

MSU Extension Publication Archive

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Milking Parlor Plans

Michigan State University Agricultural Experiment Station

Circular Bulletin – Farm Building Series

B.F. Cargill, Agricultural Economics

Revised February 1950

4 pages

The PDF file was provided courtesy of the Michigan State University Library

Scroll down to view the publication.

MILKING PARLOR PLANS

PREPARED BY B. F. CARGILL

This folder has been prepared for those farmers who are interested in selecting a milking parlor. Plans of the five parlor types appearing on the center spread are described briefly below.

The plans and ideas presented were made in cooperation with the Farm Management Department and are approved by the Dairy Department, Michigan State College.

TYPE 1. (STANCHION) Not Illustrated

Essentially, the Type 1 parlor consists of 4 to 12 conventional barn stanchions. It is not a walk-through type parlor. It is ordinarily found in barns that were originally built for 6 to 12 dairy cows and the other livestock. As the dairy herd outgrew the number of stanchions the cows were turned loose in an open pen and brought to the stanchions only for milking and grain. This type parlor can be developed at a small cost and the pen barn system used. If the operator is not satisfied he can easily return to the conventional system by adding more stanchions in the pen area.

TYPE 2. (ABREAST ARRANGEMENT) Plan No. 723-A1-50 1 sheet

Type 2 parlor is the most common in Michigan. It shows progress over Type 1, because four walk-through stalls are confined to a small room. Cows enter the parlor by a side door and move into the stalls. Grain is fed in a box mounted on the exit door in front of each stall. After milking, the exit door is opened and the cow returns to the pen.

Construction Suggestions:

Next to Type 1, this parlor is the least expensive to build. The stalls are 3'-6" to 4'-0" in width. The entrance door is 4'-0" and the exit door at least 3'-0" wide. The parlor floor should be 18" to 24" above the pen floor, and the milk house door in the center of the back wall of the parlor. Use a brushed surface on all concrete floors. A neck chain or tie is sometimes needed at the front of each stall.

TYPE 3. (ABREAST ARRANGEMENT) Plan No. 723-A1-49 1 sheet

This parlor is designed so that in the future it may be converted into a Type 4, Two-Pit Parlor. This parlor is an improvement over Type 2 because there is a work area between stalls 1-2 and 3-4. Each work area should have grain storage, a pail for udder wash, and a strip cup. If the long hose type milker is used its pail is placed in this same work area.

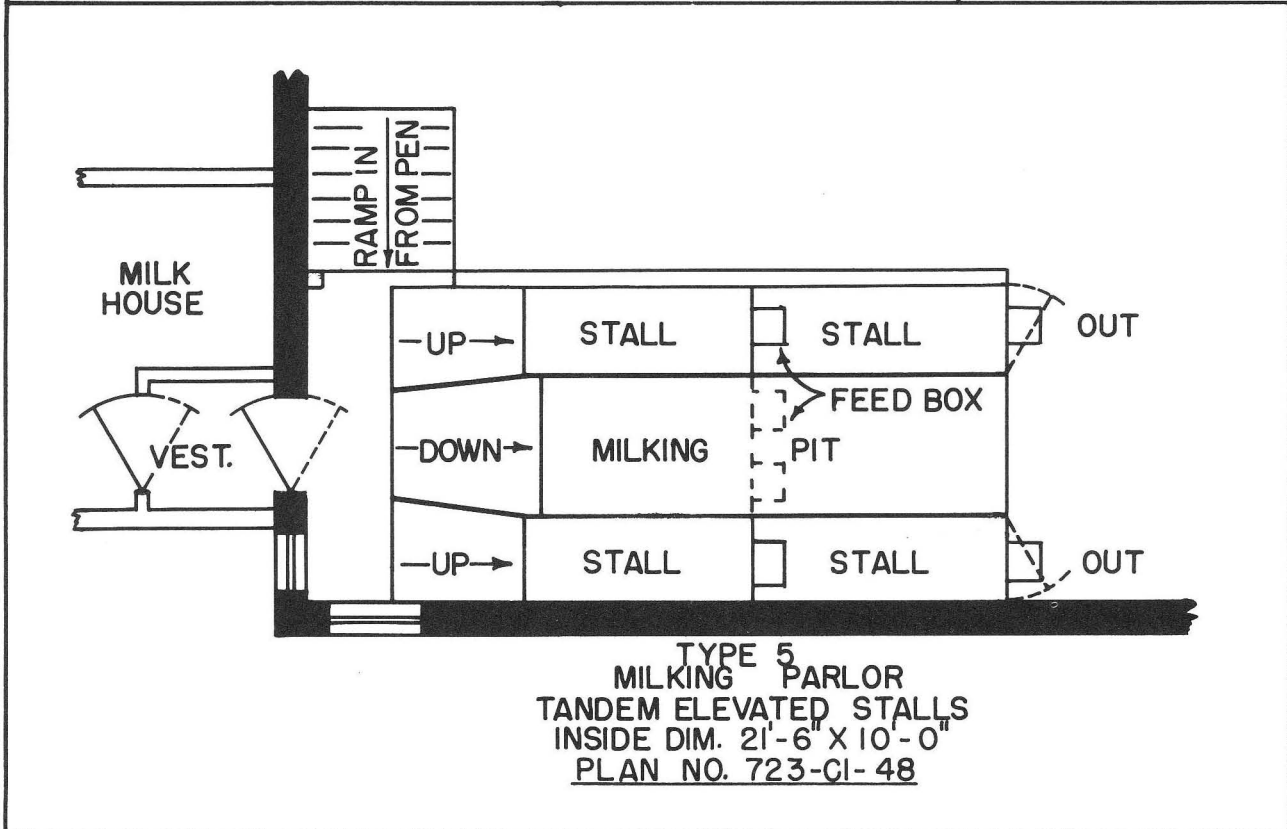
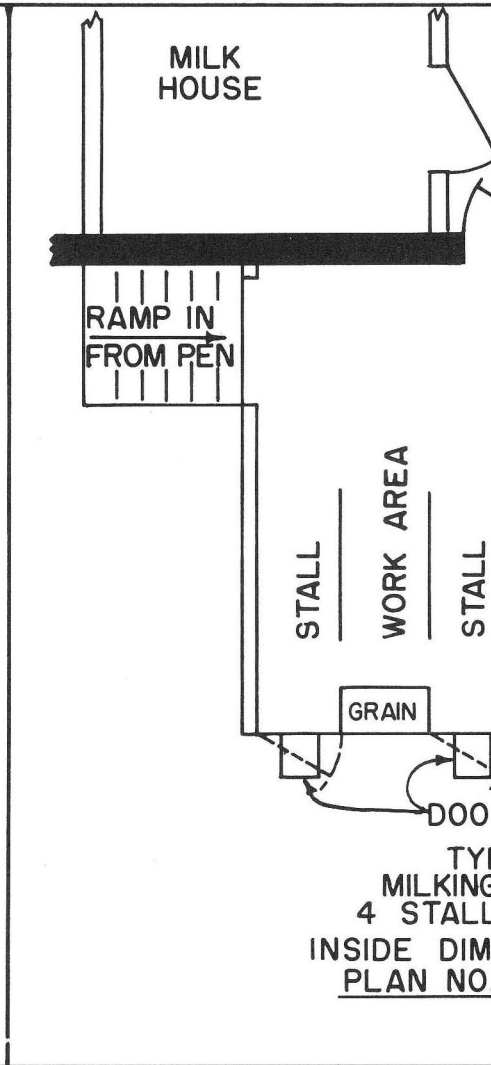
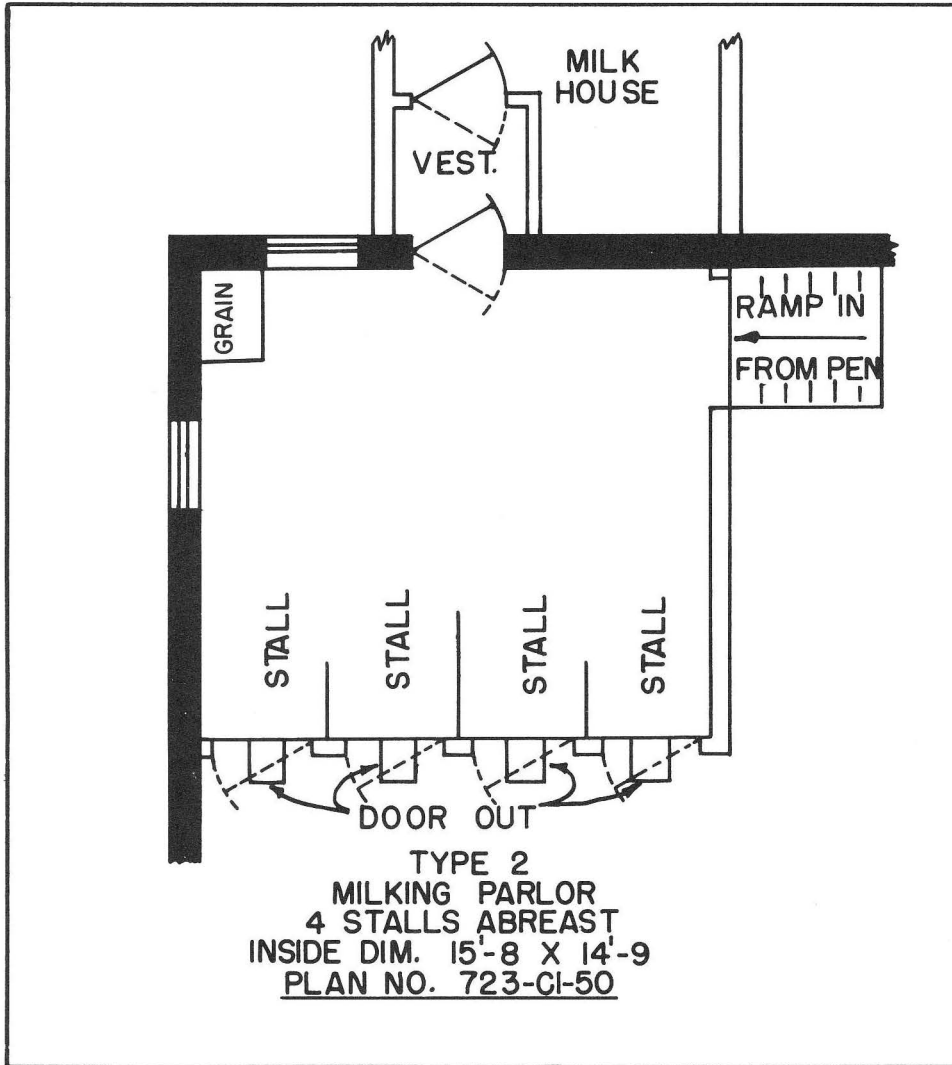
Cows come in the side door and leave through a door in front of their respective stall. Type 2 and 3 use the same milking procedure.

Construction Suggestions:

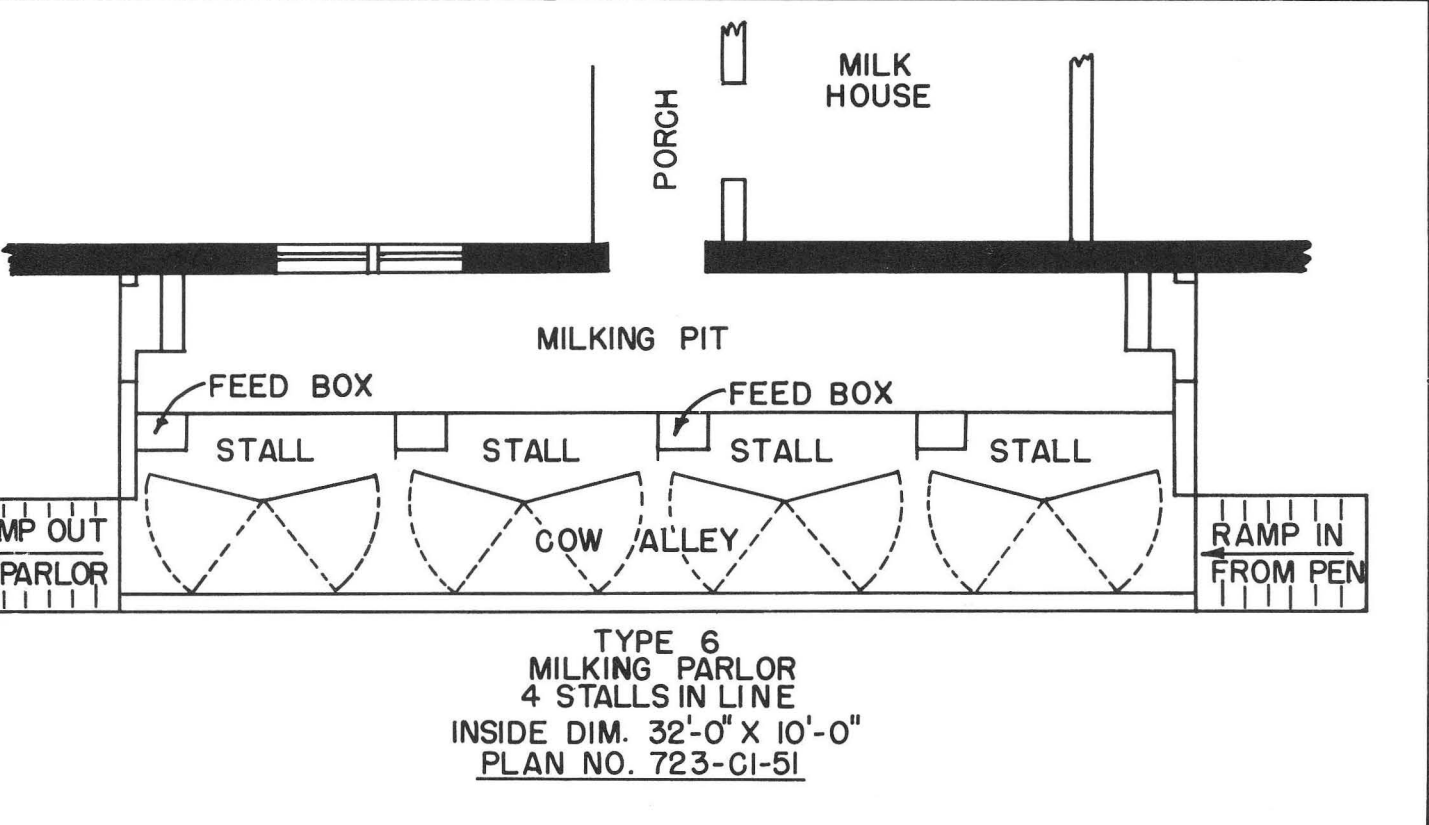
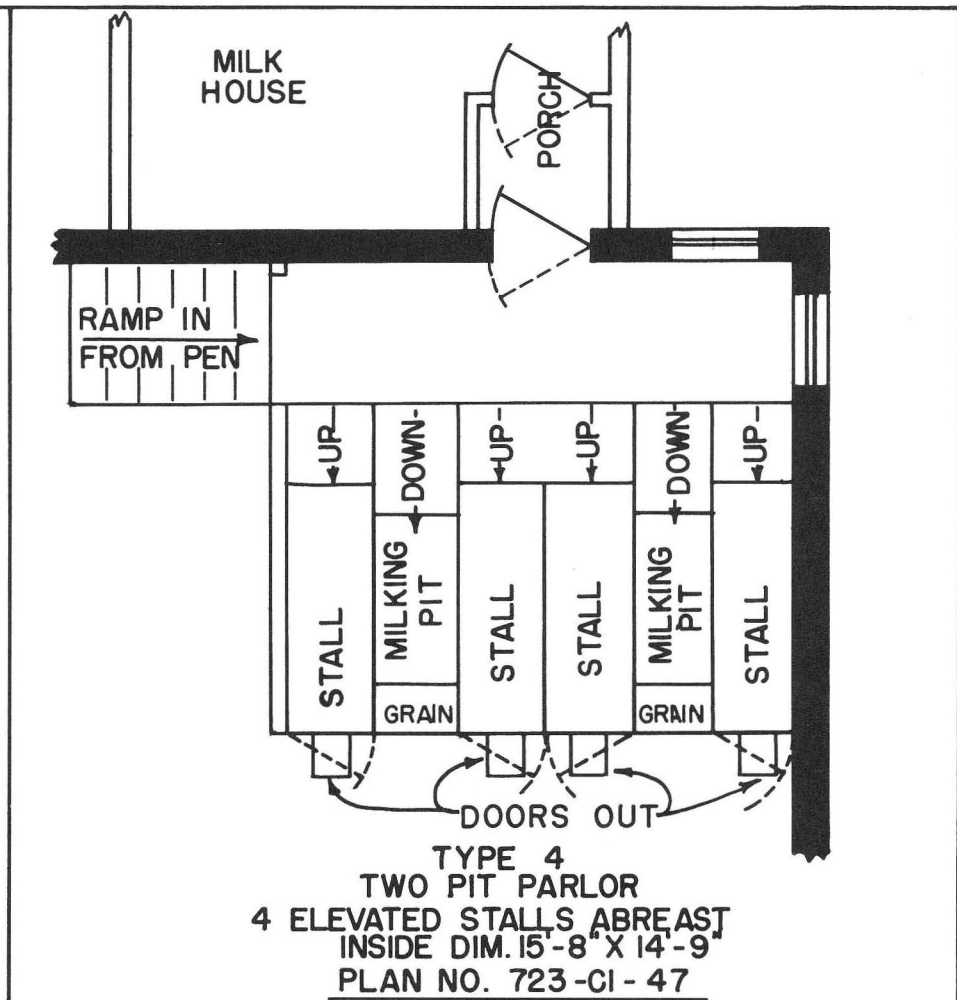
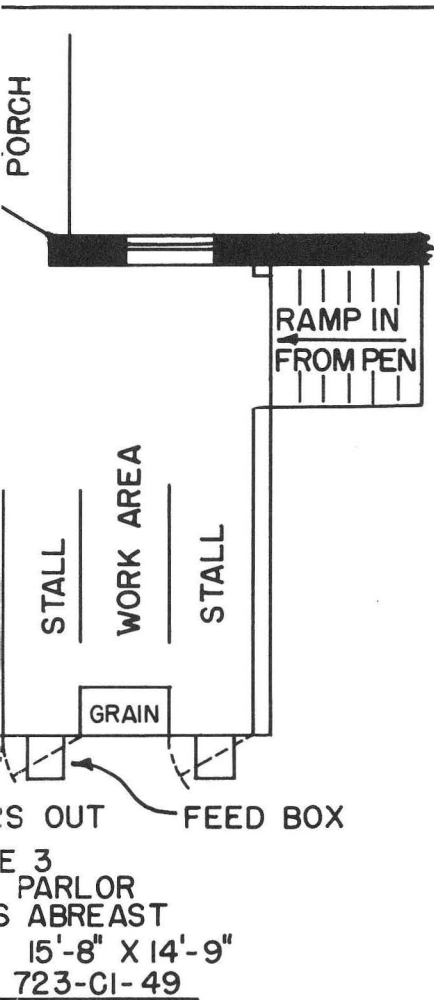
The stall widths are 31", and the working area 28" to 30" wide. The entrance door is 4'-0" and the exit doors 31" in the clear. Ground grain should be stored overhead so that the grain can be delivered by gravity to the grain boxes in the front of each work area. A chain hooked across the posts in the rear of each cow will prevent them from backing out of the stall. The parlor floor should be 18" to 24" above the pen floor.

(Continued on back page.)

MICHIGAN STATE COLLEGE :: COOPERATIVE EXTENSION SERVICE
DEPARTMENT OF AGRICULTURAL ENGINEERING
EAST LANSING



CAR



TYPE 4. (TWO PIT PARLOR) Plan No. 723-A1-47 2 sheets

Type 4 is similar to Type 3 except that the work areas are 30" lower than the cow stalls. Difference in elevation is gained by having the operator go down and the cow go up from the level of the back of the parlor, which makes it possible for the operator to do the milking without stooping down as is necessary in Types 1, 2, and 3.

Construction Suggestions:

Pit width is 28" to 30". Stall width should have a 31" clearance. The ramp slope can range from 5" to 7" per foot of run. Cleats should be used on the ramp surface to prevent cows from slipping.

TYPE 5. (TANDEM ARRANGEMENT) Plan No. 723-A1-48 2 sheets

Again, as in Type 4, the operator is 30" below the stall level and usually the operator goes down 12" and the cow up 18". In this arrangement the operator can work more efficiently than in any of the other type parlors. Any one of the four cows can be reached with a minimum number of steps.

This parlor has three variations. One variation has the parlor built in one end of the barn with the cows entering and leaving from the side of the parlor. The size is then 29'-0" x 10'-0". The other two variations have the parlor along a wall or extending out into the center. These two variations are used where there is room in front of the parlor for the cows to leave. The size is then 21'-6" x 10'-0".

Construction Suggestions:

Grain is stored overhead with grain chutes leading into the parlor (one over each feed box). A metering type grain feeder is placed in each chute, reducing the time and steps normally required for feeding grain. Cows should face away from the milk house. The parlor floor should be 18" to 24" above the pen floor and the milk house door in the center of the back wall of the parlor. Use a brushed surface on all concrete floors.

TYPE 6. (IN LINE ARRANGEMENT) Plan No. 723-A1-51 3 sheets

This type is adapted to large herds where two men normally do the daily work. For efficient operation it requires two men and four milking units. At each stall there should be a pail for udder wash, a strip cup and a grain chute. This is the most expensive type discussed, but it is economical for the individual interested in milking a large number of cows. This is the only parlor described where two men and four units milk twice as many cows per hour as one man and two units in parlor types 3, 4, and 5.

Construction Suggestions:

The cow alley is 3'-0" wide and the stall 31" at the widest point. The milking pit should be at least 4'-0" wide and 28" to 30" below the level of the stall. The stall gates are opened and closed from the pit. This parlor should be along one side of the barn and not along one end.

Recommendations for Economical and Efficient Milking Parlor Operation

1. Train the cows to be handled from either side.
2. Store the grain overhead with a chute delivering the grain to the parlor. The chute should have in it a mechanical metering device for measuring the grain ration. This inexpensive device will prevent re-handling the grain.
3. Work only one man in the parlor with the exception of Type 6 and perhaps Type 1.
4. Practice a fast milking procedure.
5. Use a self-closing door for the entrance door and ropes to open and close the doors leading from the stalls in Type 3 and 4.
6. Build the parlor floor 18" to 24" above the pen floor.
7. Recess the feed boxes into the doors to reduce the amount of grain spilled by the cows.
8. Provide each stall with four square feet of window area. (Four stalls, sixteen square feet.)
9. Locate the milk house door off the center of the back wall of the parlor.
10. Provide a floor drain in each parlor.

Where to Get Plans

Detail drawings of each of the foregoing plans may be ordered from the Agricultural Engineering Department, Michigan State College, East Lansing, Michigan. See your county agricultural agent or write to the Department of Agricultural Engineering about cost of plans.