

# BEFORE YOU BUILD

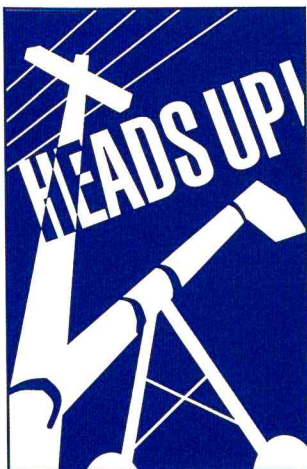
**Before you start building** your new grain bin, contact your local Touchstone Energy® Cooperative.

The call can help you properly place your new bin in relationship to existing power lines. Adequate clearances can reduce the risk of accidental contact between power lines and tall farm equipment such as portable grain augers, elevators or grain probing devices. The National Electrical Safety Code (NESC)\* requires specific line clearance requirements for grain bins located near power lines. Building a grain bin too close to a power line may mean that it will have to be moved, often at the farmer's expense. For example, a 35-foot tall bin should be placed no less than 104 feet away from the power line. Taller bins that can be filled by a portable grain auger must be placed even further from power lines.

Proper siting of grain bins in relation to existing high voltage power lines is extremely important. In addition to safety considerations, there are also requirements for power line clearances which are mandated by national wiring codes. A bin placed too close to a power line may need to be moved or the power line relocated (i.e. raised or rerouted) due to a code violation. These changes are likely to be expensive and may be charged to the bin owner. Talk with your electric supplier **before** the bin site is confirmed.

The NESC specifies the line clearance requirements for grain bins located close to power lines. The NESC specifies both the horizontal distance between the side of the bin and an adjacent power line and the vertical clearance above the bin to the nearest power line (NESC Article 234, Section F).

\*The NESC is a code which specifies minimum construction standards for safe transmission and distribution of electricity to the meter location.



**For more information, contact your local electric cooperative:**

**Black Hills Electric Cooperative**  
PO Box 792 • Custer, SD 57730-0792  
605-673-4461 • [www.bhec.coop](http://www.bhec.coop)

**Bon Homme Yankton Electric Assn.**  
PO Box 158 • Tabor, SD 57063-0158  
605-463-2507 • [www.byelectric.com](http://www.byelectric.com)

**Butte Electric Cooperative**  
PO Box 137 • Newell, SD 57760  
605-456-2494 • [www.butteelectric.com](http://www.butteelectric.com)

**Cam Wal Electric Cooperative**  
PO Box 135 • Selby, SD 57472  
605-649-7676 • [www.cam-walnet.com](http://www.cam-walnet.com)

**Central Electric Cooperative**  
PO Box 850 • Mitchell, SD 57301  
605-996-7516 • [www.centralelec.coop](http://www.centralelec.coop)

**Charles Mix Electric Association**  
PO Box 10 • Lake Andes, SD 57356  
605-487-7321 • [www.cme.coop](http://www.cme.coop)

**Cherry-Todd Electric Cooperative**  
PO Box 169 • Mission, SD 57555  
605-856-4416 • [www.cherry-todd.com](http://www.cherry-todd.com)

**Clay Union Electric Corporation**  
PO Box 317 • Vermillion, SD 57069  
605-624-5525 • [www.clayunionelectric.coop](http://www.clayunionelectric.coop)

**Codington-Clark Electric Cooperative**  
PO Box 880 • Watertown, SD 57201-0880  
605-886-5848  
[www.codingtonclarkelectric.coop](http://www.codingtonclarkelectric.coop)

**Dakota Energy Cooperative**  
PO Box 830 • Huron, SD 57350-0830  
605-352-8591 • [www.dakotaenergy.coop](http://www.dakotaenergy.coop)

**Douglas Electric Cooperative**  
PO Box 370 • Armour, SD 57313  
605-724-2323 • [kenvansee@unitelstsd.com](mailto:kenvansee@unitelstsd.com)

**FEM Electric Association**  
PO Box 468 • Ipswich, SD 57451  
605-426-8891 • [www.femelectric.coop](http://www.femelectric.coop)

**Grand Electric Cooperative**  
PO Box 39 • Bison, SD 57620  
605-244-5211 • [www.grandelectric.coop](http://www.grandelectric.coop)

**H-D Electric Cooperative**  
PO Box 1007 • Clear Lake, SD 57226  
605-874-2171 • [www.h-delectric.coop](http://www.h-delectric.coop)

**Kingsbury Electric Cooperative**  
PO Box 126 • DeSmet, SD 57231-0126  
605-854-3522 • [www.kec-sd.coop](http://www.kec-sd.coop)

**Lacreek Electric Association**  
PO Box 220 • Martin, SD 57551  
605-685-6581 • [www.lacreek.com](http://www.lacreek.com)

**Lake Region Electric Association**  
PO Box 341 • Webster, SD 57274  
605-345-3379 • [www.lakeregion.coop](http://www.lakeregion.coop)

**Moreau-Grand Electric Cooperative**  
PO Box 8 • Timber Lake, SD 57656  
605-865-3511 • [www.mge.coop](http://www.mge.coop)

**Northern Electric Cooperative**  
PO Box 457 • Bath, SD 57427  
605-225-0310 • [www.northernelectric.coop](http://www.northernelectric.coop)

**Oahe Electric Cooperative**  
PO Box 216 • Blunt, SD 57522  
605-962-6243 • [www.oaheellectric.com](http://www.oaheellectric.com)

**Rosebud Electric Cooperative**  
PO Box 439 • Gregory, SD 57533  
605-835-9624 • [www.rosebudelectric.com](http://www.rosebudelectric.com)

**Sioux Valley Energy**  
PO Box 216 • Colman, SD 57017  
605-534-3535 • [www.siouxvalleyenergy.com](http://www.siouxvalleyenergy.com)

**Southeastern Electric Cooperative**  
PO Box 388 • Marion, SD 57043-0388  
605-648-3619  
[www.southeasternelectric.com](http://www.southeasternelectric.com)

**Traverse Electric Cooperative**  
PO Box 66 • Wheaton, MN 56296  
320-563-8616 • [www.traverseelectric.com](http://www.traverseelectric.com)

**Union County Electric Cooperative**  
PO Box 459 • Elk Point, SD 57025-0459  
605-356-3395 • [www.unioncounty.coop](http://www.unioncounty.coop)

**West Central Electric Cooperative**  
PO Box 17 • Murdo, SD 57559  
605-669-2472 • [www.wce.coop](http://www.wce.coop)

**West River Electric Association**  
PO Box 412 • Wall, SD 57790  
605-279-2135 • [www.westriver.com](http://www.westriver.com)

**Whetstone Valley Electric Co-op**  
PO Box 512 • Milbank, SD 57252  
605-432-5331 • [www.whetstone.coop](http://www.whetstone.coop)

**Basin Electric Power Cooperative**  
1717 E. Interstate Ave. • Bismarck, ND 58503  
701-223-0441 • [www.basinelectric.com](http://www.basinelectric.com)

**East River Electric Power Cooperative**  
PO Box 227 • Madison, SD 57042-0227  
605-256-4536 • [www.eastriver.coop](http://www.eastriver.coop)

**Rushmore Electric Power Cooperative**  
PO Box 2414 • Rapid City, SD 57709  
605-342-4759 • [www.rushlelec.com](http://www.rushlelec.com)

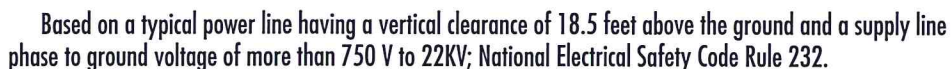


# GRAIN BINS: PLAN BEFORE YOU BUILD

If you're in the market for a grain bin, you've given plenty of thought to the size you'll need to handle your crop. But before you pour the concrete, give your local electric cooperative a call to ensure that your bin is properly placed in relationship to any nearby power lines. This call can save you hundreds of dollars and lots of frustration.



The taller the bin, the greater the distance it must be from the power line.



On the loading side(s) of the bin, distances must be greater, due to a greater risk of accidents. The distance horizontally from the bin wall to the power line is determined by the height of the highest access door or other probing port of the bin. In 234-3, this height is defined as V. Adding a distance of 18 feet to V determines the value H in Figure 234-3. Beyond this H distance, a minimum sloped clearance of 1 foot vertical drop for each 1.5 feet of horizontal travel must be designed. The NESC ruling also specifies the vertical clearance above the bin between the top of the bin and the nearest overhead line. A clearance of at least 18 feet directly above the highest opening or probing port must be maintained. This 18-foot clearance must encircle the bin around all loading sides, out to distance H as shown in the figure. These rules define the "envelope clearance" that must exist around the bin.

All portions of grain bins that are expected to be loaded by the use of a permanently installed auger, conveyor or elevator system may be considered as a building or other installation under Rule 234C for the purpose of determining appropriate clearances of wires, conductors, cables and rigid live parts, except that a vertical clearance above the bin of not less than 18 feet (5.5 meters) shall be maintained above the level of the highest probe port.

