

Safeguarding storage bins

ANNUAL STEEL STORAGE BIN CHECKLIST



Nationwide[®]
is on your side

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 _____



1-800-260-1356 • NATIONWIDEAGRIBUSINESS.COM

The information included in this publication and accompanying materials was obtained from sources believed to be reliable, Nationwide Mutual Insurance Company and its employees make no guarantee of results and assume no liability in connection with any training, materials, suggestions or information provided. It is the user's responsibility to confirm compliance with any applicable local, state or federal regulations. Information obtained from or via Nationwide Mutual Insurance Company should not be used as the basis for legal advice or other advice, but should be confirmed with alternative sources. Nationwide, the Nationwide N and Eagle, Nationwide is on your side and Nationwide NSight Solutions are service marks of Nationwide Mutual Insurance Company. © 2016 Nationwide GCO-0135AO.2 (01/16)