

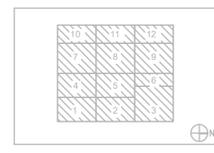
**PROVIDED PARKING**

WEST LOT STANDARD	113
WEST LOT ADA	5
<b>WEST LOT SUBTOTAL</b>	<b>118</b>
EAST LOT MANAGER AND VISITOR STANDARD	6
EAST LOT MANAGER AND VISITOR ADA	3
EAST LOT STANDARD	184
EAST LOT ADA	4
EAST LOT EV	2
<b>EAST LOT SUBTOTAL</b>	<b>199</b>
<b>FLEX MAXIMUM PARKING PROVIDED</b>	<b>317</b>

**Sanitary Load Calculations**

Existing Load	4700 GPD
Existing Population Equivalent	47 PE
Proposed Occupancy	120 Per Shift
Shifts Total	2 Shifts
Total Occupancy	240 Persons
Plumbing fixture load	1000 GPD
Mechanical Cooling Tower Load	43200 GPD
Proposed Load	44200 GPD
Proposed Population Equivalent	442 PE

- NOTES:**
- PROPERTY LINE AND EASEMENTS ARE BASED ON CURRENTLY AVAILABLE ALTA/INSPS LAND TITLE SURVEY DATED 10/03/2019. NEW SURVEY IS IN PROGRESS.
  - DUE TO AN INCREASE IN PE IEPA SEWER PERMIT WILL BE OBTAINED DURING CONSTRUCTION DOCUMENT PHASE.



2025.01.10 ZONING AND PLANNING SUBMITTAL  
 2025.01.09 DESIGN DEVELOPMENT



600 W. Fulton Street  
 Chicago, IL 60661-1259  
 T 312.454.9100  
 www.epsteinglobal.com

Prof. Design Firm No. 184000537-0007  
 Prof. Engineering Firm No. 184000537-0007

PROJECT NUMBER: 24275  
 PROJECT MANAGER: A. BIESCHKE  
 PA 1 PE: R. BEEKHUIZEN  
 DRAWN BY: R. BEEKHUIZEN  
 CHECKED BY: D. HILTY

SITE PLAN OF PROPOSAL

CZ-100

MEP / FP Engineer    Structural Engineer    Civil Engineer    Architect of Record    FLEX

EPSTEIN 600 WEST FULTON STREET CHICAGO, ILLINOIS 60661 312.454.9100

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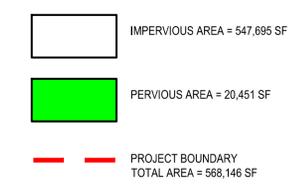
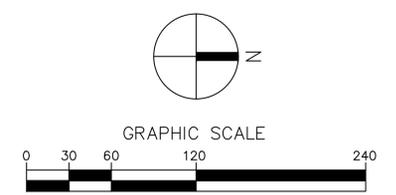
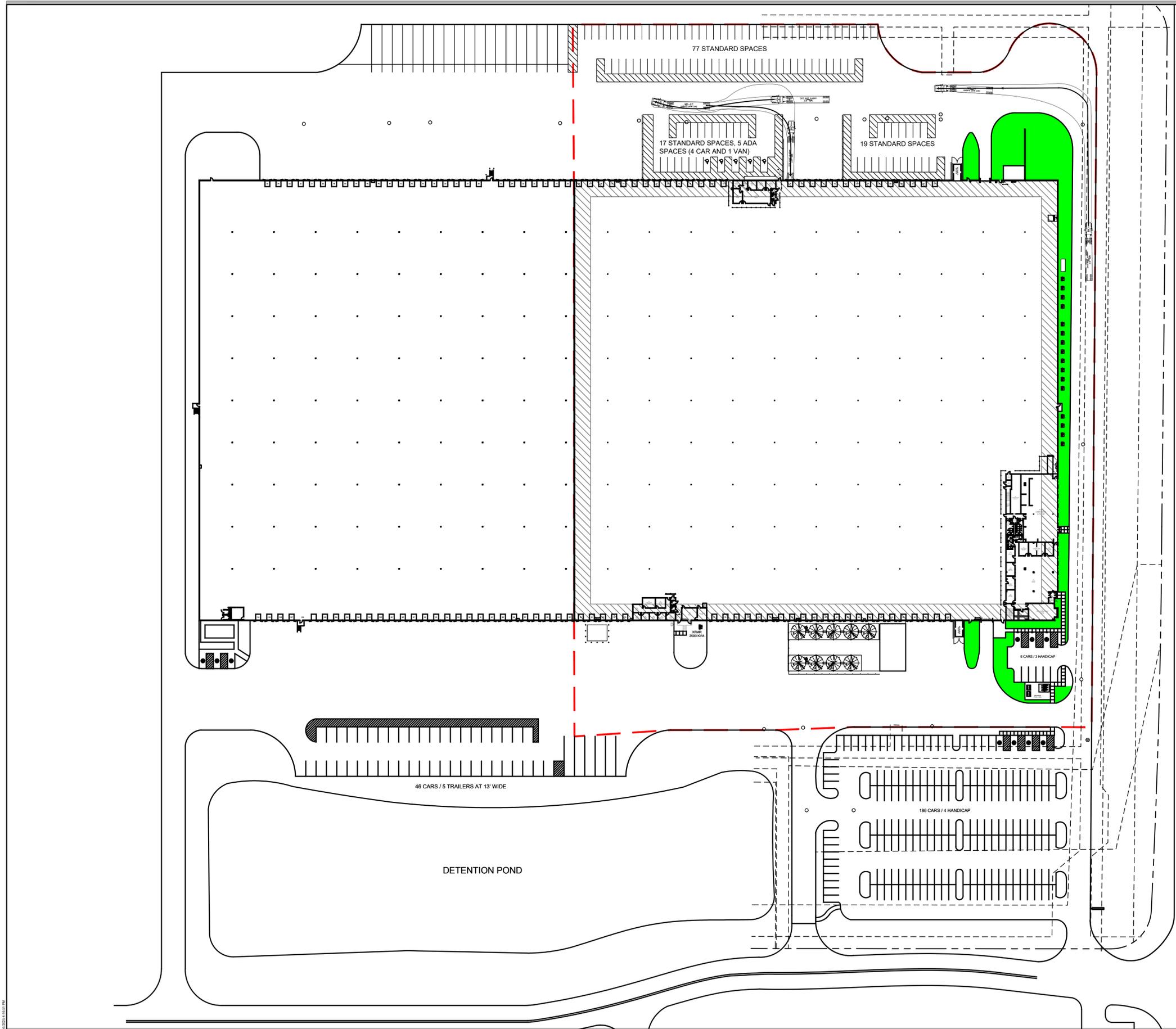
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FLEX 1501 HARRIS RD. LIBERTYVILLE, IL 60468



SEAL



Units	Existing Site		Proposed Site	
	(sf)	(ac)	(sf)	(ac)
Total Site Area	568,146	13.04	568,146	13.04
Impervious Area	547,299	12.56	547,695	12.57
Pervious Area	20,847	0.48	20,451	0.47
Difference in Impervious Area	396 sf			
Allowable Impervious Area Increase	400 sf			

STORMWATER DETENTION IS NOT REQUIRED AS THE CHANGE IN IMPERVIOUS AREA IS LESS THAN 400SF.



DATE	REVISIONS/ISSUANCES
2025.01.10	ZONING AND PLANNING SUBMITTAL
2025.01.09	DESIGN DEVELOPMENT

**EPSTEIN**  
 Architecture  
 Interiors  
 Engineering  
 Construction

Chicago  
 New York  
 Warsaw

600 W. Fulton Street  
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 Prof. Design Firm No. 184000337-0007  
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 CHECKED BY: D. HILTY

MEP / FP Engineer    Structural Engineer    Civil Engineer    Architect of Record    FLEX

EXISTING SITE IMPERVIOUS EXHIBIT

EPSTEIN  
600 WEST FULTON STREET  
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FLEX  
1501 HARRIS RD.  
LIBERTYVILLE, IL 60048



PROPOSED SITE IMPERVIOUS EXHIBIT

CZ-201

SEAL

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# TecTank™

Bolted & Factory Welded Tanks & Silos for Dry Bulk Storage

**CST**™

TecTank™



FLAT PANEL | CHIME PANEL | WELDED



» BULK MATERIAL STORAGE SOLUTIONS

## ➤ A Storage Legacy

The business roots for CST Industries (CST™) run deep – all the way back to 1893 following our heritage as Columbian Steel Tank Company™, Peabody TecTank and Columbian TecTank®.

With a legacy of 127+ years and over 350,000 field proven installations in more than 125 countries, no other company can match CST's world-renowned brands, premium engineered designs, world-class manufacturing or construction experience.

### Highest Quality – *Promised and Delivered* – in Tanks and Silos for Dry Bulk Applications

Our commitment to performance is delivered through time-proven design and engineering, our precision manufacturing technologies, and our commitment to excellence in installation.

TecTank™ systems are custom engineered to our customer's exact specifications, designed using state-of-the-art CAD and stress modeling tools, and then manufactured in one of our ISO 9001:2015 Certified manufacturing facilities located in Parsons, KS or Winchester, TN.



## Proven Engineering Capabilities and Design Standards

Our experience spans into almost every dry bulk market and challenge, which gives us a unique perspective that we bring to every client relationship. CST has been relied upon for over a century and is well-known as the Storage Industry experts.

Not only do we have decades of experience as a leading innovator, but CST also offers the most variety of engineering designs to create customized solutions for each project. Unlike our competitors, we do not make the application fit the design. We are uniquely positioned to offer designs specific to your application. Simply put, we are the only storage tank manufacturer to offer Application-Based-Solutions, allowing us to be the most competitive, efficiently designed and installed silo supplier to meet customers' exact needs.

Factors such as capacity, seismic conditions, specific gravity and wind loading vary widely from one job to the next. Our integrated project teams work to ensure every tank is designed to yield the best lifelong value for the application it's intended for.

With more overall production capacity than the next (3) three competitors combined, you can rely on CST when quick and reliable delivery of a large volume project is necessary. Our benefits include:

- A proof load tested jacking system designed by licensed engineers to ensure construction safety
- Hopper bottom silos ranging from 4 ft. (1.21 m) in diameter and 6 ft. (1.82 m) tall to nearly 50 ft. (15.24 m) in diameter and 150 ft. (45.72 m) tall, from 100 ft<sup>3</sup> to 200,000 ft<sup>3</sup> of storage capacity
- First manufacturer to design, build and erect the flat panel silo and the chime panel silo
- Third-party review of company construction methods
- Professionally Engineered stamped jack-built and scaffold-built construction processes
- CST pioneered jacking tanks on grain bins and silos in the 1940s
- Apply build gaskets to bolted tanks
- Drawings can be supplied with professional engineer seal from any state, territory or province

To accommodate various dry materials, all of our silos are custom designed and fabricated. CST offers solutions such as silos with drive-through skirts for truck or railcar loadout, tanks with unique hoppers and tanks designed with office space under the hopper bottom. Tanks can be installed on steel or concrete frames or footings. Contact us today to learn more.



# CST OptiBond™ Epoxy Coating Process

## » Maximum Performance. Lasting Protection.

CST created its first-rate epoxy coating technology to provide excellent adhesion, maximum corrosion resistance and long tank life. Decades of experience has led to continuous technology and process improvements which have resulted in the finest epoxy coating available in the storage tank industry.

The OptiBond Epoxy Coating Process is derived from years of in-field experience and performance data. This process assures the proper application of CST's proprietary powder formulation, Trico Bond EP® and Trico Bond SD™.

## » OptiBond Process Includes

- > Factory-applied coatings
- > Pre- and post-cleaning of the steel prior to application of powder coating
- > 100% coverage to eliminate areas of exposed steel
- > Automated application of powder coating with laser-locating "eyes"
- > Electrostatic topcoat application more efficient and smooth finish
- > 100% holiday testing on all sheets
- > Unlimited exterior color options

*Exterior Color Options*



# OptiBond™



# » Trust the Coating and Manufacturing Experts

## World-Class Coating

CST's coating portfolio was developed in partnership with Valspar, the world's most recognized industrial coating provider. A team of dedicated technical representatives is available 24/7 for 100% performance assurance guarantee. Used in a wide range of applications, CST's family of high performance coatings are well-equipped to keep your assets in service and provide long-term protection against their environments.

- > Trico Bond EP® – Proven, industrial grade high performance, factory-applied epoxy
- > Trico Bond SD™ – A proven enhanced performance epoxy that provides additional protection and longer life for Severe Duty applications
- > Lab tested durability – Third-party tested and verified over the #2 and #3 competitors in real world applications
- > CST OptiBond™ proprietary coating process utilized on every sheet
- > Factory coated ensures the best quality

## Setting Our Standards High

Standardized Salt Spray Test, also known as ASTM B117 or fog testing, is an accelerated corrosion test used to measure the comparative corrosion resistance of coated metals exposed to a salt spray or salt fog at high temperature. The higher the number of test hours without showing signs of corrosion, the more corrosion resistant the coating application.

Approximately 80 percent of manufacturers that specify minimum Salt Spray Test performance require only 200 to 400 hours. CST standards tests up to 6000 hours to ensure our coatings achieve maximum performance.

*Iconic manufacturers like John Deere specify only 250 - 400 hours of salt spray testing, CST standards tests to 6000 hours!*

## Falling Sand Test Results

Trico Bond test results show it is more than 2X better than Competitor A's factory-applied bolted powder coatings and more than 12X better than Competitor B's field-applied liquid coatings.

Amount of Coating Loss After 50 Cycles



*CST's high-temperature resistant coatings for bolted and welded tanks are available up to 750° F (398° C) (application dependent)*

TecTank FP® and TecTank CP™ tanks are available in seven standard exterior colors. Inquire for custom colors.

See TecTank™ Welded exterior color options on page 12.

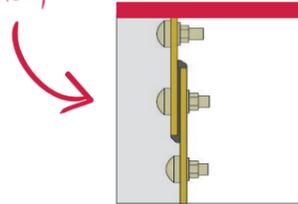
# » Tank Comparison Chart

DESIGN FEATURES	TECTANK FP®	TECTANK CP™	TECTANK™ WELDED
<b>PANEL DESIGN</b>	Flat Panel 105 in. (267 cm) wide by 55 in. (140 cm) tall premium grade cold rolled steel, convex-shaped/cut tapered panel.	Chime panel 56 in. (142 cm) to 58 in. (147 cm) wide by 96 in. (244 cm) tall with 2 in. (5 cm) external top and bottom flange, each chime is a stiffener.	Panel design not applicable. Full welded construction from 4 ft. (1.21 m) to 15 ft. (4.57 m) in diameter and 85 ft. (25.90 m) for carbon steel and 90 ft. (27.43 m) for stainless steel and aluminum in a single piece. Larger heights available with splice based on design requirements.
<b>SEAM BETWEEN PANELS</b>	Industry leading leak-free gasket available in EPDM or Viton (temps to 450° F (232° C)). Only tank manufacturer to provide both gasket and external mastic joints between panel seals to keep moisture out.	Compression seal formed between chimes with EPDM/ NBR/Viton gasket depending on the application.	Seam between panels not applicable. Robotic, sub-arc welds produce exceptionally consistent “smooth/not flush” horizontal seams.
<b>PANEL COATING INTERIOR</b>	Trico Bond EP® – 4 mil (100 µm) to 9 mil (225 µm) average dry film thickness precision-applied powder coating. Trico Bond SD™ – 5 mil (130 µm) to 10 mil (250 µm) average dry film thickness precision-applied powder coating.	Trico Bond EP® – 4 mil (100 µm) to 9 mil (225 µm) average dry film thickness precision-applied powder coating. Trico Bond SD™ – 5 mil (130 µm) to 10 mil (250 µm) average dry film thickness precision-applied powder coating.	Welded coated interior is 1.5 mil (38 µm) to 5 mil (130 µm) average dry film thickness standard epoxy coating. (Special coatings available)
<b>PANEL COATING EXTERIOR</b>	Trico Bond EP® precision-applied powder coating with high performance urethane topcoat for additional protection and UV resistance at 3.5 mil (85 µm) to 5 mil (130 µm) average dry film thickness. (Unlimited topcoat color options)	Trico Bond EP® precision-applied powder coating with high performance urethane topcoat for additional protection and UV resistance at 3.5 mil (85 µm) to 5 mil (130 µm) average dry film thickness. (Unlimited topcoat color options)	Welded coated exterior is 2 mil (50 µm) to 3 mil (75 µm) standard epoxy coating. 1.5 mil (35 µm) to 3 mil (75 µm) high performance urethane for additional protection and UV resistance.
<b>OPERATING TEMPERATURES FOR DRY APPLICATIONS</b>	Trico Bond EP® up to 200° F (93° C) Trico Bond SD™ up to 275° F (135° C) <i>(Trico Bond EP &amp; SD are FDA Approved Coatings)</i> High Temperature Inorganic Zinc up to 750° F (398° C)	Trico Bond EP® up to 200° F (93° C) Trico Bond SD™ up to 275° F (135° C) <i>(Trico Bond EP &amp; SD are FDA Approved Coatings)</i> High Temperature Inorganic Zinc up to 750° F (398° C)	Standard coating up to 250° F (121° C) <i>(FDA Approved Coating)</i> High Temperature Inorganic Zinc up to 750° F (398° C)
<b>FIELD INSTALLATION</b>	18,000 lb (8164.66 kg) hydraulic actuated, synchronized jack system third-party proof load tested and PE stamped. Fastest bolted installation for tanks greater than 24 ft. (7.31 m) tall.	Third-party safety PE stamped scaffold system. Fastest bolted installation for tanks 24 ft. (7.31 m) tall or less.	Delivered in one piece on specialized equipment, ready for lift and placed on a prepared foundation (by others). Fastest installation.
<b>MODULARITY</b>	Tanks can be modified – contact your local sales representative for more information.		
<b>MAINTENANCE</b>	Normally scheduled PM inspections by site maintenance group or CST provided maintenance.		
<b>INTERNAL LEDGE</b>	Horizontal and vertical carriage bolt heads are in product zone but secured flush to panel. Gap remaining from meeting of flanged points is minimal and compressed under load.	Horizontal 90° flanges meet external of product zone where they are securely bolted thus compressing the gasket for leak-free connection. Entirety of horizontal bolted connection is outside of product zone to not interfere with material flow.	No ledges. Welds ground smooth not flush. Special weld finishes available up to 150 grit for internal and external welds (additional cost may apply)
<b>LICENSED PROFESSIONAL ENGINEERING STAFF</b>	Professional Engineers on staff that are capable of stamping in all states, territories and provinces. Includes voting member of NFPA 22. Committee chair for AWWA, API, NFPA and EN (Eurocode). Assisted with API-12B and other AWWA standards.		
<b>AGE OF COMPANY &amp; “YEARS OF EXPERIENCE”</b>	Established in 1893. More tank and employee experience than the next two competitors combined.		
<b>FIELD CONSTRUCTION</b>	CST employed or exclusive subcontract crews using third-party safety certified and PE stamped scaffold design. Most experienced crews.	CST employed or exclusive subcontract crews using third-party safety certified and PE stamped scaffold design. Most experienced crews. (International sites may vary)	Not applicable. Arrives on-site in one piece fully constructed.
<b>PLATE THICKNESS</b>	Up to 1/2 in. (12.7 mm) thick. Available in carbon steel, aluminum and 304/316 types of stainless steel.	Up to 5/16 in. (7.9 mm) thick. Available in carbon steel, aluminum and 304/316 types of stainless steel.	Up to 1/2 in. (12.7 mm) thick. Available in carbon steel, aluminum and 304/316 types of stainless steel.

# Flat Panel Jack-Built Storage Tank Systems



*CST is the only tank manufacturer to provide both gasket and external mastic joints between seals to keep moisture out*



» Flat Panel Design

## » TecTank FP®

TecTank FP is a result of numerous advances in bolted steel tank design and construction that have occurred over the past several decades.

TecTank FP tanks and silos offer an optimized bolt pattern, increased steel thickness, reduced hardware and fewer penetration points. The jackable flat panel bolted design of TecTank FP surpasses competitive designs in the dry bulk industry and is available in short lead time pre-configured models and fully customizable designs.

Design Benefits and Features Include:

- > Arrives on jobsite as complete kit
- > Fastest construction option for tanks greater than 24 ft. (7.31 m) in height
- > Largest capacity, capable of storing up to 200,000 ft<sup>3</sup> (5,663 m<sup>3</sup>) or more
- > Available in 2 in. (5 cm) or 4 in. (10 cm) wide horizontal bolt spacing based on design requirements
- > Leading design for bolted steel tanks around the world
- > Improved structural integrity
- > Allows for greater steel thickness and larger taller tanks and capacities vs. chime
- > Reduces need for vertical and wind stiffeners, saving engineering time
- > Industry leading leak-free gasket available in EPDM or Viton up to 450° F (232° C)
- > Built with gaskets or sealant or both
- > Versatility of assembly
- > Reduces interferences on non-standard models and custom options
- > Factory coated for highest quality of corrosion protection
- > Comprised of replacement panels for ease of repairs, relocation and expansion

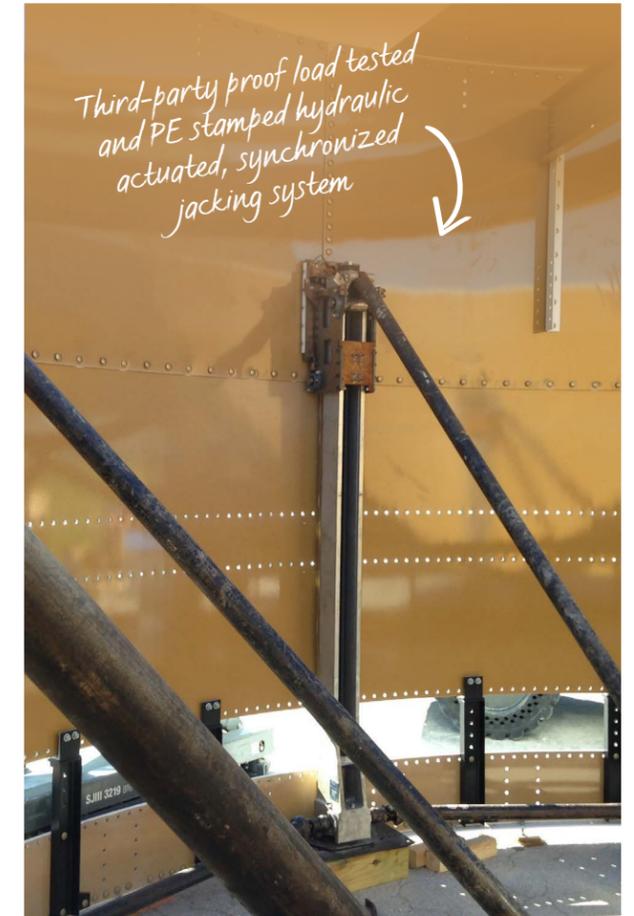
Pre-configured models are available in (4) four standard sizes and with 50% lead time improvement vs. non-pre-configured chime models.

- 600T – Working Capacity: 9,858 ft<sup>3</sup> (279 m<sup>3</sup>)
- 2000T – Working Capacity: 40,489 ft<sup>3</sup> (1,147 m<sup>3</sup>)
- 3000T – Working Capacity: 62,591 ft<sup>3</sup> (1,772 m<sup>3</sup>)
- 5000T – Working Capacity: 103,468 ft<sup>3</sup> (2,930 m<sup>3</sup>)

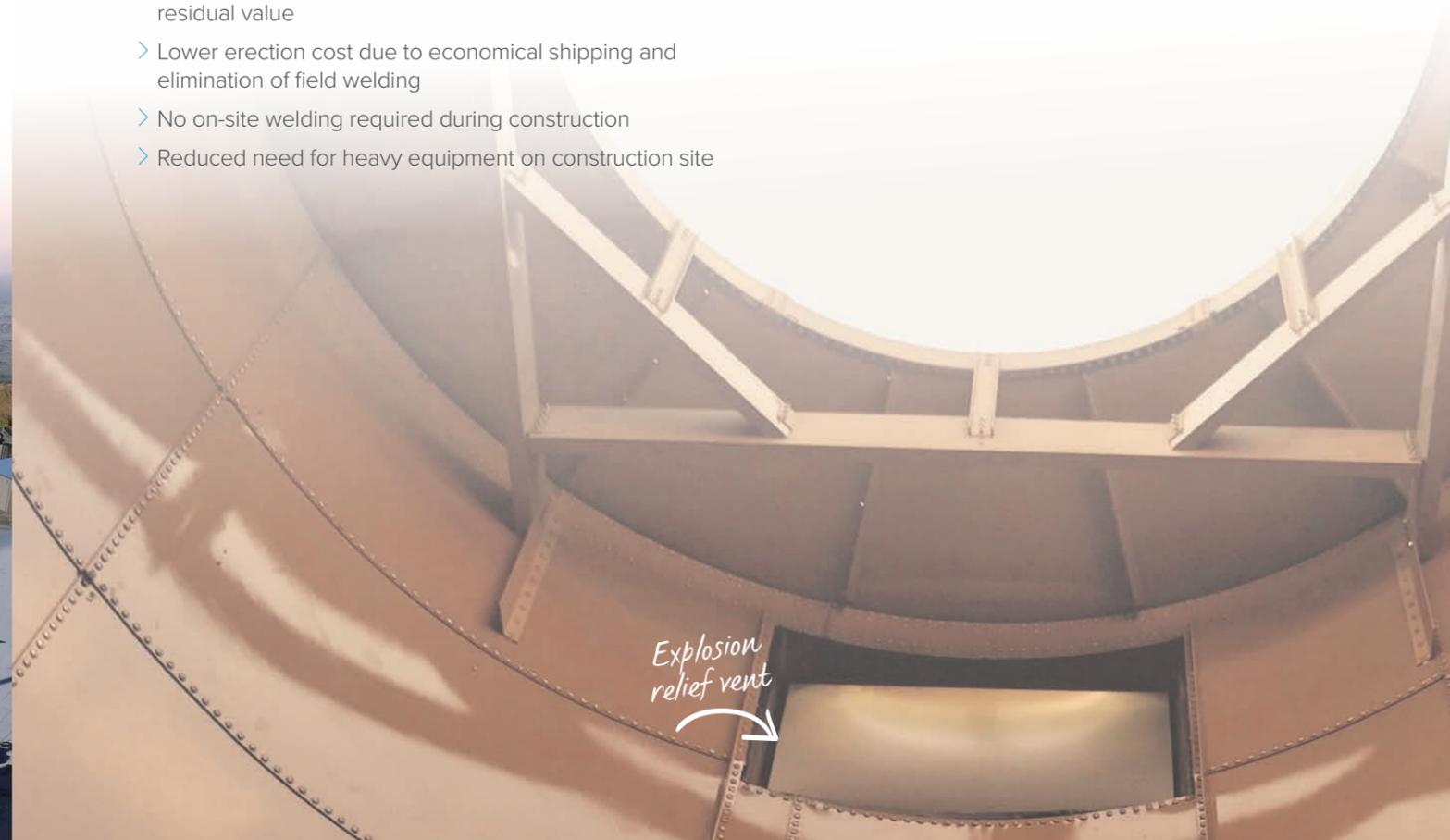
## » Flat Panel Tank Construction

TecTank's are typically erected from ground level using a hydraulic actuated, synchronized jacking system, improving safety at the construction site. Our heavy duty jacking system is the first ever jacking system designed and stamped by licensed professional engineers and third-party proof load tested per ASME Standard B30.1 – 2015.

- > Simplified and safer construction process with jacking system
- > Largest percentage of work can be performed at ground level
- > Jacks are set up and down only once saving time and money
- > Tank is jacked up and successive rings are constructed
- > The final ring is constructed and tank is lowered onto foundation ring
- > Manufactured, erected and in operation up to three times faster than field welded or concrete applications
- > Sheets can be 1/2 in. (1.27 cm) thick requiring less structural columns needed in design
- > 18 kip designed load per jack, largest in bolted tank industry
- > Easily constructed in remote locations – minimum lay down required
- > Tanks can be relocated and expanded, improving residual value
- > Lower erection cost due to economical shipping and elimination of field welding
- > No on-site welding required during construction
- > Reduced need for heavy equipment on construction site



*Third-party proof load tested and PE stamped hydraulic actuated, synchronized jacking system*



*Explosion relief vent*

# Chime Panel Scaffold-Built Storage Tank Systems



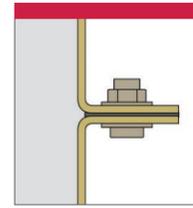
## » TecTank CP™

TecTank CP tanks and silos offer the best expansion adaptability by adding capacity without full disassembly of your dry bulk tanks. CST's TecTank CP tanks and silos are field constructed by our expert crews utilizing a scaffold system that is third-party safety certified and stamped by licensed professional engineers.

TecTank CP tanks and silos provide additional hoop strength during crane lifts, either as part of the installation process or lifting and placing the entire system, whereas when using a flat panel style system a formed/rolled angle (chime) must be added to each ring to provide equivalent rigidity necessary for lifting by crane.

Design Benefits and Features Include:

- › Arrive on jobsite as complete kit
- › Fastest construction option for tanks 24 ft. (7.31 m) or less in height
- › Available in capacities from 1,000 ft<sup>3</sup> (28 m<sup>3</sup>) to over 170,000 ft<sup>3</sup> (4,814 m<sup>3</sup>)
- › Available in diameters from 9 ft. (2.74 m) to 48 ft. (14.63 m) with hopper bottom
- › Factory coated for highest quality of corrosion protection
- › Economical storage solution
- › Features factory formed flanges at horizontal seams for added structural strength
- › Special gaskets and sealants create leak-proof joints and allow for a broader range of applications
- › Comprised of replacement panels for ease of repair, relocation and expansion
- › Best choice for oil field service and industrial applications

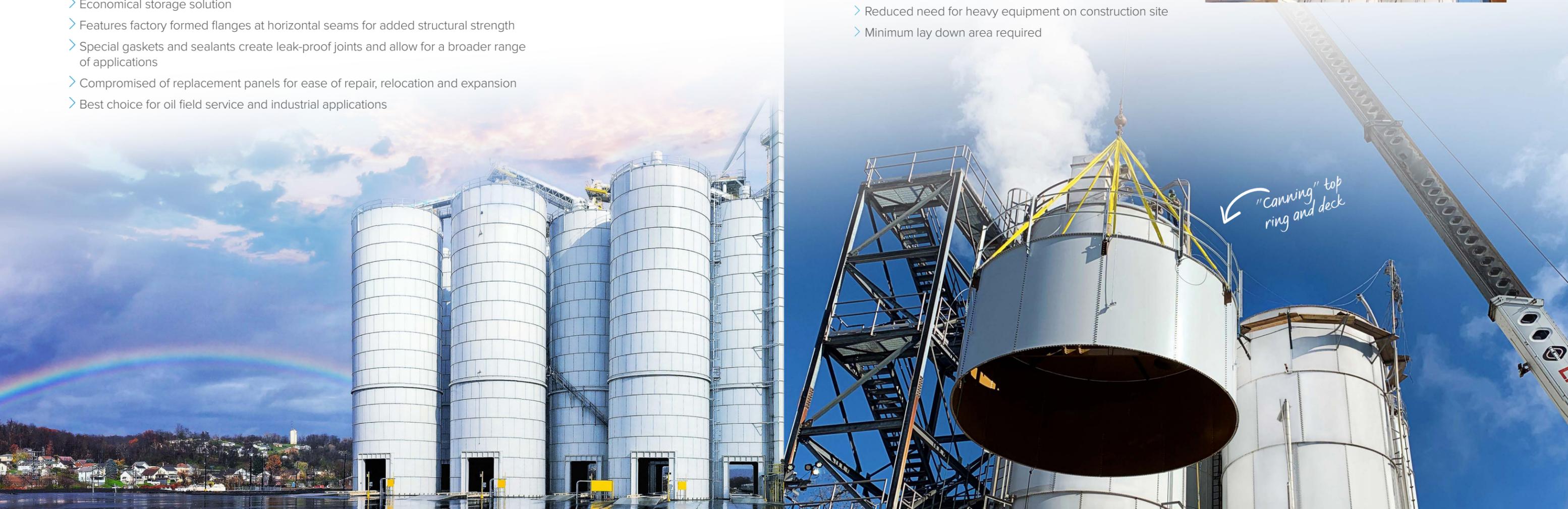
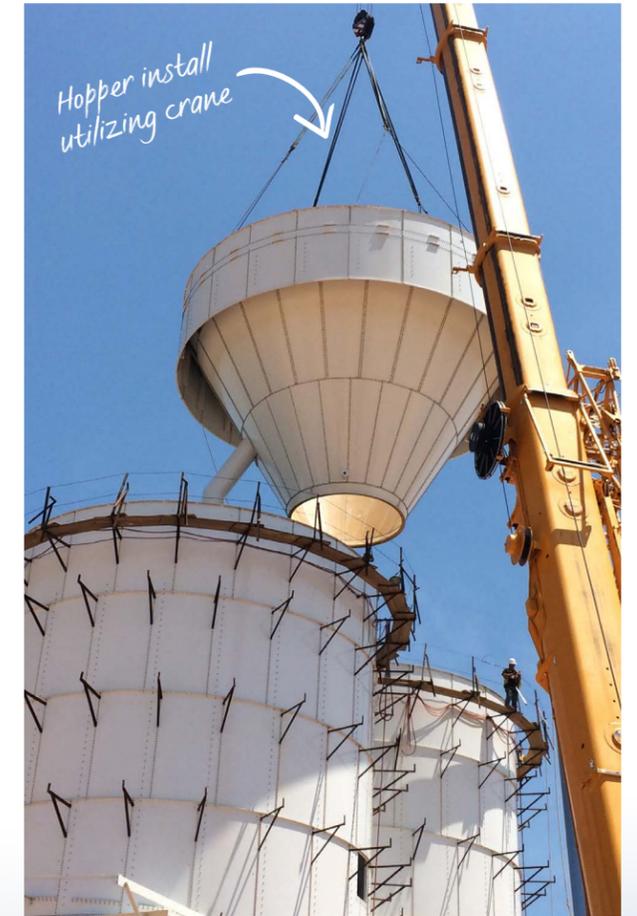


» Chime Panel Design

## » Chime Panel Tank Construction

TecTank CP™ tanks and silos are generally scaffold-built. Special scaffolding mounts and assembly ladders increase construction efficiencies and safety. Chimed tanks are the only design allowed under the API-12B standard and API-12B Monogram Certification. CST was the first manufacturer in the world to receive its API-12B Monogram Certification.

- › First ring of panels is constructed directly on the foundation
- › Successive rings are constructed in place on lower rings
- › Roof can be built in place or on the ground and placed by crane
- › Most efficient way to “can” a tank; building method allows pre-assembly on ground for efficient, productive and safe installation
- › Best option for erecting bolted short skirt silos onto a structure, especially when silo will be lifted by crane
- › Constructed up to three times faster and with half the building crew than traditional field welded tank designs
- › Versatility for in-field modification and expansion
- › Easily constructed in remote locations
- › No on-site welding required during construction
- › Reduced need for heavy equipment on construction site
- › Minimum lay down area required



# Factory Coated Welded Storage Tank Systems



## » TecTank™ Welded

CST's reputation as the world leader in factory coated tanks goes beyond bolted, field-assembled tanks, to include factory coated welded tanks. Our welded tanks are manufactured using a high performance and FDA approved coating process to guarantee the best quality coatings for longer life and better life cycle costs. Unlike field welded and painted tanks, CST welded tanks are fabricated in a modern, indoor, controlled environment.

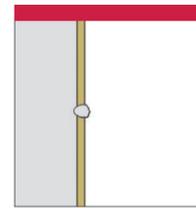
CST's coatings feature a high solids epoxy with excellent resistance to corrosion and dramatically reduce life cycle maintenance costs. This makes our factory-applied coatings far superior to field welded tanks as well as other shop welded and field-bolted tank suppliers.

Our fully staffed, in-house engineering department is capable of designing custom welded tanks to meet the most demanding needs and applications. CST offers standard tank designs up to 15 ft. (4.57 m) in diameter that can be fabricated in a matter of weeks for quick delivery. CST's welded tanks can be fabricated from aluminum, carbon steel and stainless steel. Once fabricated the tank is cleaned, coated and force cured in our 90 ft. (27.43 m) long oven on a specially designed, controlled processing line.

Design Benefits and Features Include:

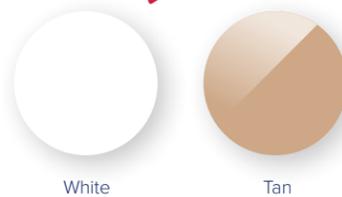
- > Shortest install time
- > Available from 4 ft. (1.21 m) to 15 ft. (4.57 m) in diameter
- > Available heights up to 85 ft. (25.90 m) for carbon steel and 90 ft. (27.43 m) for stainless steel and aluminum in a single piece, larger heights available with splice based on design requirements
- > Available in capacities from 400 ft<sup>3</sup> (11 m<sup>3</sup>) to over 14,000 ft<sup>3</sup> (396 m<sup>3</sup>)
- > Tanks can be shipped as one unit or multi-piece unit
- > Arrives on-site fully assembled and ready to stand
- > Can be specified with internal and/or external factory coating
- > Mass or funnel flow loads
- > Custom engineering and quick fabrication
- > ASME-qualified welders can produce standard and specialty welds based on design requirements
- > Provides the most versatile type of support method (skirt, short skirt, leg, stub-leg, lug supports and material types (carbon steel, stainless steel and aluminum))
- > Available in two standard exterior color options (white & tan), custom colors available upon request

With CST's qualification of welders and welding procedures, customers can be confident that CST will produce a quality welded component with properties that satisfy their design requirements.



» Welded Design

*Exterior Color Options*

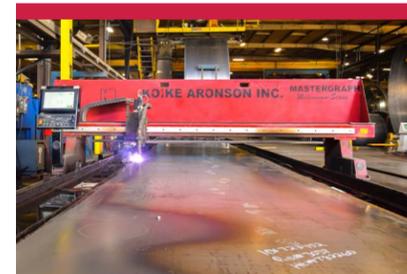


White

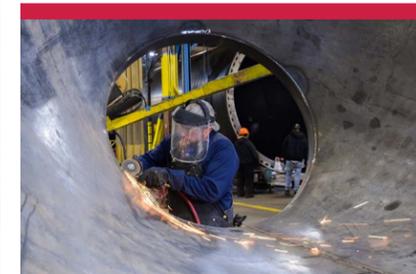
Tan

## » Welded Tank Construction

CST's factory welded tanks are custom-fabricated in our state-of-the-art facility and shipped to the field as one-piece construction. When they arrive, they can be moved with a crane and immediately set into place or staged for installation at a later date.



» Small Parts



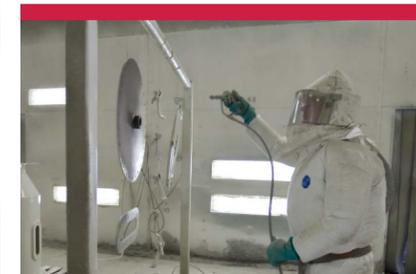
» Hopper



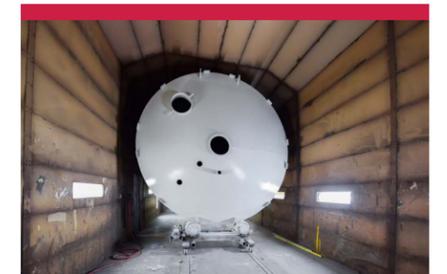
» Deck



» Blast Room



» Paint Booth



» Curing Room

## » Coating Options for Factory Welded Tank Systems

Interior & Exterior Coatings	Dry Bulk Applications	Coating Application Type	Average Dry Film Thickness	Maximum Temperature
<b>Standard Interior</b> • Epoxy Primer		Liquid / 1 Coat	2 mils (50 µm)	250° F (121° C)
<b>Upgrade Interior #1</b> • FDA Epoxy Primer	Chemicals, Plastic Pellets, Food and Other Commodities	Liquid / 1 Coat	5 mils (130 µm)	250° F (121° C)
<b>Upgrade Interior #2</b> • Ar-Lon 6101	Chemicals, Plastic Pellets, Food (FDA & USDA Acceptance). Excellent abrasion and impact resistance	Liquid / 2 Coat	5 mils (130 µm)	250° F (121° C)
<b>High Temperature Interior Coatings</b> • High Temperature Inorganic Zinc		Liquid / 1 Coat	2 mils (50 µm)	750° F (399° C)
<b>Standard Exterior</b> • Epoxy Primer • High Performance Urethane		Liquid / 2 Coat	3.5 mils (85 µm)	200° F (93° C)*
<b>Upgrade Exterior - System 3</b> • Inorganic Zinc • FDA Epoxy Primer • High Performance Urethane	For coastal or heavy industrial environments	Liquid / 3 Coat	7.5 mils (190 µm)	200° F (93° C)*
<b>High Temperature Exterior Coatings</b> • High Temperature Inorganic Zinc Primer • High Temperature Inorganic Zinc Silicate		Liquid / 2 Coat	5 mils (130 µm)	750° F (399° C)

Notes:

- Maximum temperature refers to temperature for dry bulk storage applications
- Standard Epoxy Primer and AR-Lon 6101 are compliant with FDA regulations according to 21 CFR 175.300 for food storage applications.
- System 3 involves three trips through the paint booth and oven
- High performance urethane topcoat will take temperatures up to 300° F (149° C), but above 200° F (93° C) some color change may occur. It is a cumulative effect of time at high temperature and will be most noticeable on lighter colors.



## Blenders

CST provides a full range of services for your blender project. From initial consulting to final installation, we are there with professional and experienced staff and associates to take the guesswork out of your project. Services we provide include:

- > Material Flow Testing – To make sure your blender is designed for reliable flow
- > Blend Testing – To make sure the proper blender configuration is designed to meet your process
- > Blender Layouts – To facilitate your plant site design
- > Blender and Silo Design – Our registered engineers certify each design
- > Pricing – Both budget and firm, including installation
- > Installation and Commissioning – Trained staff and specialist contractors complete your project on time and within budget

### Why Blend?

- Reduce process and production variables
- Achieve consistent color
- Achieve consistent Melt-Flow Index (MFI)

### Advantages of Gravity In-Tank Blending

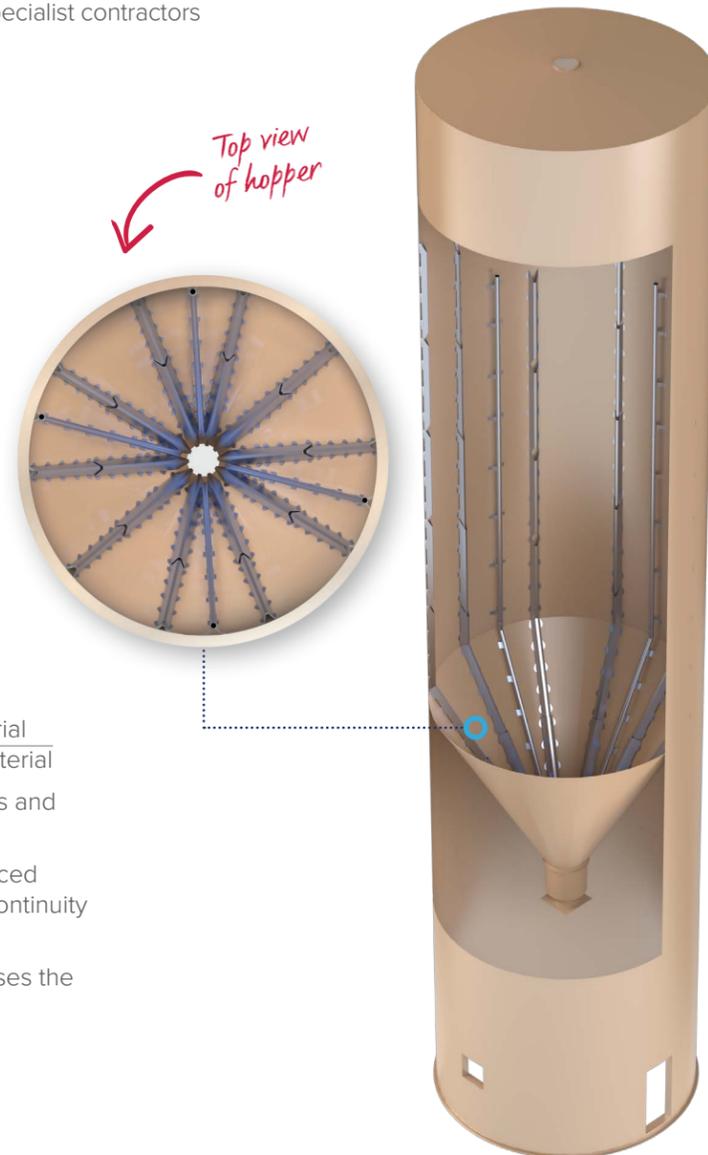
- Non-mechanical blending
- Large batch sizes
- Low maintenance
- Storage 'plus' blending

### Measuring Blend Performance

- Blend Index =  $\frac{\text{Standard Deviation of Incoming Material}}{\text{Standard Deviation of Discharged Material}}$
- The higher the Blend Index, the more homogeneous and consistent the blended material
- Consistency of MFI and color is important for enhanced processing performance and maintaining process continuity and repeatability
- Recirculation of material through the blender increases the Blend Index

### Blender Capacity

- Capacities range from 304 ft<sup>3</sup> (8.61 m<sup>3</sup>) to over 40,000 ft<sup>3</sup> (1,133 m<sup>3</sup>)
- Ideal ratio of height to diameter is 3:1
- TecTank's smallest blender (5 ft. (1.52 m) diameter by 15 ft. (4.57 m) height) will hold between (2) two and (5) five batches of most plastic processes



## > Tank Applications

TecTank™ silos are designed to meet your specific application; each is engineered and fabricated to successfully store all types of dry bulk materials including:

ABS Pellets	Calcium Chloride	Grain	Plastics	Seeds
Bauxite	Carbon Black	Gypsum	Plastic Resins	Sodium Bicarbonate
Bentonite	Cement	Kaolin Clay	Polyethylene Pellets	Starch
Blood (Dried)	Flour	Lime	Polyvinyl Chloride	Sugar
Bone Meal	Fly Ash	Limestone	Sand	Wood Pellets
Calcium Carbonate	Frac Sand	Perlite	Salt	

List of other suitable product applications available. The table above applies to Trico Bond EP® and Trico Bond SD™ coatings. Tank product lines might have other limitations, based upon their configurations.

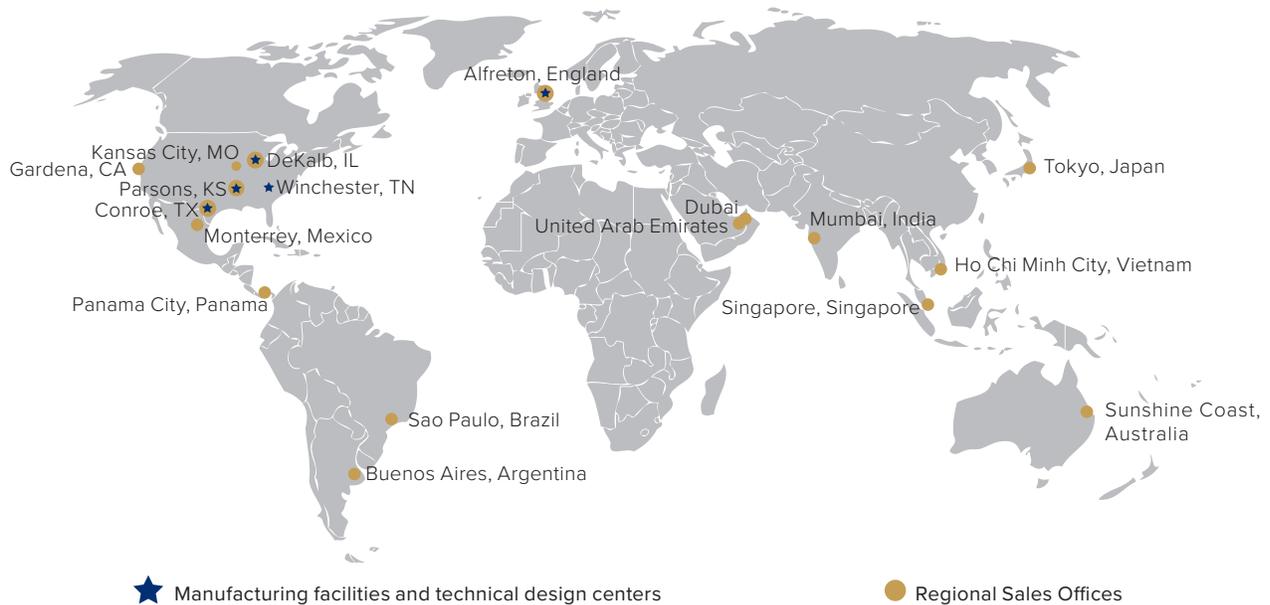
### Premium Tank Technology Provides Smooth Material Flow

The smooth-wall interior has no cracks or crevices that could suspend material flow. TecTank storage tank systems are designed and built to the exact requirements you need for material flow efficiency and reliability.

- > Mass and funnel flow designs
- > Expanded and fluidized flow designs
- > Multiple Type Tanks

Standard Tank Diameters	Standard Designs	Standard Capacities
<b>Flat Panel (45 to 70-degree hopper bottom)</b> <ul style="list-style-type: none"> <li>• 11 ft. to 51 ft. (3.35 m to 15.54 m)</li> </ul>	AISC, IBC, ASCE, NBCC, NFPA, FBC, CBC, Eurocode	1,000 ft <sup>3</sup> (28 m <sup>3</sup> ) to over 200,000 ft <sup>3</sup> (5,663 m <sup>3</sup> )
<b>Chime Panel (45 to 70-degree hopper bottom)</b> <ul style="list-style-type: none"> <li>• 12 ft. dia. by ht. 24 ft., 32 ft. or 64 ft. (3.65 m dia. by ht. 7.31 m, 9.75 m or 19.50 m)</li> <li>• 15 ft. dia. by ht. 24 ft., 48 ft., 56 ft. or 64 ft. (4.57 m dia. by ht. 7.31 m, 14.63 m, 17.06 m or 19.50 m)</li> <li>• 18 ft. dia. by ht. 32 ft., 48 ft., 56 ft., 64 ft. or 88 ft. (5.48 m dia. by ht. 9.75 m, 14.63 m, 17.06 m, 19.50 m or 26.82 m)</li> <li>• 21 ft. dia. by ht. 48 ft., 56 ft., 64 ft. or 72 ft. (6.4 m dia. by ht. 14.63 m, 17.06 m, 19.50 m or 21.94 m)</li> <li>• 32 ft. dia. by ht. 88 ft. (9.75 m dia. by ht. 26.82 m)</li> <li>• 41 ft. dia. by ht. 88 ft. (12.49 m dia. by ht. 26.82 m)</li> </ul>	AISC, IBC, ASCE, NBCC, NFPA 68, Eurocode	1,000 ft <sup>3</sup> (28 m <sup>3</sup> ) to over 170,000 ft <sup>3</sup> (4,814 m <sup>3</sup> )
<b>Welded (45 to 70-degree hopper bottom)</b> <ul style="list-style-type: none"> <li>• 8 ft. dia. by ht. 18 ft., 24 ft., 30 ft., 36 ft. or 60 ft. (2.43 m dia. by ht. 5.48 m, 7.31 m, 9.14 m, 10.97 m or 18.28 m)</li> <li>• 10 ft. dia. by ht. 24 ft., 30 ft., 36 ft., 48 ft., 60 ft. or 66 ft. (3.04 m dia. by ht. 7.31 m, 9.14 m, 10.97 m, 14.63 m, 18.28 m or 20.11 m)</li> <li>• 12 ft. dia. by ht. 24 ft., 30 ft., 36 ft., 42 ft., 48 ft., 60 ft. or 66 ft. (3.65 m dia. by ht. 7.31 m, 9.14 m, 10.97 m, 12.80 m, 14.63 m, 18.28 m or 20.11 m)</li> <li>• 14 ft. dia. by ht. 30 ft., 42 ft., 48 ft., 54 ft., 60 ft., 66 ft., 72 ft. or 84 ft. (4.26 m dia. by ht. 9.14 m, 12.80 m, 14.63 m, 16.45 m, 18.28 m, 20.11 m, 21.94 m or 25.60 m)</li> <li>• 15 ft. dia. by ht. 30 ft., 42 ft., 54 ft., 60 ft., 78 ft., 84 ft. or 96 ft. (4.57 m dia. by ht. 9.14 m, 12.80 m, 16.45 m, 18.28 m, 23.77 m, 25.60 m or 29.26 m)</li> </ul>	AISC, IBC, ASCE, NBCC, NFPA 68	400 ft <sup>3</sup> (11 m <sup>3</sup> ) to over 14,000 ft <sup>3</sup> (396 m <sup>3</sup> )

CST offers a variety of repairs, modification and turnkey services for dry bulk, liquid and welded storage tanks. CST also offers Master Service Agreements for Tank Repair and Inspection Services.



Certifications and Capabilities:

- ISO 9001:2015
- API ISO/TS 29001:2007
- API-12B (Parsons Facility - License No. 12B-0004)
- UL 142 & ULC S601
- Certified Welding Inspectors (CWI)
- FM Certified Product Line (Parsons & DeKalb Facilities)
- All Facilities EPA Compliant
- NFPA-68/69

CST is committed to providing its customers with the highest engineered quality, best service, longest product life and greatest value for every storage solution we supply. Contact CST for all your bulk storage needs.

For more information, call +1 844-44-TANKS or visit us online at [cstindustries.com](http://cstindustries.com).

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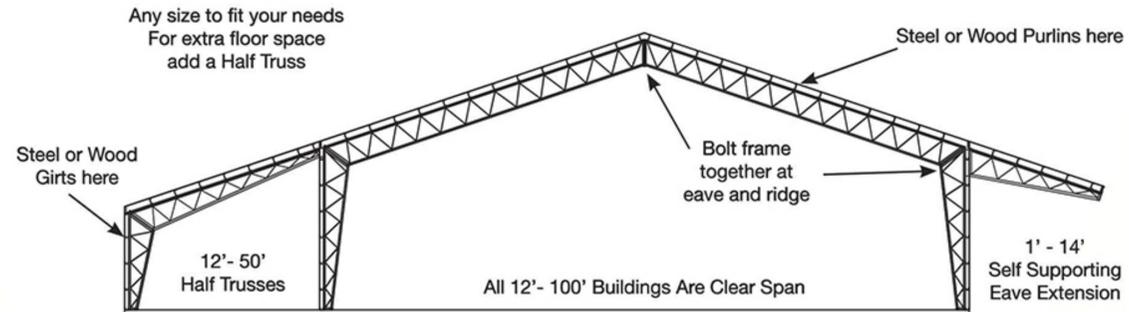
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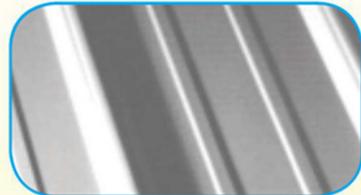
## Clear span widths 12' through 100'



**Add a ½ truss or a self-supporting overhang on one or both sides for more storage**



Mezzanines can be added for additional storage or living space.



### Sheet metal loading

**LIVE LOADS:** Standard secondary framing on 2' centers 108 PSF  
**WIND LOADS:** Standard secondary framing on 2' centers 144 PSF

### Insulate

Worldwide buildings are easy to insulate at time of construction or after construction with several choices and R-values available.



*protect what matters*



Peculiar, Missouri Office  
**800.825.0316**



*protect what matters*

Minneapolis, Minnesota Office  
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# OUR 50 YEAR STRUCTURAL WARRANTY IS THE BEST IN THE INDUSTRY!

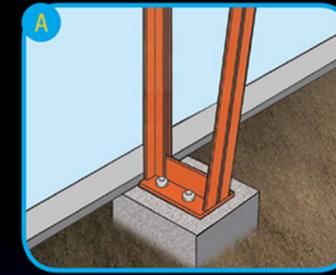
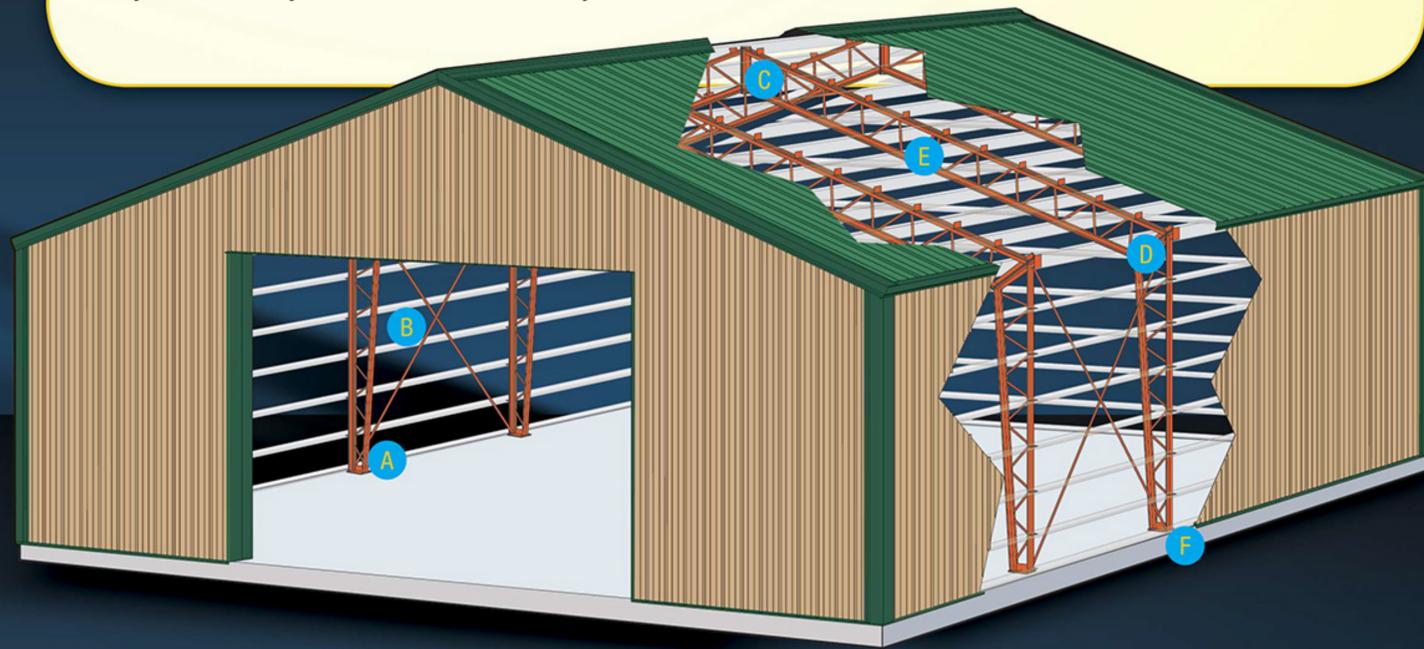
## The most versatile, strongest steel building available

Worldwide Steel Buildings is the leading manufacture of pre-engineered steel buildings with a unique open web truss design. Since 1983 Worldwide buildings have survived tornadoes, hurricanes, earthquakes, blizzards and ice storms without a single report of structural damage.

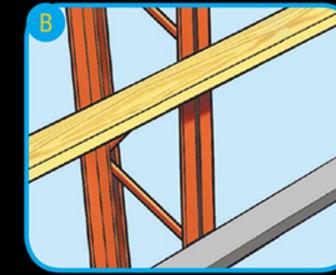
Our buildings feature a unique all steel or hybrid (wood) secondary framing system edge-mounted combined with our open web steel trusses to create a versatile and superior strength structure. Match the color of an existing building with our 40 year warranty sheet metal or create your own

distinctive look with brick, stucco, wood, stone or other options of your choice. Choosing a Worldwide Steel Building is an investment you will be proud of, like thousands of other satisfied customers who have protected their valuables with a Worldwide Steel Building.

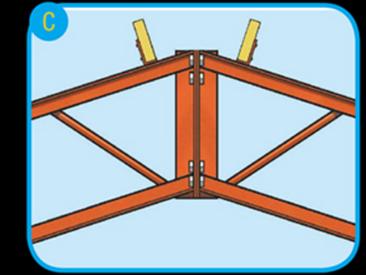
Our reputation of offering the strongest building in the market at an economical price sets Worldwide apart from the competition. With a combined 100+ years experience our staff will help you design the building that is right for you.



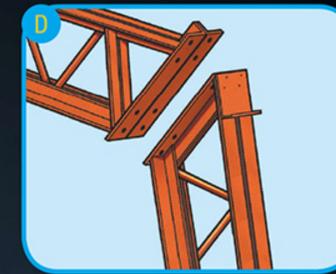
Setting the legs on full floor or basic concrete piers anchors building securely.



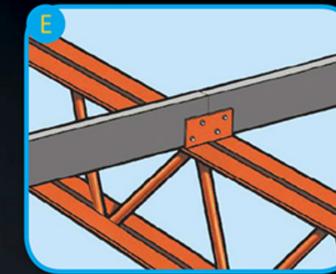
Wood or steel girts attach to the pre-welded clips with supplied fasteners every 2' giving superior strength and ease of interior finish.



There is no substitute for the strength of steel. With our bolt together framework our buildings go up fast.



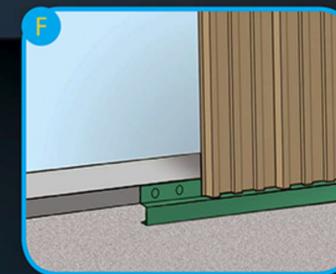
The roof truss easily connects to the sidewall leg, connecting with heavy duty plates and structural bolts.



Wood or steel purlins set on top of the steel truss attached to pre-welded clips with supplied fasteners every 2'.



Complete the framed openings for walk doors, windows and overhead doors.



Attach the base trim to bottom girt to create a seal guard against the intrusion by rodents or insects.



Attach pre-cut 40 year warranty sheet metal for walls and roof using supplied weather tight pre-painted fasteners.



Using our premium trim package, put the finishing touches on your building.

### Designed

Worldwide design can meet all snow & wind loads. Our building provides maximum protection against extreme weather conditions including heavy roof loads and high winds. There is no substitute for steel, with our bolt together framework our buildings go up fast without requiring heavy cranes and gives you superior strength.

### Versatility

Worldwide buildings are available in a variety of sizes making them ideal for a number of applications: Garages, Shops, Hangars, Boat / RV storage, Churches, Farms, Residential, Recreational, Commercial and Industrial. We also specialize in custom / unique designs to meet your specifications.

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