

# MWPS-72360

## 60-Cow Free Stall Resting Barn

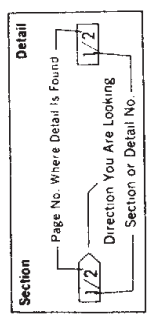
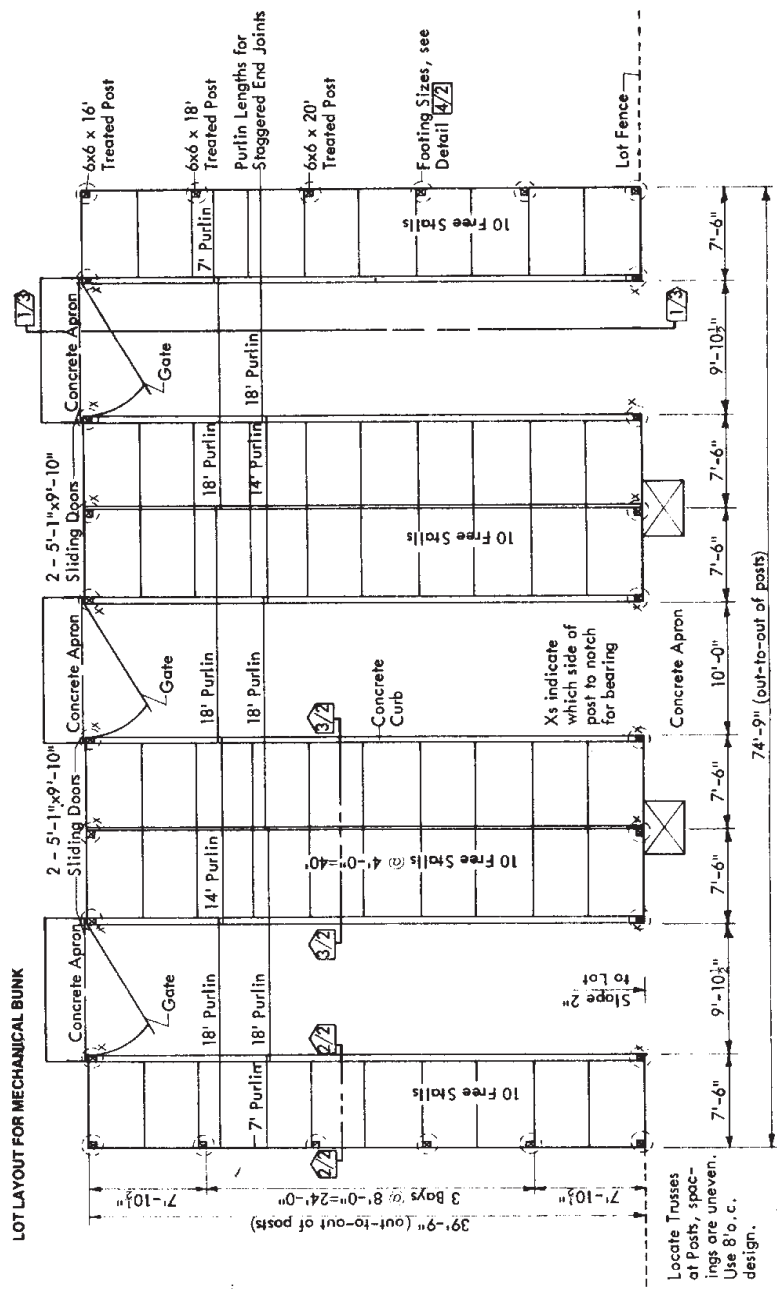
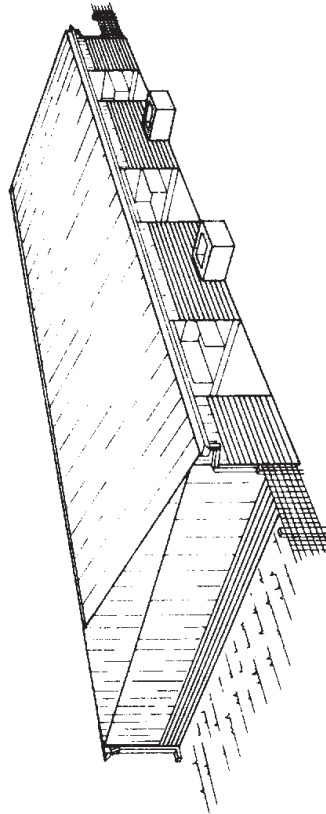
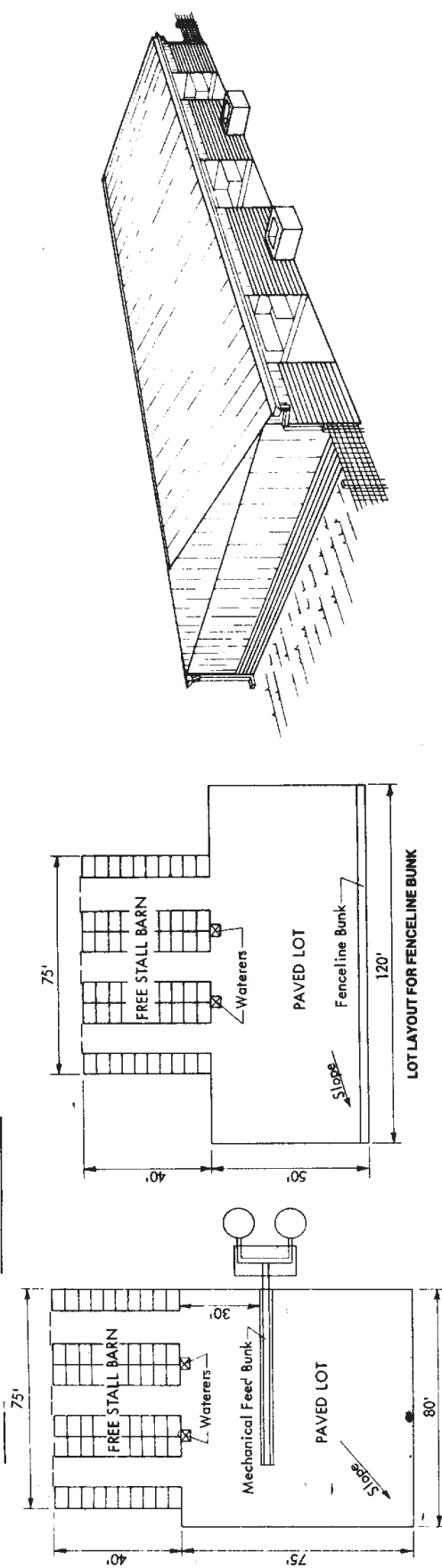
### **CAUTION!**

Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access. **Furthermore, any deviation from the given specifications may result in structural failure, property damage, and personal injury including loss of life.**

### **WARRANTY DISCLAIMER**

This plan provides conceptual information only. **Neither midwest plan service nor any of the cooperating land-grant universities, or their respective agents or employees, have made, and do not hereby make, any representation, warranty or covenant with respect to the specifications in this plan.** Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access.

<b>MIDWEST PLAN SERVICE</b>
Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
60-Cow Free Stall Resting Barn
Title Page
MIDWEST PLAN NO. 72360



**Section & Detail Indicator**

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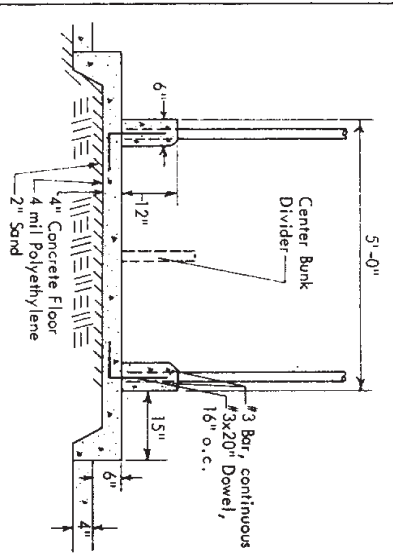
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60-COW	
FREE STALL RESTING BARN	
4 Pages plus	Plan No.
40' Truss Sheet	mmpc 72360
Page	Page
1 of 6	1 of 6

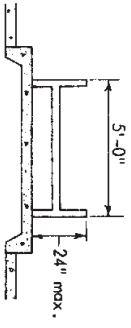
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**FLOOR PLAN—1/1**

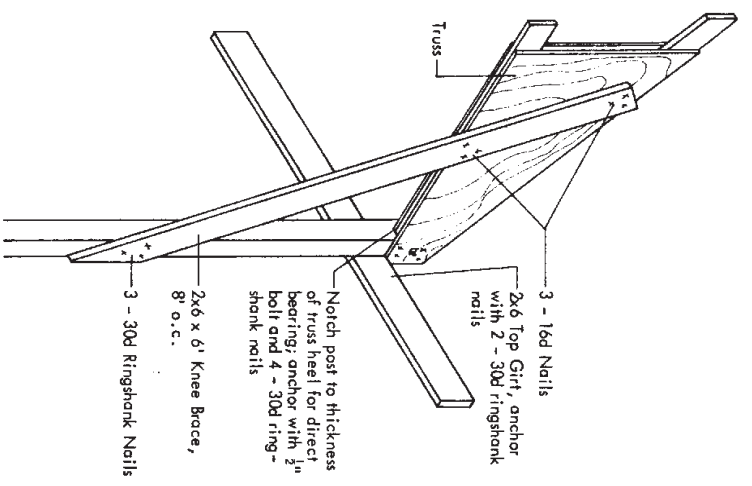
Provide Separate Milking, Feeding and Youngstock Facilities.



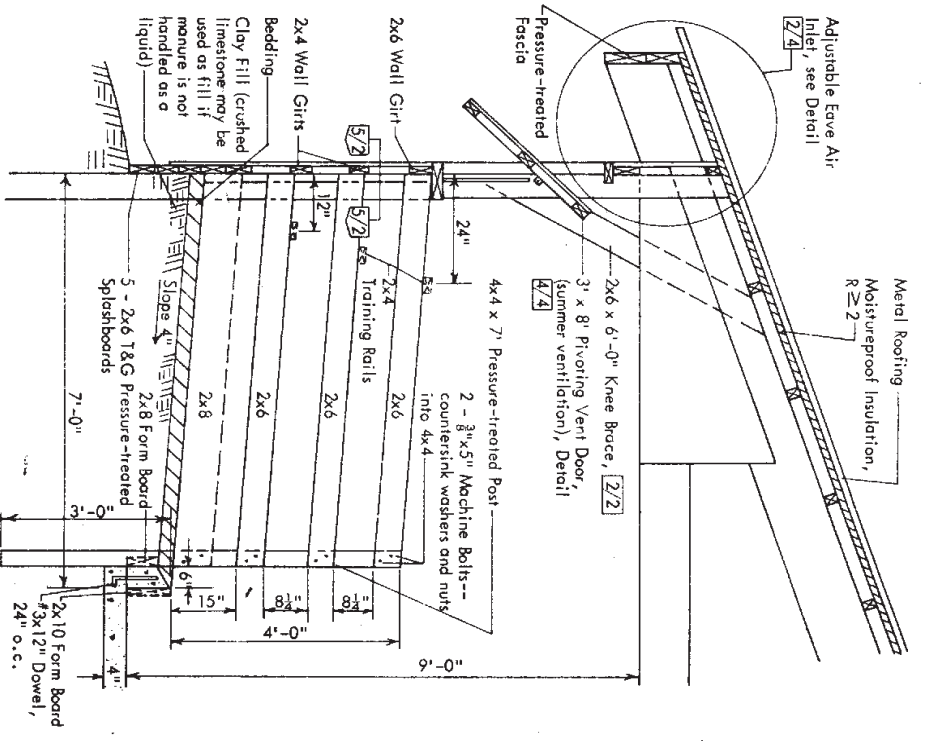
**FEEDBUNK CROSS-SECTION 1/2**  
Install center bunk divider if herd is divided and fed different rations.



If raised bunk floor is desired set precast bunk on slab.



**KNEE BRACE DETAIL 2/2**



**FREE STALL DETAIL 4/2**

Install 2x4 training rails if cows turn around in stalls or deposit manure at back of stall - 3 rails will force the cow to move back as it gets up so its shoulders can't get caught under the top rail. Install 2x8 bottom stall partition board if cows move fill and bedding from stall to stall causing deep holes in stalls.

If cows have access to outside of building, use wood siding (treated plywood or splashboards) on bottom 4 feet of wall.

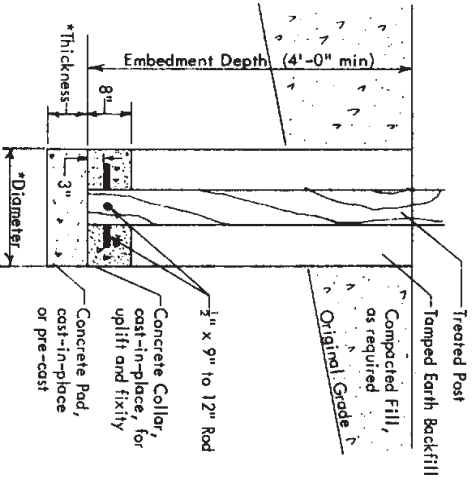
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**DAIRY BARN - 62 FREE STALLS**  
Mechanical Waste Scraper

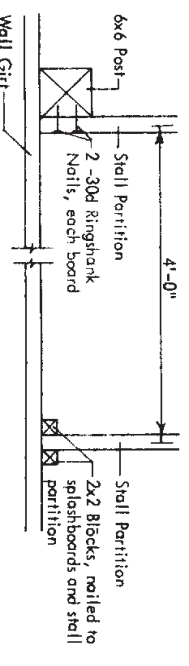
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**\*Footing Size**  
12" Dia x 6" Thick @ Endwall Posts  
16" Dia x 6" Thick @ Sidelwall Posts

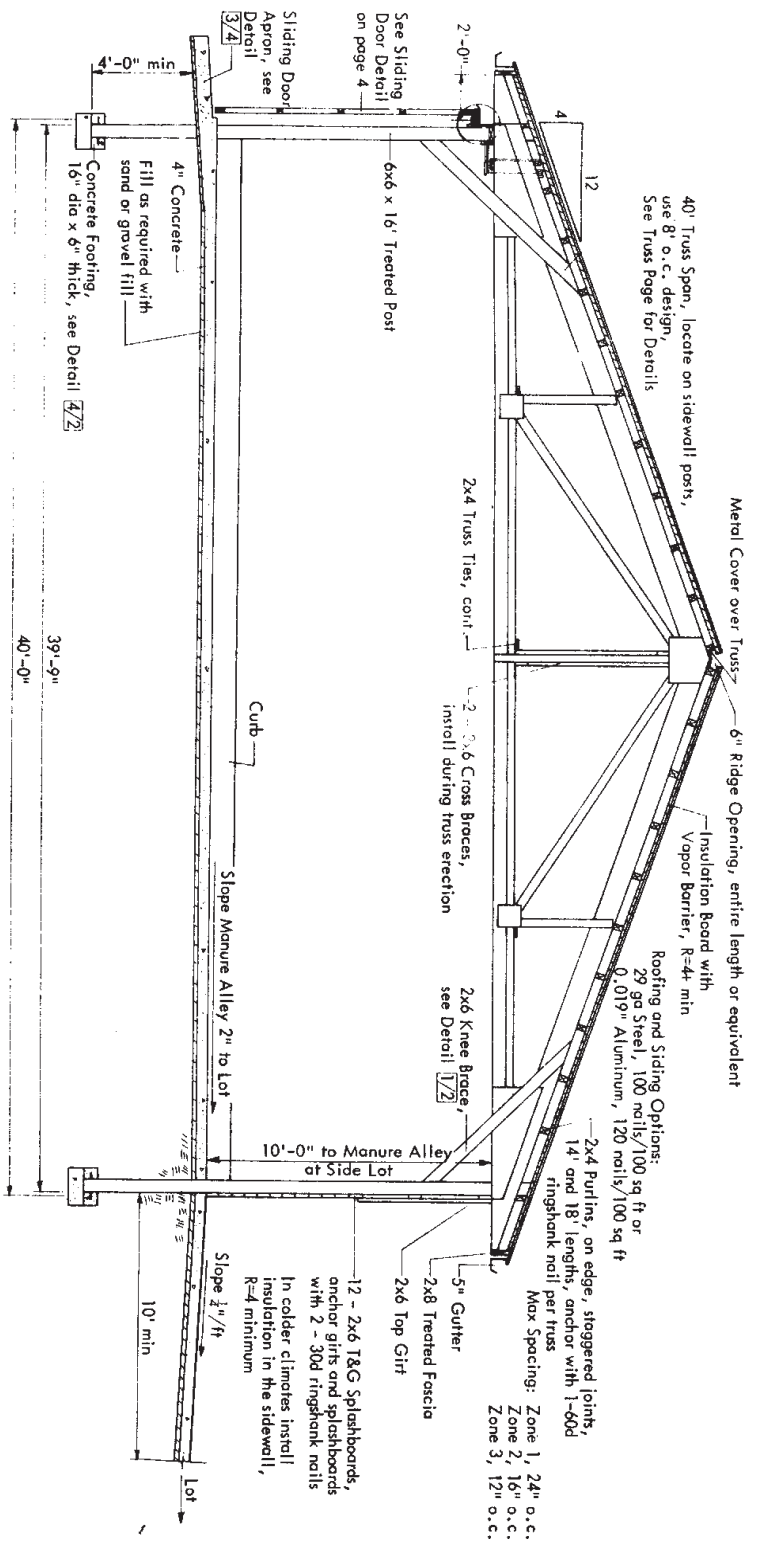
Extend embedment depth as required to place footing on undisturbed soil. For large diameter footings, use smaller diameter auger and flare the bottom of the hole with Lineman's spoon.



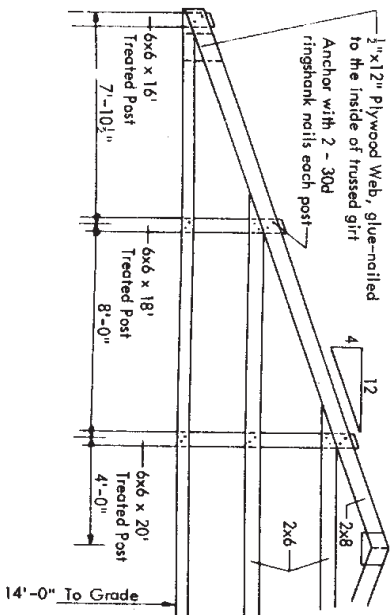
**POST FOOTING DETAIL 3/2**



**WALL CONNECTION 5/2**



CROSS SECTION—1/3

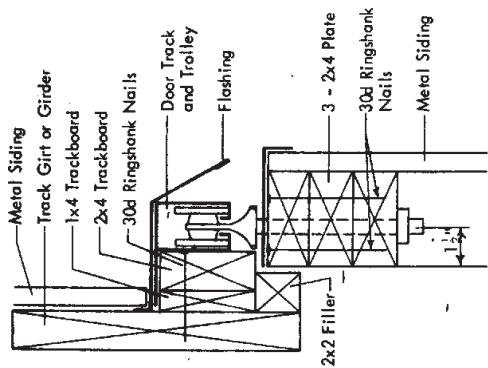


ENDWALL FRAMING—2/3

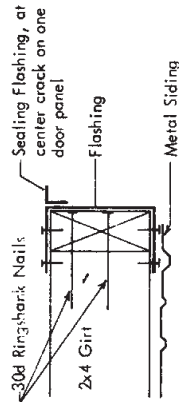
**Preferred Lumber Specifications**  
 Wall Girts  
 2x6 No. 2 (Doug Fir or Southern Yellow Pine),  
 Max. Spacing 32"  
 Trusses, Headers, Top Girts  
 No. 1 or 1500 f machine rated (Doug Fir or  
 Southern Yellow Pine)  
**Posts and Splashes**  
 Pressure Preservative Treated (Southern  
 Yellow Pine or Equiv.) Crossed-to post,  
 6x6 No. 1 or 1500 f, CCA or CCA II Type A or  
 B-9-50 per retention

**Alternate Lumber Specifications**  
 2x6 Girts (no 2 Hem-Fir) Max Spacing 24"  
 Trusses (No 1 Hem-Fir)  
 See Truss Page  
 Posts (Round vs Sawm)  
 6x6 = ASA or ASAE Class 7, 4.8" Top  
 Diameter

<b>EMPS MIDWEST PLAN SERVICE</b>		
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<b>FREE STALL RESTING BARN</b>	<b>60-COW</b>	
4 Pages plus 40' Truss Sheet	Plan No. 72360	Page 3 of 6

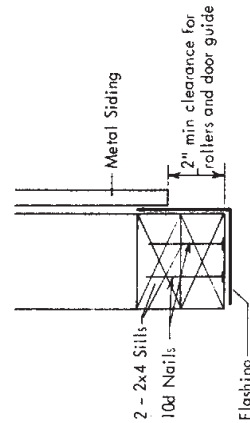


**DOOR TRACK ASSEMBLY 1/5**

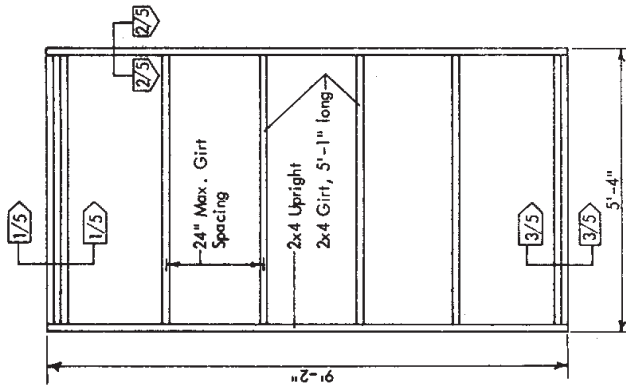


**UPRIGHT SECTION 2/5**

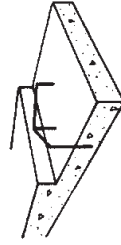
Extend flashing around uprights and nail to girts and uprights.



**SILL SECTION 3/5**

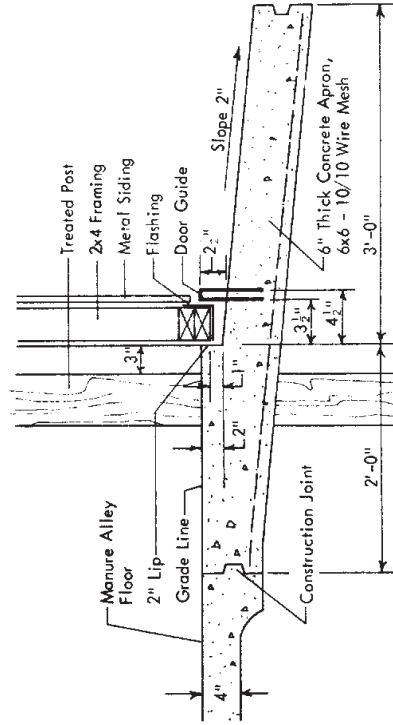


**DOUBLE SLIDING DOOR 4/5**  
2x4 Framing



**"U"-Shaped Door Guide**

Locate  $\frac{3}{4}$ " dia x 20"  $\frac{3}{4}$ " U"-shaped door guide at center of door opening. Break at center to force closing door against apron lip. Taper from 4  $\frac{1}{2}$ " end to 3  $\frac{1}{2}$ " center clearance.



**SLIDING DOOR APRON 5/5**

Set adjustable roller guides in the concrete apron at door jamb. Use door stops as required.

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DAIRY BARN - 62 FREE STALLS  
Mechanical Waste Scraper

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