

Converting from Mechanical to Drive-By Bunk

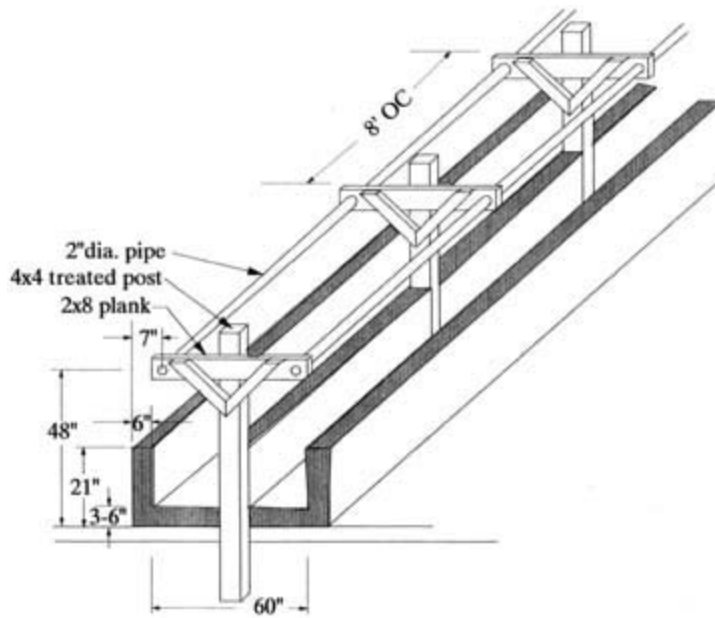
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Many older barns and cow yards use mechanical bunk feeders with H-shaped feed bunks. Cows using H-bunks often waste feed by throwing it on their backs and on the ground. This is not natural feeding behavior, and neither is eating from an elevated manger. Research has shown cows are more comfortable when eating from a surface which is 3 to 6 inches above their front feet (grazing-like position). Saliva production is also higher for cows eating from a low surface compared to an elevated surface. Saliva contains important buffering agents for the cow's digestive system. Thus, a bunk surface located close to the cow's feet is preferred in new facilities.

Dairy farmers have an interest in adopting more modern technologies as older facilities are remodeled. One question that has been raised is, "How do I replace an H-bunk and a mechanical feeder with a drive-by bunk in the same location?" The drawing shows one way to do this. This design allows separate rations to be placed on each side of the center wall divider with a self-unloading wagon whose discharge chute can fit between the neck rail support and the manger wall (about 23 inches). The center wall also helps to confine feed for easier removal of excess feed from the bunk. This bunk could be most easily cleaned with a scraper attached to a tractor or skid steer bucket. The neck rail restricts animals from entering the bunk. Use high-strength concrete for the bunk floor to resist etching of the floor.

Where the bunk is used outside, provide drain holes at the bunk's lowest points to allow precipitation to exit. Consider using longer posts to support a roof that would reduce the amount of precipitation entering the bunk. Post size might need to be increased to withstand wind load on the roof. Be sure the eaves of the roof are high enough to allow the feed wagon to pass under when there is snow and frozen manure next to the feed bunk.

If the current mechanical feed bunk is in the interior of a lot, consider relocating the new bunk to the edge of the lot. This allows drive-by feeding without having to enter the lot with the feed wagon. Locate such a drive-by bunk so animals face away from the prevailing winter wind direction. In this application, a manger front wall is not needed. Slope the manger floor to drain water away from feed. Plan to use a tractor/skid steer scraper or brush to push feed up to the animals and to clean the manger.



Drive-By Feed Bunk

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