

# Annual steel storage bin checklist



## Asset file folder

The following information should be collected and verified for each steel bin at the property and stored in a centralized location:

**Date of Construction** \_\_\_\_\_

**USDA Bin Designation** \_\_\_\_\_

### Vendors

General Contractor \_\_\_\_\_  
Purchase Agreement \_\_\_\_\_  
Concrete Engineer \_\_\_\_\_  
Concrete Contractor \_\_\_\_\_  
Bin Manufacturer \_\_\_\_\_  
Warranty \_\_\_\_\_  
Bin Erector \_\_\_\_\_

### Plans

Foundation Plans \_\_\_\_\_  
Construction Manual \_\_\_\_\_  
Bin Model Number \_\_\_\_\_  
Bin Diameter \_\_\_\_\_  
Bin Eave Height \_\_\_\_\_  
Bin Capacity in Bushels \_\_\_\_\_

### Operations

Bin Owners/Operators Manual \_\_\_\_\_  
Written operational procedures for bin loading \_\_\_\_\_  
\_\_\_\_\_  
Written operational procedures for fan operations \_\_\_\_\_  
\_\_\_\_\_  
Written operational procedures for bin unloading including clean-out procedures \_\_\_\_\_  
\_\_\_\_\_  
Written maintenance procedures for bin \_\_\_\_\_  
\_\_\_\_\_  
Written lock-out-tag-out procedures \_\_\_\_\_  
\_\_\_\_\_  
Written bin entry procedure \_\_\_\_\_  
\_\_\_\_\_

### Inspections

Photo documentation of bin during construction \_\_\_\_\_  
Initial inspection report prior to filling \_\_\_\_\_  
Annual inspection reports of bin with photos \_\_\_\_\_

### Maintenance

Record of maintenance conducted \_\_\_\_\_  
Date \_\_\_\_\_  
Activity \_\_\_\_\_  
Contractor \_\_\_\_\_  
Photos \_\_\_\_\_

## Initial inspection prior to filing

The following information should be collected and verified for each steel bin prior to filling for the first time:

**Date of Inspection** \_\_\_\_\_

### Foundation

Verify foundation dimensions match design drawings \_\_\_\_\_  
Identify and document any foundation cracks \_\_\_\_\_  
\_\_\_\_\_  
Verify water flows away from the bin \_\_\_\_\_  
Verify water flows away from the foundation \_\_\_\_\_  
Verify bin is tight to the foundation \_\_\_\_\_  
Review transit readings to verify foundation is level \_\_\_\_\_

### Walls

Verify all panel bolts in place \_\_\_\_\_  
Clean-up all loose bolts \_\_\_\_\_  
Verify all anchor bolts are tight and vertical (no angled anchor bolts) \_\_\_\_\_  
\_\_\_\_\_  
Verify all wall wind rings are tight \_\_\_\_\_  
Verify all sweep ring bolts are tight and vertical \_\_\_\_\_  
Verify bin stiffeners that land on aeration tunnels are properly supported (vertical support installed between bin stiffener anchor plate and bottom of aeration tunnel)  
\_\_\_\_\_

### Roof

Verify all roof wind rings are tight \_\_\_\_\_  
Verify roof to sidewall connection \_\_\_\_\_  
Verify roof mounted equipment is properly secured \_\_\_\_\_

### Openings

Auxiliary sumps chained and padlocked \_\_\_\_\_  
Man access doors properly secured \_\_\_\_\_  
Equipment entry doors properly braced and secured \_\_\_\_\_  
\_\_\_\_\_

### Equipment

Operate all the following equipment:

Grain Aeration Fans \_\_\_\_\_  
Exhaust Fans \_\_\_\_\_  
Sumps / Slide Gates \_\_\_\_\_  
Reclaim Conveyor \_\_\_\_\_  
Power Distributor \_\_\_\_\_  
Sweep Auger \_\_\_\_\_  
Side Draw Gates \_\_\_\_\_  
Fill System \_\_\_\_\_

### Training

Provide training for grain handling employees on proper loading of metal bin and any special requirements for first time filling of bin  
\_\_\_\_\_

Provide training for grain handling employees on proper unloading of metal bins  
\_\_\_\_\_

## Annual inspection at clean out

The following information should be collected and verified for each steel bin at the time it is emptied each year:

**Date of Inspection** \_\_\_\_\_

**Foundation**

Identify and document any foundation cracks \_\_\_\_\_  
Verify water flows away from the bin \_\_\_\_\_  
Verify water flows away from the foundation \_\_\_\_\_  
Verify foundation is level \_\_\_\_\_  
Verify bin is tight to the foundation \_\_\_\_\_  
Check all anchor bolts are tight \_\_\_\_\_  
Document any apparent movement of stiffener anchors \_\_\_\_\_

**Walls**

Verify bin stiffeners are attached and plumb \_\_\_\_\_  
Check bin for rust \_\_\_\_\_  
Check for bent or damaged bin corrugated panels \_\_\_\_\_  
Check for missing, loose or broken bin bolts \_\_\_\_\_  
Check to see if any bin bolts are on the ground around the bin \_\_\_\_\_  
Verify all wall wind rings are tight \_\_\_\_\_

**Roof**

Verify all roof wind rings are tight \_\_\_\_\_  
Check the bin roof connections \_\_\_\_\_

**Openings**

Check man access doors and equipment entry doors for damage \_\_\_\_\_

**Equipment**

Verify condition of all the following equipment:

Grain Aeration Fans \_\_\_\_\_  
Exhaust Fans \_\_\_\_\_  
Sumps / Slide Gates \_\_\_\_\_  
Reclaim Conveyor \_\_\_\_\_  
Power Distributor \_\_\_\_\_  
Sweep Auger \_\_\_\_\_  
Side Draw Gates \_\_\_\_\_  
Fill System \_\_\_\_\_

**Training**

Provide annual refresher training for grain handling employees on proper loading and proper unloading of metal bins \_\_\_\_\_  
Provide annual refresher training on lock-out-tag-out procedure \_\_\_\_\_  
Provide annual refresher training for bin entry procedure \_\_\_\_\_

**Record any maintenance activities conducted**

Date \_\_\_\_\_  
Activity \_\_\_\_\_  
Contractor \_\_\_\_\_  
Photos \_\_\_\_\_

**Miscellaneous**

Document the condition of the bin and foundation - review and photograph \_\_\_\_\_