

New Design Parameters

NEW STANDARD FOR SAFER BIN ENTRY ENGINEERED RIGHT INTO THE BIN

The American Society of Agricultural and Biological Engineers (ASABE) has initiated a project to develop a new standard regarding processes and design parameters related to grain bin entry.

Scope of Project

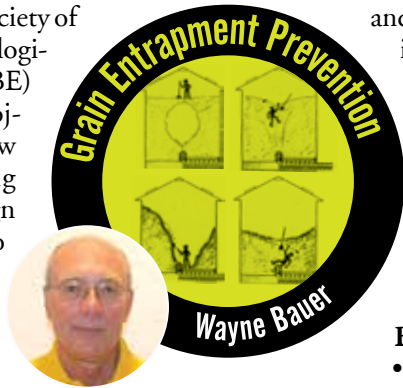
This standard will direct bin manufacturers to identify anchorage points on the bin that will allow the user to attach safety equipment to prevent him or her from falling through crusted grain or be pulled into flowing grain, if the entrant ignores other safety instructions.

ASABE is an international scientific and educational organization dedicated to the advancement of engineering applicable to agricultural, food, and biological systems, with more than 240 standards currently in publication.

Conformance to ASABE standards is voluntary, except where required by state, provincial, or other governmental requirements, and the documents are developed by consensus, in accordance with procedures approved by the American National Standards Institute (ANSI).

As Dr. Carol Jones at Oklahoma State University points out, ASABE generally is perceived as an academia-based environment. However, these grain bin entry design standards have been proposed and driven largely by the users themselves and the steel tank manufacturers.

However, the academic group will be asked to review the standards and make suggestions. In fact, ultimately, there will be more than 31 voting members and 10 to 15 non-voting parties comprising people from various groups such as consultants, users, steel bin manufacturers, safety professionals,



and academics who will have input into this process of developing new design parameters for future grain bins.

The X624 Grain Bin Entry consensus standard addresses some of the following.

Bin Access Points

- Dimensions of access

doors.

- Requirement for work platforms.
- Provisions next to openings to support a device that can be used to extricate a patient.
- Roof access openings located at 1 or 5 o'clock positions.

Restraint Anchors

- Access to anchor point that must support a minimum of 1,800 pounds.

Bin Entry Operational Procedures

- Observer must be present at all times.
 - Restraint system must be attached to the individual entering the bin that will keep the entrant above the grain, in case of a collapse of the grain mass.
 - The observer shall have provisions available to call for help, if required.
 - The observer should have access to the retrieval line and be able to maintain a minimum amount of slack in the line and have it secured properly.
 - The person serving as entrant or observer shall be trained properly in the use of all equipment and safety procedures.

Safety Signs

- All standard signs in the appropriate places and legible.

For more information on the actual proposed X624 standards, contact Scott Cedarquist at 269-932-7031; cedarq@asabe.org.

For additional information regarding the ASABE, please contact the society at 269-429-0300; e-mail: hq@asabe.org; or visit www.asabe.org.

Approval Process

The entire approval process involves a variety of groups and committees who study the proposed standards and review any and all comments offered. Voting members are notified of any steps taken to resolve any disapproval.

These ASABE grain bin entry design standards have been proposed and driven largely by the users themselves and the steel tank manufacturers.

This entire process can take at least six months assuming there are no problems or issues that need to be resolved.

Approval of the grain bin entry standard is expected by the summer of 2013.

I would like to personally thank Harmon Towne, retired from Brock Grain Systems; Dr. Carol Jones; and Dan Wambeke with Scafco Corp. for their time and assistance in helping to guide these proposed standards through this process.

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