## Before you pour concrete for that new barn

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If you are building a new free stall barn, holding pen, or other cow traffic area, you have made or are making important decisions that will affect you, your family, your cows, and your banker for decades.

Not giving enough thought to the concrete has turned new barns into disasters for many people. There are some things you must do before you pour concrete. On other things, you can wait until you move the cows in.

Order top-quality concrete such as 3,000 psi or better. You want that concrete to stay in good condition for a long time.

All cow traffic walking surfaces should be finished smooth and flat for cow foot comfort. Getting down with your bare knees on the floor is a good test. If the concrete hurts your knees, it's going to hurt the cows' hooves.

Leave floor surface equivalent to a light broom finish (same as the floor finish in the cow traffic area of a milking parlour), no stones sticking up usually accomplished by screeding floor to desired level(s), then bull floating out the screed marks.

Light broom finish....No stones sticking up.

Cut grooves 1/2" wide by 3/8" deep two ways, giving a diamond pattern to provide skid control.

New floors can be sealed after grooves have been cut insted of washed with acid. Floors should be sprayed with one or two coats or enough that water beads. There are several commercial concrete sealers available, or you can spray on a 50/50 mixture of boiled linseed oil and kerosene. These sealants not only coat floors so hooves don't come in contact with the high pH (strongly alkaline) concrete, they also protect the concrete from absorbing harmful acidic solutions such as urine. Because of this protection, these sealants are an especially good idea for slats which all contain steel rebar for structural integrity or sand blasted, milled, or planed concrete where new surfaces are exposed.

Do not trim hooves within six months of planned occupancy. Thinking that he may not have time after the move, one dairy farmer trimmed all cows just before they were moved into a new barn. About half of the cows had to be culled because of foot problems.

Be sure all construction debris has been picked up from feeding surfaces and all cow

walking surfaces. Do a walk-through to check for bolts, nails, loose wires, and wires protruding from concrete walls and curbs, shards of sheet metal, screws, bolts, and sharp stones.

Leave behind old, frail cows or cows you feel will not be able to stand the competition of the new facility.

Plan your cow-moving day so that you have lots of help around to move the cows in a calm, orderly, and safe manner. Note that cows have been lost due to one or more of the following problems:

- 1. Grading was not completed well enough to allow for a level unloading of the transport trailer.
- 2. Cows were entered onto a slippery drive-through feeding alley, rather than on grooved floors.
- 3. Excited cows clambered through cable-style feed mangers onto smooth concrete feeding alleys.