

FILE
COPY



Dedicated to
Customer Satisfaction

Schult Homes Corporation
P.O. Box 151
Middlebury, Indiana 46540

MULTI-WIDE INSTALLATION INSTRUCTIONS

TABLE OF CONTENTS

| | Page No. |
|---|----------|
| INTRODUCTION | 1 |
| SITE PREPARATION..... | 1 |
| ZONE MAPS..... | 2 |
| PIER & FOOTING SELECTION..... | 2 |
| PRE-MANUFACTURED PIER AND FOOTING | |
| INSTRUCTIONS AND DETAILS | 2 |
| INSTRUCTIONS FOR PIERS AND FOOTINGS | 2 |
| PERMANENT FOUNDATIONS..... | 3 |
| STRUCTURAL CONNECTIONS..... | 10 |
| FLOORS | 10 |
| ENDWALLS | 11 |
| EXTERIOR ROOF..... | 11 |
| INTERIOR ROOF..... | 12 |
| EXTERIOR CLOSE-UP | |
| FLOOR..... | 12 |
| METAL ROOF..... | 12 |
| SHINGLED ROOF..... | 12 |
| END WALL (VERTICAL METAL) | 13 |
| ENDWALL (LAP SIDING)..... | 13 |
| END WALL (HARDBOARD)..... | 13 |
| INTERIOR CLOSE-UP | |
| WALLS | 13 |
| CEILING..... | 14 |
| CROSSOVER UTILITY CONNECTIONS | |
| HEAT DUCT..... | 15 |
| ELECTRICAL..... | 15 |
| WATER LINES | 15 |
| GAS LINES..... | 15 |
| TIE DOWN INSTRUCTIONS..... | 16 |
| UTILITY HOOK-UP & TESTING | |
| WATER SUPPLY SYSTEM..... | 18 |
| DRAINAGE SYSTEM | 19 |
| ELECTRICAL SYSTEM..... | 19 |
| GAS | 21 |
| OIL..... | 21 |
| BOTTOM BOARD PATCHING | 21 |
| OPTIONAL ITEM INSTALLATION | |
| ELECTRIC CLOTHES DRYER..... | 22 |
| FIREPLACE..... | 22 |
| AIR CONDITIONING..... | 23 |
| EVAPORATIVE COOLER | 23 |
| HEAT PUMP | 24 |
| HITCH & WHEEL REMOVAL | 24 |
| SKIRTING..... | 24 |
| CARPORTS & AWNINGS | 24 |

INTRODUCTION

This Schult home was engineered, constructed and inspected for conformance to the Federal Manufactured Home Construction and Safety Standards in effect on the date of manufacture. This National Standard sets forth comprehensive requirements for design construction, fire safety, plumbing, heating systems and electrical systems for factory built homes designed to be used as dwellings.

Consult with building officials in your area to determine necessary permits, licenses and inspections required for installation of this home.

The step-by-step instructions which are required for the correct installation of a Schult home are presented in this booklet. Alternate methods may be covered in separate documents.

Before attempting to install the Schult home, these instructions must be carefully read and understood.

The drawings contained in these instructions are intended to be representative of the product. Designs and specifications are subject to change without notice.

NOTE: This manual is intended to instruct and to assist already qualified personnel in the proper installation of a Schult home. It is not intended to enable someone unfamiliar with home set-up to perform the installation.

NOTE: The words "should" or "may" in this manual indicate recommendations but not requirements. The words "shall" or "must" indicate requirements that must be adhered to.

SITE PREPARATION

The selected home site must be graded and sloped to provide proper drainage.

NOTE: The area under the home must be sloped to prevent water accumulation. This is to prevent excessive humidity in the home.

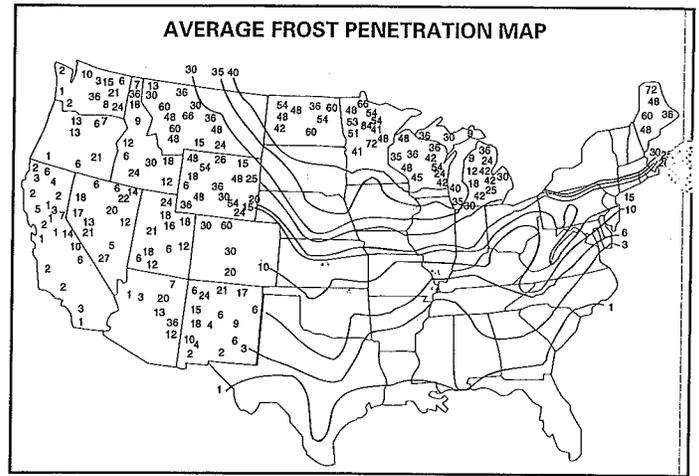
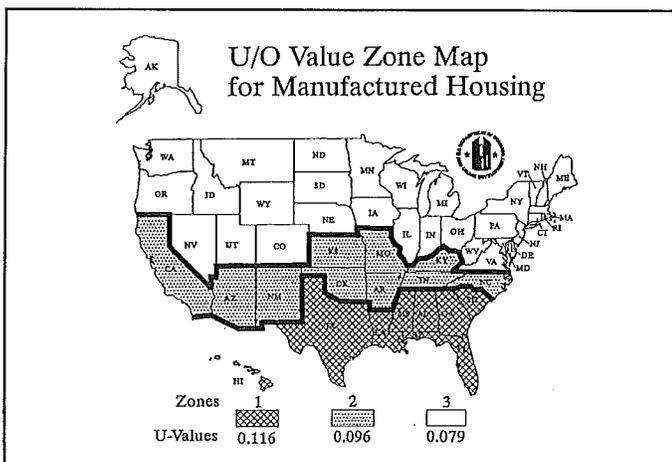
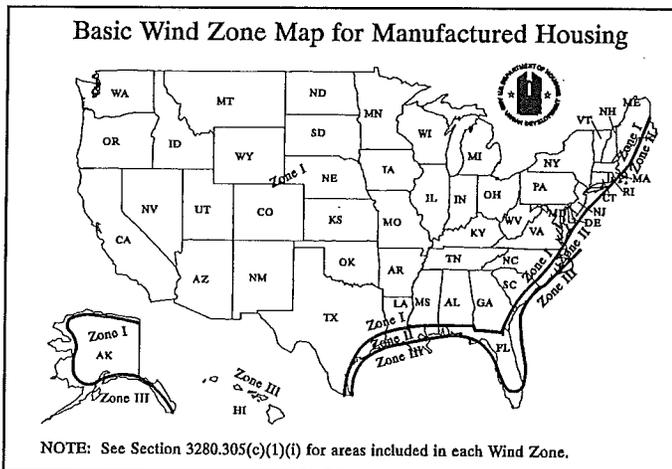
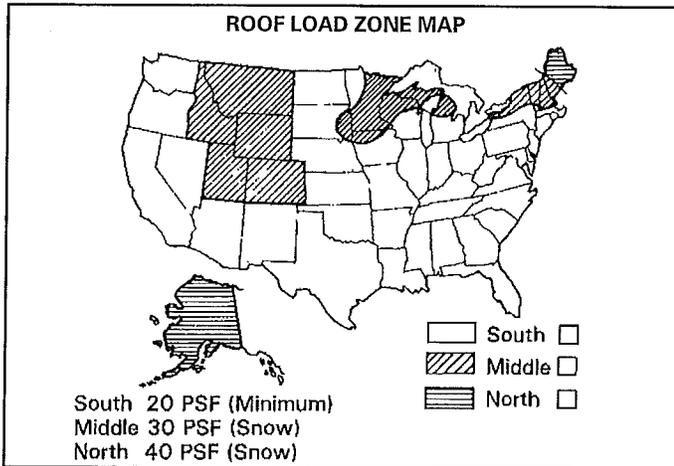
NOTE: If skirting is to be installed, it is recommended that the entire area under the home be covered with a blanket of Visqueen. This is to prevent excessive humidity in the home. The Visqueen should be a minimum of 6 mil thick and be overlapped 6" at all joints.

ZONE MAPS

The following Zone Maps will help you make installation decisions with regard to prevailing weather in the zone where the home is to be located:

NOTE: Do not install your home in a zone that requires greater loads or greater climate zone requirements than those on the Compliance Certificate. You may, however, install a home in a zone requiring lesser loads or climate requirements.

1. From the following maps, determine and mark the zones where the Schult home is to be located. This information will be required to determine information from other charts and tables in this manual.



PIER AND FOOTING SELECTION

The piers used must have a capacity great enough to transmit the vertical load, which includes the weight of the home, its furnishings, and temporary roof loading to the foundation surface below it. If the load imposed is greater than the capacity of the pier, then two or more piers may be used. The total capacity of the piers must be equal to or greater than the load to be transmitted.

PRE-MANUFACTURED PIER AND FOOTING INSTRUCTIONS AND DETAILS.

The following details and instructions were created to assist the setting and placement of a manufactured home using the many pre-manufactured piers and footings available to retailers and home installers.

For some time, many states and regional authorities have recognized the availability of such material and have written state or local approved instructions on how to properly set a manufactured home using these materials.

The following instructions are generic in nature. These may be used when there are no state or regional approvals available. If there are state or regional approvals available, and if they reflect the local conditions and are less restrictive than these requirements, they may be used in place of these instructions. In all cases, these instructions pre-empt other more restrictive state rules and regulations regarding the use of pre-manufactured piers and footing.

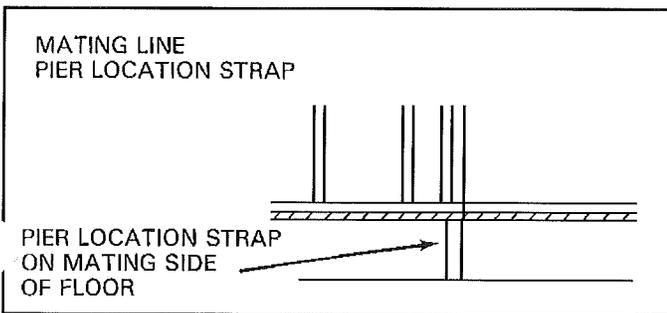
This method of pier support is suitable for FHA Title I financing. Do not use this method for homes financed under FHA Title II.

A form has been included to assist you in determining pier and footing sizes and loads based on the following instructions. Completing the form as you go will help to avoid confusion since this gets somewhat technical.

INSTRUCTIONS FOR PIERS AND FOOTINGS

- 1) First you must determine the design load criteria for the site where the manufactured home will be installed. The soil bearing capacity must be determined. This is usually determined by the local building official. If there is no building official or the soil bearing capacity is unknown, refer to the chart entitled "TYPES OF SOILS AND THEIR DESIGN PROPERTIES."

- 2) Determine the roof load for the area where the home is being installed from the "ROOF LOAD ZONE" map.
- 3) From the "I-BEAM PIER SPACINGS" chart, select the home width and determine the footing size you wish to use. A pier and footing must be installed within 16" of the end of each I-beam near the endwalls of the home. Using the chart, move horizontally in the row reflecting the footing size chosen until you find the column listing the proper roof load zone and soil bearing capacity. The value listed in the chart is the maximum allowable spacing of the remaining intermediate piers and footings. If the spacings do not please you, select another footing size and repeat the process. Once the footings are installed, select a pier type from the Typical I-beam pier supports chart and place them on the footings.
- 4) Multi-wides require additional piers under the marriage wall at the ends of open spans to support the concentrated roof column loads. The location of these additional piers can be determined in any of the following ways:
 - a) A pier location strap or tag may be found on the underside of the floor at each required location.



- b) A technical sheet may have been provided listing the pier location dimensions.
- c) If neither a) nor b) above have been provided, piers should be located under the marriage wall at the ends of any openings over 4'-0" wide.

Once the pier locations have been established, you must determine the type of piers and size of footings to be used. This can be determined using either of the following methods:

- a) If a technical sheet has been provided, the *minimum pier and footing capacity* will be listed for each pier location.
- b) If a technical sheet is not available, the *minimum pier and footing capacity* can be determined by measuring the open spans in the marriage wall.

As explained above, a pier is required under the marriage wall at the ends of all open spans over 4'-0" wide. Measure the open span distance between any two adjacent pier locations. **Note: If a pier serves as a support for two adjacent spans, use the sum of both distances.** Refer to the chart entitled "*MINIMUM PIER AND FOOTING CAPACITY MULTI-SECTION*

MARRIAGE WALL." Select the proper row in the chart by choosing the appropriate *roof load zone and home width*. Moving across the chart select the column that is equal to or larger than the measured open span. The value listed is the minimum pier and footing capacity for that particular pier and footing.

Move to the chart entitled "*MAXIMUM PIER AND FOOTING LOADS MULTI-SECTION MARRIAGE WALL.*" Find the column that matches the soil bearing capacity for your location. Move down the column until you find a value that equals or exceeds your *minimum pier and footing capacity* determined above. Moving to the left column you will get the required size of footing needed. Continue this process until you have sized all marriage wall piers and footings.

- 5) Additional footings and piers are required along the sidewall(s) at each side of individual windows and doors with rough opening greater than 48" wide. NOTE: This is not required if an outrigger has been installed by the factory at each side or if a support wall is installed between the footing or slab and the floor of the home.

Proper support for the home must allow for soil conditions in the immediate area. Pier footings must be placed on firm undisturbed soil (not loose fill) or soil which has been compacted to at least 90 percent of its maximum relative density. Pier supports may also be placed directly on concrete slabs designed for the home's placement.

Climate conditions must also be taken into account. If footings are to be placed on well drained non-frost-susceptible soil, such as coarse sand or gravel with the water table below maximum frost depth, shallow footings may be placed on firm soil, provided local jurisdiction will allow. Schult Homes Corporation should be contacted for a typical footing design under these conditions. Request alternate footing detailed drawing 34HU-4.

If footings are to be placed on frost susceptible soil, such as clay or silt, heaving or settlement may occur. Under these conditions the pier footings should be located below the frost line or the home should be provided with insulated skirting having sufficient insulation to prevent the soil under the home from freezing. Be sure to check with local authorities to verify this alternative. Schult Homes Corporation should be contacted for a typical insulated skirting design. Request alternate footing detailed drawing 34HU-4.

PERMANENT FOUNDATIONS

In the event you are considering a permanent foundation for the home, Schult Homes Corp. has a system available that would be acceptable in most areas. Drawings may be obtained by contacting the Schult Homes Corporation.

Once obtained, the drawings must be submitted to the local jurisdiction for permission, soil conditions, type of foundation construction allowed and other requirements relative to the installation.

FORM FOR DETERMINING PIER AND FOOTING LOADS AND SPACINGS

Design load criteria

| | |
|-----------------------------|---------|
| Soil bearing capacity (psf) | Fill-in |
| Roof load zone (psf) | |
| Home width (ft.) | |

I-beam piers and footings

| | |
|---|--|
| Footing size | |
| Maximum spacing of piers and footings (ft.) | |

Marriage wall piers and footings

"A" - "B" unit marriage line

| | | |
|--------------------------------------|--|--|
| Pier 1 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 2 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 3 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 4 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 5 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 6 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |

"B" - "C" unit marriage line (if applicable)

| | | |
|--------------------------------------|--|--|
| Pier 1 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 2 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 3 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 4 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 5 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |
| Pier 6 | | |
| Max. distance to adjacent pier (ft.) | | |
| Pier and footing load (lbs.) | | |

TYPES OF SOILS AND THEIR DESIGN PROPERTIES
(SOIL BEARING CAPACITY MUST BE VERIFIED BY A QUALIFIED PERSON AT EACH SITE).

| Unified soil classification system symbol | Soil description | Allowable bearing in pounds per square foot with medium compaction or stiffness ³ | Drainage Characteristics ² | Frost heave potential | Volume change potential expansion |
|---|---|--|---------------------------------------|-----------------------|-----------------------------------|
| GW | Well graded gravels, gravel sand mixtures, little or no fines. | 8000 | Good | Low | Low |
| GP | Poorly graded gravels or gravel sand mixtures little or no fines. | 8000 | Good | Low | Low |
| SW | Well graded sands, gravelly sands, little or no fines. | 6000 | Good | Low | Low |
| SP | Poorly graded sands or gravelly sands, little or no fines. | 5000 | Good | Low | Low |
| GM | Silty gravels, gravel-sand-silt mixtures. | 4000 | Good | Medium | Low |
| SM | Silty sand, sand-silt mixtures. | 4000 | Good | Medium | Low |
| GC | Clayey gravels, gravel-sand-clay mixtures. | 4000 | Medium | Medium | Low |
| SC | Clayey sands. sand-clay mixtures | 4000 | Medium | Medium | Low |
| ML | Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity. | 2000 | Medium | High | Low |
| CL | Inorganic clays of low to medium plasticity. gravelly clays, sandy clays, silty clays, lean clays. | 2000 | Medium | Medium | Medium ¹ |
| CH | Inorganic clays of high plasticity, fat clays. | 2000 | Poor | Medium | High ¹ |
| MH | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts. | 2000 | Poor | High | High |

- 1) Dangerous expansion might occur if these two soil types are dry but subject to future wetting.
- 2) The percolation rate for good drainage is over 4 inches per hour, medium drainage is 2 to 4 inches per hour, and poor is less than 2 inches per hour.
- 3) Allowable bearing value may be increased 25 percent for very compact, coarse grained gravelly or sandy soils or very stiff fine grained clayey or silty soils. Allowable bearing value shall be decreased 25 percent for loose, coarse-gravelly or sandy soils, or soft, fine-grained clayey or silty soil. The following method is suggested for determining the allowable soil bearing capacity to be used in the sizing of footings. Such a method is only an approximation, and the results should be properly interpreted.
 - a. Obtain a pocket penetrometer, such as model CL-700A by Soil Test. Contact Cal-Cert Co. P.O. Box 416, Clackamas, OR 97015 or call 1-800-356-4662.
 - b. Test an area adjacent to, or within 10 feet of, the perimeter of the home.
 - c. Dig down to undisturbed soil a minimum of 4 inches. Uncover an area of at least one square foot.
 - d. Using the pocket penetrometer, take at least seven readings.
 - e. Take an average of the middle five readings, disregarding the highest and the lowest readings. Round this average down to the nearest soil bearing value. Use this value for determining minimum footing sizes.
 - f. Drive a wooden stake beside the test area so that an inspector will be able to verify the results, should the inspector desire to do so.



**MINIMUM PIER AND FOOTING CAPACITY
MULTI-SECTION MARRIAGE WALL**

| Unit Width (ft.) | Roof Load Zone (psf) | Minimum Pier Capacity (lbs.) | | | | | | | | | | |
|------------------|----------------------|---|------|------|------|------|------|-------|-------|-------|-------|-------|
| | | Distance to next pier at opposite end of marriage wall clear span (ft.) | | | | | | | | | | |
| | | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| 24W | 20 | 720 | 1080 | 1440 | 1800 | 2160 | 2520 | 2880 | 3240 | 3600 | 3960 | 4320 |
| | 30 | 960 | 1440 | 1920 | 2400 | 2880 | 3360 | 3840 | 4320 | 4800 | 5280 | 5760 |
| | 40 | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | 5400 | 6000 | 6600 | 7200 |
| | 80 | 2160 | 3240 | 4320 | 5400 | 6480 | 7560 | 8640 | 9720 | 10800 | 11880 | 12960 |
| 28W | 20 | 840 | 1260 | 1680 | 2100 | 2520 | 2940 | 3360 | 3780 | 4200 | 4620 | 5040 |
| | 30 | 1120 | 1680 | 2240 | 2800 | 3360 | 3920 | 4480 | 5040 | 5600 | 6160 | 6720 |
| | 40 | 1400 | 2100 | 2800 | 3500 | 4200 | 4900 | 5600 | 6300 | 7000 | 7700 | 8400 |
| | 80 | 2520 | 3780 | 5040 | 6300 | 7560 | 8820 | 10080 | 11340 | 12600 | 13860 | 15120 |
| 32W | 20 | 940 | 1410 | 1880 | 2350 | 2820 | 3290 | 3760 | 4230 | 4700 | 5170 | 5640 |
| | 30 | 1253 | 1880 | 2507 | 3133 | 3760 | 4387 | 5013 | 5640 | 6267 | 6893 | 7520 |
| | 40 | 1567 | 2350 | 3133 | 3917 | 4700 | 5483 | 6267 | 7050 | 7833 | 8617 | 9400 |
| | 80 | 2820 | 4230 | 5640 | 7050 | 8460 | 9870 | 11280 | 12690 | 14100 | 15510 | 16920 |



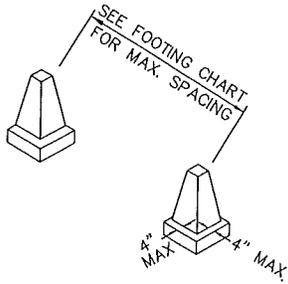
**MAXIMUM PIER AND FOOTING LOADS
MULTI-SECTION MARRIAGE WALL**

| Footing Size (in.) | Footing Area | Soil bearing capacity (psf) | | | | | | | | | | |
|---------------------|--------------|-----------------------------|------|------|-------|-------|-------|-------|-------|--|--|--|
| | | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 6000 | 8000 | | | |
| 12 x 12 x 4 CONC | 1 sf | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 6000 | 8000 | | | |
| 16 x 16 x 4 CONC | 1.78 sf | 1778 | 2667 | 3556 | 5333 | 7112 | 8890 | 10668 | 14224 | | | |
| 18.5 x 18.5 ABS | 2.38 sf | 2380 | 3570 | 4760 | 7140 | 9520 | 11900 | 14280 | 19040 | | | |
| 18.5 x 18.5 PT WOOD | 2.38 sf | 2380 | 3570 | 4760 | 7140 | 9520 | 11900 | 14280 | 19040 | | | |
| 22.5 x 22.5 PT WOOD | 3.52 sf | 3520 | 5280 | 7040 | 10560 | 14080 | 17600 | 21120 | 28160 | | | |
| 2 - 12 x 12 CONC | 2 sf | 2000 | 3000 | 4000 | 6000 | 8000 | 10000 | 12000 | 16000 | | | |
| 1 - 16 x 16 CONC | 3.56 sf | 3555 | 5333 | 7111 | 10667 | 14221 | 1777 | 21332 | 28443 | | | |
| 2 - 18.5 x 18.5 ABS | 4.72 sf | 4720 | 7080 | 9440 | 14160 | 18880 | 23600 | 28320 | 37760 | | | |

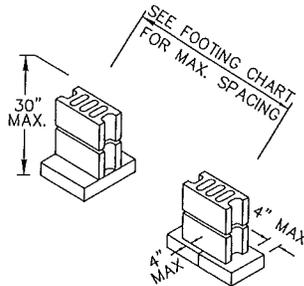
TYPICAL PIER DETAILS

SINGLE PIER: TYPICAL I-BEAM OR MARRIAGE WALL PIER SUPPORTS

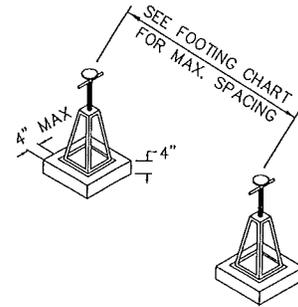
ALSO MAY BE USED FOR EXTERIOR WALL SUPPORT IF REQUIRED.



SINGLE FOOTING WITH CONCRETE CONE PIERS



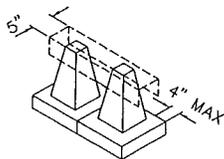
SINGLE OR DOUBLE FOOTING WITH 8" X 8" X 16" CONCRETE BLOCK PIERS



SINGLE FOOTING WITH STEEL ADJUSTABLE PIERS

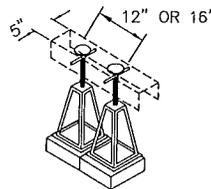
DOUBLE PIER: TYPICAL MULTI-SECTION MARRIAGE WALL PIER SUPPORTS

INSTALL 3/8"x3"x5" "C"-CHANNEL WHEN PIER LOAD EXCEEDS 2500 lbs.

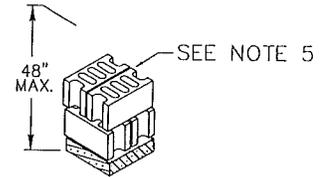


FOOTINGS DOUBLED FOR MARRIAGE WALL PIER SUPPORT WITH CONCRETE CONE PIERS.

INSTALL 3/8"x3"x5" "C"-CHANNEL WHEN PIER LOAD EXCEEDS 2500 lbs.



FOOTINGS DOUBLED FOR MARRIAGE WALL PIER SUPPORT WITH STEEL PIERS.



16"x16" FOOTING MINIMUM WITH DOUBLE CONCRETE BLOCKS FOR MARRIAGE PIER SUPPORT. ALSO, REPLACES SINGLE BLOCKS WHEN PIER HEIGHT IS GREATER THAN 30" BUT NO GREATER THAN 48".

GENERAL NOTES:

- 1) These are typical examples of readily available footings and precast piers. Any combination or example may be used providing they meet the minimum requirements and are designed for supporting a manufactured home.
- 2) The footing must not extend beyond the periphery of the pier base more than its depth (4" typically) without reinforcement.
- 3) Maximum pier height from top of footing to bottom of I-beam (or floor at marriage line.) shall be 30" for single stack of concrete blocks and 48" for double stack of concrete blocks
- 4) See Treated Wood Footing detail for alternate.
- 5) Piers over 48" high from grade to bottom of frame (or floor at marriage line) must be designed by a qualified architect or engineer.



TYPICAL PIERS AND FOOTINGS

LONG DIMENSION OF PIER TO BE PLACED PERPENDICULAR TO TOP LAYER JOINT



2x10 FOOTING (18.5" X 18.5")

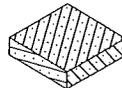
2x12 FOOTING (22.5" X 22.5")

Two layers of 2x lumber laid in alternate directions are required for footings on 2000 psf soil or less. Three layers are required for soils above 2000 psf soil bearing values. Wood shall have an AWPB-FDN grade mark. Any cut made after treatment shall be re-treated per APA product guide: Pressure Preserved Plywood, Form Q220.

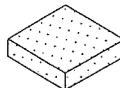
PRESSURE TREATED (PT) WOOD FOOTINGS



12" X 12" X 4" PRECAST CONC. FOOTING



16" X 16" X 4" PRECAST CONC. CONC FOOTING



18.5" X 18.5" ABS PLASTIC FOOTING



8"X8"X16" CONCRETE BLOCK



STEEL ADJUSTABLE PIERS - 5000 LBS. MINIMUM CAPACITY



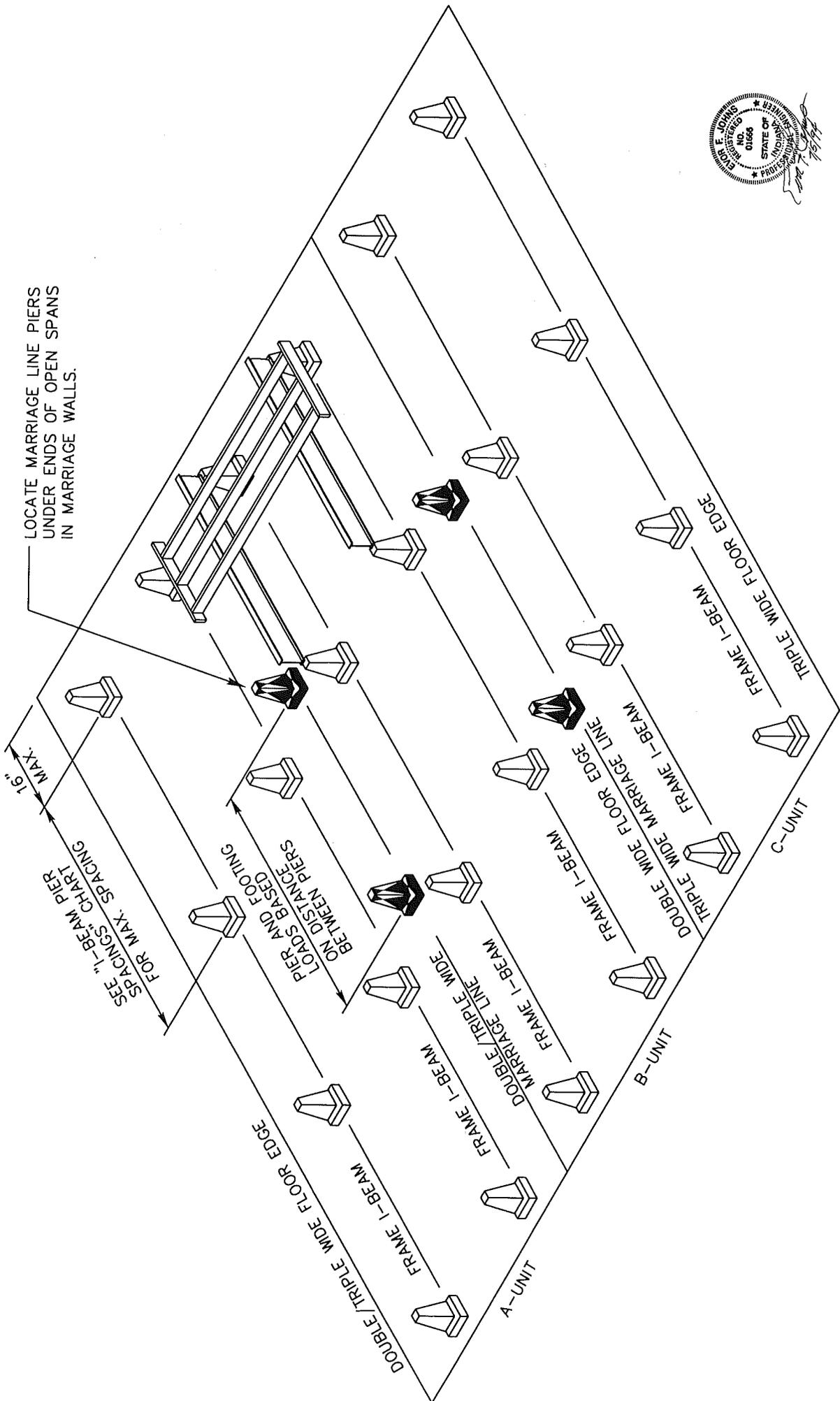
PRECAST CONCRETE PIER 2800 PSI MIN.

WEDGES:
TAPERED HARDWOOD SHIMS - TO BE DRIVEN IN TIGHTLY FROM OPPOSITE SIDES AND SHALL NOT OCCUPY MORE THAN 1" VERTICAL SPACE WHEN USED TO LEVEL UNIT.



PIER CAP:
4" SOLID CONCRETE OR 3/4" NOMINAL PRESSURE TREATED LUMBER.

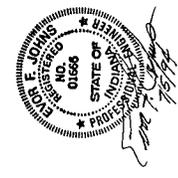
SHIMMING CONCRETE PIERS



LOCATE MARRIAGE LINE PIERS UNDER ENDS OF OPEN SPANS IN MARRIAGE WALLS.

16" MAX.
 SEE "I-BEAM PIER SPACINGS" CHART FOR MAX. SPACING

PER AND FOOTING ON DISTANCE BASED LOADS BETWEEN PIERS



MULTI-WIDE PIERS & FOOTINGS

SEE "INSTRUCTIONS FOR PIERS AND FOOTINGS"

STRUCTURAL CONNECTIONS

A. Floor Connections

The floors must be fastened together two different ways.

First, **Lag bolts** must be installed from one rim joist to the other to hold the floors flush. There is no minimum quantity of lags needed. Install enough to hold the floors flush, especially in the open areas.

Second, **Pre-punched metal straps** must also be installed on the bottom of the floor across the mating line joint.

Lag Bolts

Option #1

Minimum lag bolt sizes:

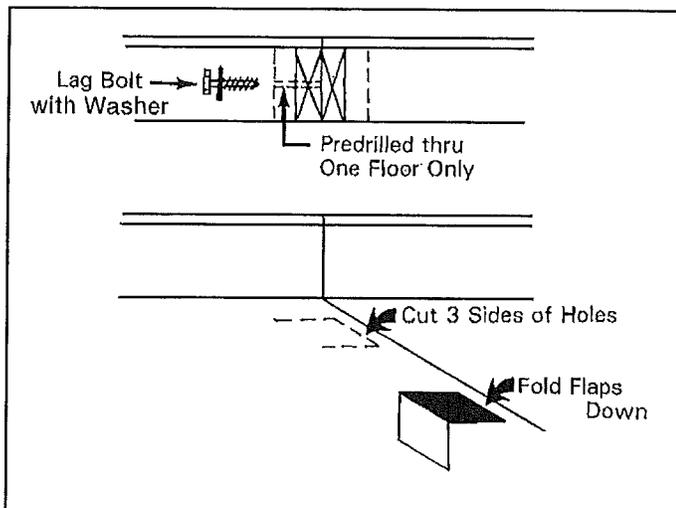
Single rim joists— $\frac{3}{8}$ " x 3"

Double rim joists— $\frac{3}{8}$ " x 6"

Washers should be used on all lag bolts.

Secure floors together as follows:

1. Cut 3 sides of a 16" x 16" hole at mating line of either section at the locations for the bolt holes. Bend the bottom board flaps out of the way.
2. After flushing floors, pre-drill $\frac{3}{8}$ " holes in rim joist(s) of the section with holes in bottom board.
3. Install bolts and tighten securely.
4. Replace insulation if removed for installation of bolts.
5. Repair bottom board as specified in "Bottom Board Patching" section of this manual.



Option #2

Minimum lag bolt sizes:

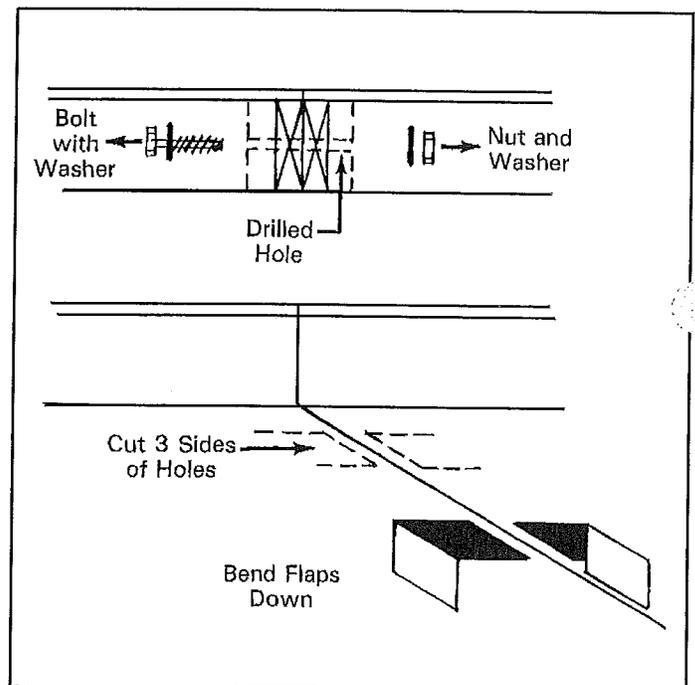
Single rim joists— $\frac{3}{8}$ " x 4"

Double rim joists— $\frac{3}{8}$ " x 7"

Washers should be used on both ends of all bolts.

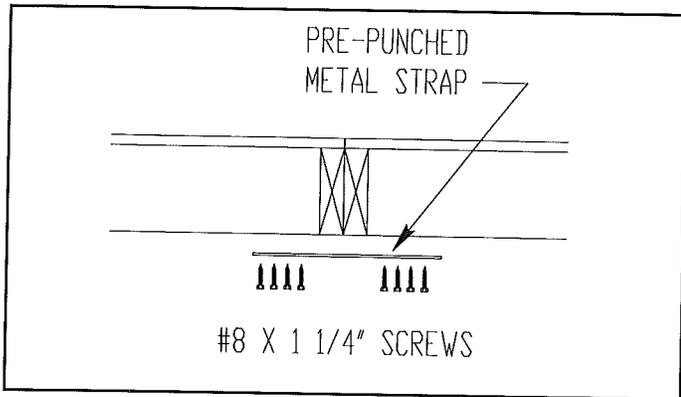
Secure floors together as follows:

1. Cut 3 sides of a 16" x 16" hole at mating line of both sections at the locations for the bolt holes. Bend the bottom board flaps out of the way.
2. After flushing floors, drill $\frac{3}{8}$ " holes through all rim joists.
3. Install bolts and tighten securely.
4. Replace insulation if removed for installation of bolts.
5. Repair bottom board as specified in "Bottom Board Patching" section of this manual.



Pre-punched metal straps

Using the metal straps provided, install them at the spacings shown in the chart. The straps are to be secured to the floor joists on opposite halves using (4) #8 x 1 1/4" screws on each half.



The exterior of the roofs must be fastened together as shown below: Secure roofs together with 3/8" x 5" lag bolts spaced as needed for the roof zone the home is located in.

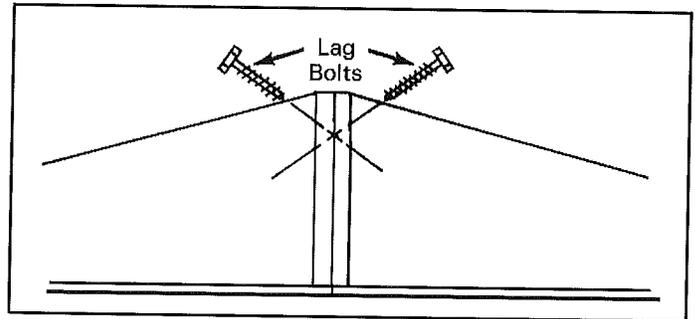
Maximum spacing of lags is as follows:

South Zone—20" O.C. on both sides

Middle Zone—16" O.C. on both sides

North Zone—12" O.C. on both sides

Install lag bolts at 45 degree angles and tighten securely.



| PRE-PUNCHED METAL STRAP SPACING | | | |
|---------------------------------|--------|--------|--------|
| UNIT WIDTH (FT.) | 24W | 28W | 32W |
| WIND ZONE I | 12'-0" | 12'-0" | 12'-0" |
| WIND ZONE II | 5'-4" | 6'-8" | 8'-0" |

B. Endwall Connections

1. Fasten endwalls of the home together with either of the following methods:
 - A. #8 x 3" screws 12" O.C.
 - B. 16d nails 8" O.C.
2. Fasteners may be installed at an angle if more than one stud is used at mating line.
3. Fasteners may be installed from outside or inside of the house, depending on the method of close-up used.

C. Exterior Roof Connections

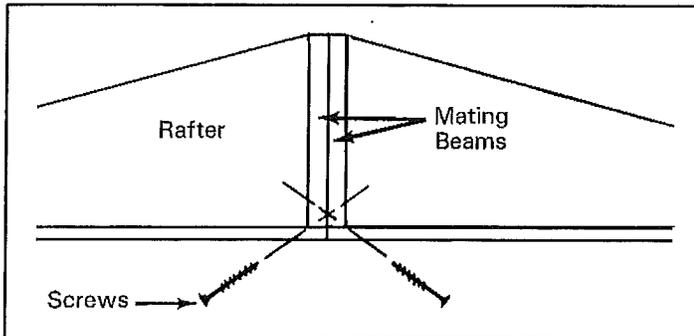
NOTE: It is important to have the ceilings flush below each rafter before the roof is fastened. One man should work inside to raise the low side, as required. By jacking under a wood post or section of steel pipe with a wood or metal pad at the top, place the base of the jack across the floor seam to distribute the load to both sections. Jack against the ceiling only in areas to be covered later with trim molding.

D. Interior Roof Connections

Interior: The interior of the roofs must be fastened together by one of the following methods.

Method #1

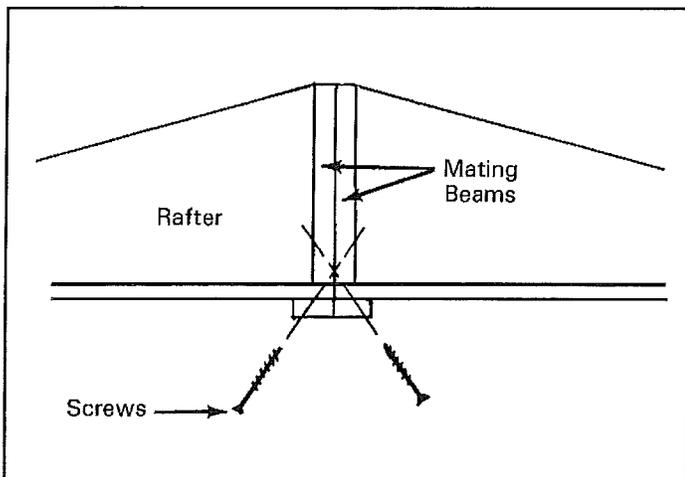
1. On each side of the ceiling mating line at each rafter location (16" O.C.), drill a pilot hole at 35° toward the opposite side. Counter sink a #10x5" screw in each pilot hole.



2. Where there is a mating wall on one side of the home this must be done on the exposed side.
3. No interior fastening is required where there are two mating walls.

Method #2

1. If the home has 1 x 3 members installed at the factory, on each side of the mating line at each rafter location (16" O.C.), drill a pilot hole at 45° toward the opposite side. Countersink a #10 x 5" screw in each pilot hole.



2. Where there is a mating wall on one side of the home this must be done on the exposed side.
3. No interior fastening is required where there are two mating walls.

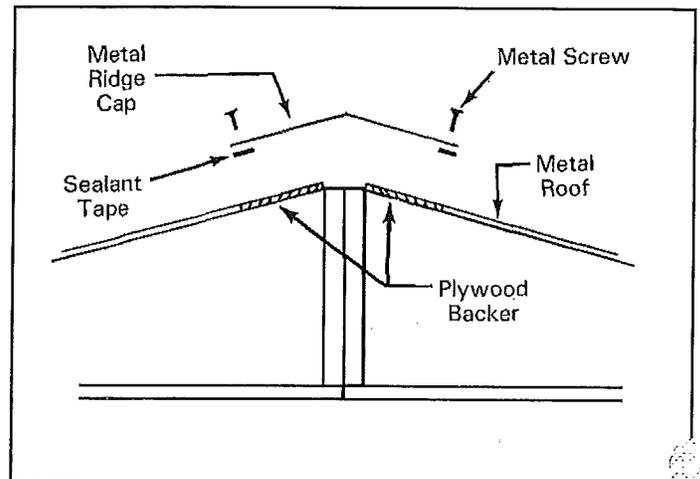
EXTERIOR CLOSE-UP

A. Floors

Staple 3" wide strip of bottom board, the full length of the home, bridging the bottom edges of the mating rim joists.

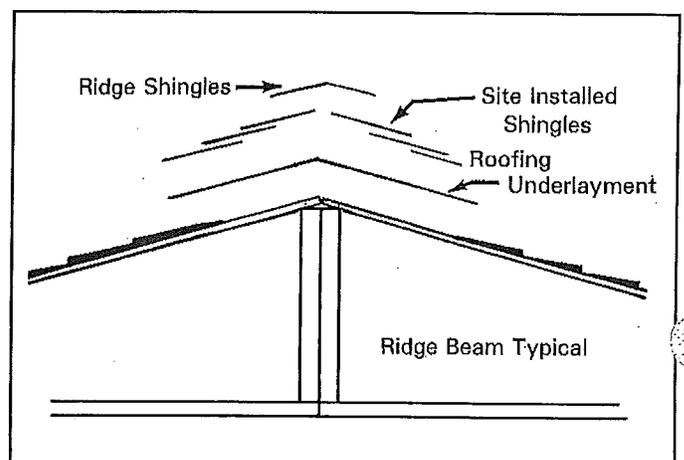
B. Metal Roof

1. Apply sealant tape to outer edges of ridge cap.
2. Position cap on roof and fasten with #8 x 3/4" screws 3" O.C. Screws must compress sealant tape and penetrate wood backing under metal roof.
3. Lap ridge cap joints 3" to 4". Caulk and screw all joints.
4. Apply roof sealant along edges of ridge cap, at joints and over all screws.



C. Shingled Roof

1. Remove top row of shingles that have been stapled into for close-up Visqueen.
2. Install one layer of roof underlayment under the top of the last row of shingles.
3. Install shingles on both halves of the roof allowing top of shingles to overlap ridge.
4. Cut shingle for ridge lap. Overlay the ridge shingles with open end of tabs away from prevailing winds.
5. Refer to Manufacturer's Installation Instruction printed on shingle wrapper.



D. End Wall (Vertical Metal)

1. Install bottom starter at mating line to match starter on home.
2. Install vertical panels by snapping the sides into the factory installed S-locks on the home.
3. Install fascia and soffit material to match the home.
4. Use putty tape and caulking or sealant materials in appropriate places to ensure weatherproofing.

E. End Wall (Lap Siding)

1. Install starter strip at bottom of walls even with siding on the sides of the home.
2. Install lap siding on end walls starting at the bottom.
3. Install fascia and soffit material to match the home.
4. Use putty tape and caulking or sealant materials in appropriate places to ensure weatherproofing.
5. Vents and outlets — accessory items such as J-blocks and/or light blocks are available to simplify installation of siding around these areas. If they are not used and vents and outlets are positioned directly over the siding, be sure to use panels that are less than 4' in length.

F. End Wall (Hardboard Siding)

1. Install horizontal trim at bottom of home and at ceiling height to match trim on sides of home.
2. Install vertical piece over mating line to match the siding on the home.
3. Install fascia and soffit material to match the home.
4. Install freeze board (trim piece at top of peak against soffit).
5. Caulk top edge of all horizontal trim pieces.
6. Caulk both sides of vertical piece covering mating line.
7. Use corrosion resistant nails provided for installing hardboard.

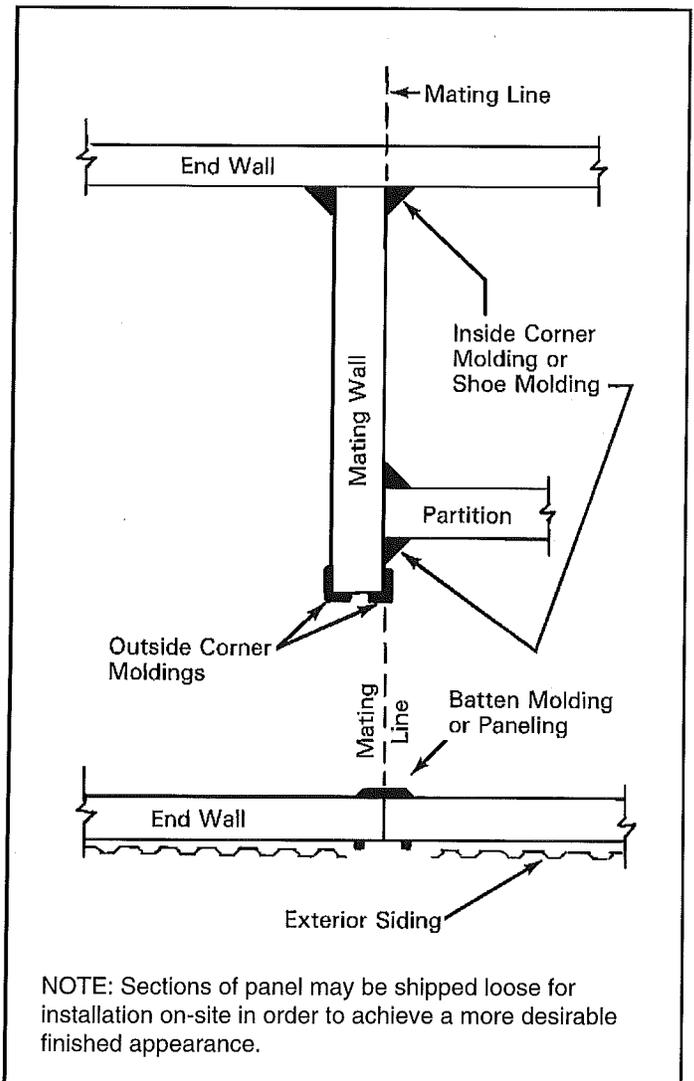
INTERIOR CLOSE-UP

A. Walls

All the materials necessary to trim out the interior of the home are shipped with each home and can be easily identified by matching the moldings or paneling with the materials installed in the home.

Before installing moldings, fill all gaps with insulation.

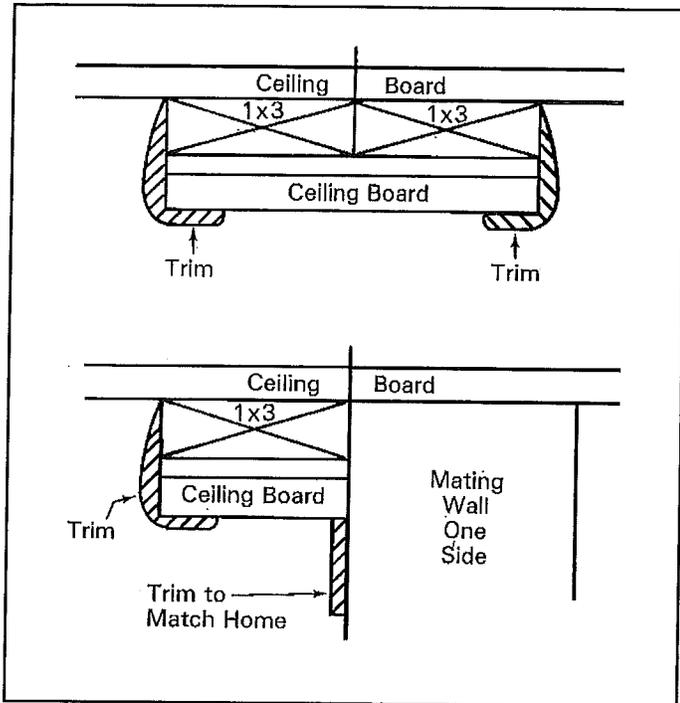
The illustrations below are typical molding installations for trimming out the various mating wall joints.



B. Ceiling

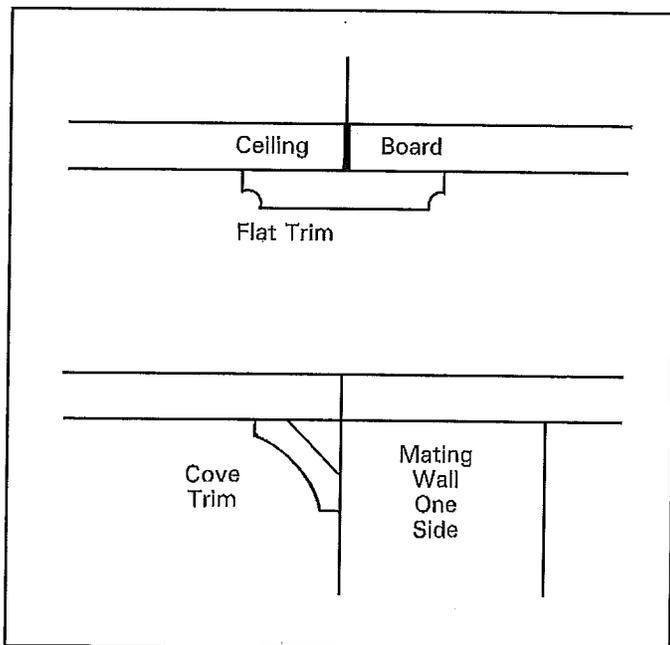
Method #1—Flat Ceiling

1. The 1 x 3 strips and trim on one side may be installed at the factory.
2. Insert the "floating" strip of ceiling board and attach the second piece of trim.



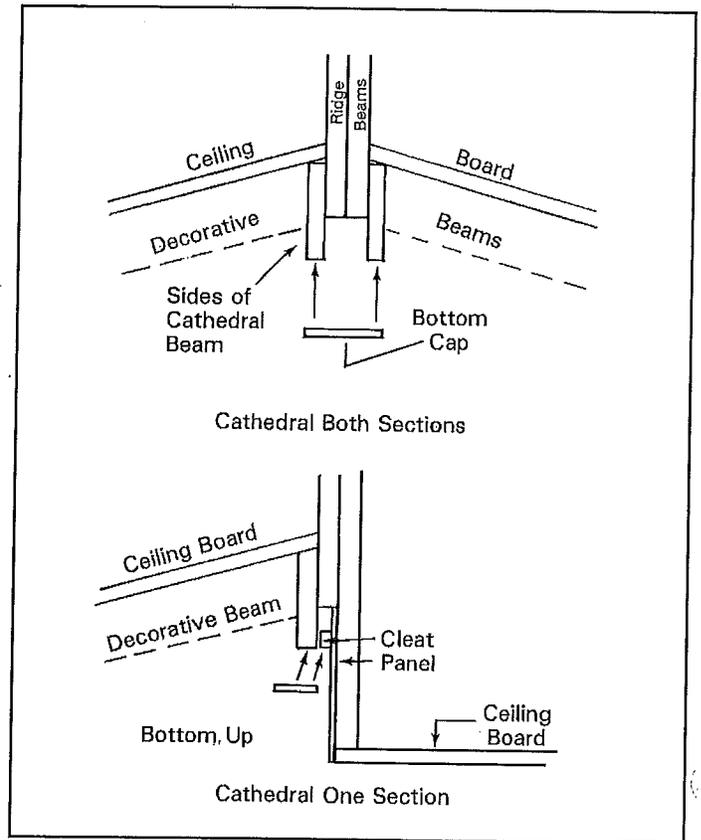
Method #2—Flat Ceiling

1. Install flat trim or cove trim per details shown.



Method #3 — Cathedral Ceiling

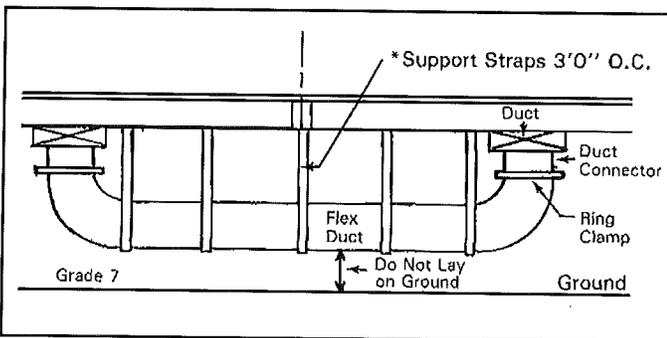
1. Install cap on bottom of cathedral beam. Material for cap will be sent to match the sides of the beam.



CROSSOVER UTILITY CONNECTIONS

A. Heat Duct Crossover

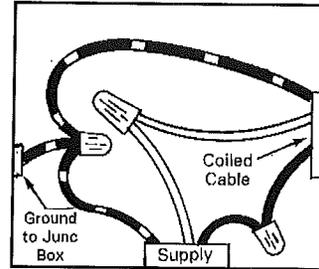
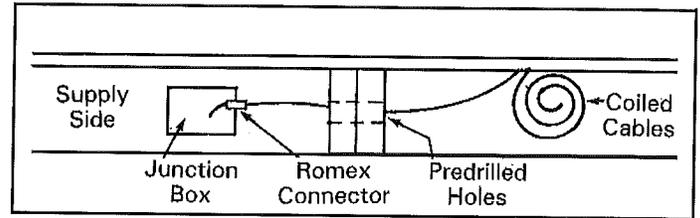
1. Duct connectors should be located as follows. Furnace side connector should be located at least 1/2 under the furnace. Opposite side should be located as close to the center of the duct as possible.
2. Connect each end of the insulated flexible duct to the metal duct connectors on each half of the home by sliding the duct over the collars. Secure duct to connectors with the ring clamps provided.
3. Tape each connection with duct tape to assure an airtight seal.
4. Support duct with metal straps as shown below. Straps should be secured to a wood frame member.



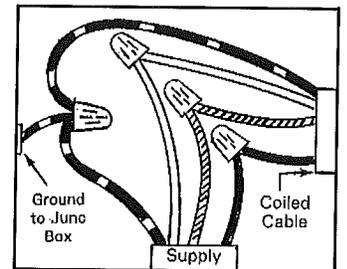
B. Electrical Crossover

Electrical crossover connections are located on the underside of the floor at the rear of the home.

1. Remove the access covers from both sections of the home.
2. The junction box is located on the supply section of the home; the second section has cables coiled up in the floor.
3. If electric service has been run to the home, check to see that the main breaker in the distribution panel is turned off.
4. Remove the cover from the junction box on the supply section.
5. Route the coiled up cables to the junction box through the holes predrilled in the floors.
6. Install Romex connectors where the cables enter the junction box.
7. Depending on the number of circuits required, more than one junction box may be used.
8. Connect the coded wires with the connectors provided in the junction box.
9. Replace junction box cover.
10. Secure cables within 12" of the junction box.
11. Replace any insulation that was removed to make the connections.
12. Replace access covers on both sections of the home.



Typical 115 Volt Connection
For 15 AMP or 20 AMP
Circuit



Typical 230 Volt Connection
For 30 AMP or Larger
Circuit

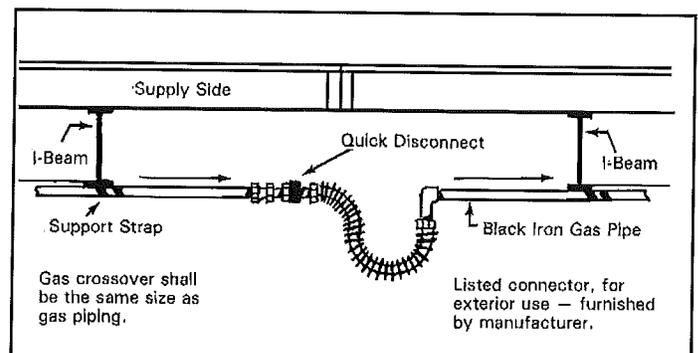
C. Water Line Crossover

Water line crossover connections are located on the underside of the floor at the mating line of the home.

1. Remove the access covers from both sections of the home.
2. Feed water lines through the holes predrilled in the floors.
3. Connect the water lines between sections with the fittings provided.
4. Replace any insulation that was removed to make the connections.
5. Replace access covers on both sections of the home.

D. Gas Line Crossover

1. Remove the protective caps from the gas line and connectors.
2. Attach the quick disconnect to the supply side and the connector to the other half.
3. The crossover must be readily accessible from the exterior of the home.
4. Do not use tools to separate the "Quick Disconnect" device.



TIE-DOWN INSTRUCTIONS

After blocking and leveling, the home should be made secure to the foundation. The requirements will vary depending on which wind zone your home is located in (see the wind zone map shown on page 2).

In Wind Zone I, tie-down is accomplished by installing frame ties only supplied by the owner or installer. These straps are wrapped around the frame I-beams and anchored to the ground.

In Wind Zone II, vertical tie-down straps installed by the factory along the sidewalls must also be connected to ground anchors in addition to the frame ties.

The number of frame and vertical ties required varies depending on the wind zone and the strapping method selected.

Ground anchors should be certified by a professional engineer, architect or a nationally recognized testing laboratory as to their resistance, based on the maximum angle of diagonal tie and/or vertical tie loading and angle of anchor installation, and type of soil in which the anchor is to be installed. The need for stabilizing devices shall be determined by the ground anchor manufacturer's requirements.

Ground anchors should be embedded below the frost line and be at least 12" above the water table.

Ground anchors should be installed to their full depth, and stabilizer plates should be installed to provide added resistance to overturning and sliding forces.

Anchoring equipment should be certified by a registered professional engineer or architect to resist the applicable wind forces in accordance with testing procedures in ASTM Standard Specification D3953-91, standard specification for strapping, flat steel and seals. Minimum anchor capacity required is as noted and indicated on P.E. certified Ground Anchor/Frame Tie Strapping Requirements detail.

The following instructions are for installing tie-downs on a Schult home.

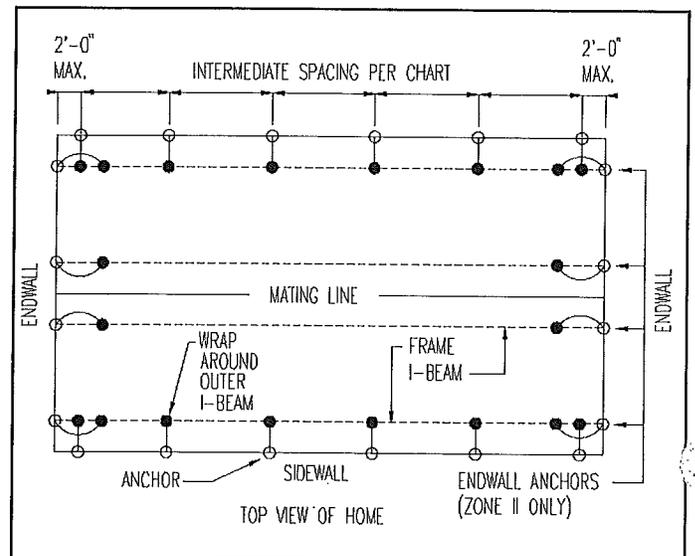
1. From the chart and details below, select either the single or double strap method (Note: Double strap method is not available in zone II). Be sure to use ground anchors equal to or stronger than the minimum load capacities listed in the chart for the method selected.
2. Install ground anchors at the required locations per the details shown below. Anchors should be installed per the manufacturer's instructions.

In Zone I, install single head ground anchors at all "frame-tie-only" locations when using the single strap method. Install double head ground anchors at all "frame-tie-only" locations when using the double strap method.

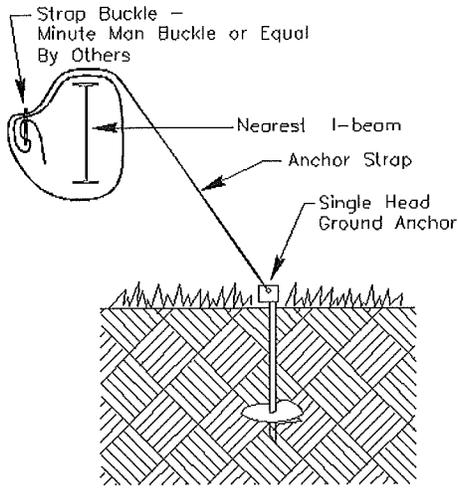
In Zone II, install double head ground anchors at all vertical tie locations.

3. The first and last frame ties must be installed within 2'-0" of the ends of the home.
4. In Zone II, endwall tie-downs are required at each I-beam. Run anchor straps from a double head anchor through angled slot cut in I-beam web, then, return to double head anchor.
5. Connect frame ties to the frame I-beam at all ground anchor locations (double and single head) on both sides of the home. In Zone II, connect both the vertical tie-down straps and the diagonal frame straps to double head anchors. Straps should not be tight at this point. Construct the tie-down system with adjustable devices in order that the strap tension may be periodically adjusted to compensate for heaving and settling.
6. With one man on each side of the home, start at the front and tighten straps on both sides at the same time. The home could be pulled off its piers if all straps are tightened on one side at a time.
7. Due to uplift forces, some homes may have tie-down straps located along the mating side of the home. These straps should be anchored to the ground the same as a vertical tie down. Note that only a single head anchor is necessary, however.

| STRAP METHOD | ANCHOR MIN. ULT. LOAD CAPACITY | WIDTH OF HOME (FT.) | | | | | |
|--------------|--------------------------------|------------------------------|-----|-----|---------|---------|-----|
| | | 24' | 28' | 32' | 24' | 28' | 32' |
| | | MAXIMUM ANCHOR SPACING (FT.) | | | | | |
| | | ZONE I | | | ZONE II | | |
| SINGLE | 4725 LBS. | 11' | 11' | 11' | 4' | 6' - 8" | 8' |
| DOUBLE | 9450 LBS. | 22' | 22' | 22' | NA | NA | NA |



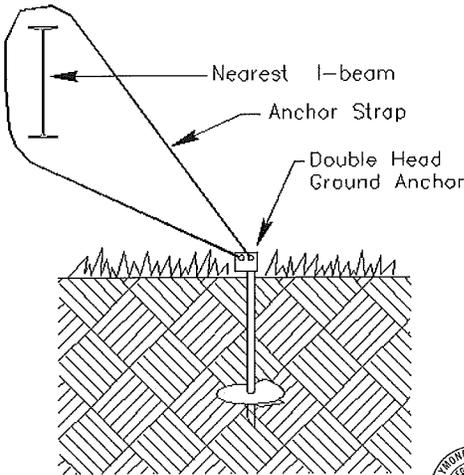
FRAME TIE-DOWN METHODS



SINGLE STRAP METHOD
(Wind Zone I only)



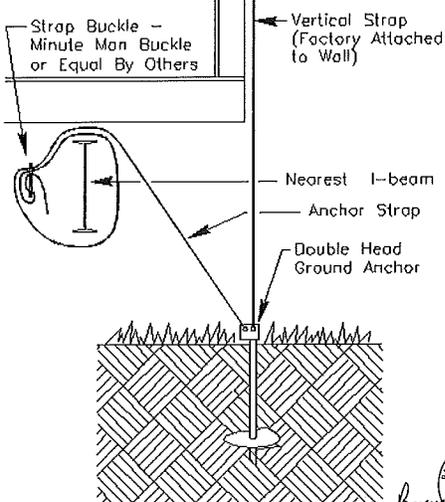
FRAME TIE-DOWN METHODS



DOUBLE STRAP METHOD
(Wind Zone I only)



FRAME TIE-DOWN METHODS



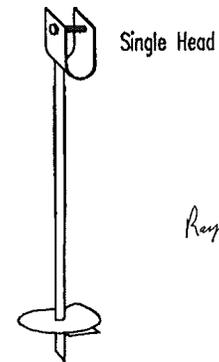
SINGLE STRAP W/VERTICAL TIE METHOD
(Wind Zone II only)



GROUND ANCHOR / FRAME TIE STRAPPING REQUIREMENTS

Anchoring equipment should be certified by a registered professional engineer or architect to resist the applicable forces in accordance with testing procedures in ASTM Standard Specification D3953-91, Standard Specifications for strapping, flat steel and seals. Anchor straps should be Type 1, Finish B, Grade 1 steel strapping, 1 1/4" wide and .035 inches in thickness. Anchoring equipment exposed to weathering shall have a resistance to weather deterioration at least equivalent to that provided by a coating of zinc on steel of not less than .03 ounces per square foot of surface coated.

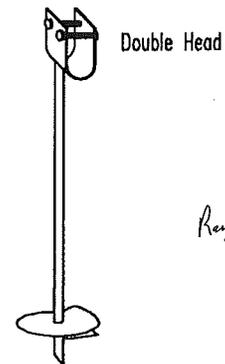
SINGLE HEAD GROUND ANCHOR
(Required in Wind Zone I)



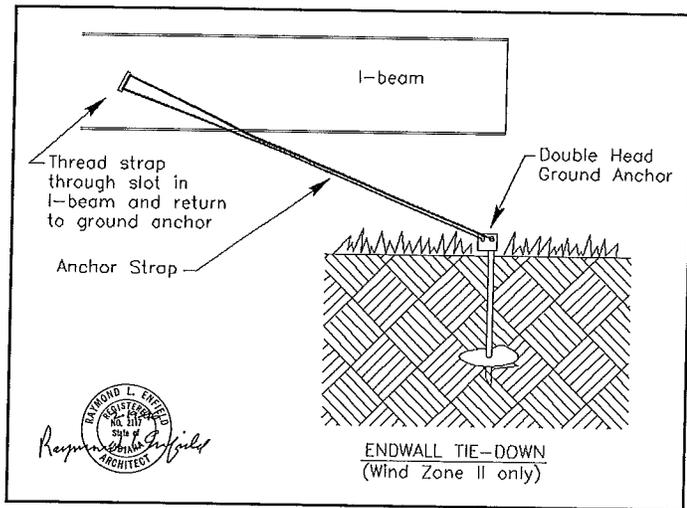
Single Head Minute Man Anchor or Equal - by Others
Minimum Ultimate Load Capacity - 4,725 lbs.

DOUBLE HEAD GROUND ANCHOR

(Optional in Wind Zone I
Required in Wind Zone II)



Double Head Minute Man Anchor or Equal - by Others
Minimum Ultimate Load Capacity -
9,450 lbs. with Double Strap Method
4,725 lbs. with Single Strap W/Vertical Tie Method



WATER SUPPLY HOOKUP & TESTING

NOTE: Water heaters must be by-passed during test. Test involves use of pressurized air which can permanently damage the water heater or may even cause rupture or explosion which could result in serious injury. Water heater is by-passed by disconnecting both the cold water line inlet and the hot water line outlet from the water heater and then connecting the hot and cold water lines together through the use of appropriate connection fittings.

The water system was tested at the factory; however, it is essential that it be rechecked at the site for leaks that may have been caused by in-transit vibrations. Recheck to make sure water supply lines have been connected between sections of the home as previously instructed.

EXHAUST SYSTEMS

1. Visually inspect bathroom & kitchen exhaust vents to see that they are free & clear to the outside of the home and that nothing has been disturbed due to in-transit vibrations.

UTILITY HOOKUP AND TESTING

This section of the manual deals with the connections of the water supply, drainage, gas, oil and electrical systems of the home to the site service.

NOTE: The connection and testing of these systems, on site, are to be made by qualified personnel only.

The information on the following pages will assist in determining the proper connection procedures for which the home was designed and serve as a guide for inspection of the system upon completion.

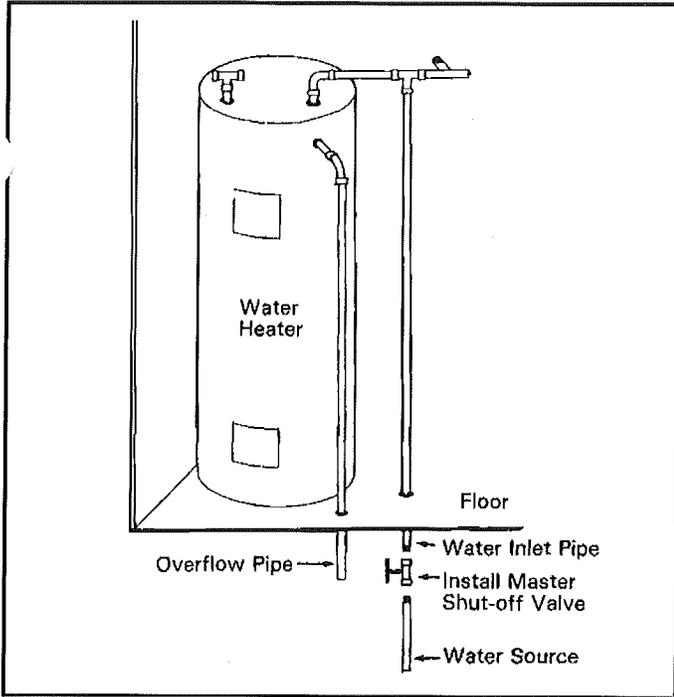
Upon completion of your utility installation, it is important that access to connections be provided for periodic inspection and possible future service.

1. Install a master shut-off valve at the bottom of the water inlet pipe (either a full port gate or a full port ball valve, with threaded or solder joints). Install a pressure reducer if site pressure goes over 80 P.S.I. These items to be supplied by the installer or owner.
2. To prevent the possibility of fresh water contamination, all exterior faucets shall have an anti-siphon valve installed by the installer or owner.
3. Proceed with test as follows:
 - A. Close all water faucets, spigots and stool tank float valves.
 - B. Pressurize the system to 100 psi.
 - C. Isolate the pressure source from the system.
 - D. The gauge must stand 15 minutes with no drop.

PROTECTION FROM FREEZING

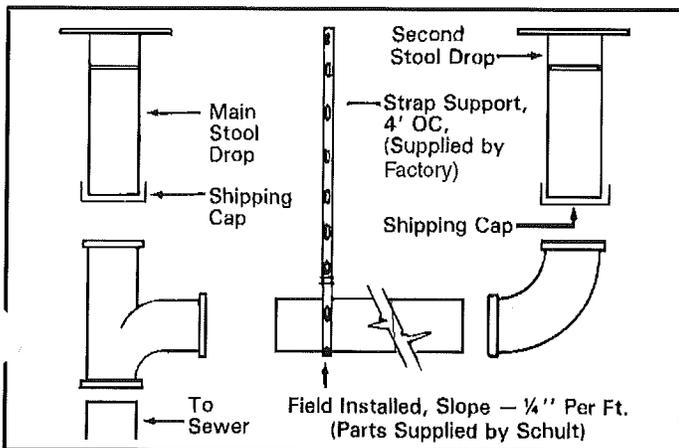
4. If the home is to be left unheated in cold weather, after the above test, it is necessary to drain the water lines and blow them clear with compressed air to prevent damage from freezing.
5. If the home is installed in an area subjected to freezing temperatures, the exposed section of the water supply piping, shut-off valve, and pressure reducer must be protected. The most efficient and recommended means of accomplishing this is by the use of a thermostatically controlled heat tape. For this purpose, Schult homes are equipped at the factory with an electrical receptacle under the home in the vicinity of the water supply inlet.

THE HEAT TAPE USED MUST BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY FOR USE WITH MOBILE HOMES, AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.



DRAIN SYSTEM HOOKUP & TESTING

1. The drainage system was checked for leaks at the factory; however, it is essential that it be rechecked at the site for leaks which may have been caused by in-transit vibrations.
 - A. With the stool drop(s) under the home tightly capped and the tub and shower drains plugged, fill the drainage system until the toilet bowl(s) are full to the rim(s). The water should stand without dropping for fifteen minutes.
 - B. Fill fixtures which are higher than the toilet bowl (lavatories, sinks, etc.) with water. Check these fixture connections for leaks as you allow the water to flow through the system.
2. Make drain line connections between sections of the home and separate bathrooms. Secondary bath stool drops must be connected to the main stool drop with 3" drain lines and fittings. Other fixtures to be connected to the main drain system with the appropriate size drain line and fittings. Drain lines and fittings are shipped loose with the home. These installations are many and varied; the drawing below is typical.



The main drain connection to the sewage system should be made with 3" drain line sloped at 1/4" per foot. This connection material is supplied by the owner or the installer.

NOTE: All site installed drain lines must be supported by straps attached to the home 4' OC maximum.

PROTECTION FROM FREEZING

3. Access to fittings in the drainage system subject to freezing, such as P-Traps in the floor, have been protected with insulation by the manufacturer. Insulation must be replaced if removed during the testing.
4. If the home is to be left unheated in cold weather after the above tests, it is necessary to drain the entire system to prevent damage from freezing.

P-Traps at all fixtures and stools can be protected by pouring 1/2 cup of antifreeze into each one.

ELECTRICAL SYSTEM HOOKUP & TESTING

NOTE: Electrical tests and connections should be made only by qualified personnel.

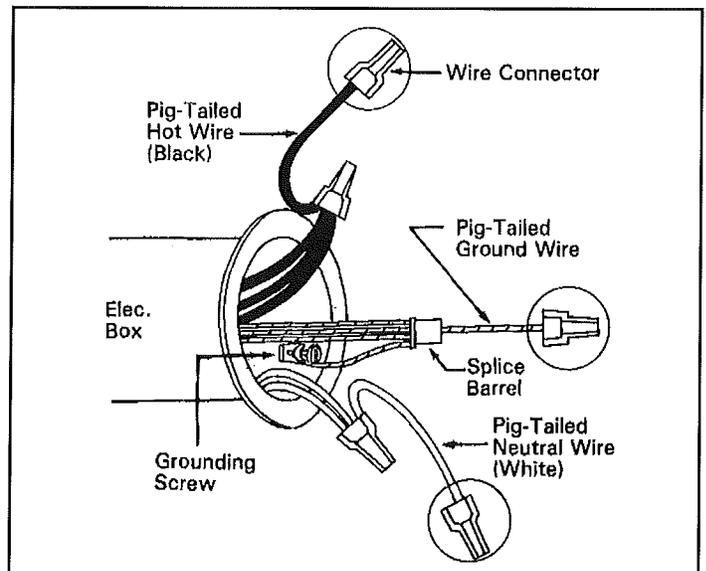
The home was tested at the factory, but must be retested after set-up, because of the possibility of connections loosening due to in-transit vibrations. Re-check to make sure electrical wiring connections have been made between sections of the home as previously instructed.

EXTERIOR LIGHT FIXTURES & OTHER 110V APPLIANCES

1. Connect wires, black to black, white to white, and ground to ground, using wire nuts.

Push wires into box and secure fixture in position. Install the bulb.

2. Apply caulking around base of light fixture to insure a water-tight seal to the wall.



CONNECTION OF THE ELECTRICAL SERVICES

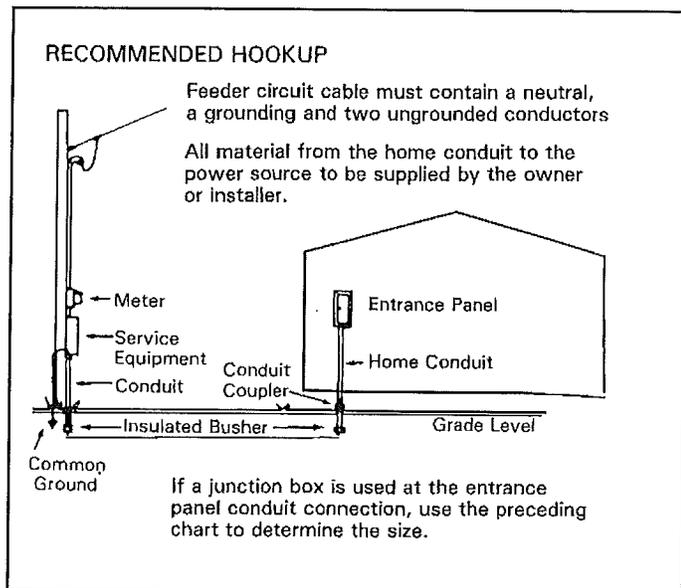
- To determine applicable feeder size amperage, see Main Breaker and the label on electrical distribution panel.
- Using this information, determine the required feeder size from the following table.

| ELECTRICAL FEEDER AND EQUIPMENT SIZES | | | | | |
|---------------------------------------|------------------------------------|---|--|----------------------|----------------------------|
| Feeder Size (Amps) | Maximum Neutral Feeder Load (Amps) | Minimum Required Junction Box Size (Inches) | Feeder Sizes Based on Use of 75 Degree "C" Insulated Copper Conductors | | |
| | | | Black - "Power" Red - "Power" White - "Neutral" | Green or Bare Ground | Conduit Size (Inside Dia.) |
| 50 | 50 | NA | #8 THW (Cu) | #8 (Cu) | 1" |
| 100 | 100 | 10x10x4 | #4 THW (Cu) | #8 (Cu) | 1 1/4" |
| 150 | 115 | 10x12x4 | #1 THW (Cu) | #6 (Cu) | 1 1/2" |
| 200 | 130 | 10x16x4 | #2/0 THW (Cu) | #4 (Cu) | 2" |

Conductor sizes are in accordance with the National Electric Code, Table 310-16, and do not take voltage drop into consideration. Allowable ampacities are based on ambient temperature of 30°C, 86°F.

CAUTION: If the home has an electric water heater, it must either be filled with water or have the circuit breaker turned "OFF" before energizing the home electrical system or severe damage to the heating element will result.

- With the main panel box circuit breaker and all individual circuit breakers in the home turned off, make electrical service connections. When connections are complete, turn on power at electric meter source. Do not turn on the main panel box circuit breaker in the home until the grounding and continuity testing has been performed.



6. Grounding the Home

NOTE: The grounding bar in the main home electrical distribution panel box must be grounded through the green colored conductor in the feeder wiring to the service ground in the service entrance equipment, pro-

vided by the utility company. If grounding through service equipment is impractical, the green colored conductor must be grounded to an approved grounding rod sunk directly into the earth to a depth as specified by authority having jurisdiction.

- Both halves of the home must be connected at the frame for complete grounding. Ground lugs are installed at two places of each half of the home on the mating side. These lugs are to be connected on site with the supplied bare copper wire.

GROUNDING AND CONTINUITY TEST

- Perform the following test after all structural assembly, metal and trim installation is finished.

A. Connect one clip of a flashlight continuity tester to a convenient ground (metal skin, window frame on metal skinned units, floor duct riser, screw head on receptacle or switch plate, etc.) and touch the other clip to each light fixture canopy (where the light is mounted to ceiling or wall). The continuity tester should light if each fixture is properly grounded.

B. Using the continuity tester, check every direct-connected appliance or fan. The tester must be hooked to a convenient ground and to the metal frame of the appliance.

C. Using the continuity tester, check the continuity between the following:

- Between one riser of furnace duct and convenient ground.
- Between metal roof and steel frame.
- Between metal skin and steel frame.
- Between metal frame and gas piping. (After making gas connections between sections.)

(NOTE: Continuity to ground is not required on metal inlet of plastic piped water system.)

- Between metal raceway below distribution panel and steel frame.

When plumbing fixtures such as metallic sinks, tubs, faucets and shower risers are connected only to plastic water piping and plastic drain piping, continuity to ground is not required.

- Any loss of grounding continuity found in the above will require investigation and correction.

POLARITY & OPERATIONAL TEST

- Turn on main panel box circuit breaker and then one at a time, turn on the individual home circuit breakers and perform the following test.

Should any breaker trip, this indicates a problem with the circuit that must be located and corrected.

A. Plug an AC receptacle wiring tester into each receptacle in the home to check for reversed polarity, open grounds and shorts.

Any reversed polarity, open grounds or shorts found will require investigation and repair.

B. Install light bulbs and fluorescent tubes in all light fixtures. Make sure each light fixture is operable by turning the appropriate switch to the "ON" position.

C. Repair or replace any defective light fixtures or switches.

GAS SYSTEM HOOKUP & TESTING

The gas piping system was tested at the factory; however, it is essential that it be rechecked at the site for leaks that may have been caused by in-transit vibrations.

Pressurize the entire system to at least 10 inches of water column (3/8 PSI) but not exceeding 14 inches of water column (1/2 PSI). Apply a soapy water or bubble solution to all appliance connections, valves, and pipe fittings.

NOTE: Do not apply more than the specified pressure as damage to gas valves and/or regulators may result. Prior to making connection to site supply, gas inlet orifices of furnaces, water heaters, and other gas appliances must be checked to insure they are set up for the type of gas to be used—L.P. (liquefied petroleum) or natural gas.

OIL PIPING HOOKUP & TESTING

Homes produced by Schult which are equipped with oil burning furnaces must have the oil supply piping installed on site. Piping is not supplied by Schult.

The furnace manufacturer's instructions must be consulted for proper pipe sizing and installation procedures.

In addition, unless the home is installed in a park with a centralized oil distribution system, an oil storage tank of suitable capacity must be installed outside the home in a location accessible for service, and safe from fire and other hazards.

Oil tanks that feed vaporizing type oil furnaces must be installed so that oil flows by gravity. To achieve efficient gravity flow the tank must be installed so that the bottom of the tank is at least 18 inches above the level of the furnace oil control, while top of the tank is within 8 feet of the oil control level.

For gun type oil furnaces the location of the oil storage tank is left to the discretion of the homeowner. Since the furnace includes a fuel pump, the tank may be installed above or below ground. For tanks installed below ground the filler neck should extend 1 foot above grade and a 1 1/4 inch diameter minimum vent pipe extending at least 2 feet above grade must be provided.

Regardless of the type of oil furnace served, or the tank location, the tank should be installed to provide a gradual slope toward the fill end or drain plug (if so equipped) to facilitate pumping or draining of water and sludge.

An accessible and approved manually operated shut-off valve must be installed at the oil tank outlet. Additionally it is recommended that a suitable filter be installed in the fuel line near the tank to help trap dirt and water.

NOTE: All oil storage tank and oil piping installations must meet all applicable local regulations and should be made only by experienced, qualified personnel.

BEFORE setting the system in operation, the tank installation and supply piping must be checked for leakage. The tank must be filled to capacity with the fuel to be burned and all joints in the system checked visually for leakage.

BOTTOM BOARD PATCHING

Below are listed some of the different patching methods which offer the dealer, or home buyer, a means of resealing the bottom board:

Affix the patch with an approved bottom board tape. Schult Homes Corp. recommends either CS-12 from Shepherd Products of Kalamazoo, Michigan or #620 from First Line Corp. of Valdosta, Georgia.

The outward Flare Tacker is an air operated tool Model LN3045 manufactured by Senco Products, Inc., suitable for either transverse or longitudinal floor construction. The patch should first be affixed to the bottom, using an approved tape to secure the perimeter and then fastened near the perimeter at 3" intervals. Use the staples described in Senco Bulletin M-100.

OPTIONAL ITEM INSTRUCTIONS

CAUTION: Schult Homes cannot be responsible for any damage resulting directly or indirectly from installation of accessories, nor any modifications to the home subsequent to shipment from the factory. Such alterations are undertaken at the risk of the installer and/or homeowner.

Local building officials should be consulted prior to making any alterations to the home to insure compliance with all applicable codes and requirements. Your dealer should be consulted as he is a specialist in the proper installation of accessories.

ELECTRIC CLOTHES DRYER VENTING

NOTE: The dryer vent must not exhaust into the skirted area under the home. This is to prevent excessive humidity in the home.

Homes factory equipped with an electric dryer receptacle will also have the moisture-lint exhaust system roughed-in. To complete the moisture-lint exhaust system, the following must be performed:

1. Remove the covers over the vent hole.
2. Check the duct provided to see that it is clear and connect to the dryer in accordance with the dryer manufacturer's instructions.
3. Secure the termination fitting to the outside edge of the floor or wall.
4. Secure the flexible duct to the termination fitting with clamps. (Do not use sheet metal screws or other devices which extend into the interior of the duct.)
5. Seal the hole where the duct goes through the floor or wall with a good grade of caulking or heat duct tape.

Schult Homes Corp. will not be responsible for damage to home resulting directly or indirectly from failure to install the dryer moisture/lint exhaust system in accordance with the instructions presented herein and those of the dryer manufacturer.

The installation of a gas dryer requires substantial modification of the home, including the provision of gas supply piping and adequate venting as specified by the dryer manufacturer.

NOTE: Gas dryer installation must be handled by fully qualified, experienced personnel only. Cutting of major structural elements of home such as rafters or floor joists to facilitate installation is not permissible and any resulting weakening of the structural integrity of the home is not the responsibility of Schult Homes Corp.

FIREPLACE CHIMNEY INSTALLATION

Homes equipped with fireplaces require that the installation of additional section(s) of chimney pipe and a rain cap assembly be made on site.

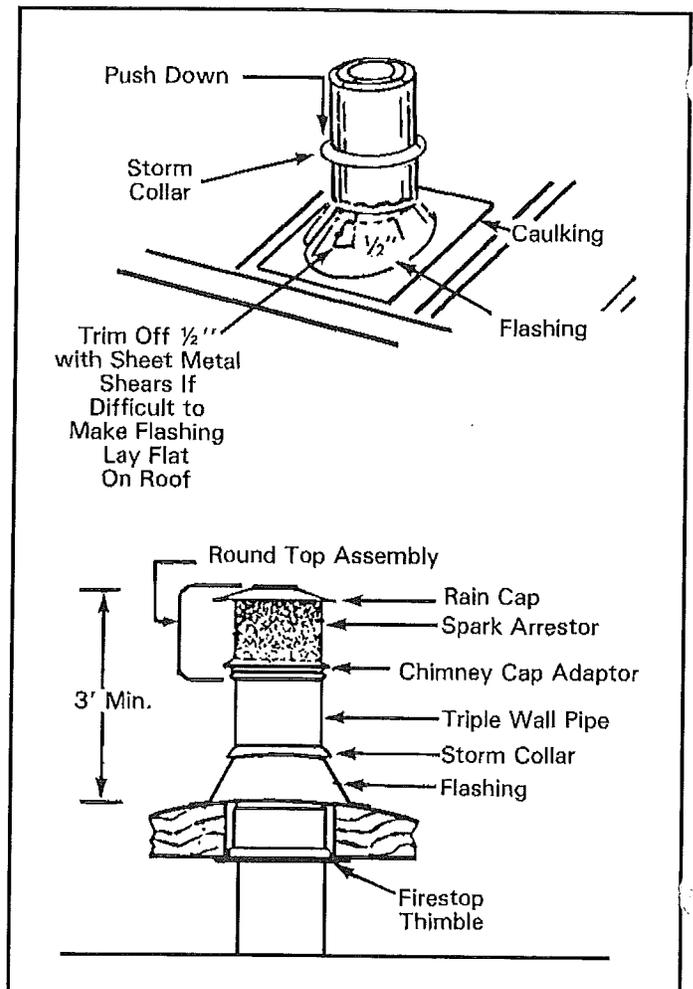
To insure sufficient draft for fireplace, the finished chimney **MUST** extend 3 feet above the highest point where it penetrates the roof and must be at least 2 feet higher than any building or other obstruction located within a horizontal distance of 10 feet.

Parts necessary to complete installation are provided. Note, however, that chimney section(s) provided will be sized of sufficient length to meet the above stated requirement for the home only.

If the site has obstructions extending higher than the home's roof peak within 10 feet of the chimney, an additional section of chimney pipe may have to be provided by installer.

Chimney installation must be made in accordance with fireplace manufacturers' instructions. Typical chimney installation is as follows:

1. Remove transit protective covering from over the chimney.
2. Install additional chimney section(s) provided and secure.
3. Install spark arrestor.
4. Install rain cap assembly.



AIR CONDITIONING

NOTE: The installation should be made only by qualified personnel. The completed installation must conform to the National Electrical Code and applicable local codes.

Schult Homes Corporation does not recommend the installation of window air conditioning units.

Factory installed circuits for air conditioning are indicated on the electric entrance panel.

The maximum full load ampere draw for the desired air conditioning unit must not exceed the indicated circuit rating.

The electrical connection is via a circuit terminating in a junction box beneath the home.

The electrical supply, if not factory installed, may have to be from an outside source as electrical equipment within the home may not have been sized for the additional air conditioning load.

The field installation wiring beyond the junction box, must incorporate a fused disconnect (sized in accordance with NEC Article 440) located within sight of the condensing unit. The maximum fuse size to be used with the fused disconnect is marked on the condenser data plate. The acceptability of the air conditioning equipment, rating the location of disconnect means, fuse type branch circuit protection, and connections to the equipment are to be determined by the local inspection authority.

The compliance certificate posted in the home will specify the U-Valves necessary to calculate heat gain and the maximum capacity of air conditioning allowable for the home. The equipment you select should not exceed the maximum BTU HR rating on the compliance certificate.

"A" coil air conditioning units installed must be listed for use with the furnace in the home; for air conditioning installation, see the instructions shipped with the air conditioner.

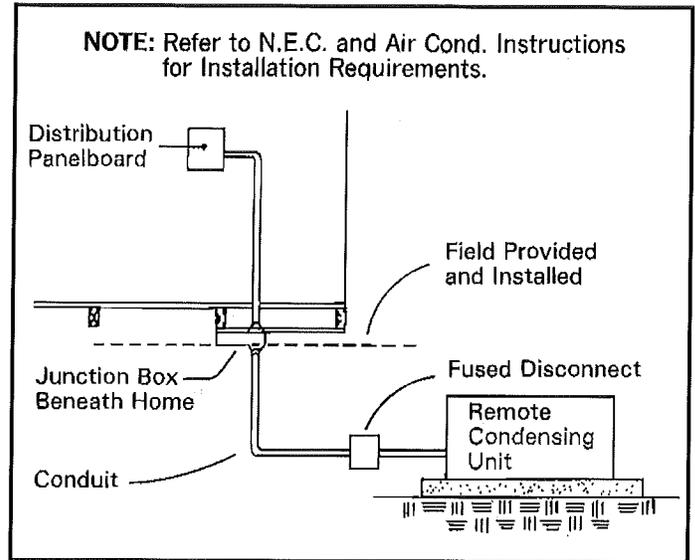
If a remote air conditioner is to be installed and connected to the heating supply duct the installation must include an automatic damper or other means to prevent the cooled air from passing through the heating appliance.

It is important when installing the return air system and supply system that no floor joists are cut or damaged. The return air and supply ducts are sized to fit between the floor joists. Joists are located 16 inches on center throughout the home.

It is important to replace insulation that may have been removed during the installation—also to seal the bottom board around the duct connections.

This home is intended to accommodate air conditioning. If air conditioning is not installed, a switch for manual control of the whole-house ventilation system (available through NORDYNE distributors – a listing is included with the furnace) must be installed per NORDYNE installation instructions or some other means for activating the ventilation system remotely must be installed.

Do not allow condensate drain line to terminate under home.



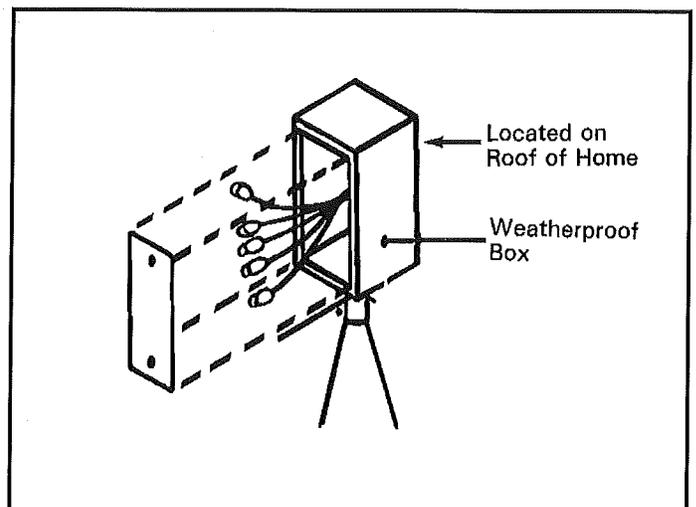
EVAPORATIVE COOLER

NOTE: The electrical connection should be made only by qualified personnel.

1. On models equipped for installation of optional evaporative cooler, install the roof-mounted cooler according to the instructions with the cooler. For coolers without an integral air duct the cooler box shall be lined with .016 in. metal. The factory installed branch circuit for the cooler is sized for a maximum cooler electrical load of 12 amperes, 120 V. AC, 60 Hz.
2. Remove the cover from the roof-mounted junction box and make the connection of the color-coded wires using the provided wire nuts. The electrical portion of the installation is now complete.

COLOR CODE

| | |
|-------------|----------|
| White..... | Neutral |
| Yellow..... | Pump |
| Black..... | Low Fan |
| Red..... | High Fan |
| Green..... | Ground |



HEAT PUMP INSTALLATION

Due to the fact that heat pump designs vary considerably between manufacturers, it is impractical to give detailed installation instructions in this manual. The manufacturer's installation instructions provided with the specific system to be installed must be followed. Necessary information for the correct sizing of the system can be found on the home's Compliance Certificate (Data Plate) located in the area of the electrical power distribution panel and explained in earlier parts of this manual. Installation should be handled by qualified heating/air conditioning professionals.

The following are some general considerations for the installation of heat pumps:

1. If heat pump is not supplied by Schult, the installer is responsible for making all necessary calculations based upon site conditions and information presented on the home's Compliance Certificate (Data Plate) to insure that the unit selected is adequately sized.
2. Equipment selected must meet all applicable codes and be specifically approved for use in mobile homes.
3. Major structural elements of the home, such as wall studs or floor joists, must not be cut to facilitate installation.
4. All necessary electrical modifications and installations must be handled by a qualified electrician.

HITCH AND WHEEL REMOVAL AND STORAGE

If the front hitch used to transport the home is designed to be detachable, for aesthetic purposes it may be removed after set-up. However, the hitch should be retained in the event the home is ever relocated. Common practice is to store the hitch under the home where it will be protected from the elements and concealed by the skirting.

During or after set-up, it is common practice to remove the wheels and tires. The axles and complete suspension system may be removed in some states and localities, but in others they must remain attached as installed. In some states and localities, owners are allowed to dispose of this equipment, while in others they may not. Before removing axles and suspension systems be sure to check carefully with the dealer and/or local authorities.

Although it may be permissible to dispose of the wheels, tires and suspension system, Schult Homes recommends they be retained in the event the home is ever relocated.

This equipment is commonly stored under the home on a waterproof substance, like vinyl sheeting, where it is protected and concealed by the skirting. After wheel removal, hub surfaces should be coated with heavy grease to resist rust and corrosion.

The tires, wheels and suspension systems are designed **ONLY** for use to transport this manufactured home. They are not designed for any other purpose.

SKIRTING

Schult Homes Corporation recommends the use of skirting.

Skirting not only increases the value of the home but has other benefits. Skirting helps keep the floor warmer in the winter, cooler in the summer, and helps prevent plumbing freeze-ups in winter.

NOTE: Before skirting is installed, it is suggested that the entire area under the home be covered with a blanket of Visqueen. This is to prevent excessive humidity in the home. The Visqueen should be a minimum of 6 mil thick and be overlapped 6" at all joints.

It is also suggested that the skirting around the home be provided with non-closing vents.

The free air of the vents should be equal to not less than 1/300th of the floor area of the home (divide sq. ft. of home by 300).

The vents should be located to provide cross ventilation to the entire area under the home.

1. If the home is equipped with a fuel burning fireplace or sealed combustion water heater, additional vents in the skirting must be provided adjacent to the intake vents for these appliances. Vents must be sized in accordance with the equipment manufacturer's instructions.
2. A removable panel should be provided in the skirting to allow crawl space access.

CARPORTS AND AWNINGS

Points to remember when selecting and installing carports and/or awnings:

1. Awnings and carports of a self-supporting design should be installed to minimize the possibility of damaging the home.
2. Follow installation instructions of accessory manufacturer.
3. Make sure all connections are to structural members of the home such as floor joists or rafter end rails. All penetrations through siding must be properly sealed and caulked.
4. Exercise extreme caution that no fastener penetrates any electrical cables. It is recommended all power be disconnected during installation and all circuits tested after installation is completed.
5. Insure that fasteners and support railings used are capable of handling the intended loads without damaging the home structure.
6. Insure all seams are properly sealed.