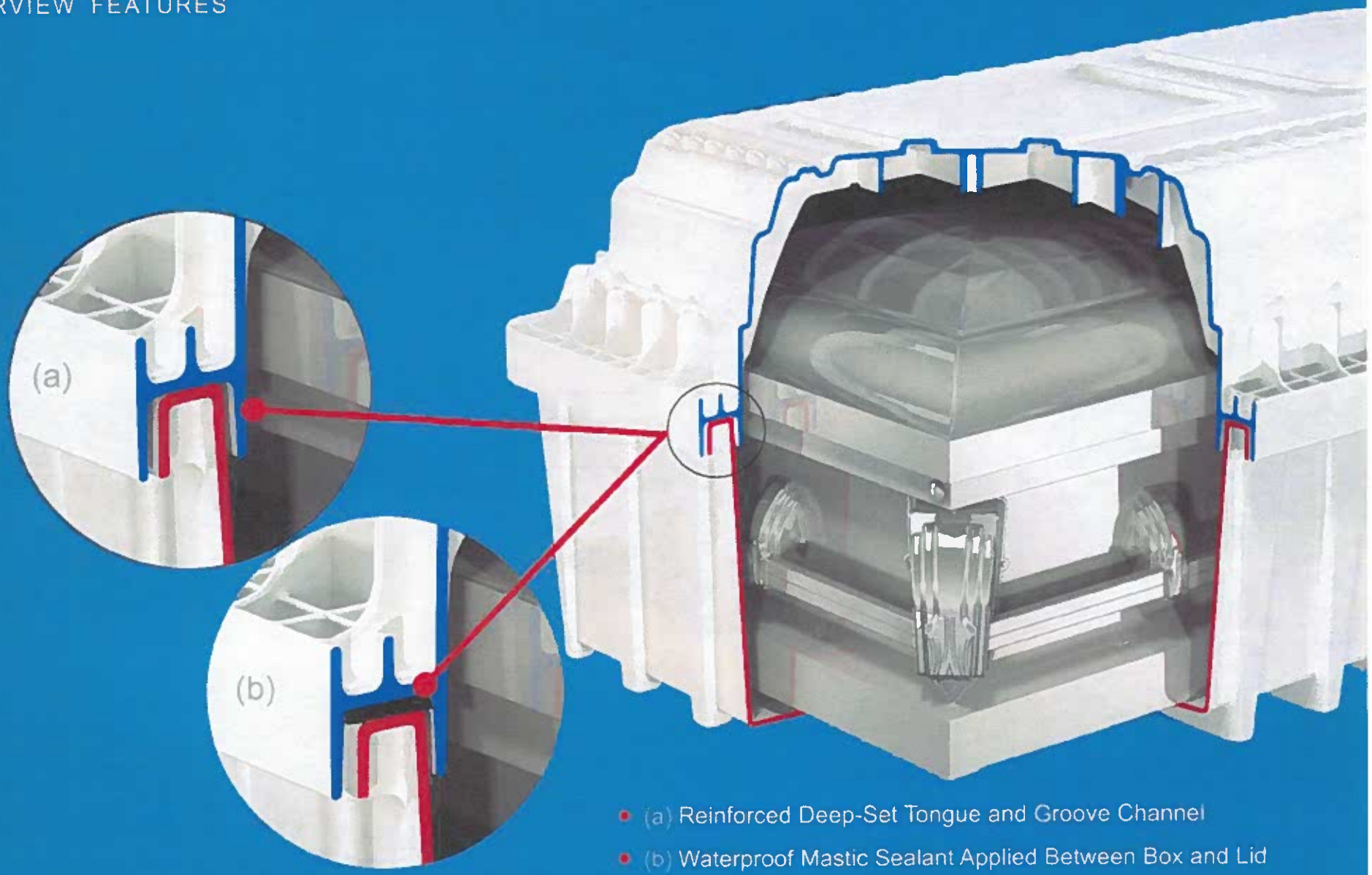
Content Review: Dale Coulam, City Manager

11.03.112: VAULTS REQUIRED:

(1) It is unlawful for any person to be buried in the cemetery unless the casket shall be placed in a vault made of concrete, polypropylene, fiberglass, steel or brick lined or of such other material approved by the city council, substantially constructed and covered with a similar durable material.

(2) No wood shall be used as a permanent part of the construction of any part of the vault. (Ord. 2006-18, 2006)

ATLAS II
OVERVIEW FEATURES



- (a) Reinforced Deep-Set Tongue and Groove Channel
- (b) Waterproof Mastic Sealant Applied Between Box and Lid

ATLAS II

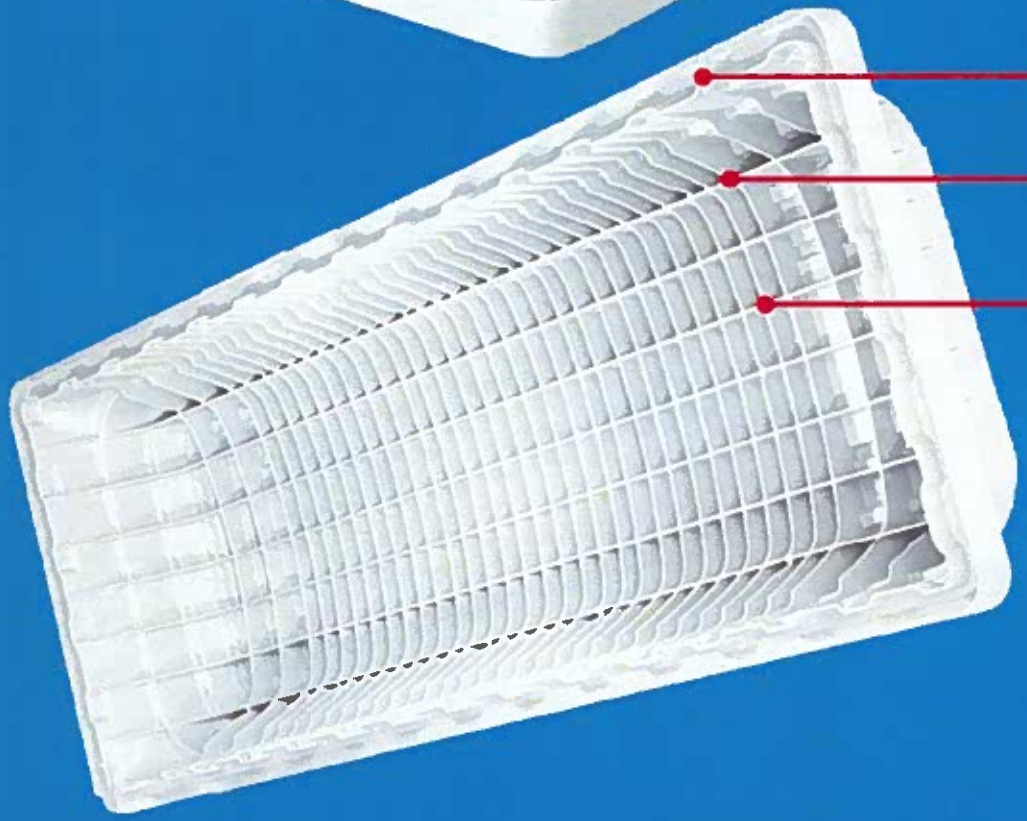
OVERVIEW FEATURES



Carapace Frames

180° Reinforced Perimeter Lip

Vertical Gussets Facilitate Net-Zero Side Wall Expansion



Deep Tongue N' Groove 2.90"

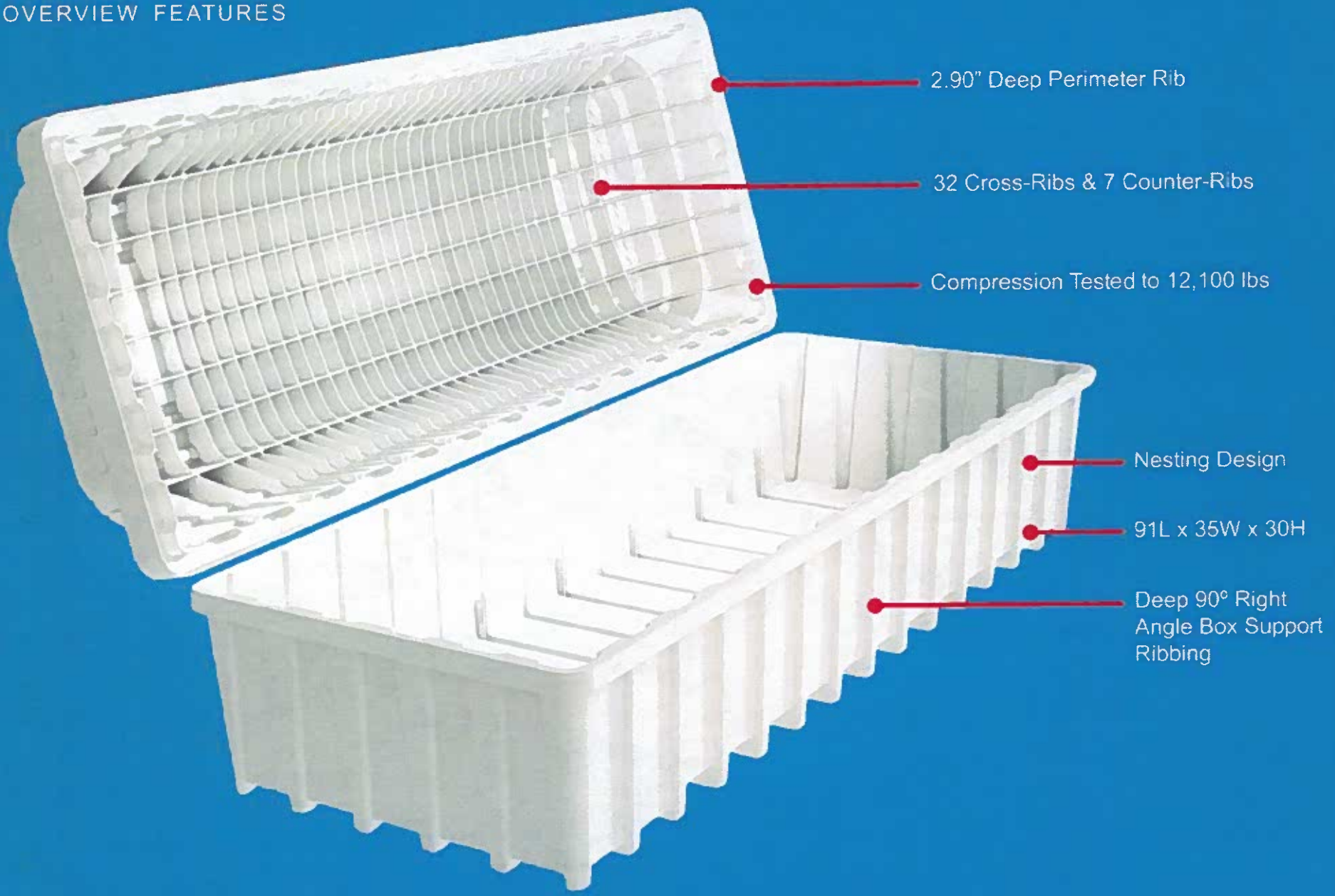
Deep Arched Ribbing

Lid Engineered With 32 Cross Ribs, 7 Counter Ribs, and 1.33" Rib to Center

- Certified Load Bearing Capacity: 12,100 lbs
- Lid: 81 lbs
  Box: 62 lbs
  Total Weight: 143 lbs

ATLAS II

OVERVIEW FEATURES



ATLAS II

OVERVIEW FEATURES





ATLAS II

BURIAL VAULT

The Atlas II - "Top Seal"

The Atlas Vaults feature unmatched strength and designed to withstand day-to-day downward pressure from the cemetery surface and the earth load from within the grave. Originally designed and produced in 1995, this lightweight top seal vault was reengineered in 2022. Updates to the Atlas were focused on the mid-section with increased structural strength where the lid and base join together. With a focus on reducing sidewall deflection, more gussets were added to the lid, along with a redesign of the tongue and groove channel where the lid and base join together.

MAXIMUS

BURIAL VAULT



MAXIMUS

BURIAL VAULT

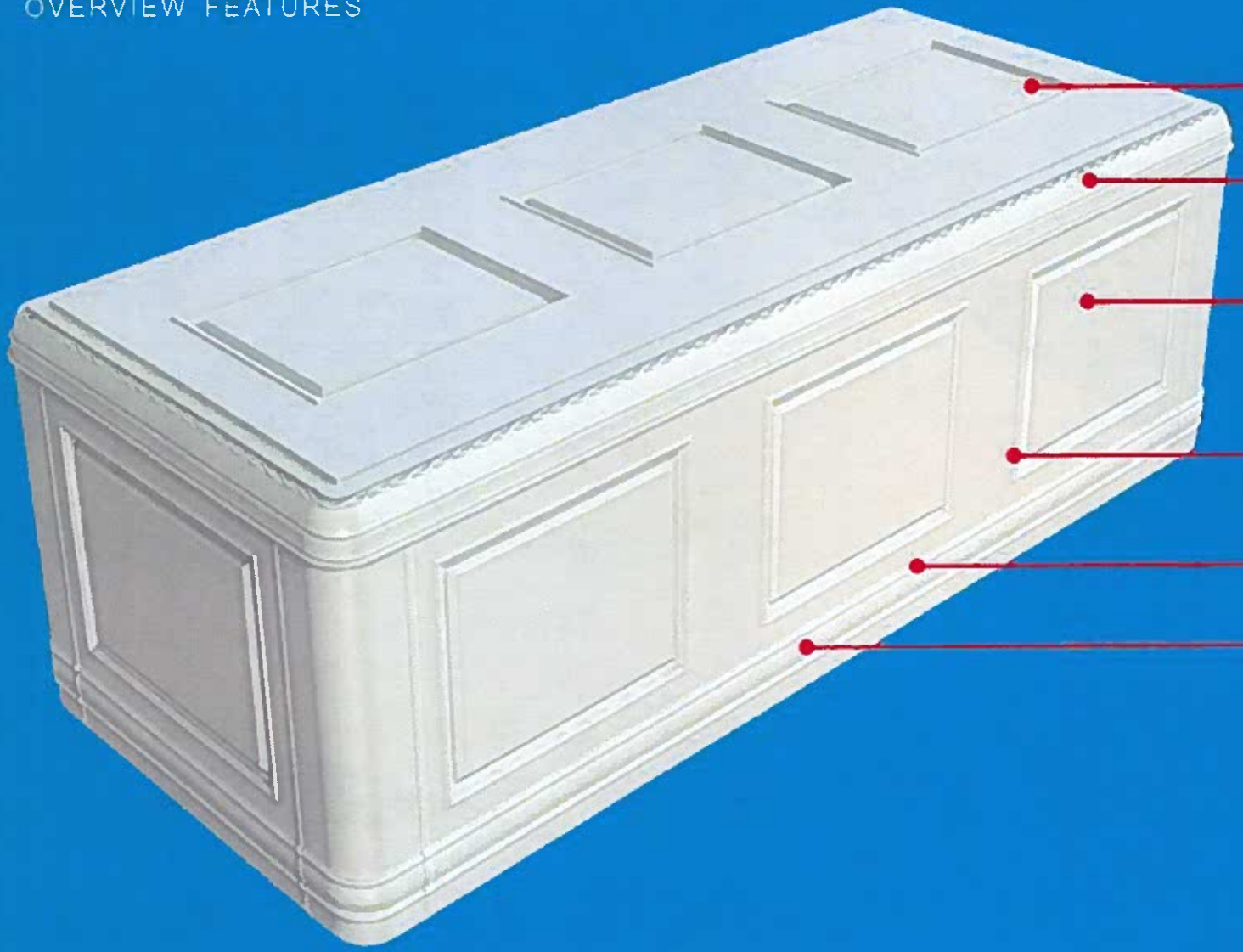
"The Maximus - "Assembly Innovation"

The Maximus is the only polymer burial vault that ships flat and is assembled onsite. This premium vault was designed with ribbing and cross-ribbing on all six sides for superior strength and performance. The design elements and structure of the Maximus were derived from input and collaboration between the Polyguard & Co. product the development team and key personnel from a large cemetery group in California. The Maximus offers exceptional presentation at the graveside but also provides peace of mind in the protection and cemetery grounds integrity.



MAXIMUS

OVERVIEW FEATURES



Picture Frames

Aesthetic Design:
Braid Detail on Lid

Decorative Panes
on Ends and Sidewalsl
Add Strength

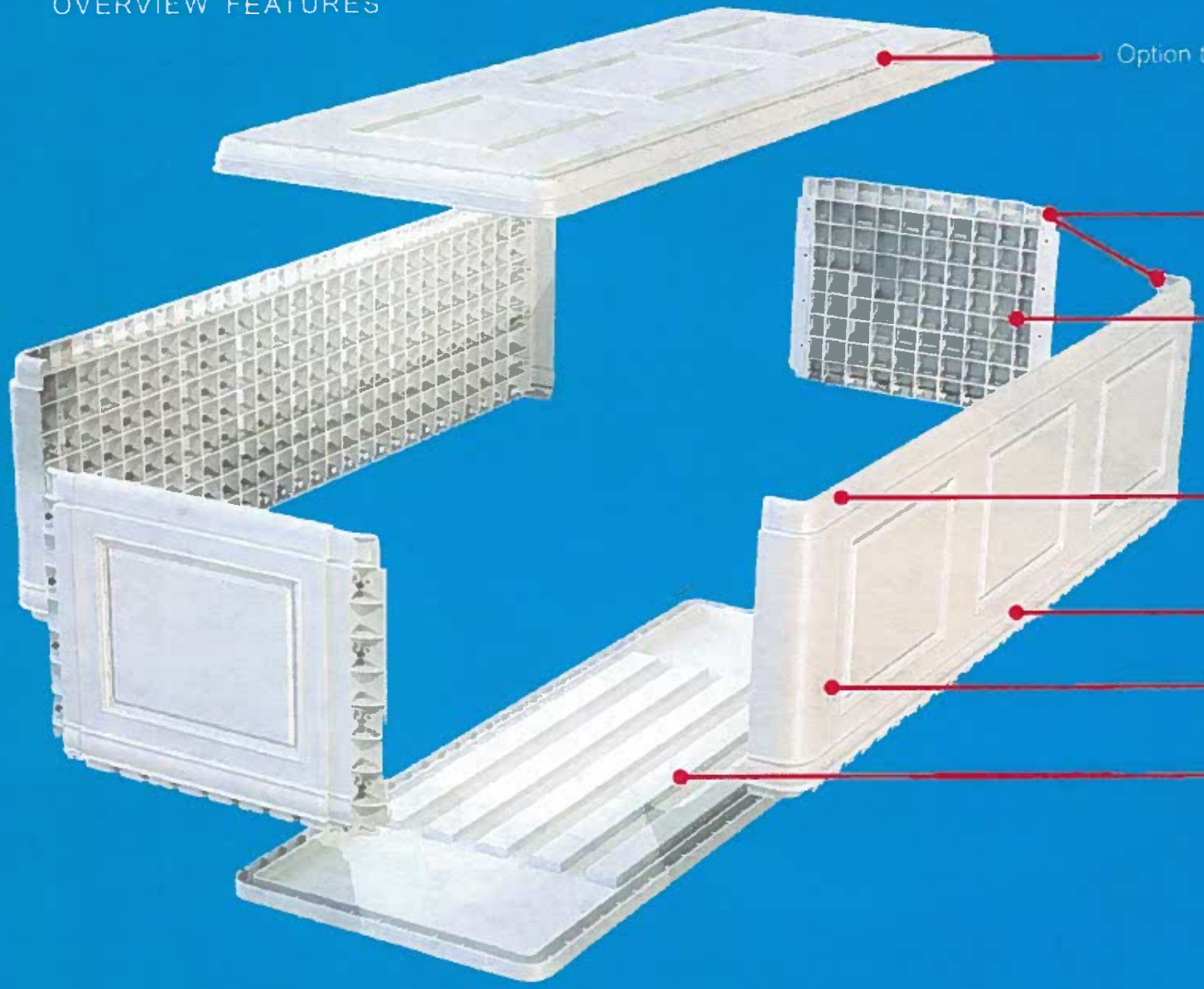
Many Design Features
Engineered for Strength

Eco-Friendly Material

State of the Art
Engineering:
USA Patent Office

MAXIMUS

OVERVIEW FEATURES



- Option to Mechanically Fasten Lid
- Double Wall Created at Corner Panel Joints
- Interior Structural Cells 2.75" Deep & 1.33" on Center (Five Panels)
- Deep-Set 2.85" Tongue & Groove Lid to Wall Closure
- Flat Pack Construction
- Molded Corner Return for Maximum Strength
- Casket Risers

MAXIMUS

OVERVIEW FEATURES

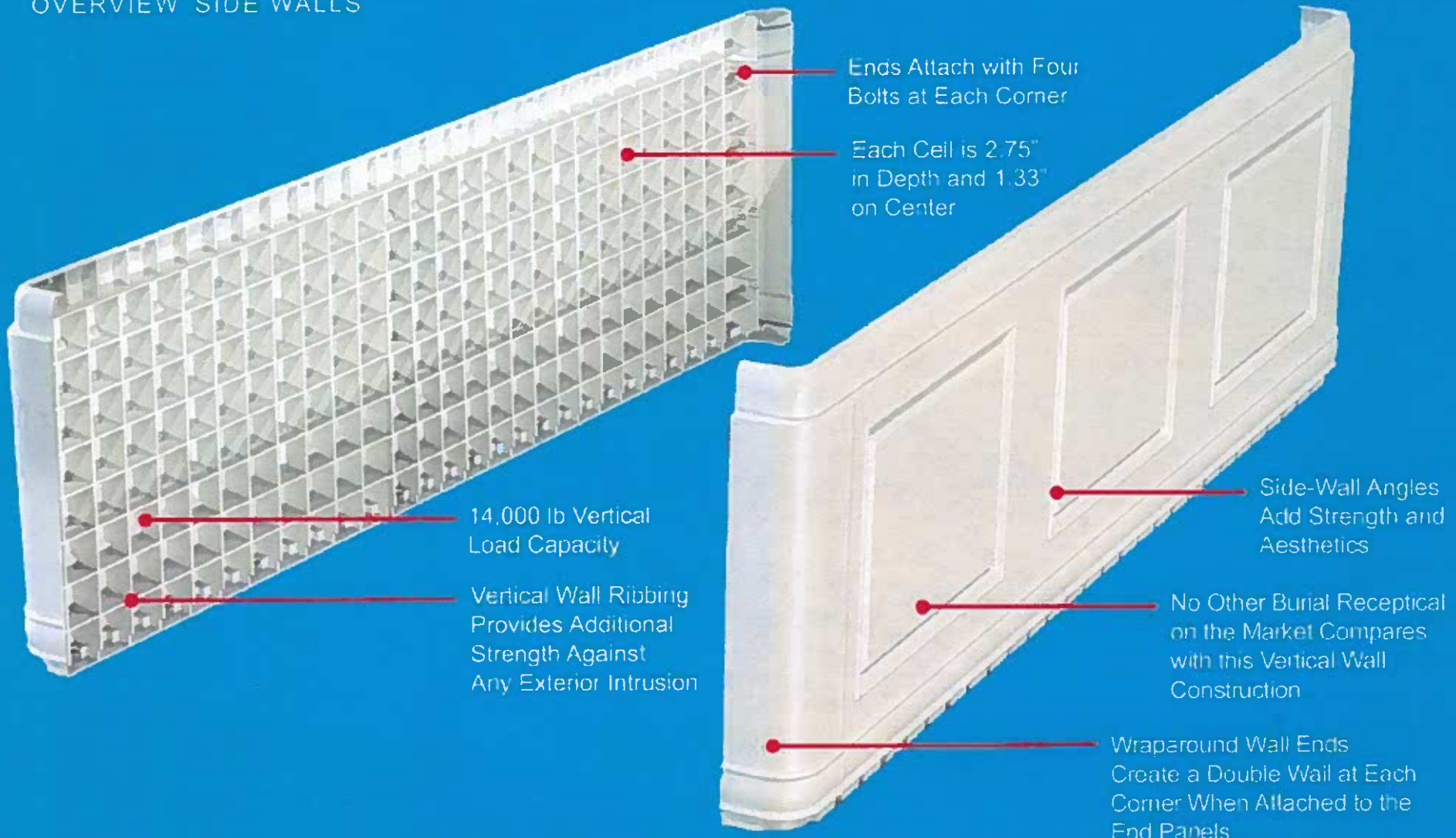


- Steel Reenforced Lid Option
- Deep-Set Lid to Box Closure
- 14,000 lb Vertical Load Capacity
- 220 lbs of Engineered Resin

- Exterior Dimensions
  90"L x 34.6"W x 29"H
- Interior Dimensions
  85.75"L x 30.25"W x 24.5"H

MAXIMUS

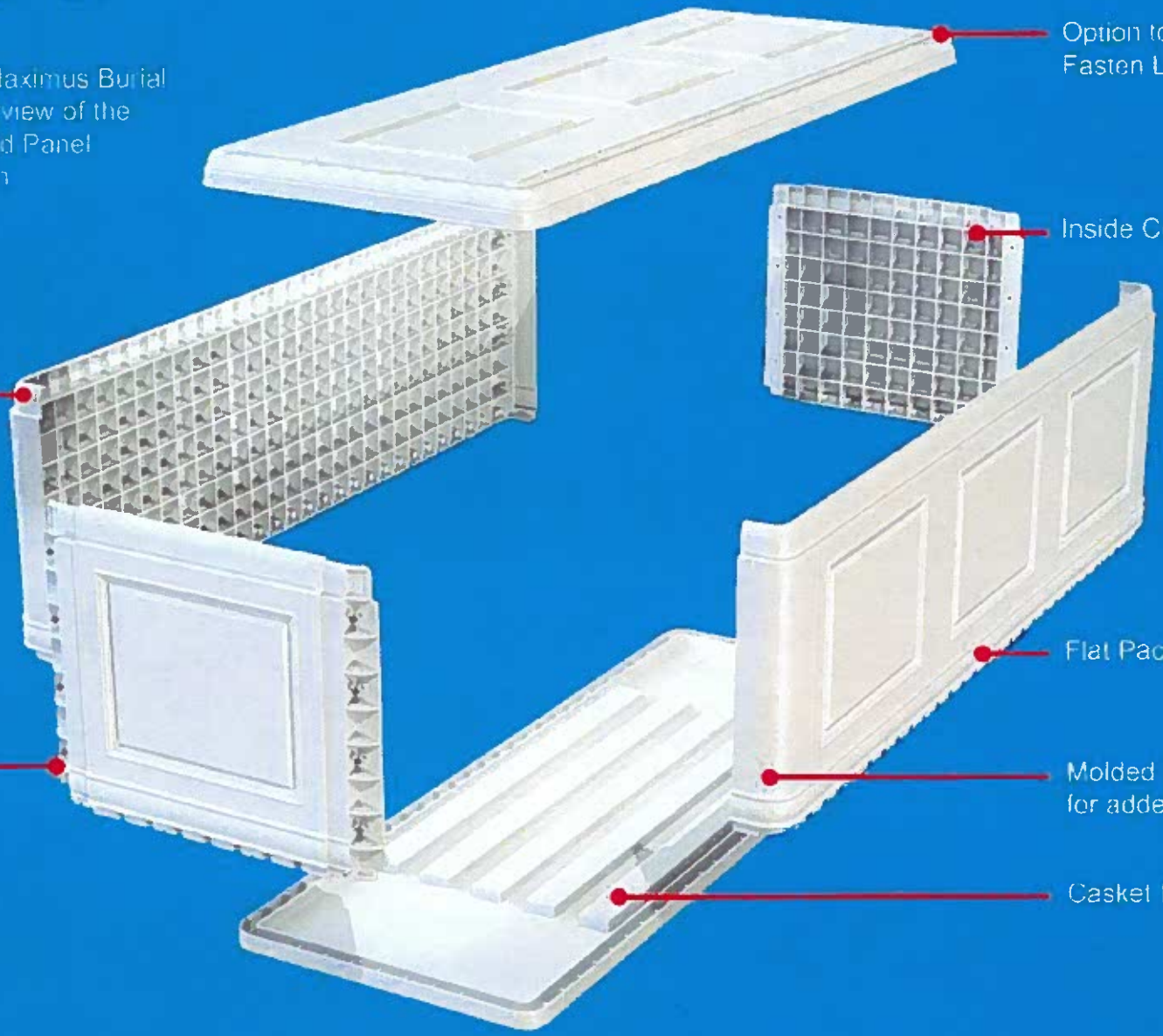
OVERVIEW SIDE WALLS



MAXIMUS

EXPLOADED OVERVIEW

- Exploded view of the Maximus Burial Vault Provides an Overview of the Lid, Base, Side and End Panel Assembly Configuration



MAXIMUS

SHIPPING AND STORAGE

- Stacked for economical shipping and storage

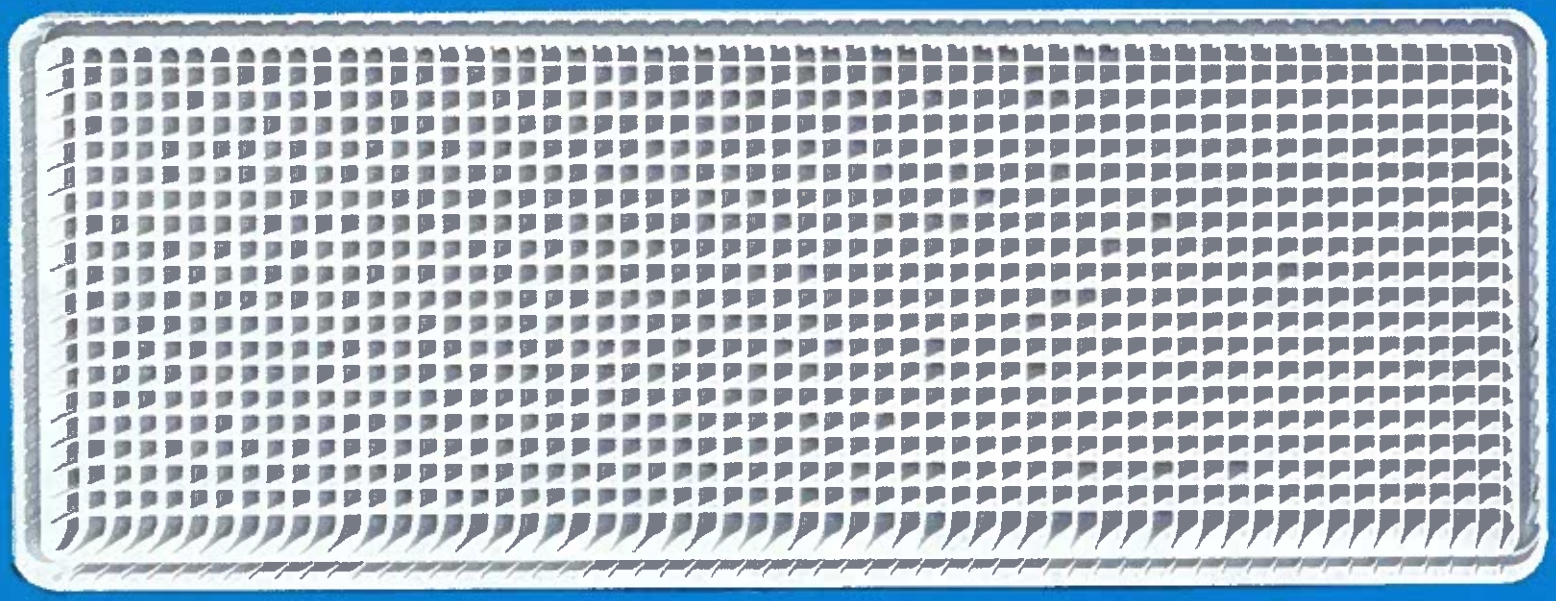


MAXIMUS

LID AND PANEL FEATURES

- Maximus Lid and Sidewall Construction Offers Maximum Strength, Minimal Sidewall Deflection
- Inside the End Panels: 10 Vertical Ribs, 8 Horizontal Ribs
- Inside Sidewall panels: 26 Vertical Ribs, 8 Horizontal Ribs
- Panel Cells: 2-3/4" Inches in Depth, 1.33" on Center
- Lid Joins Box Seamlessly, Easy "Tongue-in-Groove" Placement





MAXIMUS

STRUCTURAL STRENGTH TESTING



- 5K LBS
  Maximus Load Bearing Test with 12" Plate Centered on Lid

- 14K LBS
  Maximus Load Bearing Test with Steel Beam and Sandbags on Length of the Vault

