



# Channel - Lok™

## BIN FLOORS & SUPPORTS Installation & Owner's Manual

### MINOR BIN DIAMETERS

12'	16' 5" (5M)	18' 7"
19'	19' 8" (6M)	21' 8"
22' 11" (7M)	24' 9"	26' 3" (8M)
27' 10"	29' 6" (9M)	31'
34'	36'1" (11M)	37'1"
42' 8" (13M)	43' 3"	49' 3" (15M)
55' 8"	59' 1" (18M)	61' 10"

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<u>DATE</u>	<u>REVISIONS</u>	<u>PAGES</u>
03/14/2019	– Updated Z-Post Support spacing tables-----	11-12
	Updated SuperWave Supports installation instructions & spacing tables -----	18-23
	Updated instructions for supporting floor over unload system -----	26-35
	Added instructions for supporting floor in front of fan -----	36
	Updated instructions for supporting split planks-----	37
	Updated instructions for installing split planks at center sump -----	38
01/10/2019	– Updated warranty -----	4
11/13/2018	– Updated Super Supports installation instructions -----	13-14
	Updated flashing installation instructions -----	40
	Updated instructions for locating & installing planks -----	41-83

## Safety



Read manual before installing or using product. Failure to follow instructions and safety precautions in manual can result in death or serious injury. Keep manual in a safe location for future reference.



On safety decals, this symbol and the signal words Danger, Warning, Caution and Notice draw your attention to important instructions regarding safety. They indicate potential hazards and levels of intensity.



**RED - DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**ORANGE - WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**YELLOW - CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

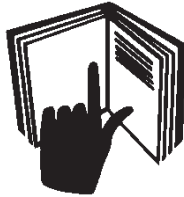
**NOTICE**

**BLUE - NOTICE** alerts you to practices unrelated to personal injury, such as messages related to property damage.

**IMPORTANT:** To prevent serious injury or death to you or your family, it is essential that safety decals are clearly visible, in good condition, and applied to the appropriate equipment.

### FOLLOW MANUAL & SAFETY DECAL MESSAGES

Carefully read this manual and all safety decals on your equipment. Safety decals must be kept in good condition. Replace missing or damaged safety decals by contacting Sukup Manufacturing Co. via mail at PO Box 677, Sheffield, Iowa USA, 50475; by phone at 641-892-4222; or by e-mail at [info@sukup.com](mailto:info@sukup.com).



It is the responsibility of the owner/operator to know what specific requirements, precautions, and work hazards exist. It is also the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of hazards and safety precautions that need to be taken to avoid personal injury or death. Always keep children away from bins and vehicles with flowing grain.

Make no unauthorized modifications to machine. Modifications may endanger function and/or safety of unit. Keep unit in good working condition. Keep shields in place. Replace worn or missing shields free of charge by contacting Sukup Manufacturing Co.

### GRAIN BIN SAFETY

Owners/operators are responsible for developing site-specific confined space entry procedures. OSHA's confined space entry procedures (29CFR 1910.146) can be found at [www.osha.gov](http://www.osha.gov).

#### If you must enter bin for repair or maintenance:

- Use a safety harness, safety line and respirator
- Station another person outside of bin
- Avoid the center of the bin
- Wear appropriate personal protective equipment
- Keep clear of all augers and moving parts



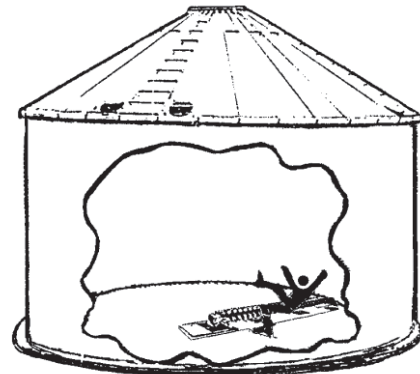
**DANGER:** Never enter bin unless all power is locked out and another person is present.



**Rotating augers can kill or dismember!**

#### **NEVER** enter bin when augers are running!

When bin is nearly empty, sweep auger will travel at an increasingly fast speed. Keep away from sweep and sump augers to avoid entanglement.



**Failure to follow precautions above will result in death or serious injury.**



**DANGER:** Flowing grain may trap and suffocate. If you enter a bin of flowing grain you can be completely submerged in grain in about 8 seconds.



Failure to heed this warning will result in death or serious injury.

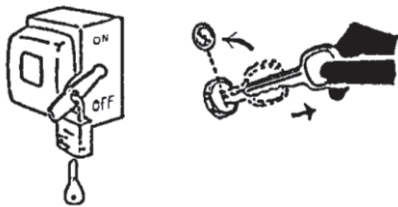
## Safety

To avoid electric shock or electrocution, all equipment must be properly wired and grounded according to electrical codes. Have unit wired by qualified electrician.



Have an electrician install a main power disconnect switch capable of being locked only in OFF position. Mark disconnect clearly as to equipment it operates. Always lock out main power disconnect switch whenever equipment is not in use.

### Service Disconnect



**WARNING:** When servicing equipment, never enter bin unless all power is locked out and another person is present. Always LOCK OUT all power and always check with voltage meter before servicing.

Failure to do so could result in death or serious injury.

Owners/operators are responsible for developing site-specific Lockout/Tagout procedures based on equipment at their work site. See OSHA's typical minimal lockout procedures (29CFR 1910.147 App A) at [www.osha.gov](http://www.osha.gov).

**WARNING: KEEP CLEAR OF ALL MOVING PARTS.**

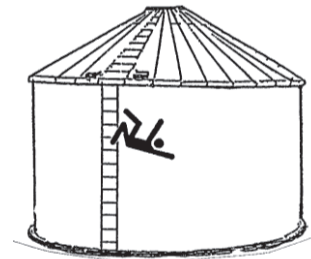
Keep people (ESPECIALLY YOUTH) away from equipment, particularly during operation.

Keep away from all moving parts. Keep all shields in place. **SHUT OFF AND LOCK OUT** all power before servicing.

Failure to follow precautions above could result in death or serious injury.



**WARNING:** Metal is slippery when wet. To avoid falls, never carry items if climbing on bin. Maintain secure hand and foothold if climbing on bin. Failure to do so could result in death or serious injury.



**CAUTION:** Metal edges are sharp. To avoid injury, wear protective clothing and handle equipment and parts with care.

Failure to do so may result in minor or moderate injury.

### PERSONAL PROTECTIVE EQUIPMENT



Refer to OSHA 1910.132 (Personal Prot. Equip.)

Owners/Operators are responsible for developing site-specific personal protective equipment standards. OSHA's personal protective equipment standards (29CFR 1910.132) can be found at [www.osha.gov](http://www.osha.gov).

### EMERGENCIES – KNOW WHAT TO DO

Have emergency numbers and written directions to work site readily available in case of emergency. An area for emergency phone numbers to be recorded is provided below and at end of this manual.

**Ambulance • Fire • Police: 9-1-1**

Bin rescue team: \_\_\_\_\_

Emergency medical squad: \_\_\_\_\_

Address of work site: \_\_\_\_\_

Directions to work site: \_\_\_\_\_

## STORED GRAIN, EQUIPMENT HAZARDS

**IMPORTANT:** A bin floor itself is not a hazard, but grain stored in bin and unload equipment installed in bin can create hazardous situations. Fig. 1 shows dangers of grain stored in bin, including obstructed flow, bridged grain, and collapse of bridged grain, all of which can engulf a person in bin. Obstructions or bridging should be removed by means other than entering bin.

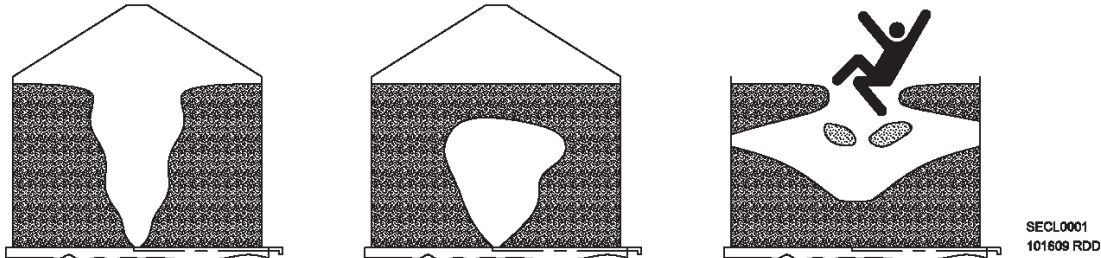


Fig. 1 – Obstructed-flow, bridged grain, collapsed bridge of grain in bin

### Basic Safety Rules

1. Learn how to use controls and operate equipment.
2. Do not let anyone operate equipment without thorough training of basic operating and safety procedures. Follow a proper lockout procedure.
3. Do not modify or redesign equipment without first obtaining written approval from Sukup Manufacturing Co. Unauthorized modifications to equipment may impair function and/or safety and affect machine life.
4. Periodically check all mechanical and electrical components. Keep equipment in good working condition.
5. Handle equipment and parts with care. Wear protective clothing to avoid injury from sharp metal edges.

General safety procedures must be followed when working near or on grain bins. Engulfment and burial, falling from heights, dust and mold inhalation, pesticide exposure, electrocution, and injury from augers are hazards associated with grain bins. Refer to the Sukup Bin Operation Manual, L13920, for more specific information.

**IMPORTANT:** Failure to follow general safety precautions may cause serious injury or death.

### SAFETY QUESTIONS OR CONCERNS

Please contact Sukup Manufacturing Co. with specific safety needs regarding this equipment or its use.

**NOTICE:** Do not run fans unless there is a minimum of 44" of grain over entire aeration floor. Starting fans without enough weight on floor may cause supports to be pushed out of position and cause failure of floor.

**NOTICE:** If bin is equipped with a sidedraw, do not use at same time sumps are being used to unload grain.



## FOLLOW A PROPER LOCK-OUT PROCEDURE

This suggested procedure must be performed **EVERY TIME** your equipment is to be worked on. Following these steps will assist in preventing accidents.

- Each worker must have his/her own lock and the only key to that lock.
- Make sure equipment is not operating before turning off power.
- Notify all affected employees that equipment will be locked out for service.
- Authorized employee shall refer to the facility procedure referencing the power source for the equipment.
- Shut down equipment in a normal manner.
- All energy sources that could activate the equipment must be de-activated.
- Each person who will be working on the equipment must put a lock on any energy sources that could provide any power to the equipment.
- Confirm that power has been deactivated.
- Turn all controls for equipment back to their "off" positions.
- **NO ONE** is to return power to equipment until all work on it has been completed and all locks have been removed.

Facility management needs to proactively train employees to ensure use of proper lockout procedures before working on the equipment. Management also needs to inspect equipment for any covers or guards not in their proper place. It is everyone's responsibility to report any missing grates, guards, equipment failures or failures to lock out. Make certain that no cover is removed unless power is locked out.

**NOTE:** Refer to OSHA document 1910.147 App A for a typical minimal lockout procedure.



**DANGER: Never enter bin unless all power is locked out and another person is present. Entanglement in rotating auger will cause death or serious injury.**

### SAFETY DECAL PLACEMENT

Two **"DANGER DO NOT ENTER this bin!"** decals, L0258A-08, are supplied with Sukup bin equipment. Both decals should be placed where people entering bin or storage building will see them.

Install one **"DANGER"** decal on bin sheet next to door, opposite of hinge side.

Install other **"DANGER"** decal next to ladder leading to roof.

One **"WARNING"** decal, L0281-15, is also supplied. It should be placed next to **"DANGER"** decal on bin sheet next to door.

If suggested locations are not in full view, place safety decals in a more suitable location. Be certain not to cover any safety decals that are already there.

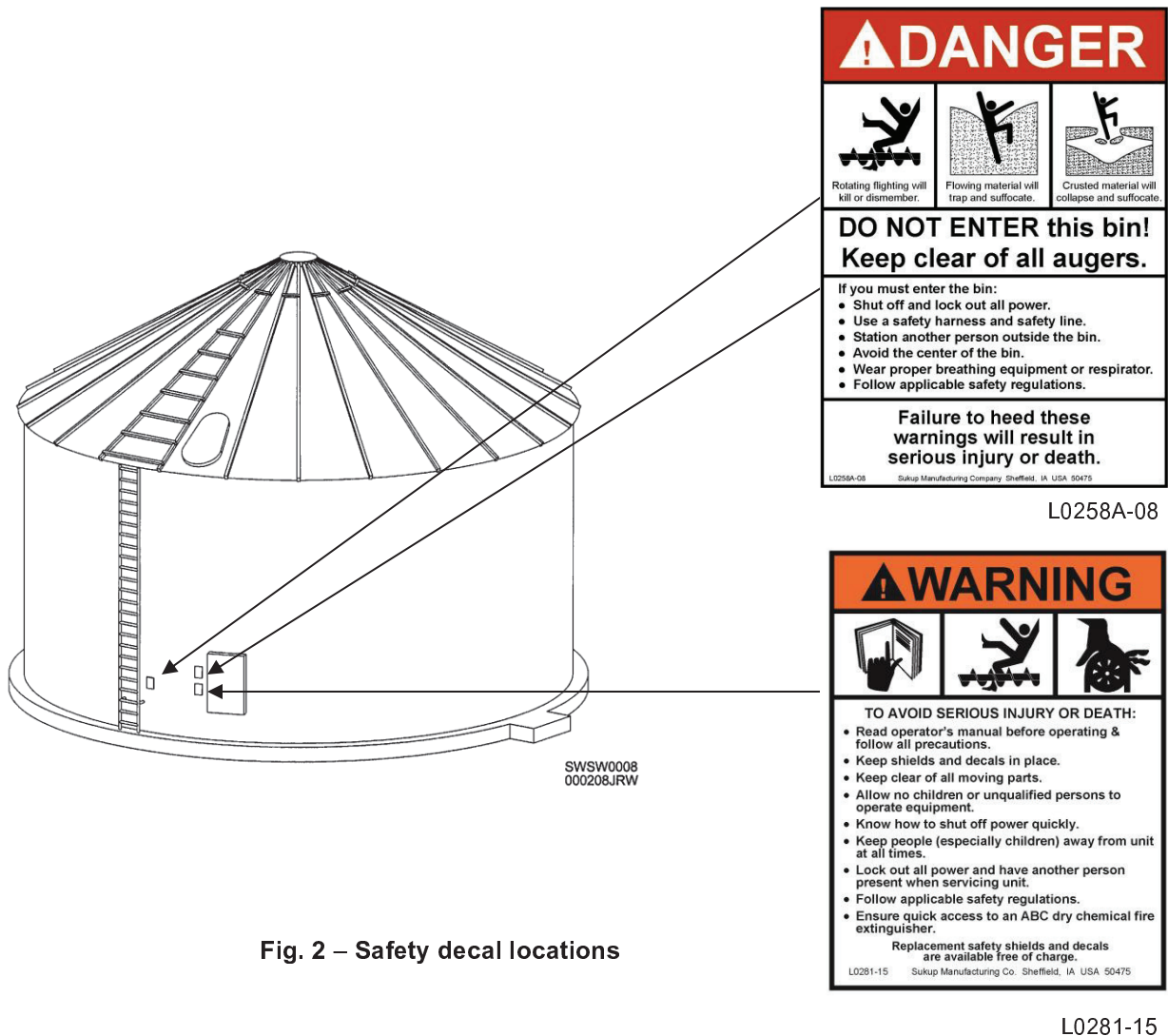


Fig. 2 – Safety decal locations

It is essential that these safety decals be mounted on bin to warn and remind of potential hazards. Decals may need to be replaced if damaged or worn. Order replacement safety decals or shields free of charge by contacting Sukup Manufacturing Co. by mail at PO Box 677, Sheffield, Iowa, USA, 50475; by phone at 641-892-4222; or by e-mail at info@sukup.com. Please specify computer number. Use decal placement drawing to determine location of decals.