



# Manufactured Home Information

## Building & Fire Safety Division - Yakima County Public Services

- ☐ This Brochure provides information about the permit process, and installation for placement of a Manufactured Home (OR Mobile Home).
- ☐ A Manufactured Home may be placed on a private parcel (dependant upon the zone of your parcel) OR within a manufactured home park.

### Application Submittal Requirements

- |  |  |
|--|--|
| 1. Manufactured Home Application and Narrative.      | 5. Runner Design (if applicable).                        |
| 2. Site Plan (See "Minimum Site Plan Requirements"). | 6. Pier loads / locations for perimeter & marriage line. |
| 3. For a used home, provide a Copy of MH Title.      | 7. Tie down / Anchor.                                    |
| 4. Floor Plan (clearly mark options if applicable)   | 8. Mainframe Plan.                                       |

### Additional Yakima County Handouts and Website information that may be of assistance are:

- Site Plan Requirements
- Homeowners Guide to the Building Process
- [www.yakimap.com](http://www.yakimap.com) for parcel information
- [http://www.codepublishing.com/WA/yakimacounty/ Chapter 13](http://www.codepublishing.com/WA/yakimacounty/Chapter13)
- <http://www.yakimacounty.us/publicservices/PermitsApplicationsForms/>

### Frequently Asked Questions

**Q: Can I temporarily move the home to the proposed location before my permit is issued?**

**A: No**, all reviews, approvals, and issuance of the placement permit must be approved prior to moving the home to its proposed destination.

**\*Typical review / approval for moving a home on a private parcel**

- ☐ Septic Clearance from Yakima District Health or Outside Utility Agreement (OUA) from Sewer District, as applicable.
- ☐ Road Approach and issuance of your address from Yakima County Transportation Division. (If access is from a State Hwy, State Road Approach approval is required.)
- ☐ Zoning approval – Adjustments to the siting criteria of your home, or the required distance to property lines, roads, Especially Sensitive Land Uses, etc.
- ☐ Environmental Zoning review – If placement of the proposed home is within a Critical Area buffer zone.
- ☐ Flood Hazard review if a portion of your parcel is within the Flood Plain or Flood Way.

**Upon review of your actual application and site plan, additional comments / reviews may be forthcoming.**

- ☐ Separate permits are required for any additions, covered porches / decks, OR uncovered decks over 30 inches above the finished grade.

**Q: Are permits required through any other agencies?**

**A:** Permits from State of Washington Department of Labor and Industries are required for the following:

- ☐ Electrical hookup to your new home.
- ☐ Alterations or additions to a manufactured or mobile home.

**Washington State Department of Labor and Industries**  
**15 West Yakima Ave., Yakima 98902**  
**(509) 454-3760**

- ☐ Additionally, Mobile Homes constructed prior to June 15, 1976 do not meet the current safety standards as a "Manufactured Home". Before these older mobile homes can be moved to a new location within Yakima County, the Department of Labor and Industries must do a Fire Life Safety Inspection., (you will need to provide our office a copy of their inspection record).

**ALSO,**

- ☐ Many Mobile Homes do not meet the current zoning criteria. If this is the situation, then land use review and approval by Yakima County Planning Division would be required before a permit can be issued.

### **General Installation Requirements (13.0.10)**

1. All mobile homes and manufactured homes shall be installed in compliance with Chapter 296-150M WAC which is incorporated into this ordinance by this reference.
2. All mobile homes and manufactured homes shall have permanent landings with permanent steps or inclined planes provided at all entrances and shall have the tow tongue removed except that in identified flood plain areas it may be camouflaged to the extent that it is unrecognizable.
3. In those areas that are recognized as flood plain by the Federal Emergency Management Agency, all manufactured homes must be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage.

Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

(Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques). All manufactured homes shall have the lowest floor elevated to or above the base flood elevation and shall be securely anchored to an adequately anchored foundation system. In those areas that are recognized as hazardous because of the probability of earthquakes, the building official may set requirements that are necessary to lessen the hazard or may require that the installation be designed by an engineer or architect licensed in the State of Washington. (Ord. 3-2007 § II (part), 2007).

No person, firm, partnership, corporation, or other entity may install a manufactured home unless he, she, or it is the homeowner, a certified installer, an individual who is supervised by an on-site certified installer, or, for certain aspects of the installation, a specialty trades person. All persons, firms, partnerships, corporations, or other entities installing manufactured homes must comply with the provisions of RCW 43.63B.

### **13.09.040 Inspections**

1. The installer shall request inspections at each stage of the installation as required by the building official.
2. The Building and Fire Safety Division shall approve the installation of a manufactured home, and allow the manufactured home to be occupied if the installation complies with the installation requirements of this Chapter and the conditions of the installation permit.
3. If the installation does not comply with the installation requirements of this chapter and the conditions of the installation permit, the Building and Fire Safety Division shall provide the installer with a list of corrections that the installer must make.

The list of corrections shall state a date by which the corrections must be completed. The Building and Fire Safety Division shall reinspect the installation after the corrections are completed. If the items that require correction do not endanger the health or safety of the occupants, or substantially affect the habitability of the manufactured home, the Building and Fire Safety Division may permit the owner of the manufactured home to occupy it. (Ord. 3-2007 § II (part), 2007).

### **13.09.050 Building Site Preparation**

A manufactured home may not be installed at a building site unless the ground at the site has adequate load-bearing ability to meet the support requirements of Section [13.09.060](#). A manufactured home site must be prepared per the manufacturer's installation manual or per NFPA 225, 2005 Edition, Chapter 5.

The installer or, if the building site is in a mobile home park, the park owner must ensure that the ground on which the manufactured home is to be installed has been improved as necessary to provide a proper base for the manufactured home and that the area beneath the manufactured home has adequate drainage. To provide adequate drainage, the installer may need to slope the finish grade or install drain tile. (Ord. 3-2007 § II (part), 2007).

### 13.09.060 Foundation System Footings

Foundation system footings shall comply with the requirements of Chapter 6, Foundations, of NFPA 225, 2005 Edition. (Ord. 3-2007 § II (part), 2007).

### 13.09.070 Foundation Skirting

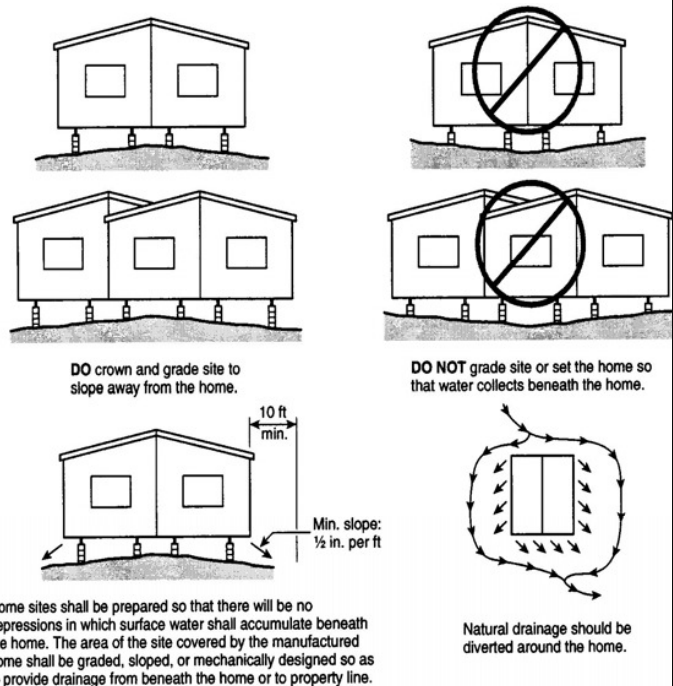
1. A manufactured home shall have approved foundation skirting around its entire perimeter. The skirting shall be installed per the manufacturer's installation or if the manufacturer is not specific, to the standards of this section. The skirting must be vented and allow access to the under floor area per the manufacturer's installation instructions or per the standards in this section.
2. Skirting must be of materials suitable for ground contact. Metal fasteners must be galvanized, stainless steel or other corrosion resistant material. Ferrous metal members in contact with the earth, other than those that are galvanized or stainless steel, must be coated with an asphaltic emulsion. Skirting must not be attached in such a manner that can cause water to be trapped between the skirting and the siding or trim. The skirting must be recessed behind the siding or trim.
3. The skirting must be vented as follows except for manufactured homes sited in a flood hazard area. Skirting must be vented by openings protected from the entrance of rodents by being covered with corrosion-resistant wire mesh with openings of 1/4 inch in dimension. Such openings must have a net free area of not less than one square foot for each one hundred fifty square feet of under floor area. Ventilation openings must be located as close to corners and as high as practical. Openings must be located to provide cross-ventilation on at least two opposite sides. (Ord. 3-2007 § II (part), 2007).

**Table 5.6.1 Maximum Allowable Soil Pressures**

Class of Material	Minimum Depth of Footing Below Adjacent Ground		Pressure Permitted if Footing Is at Minimum Depth*	
	ft	m	psf	kN/m <sup>2</sup>
Compact fine sand	1	0.3	1000 <sup>†</sup>	48 <sup>†</sup>
Loose sand	2	0.6	500 <sup>†</sup>	24 <sup>†</sup>
Medium stiff clay	1	0.3	2000	96
Soft, sandy clay or clay	2	0.6	1000	48
Compact inorganic sand and silt mixtures	1	0.3	1000	48
Loose inorganic sand and silt mixtures	2	0.6	500	24
Loose organic sand and silt mixtures and peat	—	—	0	0

\*These pressures are considered sufficient to prevent failure of the supporting ground but not to prevent excessive foundation movement or settlement where unusual soil or moisture conditions are encountered.

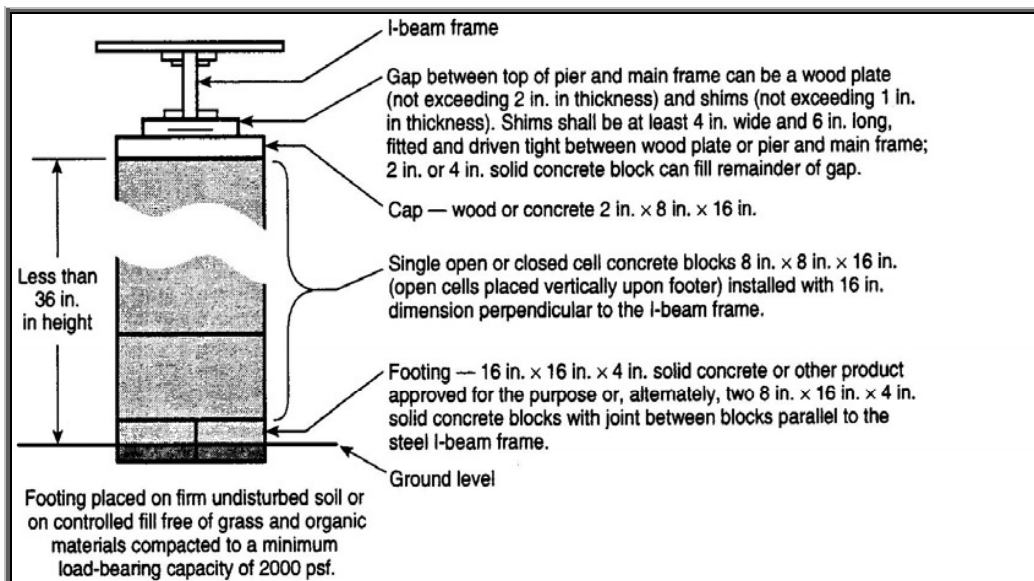
<sup>†</sup>Values are for footings 1 ft (0.30 m) wide and are permitted to be increased in direct proportion to the width of the footing to a maximum of 2½ times the designated value.



Home sites shall be prepared so that there will be no depressions in which surface water shall accumulate beneath the home. The area of the site covered by the manufactured home shall be graded, sloped, or mechanically designed so as to provide drainage from beneath the home or to property line.

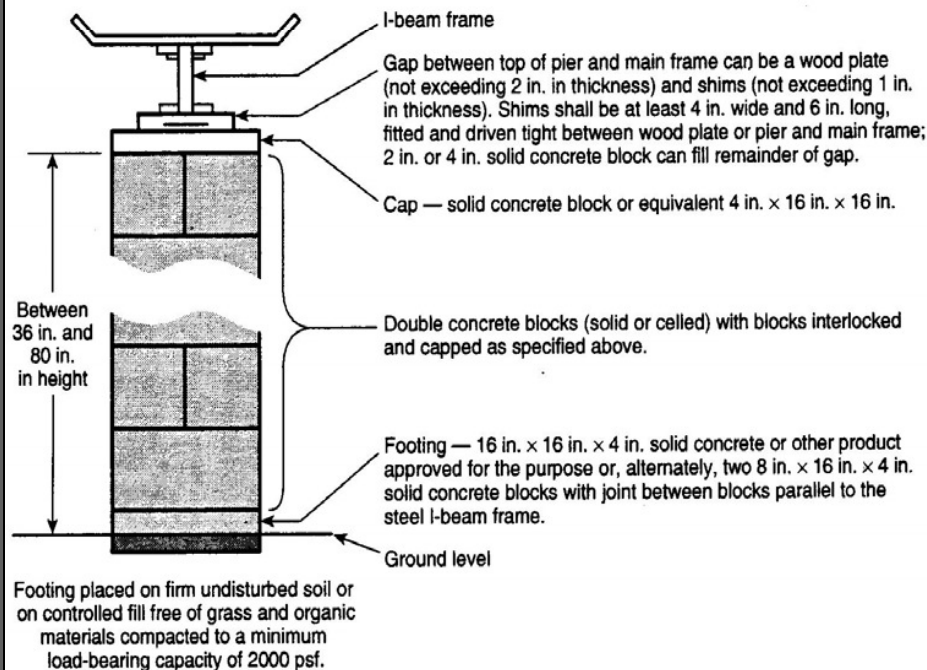
Note: For SI units, 1 ft = 0.3048 m, 1 in. = 25.4 mm.

**FIGURE 5.7.1.1 Grading and Drainage.**



Note: For SI units, 1 in. = 25.4 mm, 1 psf = 0.04788 kN/m<sup>2</sup>.

**FIGURE 6.2.2.1(a) Typical Footing and Pier Installation — Less than 36 in. in Height**



Note: For SI units, 1 in. = 25.4 mm, 1 psf = 0.04788 kN/m<sup>2</sup>.

**FIGURE 6.2.2.1(b) Typical Footing and Pier Installation — Greater than or Equal to 36 in. in Height.**

**Table 6.2.3.1.2(a) Minimum Pier Capacity, Frame Plus Perimeter Blocking (Both Frame and Perimeter Blocking Required)**

Section Width (ft)	Roof Live Load (psf)	Pier Location	Minimum Pier Capacity (lb)			
			At Maximum Pier Spacing of 4 ft	At Maximum Pier Spacing of 6 ft	At Maximum Pier Spacing of 8 ft	At Maximum Pier Spacing of 10 ft
8	20	Frame	900	1,300	1,800	2,200
		Perimeter	600	800	1,100	1,400
	30	Frame	900	1,300	1,800	1,200
		Perimeter	700	1,100	1,400	1,800
10	40	Frame	900	1,300	1,800	2,200
		Perimeter	900	1,300	1,800	2,200
	20	Frame	1,100	1,700	2,200	2,800
		Perimeter	700	1,100	1,400	1,800
12	30	Frame	1,100	1,700	2,200	2,800
		Perimeter	900	1,400	1,800	2,300
	40	Frame	1,100	1,700	2,200	2,800
		Perimeter	1,100	1,700	2,200	2,800
14	20	Frame	1,300	1,900	2,600	3,200
		Perimeter	800	1,200	1,600	2,000
	30	Frame	1,300	1,900	2,600	3,200
		Perimeter	1,100	1,600	2,100	2,600
16	40	Frame	1,300	1,900	2,600	3,200
		Perimeter	1,300	1,900	2,600	3,200
	20	Frame	1,500	2,200	3,000	3,700
		Perimeter	900	1,400	1,900	2,400
18	30	Frame	1,500	2,200	3,000	3,700
		Perimeter	1,200	1,800	2,400	3,000
	40	Frame	1,500	2,200	3,000	3,700
		Perimeter	1,500	2,200	3,000	3,700
20	20	Frame	1,700	2,600	3,400	4,300
		Perimeter	1,100	1,600	2,200	2,700
	30	Frame	1,700	2,600	3,400	4,300
		Perimeter	1,400	2,100	2,800	3,500
22	40	Frame	1,700	2,600	3,400	4,300
		Perimeter	1,700	2,600	3,400	4,300
	20	Frame	1,900	2,900	3,900	4,800
		Perimeter	1,200	1,800	2,500	3,100
24	30	Frame	1,900	2,900	3,900	4,800
		Perimeter	1,600	2,400	3,200	3,900
	40	Frame	1,900	2,900	3,900	4,800
		Perimeter	1,900	2,900	3,900	4,800

For SI units, 1 ft = 0.3048 m, 1 psf = 0.04788 kN/m<sup>2</sup>, 1 lb = 4.448 N.

Notes:

(1) Frame blocking is the total of the frame weight plus perimeter weight.

(2) When using frame and perimeter blocking, the marriage lines of the multisection home are double the perimeter weight.

**Table 6.3.3 Footing Size**

Soil Capacity (psf)	Minimum Footing Size	Single Stack Pier (8 in. × 16 in.)		Double Stack Pier (16 in. × 16 in.)	
		Maximum Footing Capacity (lb)	Unreinforced Cast-in-Place Minimum Thickness (in.)	Maximum Footing Capacity (lb)	Unreinforced Cast-in-Place Minimum Thickness (in.)
1,000	16 × 16	1,600	6	1,600	6
	20 × 20	2,600	6	2,600	6
	24 × 24	3,700	6	3,700	6
	30 × 30	5,600	8	5,800	6
	36 × 36	7,900	10	8,100	8
	42 × 42	10,100	12	10,700	10
	48 × 48	13,000	15	13,600	12
1,500	16 × 16	2,500	6	2,500	6
	20 × 20	4,000	6	4,000	6
	24 × 24	5,600	8	5,700	6
	30 × 30	8,600	10	8,900	6
	36 × 36	12,200	12	12,600	8
	42 × 42	16,100	15	16,500	12
	48 × 48	20,400	18	21,000	15

(Sheet 1 of 2)

**Table 6.3.3 Continued**

Soil Capacity (psf)	Minimum Footing Size	Single Stack Pier (8 in. × 16 in.)		Double Stack Pier (16 in. × 16 in.)	
		Maximum Footing Capacity (lb)	Unreinforced Cast-in-Place Minimum Thickness (in.)	Maximum Footing Capacity (lb)	Unreinforced Cast-in-Place Minimum Thickness (in.)
2,000	16 × 16	3,400	6	3,400	6
	20 × 20	5,300	6	5,300	6
	24 × 24	7,600	8	7,700	6
	30 × 30	11,600	10	11,900	8
	36 × 36	16,300	15	16,900	10
	42 × 42	21,700	18	22,700	12
2,500	16 × 16	4,300	6	4,300	6
	20 × 20	6,700	6	6,700	6
	24 × 24	9,600	8	9,700	6
	30 × 30	14,700	12	15,000	8
	36 × 36	20,800	15	21,400	10
3,000	16 × 16	5,200	6	5,200	6
	20 × 20	8,100	8	8,100	6
	24 × 24	11,500	10	11,700	6
	30 × 30	17,800	12	18,100	8
	36 × 36	25,000	18	25,700	12
4,000	16 × 16	7,000	6	7,000	6
	20 × 20	10,800	8	10,900	6
	24 × 24	15,500	10	15,600	8
	30 × 30	23,800	15	24,200	10

For SI units, 1 psf = 0.04788 kN/m<sup>2</sup>, 1 in. = 25.4 mm, 1 lb = 4.448 N.

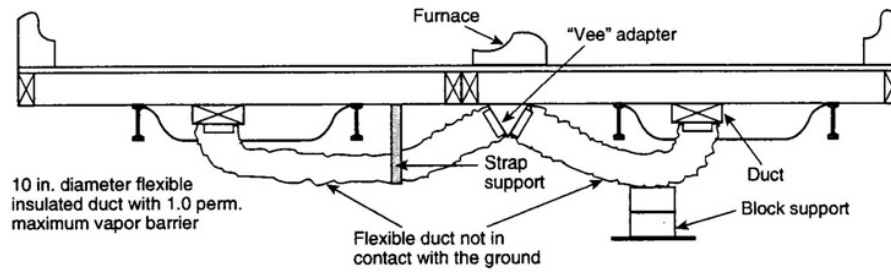
(Sheet 2 of 2)

Notes:

(1) The footing sizes shown are for square pads and are based on the area (in.<sup>2</sup>), shear, and bending required for the loads shown. Other configurations, such as rectangular configurations, can be used, provided the area is equal to or greater than the area of the square footing shown in the table and the distance from the edge of the pier to the edge of the footing is not exceeded.

(2) The 6 in. cast-in-place values can be used for 4 in. unreinforced precast concrete footings.

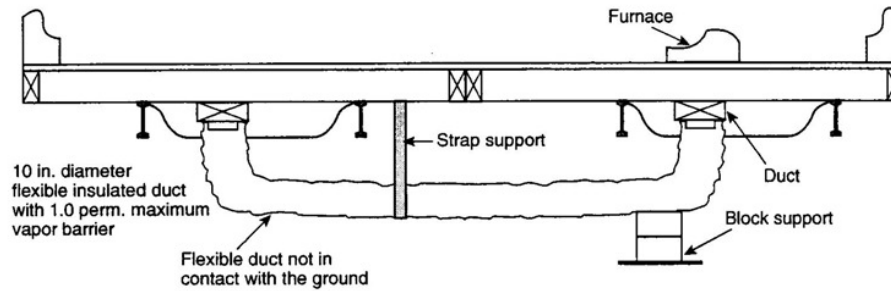
(3) The capacity values listed have been reduced by the dead load of the concrete footing.



**Notes:**

- (1) This system is utilized when a crossover duct has not been built into the floor and the furnace is outside the I-beam. With this type of installation, it is necessary for two flexible ducts to be installed.
- (2) For SI units, 1 in. = 25.4 mm

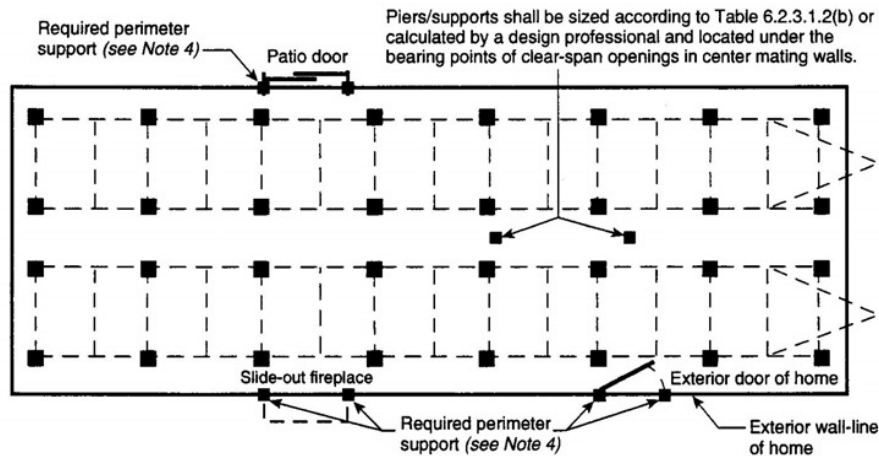
**FIGURE 7.4.2.5(a) Crossover Duct Installation (Option 1).**



**Notes:**

- (1) This system is used when a crossover duct has not been built into the floor and the furnace is situated directly over the main duct in one section of the home. A single flexible duct is then used to connect the two sections to each other.
- (2) For SI units, 1 in. = 25.4 mm.

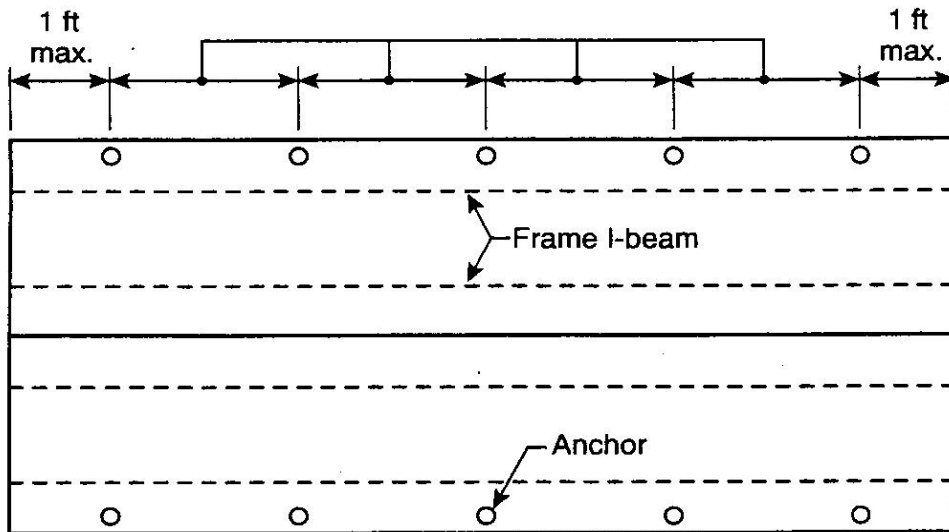
**FIGURE 7.4.2.5(b) Crossover Duct Installation (Option 2).**



**Notes:**

- (1) See Table 6.2.3.1.2(a) for required pier capacity and spacing.
- (2) See Table 6.2.3.1.2(b) and Section 6.3 for footing requirements.
- (3) Locate piers a maximum of 12 in. (305 mm) from both ends.
- (4) Place piers on both sides of entry doors, at any other openings greater than 48 in. (1220 mm) width, such as patio or atrium doors, and under porch posts, factory-installed fireplaces, and wood stoves.

**FIGURE 6.2.5.4 Typical Blocking Diagram for Multisection Homes.**



**Notes:**

- (1) See Table 7.5.2.4.1 for maximum anchor spacing.
- (2) For SI units, 1 ft = 0.3048 m.

**FIGURE 7.5.2.4.1 Anchor Locations and Spacings.**

**Table 7.5.2.4.1 Maximum Anchor Spacing for Manufactured Homes**

Strap Method	Anchor Minimum Ultimate Load Capacity	Maximum Anchor Spacing		
		Wind Zone I	Wind Zone II <sup>a</sup>	Wind Zone III <sup>a</sup>
Single strap	4725 lb	11 ft 0 in.	6 ft 0 in.	4 ft 6 in.
Double strap	4725 lb <sup>b,c</sup>	11 ft 0 in. <sup>2</sup>	6 ft 0 in. <sup>2</sup>	4 ft 6 in. <sup>2</sup>

For SI units, 1 lb = 4.448 N, 1 ft = 0.3048 m, 1 in. = 25.4 mm.

**Notes:**

(1) Table 7.5.2.4.1 is applicable to single-story homes with roof slopes less than 20 degrees, a maximum sidewall height of 8 ft, and a maximum pier height of 4 ft.

(2) See NFPA 501, *Standard on Manufactured Housing*, for determination of wind zones.

<sup>a</sup>Unless reduced spacing is specified by the AHJ.

<sup>b</sup>All homes located in Wind Zones II and III shall have a vertical tie installed at each diagonal tie location.

<sup>c</sup>Unless listed for a higher capacity.

## ***MANUFACTURED HOME INSPECTION REQUIREMENTS***

- ☐ **The owner of the project / parcel is responsible for requesting all inspections for the home placement.**

### **SITE INSPECTION:**

**Setback inspection:** Have all of the property corners marked so the setbacks can be verified and the home is not located in a floodway or floodplain.

#### **Footing inspection:**

- Verify the footing dimensions, reinforcement and anchor locations per the insert sheet provided at the time of application.
- Inspection of the site where the home will be placed to verify that it has been cleared of vegetation.
- Inspection of forms for concrete runner placement. If runners are not used then the home location will have all vegetation removed from where the pads will be placed.
- The bottom of the perimeter bearing supports must be below the frost line (12 inches) to prevent frost heave.
  - ☐ Installation for new homes must comply with the manufacturer's requirements or an architect or engineer's design.
  - ☐ Relocated homes must also comply with NFPA 225 or an architect or engineer's design.

### **PLACEMENT INSPECTION:**

**Blocking:** Marriage line, main frame and perimeter blocking.

- New homes installed per the manufacturer's requirements or an architect's or engineer's design.
- Relocated homes per NFPA 225 or an architect's or engineer's design.
- Marriage line connections at the floor and roof.

**Tiedown anchors:** Proper placement of anchoring devices per the anchor manufacturer's installation requirements.

- Tiedown spacing for new homes must comply with the manufacturer's requirements or an architect's or engineer's design.
- Tiedown spacing for relocated homes must comply with NFPA 225 or an architect's or engineer's design.
  - ☐ If cable: Size, working load, clamps and turnbuckles, must meet working load of 4,725 lbs, and no open-end hooks.
  - ☐ If strap: Single strap or double strap method. Installed per the manufacturer's instructions.
  - ☐ If ground anchor: Installation instructions for the soil type.

#### **Plumbing:**

- The installer provides a certificate of test for the water pipes, Drain Waste Vent (DWV), and gas piping.
- Proper materials used for yard piping, condensate lines and pressure relief valve drain.
- Proper support for DWV and water pipe.

**Mechanical:** Dryer duct and cross over duct.

**Insulation:** Water lines shall have R-3.6 for pipes less than 2" diameter; R-5.4 for pipes greater than 2" in diameter.

- ☐ **NO SKIRTING SHALL BE INSTALLED UNTIL THE BUILDING INSPECTOR HAS APPROVED THE PLACEMENT INSPECTION**

### **FINAL:**

#### **Landings:**

- A 36-inch square landing at each exterior door not more than 8-inches below the door threshold of an in swinging door and not more than 1-inch below an out swinging door.

#### **Stairs:**

- Where required, 36-inches wide, with minimum 10-inch run, and 4-inch to 7 ¾-inch rise.

#### **Handrails:**

- Where required, 34" to 38" above the nosing of the stair tread.

#### **Guardrails:**

- On decks 30-inches or more above the adjacent grade, 36-inches high with no openings large enough to allow passage of a 4-inch sphere.

#### **Underfloor access and ventilation:**

- Provide a minimum 16-inch by 24-inch underfloor access through perimeter wall.
- Provide 1 square foot of ventilation for every 150 square feet of underfloor area.