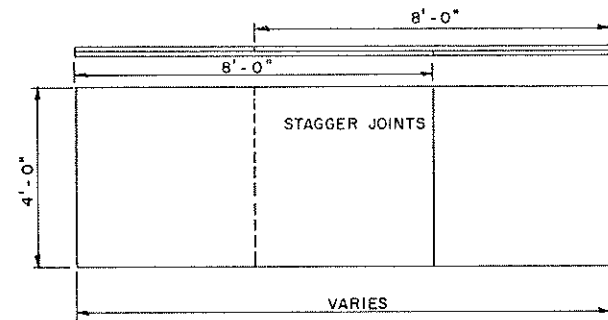


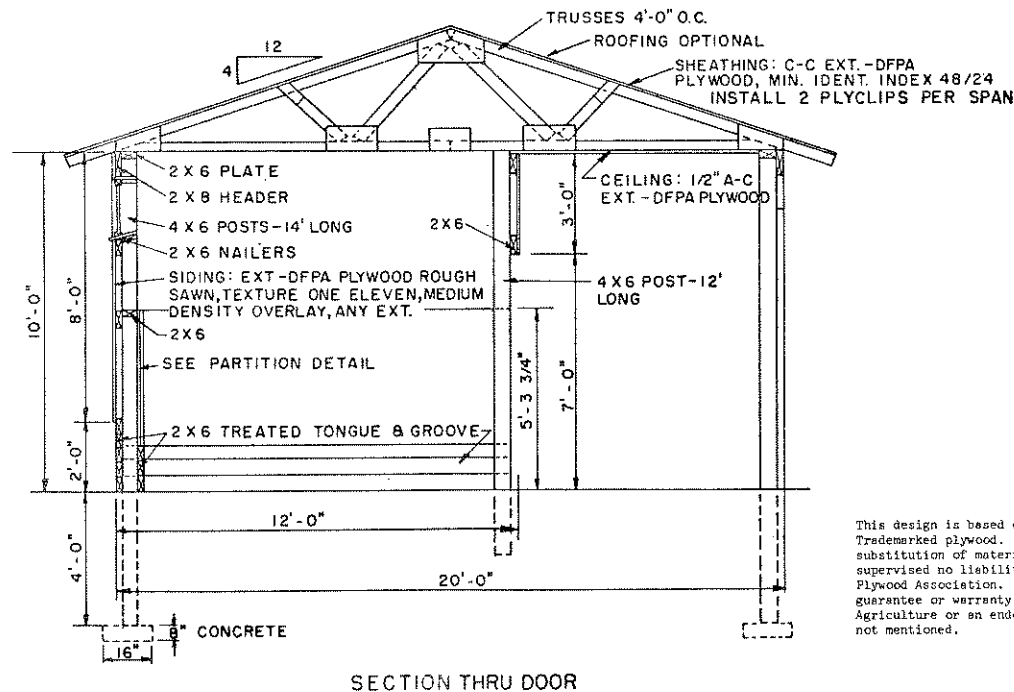
GIRDER DETAIL



**PARTITIONS & INNER WALL LINER**

5/8" C-C EXT-DFPA PLYWOOD. FASTEN PANELS TOGETHER WITH PANEL ADHESIVE AND NO. 10 WOOD SCREWS 1" LONG, THREE ROWS SPACED 12" O.C. IN EACH ROW.

NOTE:  
CONSULT LOCAL HEALTH AUTHORITIES BEFORE STARTING CONSTRUCTION TO BE SURE THAT THE PLAN CONFORMS WITH LOCAL CODES AND REGULATIONS

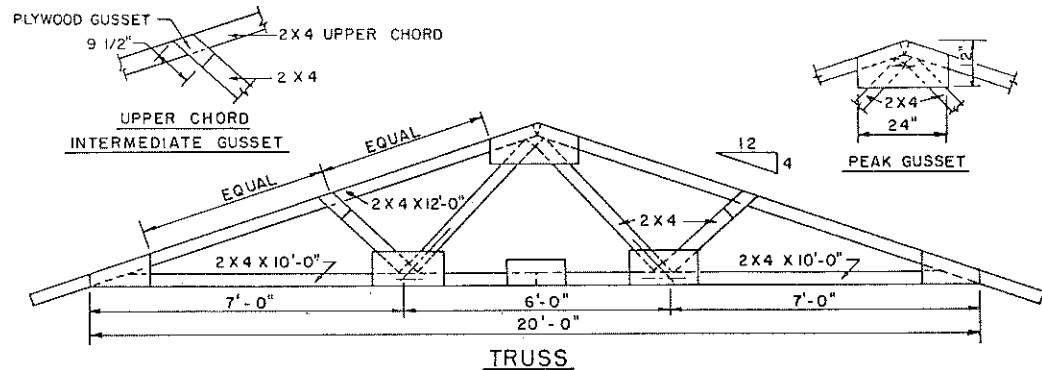


This design is based on the use of American Plywood Association Grade-Tredemarked plywood. Structural deficiencies may result with the substitution of materials. Because erection of the structure cannot be supervised no liability can be assumed by the designer or the American Plywood Association. Mention of a trade name does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture or an endorsement by the Department over other products not mentioned.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS		
DEPARTMENT OF AGRICULTURAL ENGINEERING		
UNIVERSITY OF MARYLAND		
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING		
HORSE BARN		
2 STALL PLYWOOD		
APA '71	6118	SHEET 1 OF 3

AMERICAN PLYWOOD ASSOC.  
FORM NO. 70-160

*Add nails list sheet*



**TRUSS SPECIFICATION**

**LUMBER:**

UPPER CHORD 2 X 4 — 1500f LUMBER  
 LOWER CHORD 2 X 4 — 1200f LUMBER

WEB 2X4 CONSTRUCTION GRADE DOUGLAS FIR,  
 LARCH, HEMLOCK OR NO. 2 SOUTHERN PINE

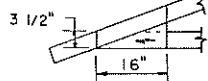
**GLUE:**

RESORCINOL RESIN TYPE

**NAILS:**

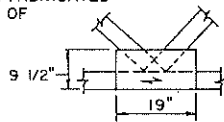
6d SPACED 4" O.C. TWO ROWS FOR 2 X 4 MEMBERS

HEEL GUSSETS SHOULD BE FABRICATED  
 FLUSH WITH BOTTOM EDGE OF  
 CHORD MEMBER

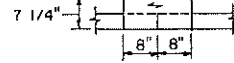


**HEEL GUSSET**

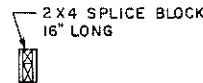
LOCATE GUSSETS  
 AS SHOWN



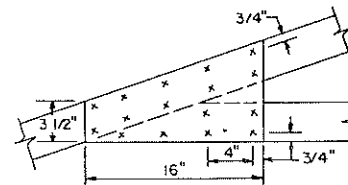
**LOWER CHORD  
 INTERMEDIATE GUSSET**



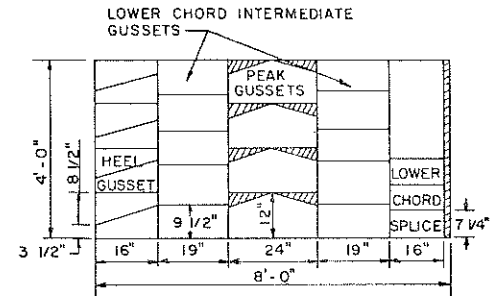
**LOWER CHORD SPLICE**



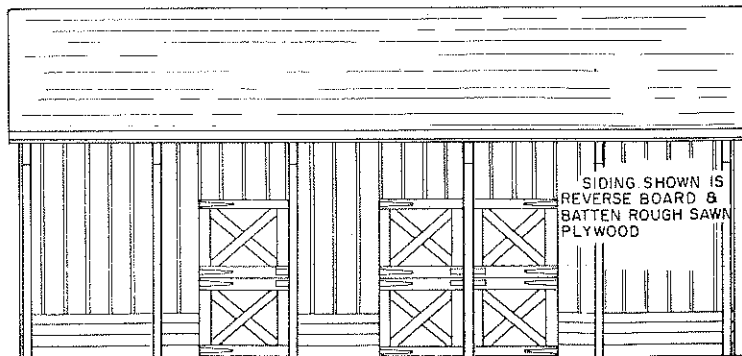
**GUSSETS**  
 GUSSETS ARE CUT FROM PLYWOOD (EXT.-DFPA)  
 1/2" C-C STRUCTURAL I. FACE GRAIN IS  
 HORIZONTAL ON ALL GUSSETS. ALL PLYWOOD  
 GUSSET PLATES ARE ON BOTH SIDES OF TRUSS.



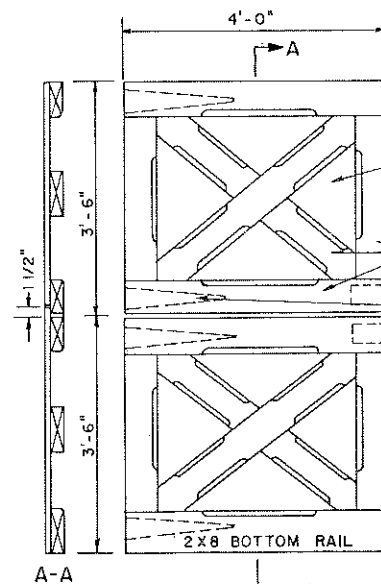
**TYPICAL NAIL PATTERN**



**TYPICAL CUTTING SCHEDULE  
 FOR PLYWOOD GUSSETS**



**SIDE ELEVATION**



**STALL DOOR DETAILS**

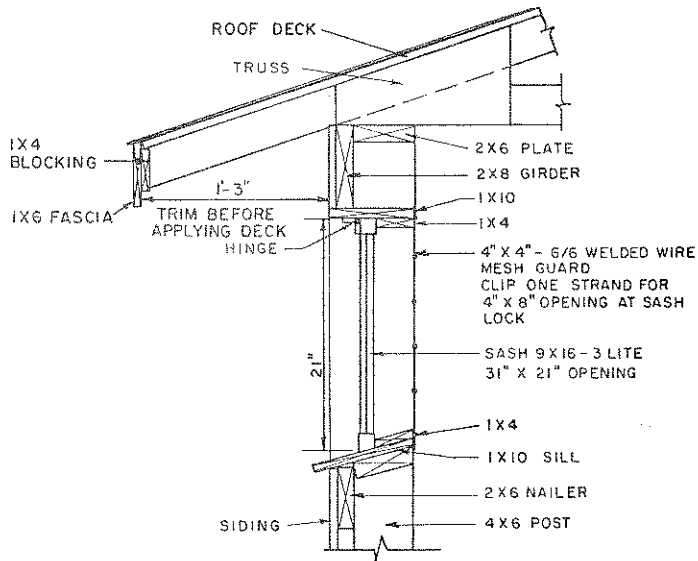
3/4" EXT-DFPA MEDIUM DENSITY OVERLAY PLYWOOD  
 FASTENED WITH 2" NO. 14 SCREWS SPACED 6" O.C.  
 AROUND PERIMETER

2 X 6 STILES, RAILS AND  
 BRACES

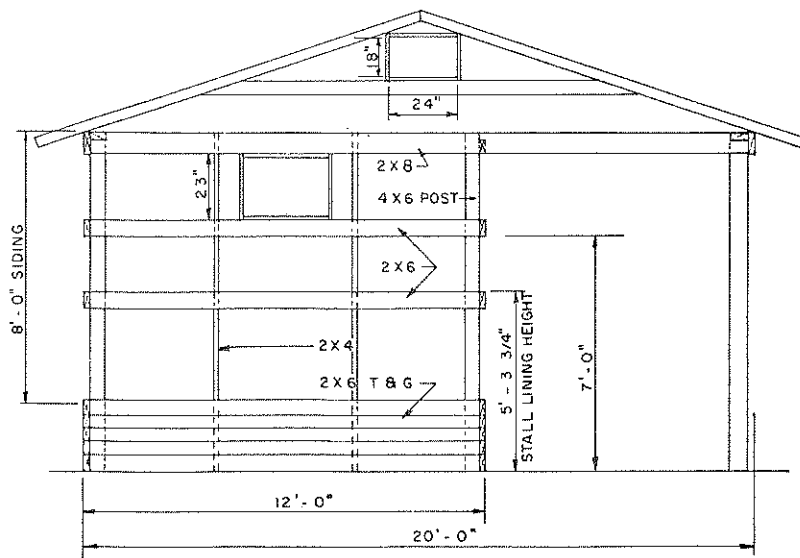
HEAVY DUTY LATCHES  
 AND HINGES

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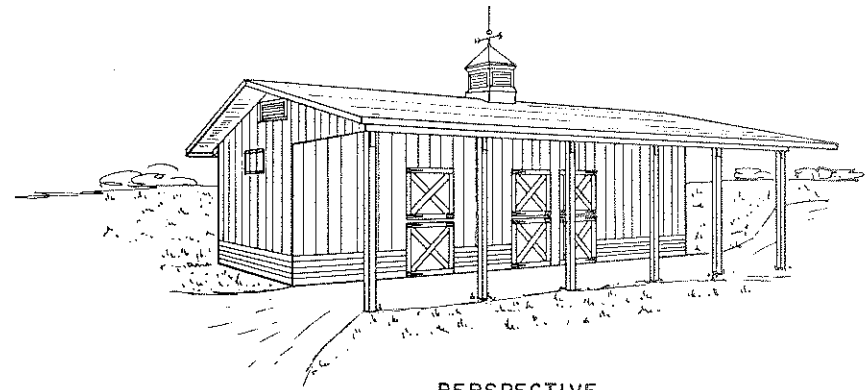
HORSE BARN			
2 STALL PLYWOOD			
APA	'71	6118	SHEET 2 OF 3



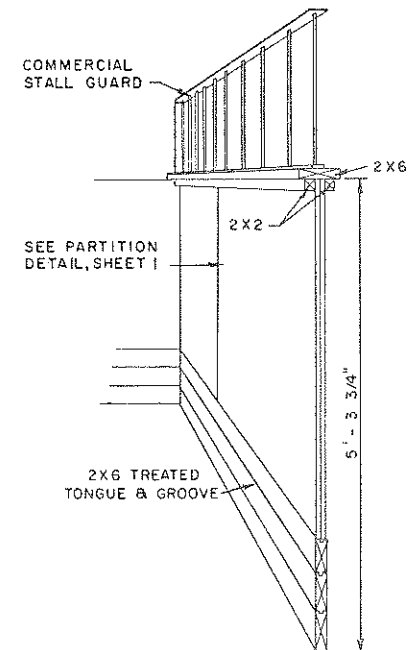
WINDOW DETAIL



END FRAMING DETAIL



PERSPECTIVE



STALL PARTITION DETAIL

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HORSE BARN  
 2 STALL PLYWOOD

APA '71 6118 SHEET 3 OF 3

*add. matts list sheets*

MATERIAL LIST: 2-STALL PLYWOOD HORSE BARN

FOUNDATION AND FLOOR MATERIAL:

Item and Use	Size	Quantity
Concrete	8" Thick Post Footings; 4" Floor in Tack and Feed Room	2 Cu. Yds.
Reinforcing	6" x 6" - No. 10 Welded Wire Mesh	100 Sq. Ft.
Vapor Barrier	Under Tack and Feed Room Floor	100 Sq. Ft.

LUMBER: Construction Grade Douglas fir or No. 1 Southern pine

Item and Use	Pieces	Size	Length	FBM
Posts - Preservative Treated	12	4 x 6	14'	336
Posts - Preservative Treated	7	4 x 6	12'	168
Skirting Boards - T&G Pressure Treated	38	2 x 6	12'	456
Skirting Boards - T&G Pressure Treated	19	2 x 6	8'	152
Headers	4	2 x 8	12'	64
Headers	2	2 x 8	8'	22
Plates	4	2 x 6	12'	48
Plates	2	2 x 6	8'	16
Nailing Girts	2	2 x 8	20'	54
Nailing Girts	12	2 x 6	12'	144
Nailing Girts	9	2 x 6	8'	72
Nailing Girts	2	2 x 6	14'	28
End Rafters	4	2 x 4	12'	32
Trusses (7 Required)				
Upper Chords	14	2 x 4	12'	112
Lower Chords	14	2 x 4	10'	94
Webs	7	2 x 4	12'	56
Miscellaneous Framing				
Girder Support	1	2 x 4	12'	8
Partition Stiffener	2	2 x 6	12'	24
Partition Cleats	4	2 x 2	12'	16
Partition Spacers	4	2 x 4	12'	32
Blocking: Use 2 x 4 Blocking at Panel Edges if 3/8" Plywood Siding is Applied.	10	2 x 4	8'	54
Door				
Diagonals	6	2 x 6	8'	48
Top and Middle Rails	3	2 x 6	12'	36
Stiles	3	2 x 6	10'	30
Bottom Rail	1	2 x 8	12'	16
Cleats	3	1 x 2	7'	4
Window Framing				
Blocking: Sill Support (2 per window, cut in 12" lengths, tapered to match slope of bottom rail of window)	1	2 x 6	12'	12
Top and Sill	6	1 x 10	6'	30
Stop	6	1 x 4	6'	12
Sides	3	1 x 8	8'	16
Stop	3	1 x 4	8'	8
Fascia - Gable Ends	4	1 x 6	12'	24
Eave Trim				
Blocking (Between Trusses)	8	1 x 4	8'	22
Fascia	4	1 x 6	16'	32

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PLYWOOD: All Exterior-Type (EXT-DFPA)

Item and Use	Pieces	Thickness	Panel Size	Sq. Ft.
Roof Sheathing - C-C EXT-DFPA	24	Iden. Index 48/24	4 x 8	768
Gussets - C-C EXT-DFPA, Structural I	4	1/2"	4 x 8	128
Doors - MDO EXT-DFPA	3	3/4"	4 x 8	96
Partitions and Inner Wall Liner - C-C EXT-DFPA	23	5/8"	4 x 8	736
Ceiling - A-C EXT-DFPA	8	1/2"	4 x 8	256
Siding - 3/8" 303 Siding, MDO, or A-C EXT-DFPA; Or: 5/8" 303 Siding or Texture 1-11 EXT- DFPA  (Note: Refer to American Plywood Association pamphlet, "Plywood Sidings", Form No. 62-490A, for manufacturers of each siding style. Brand names of styles listed will help assure that the desired pat- tern and texture are obtained.)	24	5/8" or 3/8"	4 x 8	768

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HARDWARE: Corrosion Resistant

Item and Use	Quantity	Size
Commercial Stall Guard	2	12' long
Windows	6	9" x 16" - 3 Lite, to fit 31" x 21" opening
Louvers	2	18" x 24"
Hinges - Heavy Duty for Stall Doors	6 pr.	10" T-Hinges
Latches - Heavy Duty for Stall Doors	6	
Framing Anchors for Trusses	28	
Plyclips for Roof Sheathing	64	For 48/24 Sheathing
Mesh Guard for Windows	36 Sq. Ft.	4" x 4" 6/6 Wire
Sash Locks	6	
Sash Hinges	6 pr.	
Nails:		
Framing	40 Lb.	20d Common
Trusses	7 Lb.	6d Common
Sheathing	7 Lb.	8d Common
Siding	15 Lb.	8d Galvanized
Ceiling	2 Lb.	6d Galvanized
Screws	264	2" No. 14
Screws	360	1" No. 10
Cupola (Optional)	1	16" x 16" Base

MISCELLANEOUS:

Item and Use	Quantity	Size
Panel Adhesive - Partitions	8	10 Oz. Tubes
Roofing - Material Optional	8 Sqs.	

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Note: 12" gable roof extension is optional. If desired, cut first tier of plywood decking at gable ends 5'-0" long to provide 1'-0" overhang and to cover 4' span from gable end to first truss. Use horizontal blocking at panel edges where plywood is applied over a single span. Add the following items to the above material list:

PLYWOOD: All Exterior-Type (EXT-DFPA)

Item and Use	Pieces	Iden. Index	Panel Size	Sq. Ft.
Roof Sheathing - C-C EXT-DFPA	6	48/24	4 x 8	192

LUMBER: Construction Grade Douglas fir or No. 1 Southern pine

Item and Use	Pieces	Size	Length	FBM
Horizontal Blocking - Panel Edges	4	2 x 4	10'	27
Overhang Rafter at End of Roof Deck	4	2 x 4	12'	32

HARDWARE AND MISCELLANEOUS:

Item and Use	Quantity	Size
Nails - Galvanized for Sheathing	1 Lb.	8d Common
Roofing - Material Optional	1/2 Square	