

ON-FARM

Grain Storage Systems



# MFS/Stormor: On-Farm Storage Systems

On-farm storage systems that protect valuable grain.  
And the people who grow it.

You've invested money, time, intelligence, technology and sweat into your crop. You deserve an on-farm grain storage system that protects that investment—with no worries.



Why sacrifice strength and long life for price?  
With MFS/Stormor, you can have it all!

**The strongest, highest-rated roof system in the industry**

Our roof systems meet the industry's highest load ratings for wind and snow, for non-structured roofs—and we have the documented engineering data to prove it.

**G-115 galvanization throughout for longer life** Every roof, sidewall and hopper we make uses G-115 galvanization, which adds up to 27% longer life than competitors who settle for G-90.

**Industry-leading bin safety equipment & accessibility**

From sturdy ladders and stairs to roomy access doors—everything we do is focused on making your grain storage system as safe and easy to use as possible. These features can help you comply with OSHA guidelines.

**Commercial grade quality at an affordable price**

Our on-farm storage systems are rugged, reliable and long-lasting—providing outstanding performance and value over the long haul. Every grain bin is backed by a **5-year warranty**.





## Why G-115 Galvanization Matters

**MFS/Stormor uses G-115** hot-dip galvanization on key components of every on-farm storage bin system.

Industry research indicates that G-115 galvanization can extend the life of the galvanized coating on the bin's surface by up to 27% over competitors who settle for G-90 galvanization.

That means the galvanization on your bin maintains its integrity longer—and that means greater service life, increased reliability, optimal grain protection and a better return on investment for you.

**Innovative design that solves big problems** We've engineered features that address key issues including personal safety, easier access, resistance to moisture, strength and stability, and reliability and performance over the long haul.

**Precise engineering for easier construction** Bolt holes that line up. Sheets that are sized right and sized consistently. Sensible bundling of materials for easier handling on the job site. It all adds up to savings of time, labor and headaches.

# MP+ ROOF SYSTEM

The strongest, highest quality roof in the business.

Available for bins from 12' (3.65 m) to 60' (18.28 m) diameter.

The MP+ Roof System offers strength and protection that are the best in the business. You get maximum grain protection, superior strength and reliability that are simply unmatched by any other non-structured roof.

Why pay more for a structured roof when you can get a high-performance, industry-leading roof system for less?

## Best performance specifications in the industry.

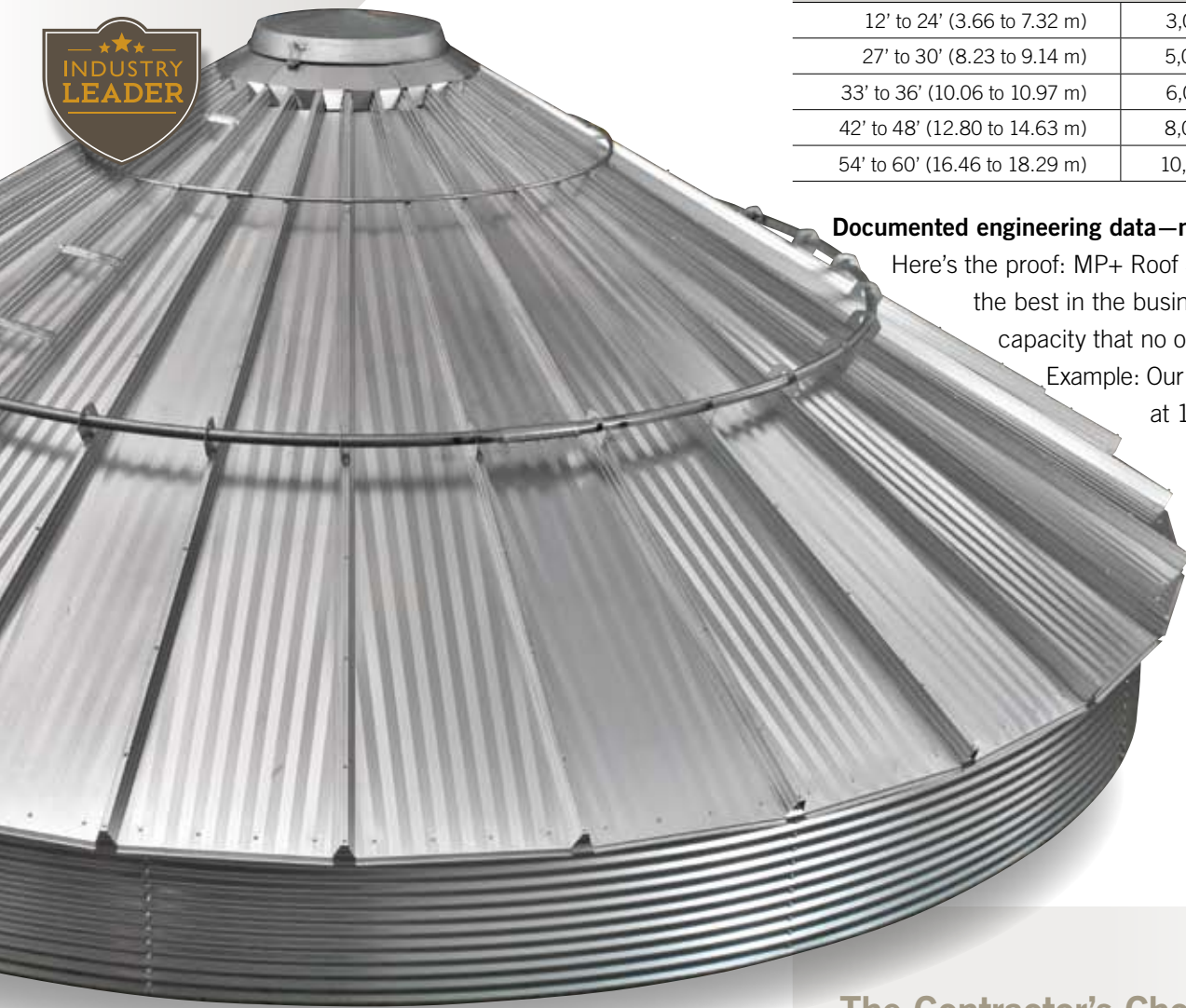
- **Highest load ratings** for wind and snow in the industry, for non-structured roofs. You get maximum strength without paying extra for a structured roof.
- **Meets IBC 2011 and ASCE 7-2010** building codes—the only bin roof system in the industry that does!
- **Steep 30° slope** sheds moisture and snow quickly and efficiently.
- **G-115 galvanization** provides 27% longer life than competitors settling for G-90.
- **ASTM A653 Grade 50 with 50K yield and 65K tensile** for the ultimate in strength and durability.
- **Corrugation in flat of roof sheets** provides an extra measure of strength.



Proprietary state-of-the-art roll former controls the distance between holes from rib-to-rib, not from the edge of the coil like competitive products. The result: Higher quality roof sheets that fit better—with bolt holes that line up every time. Bolts drop right in place. That means trouble-free, labor-saving, frustration-free installation on site.



Period.



Non-Structured Roofs	
LOADING	
Live Load	35 lbs/ft <sup>2</sup> (1.0 kPa)
Dead Load	3 lbs/ft <sup>2</sup> (0.14 kPa)
Wind Load	105 mph (168 kph)
CONCENTRATED PEAK LOADING	
12' to 24' (3.66 to 7.32 m)	3,000 lbs (1,361 kg)
27' to 30' (8.23 to 9.14 m)	5,000 lbs (2,268 kg)
33' to 36' (10.06 to 10.97 m)	6,000 lbs (2,721 kg)
42' to 48' (12.80 to 14.63 m)	8,000 lbs (3,629 kg)
54' to 60' (16.46 to 18.29 m)	10,000 lbs (4,536 kg)

**Documented engineering data—not marketing fluff.**

Here's the proof: MP+ Roof Systems are simply the best in the business, providing load capacity that no one else can match.

Example: Our 60' bin roof is rated at 10,000 lbs. Nobody else comes close.

**The Contractor's Choice**

- Fewer parts for quicker, easier construction
- Precise manufacturing for accuracy and trouble-free in-field assembly
- Bolt holes that line up every time for faster installation
- Quality, strength and industry-leading specifications provide confidence and reliability

# MP+ ROOF SYSTEM

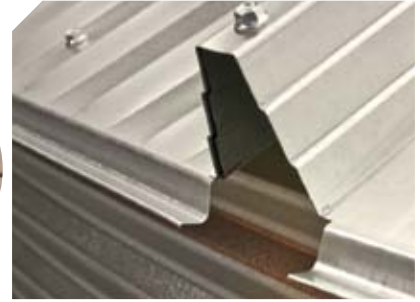
Design details that surpass industry standards—and your expectations.



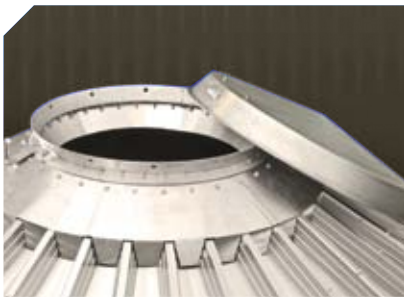
**Large pre-formed manway roof opening** is standard, featuring a hinged lid and big 5.5 sq. ft. (0.51 m<sup>2</sup>) opening for easy access. Easy-open lid with big beefy hinges lays flat to avoid wind. Seamless extruded collar (inset) with rubber gasket provides moisture-tight seal when closed. Pre-formed opening makes for simpler construction and tight fit.



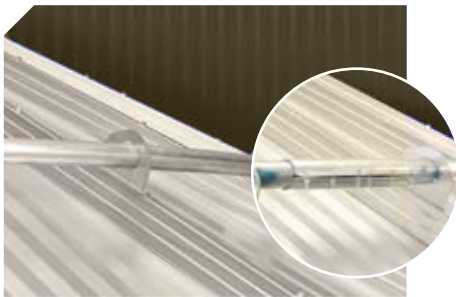
**Specially designed 12-gauge eave clips** connect roof sheets to sidewalls. "Up" position helps exhaust moisture-laden air. "Down" position preferred for long-term storage. Built-in rib stops keep out pesky birds. Continuous eave ring used in lieu of clips on 54' (16.46 m) and 60' (18.28 m) models.



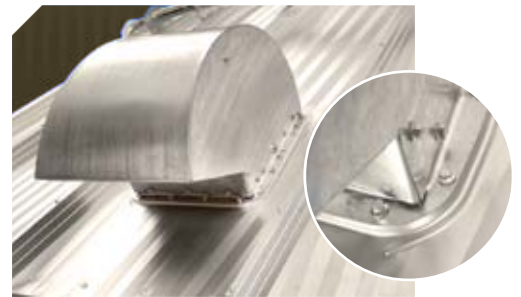
**Extra-tall 3-3/4" (9.5 cm) stair-stepped ribs** are staggered to provide even greater strength. Hemmed drip edge deflects moisture, eliminates sharp edges to reduce injury and strengthens the cross-section of the roof sheet.



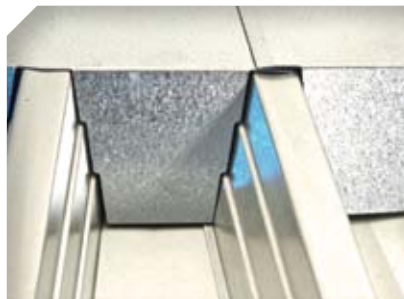
**Large 36" (91.4 cm) peak opening** provides easy filling and optimal access. A roof ladder from the eave to the peak—plus a roof safety ring—are standard on all models. Easy-open removable cap is standard. Heavy-duty cap for spouting is optional.



**Oversized bridging ring** enhances structural integrity. Splice clamps (inset) and expansion bolts ensure ring segments function as one continuous pipe.



**Well-designed 2.25 sq. ft. (0.686 m<sup>2</sup>) roof vents** for maximum airflow. Vent openings are pre-punched for easy construction and tight fit and seals. Vents feature seamless raised lip (inset) for improved integrity and moisture resistance.



**Peak flashing** is formed to the ribs to improve resistance to moisture and birds.

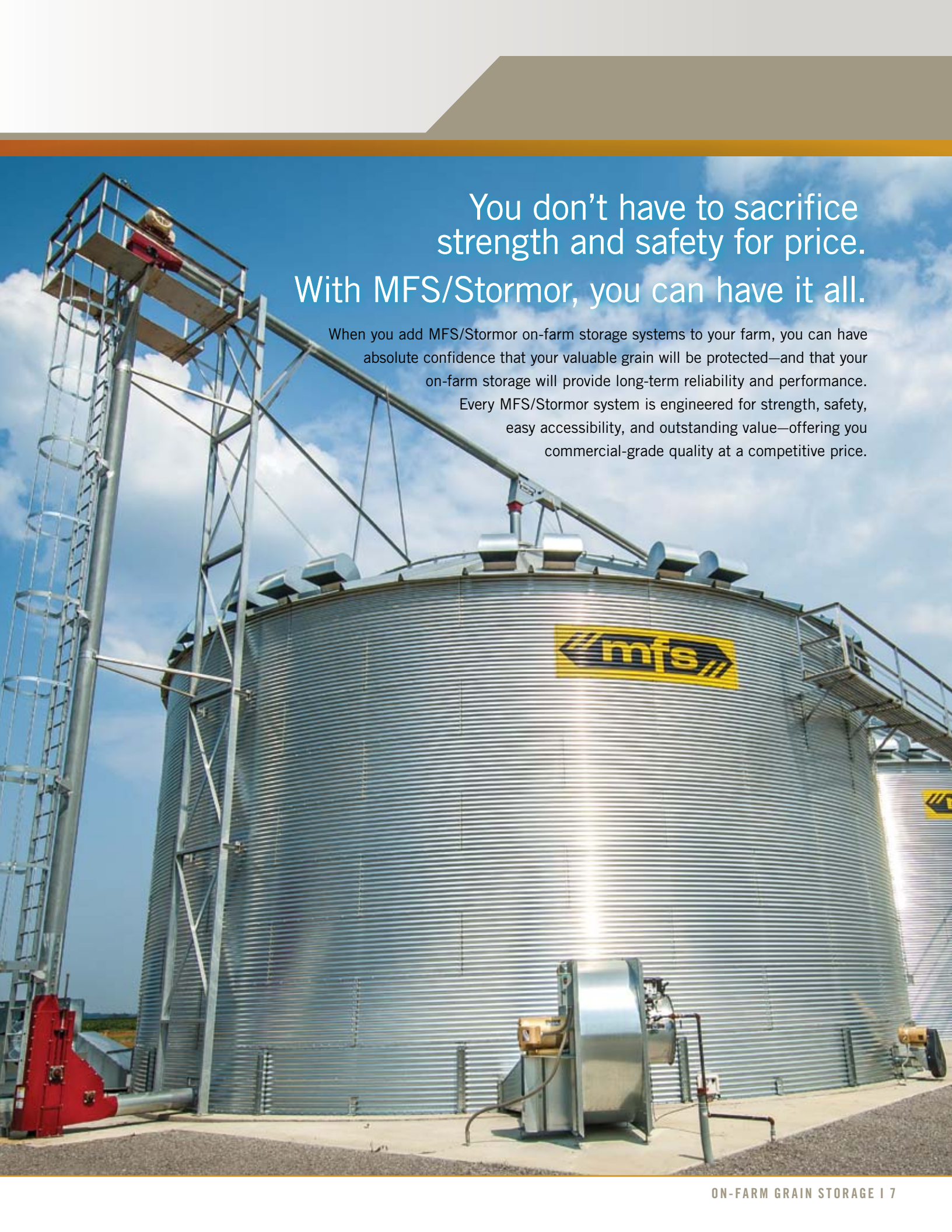


**Safety ring** is a continuous round pipe for safer, easier access to and around the roof cap.



**Extra-large manway** is sized for plenty of shoulder-room and easy maneuverability, even for large-framed farmers wearing cold-weather gear!





You don't have to sacrifice  
strength and safety for price.  
With MFS/Stormor, you can have it all.

When you add MFS/Stormor on-farm storage systems to your farm, you can have absolute confidence that your valuable grain will be protected—and that your on-farm storage will provide long-term reliability and performance.

Every MFS/Stormor system is engineered for strength, safety, easy accessibility, and outstanding value—offering you commercial-grade quality at a competitive price.



# The industry standard for strength, quality and long li

## Here are the details.

### SIDEWALL

- G-115 galvanizing
- ASTM A653 Grade 50 with 50K yield and 65K tensile
- 2.66" (6.76 cm) corrugation (the industry standard)



**One-ring base anchor** firmly and securely holds bin wall to concrete base for stability, strength and weather resistance.



**Bin hold-down bracket** on 42' (12.80 m) to 60' (18.28 m) bins provides supplemental security and strength to one-ring base anchor.



**27% longer life** thanks to G-115 galvanizing.

### DOOR



**Full opening door** in sidewall provides full and easy access regardless of door option selected. Both 1R and 2R options available.



**Outer door cover with bar lock** firmly holds door cover closed, even in challenging weather conditions.

### FASTENERS



**Grade 8.2 bin bolts** are used throughout to ensure strengths and stability. Roofs and lighter gauge sidewalls use 5/16" (0.79 cm) bolts. Heavier gauge sidewalls use 3/8" (0.95 cm) bolts.



**Top-quality fasteners** feature JS1000 plating system, SAE Grade 8.2 for maximum shear capacity as well as industry standard washers to seal the bolt to the sidewall.

### FLOORS

#### The Contractor's Choice

- Every floor plank is labeled for easy identification in the field
- Floor planks are precisely bundled to enable building from the stack
- On-side shipment makes parts easier to handle and reduces damage during loading/unloading
- Multiple bundles on larger systems make for easier loading and unloading
- Single piece option for larger bins can make on-site construction easier
- One-man installation of flashing possible thanks to use of nuts on the inside of the bin
- Easy-to-use construction guide simplifies the process—especially for first-time installers
- Powder-coated welded supports resist rust and enhance appearance upon delivery at job-site

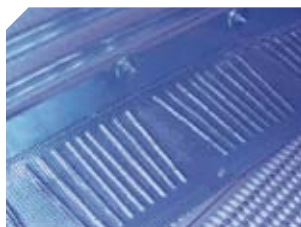


## FLASHING

Bin flashing is an underappreciated but critical component of bin construction. At MFS/Stormor we take great care in designing and manufacturing flashing that is strong and durable, regardless of the gauge you choose for your flooring system.



**Choice of high back or low back flashing** works for both new bin installation or retrofits.



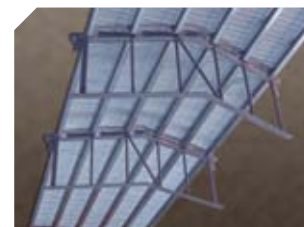
**Multi-rib design** adds strength and durability. Also provides traction for sweep augers.

## SUPPORTS

MFS/Stormor supports are available in either galvanized or welded styles, providing a choice for customers. Supports come in multiple heights to accommodate different sizes of bin unloading systems and fan transitions for optimum performance.



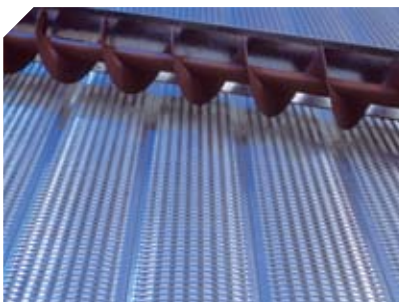
**Locking tabs** on galvanized supports lock into place during assembly. 17 gauge galvanization provides strength and dependability.



**Powder-coated welded design** resists rust and lasts longer than non-painted supports. Facilitates easy installation.



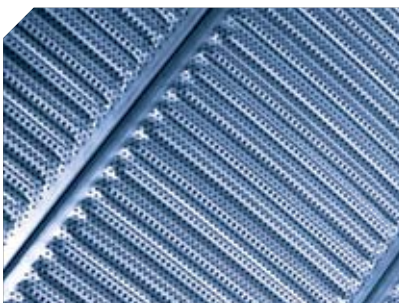
**16-Gauge Floor Option** is the heaviest specification available in the industry. MFS/Stormor also offers the widest variety of gauges in the industry—providing even more assurance that the construction matches the challenge.



**Built-in crown on planks** prevents sagging and provides additional strength. Slotted design offers strength and economy.



**Built-in corrugation on planks** increases strength and rigidity. Round perforation (0.093") design is smooth and easy to sweep.



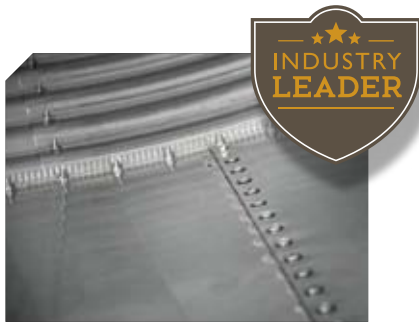
**Small perforation** (0.050") floor planks are ideal for use in storing small grains such as canola. Smooth surface facilitates easy clean-out.

MFS/Stormor bin floors are available in a wide variety of styles to match the application, storage system and customer preference. Long-lasting galvanized construction coupled with state-of-the-art design and manufacturing makes for a bin floor that stands up to use and abuse under the most challenging conditions. Floors can be constructed in any diameter, which makes an MFS/Stormor floor available on our bins—plus any other brand of bin.

# FEED HOPPER BINS

Engineered to stand up to daily use & tough conditions.

- **40° roof pitch** for better feed fill and greater capacity
- **G-115 galvanization** for up to 27% longer life than competitors who settle for G-90
- **Specially engineered design features** for increased safety, strength and outstanding protection against moisture and environmental threats.



**Rolled and crimped connections** on the roof-to-sidewall and sidewall-to-hopper matches the sidewall corrugation for extra strength and improved protection of bin contents.



**Heavy-duty one-piece 14 gauge 16" (40.64 cm) outlet collar** provides strength and reliability on the working portion of the bin.



**Heavy-duty ladder with top handrail** provides extra safety and easier access.



**Extended sidewall drip edge** directs moisture away from the outlet end of the hopper.



**Plenty of ground clearance** provides adequate work area with less chance of injury.



**Access lid with 200° opening range** lays flat to provide greater access and reduce potential damage during fill. **Ground-controlled lid (inset)** can be opened and closed from the base of the bin for extra convenience and safety.



# LARGE HOPPER BINS

Built for strength & versatility.



**Large hopper bins** from MFS/Stormor are engineered and built to provide optimum protection, ease of use and outstanding strength and reliability.

## The perfect solution for:

- Grain storage
- Seed storage
- Wet holding in front of a dryer
- Load-out tank applications

## All large hopper bins offer these powerful benefits:

- **Capacities** from 1,400 (36.6 m/ton) bushels up to 6,400 (161.5 m/ton) bushels
- **Industry-leading MP+ roof system** used on all hopper tanks 15' to 21' (4.57 m to 6.40 m)
- **G-115 galvanization** for up to 27% longer life than competitors who settle for G-90
- **Common sense design features** that protect grain and improve load-out
- **A steep 45° slope** for fast and complete load-out

## Options available:

- Roller valves
- Rack & pinion gates
- 4", 6" & 8" auger boots
- Aeration kits
- Sidewall ladder kits
- Safety cages for taller bins
- Roof ventilation

For larger capacities, please see our excellent line of commercial hopper tanks with diameters to 36' (10.97 m) and capacities exceeding 50,000 bushels (1280 m/ton).

# GRAIN BIN FANS

MFS/Stormor is part of Global Industries, a multi-faceted company specializing in grain storage and handling systems. As a result, we can offer you additional solutions to complete your on-farm grain storage including grain bin fans from NECO and bin unloading systems from NECO and Hutchinson.

Rugged, efficient grain bin fans engineered to run a long, long time.



## NECO Axial Fans



### High air flow at low static pressures.

- Motors are specifically designed for use in axial fans and designed to run at less than full load amperage to extend motor life and increase fan efficiency.
- Unique airfoil profile of precision-cast aluminum blades provide high airflow with low horsepower requirements, saving energy costs.
- Blades are precision balanced for low vibration.
- Fan housing fabricated from heavy gauge G-90 galvanized steel; bolted together to eliminate cracks and breaks typically associated with welded housings and rolled flanges.
- 3/4 HP to 15 HP models available.

## NECO Centrifugal Fans



### Low-speed, low-noise design.

Designed for high air flows at low to medium static pressures—typically outperforming vane axial fans (propeller type) of the same horsepower when operating at over 4" of static pressure.

- Special airfoil blades provide maximum air output while minimizing noise.
- Most fan wheels constructed with energy-efficient continuously welded airfoil blades for optimal safety; keeps water out to prevent imbalance.
- Fan housing fabricated from heavy gauge G-90 galvanized steel and assembled with special locking bolts and nuts for rust-free long life and minimum maintenance.
- 3 HP to 60 HP models available.



# BIN UNLOADING SYSTEMS

Helping you capture every kernel of value in your grain storage system.



## NECO Bin Unloading Systems

### Simple, rugged & reliable

- Easy to maintain, access and configure
- Heavy duty construction for long service life
- Large center well improves capacity of discharge auger
- Available in fixed or variable angle discharge
- Wide range of models and capacities available
- Manufactured in the USA



## Hutchinson Bin Unloading Systems

### Standard Klean Sweep

- A simple, easy to handle sweep at an economical price
- Use for emptying bins up to 48' (14.6 m) in diameter
- Unique design adjusts for close floor clearance to maximize bin clean-up
- Wide range of models and capacities available
- Manufactured in the USA

### Commercial Klean Sweep

- An outstanding performer for minimal investment
- For use in on-farm grain storage systems with diameters up to 60' (18.29 m)
- Engineered for larger bins and higher unloading speeds
- Wide range of models and capacities available
- Manufactured in the USA



# STAIRS & LADDERS

Safety and quality that are several steps above the competition.



Personal safety and easy accessibility are hallmarks of on-farm storage systems from MFS/Stormor. Thanks to our Global Industries “family” affiliation with Brownie Systems, we can offer a wide range of industry-leading stairs and ladders that are a perfect match to our on-farm grain storage bins—at a competitive price.

**All galvanized steel construction** ensures long life and lasting strength under the most demanding conditions.

**Extra-wide step and toe space** provide additional confidence and safety, while helping you comply with OSHA regulations.

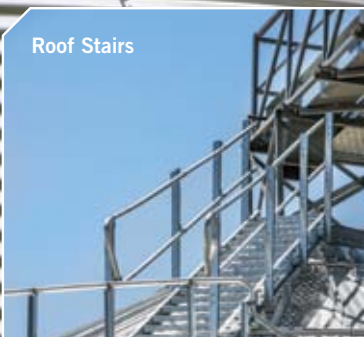
**Extruded non-slip stair** helps prevent build-up of ice and water for sure footing under tough conditions and heavy loads.

**Single or doublewide platforms** at the top provide easy access to roof stairs and manway. Optional rest stop and working platforms below provide a safe, convenient surface when and where you need it. Four-inch (102 mm) toe-boards ensure a safer platform for everyone—above and below.

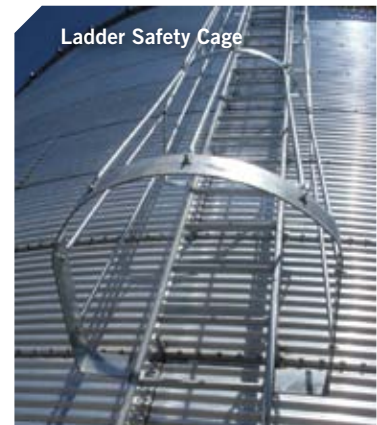
**Large pipe handrails** with OSHA-compliant spacings provide a sure grip as you ascend or descend. There are no rail breaks, sharp ends, corners or protruding bolts. An optional inner handrail is available for extra assurance.



Roof Handrails



Roof Stairs



Ladder Safety Cage

MFS/Stormor partners with Brownie Systems to bring you the best in stairs and platforms, roof ladders, in-bin ladders, handrails and other sturdy and rugged structures that improve personal safety and ease of access for your on-farm grain storage.



In-bin Emergency Ladder





# MFS/Stormor On-Farm Grain Storage Systems

Setting the industry standard for strength, long life & quality.

- The highest-rated roof system in the industry—without question
- G-115 galvanization throughout; 27% longer life than competitors who settle for G-90
- Industry-leading bin safety equipment & accessibility features that help you comply with OSHA guidelines
- Commercial grade quality & strength at an affordable price
- Available from a dealer you can trust—with unmatched service



MFS/Stormor is a division of Global Industries, Inc., a multi-faceted company specializing in grain storage and handling systems and high-quality steel construction. Thanks to this “family” relationship, MFS/Stormor can offer you completely integrated, high-quality grain storage and handling systems at a very competitive price.



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**NECO**

**Hutchinson**  
MOVES A WORLD OF GRAIN  
THE WORLD OVER

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GLOBAL TREATMENT SYSTEMS

**SENTINEL**  
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