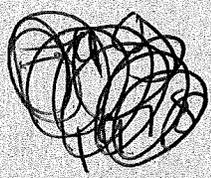


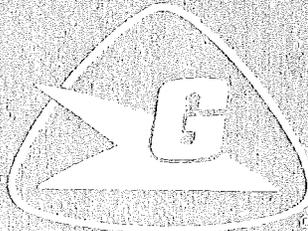
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INSTALLATION INSTRUCTIONS FOR YOUR HOME



DP	<input checked="" type="checkbox"/>	SH	<input type="checkbox"/>
RB	<input checked="" type="checkbox"/>	VS	<input type="checkbox"/>
RF	<input type="checkbox"/>	GI	<input checked="" type="checkbox"/>
DM	<input type="checkbox"/>		
FILE	<input type="checkbox"/>		
Review & Signatures			
ACTION BY:			
ACTION TAKEN:			



GUERDON
INDUSTRIES, INC.

APPROVED

Approval of these plans does not authorize or approve any omission or deviation from requirements of Federal Mobile Home Construction and Safety Standards. One set of approved plans shall be available at each place of manufacture at all times.

Federal Mobile Home Construction
And Safety Standards.

APPROVED

AUG 8 1978

APPROVED

HWG

STATE OF CALIFORNIA

Department of Housing and Community Development
Division of Codes and Standards

No. INSTALLATION
By Charles J. Williams
Date 8/10/78

APPROVED Att.
NEBR. M 142 DATE 8/31/78

Meets the requirements of HUD Mobile
Home Standards & Regulations
NEBRASKA DEPARTMENT OF HEALTH


APPROVED
BY J. Peter Mentzer
DATE 8/7/78

FOREWORD

Your Guerdon mobile home has been built with great care. It meets or exceeds the Federal Standards for Mobile Homes as established by the Department of Housing and Urban Development.

The Federal Standard governs body and frame design construction requirements, and installation of plumbing, heating, and electrical systems.

Your mobile home was designed and built as a totally integrated structure. Therefore, it is important that these instructions for installation are closely adhered to and followed if you are to enjoy a comfortable, safe and trouble free home.

Because the proper installation (set-up) of your new home is of such importance, it must be performed by experienced set-up men. Your dealer can assist you in locating experienced personnel.

BEFORE ATTEMPTING TO SET UP THE MOBILE HOME THESE INSTRUCTIONS SHOULD BE STUDIED SO THAT ALL WORK TO BE PERFORMED IS CLEARLY UNDERSTOOD.

IF ANY QUESTIONS OR FURTHER CLARIFICATION IS DESIRED, PLEASE CONTACT THE DEALER OR FACTORY REPRESENTATIVE.

CONTENTS

		Page
Foreword		
Section 1	Support Foundation System Requirements	3
	Load Maps	4
	Selection of Support Method	8
	Required Support Foundation	9
	Tiedowns	12
Section 2	Set-Up Procedure Instructions	13
	Single Wide Set-Up Procedure	13
	Double Wide Set-Up Procedure	14
	Roof Eaves Installation	15
Section 3	Utility System Connections and Testing	23
Section 4	Skirting and Condensation Control	33

SECTION 1

SUPPORT FOUNDATION SYSTEM REQUIREMENTS

GENERAL:

This section gives the information needed to properly select a support foundation which will provide the needed stability for your home. The first part of this section covers support foundation and footing requirements for vertical downward loads, such as snow loads. The second part covers support foundation requirements for wind loads.

Your mobile home has been designed to meet the wind and roof load requirements for one of the zones listed below. (see map, page 4)

ROOF LOAD

North Zone
Middle Zone
South Zone

WIND LOAD

I — Standard Wind
II — Hurricane Wind

The certification located inside your home will indicate for which "load zones" Your home was designed.

A. VERTICAL DOWNWARD LOADS

Individual support foundations (sometimes referred to as piers or blocks) must be placed under your home to support the vertical downward loads.

One of two types of frames may be found under your home. Illustration 1 depicts the most common or "standard" method, parallel steel beams with outriggers and cross members. Illustration 2 shows the alternate perimeter frame.

NOTE: Load bearing supports, footing and tie down systems shall be approved by the local enforcement agency, if any.

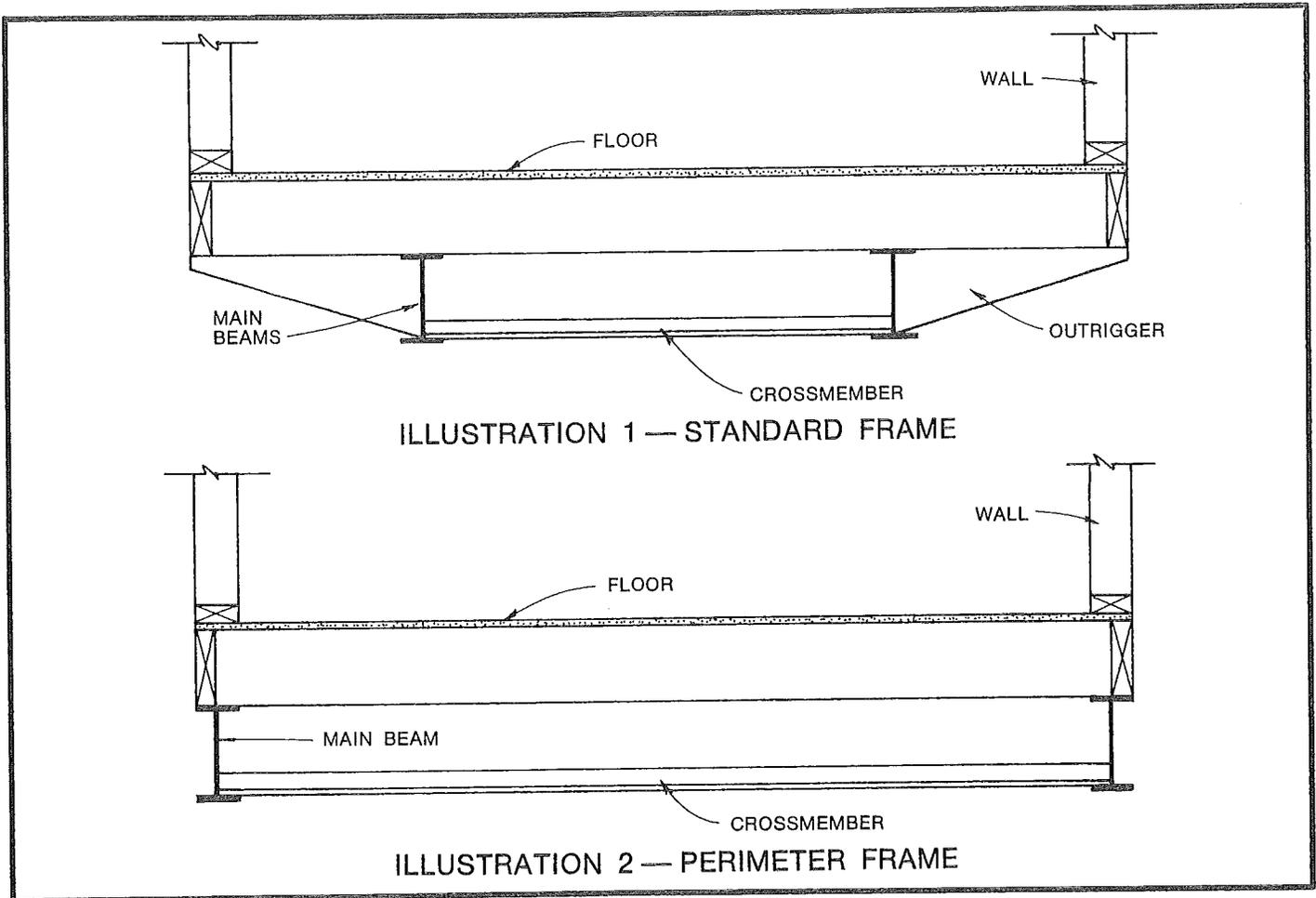


ILLUSTRATION 1 — STANDARD FRAME

ILLUSTRATION 2 — PERIMETER FRAME

With the "standard" frame construction, home location will dictate one of two support methods.

System "A" uses individual support foundations along with the steel beams. See Illustration 2A and 2B.

System "B" uses individual support foundations under the steel beams and around the exterior edge of the home. See Illustration 2C and 2D.

Table I shows method of selecting the appropriate support system.

Illustration 2E and 2F detail the support locations

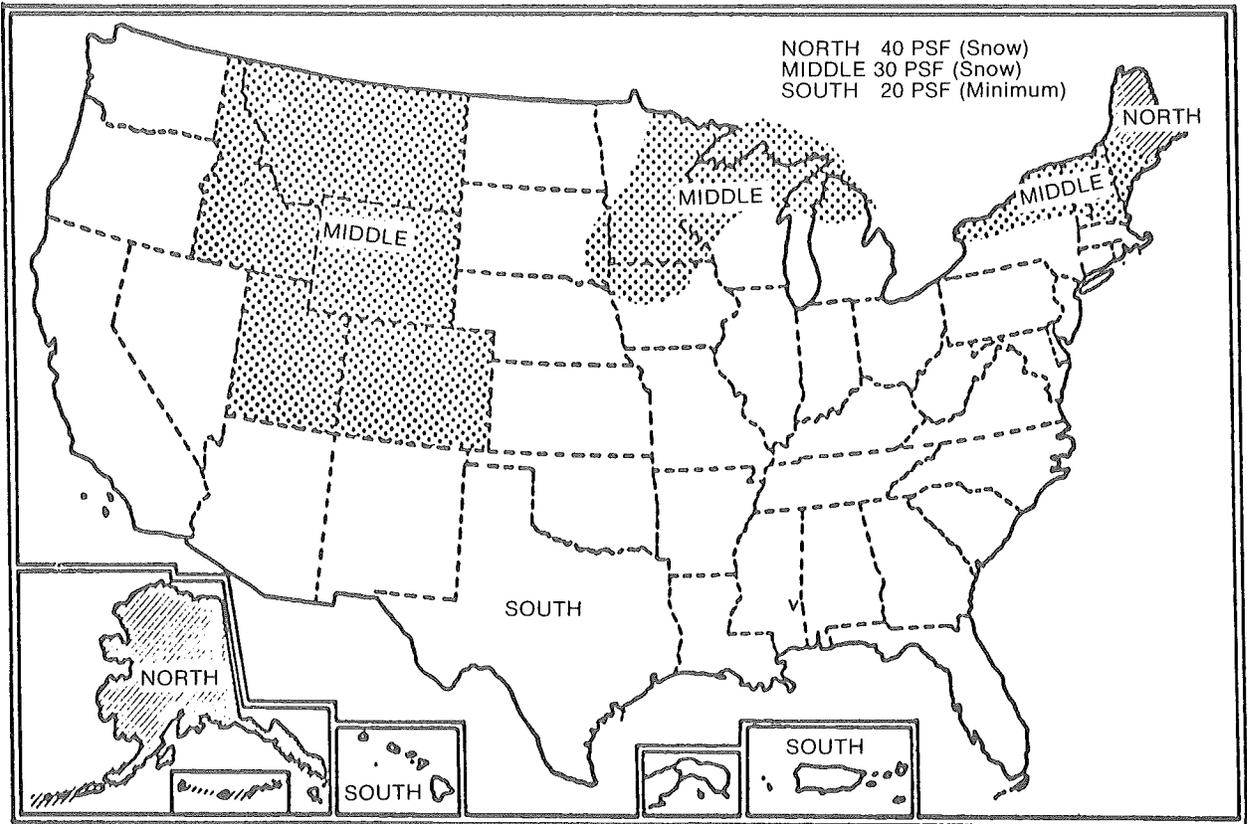
when a perimeter frame is used.

NOTE: If your home is constructed with 2 x 4 floor joists, System "B" must be used.

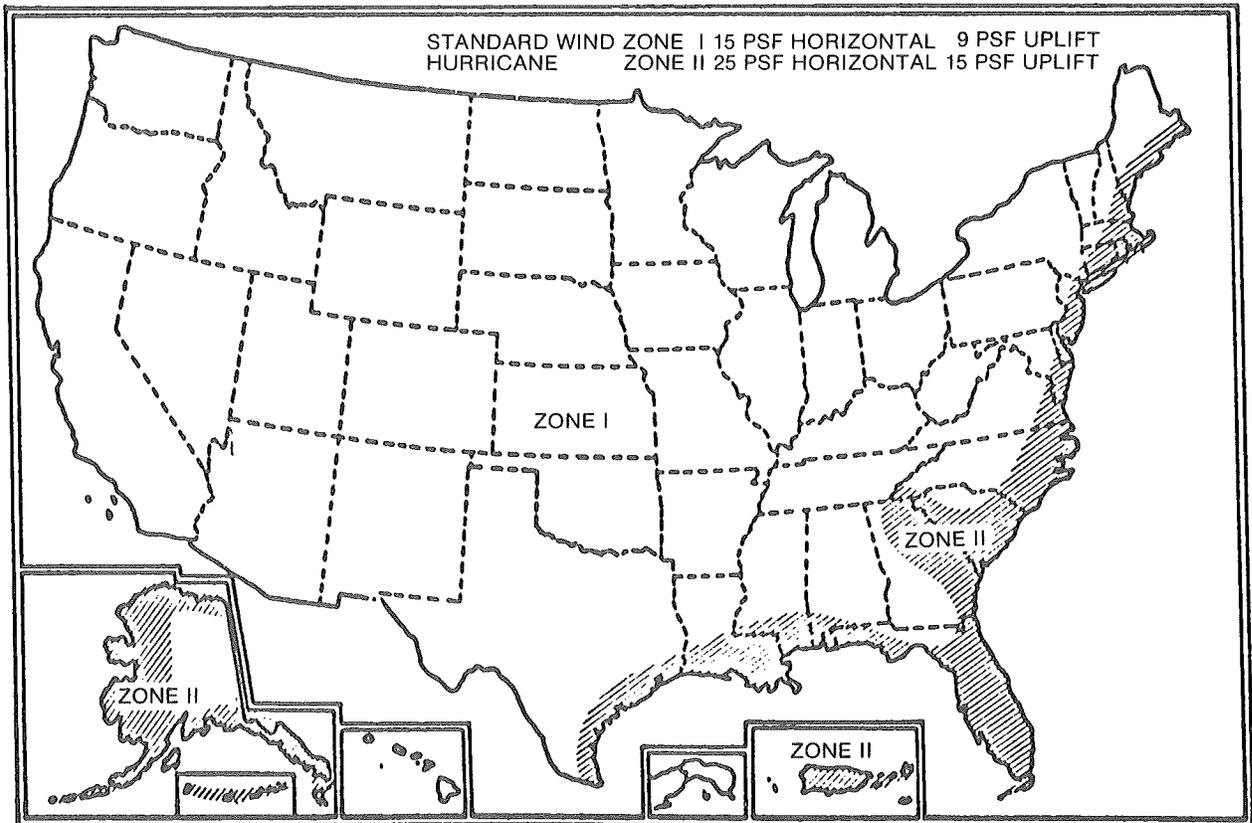
In double wide homes ridge beam support column piers may be required under each ridge beam support and under each end of the home at the centerline. See Illustration 4.

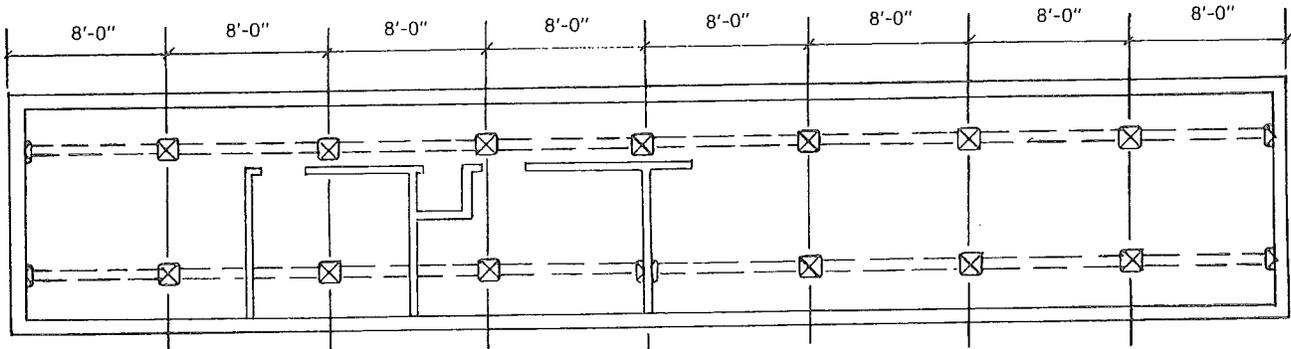
Typical locations are shown on Illustrations 2C and 2D. Refer to Table III for specific requirements.

ROOF LOAD ZONE MAP



WIND ZONE MAP

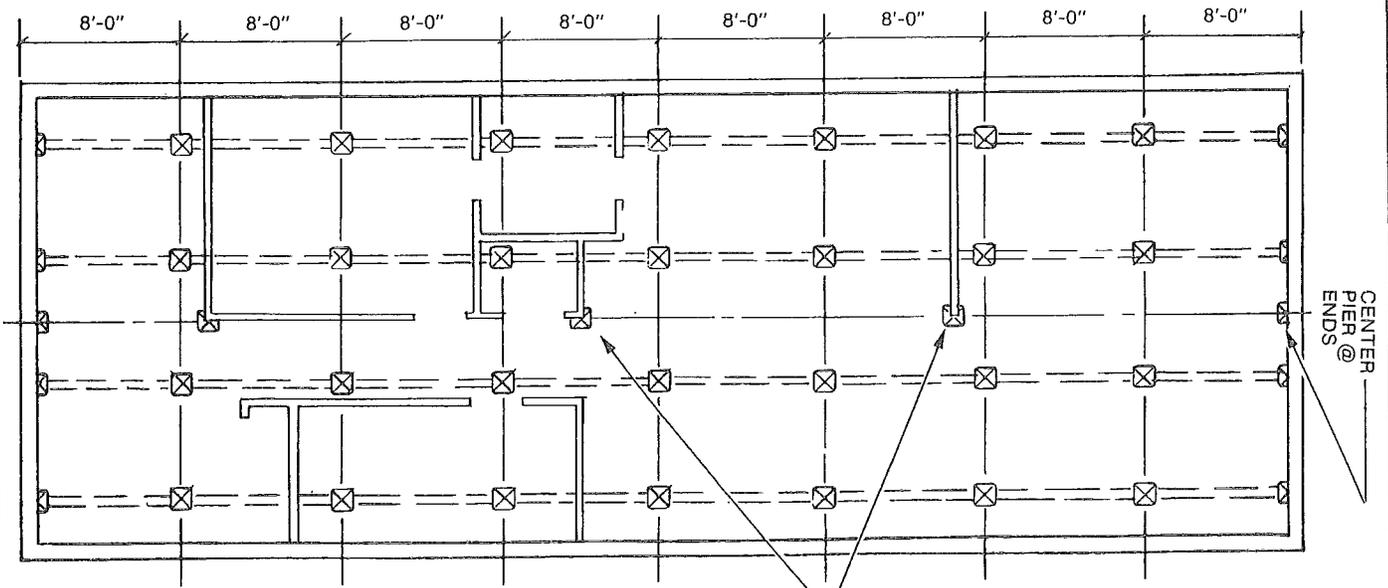




PIER SPACING 8' o.c. MAXIMUM

ILL. 2A — SYSTEM A — TYPICAL SUPPORT FOUNDATION — SINGLE WIDE

NOTE: FIRST PIER SHOULD BE UNDER THE ENDS OF THE HOME. MAXIMUM DISTANCE FROM THE END OF THE HOME TO THE FIRST PIER NOT TO EXCEED 2 FT. (ALL METHODS).

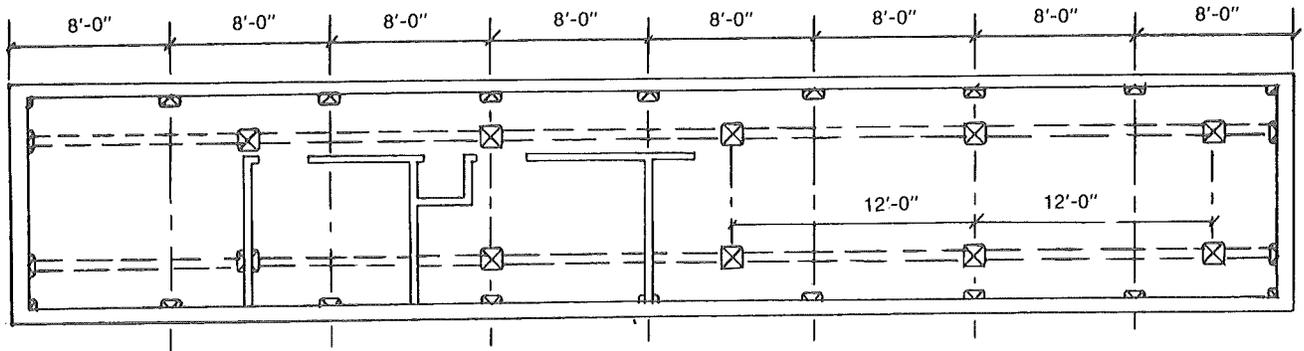


PIER SPACING 8' o.c. MAXIMUM

SUPPORT PIER @ EACH RIDGE BEAM COLUMN

ILL. 2B — SYSTEM A — TYPICAL SUPPORT FOUNDATION — DOUBLE WIDE

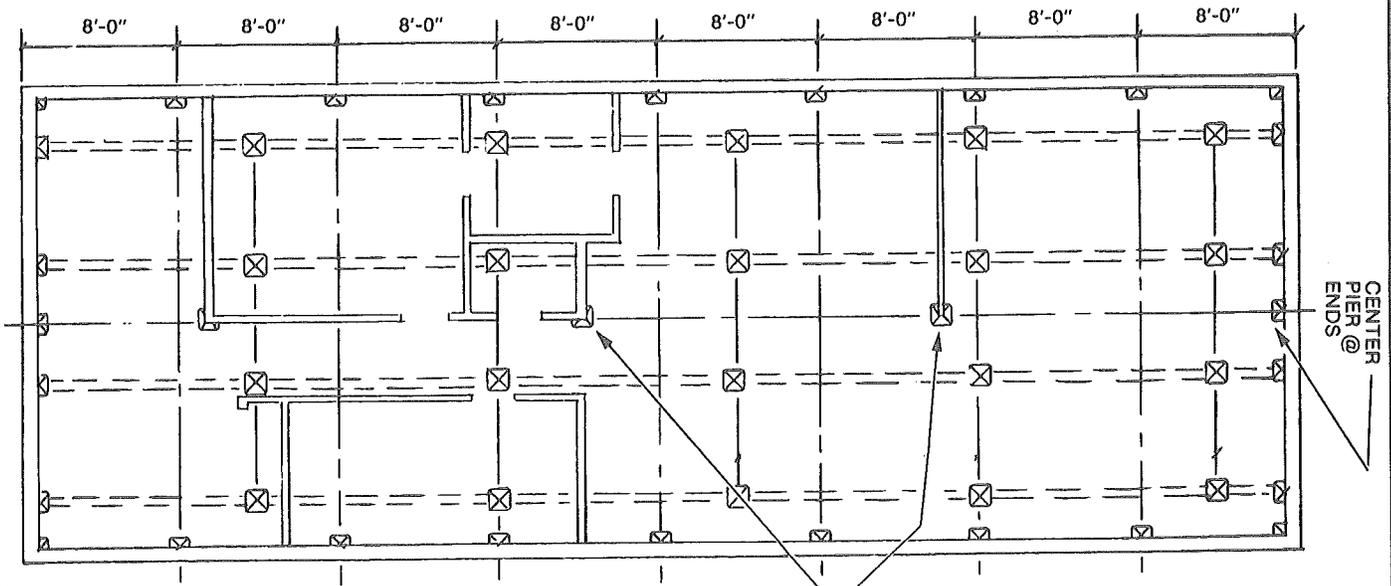
NOTE: FIRST PIER SHOULD BE UNDER THE ENDS OF THE HOME. MAXIMUM DISTANCE FROM THE END OF THE HOME TO THE FIRST PIER NOT TO EXCEED 2 FT. (ALL METHODS).



PIER SPACING —
 MAIN CHASSIS BEAM — 12' o.c. MAXIMUM
 PERIMETER — 8' o.c. MAXIMUM
 PERIMETER PIERS TO BE SPACED BETWEEN OUTRIGGERS

ILL. 2C — SYSTEM B — TYPICAL SUPPORT FOUNDATION — SINGLE WIDE

NOTE: FIRST PIER SHOULD BE UNDER THE ENDS OF THE HOME. MAXIMUM DISTANCE FROM THE END OF THE HOME TO THE FIRST PIER NOT TO EXCEED 2 FT. (ALL METHODS).

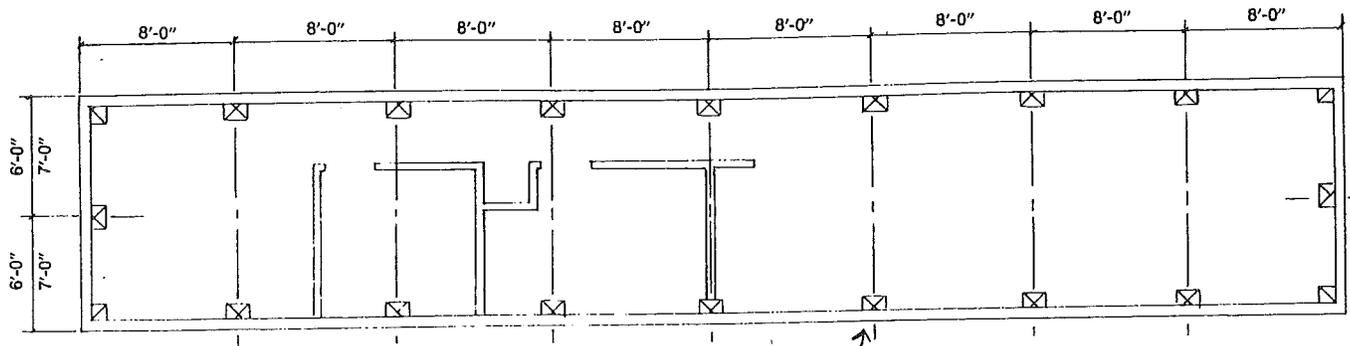


PIER SPACING —
 MAIN CHASSIS BEAM — 10' o.c. MAXIMUM — 12" BEAM; 8' o.c. MAXIMUM — 10" BEAM; 6' o.c. MAXIMUM — 8" BEAM
 PERIMETER — 8' o.c. MAXIMUM
 PERIMETER PIERS TO BE SPACED BETWEEN OUTRIGGERS

SUPPORT PIER @ EACH RIDGE BEAM COLUMN

ILL. 2D — SYSTEM B — TYPICAL SUPPORT FOUNDATION — DOUBLE WIDE

NOTE: FIRST PIER SHOULD BE UNDER THE ENDS OF THE HOME. MAXIMUM DISTANCE FROM THE END OF THE HOME TO THE FIRST PIER NOT TO EXCEED 2 FT. (ALL METHODS).



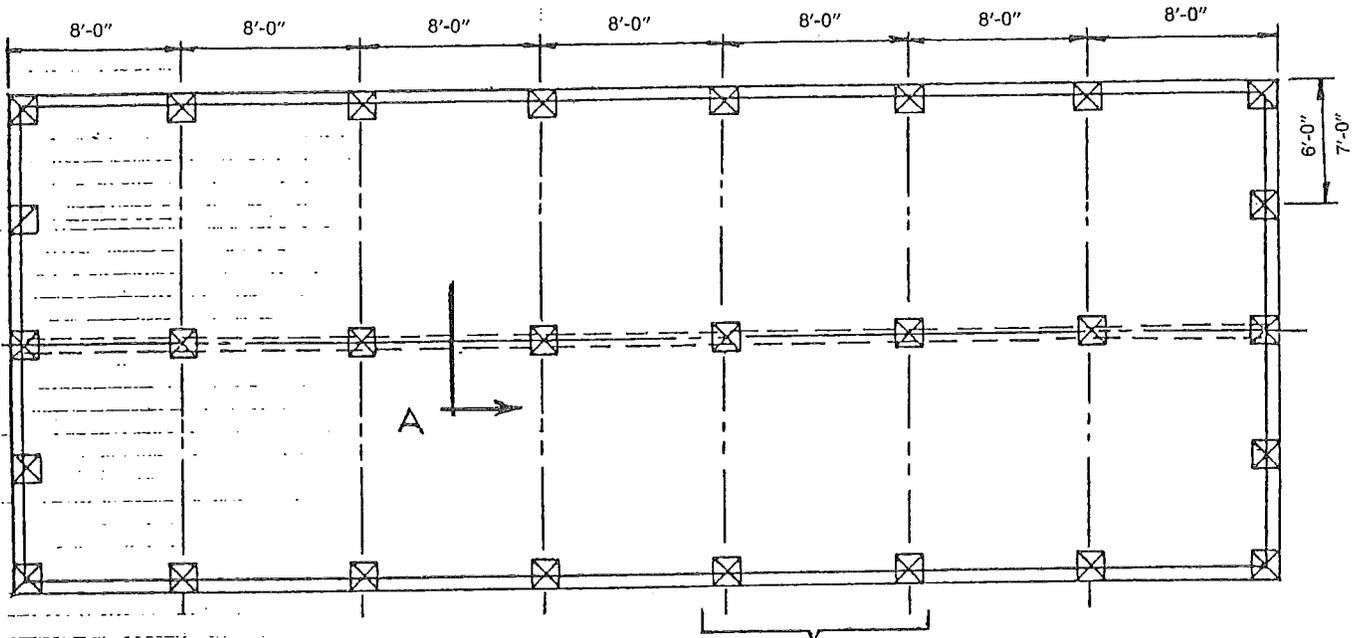
INTERFERING PIERS TO BE INSTALLED AFTER RUNNING GEAR AND WHEELS ARE REMOVED.

ILL. 2E — PERIMETER FRAME SUPPORT FOUNDATION — SINGLE WIDE

For required pier capacity, see Note 3, page 9.

NOTE: FIRST PIER SHOULD BE UNDER THE ENDS OF THE HOME. MAXIMUM DISTANCE FROM THE END OF THE HOME TO THE FIRST PIER NOT TO EXCEED 2 FT. (ALL METHODS).

8'-0" MAX. SPACING



OUTER PIERS AT WHEEL AREA EACH INSTALLED AFTER AXLE ASSEMBLY REMOVAL.

ILL. 2F — PERIMETER FRAME SUPPORT FOUNDATION — DOUBLE WIDE

For required pier capacity, see Note 3, page 9.

NOTE: FIRST PIER SHOULD BE UNDER THE ENDS OF THE HOME. MAXIMUM DISTANCE FROM THE END OF THE HOME TO THE FIRST PIER NOT TO EXCEED 2 FT. (ALL METHODS).

TABLE 1
SELECTION OF SUPPORT METHOD

BEAM-SPACING	FLOOR	SOUTH ZONE				MIDDLE ZONE				NORTH ZONE			
		10 & 20 WIDE	12 & 24 WIDE	14 x 28 WIDE	16 x 32 WIDE	10 & 20 WIDE	12 & 24 WIDE	14 x 28 WIDE	16 x 32 WIDE	10 & 20 WIDE	12 & 24 WIDE	14 x 28 WIDE	16 x 32 WIDE
80" ±	2 x 4 @ 16"	B	B	—	—	B	B	—	—	—	—	—	—
	@ 16" 2 x 6 @ 24"	A	A	A	B	A	A	A	B	A	B	B	B
		A	A	B	B	B	B	B	B	B	B	B	B
100" ±	2 x 4 @ 16"	B	B	—	—	B	B	—	—	B	B	—	—
	@ 16" 2 x 6 @ 24"	A	A	A	A	A	A	A	B	A	A	B	B
		A	A	A	B	B	B	B	B	B	B	B	B

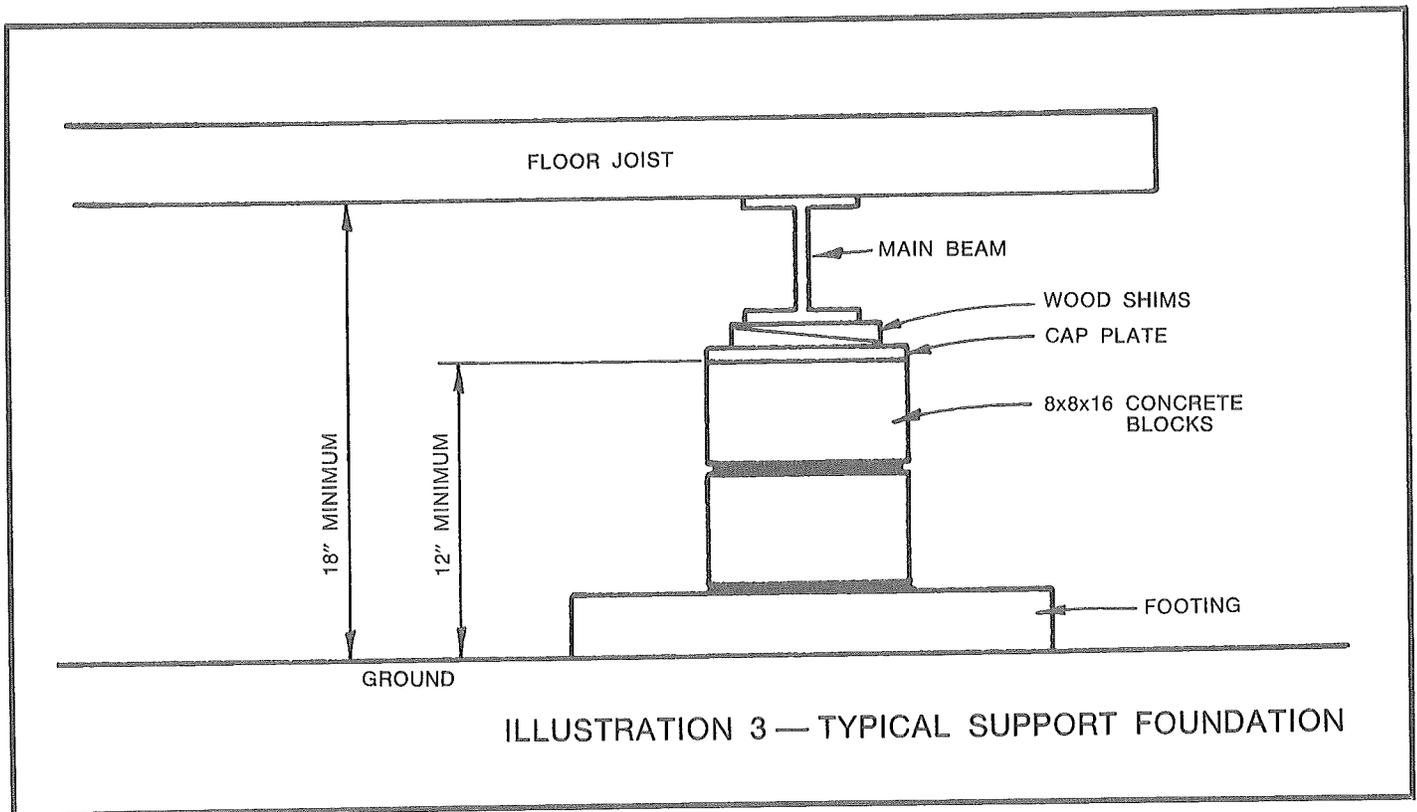


Table 2 gives the required vertical load bearing capacity and footing area requirements for the particular support foundation system used (Method "A" or "B"). The support foundation footing must be set on firm soil. In northern climates where soil is subject to freezing and thawing (heaving) the footings must extend below the frost line.

Individual footings for support foundations must consist of one of the following: (Local regulations should be checked for other requirements.)

1. Pressure treated lumber not less than two inch nominal thickness.
2. Precast or poured-in-place concrete not less than 3½ inches in thickness.

3. Other material providing equivalent load bearing capacity and resistance to decay.

Individual support foundations should not exceed 3'-0" in height unless lateral bracing is provided in two directions at right angles to each other. An individual support foundation base must have a minimum dimension of not less than four-tenths of the height of the support foundation but in no case be less than 10 inches in least dimension. When more than one-fourth of the area of the mobile home is supported at a height of three feet or more above the ground the support structure must be of permanent type construction.

A support foundation must be placed at the perimeter at each side of a door or window opening 4'-0" or wider.

**TABLE 2
REQUIRED SUPPORT FOUNDATION VERTICAL LOAD BEARING CAPACITY AND FOOTING AREA**

	SOUTH ZONE						MIDDLE ZONE						NORTH ZONE							
	10'	12'	14'	16'	10'	12'	14'	16'	10'	12'	14'	16'	10'	12'	14'	16'				
Required vertical load bearing capacity of individual support foundation (pounds)	Method B Perimeter		1560	1960	2360	2610	1960	2440	2920	3250	2360	2920	3480	2360	2920	3480	3890			
	Beam		2330	2630	2920	3440	2330	2630	2920	3440	2330	2630	2920	2330	2630	2920	3440	3440		
	Method A		3120	3975	4530	4900	3520	4450	5100	5540	3920	4950	5660	3920	4950	5660	6180	6180		
Required footing for individual support foundation (square inches) See Note 1 below.	Method B Perimeter		225	282	340	376	282	351	420	468	340	420	500	340	420	500	560	560		
	Beam		336	379	420	495	336	380	420	495	335	380	420	335	380	420	495	495		
	Method A		450	572	652	706	507	640	734	798	564	712	815	564	712	815	890	890		
Expando Room			1500 lbs. - 216 sq. in.						1700 lbs. - 245 sq. in.						1900 lbs. - 274 sq. in.					

NOTE 1: Footing area requirements are based on minimum soil load bearing capacity of 1000 pounds per square foot. Where soil load bearing capacity is less than 1000 P.S.F. minimum footing area must be increased proportionately. Likewise, where soil load bearing capacity is known to exceed 1000 P.S.F. minimum footing areas specified above can be decreased proportionately.

NOTE 2: See Page 5 for selection of proper support foundation method (A or B).

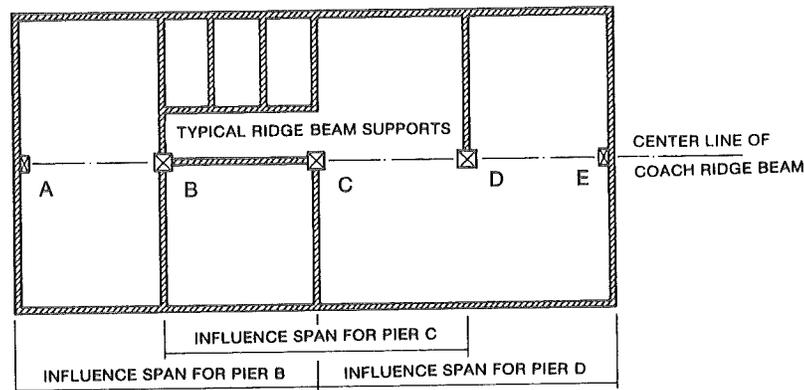
NOTE 3: For perimeter type frames the required pier capacity and footing area is the same as method A. Double required capacity for center line piers of double wide units.

TABLE 3

**RIDGE BEAM SUPPORT
FOUNDATION CAPACITY, LB.**

**RIDGE BEAM SUPPORT
FOUNDATION FOOTING AREA, SQ. IN.**

INFLUENCE SPAN	20 WIDE	24 WIDE	28 WIDE	32 WIDE	INFLUENCE SPAN	20 WIDE	24 WIDE	28 WIDE	32 WIDE
SOUTH ZONE					SOUTH ZONE				
24	3240	3888	4536	5184	24	467	560	654	747
28	3780	4536	5292	6048	28	545	654	763	871
32	4320	5184	6048	6912	32	622	747	871	996
36	4860	5832	6804	7776	36	700	840	980	1120
40	5400	6480	7560	8640	40	778	934	1089	1245
44	5940	7128	8316	9504	44	856	1027	1198	1369
48	6480	7776	9072	10368	48	934	1120	1307	1494
MIDDLE ZONE					MIDDLE ZONE				
24	4447	5337	6226	7116	24	641	769	897	1025
28	5188	6226	7264	8301	28	748	897	1047	1196
32	5930	7116	8301	9487	32	854	1025	1196	1367
36	6671	8005	9339	10673	36	961	1153	1346	1538
40	7412	8894	10377	11859	40	1068	1282	1495	1709
44	8153	9784	11414	13045	44	1175	1410	1645	1880
48	8894	10673	12452	14231	48	1282	1538	1794	2051
NORTH ZONE					NORTH ZONE				
24	5650	6780	7909	9039	24	814	977	1140	1303
28	6591	7909	9228	10546	28	949	1140	1330	1520
32	7533	9039	10546	12052	32	1085	1303	1520	1737
36	8474	10131	11864	13559	36	1221	1460	1710	1954
40	9416	11299	13182	15066	40	1357	1628	1899	2171
44	10358	12429	14501	16572	44	1492	1791	2089	2388
48	11299	13559	15819	18079	48	1628	1954	2279	2605



NOTE 1: Ridge Beam Support Columns location are shown by either dimensional drawings with these instructions, by paint marks on the bottom of the home or by the six pre-drilled bolt holes at 4 inches on center in the ridge beam. See III. 4 for Typical Details. (Dimensioned drawings are required for installation in California.)

NOTE 2: Influence spans are the sums of adjacent support foundation spacings (see drawing). The influence span for the ridge beam support foundation under each end wall is the distance to the next support foundation.

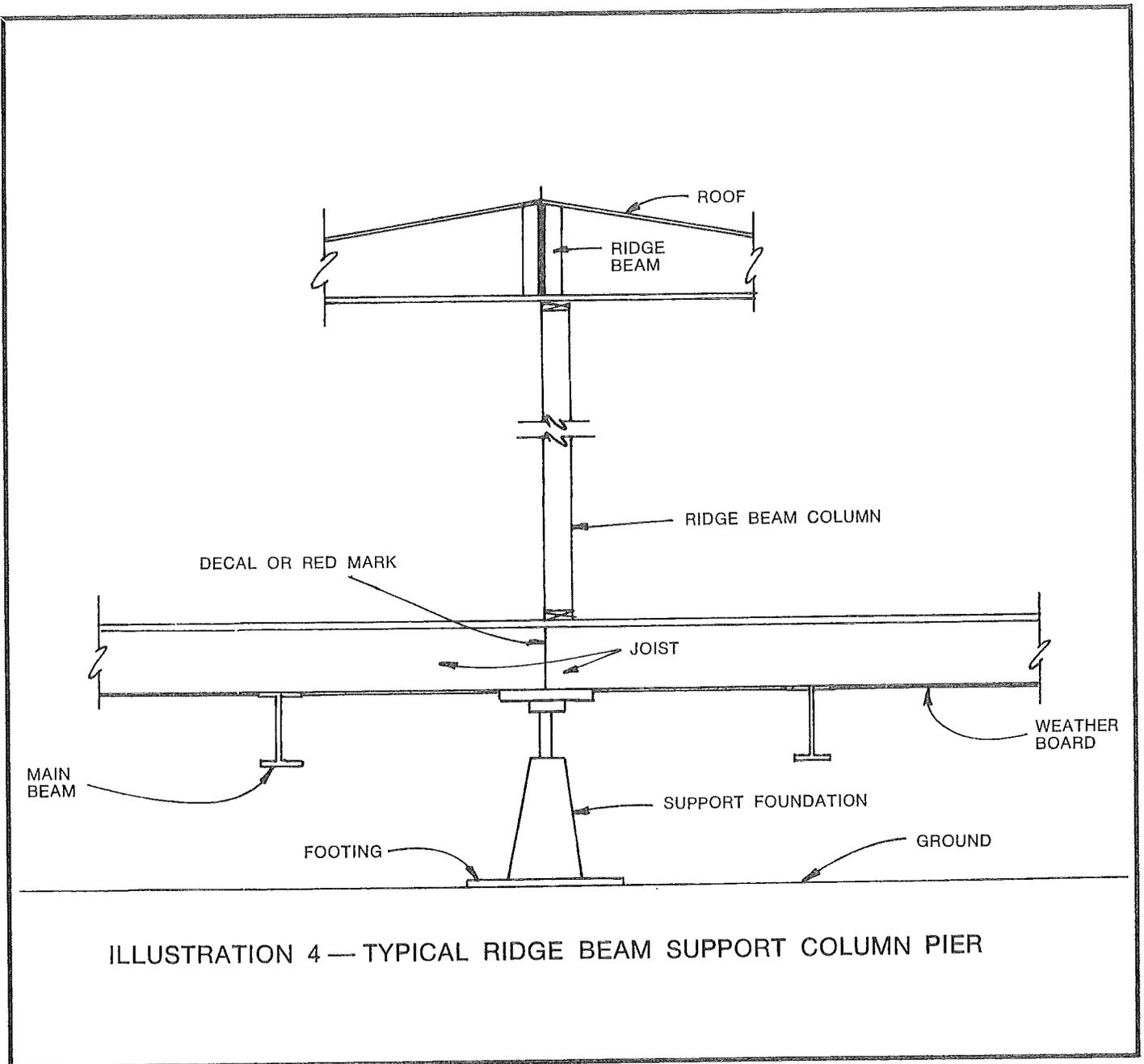


ILLUSTRATION 4 — TYPICAL RIDGE BEAM SUPPORT COLUMN PIER

B. HORIZONTAL AND VERTICAL UPLIFT LOADS

Your Guerdon home is equipped with provisions to anchor it against horizontal and vertical uplift forces imposed by winds. You must provide an anchoring or "tie-down" system in order to properly install your home.

With this book, you will find the details of one anchoring system. While this system will do the job, it is not the only one available. Any system approved by the local authority having jurisdiction is acceptable provided that the tiedown, anchoring system and all components have a working strength of at least a 50 percent overload without failure. The tiedown which attaches the mobile home to the ground anchor must be installed at a minimum angle of 40° and a maximum angle of 50° to the vertical. (See page 12.)

Double wide mobile homes have provisions for chassis or frame tiedowns only. Single wide homes may have provision for frame ties only, or may be equipped with "over the roof" straps. For proper installation, homes so equipped must be tied down at both the frame tiedown and the "over the roof" tiedown location.

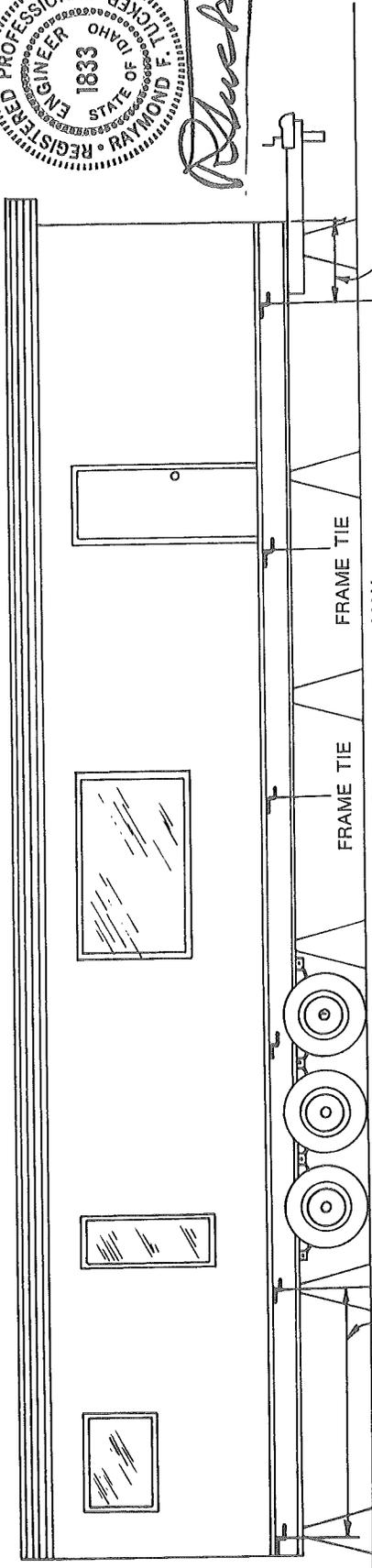
The number of tiedowns specified on Page 12 must be provided on each side of the home.

Your home is designed for a tiedown system which includes straps wrapped around the main chassis beam. (See details on page 9.)

If your home is equipped with an "Expando" or "Tip Out" room, separate instructions are attached.



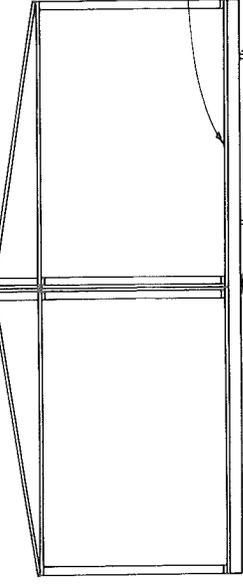
R. Tucker



TYPICAL SIDE VIEW SHOWING FRAME TIE SPACING

STANDARD WIND TYPICAL TIEDOWN 12'-0" o.c. MAX.
 HURRICANE WIND TYPICAL TIEDOWN 8'-0" o.c. MAX.

FRONT FRAME TIE NOT MORE THAN 6' (STANDARD WIND) OR 4' (HURRICANE WIND) FROM FRONT WALL OF HOME

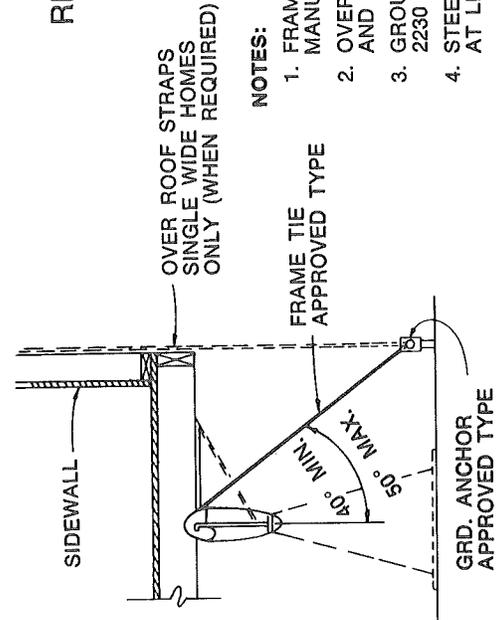
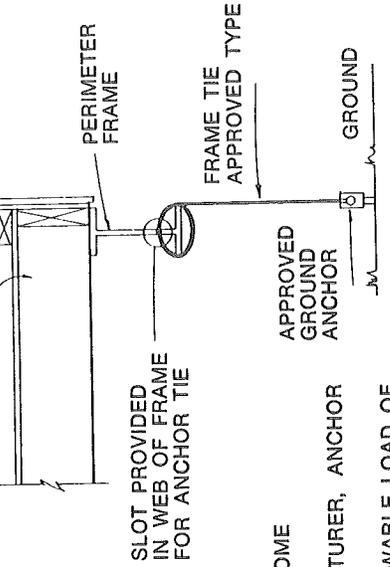


TYPICAL CROSS SECTION SHOWING TIEDOWNS

OVER ROOF TIES — SINGLE WIDE ONLY

1. Standard Wind — 1 ea. @ 8'-0" from front and 8'-0" from back of home.
2. Hurricane Wind — 1 ea. @ 8'-0" from front and 8'-0" from rear of home and @ 18'-0" max. spacing between.
3. Over roof ties may not be necessary under certain conditions, if your home does not have them, frame ties only are required.

RECOMMENDED TIEDOWN SYSTEM



NOTES:

1. FRAME TIEDOWNS AND ANCHOR NOT SUPPLIED BY MOBILE HOME MANUFACTURER.
2. OVER ROOF STRAPS SUPPLIED BY MOBILE HOME MANUFACTURER, ANCHOR AND END TREATMENTS SUPPLIED BY OTHERS.
3. GROUND ANCHOR SHALL BE CAPABLE OF RESISTING AN ALLOWABLE LOAD OF 2230 LBS. WHEN APPLIED @ ANGLE OF 45° TO HORIZONTAL.
4. STEEL ANCHORING EQUIP. EXPOSED TO WEATHER SHALL BE PROTECTED WITH AT LEAST 0.30 OZ. ZINC/SF. OF STEEL.

SECTION 2

SET-UP PROCEDURE INSTRUCTIONS

PLEASE READ CAREFULLY

GENERAL

It is important that these instructions and precautions are adhered to closely if you are to enjoy the comfortable, safe and trouble free home that has been designed and built for you. The following three items apply to the set-up of all homes (single wide and double wide homes). Each step should be checked off as it is completed. The mobile home set up crew should consist of a minimum of two experienced mobile home set-up men.

In following the procedures below for set-up it is recommended that your home be installed as close as possible to the ground as local codes permit, yet still providing a crawl space for periodic inspecting. This may require that wheels and tires be removed and that the ground in the axle hub and drum area be "dug out" so the drums can be set lower.

- 1. Select the proper foundation and footing area

from the information contained in Section 1, Support Foundation System Requirements, by relating the information in Section 1 to the structural load zone for which your home was designed and will be set up within.

- 2. If the support foundation, or tiedown types selected cannot be installed when the mobile home is in its final position, these portions of the support foundation system must be installed before the mobile home is positioned in its final desired location. For example, ground anchors required for a tiedown system normally must be installed before the mobile home is placed in its final position.
- 3. Upon delivery of your new mobile home, and before placing in its final position, you should inspect both interior and exterior for possible shipment damage. Any damage should immediately be reported to your dealer.

SINGLE WIDE SET-UP PROCEDURE

- 1. Position your home in its proper final location.
- 2. Using the screw type jack at the hitch, "rough" level the home. This is only a "rough" level and not the "final" level.
- 3. Placing the individual support foundations under the home in the correct sequence is very important and should be done as follows:
 - Place the first lifting jack under the chassis' main beam, just forward of the front spring shackle. Locate the lifting jack so that a support foundation can be placed next to the front spring shackle.
- 4. Position a second lifting jack under the same chassis main beam just behind the rear spring shackle.
- 5. Using both jacks uniformly, lift one side of the home and place a support foundation (using appropriate pier and footing as referenced in Section 1) next to the front spring shackle.
- 6. Place a second support foundation within 8 feet of the first or, if necessary, immediately behind the rear spring shackle. On three, four or five axle units where these two support foundations could be further than 8 feet apart, place a third support foundation between axles spaced evenly as possible between the first two support foundations.
- 7. Place one additional support foundation towards each end of the chassis' main beam within 2 feet of the extreme end of the home.
- 8. Lift the opposite side main beam as outlined above and "rough" level by placing support foundations directly opposite those placed on the first side. If the home is equipped with a perimeter frame, and

running gear is to be removed, one pier must be left out until gear is removed.

- 9. Complete the "rough" leveling from front to rear and side to side by adjusting the support foundations as required.
- 10. Evening space intermediate support foundations under the main beams (and perimeter if applicable) so that the home is supported as required in Method "A" or "B" as applicable (See Section 1, Vertical Downward Loads).
- 11. Additional support foundations are desirable under chassis main beams or floor joists where extra heavy furniture or appliances are located.
- 12. Make a "final" level adjustment of the home using a standard bubble level or a monometer type level working from front to rear and side to side to obtain "final" level conditions throughout the home. Each individual support foundation should have snug contact with the home.
- 13. The tiedown systems must be connected as discussed in Section 1, Part B, of these instructions and in accordance with the instructions of the tiedown and anchor manufacturer.
- 14. If individual support foundations and footings are installed as required by these instructions, no settlement should be experienced. In the event of a slight settlement any time after initial installation, releveling can be accomplished by following the procedures detailed above for "final" leveling.
- 15. Install all light shades and light fixtures as needed.
- 16. Connect and test utility systems (electrical, water, drain lines, and gas lines as applicable) as detailed in Section 3, Utility Systems, Connections and Testing.

- 17. Check the entire home for the following:
 - a. Passage Doors (close easily with proper alignment).
 - b. Cabinet Doors (proper alignment).
 - c. Drawers (open and close easily).
 - d. Closet Doors (proper alignment and square with walls).
 - e. Exterior Doors (close easily and square with frame, lock and unlock easily).
 - f. All windows (open and shut easily).
 - g. Drapes (operate easily and completely close).
- 18. Install and/or connect all other items shipped loose with the home.
- 19. Conduct final clear up operation in the home. Your home is now ready for occupancy.

DOUBLE WIDE SET-UP PROCEDURE

- 1. Strip plastic and wood braces from both units (weather proof covering and temporary supports). Be sure all exposed nails and staples are removed.
- 2. Position one-half (usually the heaviest half) of the home in its proper final location.
- 3. "Rough" level this half of your home as outlined in Steps 2 thru 11 of Single Wide Set Up Procedures.
- 4. Place one additional support foundation under the floor rim joist at each ridge beam column location (see Note 1, Page 9).
- 5. On models with heat duct crossover in the floor or in the ceiling, check the mating gasket for proper alignment and installation.
- 6. Position second unit along side the first unit being careful not to jar the first unit. Approximately six inches or less should separate the floors. Bring the two floors together using jacks or similar devices. Draw the floors together tight (at this stage the ceiling will usually be open at the center).
- 7. Using one of the following two methods, loosely bolt the floors together:
 - a. Insert bolts through the marriage clip brackets provided at the end of floor joist or outriggers (see Illustration 8). Install washers and nuts but do not fully tighten, or
 - b. Connect the liner chassis main beam of each floor with the threaded tie rods as illustrated in Illustration 8. Install washers and nuts but do not fully tighten.
- NOTE: DO NOT SECURE RIDGE BEAM AT THIS TIME.**
- 8. Starting with the inside main beam, rough level the second floor as detailed in Single Wide Set Up Procedures, Steps 2 thru 11.
- 9. Close the gap in the center of the ridge beam halves by raising the outside of the second unit. Connect top of ridge beam using one of the methods shown in Illustration 9. It may be necessary to adjust the ceiling joint flush before installing the connections. A jack and tee is used to raise whichever ceiling is low. Start in the front and work through the coach to the rear.
- 10. Tighten the bolts or tie rods to securely fasten the floors together.
- 11. Make a final level adjustment of the home using a standard bubble level or a monometer type level. Work from front to rear and side to side to obtain final level conditions throughout the home. Each individual support foundation should be snug in contact with the home.
- 12. On metal roof homes install the roof cap with sealant tape along each side. Overlap approximately two to three inches using sealant tape between sections. Screw roof cap along each side 3 inches on center. Screw cap sections together at overlap two inches on center. Seal along both sides of roof cap, overlapping joints, and all exposed screws with roof coating. Check entire roof and roof jacks. If in doubt, apply roof coating. Install exterior finish pieces on the front and rear of the home to finish the center joint.
- 13. Connect gas line flex connector (crossover) where applicable.
- 14. Connect electrical crossover as required with material provided.
- 15. Connect duct crossover where applicable. Flexible crossover must be supported so that it does not rest on the ground.
- 16. Connect waste line crossover where applicable.
- 17. Connect hot and cold water line flex crossover connectors where applicable.
- 18. The tiedown system must be connected as discussed in Section 1, Part B, of these instructions, and in accordance with the instructions of the tiedown and anchor manufacturer.
- 19. If individual support foundations and footings are installed as required by these instructions, no settlement should be experienced. In the event of a slight settlement any time after initial installation, releveling can be accomplished by following the procedures detailed above for "final" leveling.
- 20. Install all light shades and light fixtures as needed.
- 21. Connect and test utility system (electrical, water, drain lines and gas lines, as applicable) as detailed in Section 3, Utility systems, Connection and Testing.
- 22. Install the ridge beam molding over the center joint in the ceiling with 8d finish nails.
- 23. Install carpet, carpet padding, and molding where applicable.
- 24. Check and adjust the entire home for items which may have become misaligned in transit or during set-up such as the following:

- a. Adjust passage doors to close easily with proper alignment.
 - b. Re-align cabinet doors.
 - c. Adjust drawers to open and close easily.
 - d. Adjust closet doors, align and square with walls.
 - e. Adjust exterior doors to close easily and be square with frame, and lock and unlock easily.
 - f. Adjust all windows to open and shut easily.
 - g. Adjust drapes to operate easily and completely close.
 - h. Recaulk over top of all windows and doors and other exterior seams as necessary.
 - i. Retack any loose moldings, panel connections, and trim.
 - j. Retighten "p" trap fittings.
- 25. Install and/or connect all other parts and items shipped loose with the home.
 - 26. Conduct final clean-up operation in the home. Your home is now ready for occupancy.

INSTALLATION INSTRUCTIONS FOR DETACHABLE EAVES (METAL ROOFS)

(See Illustration 5)

- 1. In the area where the eaves are to be attached, do the following:
 - a. Bend the galvanized roof, on mobile home, so the 2 inch overhang extends straight out from the mobile home.
 - b. Remove the shipment material.
 - c. Bend the galvanized straps (at 48 inches on center) so they are not in the way when attaching the detachable eaves.
- 2. Raise the eave sections into position, rest it on the aluminum cap to obtain the proper height, and fasten in place with 10d nails at 16 inches on center and #8 x 2½" wood screws at 48 inches on center.
- 3. Fasten the plywood to the top of the eave frame with 4d nails at 12 inches on center and nail the galvanized strap over the plywood with three each 4d nails in each strap.
- 4. Raise the aluminum eave metal into position and slide it over the eave. The metal is slid under the 2 inch overhang of the galvanized roof and, on the underside, the hook shall be slid under the aluminum cap on the sidewall. The underside is now fastened with #8 x ¾" sheet metal screws at 16 inches on center.
- 5. On top of the eave another row of #8 x ¾" sheet metal screws is placed, approximately ¾ inch in on the 2 inch galvanized overhang. These screws are at 4 inches on center and, when finished, a coat of roof sealer is applied to make a weather-proof connection.

INSTALLATION INSTRUCTIONS FOR DETACHABLE EAVES (SHINGLE ROOF)

(See Illustration 6)

- 1. In the area where the eaves are to be attached, remove the shipment material and then bend the galvanized straps (at 48 inches on center) so they are not in the way when attaching the detachable eaves.
- 2. Raise the eave sections into position, rest it on the aluminum cap to obtain the proper height and fasten in place with 10d nails at 16 inches and #8 x 2½" wood screws at 48 inches on center.
- 3. Fasten the plywood to the top of the eave frame with 4d nails at 12 inches on center and nail the galvanized straps, over the plywood with three each 4d nails in each strap.
- 4. Raise the aluminum eave metal into position and slide it over the eave. On the underside of the eave, the hook is slid under the aluminum cap and fastened with #8 x ¾" sheet metal screws at 16 inches on center.
- 5. On top of the eave apply the 4d nails at 32 inches on center into the eave metal.
- 6. The eave is now ready to apply the shingles. On the mobile home, raise the felt paper and shingles up approximately 2 inches back to allow the felt on the eaves to be slid under it.
- 7. Apply a coating of asphalt cement to the top side of the eave and place the first layer of felt. (Be sure to slide it under the roof of the mobile home.)
- 8. Apply another coat of asphalt cement and another layer of felt. (Use only enough roofing nails to hold the felt from sliding.)
- 9. Apply the starter strip using 6 each 1¼ inch roofing nails per section of shingle. The starter strip is a regular shingle laid upside down with the solid side toward the bottom and the outside facing the center of the home.
- 10. Lay the first layer of shingles over the starter strip and fasten with 6 each 1¼ inch roofing nails. Nail on the second layer (and all others) of shingles making sure the shingles are mismatched at the joints.
- 11. On the last layer of shingles, you may have to trim the top side of the shingle to allow it to fit under the shingles on the mobile home. (Cut off only a minimum amount of shingle.) Raise the shingles on the home enough to be covered by the shingles you have raised.

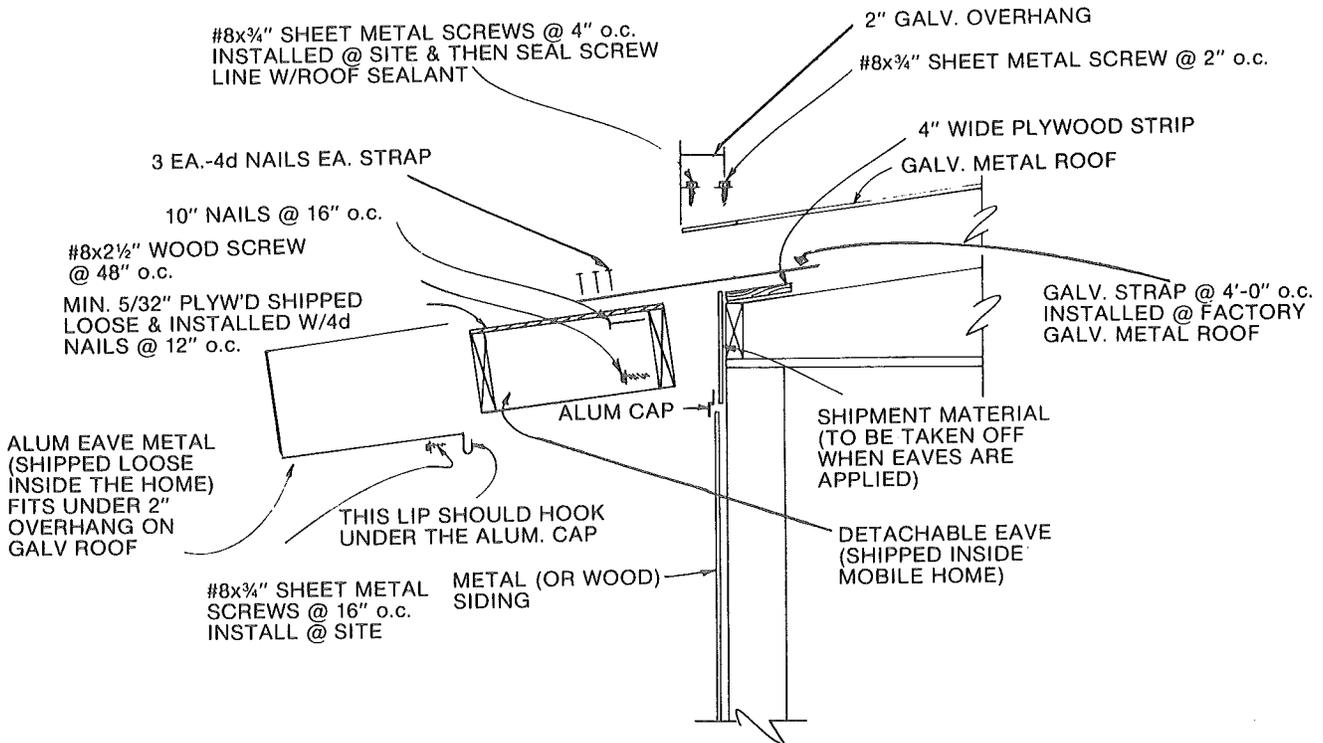


ILLUSTRATION 5 — DETACHED EAVE DETAIL

1/2" = 1'-0"

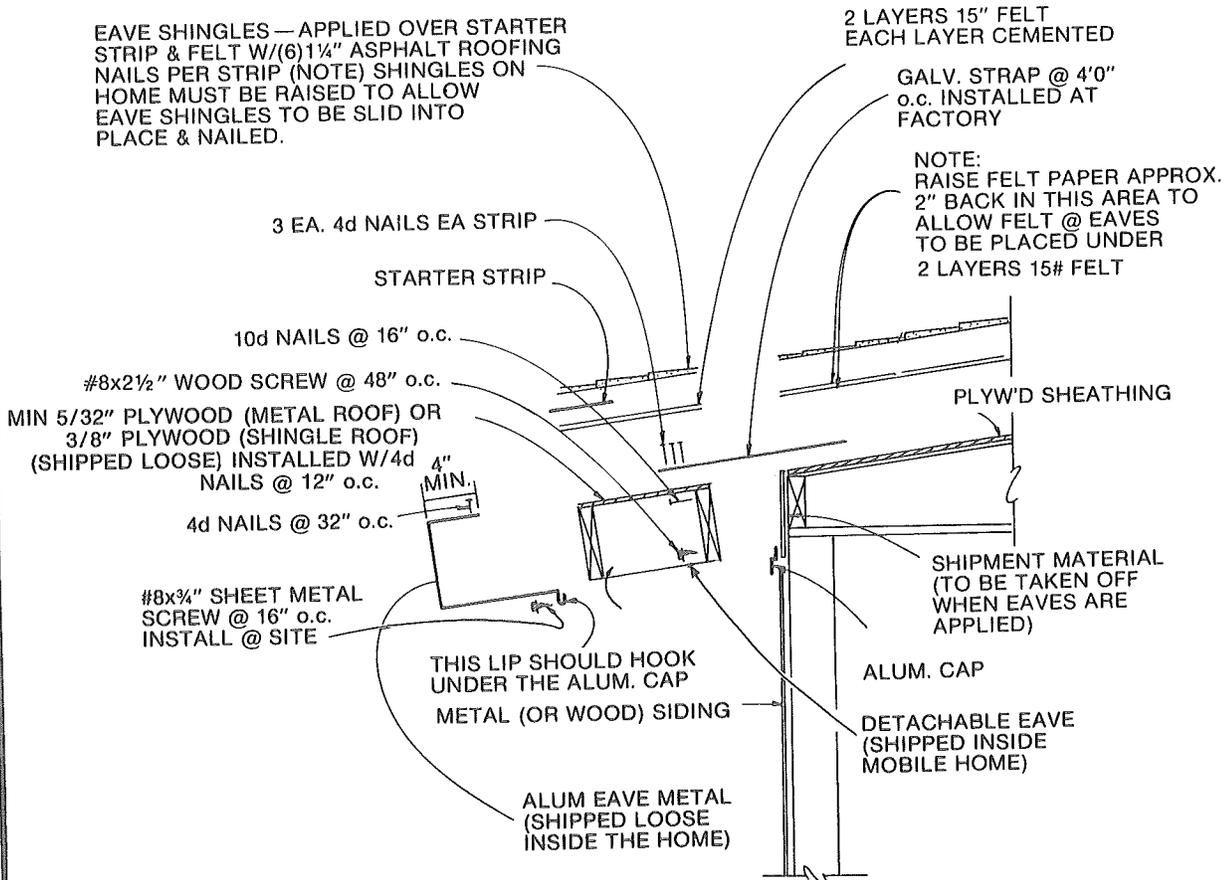


ILLUSTRATION 6 — DETACHED EAVE W/SHINGLED ROOF

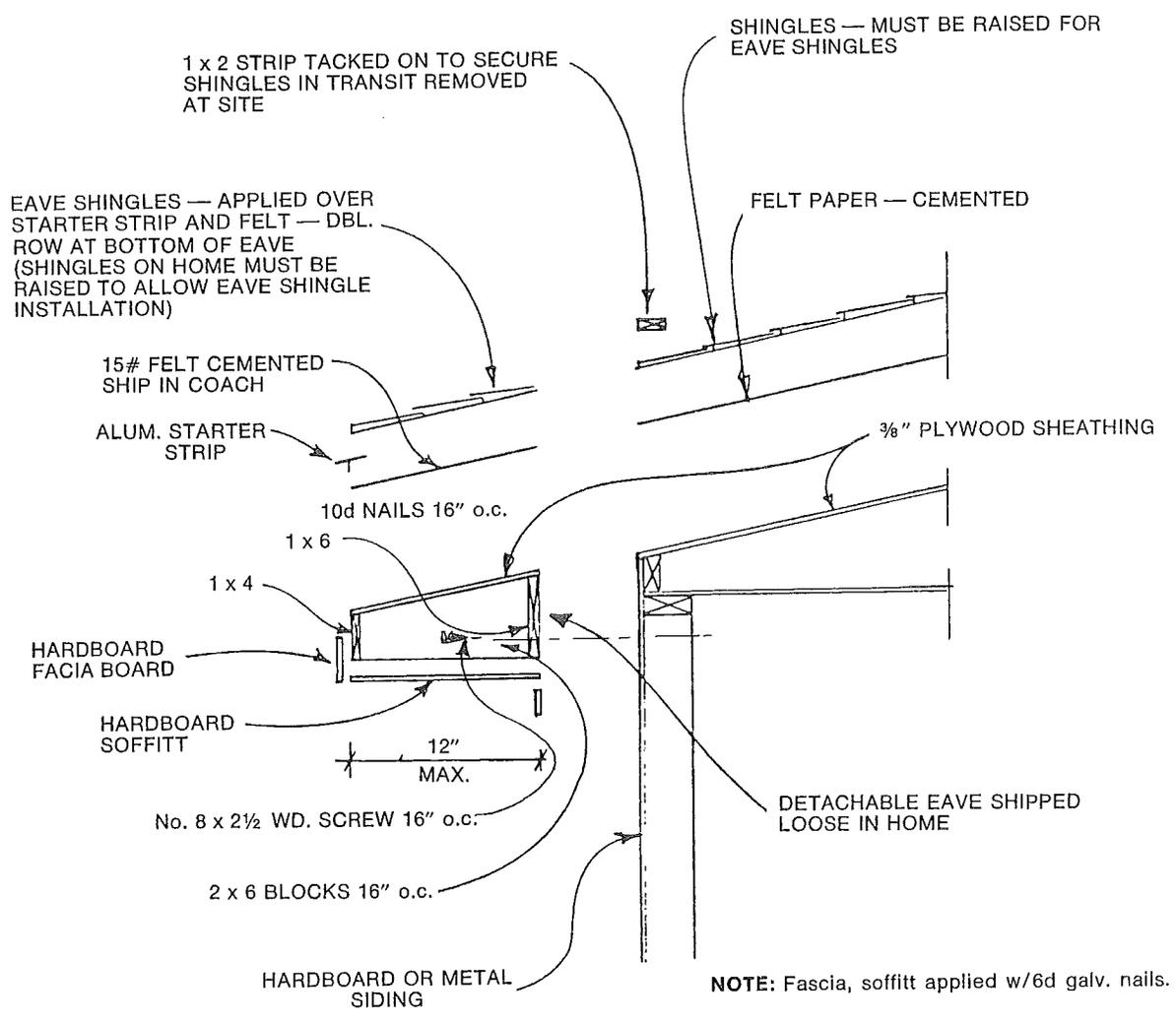


ILLUSTRATION 7 — ALTERNATE DETACHED EAVE DETAIL

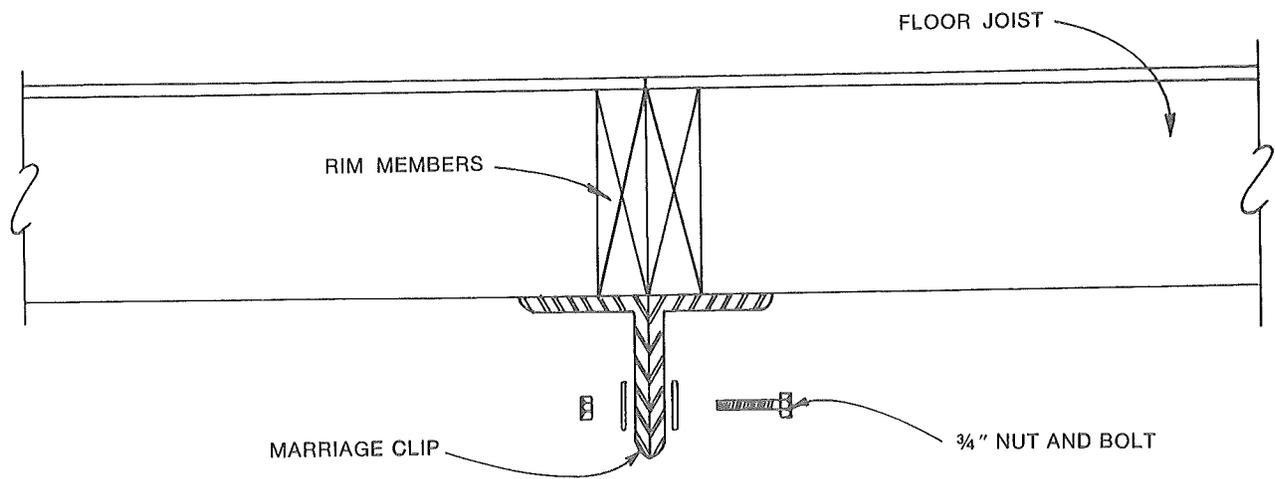


ILLUSTRATION 8A — ALTERNATE FLOOR MARRIAGE SYSTEM

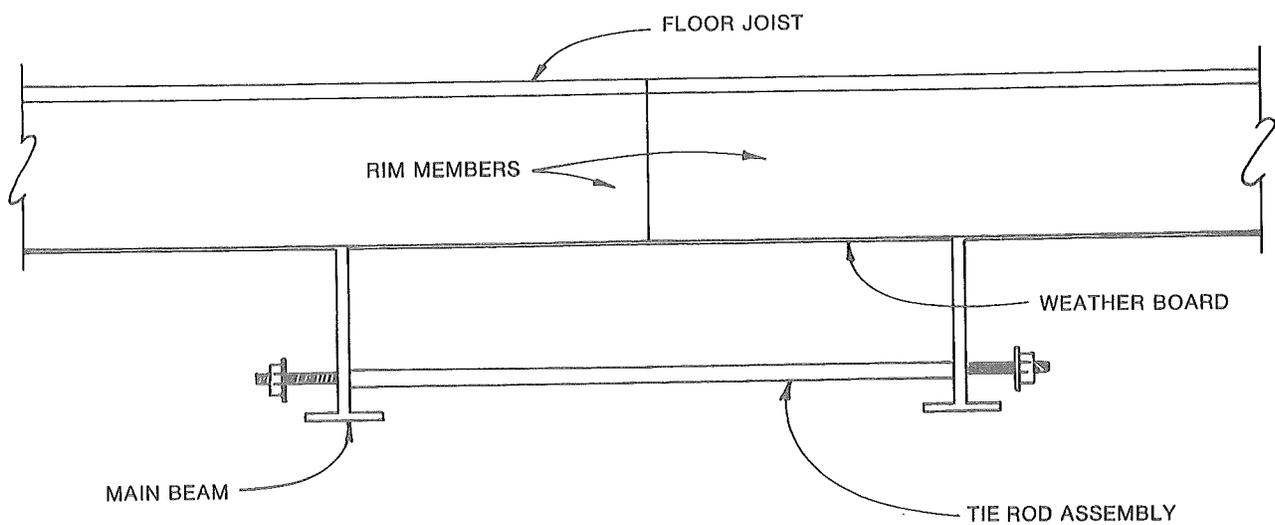


ILLUSTRATION 8B — ALTERNATE FLOOR MARRIAGE SYSTEM

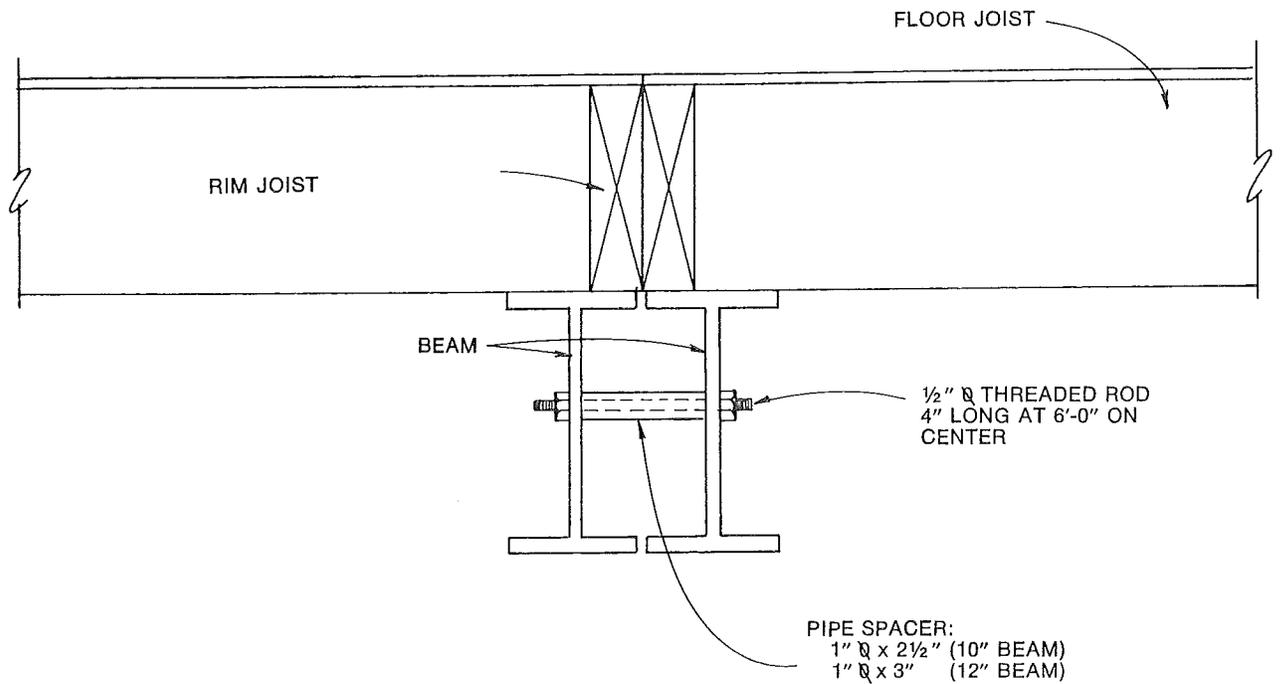


ILLUSTRATION 8C — ALTERNATE FLOOR MARRIAGE SYSTEM

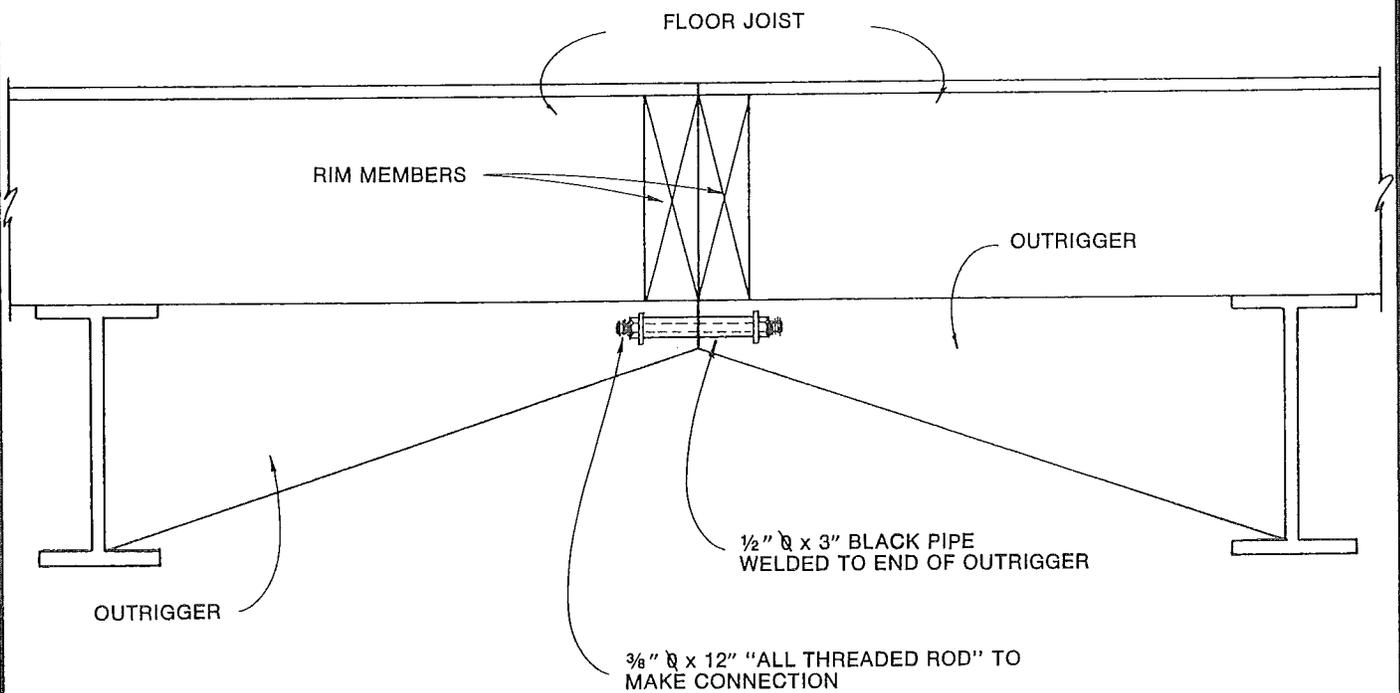


ILLUSTRATION 8D — ALTERNATE FLOOR MARRIAGE SYSTEM

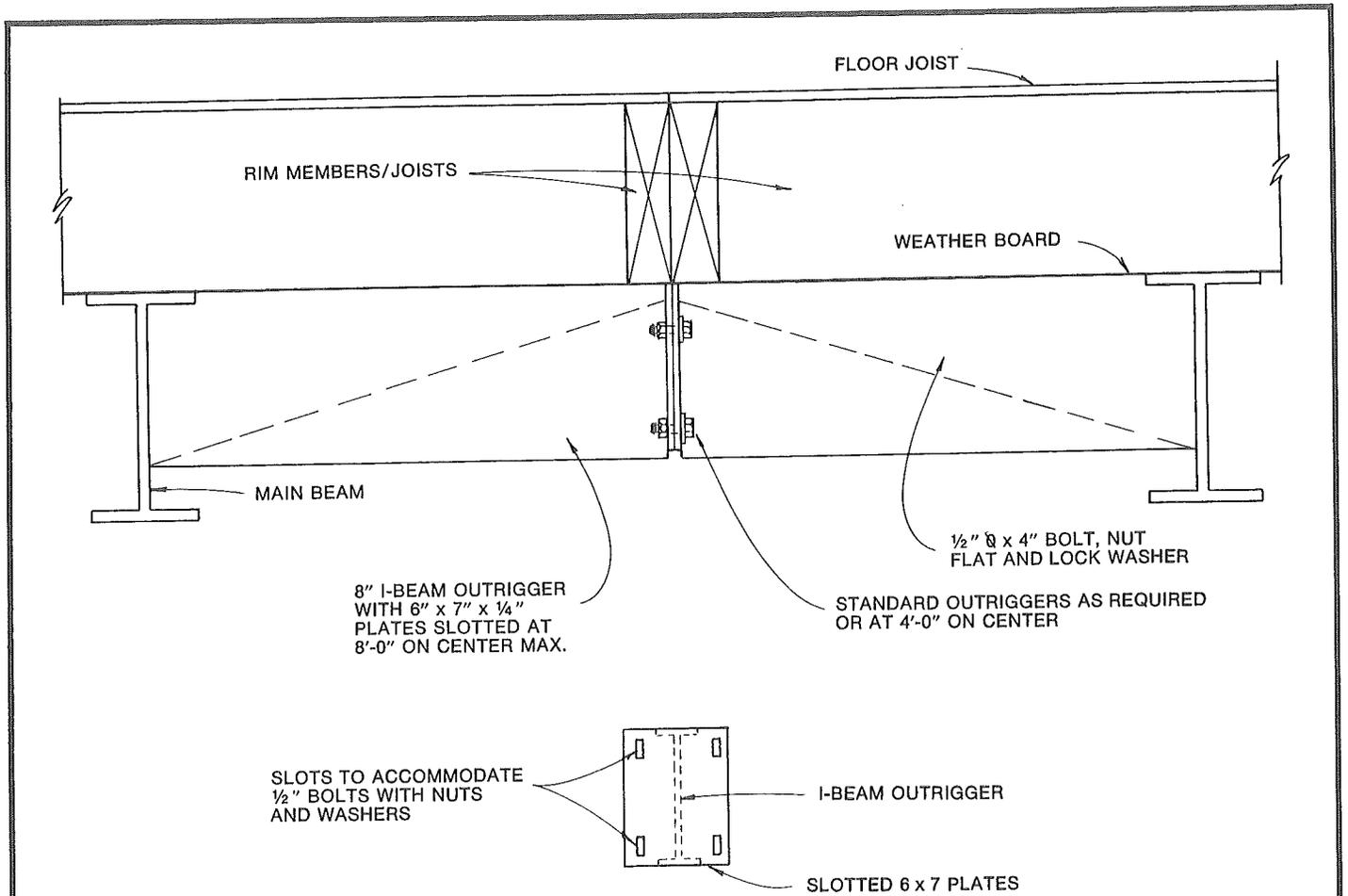


ILLUSTRATION 8E — ALTERNATE FLOOR MARRIAGE SYSTEM

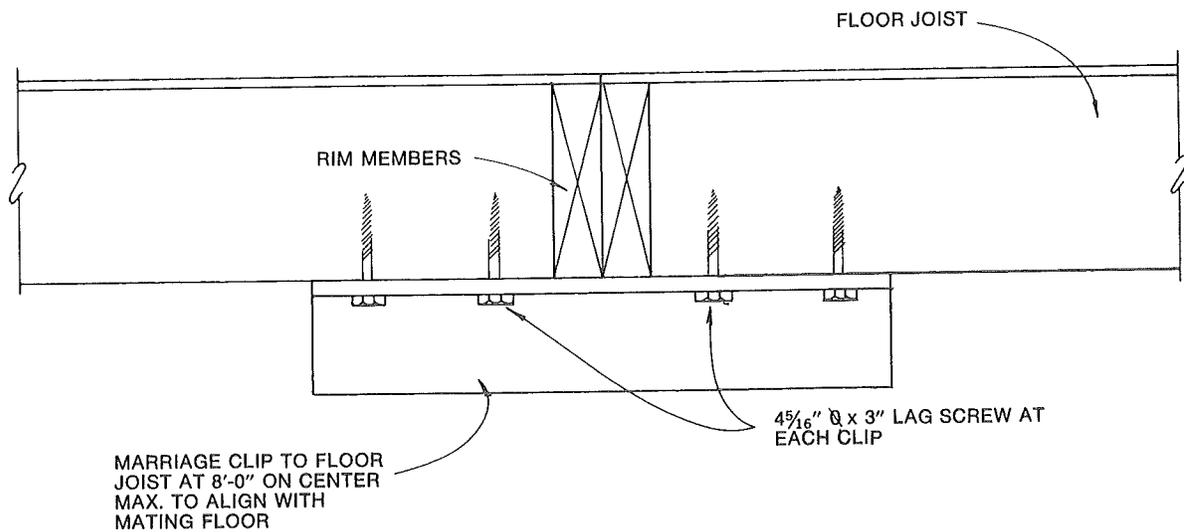


ILLUSTRATION 8F — ALTERNATE FLOOR MARRIAGE SYSTEM

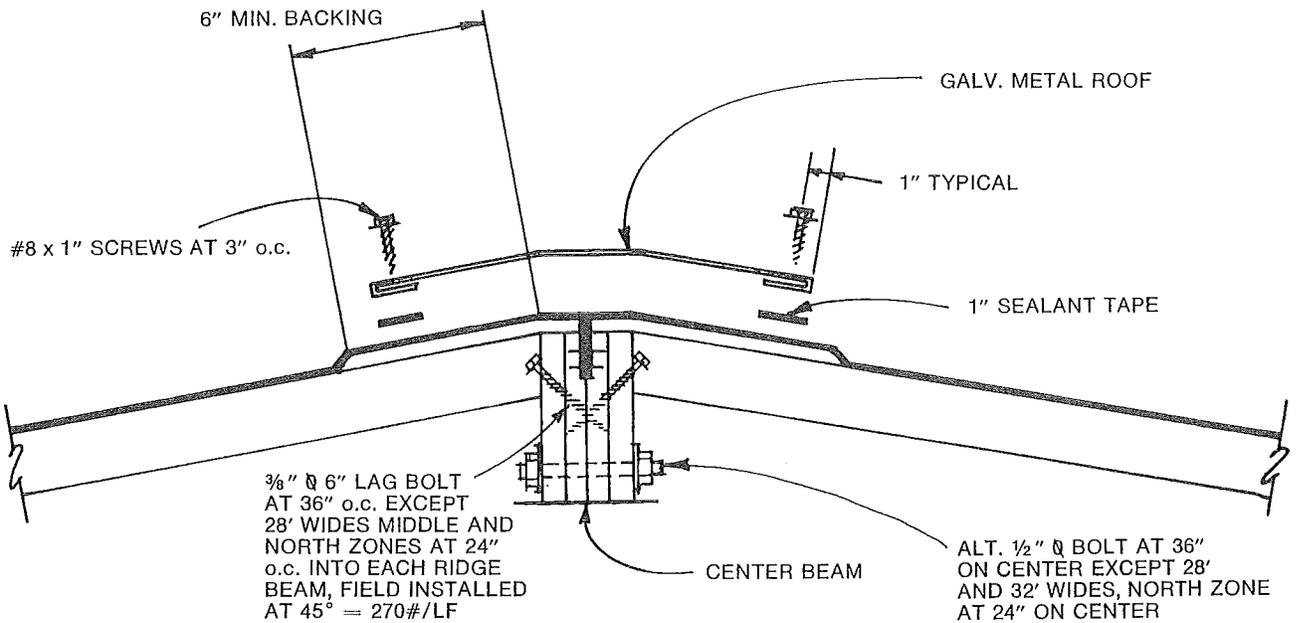


ILLUSTRATION 9A — ALTERNATE ROOF MARRIAGE CONNECTION

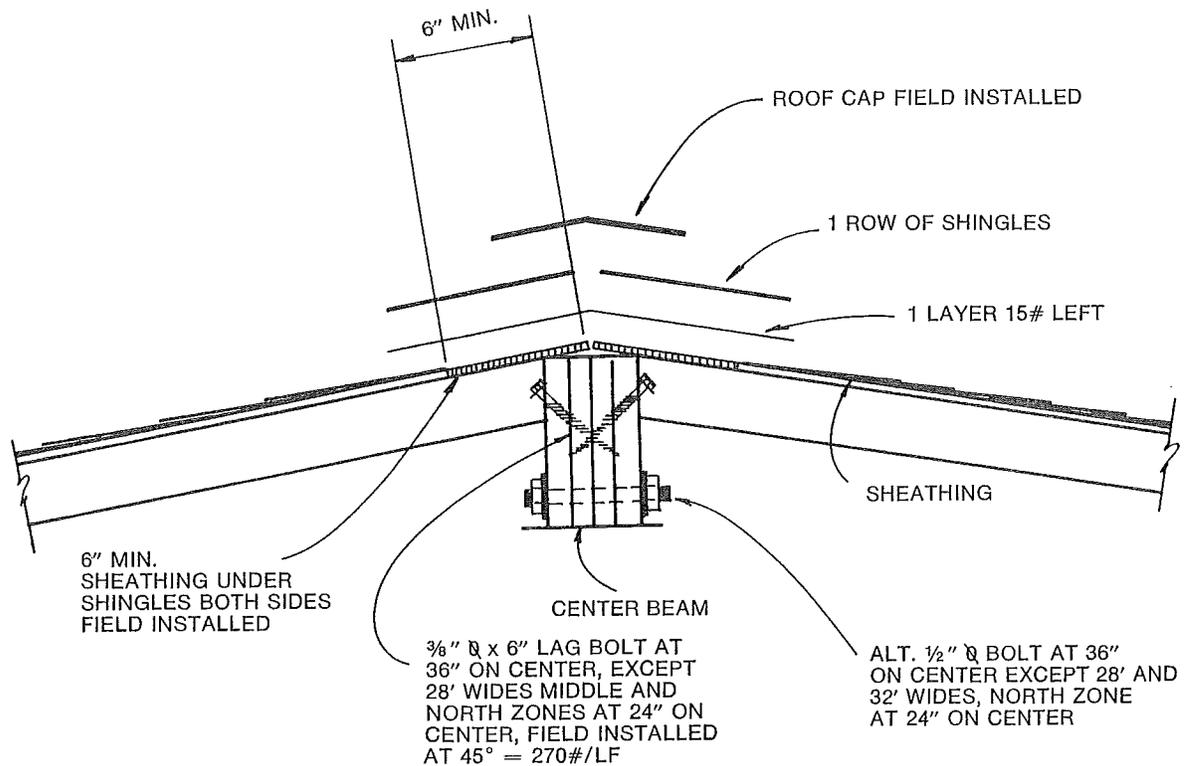


ILLUSTRATION 9B — ALTERNATE ROOF MARRIAGE CONNECTION

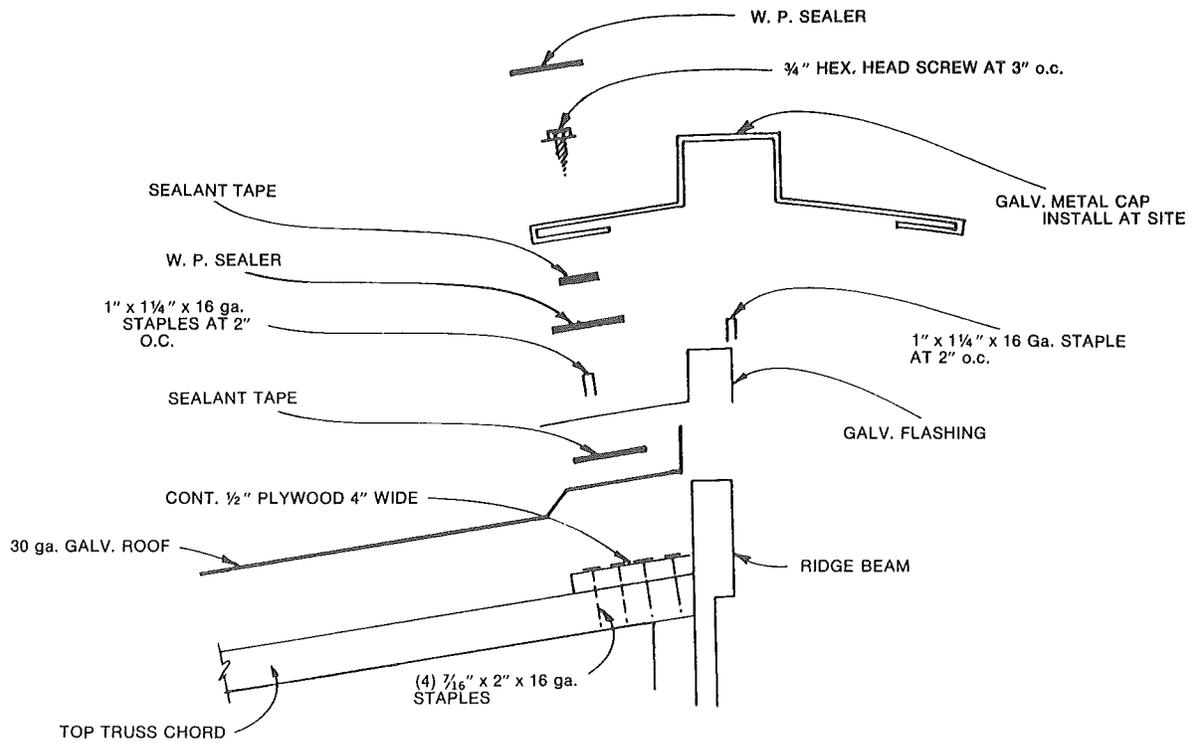


ILLUSTRATION 9C — ALTERNATE ROOF MARRIAGE CONNECTION

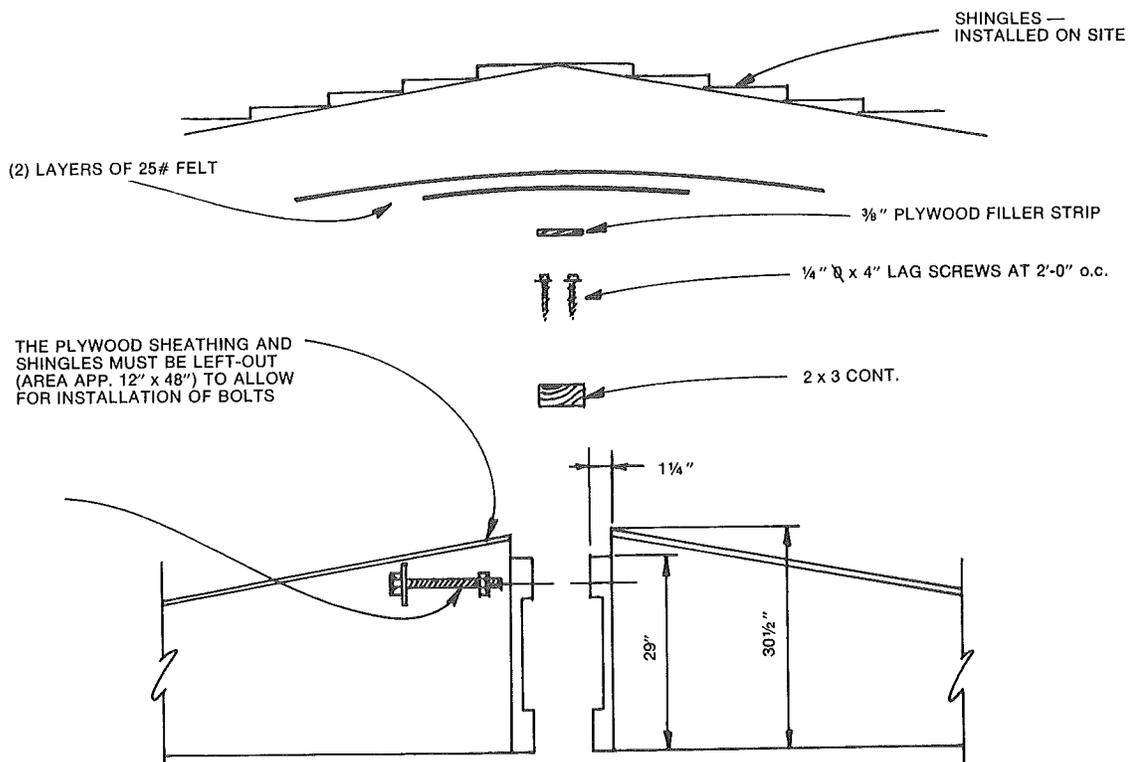


ILLUSTRATION 9D — ALTERNATE ROOF MARRIAGE CONNECTION

SECTION 3

UTILITY SYSTEM CONNECTIONS AND TESTING

GENERAL

Before leaving the factory, the gas, water, and drain line systems of your home have been tested for leaks. In addition, the electrical system has been thoroughly tested. However, prior to connecting these systems to their supply, another test is recommended to insure that these systems are functioning properly after your home has been set up. Following are the procedures to follow in conducting these tests. On a multi-width unit (for example double wide) all utility connections between units should be made as detailed in the double wide set up procedures, and visually inspected before performing the following test.

All utility connections must be made by authorized service personnel who are familiar with the requirements in your local area.

WATER DISTRIBUTION CONNECTION AND TEST:

CAUTION: THE WATER SYSTEM IN YOUR MOBILE HOME IS DESIGNED FOR WATER PRESSURE NOT TO EXCEED 80 PSI. IF THE WATER PRESSURE FROM THE SUPPLY SOURCE EXCEEDS, OR MAY EXCEED 80 PSI, A PRESSURE REDUCING VALVE MUST BE INSTALLED.

Connect the water supply to the mobile home water inlet. Check the water distribution system and the supply connections for evidence of leakage. If your home is not equipped with a master water shut off valve, one must be installed between the home and the supply source. This valve must be either a full port gate or full port ball valve with threaded or solder joints.

NOTE: IN AREAS SUBJECT TO FREEZING, THE EXPOSED WATER PIPE MUST BE PROTECTED AND ELECTRICAL RECEPTACLE IS PROVIDED CONVENIENT TO THE POINT OF CONNECTION. TO PREVENT FREEZING, WRAP THE EXPOSED PIPE WITH HEAT TAPE LISTED FOR USE WITH A MOBILE HOME. AS AN ALTERNATE, THE PIPE MAY BE WRAPPED WITH INSULATION. INSULATION SHOULD NOT BE WRAPPED OVER THE HEAT TAPE.

IF YOUR HOME IS NOT EQUIPPED WITH AN INSULATED WATER HEATER DOOR, THE PIPES IN THE WATER HEATER COMPARTMENT SHOULD BE INSULATED.

DRAINAGE SYSTEM TEST:

Connect the drainage piping system to the lot or site inlet and test by allowing water to flow into all fixtures including the clothes washer standpipe (if applicable), for a period of three minutes. Check for any evidence of leakage in the drainage piping system.

NOTE: SOME COMPONENTS OF THE DRAIN SYSTEM MAY BE SHIPPED LOOSE WITH YOUR HOME TO PROTECT THEM FROM IN TRANSIT DAMAGE. ALL NECESSARY ABS PIPE AND PIPINGS ARE PROVIDED TO BRING THE ENTIRE DRAIN SYS-

TEM TO ONE DISTRIBUTION POINT. THESE FITTINGS AND PIPE SHOULD BE INSTALLED BY QUALIFIED PERSONNEL USING CEMENT SUITABLE FOR ABS PIPE. IN ORDER TO ASSURE PROPER DRAINAGE, AND TO PREVENT FREEZING, DRAIN PIPES MUST BE SUPPORTED AT APPROXIMATELY FOUR FOOT INTERVALS, AND A SLOPE OF NOT LESS THAN 1/4" PER FOOT SHOULD BE MAINTAINED. IF SLOPE IS LESS THAN 1/4" PER FOOT (BUT NEVER LESS THAN 1/8" PER FOOT) A CLEANOUT MUST BE INSTALLED.

GAS PIPING SYSTEM TEST:

CAUTION: THE GAS PIPING SYSTEM IN YOUR MOBILE HOME IS DESIGNED FOR A PRESSURE NOT TO EXCEED 14 INCHES WATER COLUMN (1/2 PSI). IF GAS FROM SUPPLY SOURCE EXCEEDS, OR MAY EXCEED THIS PRESSURE A PRESSURE REDUCING VALVE MUST BE INSTALLED.

CAUTION: DO NOT OVER PRESSURE GAS PIPING SYSTEM AS DAMAGE MAY RESULT.

For safe and efficient operation of gas appliances, the design pressure limitations should not be exceeded. For natural gas systems, the gas pressure should not exceed 10 1/2" water column and should not be less than 7 inches water column. For LPG systems, the pressure should not exceed 14 inches water column or be less than 11 inches water column.

Connect a properly sized gas supply connector from the gas supply line to the mobile home gas piping inlet. Check that all appliance shut off valves are open and all appliance burner valves closed. Pressurize the gas piping system by opening the main gas shut off valve. Check all appliance connections and the gas inlet connection for leaks with soapy water or bubble solution.

Visually check gas appliance vents to insure that they have not been dislodged in transit and are securely connected to the appliance.

ELECTRICAL SYSTEM TEST:

CAUTION: ELECTRICAL SYSTEM CONNECTION AND TESTING MUST BE PERFORMED ONLY BY QUALIFIED ELECTRICAL SERVICE MAN USING APPROVED ELECTRICAL TEST EQUIPMENT.

The following test should be conducted before connecting to the power source.

A continuity test with all branch circuit breakers and switches controlling individual outlets in the on position. There should be no evidence of connection between any of the supply conductors (including neutral) and the grounding circuit. In addition, all non-current carrying metal parts of the electrical system including fixture, appliances, and the chassis of the mobile home should be tested for continuity with the grounding circuit.

DRYER INSTALLATION:

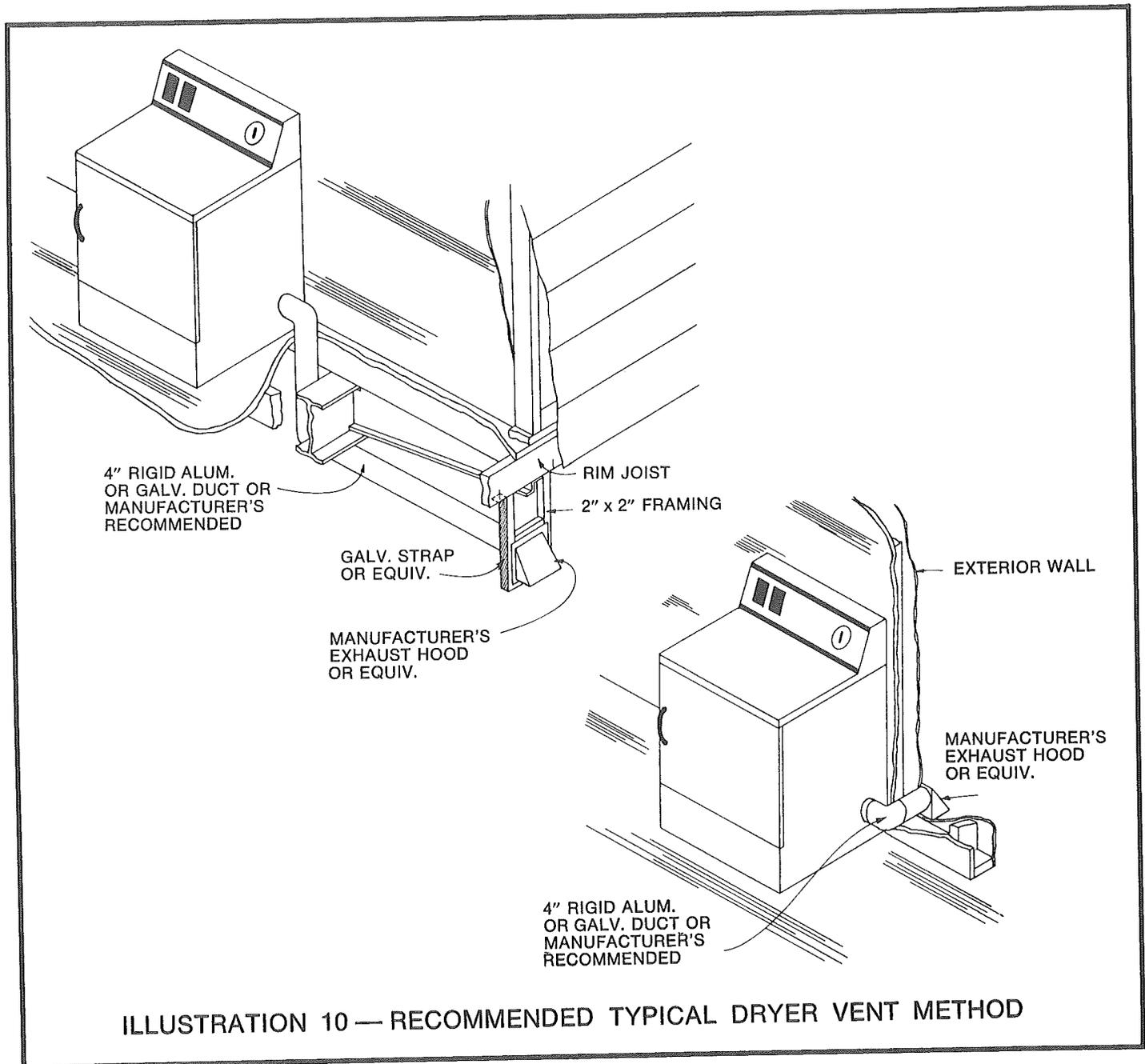
If your home is equipped with a clothes dryer, it must be exhausted to the outside by a moisture-lint exhaust system.

CAUTION: THIS EXHAUST SYSTEM MUST NOT TERMINATE UNDER THE HOME.

All required components and fittings are provided in

the home. An opening in the floor is provided. Typical dryer exhaust connections are illustrated on the next page. After the duct is installed, the openings in the floor (both inside and outside) must be caulked or sealed.

If your home is not equipped with a dryer, but an electrical or gas outlet is provided for one, then the opening in the floor or wall is provided. Installation of the exhaust system must be in accordance with the dryer manufacturer's installation instructions.



AIR CONDITIONER INSTALLATION:

If you are having a central air conditioner installed, certain precautions must be noted:

1. If the air conditioner is to be connected to the heating duct in your home, an automatic damper must be installed to prevent cold air from passing

through the heating appliance.

2. The installation must prevent heating air from entering the cooling appliance and connecting ducts.

3. The installation must not permit simultaneous operation of the heating and cooling appliances.

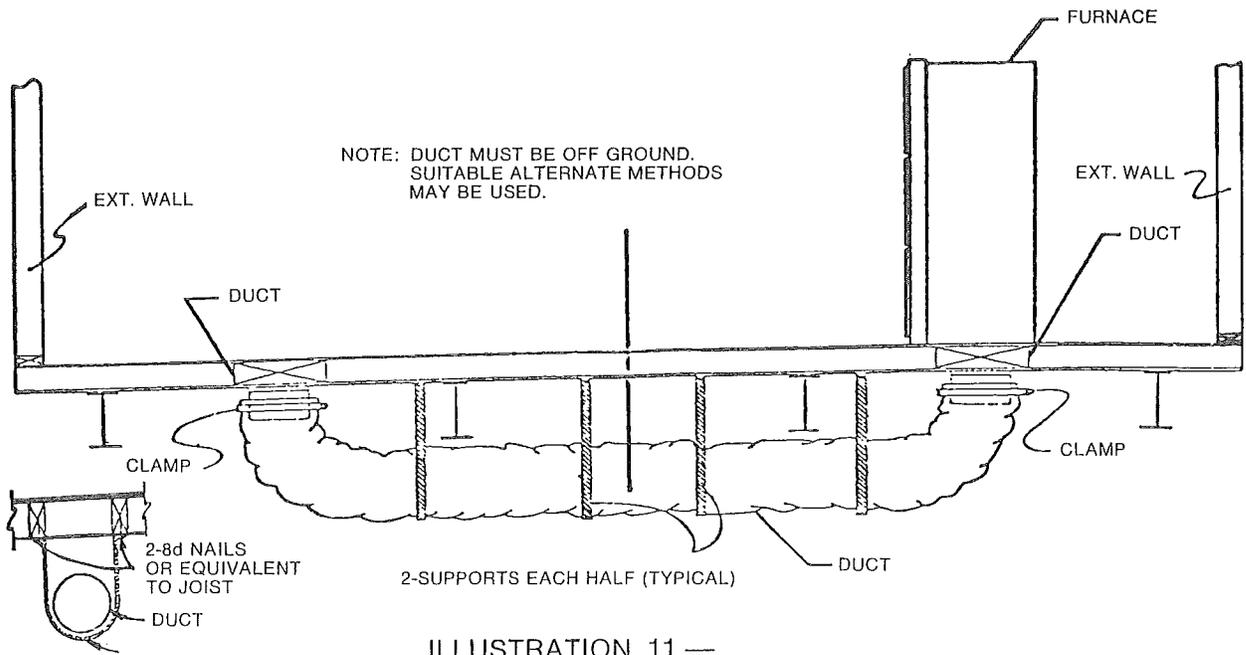


ILLUSTRATION 11 —
TYPICAL CROSS-OVER SYSTEM

DETAIL

NOTE: If a remote air conditioner is installed, dampers must be provided per Section 280.709(8)(G) of the Federal Standard for Mobile Homes.

1. Cross over duct to be 10 in. diameter minimum or equivalent area with R-4 insulation and perm rating of one or less.
2. Duct to be clear of ground.

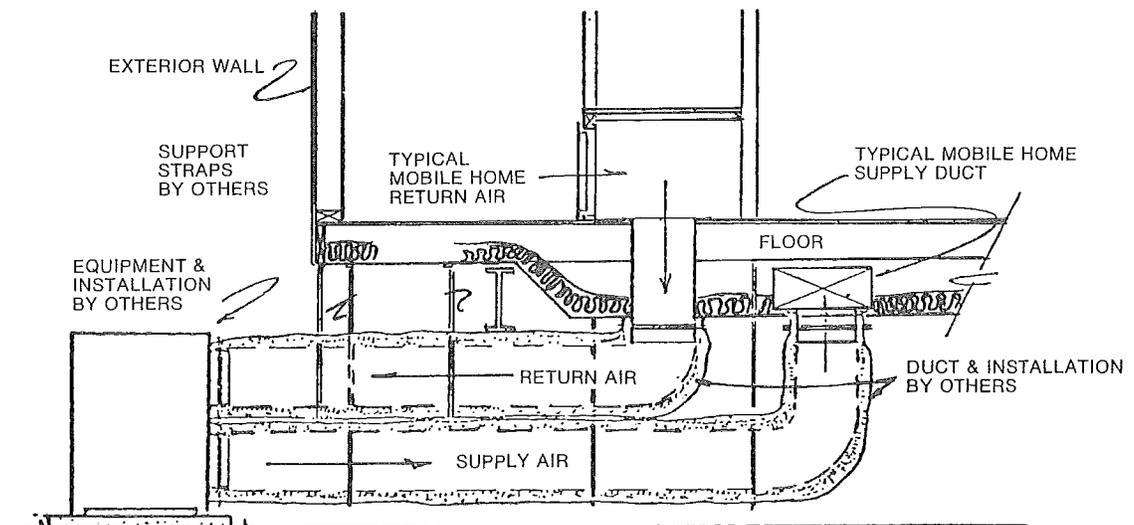


ILLUSTRATION 12 — TYPICAL INSTALLATION WHEN HEATING AND/OR AIR CONDITIONING EQUIPMENT IS FURNISHED AND INSTALLED BY OTHERS

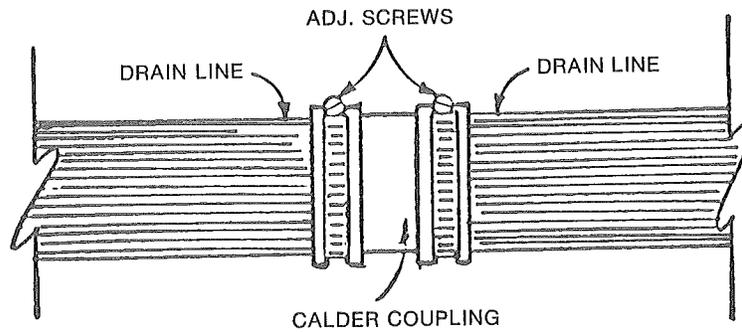


ILLUSTRATION 13A — TYPICAL DRAIN CONNECTOR

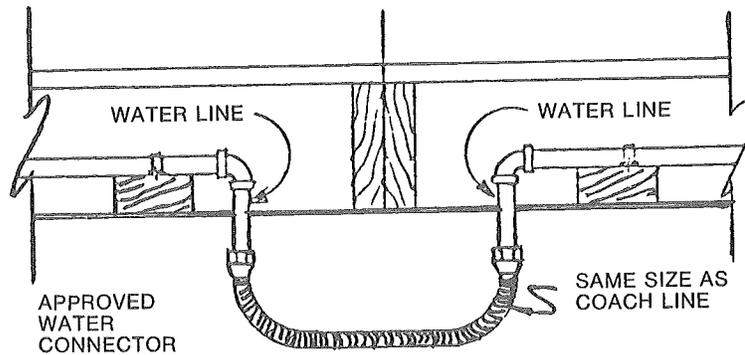


ILLUSTRATION 14A — TYPICAL WATER LINE CROSSOVER CONNECTION

NOTE: If freezing conditions exist wrap water connector with insulation. Use water connectors supplied by manufacturer where applicable.

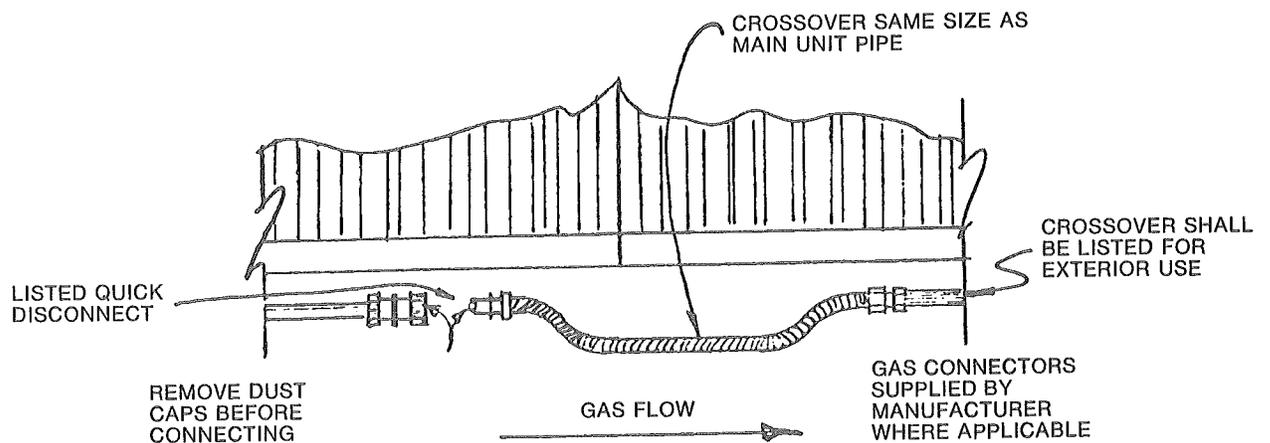


ILLUSTRATION 15 — TYPICAL GAS LINE CROSSOVER

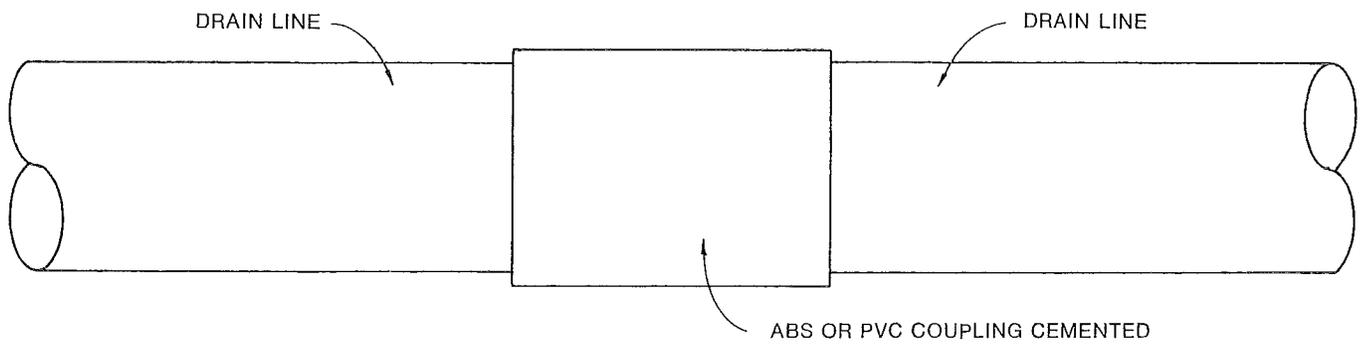
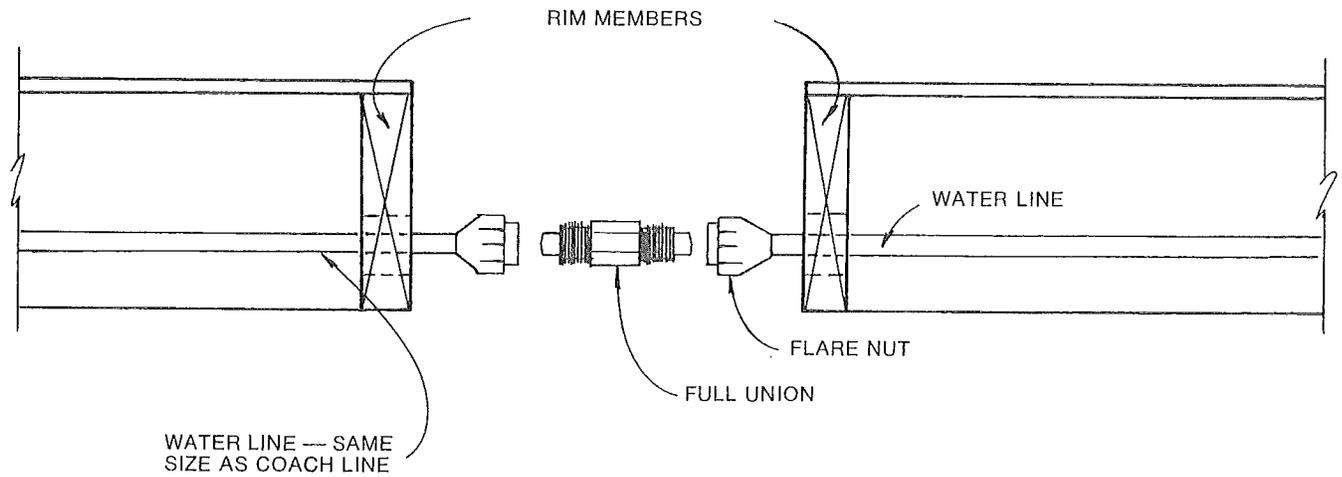
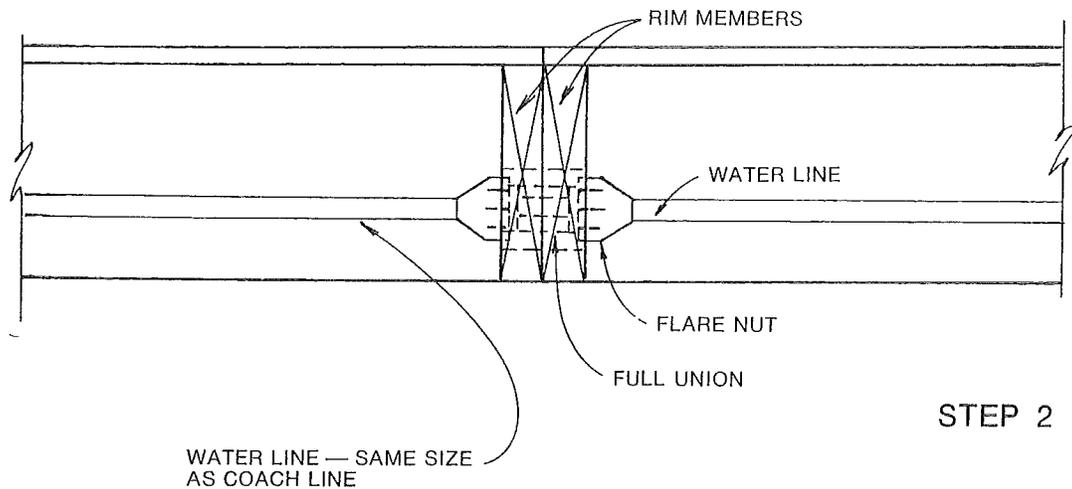


ILLUSTRATION 13B — ALTERNATE DRAIN CONNECTOR



STEP 1



STEP 2

ILLUSTRATION 14B — WATER LINE CROSSOVER CONNECTION

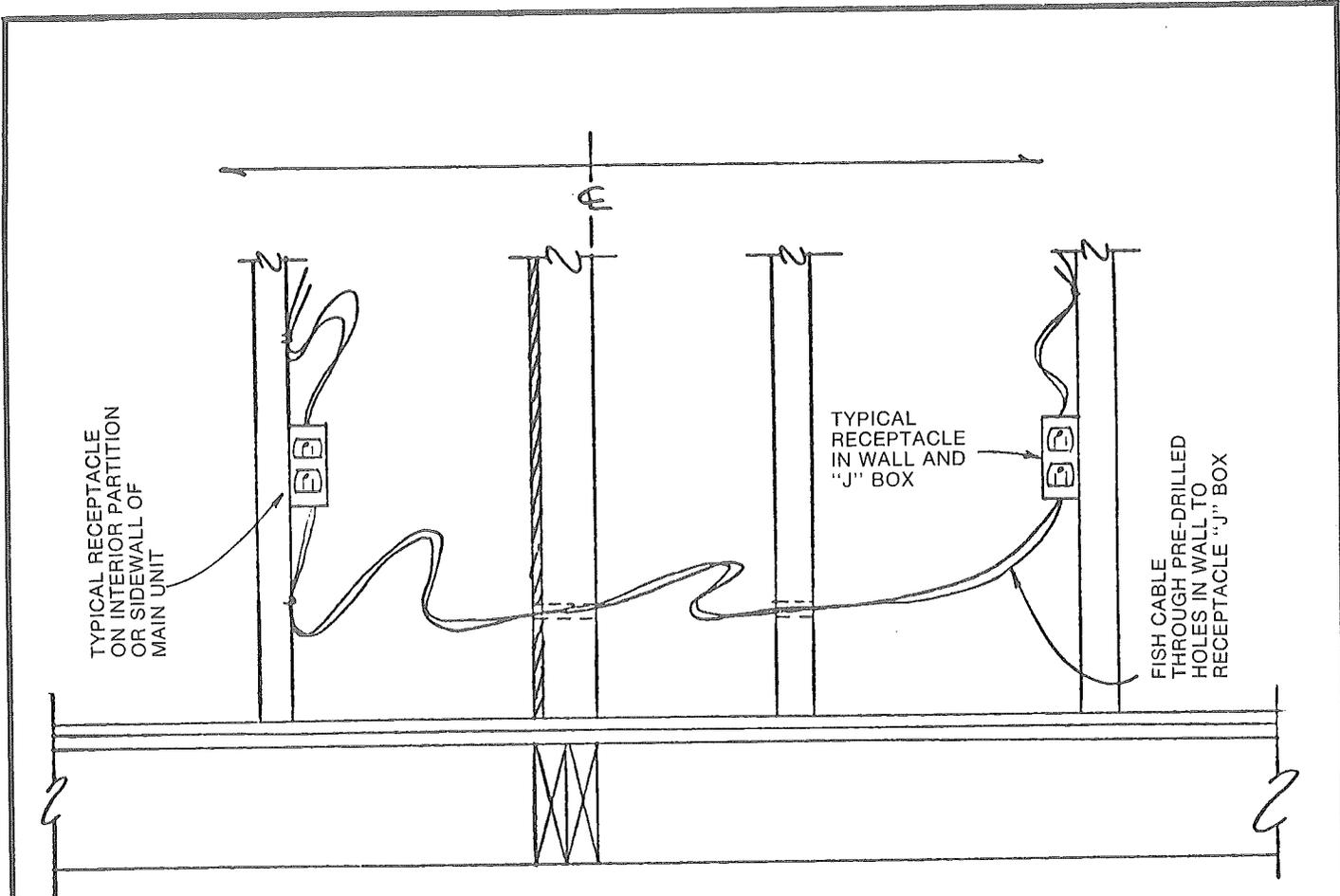
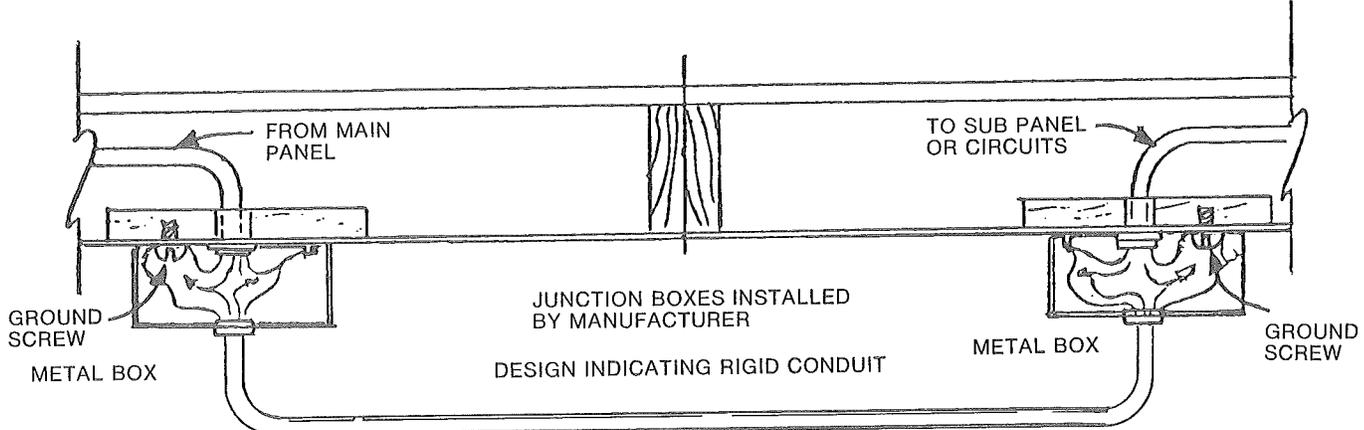
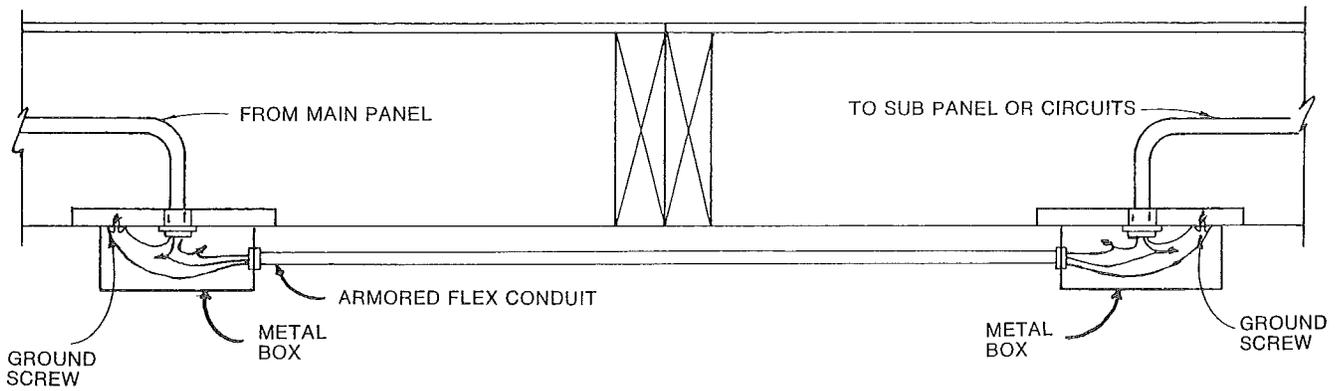


ILLUSTRATION 16A — TYPICAL ELECTRICAL CROSSOVER



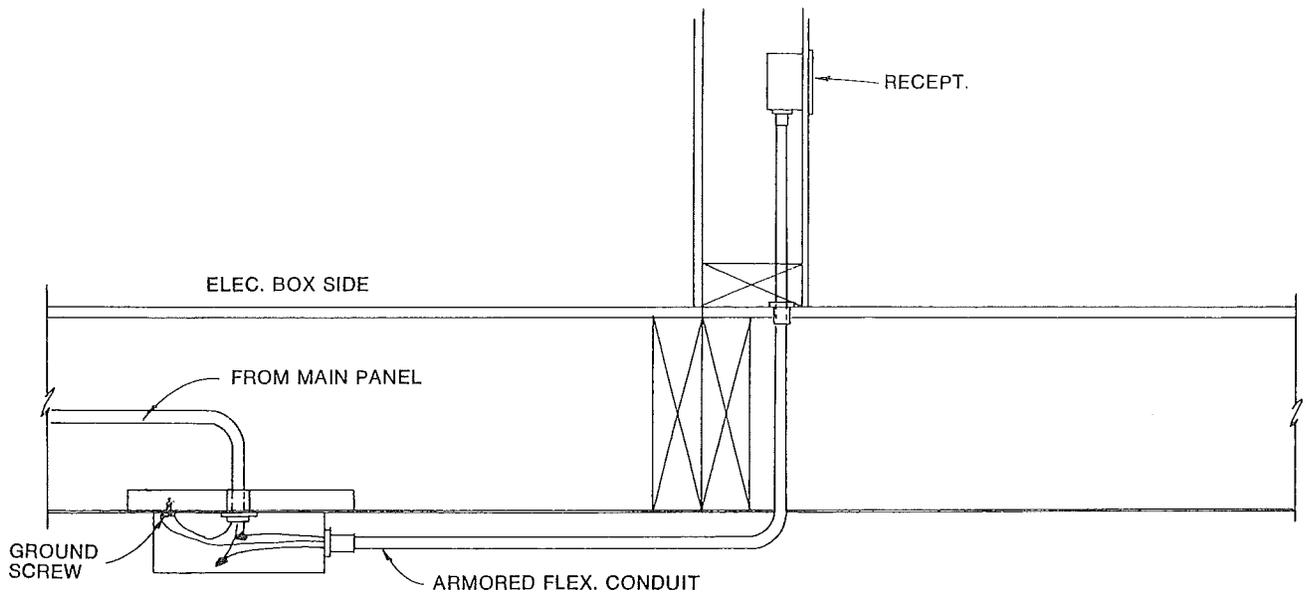
NOTE: To ensure circuit continuity, connect matching color coded wires with approved splicing devices or methods per NEC (1975) 110-14(b).

ILLUSTRATION 16B — ALT. ELECTRICAL CROSSOVER



JUNCTION BOXES INSTALLED BY MANUFACTURER

ILLUSTRATION 16C — ALTERNATE ELECTRICAL CROSSOVER



JUNCTION BOXES INSTALLED BY MANUFACTURER

ILLUSTRATION 16D — ALTERNATE ELECTRICAL CROSSOVER

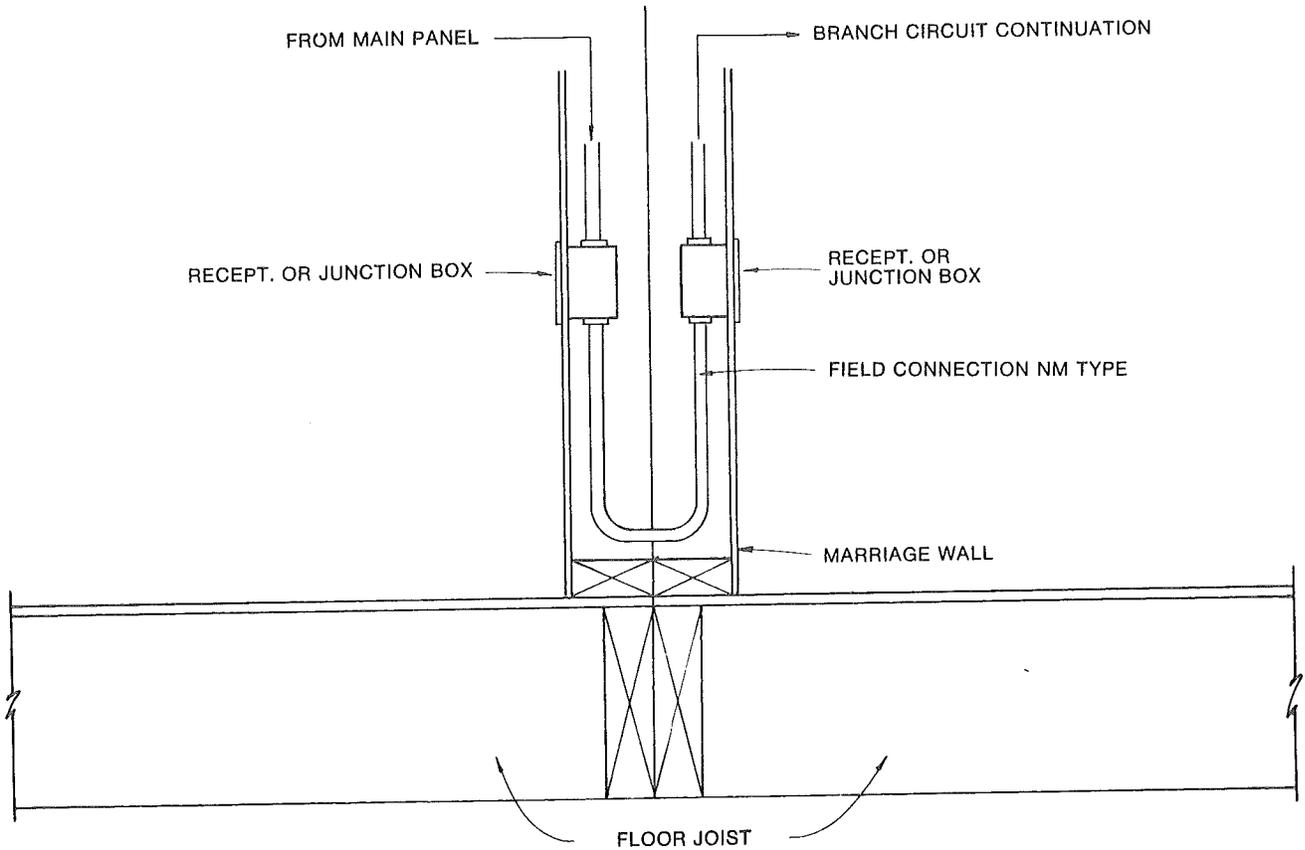
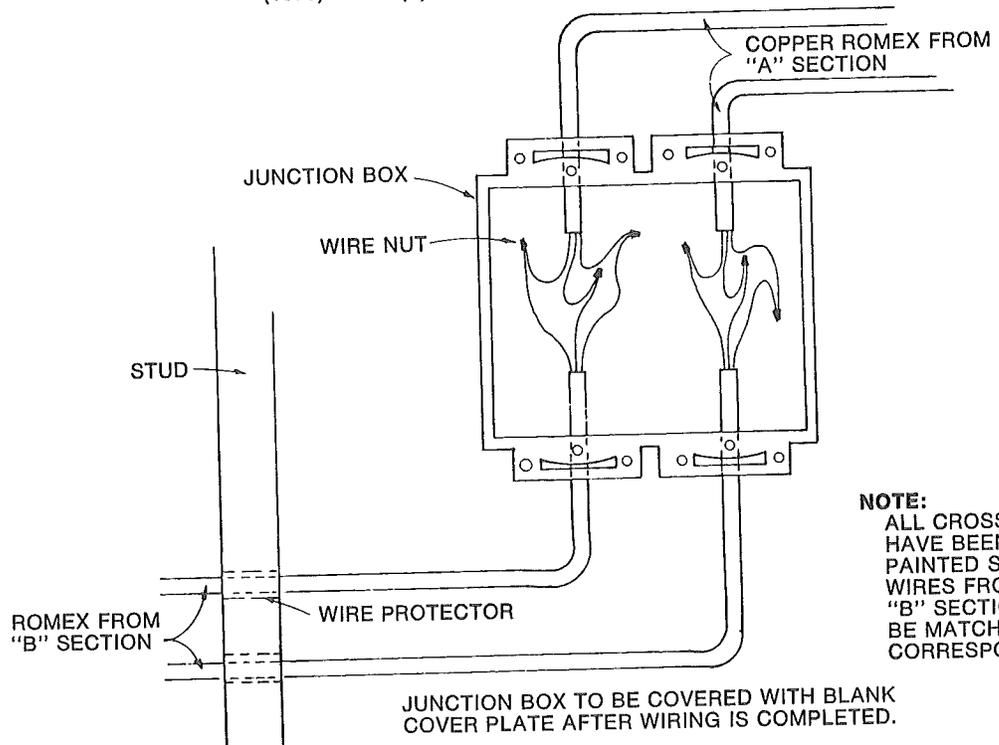


ILLUSTRATION 16E — ALTERNATE ELECTRICAL CROSSOVER

NOTE: To insure circuit continuity, connect matching color coded wires with approved splicing devices or methods per National Electric Code (1975) 110-14(b).



NOTE:
ALL CROSSOVER WIRES
HAVE BEEN MARKED WITH
PAINTED STRIPS, THE
WIRES FROM THE "A" AND
"B" SECTIONS MUST
BE MATCHED BY
CORRESPONDING MARKS.

JUNCTION BOX TO BE COVERED WITH BLANK
COVER PLATE AFTER WIRING IS COMPLETED.

ILLUSTRATION 16F — ALTERNATE ELECTRICAL CROSSOVER

NOTE: HORIZONTAL SECTIONS OF DRAIN TO BE MINIMUM OF 1/4" PITCH PER FOOT AND/OR TO COMPLY WITH LOCAL ENFORCING AGENCY/CODES, ETC.

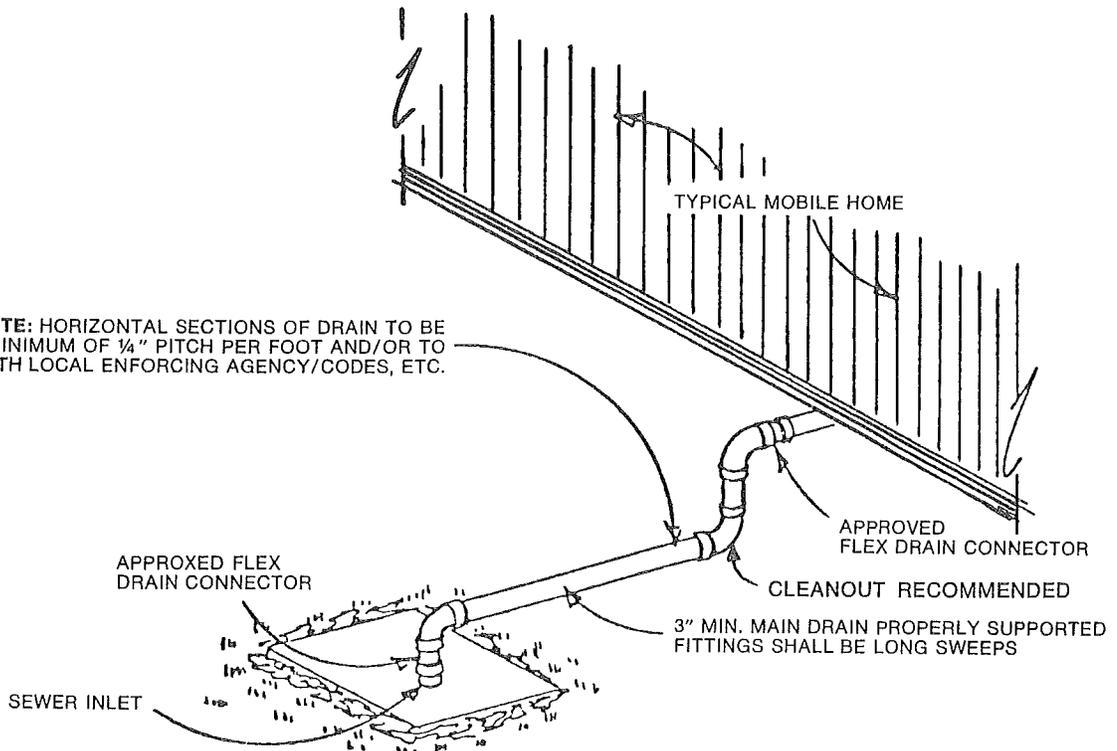


ILLUSTRATION 17 — TYPICAL METHOD OF MAIN DRAIN @ SEWER

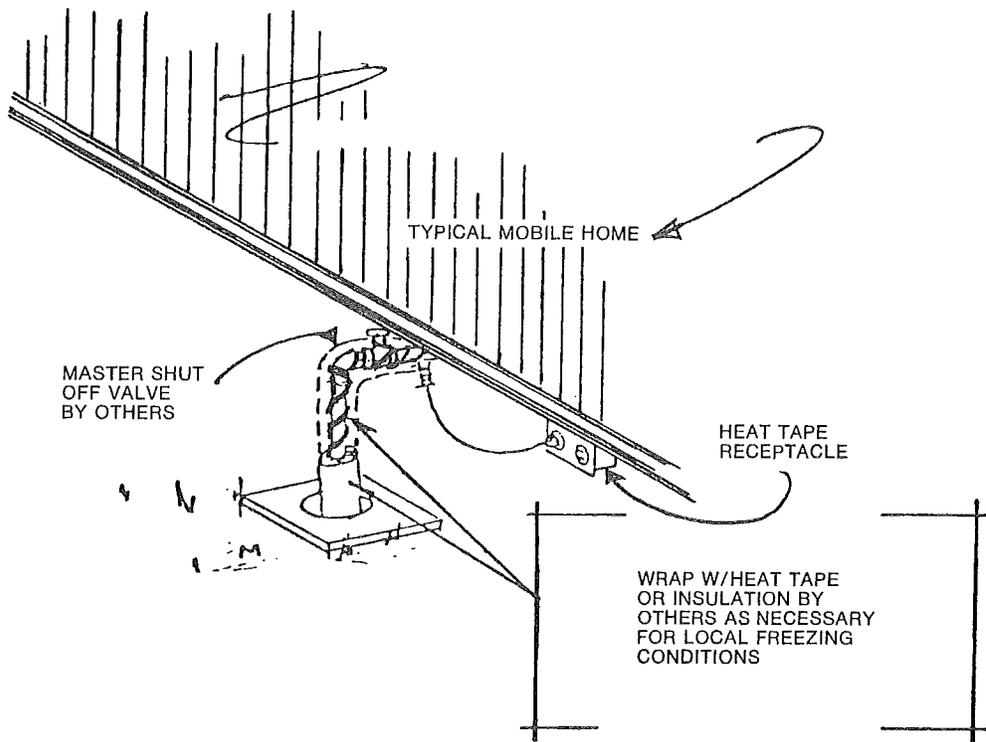
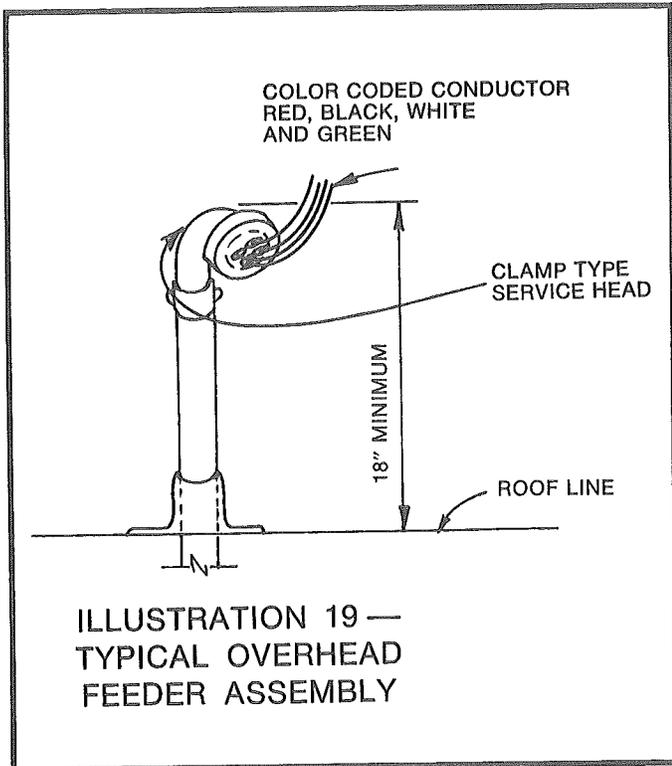
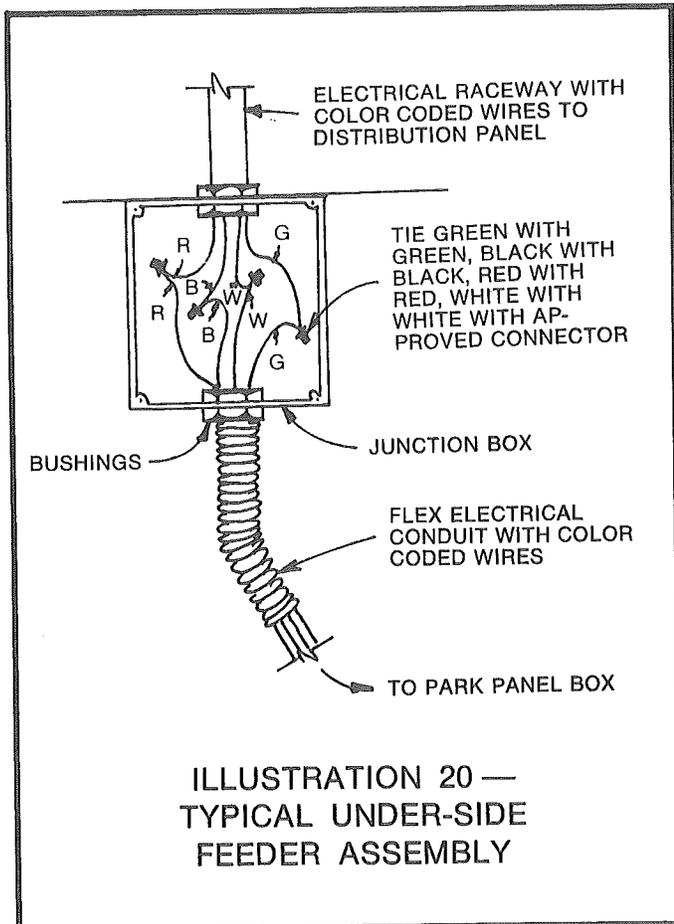


ILLUSTRATION 18 — TYPICAL WATER CONNECTION



**TABLE 4
COPPER CONDUCTOR SIZE**

Service Amps	Wire Size			Conduit Size	Box Size
	Feeder	Ground	Neutral		
100	#3	#8	#3	1½"	10 x 10 x 4
125	#1	#6	#3	2"	10 x 12 x 4
150	#0	#6	#3	2"	10 x 12 x 4
200	#000	#4	#3	2"	10 x 12 x 4
Aluminum Conductor Size					
100	#1	#6	#1	1½"	10 x 10 x 4
125	#00	#4	#1	2"	10 x 12 x 4
150	#000	#4	#1	2"	10 x 12 x 4
200	#250	#4	#1	2"	10 x 12 x 4



**TABLE 5
JUNCTION BOX SIZE**

For straight pulls the length of the box shall not be less than eight times the trade diameter of the largest raceway.

For angle pulls the distance between each raceway entry inside the box and the opposite wall of the box shall not be less than six times the trade diameter of the largest raceway.

Size of Feeder Conductors to be Installed, AWG or MCM	Distance Raceway Entry to Cover In.
4 - 3	2
2	2½
1	3
1/0 - 2/0	3½
3/0 - 4/0	4
250	4½
300 - 350	5

SECTION 4

SKIRTING AND CONDENSATION CONTROL

After your home has been completely set-up, it is strongly recommended that the home be skirted around the perimeter between finish grade and the lower edge of the outside wall. This will improve the appearance of your home, provide an insulating effect, and assist in control of condensation. A number of skirting systems are available from your dealer or mobile home supply.

An access door or easily removable panel must be provided. Ventilation must be provided by installing a minimum of two louvered or screened vents at opposite ends of the house. The total "free air" area of the vents

should be approximately 5% of the floor area of your home.

Prior to skirting, the soil beneath the home should be rough graded to assure drainage and prevent the pending of water. All debris should be removed and a polyethylene barrier should be installed on the ground beneath the home to prevent ground moisture from migrating into the home.

If the home is equipped with an air conditioner, the condensate drain line must be extended beyond the perimeter of the home at a slope not less than $\frac{1}{8}$ inch per foot.

FRAME CORROSION

In the course of time, your metal frame may become exposed to corrosion due to loss of paint coverage. Any bare spots on the frame may be made corrosion resistant by removing any rust with a wire brush or other appropriate

method, and touching up the paint. Paint should be a zinc chromate or asphaltic base paint, or other paints providing equivalent levels of protection against corrosion.