

MANUFACTURED DWELLING PLAN REQUIREMENTS

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Code of Reference: 2010 Oregon Manufactured Dwelling & Parks Specialty Code and 2014 Oregon Residential Specialty Code.

The City of Hood River would like to help you receive your building permit in a timely fashion by providing you with this checklist to inform you of what is required for processing your permit. Additional information may be required on a case by case basis. **Please fill out and return this checklist with your permit application.**

Applicant Name: _____ **Address:** _____

Phone: _____

Property location: _____ **Map & Tax Lot No.:** _____

**Site plan that includes the following information:
Must be drawing to a legible scale.**

1. ___ **Copy of the latest deed of record.**
2. ___ **Copy of Manufactured Dwelling Installer's certification.**
3. ___ **Copy of Skirting Installer's certification.**
4. ___ **Manufactured dwelling factory specifications.**
5. ___ **Entire property with dimensions of boundaries, lot square footage and north arrow.**
6. ___ **Location and height of proposed fences.**
7. ___ **Elevations of finish floors and slabs relative to street curb or gutter and elevations at property corners.**
8. ___ **Footing and foundation plan, with manufacture's pier placement plan.**
9. ___ **Roof and foundation drain location, routing, slope and elevations at discharge points.**

10. **Location of existing and proposed private and public utilities (sanitary, storm, water, power, gas, tv and telephone.**
11. **Location of existing structures including decks, stairs and patios. Indicate proposed new structures or additions, with dimensions and distances from property lines and each other.**
12. **Existing and proposed elevations or contours in sufficient detail to show all cuts, fill, slopes and drainage.**
13. **Existing curbs with elevations, sidewalk location (existing and proposed), proposed driveways(s) and off-street parking area.**
14. **Existing trees on site, street trees and landscaping when required.**

Manufactured Home Placement Permit Information

1. Check zoning with the City of Hood River's Planning Department to assure that the lot location is zoned for manufactured dwelling. There are different requirements for placement of manufactured dwellings in the R-1, R-2 and R-3 zones. All manufactured dwellings must meet Chapter 17.12 of the City of Hood River Municipal Code. (See **Attachment "A"**)

2. **Permit Fees:**

There are two parts to Manufactured Dwelling permit applications: A) Foundation; B) placement of home. Generally the permit is combined and the total fees collected, however, an applicant may request a foundation permit only. A separate building permit would be required for any accessory structures (detached garage, awnings or decks).

Foundation: the permit fee is based on the "value" of the foundation and excavation costs. Any accessory structures shall have a separate permit.

TOTAL PERMIT FEES

86.00	Construction Site Permit (if applicable)
154.00	Construction Site Permit (if involves street cut)a degradation fee may apply.
240.00	Manufactured placement 150.00/Plumbing & electrical 90.00(meter to home)
72.00	Planning Department
72.00	Engineering Department
73.00	Fire Department
1821.00	Sewer connection fee (3/4 inch-based on water meter size)
5123.00	Water connection (3/4 inch service)
650.00	Storm SDC
1802.00	Transportation SDC
61.00 plus 5.00 per page for recording fees (if applicable)	
1.20 sq. ft. HRC School Tax for new SFD	
2808.00	HR County Parks & Recreation

Separate building permits are required for on accessory buildings, awnings or decks.

3. Applicant must provide a drawing of the type of foundation (i.e. FHA runners). Also provide a diagram of support placement required for specific manufactured home at time of permit application. Hurricane and seismic hold-downs are also required in the area and gutter drainage will need to be addressed. (See **Attachment "B"**)
4. If excavation is required, they will need to check with engineering (in case of curb cut, etc. is needed).
5. The applicant must include documentation which addresses all the manufactured home specifications and floor plan. (See **Attachment "C"**)
6. A site plan to scale is required. Any questions about zoning and setbacks can be handled through the City Planning Department (541-387-5210). (**Attachment "D"**)

7. Separate electrical and plumbing permit will be required. These permits can be obtained by contacting the Mid Columbia Building Code Services office located in The Dalles (541- 298-4461).
8. Mechanical permits are required for any additional or alteration of the heating or cooling system. Those permits can be obtained through the City Building Department (541-387-5202).
9. All fees must be collected before permit is issued. A separate check needs to be made payable to HR County Parks & Recreation.
10. **Required Inspections: CALL 24 HOURS PRIOR TO WHEN INSPECTION IS NEEDED. (541)387-5211**
 1. **Site Inspections:** Shall be performed and approved prior to installation of the manufactured dwelling. This inspection is to assure that the site is suitable before home is placed. Includes:
 - (a) Meets minimum setbacks;
 - (b) Vegetation removal;
 - (c) Controlled fill tested and report submitted (if required);
 - (d) Site grading and drainage;
 - (e) Topographical review.
 2. **Foundation Inspection:** Shall be performed and approved prior to pouring concrete. This inspection includes:
 - (a) Placement and support of reinforcing steel;
 - (b) Clearance from finished sub-grade to reinforcement;
 - (c) Seismic tie-downs (if applicable);
 - (d) Plumbing, electrical and water connections;
 - (e) Grounding electrode;
 - (f) Vapor barrier (if below footing).
 3. **Marriage Inspection:** After manufactured dwelling is blocked and bolted, before marriage lines are covered.
 - (a) Blocking under frame and key street points;
 - (b) Perimeter stability blocking (other than skirting);
 - (c) Ridge beam connector(s);
 - (d) Frame connection(s);
 - (e) Marriage end walls;
 - (f) Seal of marriage line;
 - (g) Vapor barrier (above footing).
 4. **Placement Inspection:** Shall be performed prior to installation of skirting.
 - (a) All State electrical and plumbing inspections must be signed off;
 - (b) Tie-downs;
 - (c) Plumbing, electrical and water connections;
 - (d) Cross over connections;
 - (e) Flue and duct connections;
 - (f) Weather sealing.

- 5. Final Inspection:** Shall be performed prior to occupancy.
- (a) Skirting or perimeter foundation installation;
 - (b) Under-floor access and ventilation;
 - (c) Temporary steps must be removed;
 - (d) Permanent steps installed;
 - (e) Dryer and range exhaust duct through skirting or perimeter foundation;
 - (f) GFCI and smoke detector test;
 - (g) Site grading and roof drainage completed;
 - (h) Off street parking and access to public way must be hard-surfaced;
 - (i) Public sidewalks completed (if required);
 - (j) Street cuts repaired.

**City of Hood River Building Department
 Manufactured Dwelling Installation Checklist**

Permit No.: _____
Site Address: _____

Owner: _____ **Phone No.:** _____

Address: _____

Contractor: _____ **Phone No.:** _____

INSPECTOR MUST SIGN ALL SPACES PERTAINING TO THIS PERMIT

Inspection	Date	Inspector's Initials
Site Inspection		
Set Backs		
Site Grading & Drainage		
Foundation		
Footings		
Vapor Barrier (if under footing)		
Foundation Drain		
Marriage		
Ridge Beam Fastened		
Marriage Sealed		
Marriage Ceiling & Floor		
Marriage End Walls		
Vapor Barrier (above footing)		
Placement		
Tie-downs (if applicable)		
Foundation Support		
Utility Connections		
Flue & Duct Installation		
Weather Seals		
GFCI & smoke detector testing		
Final		
Underfloor Access & Ventilation		
Permanent Steps		
Roof Drainage		
Address Posted (Visible from Street)		
Off-Street Hard Surfaced Parking		
APPROVAL FOR OCCUPANCY		
Signature:		Date:

Applicant Name _____
Permit No. _____

Site Address _____

The below subcontractor's list must be completed and reviewed by the building department prior to construction.

Name:	Address:	License No.:	Phone No.:
General Contractor:			
Excavation:			
Concrete - Foundation/Footings/Runners/Slab:			
Manufactured Home Installer:			
Manufactured Home Skirt Installer:			
Electrical:			
Plumbing:			
Mechanical:			
Concrete: Flatwork/sidewalk/driveway approach			
Misc./Finish:			

CHAPTER 17.12 MANUFACTURED HOMES AND MOBILE HOME PARK PROVISIONS

SECTIONS:

- 17.12.010 Placement of Manufactured Homes on Individual Lots**
- 17.12.020 Additional Criteria for Manufactured Homes in R-1 Zone**
- 17.12.030 Mobile Home/Manufactured Dwelling Parks**
- 17.12.040 Information Required for Preliminary Site Plan Review**
- 17.12.050 Final Site Plan and Submission Requirements**
- 17.12.060 General Standards for Mobile Home Park Development**

17.12.010 Placement of Manufactured Homes on Individual Lots

The following standards apply to manufactured homes on individual lots or parcels in all zones where manufactured homes are a permitted use:

1. The manufactured home shall be multi-sectional and enclose a space of not less than 1,000 square feet.
2. The manufactured home shall be placed on an excavated and back-filled foundation and enclosed at the perimeter such that no more than twelve (12) inches of the enclosing material is exposed above grade. Where the building site has a sloped grade, no more than twelve (12) inches of the enclosing material shall be exposed on the uphill side of the home. If the manufactured home is placed on a basement, the twelve (12) inch limitation will not apply.
3. The manufactured home shall have a pitched roof with a slope of not less than a nominal three (3) feet in height for each twelve (12) feet in width.
4. The manufactured home shall have exterior siding and roofing which in color, material, and appearance, is similar to the exterior siding and roofing material commonly used on new residential dwellings within the community.
5. The manufactured home shall be certified by the manufacturer to have an exterior thermal envelope meeting performance standards that will reduce heat loss to levels equivalent to the heat loss performance standards required of single-family dwellings constructed under the State Building Code.

17.12.020 Additional Criteria for Manufactured Homes in the R-1 Zone

The following additional standards apply to manufactured homes on individual lots or parcels in the R-1 Zone:

- A. All manufactured homes shall have a minimum eave extension of six (6) inches.
- B. Manufactured homes shall utilize at least five (5) of the following design features to provide visual relief:
 1. Dormers
 2. Gables
 3. Recessed entries
 4. Covered porch entries
 5. Cupolas
 6. Bay or bow windows
 7. Garage
 8. Window shutters
 9. Skylights
 10. Attached deck
 11. Off-sets on building face or roof (min. sixteen inches)
 12. Roof pitch of 5/12 feet or greater
 13. Minimum eave extension of twelve (12) inches, including gutters.

17.12.030 Mobile Home/Manufactured Dwelling Parks

The following requirements apply to new, expanded, or altered mobile home parks. Parks are allowed in the R-1, R-2, and R-3 zones.

ATTACHMENT "A" page 2 of 2

1. Parks are not permitted in commercial or industrial zones.
2. Minimum lot size of one (1) acre with a maximum of two (2) acres.
3. No park shall be established or expanded without first receiving approval of the Planning Commission.
4. The Planning Commission shall grant or deny approval of a park based on the criteria delineated in this chapter and the procedural requirements of the *Review Procedures* (Chapter 17.09).
5. Notwithstanding, parks shall comply with the City of Hood River's Comprehensive Plan.

17.12.040 Information Required for Preliminary Site Plan Review

The application for a preliminary site plan review for a mobile home park shall be filed with the Planning Department on a form obtained from the Planning Director and shall be accompanied by a site plan showing the general layout of the entire mobile home park and drawn to a scale not smaller than one (1) inch representing fifty (50) feet. The drawing shall show the following information:

1. Name of the property owner, the applicant, and the person who prepared the plan.
2. Name of the mobile home park and address.
3. Scale and north point of the plan.
4. Vicinity map showing relationship of mobile home park to adjacent properties.
5. Boundaries and dimensions of the mobile home park.
6. Location and dimensions of each mobile home site, with each site designated by number, letter, or name.
7. Location and dimensions of each existing or proposed structure.
8. Location and width of park streets.
9. Location and width of walkways.
10. Location of each lighting fixture.
11. Location of recreational areas and buildings.
12. Location and type of landscaping plantings, fence, wall, or combination of any of these, or other screening materials.
13. Location of point where mobile home park water system connects with the public system.
14. Location of available fire and irrigation hydrants.
15. Location of public telephone service for the park.
16. Enlarged plot plan of a typical mobile home site, showing location of the pad, patio, storage space, parking, sidewalk, utility connections, and landscaping.

17.12.050 Final Site Plan and Submission Requirements

At the time of application for final approval to construct a new mobile home park, or expansion of an existing mobile home park, the applicant shall submit copies of the following required detailed plans to the appropriate reviewing departments and agencies:

1. New structures.
2. Water supply and sewage disposal system.
3. Electrical systems.
4. Road, sidewalk, and patio construction.
5. Drainage system.
6. Recreational area improvements.

3-7.2.4 Elevated Homes. When more than 25 percent of the area of a home is installed so that the bottom of the main frame members are more than 36 in. above ground level, the home stabilizing devices shall be designed by a registered design professional.

3-7.3 Marriage Line Support.

3-7.3.1 Marriage Line Column Support Piers. For the initial installation of a new multisection manufactured dwelling, footings shall be sized and piers shall be placed under the column support locations according to the manufacturer’s installation instructions.

3-7.3.2. For secondary installations where the column support post location and capacity cannot be obtained or located, the column support post must be visually located and identified to determine that the spans and capacity of the piers and footings are according to Table 3-7.3. Column support may be placed parallel or perpendicular to the rim joist. If necessary, column support piers may be offset up to 6 in.

3-7.3.3 Marriage Line Concentrated Loads. Where the concentrated load of a column support post exceeds the capacity of a single pier, multiple piers of the same type and rating may be used to distribute the load. When two or more piers are used, each pier may be supported by individual footings having a combined size and rating equivalent to the applied load identified in Table 3-7.3.

3-7.4 Pier Location and Spacing.

3-7.4.1 General. Piers shall be spaced according to the following and Table 3-7.4.

3-7.4.2 Main Frame Piers. Piers shall be located under each main frame member within 12 in. from the end of each beam. All other piers under the main frame may be offset or placed as close as possible to accommodate foundation walls or other obstructions. Main frame piers shall not be offset more than 12 in. Up to 25 percent of the main frame CMU piers may be placed parallel to the beam.

3-7.4.3 Perimeter Piers. Perimeter piers shall be located on either side of each door over 30 in. wide, side wall window openings 4 ft. wide or greater, and recessed side wall openings 4 ft. wide or greater. Perimeter piers may be offset up to 12 in. and may be recessed up to 16 in. from the end wall.

Table 3-7.3 Center Beam Span and Footing Capacity for Secondary Installations

Footing Size	1,000 PSF Soil/Span Capacity	1,250 PSF Soil/Span Capacity	1,500 PSF Soil/Span Capacity	2,300 PSF Concrete Runner or Slab
256 SQ IN 1 – 16 in. x 16 in.	5 ft. – 6 in. 1,780 lbs.	6 ft. – 11 in. 2,225 lbs.	7 ft. – 9 in. 2,500 lbs.	12 ft. – 9 in. 4,094 lbs.
512 SQ IN 2 – 16 in. x 16 in.	11 ft. – 1 in. 3,560 lbs.	13 ft. – 10 in. 4,450 lbs.	15 ft. – 7 in. 5,000 lbs.	25 ft. – 7 in. 8,188 lbs.
768 SQ IN 3 – 16 in. x 16 in.	16 ft. – 8 in. 5,340 lbs.	20 ft. – 10 in. 6,675 lbs.	23 ft. – 2 in. 7,500 lbs.	38 ft. – 4 in. 12,282 lbs.
1,024 SQ IN 4 – 16 in. x 16 in.	22 ft. – 3 in. 7,120 lbs.	27 ft. – 9 in. 8,900 lbs.	31 ft. – 3 in. 10,000 lbs.	51 ft. – 2 in. 16,376 lbs.
1,536 SQ IN 6 – 16 in. x 16 in.	33 ft. – 4 in. 10,680 lbs.	41 ft. – 8 in. 13,350 lbs.	46 ft. – 10 in. 15,000 lbs.	-----
2,048 SQ IN 8 – 16 in. x 16 in.	44 ft. – 6 in. 14,240 lbs.	55 ft. – 7 in. 17,800 lbs.	62 ft. – 6 in. 20,000 lbs.	-----

NOTES:

- (1) Piers may be placed directly on concrete runners or slabs and do not require additional footing materials to be placed.
- (2) Other pier spacing is based on 256 square inch footings.

2010 Oregon Manufactured Dwelling Installation Specialty Code

Table 3-7.4 Pier Spacing

Pier Spacing	1,000 PSF Soil Capacity	1,250 PSF Soil Capacity	1,500 PSF Soil Capacity	2,300 PSF Concrete Runner or Slab
Main Frame Piers	4 ft. – 6 in.	5 ft. – 6 in.	6 ft. – 0 in.	8 ft. – 0 in.
Perimeter Sidewall Piers	4 ft. – 6 in.	5 ft. – 6 in.	6 ft. – 6 in.	8 ft. – 0 in.
Marriage Line Wall Piers	4 ft. – 6 in.	5 ft. – 6 in.	6 ft. – 6 in.	8 ft. – 0 in.
Marriage Line Floor Piers	8 ft. – 0 in.	8 ft. – 0 in.	8 ft. – 0 in.	8 ft. – 0 in.

NOTES:

- (1) Pier spacing is based on 256 square inch footings.
- (2) Perimeter piers are required at both sides of all doors and at any opening 4 ft. wide or greater.
- (3) This table applies to the initial installation of homes having floors that are 14 ft. wide or less. Homes with floors over 14 ft. wide shall be installed according to the manufacturer’s installation instructions.
- (4) For all secondary installations, piers shall be spaced according to this table.
- (5) Perimeter piers are required on all homes, except when the distance from the I-beam to the perimeter of the home is less than 16 in.

3-7.5 Concrete Block Pier Configuration.

3-7.5.1. Concrete block piers shall be installed in accordance with the following: Figure 3-7.2.

- (1) The concrete blocks shall be stacked with their hollow cells aligned vertically.
- (2) When piers are constructed of blocks stacked side by side, each layer shall be at right angles to the preceding one.

3-8 Pier Caps, Shims and Wedges.

3-8.1 Pier Caps. Structural loads shall be evenly distributed across capped hollow block piers. Material shall be equal in size to the pier blocks. Piers shall be constructed from one of the following:

- (1) A 4 in. nominally thick solid concrete block;
- (2) A 1 in. nominally thick group 2 or 3 parallel laminated veneer wood plate;
- (3) One piece of 1-1/4 in. plywood;
- (4) Two pieces of 3/4 in. plywood;
- (5) One 1-1/2 in. thick S-P-F (Spruce-Pine-Fir) or better board lumber free of loose knots, splits, or other visual defects;
- (6) One 1-1/2 in. thick wood polymer composite;
- (7) Listed and approved prefabricated pier caps; or
- (8) Material or methods designed by a registered design professional and approved by the building official.

3-8.2 Pier Shims. Pier shims for CMU block foundation piers shall be a minimum of 5-1/2 in. x 16 in. constructed using any of the following materials, but shall not exceed a combined height of 9 in.:

- (1) 1 in. thick group 2 or 3 parallel laminated veneer wood plate;
- (2) 1/4 in. or greater plywood;
- (3) One 1-1/2 in. thick S-P-F (Spruce-Pine-Fir) or better board lumber free of loose knots, splits, or other visual defects;
- (4) 3/4 in. thick S-P-F (Spruce-Pine-Fir) or better board lumber free of loose knots, splits, or other visual defects;
- (5) 1-1/4 in. minimum thick wood polymer composite;
- (6) 4 in. x 6 in. wood beam;
- (7) Listed and approved shimming material; or
- (8) Material or methods designed by a registered design professional and approved by the building official.

3-8.3 Wedges. Wedges for CMU block foundation piers shall be made with one of the following materials, but shall not exceed a combined height of 9 in.:

- (1) Two sets of 3/4 in. thick by 3-1/2 in. wide by 8 in. to 16 in. long wood wedges;
- (2) One set of 1-1/2 in. thick by 3-1/2 in. wide by 8 in. to 16 in. long wood wedges;
- (3) Listed or approved shimming material; or
- (4) Material or methods designed by a registered design professional and approved the building official.

3-9 Perimeter Piers.

3-9.1 Perimeter Piers. Perimeter piers may be recessed under the sidewalls, up to 12 in., to allow room for skirting to be constructed or installed. When foundation walls, basement

4-9 Under-Floor Separations.

4-9.1. Manufactured dwellings shall be installed to provide a separation between the under-floor areas of porches, decks, landings or other similar structures, including factory built structures, to the underside of the home to prevent the migration of moisture to the underside of the home.

4-9.2. The separation shall be made according to one of the following:

- (1) An under-floor enclosure shall be placed below the recessed exterior walls of the manufactured dwelling, see Figure 4-9.2;
- (2) An under-floor enclosure shall be placed below the outside perimeter of the porch,

deck, landing, or similar structure. A durable, rigid or flexible, curtain wall material (i.e. sheet vinyl, plexiglas, fiberglass, rubber membrane, ABS, pressure treated wood, 6 mil polyethylene membrane sheeting, or EPDM (ethylene propylene diolefin monomer) is placed below the recessed exterior walls of the manufactured dwelling. For the purposes of this code, EPDM is a rubber sheeting used to prevent water penetration in roofing, foundations and other similar applications where moisture or water penetration must be eliminated or minimized; or

- (3) A barrier at the footing to prevent water migration into the crawl space.

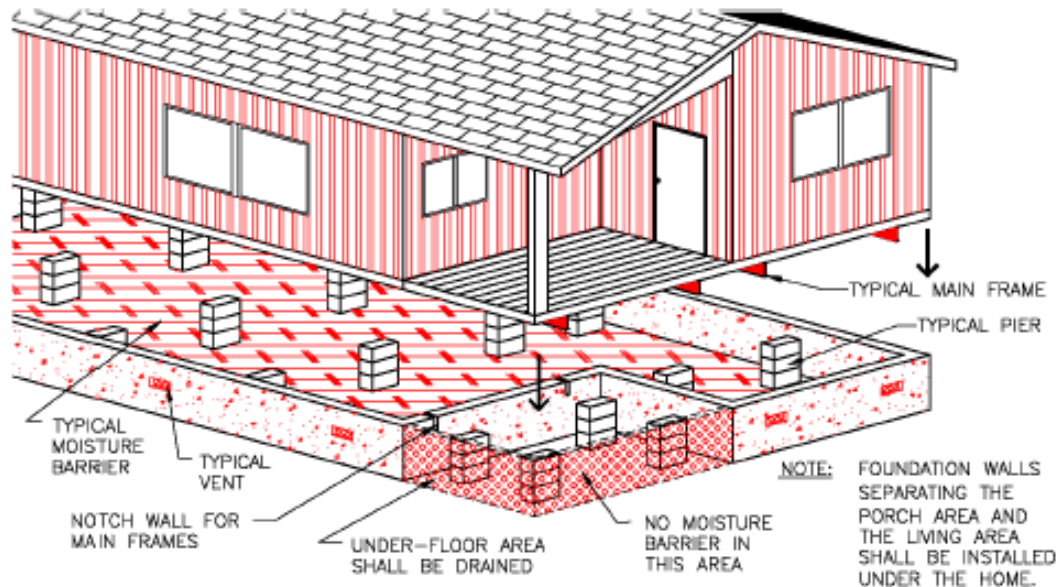


Figure 4-9.2 Under-Floor Separations

4-10 Under-Floor Ventilation.

4-10.1 Under-Floor Ventilation. The enclosed under-floor area of a manufactured dwelling shall be vented. Foundation walls, perimeter retaining walls, basements and skirting shall be vented as follows:

- (1) Each manufactured dwelling shall have cross ventilation on at least two sides of the home.
- (2) There shall be a minimum of four ventilation openings provided through the under-floor enclosure.

- (3) When possible ventilation openings shall begin at or within 3 ft. of a corner and then be evenly spaced.
- (4) Ventilation openings shall not be located at marriage lines or where the free flow of air would be restricted or obstructed.
- (5) Ventilation openings shall be placed as high as possible. In flood hazard areas, the vent openings shall be located within 12 in. of the interior grade.
- (6) Ventilation openings may be of a closable type for seasonal climatic conditions unless the stand is located at or below the base flood elevation in which case closable vents are prohibited.

ATTACHMENT “B” page 4 of 9

2010 Oregon Manufactured Dwelling Installation Specialty Code

- (7) Ventilation openings shall be provided with maximum 1/4 in. corrosion-resistant wire mesh or with louvered openings with not less than 1/8 in. screen to retard the entry of vegetation, waste materials, and rodents.
- (8) Ground level installations shall have vent wells installed where backfill or pavement would otherwise block the vent opening.
- (9) Under-floor vents may be omitted when the manufactured dwelling is placed over a basement containing a living area.
- (2) When a vent does not include a rating of the net free area, deduct 25 percent of the gross ventilation area for vent hardware such as screens or louvers.
- (3) Under-floor vents may be omitted when a continuously operated mechanical ventilation system is provided. A minimum air flow rate of 1.0 CFM for each 50 square feet of under-floor area shall be maintained and an equally sized air intake port at the opposite end of the home shall be provided.

4-10.2 Ventilation Sizing. The under-floor net free ventilation area shall be:

- (1) Equivalent to 1 square foot for every 1,500 square feet of under-floor area, as per Table 4-10.2.

Table 4-10.2 Ventilation Sizing Table

Type of Home	Min. # Vents Required	Min. Free Area Required
Single Wide	4	90 sq. in.
Double Wide	4	180 sq. in.
Triple Wide	4	280 sq. in.
Quad	4	380 sq. in.
NOTES:		
(1) More vents than the minimum required may be installed to achieve the minimum free area.		
(2) The minimum free area required is provided as a guide for a typical type of home being vented. The actual amount of free area required may be determined by calculation as per 4-10.2.		

4-11 Under-Floor Access.

4-11.1. Access to the under-floor area of a manufactured dwelling shall be provided according to this section.

4-11.1.1 Skirting Access. Access through the skirting shall be as follows:

- (1) Access opening shall provide a minimum clear opening of 18 in. x 24 in.
- (2) Access doors or panels that are not easily recognizable shall be permanently labeled "ACCESS" in 3/4 in. high bold letters.
- (3) There shall be a minimum 6 in. x 6 in. covered hand hole access opening through the under-floor enclosure within reach and not more than 12 in. from the main water inlet shutoff valve and the main drain cleanout if either is located in the enclosed area under the manufactured dwelling.

4-11.1.2 Ground Level Access. Foundation walls, retaining walls, and some basement walls shall be provided with an under-floor ground level access well constructed according to the following, see Figure 4-11.1.2:

- (1) The access well shall be constructed with materials approved for supporting unbalanced fill to the depth of the access well below grade.
- (2) The access shall provide a minimum clear opening of 18 in. x 24 in. through the foundation wall, retaining wall, or basement wall to the underside of the manufactured dwelling.
- (3) The access well shall have a minimum inside horizontal dimension of 24 in. x 30 in. Measurements shall be taken from the outside face of the access opening.
- (4) The bottom of the access well shall be below the threshold of the access opening.
- (5) The access well shall have a removable water resistive cover weighing not more than 50 lbs., made to resist the entrance of rodents and animals, without a locking device, and have handles or a method of opening without the use of special tools.

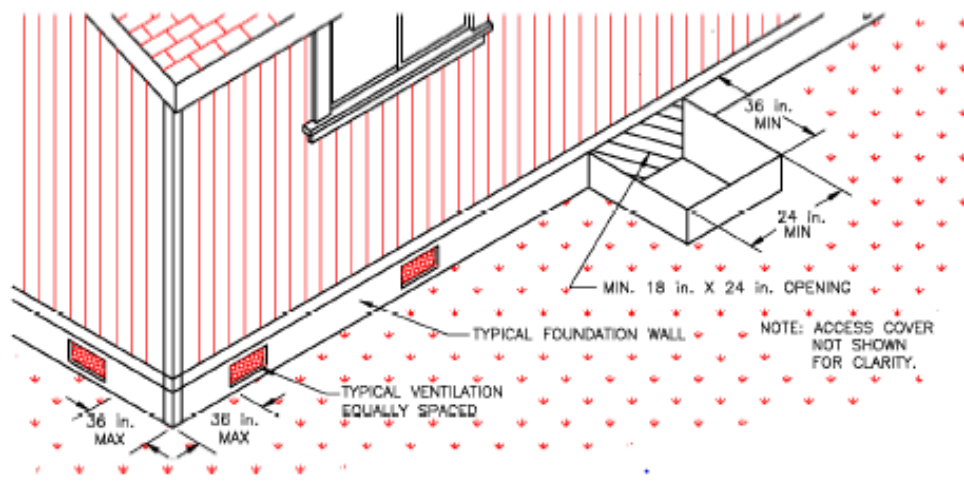


Figure 4-11.1.2 Typical Ground Level Ventilation and Under-Floor Access Detail

4-11.1.3 Through the Floor Access. Access to the under-floor area through the floor of a manufactured dwelling shall:

- (1) Be constructed according to the manufacturer's approved DAPIA plans.
- (2) Have a minimum clear opening of 24 in. x 30 in.
- (3) Have an access panel that is tight fitting, capable of resisting rodents, and insulated with an R-value equivalent to the insulation within the floor cavity.
- (4) Have an access panel weighing not more than 50 lbs. with a handle or method of opening that does not require the use of tools.
- (5) Have a minimum 24 in. x 30 in. x 48 in. space directly above the access panel without any permanent obstructions.
- (6) Be made available for inspectors and service personnel.

4-11.1.4 Stairway Access Through the Floor. Stairways within a manufactured dwelling shall comply with the following:

- (1) Access openings through the manufactured dwelling floor or ceiling for stairways shall be constructed according to the manufacturer's approved DAPIA plans.
- (2) Stairways, landings, guardrails, handrails, and headroom used for access to a basement, second floor, or between multi-level floors shall be constructed and installed according to the Oregon Residential Specialty Code whether constructed on site or in the factory.

**CHAPTER 5
INSTALLATION PROCEDURES**

5-1 Marriage Line Connection and Seal.

5-1.1 Interconnection of Multisection Manufactured Dwellings. The interconnection of multisection manufactured dwellings shall be completed in accordance with the following.

5-1.2 Preparation. Prior to joining the sections of a multi-section manufactured dwelling:

- (1) Remove all shipping and close-up materials from the marriage line floor, wall, and roof areas between the sections so there are no exposed or protruding fasteners, material scraps, or other protrusions on either side of the marriage line.

- (2) Install a durable, non-porous caulking, closed cell foam, urethane, or sill seal on the floor, wall, and roof areas of the marriage line between each section. See Figure 5-1.2.
- (3) Caulking, when used, shall be capable of compressing and stretching.
- (4) Sill seal, if used, shall be a minimum of 5-1/2 in. wide, doubled over, and attached with fasteners staggered at 6 in. on center.
- (5) Gaps between multisection manufactured dwellings shall be shimmed with wood shims, expansive foam, or other air infiltration barrier listed in this section. Gaps larger than 1 in. must be shimmed with full depth wood at the bolt locations. Gaps larger than 1-1/2 in. shall be referred to the manufacturer for correction.

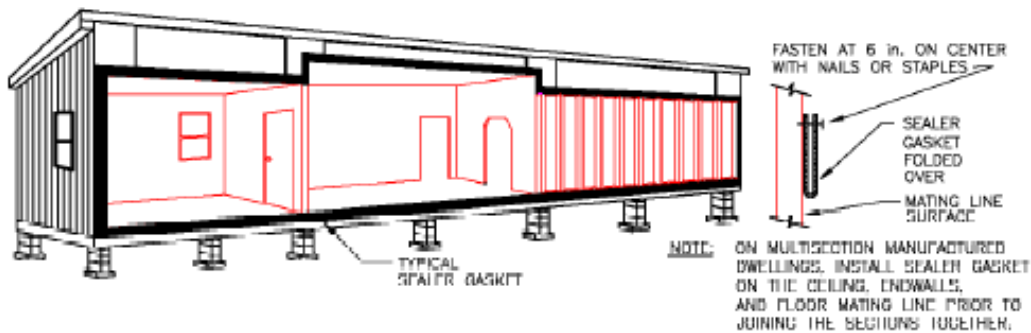


Figure 5-1.2 Typical Marriage Line Seal

5-2 Marriage Line Attachments.

5-2.1. Marriage line attachments shall be secured according to this section.

5-2.1.1 Ridge Beam Connections. Multisection manufactured dwellings marriage line ridge beams shall be secured together according to one of the following:

- (1) With 1/2 in. diameter bolts and washers, spaced equally along the length of the ridge beam, and at a maximum of 32 in. on center. Bolts shall be long enough to penetrate through both beams, washers, and all shimming material, and have 1 in. of exposed thread for installing the nut. Bolts shall be installed through 5/8 in. diameter pre-drilled holes 2 in. below the top of the ridge beam, at a 90 degree angle to the beam.

- (2) With 3/8 in. diameter lag screws installed with washers, spaced equally and staggered side to side the length of the ridge beam and at a maximum of 16 in. on center. Lag screws shall be long enough to penetrate through both ridge beams. Lag screws shall be installed through pre-drilled pilot holes with a diameter equal to half the diameter of the lag screw. Lag screws shall be installed at a 45 to 90 degree angle.
- (3) installation instructions, with 1-1/2 in. wide, by 10 in. long, by 30 gage galvanized steel straps spaced equally along the length of the ridge beam at a maximum of 32 in. on center and fastened into the top chords of the rafters or trusses on each side of the ridge beam with three #8 by 1 in. wood screws at each end of each strap.

- (c) A gravity drain installed at the lowest part of the stand or an automatically controlled sump pump or similar system to prevent the accumulation of water. Discharge from a sump pump or similar system shall drain into a storm water drainage system or to a point above grade where erosion will not occur.

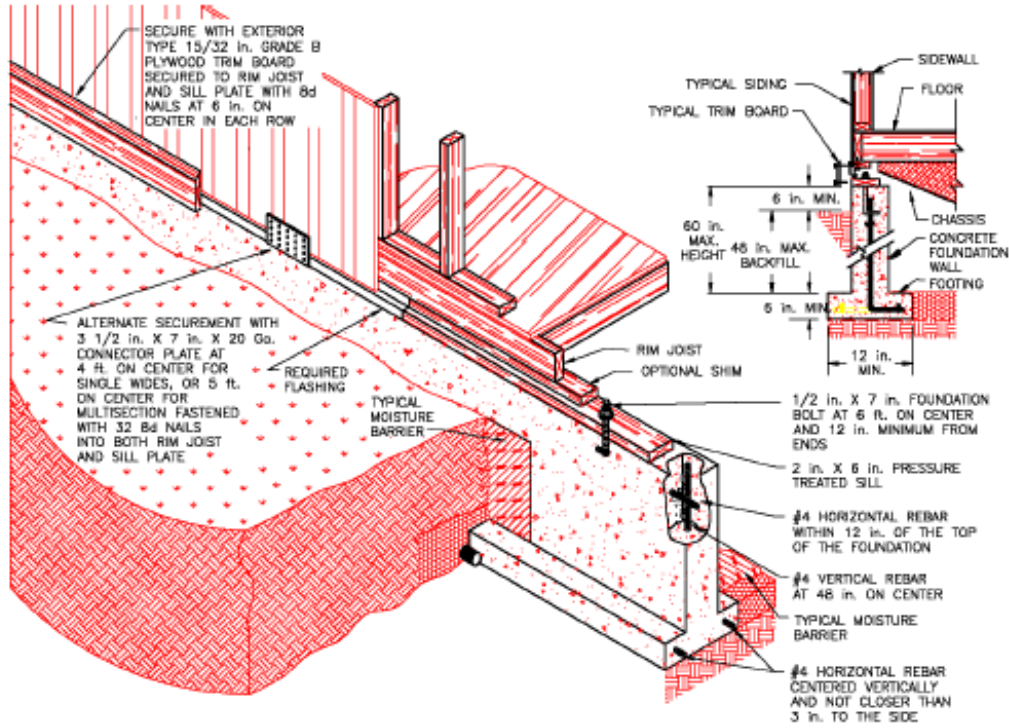
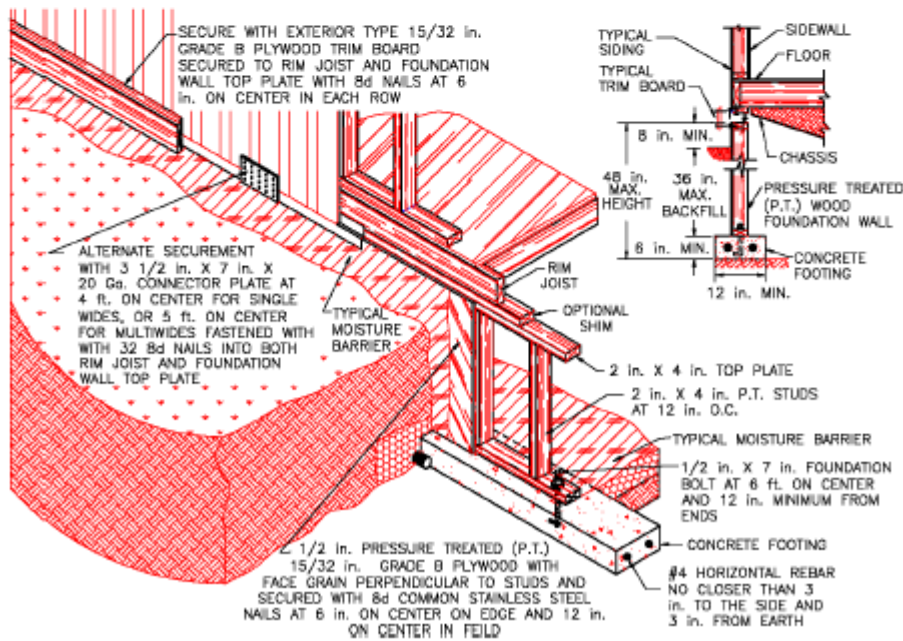
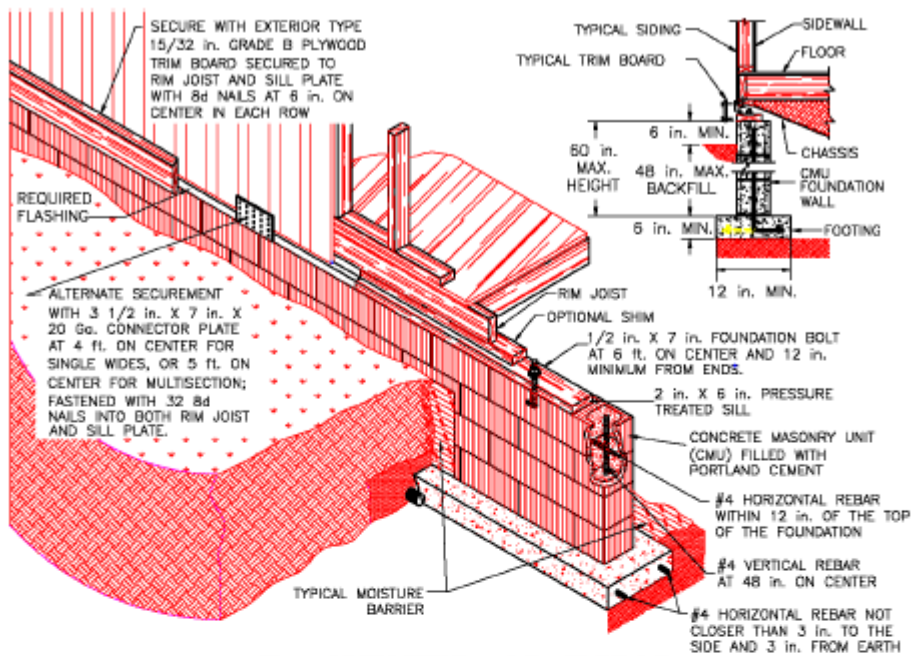


Figure 4-3.2(a) Concrete Foundation Wall Detail



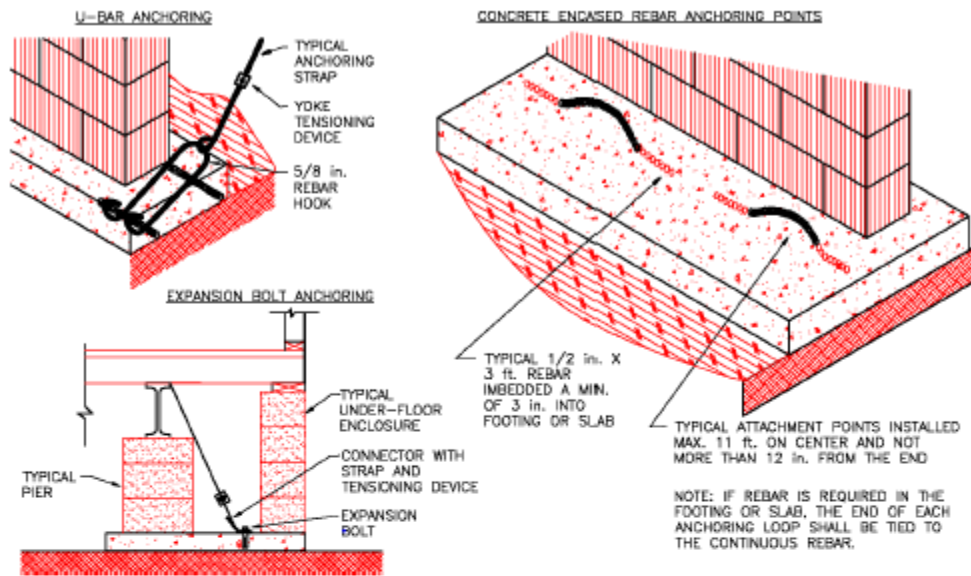


Figure 3-2.6 Typical Foundation Anchoring

3-3 Site and Stand Preparation.

3-3.1 Suitability of Site. Each site shall be suitable for its intended use and acceptable to the building official based on this code and local land use regulations. Manufactured dwellings shall not be located on land that is unsuitable due to swampy terrain, lack of drainage, or proximity to the breeding places of rodents or vermin unless improvements have been made to the land to eliminate or control the hazards. In areas having highly expansive, compressible, or shifting soils, the building official may require a soil test.

3-3.2 Unforeseen Factors. When unforeseen factors are encountered (i.e., rock formation, high ground water levels, springs, or biological generated gasses), corrective drainage work, acceptable to the building official, shall be completed prior to the siting of the manufactured dwelling.

3-3.3 Grading and Drainage. Site grading and drainage shall be provided according to the following and Figure 3-3.3:

- (1) Lots and stands shall be provided with adequate drainage and shall be properly graded to divert surface water away from manufactured dwellings, accessory buildings, and accessory structures.

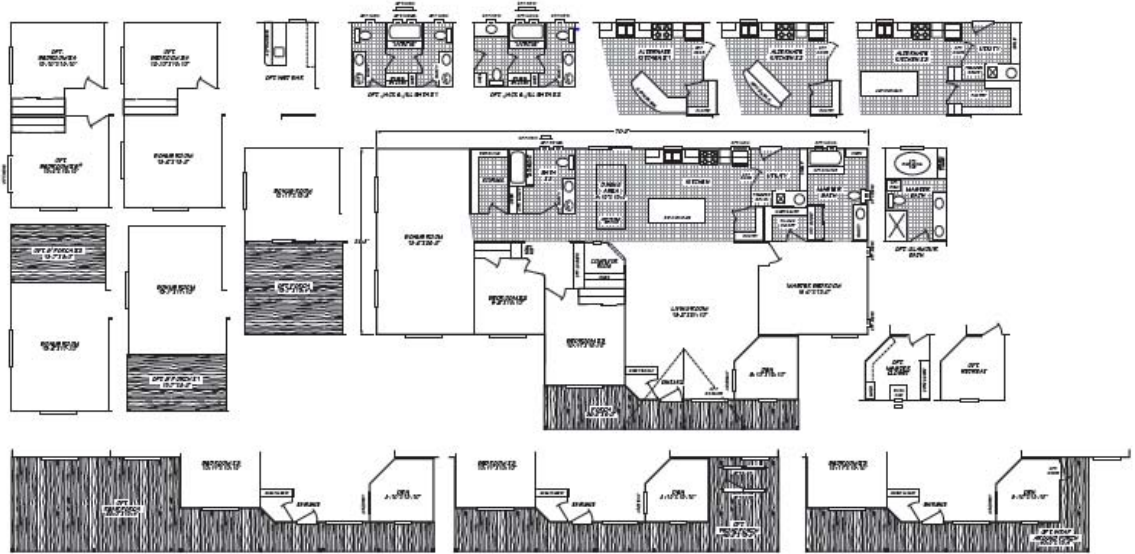
- (2) Roof run-off from manufactured dwellings shall be adequately diverted away from the stand.
- (3) Lots shall have sufficient drainage to prevent standing water, excessive soil saturation, or erosion from becoming detrimental to the lot, stand, or any structures.
- (4) All drainage shall be diverted away from the home and shall slope a minimum of 1/2 in. per foot away from the foundation for the first 10 ft. Where property lines, wall, slopes, or other physical conditions prohibit this slope, the site shall be provided with drains or swales or otherwise graded to drain water away from the structure. Alternate grading methods may be used if approved by the building official.
- (5) Sidewalks, walkways, patio slabs, or driveways abutting the manufactured dwelling stand or foundation shall have a slope of 1/4 in. per 12 in. to divert water away from the stand or foundation. The concrete shall be no closer than 3 in. vertically to any untreated wood or siding.
- (6) The slope of cut or fill surfaces shall be no steeper than is safe for the intended use according to Oregon Residential Specialty Code, Section R403.1.9.

ATTACHMENT "C"



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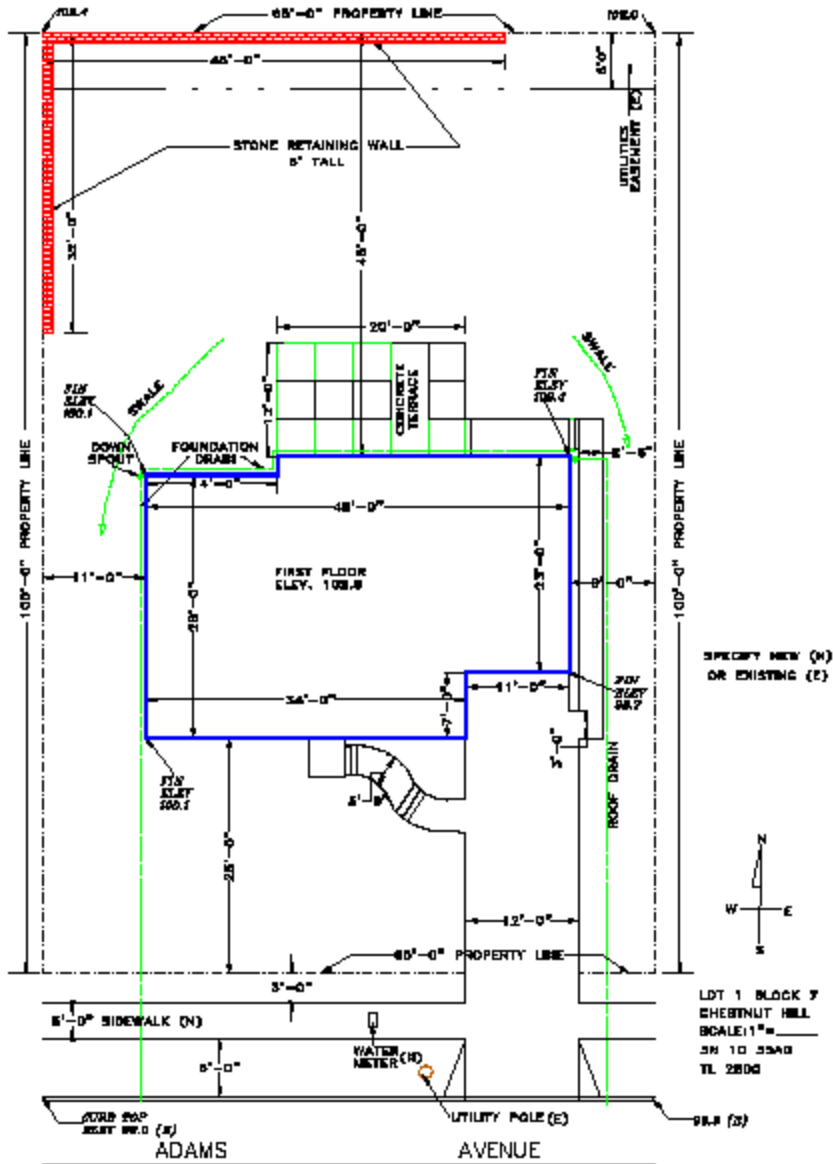
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FFS APPROVAL 1/15/15

ATTACHMENT "D"

CITY OF HOOD RIVER RESIDENTIAL SITE PLAN EXAMPLE



17.03.010 Urban Low Density Residential Zone (R-1)

A. Permitted Uses.

1. Single family dwellings and accessory structures
2. Home Occupations
3. Manufactured homes
4. Mobile home parks
5. Family day care
6. Residential care facilities
7. Transportation facilities pursuant to 17.20.050

B. Conditional Uses.

In the R-1 zone the following uses are allowed subject to the provisions of Chapter 17.06:

1. Planned unit developments
2. Schools and child care centers
3. Public parks, playgrounds, and related facilities
4. Utility or pumping substations
5. Churches

C. Site Development Requirements.

1. Minimum Lot Size: The minimum lot or parcel size shall be 7,000 square feet.
2. The minimum requirements for building sites are as follows:
 - a. Per dwelling, unit a minimum of 7,000 square feet.
 - b. A minimum frontage of fifty (50) feet on a dedicated public street.
 - c. A minimum frontage of thirty (30) feet on a public dedicated cul-de-sac.
 - d. Corner lots created after June 1, 2004 shall have a minimum of thirty (30) feet of frontage on public dedicated road.

D. Setback Requirements.

The minimum setback requirements shall be as follows:

1. No structure shall be placed closer than ten (10) feet from the nearest public right-of-way line of a dedicated public street.
2. Garages that directly face adjacent streets shall be at least twenty (20) feet from the nearest public right-of-way lines of the dedicated public streets. Garages so constructed to not face an adjacent street may be ten (10) feet from the nearest right-of-way line of the dedicated public street. Detached garages so constructed to not face an adjacent public dedicated alley may be five (5) feet from the right-of-way line.
3. Side yard/rear yard.
 - a. No structure shall be placed closer than six (6) feet from the side property line.
 - b. Structures greater than twenty-eight (28) feet in height shall be eight (8) feet from the side property line.
 - c. No structure shall be placed closer than ten (10) feet from the rear property line.
 - d. Projections may not encroach more than three (3) inches for each foot of required yard setback width.

E. Maximum Building Height:

Thirty-five (35) feet

ATTACHMENT "D" page 3 of 8

F. Parking Regulations.

1. Individual dwelling units shall be provided with at least two (2) parking spaces on the building site, one (1) of which may be within the required front yard setback area.
2. Parking spaces utilizing access from a public dedicated alley may be located within the setback area.
3. All parking areas and driveways shall be hard surfaced prior to occupancy, under the following circumstances:
 - a. New construction
 - b. Change of use
 - c. New or expanded parking area

G. Signs. All signs shall be in conformance with the sign regulations of this title.

17.03.020 Urban Standard Density Residential Zone (R-2)

A. Permitted Uses.

1. Single-family dwellings and accessory structures
2. Duplexes
3. Townhouses
4. Home occupations
5. Manufactured homes
6. Bed and breakfast facilities
7. Mobile home parks
8. Family day care
9. Residential care facilities
10. Group residential, if less than fifteen (15) persons
11. Transportation facilities pursuant to 17.20.050

B. Conditional Uses.

1. Planned unit developments
2. Schools and child care centers
3. Public parks, playgrounds, and related facilities
4. Utility or pumping substations
5. Churches

C. Site Development Standards.

The minimum lot or parcel size shall be 5,000 square feet. The minimum requirements for building sites are as follows:

1. Per dwelling unit or duplex, a minimum of 5,000 square feet.
2. Per townhouse building, a minimum of 2,100 square feet.
3. A minimum frontage of fifty (50) feet on a dedicated public street.
4. A minimum frontage of thirty (30) feet on a dedicated public cul-de-sac.
5. Corner lots created after June 1, 2004 shall have a minimum of thirty (30) feet of frontage on public dedicated road

D. Setback Requirements.

The minimum setback requirements shall be as follows:

1. No structure shall be placed closer than ten (10) feet from the nearest public right-of-way line of a dedicated public street.
2. Garages that directly face adjacent streets shall be at least twenty (20) feet from the nearest public right-of-way lines of the dedicated public streets. Garages so constructed to not face an adjacent street may be ten (10) feet from the nearest right-of-way line of the dedicated public street. Detached garages so constructed to not face an adjacent public dedicated alley may be five (5) feet from the right-of-way line.
3. Side yard/ rear yard.
 - a. No structure shall be placed closer than five (5) feet from the side property line.
 - b. Structures greater than twenty-eight (28) feet in height shall be eight (8) feet from the side property line.
 - c. No structure shall be placed closer than ten (10) feet from the rear property line.
 - d. Projections may not encroach more than three (3) inches for each foot of required yard setback width.

E. Maximum Building Height.

Thirty-five (35) feet

ATTACHMENT "D" page 5 of 8

F. **Parking Regulations.**

1. Each dwelling unit shall be provided with at least two (2) parking spaces on the building site, one (1) of which may be in the required front yard setback area.
2. Parking spaces utilizing access from a public dedicated alley may be located within the setback area.
3. All parking areas and driveways shall be hard surfaced prior to occupancy, under the following circumstances:
 - a. New construction
 - b. Change of use
 - c. New or expanded parking area
4. Bicycle parking as required by 17.20.040.

G. **Signs.** All signs shall be in conformance with the sign regulations of this title.

17.03.030 Urban High Density Residential Zone (R-3)

A. Permitted Uses.

1. Single-family dwellings and accessory structures
2. Duplexes and triplexes
3. Townhouses
4. Multi-family dwellings, subject to site plan review
5. Rooming and boarding houses
6. Manufactured homes
7. Home occupations
8. Bed and breakfast facilities
9. Mobile home parks
10. Family day care
11. Residential care facilities
12. Group residential, if fifteen (15) or more persons, subject to site plan review
13. Transportation facilities pursuant to 17.20.050

B. Conditional Uses.

1. Hospitals, sanitariums, rest homes, nursing or convalescent home
2. Schools and child care centers
3. Public parks, playgrounds, and related facilities
4. Utility or pumping substations
5. Churches
6. Planned unit developments
7. Professional offices
8. Hostels

C. Site Development Requirements.

1. Minimum Lot Size: The minimum lot or parcel size shall be 5,000 square feet.
2. The minimum requirements for building sites are as follows:
 - a. Per dwelling unit or duplex: A minimum area of 5,000 square feet.
 - b. Per townhouse building: A minimum of 5,000 square feet for the first two (2) residential units and 1,500 square feet each for any additional residential units.
 - c. A minimum frontage of fifty (50) feet on a dedicated public street.
 - d. A minimum frontage of thirty (30) feet on a dedicated public cul-de-sac.
 - e. Corner lots created after June 1, 2004 shall have a minimum of thirty (30) feet of frontage on public dedicated road

D. Setback Requirements.

The minimum setback requirements shall be as follows:

1. No structure shall be placed closer than ten (10) feet from the public right-of-way line of a public dedicated street.
2. Garages that directly face adjacent streets shall be at least twenty (20) feet from the nearest public right-of-way lines of the public dedicated streets. Garages so constructed to not face an adjacent street may be ten (10) feet from the nearest right-of-way line of the dedicated public street. Detached garages so constructed to not face an adjacent public dedicated alley may be five (5) feet from the right-of-way line.
3. Side yard/rear yard.
 - a. No structure shall be placed closer than five (5) feet from the side property line.
 - b. Structures greater than twenty-eight (28) feet in height shall be eight (8) feet from the side property line.

ATTACHMENT "D" page 7 of 8

- c. No structure shall be placed closer than five (5) feet from the rear property line.
- d. Projections may not encroach more than three (3) inches for each foot of required yard setback width.
- e. Structures greater than 28 feet in height shall be ten (10) feet from the rear property line.

E. Maximum Building Height.

Thirty-five (35) feet

F. Parking Regulations.

- 1. All individual dwelling units, duplexes, and triplexes shall be provided with two (2) parking spaces for each unit on the building site, one (1) of which may be within the required front yard setback area.
- 2. Multi-family dwellings shall be required to furnish one and one-half (1½) off-street parking spaces per dwelling unit on or adjacent to the building site.
- 3. Required setback areas may be utilized for off-street parking for multi-family dwellings.
- 4. Parking spaces utilizing access from a public dedicated alley may be located within the setback area.
- 5. All parking areas and driveways shall be hard surfaced prior to occupancy, under the following circumstances:
 - a. New construction
 - b. Change of use
 - c. New or expanded parking area
- 6. Bicycle parking as required by 17.20.040.

G. Signs.

All signs shall be in conformance with the sign regulations of this title.

H. Landscaping.

All landscaping shall be in conformance with the landscape standards in this title.

Attachment “D” Site Development Requirements page 8 of 8

City of Hood River Zoning District Development Standards*:

Zone	Min. Lot Size	Min. Frontage	Max. Lot Coverage	Front Yard Setback	Side Yard Setback	Rear Yard Setback	Max. Height	Projections	Other
R-1 Urban Low Density Residential	7,000 sq. ft.	50 ft. on a public street, or 30 ft. on a public cul-de-sac bulb	40%	10 ft. min., excluding garage; 20 ft. min. for garage facing street**	6 ft. min. 8 ft. min. for structures that are >28 ft. tall	10 ft. min.	28 ft. for all residential uses 35 ft. for all other uses	Max. of 3 inches per ft. of required setback	Use, parking, landscaping, lighting, signs, etc. shall be consistent with the zoning district standards in HRMC Chapter 17.03
			43% w/ front porch ≥60 sq. ft.						
			45% w/ detached rear garage						
			48% w/ front porch ≥60 sq. ft. & detached rear garage						
R-2 Urban Standard Density Residential	5,000 sq. ft.	50 ft. on a public street, or 30 ft. on a public cul-de-sac bulb	45%	10 ft. min., excluding garage; 20 ft. min. for garage facing street**	5 ft. min. 8 ft. min. for structures that are >28 ft. tall	10 ft. min.	28 ft. for all residential uses 35 ft. for all other uses	Max. of 3 inches per ft. of required setback	
			48% w/ front porch ≥60 sq. ft.						
			50% w/ detached rear garage						
			53% w/ front porch ≥60 sq. ft. & detached rear garage						
R-3 Urban High Density Residential	5,000 sq. ft.	50 ft. on a public street, or 30 ft. on a public cul-de-sac bulb	55%	10 ft. min., excluding garage; 20 ft. min. for garage facing street**	5 ft. min. 8 ft. min. for structures that are >28 ft. tall	5 ft. min. 10 ft. min. for structures that are >28 ft. tall	28 ft. for residential (35 ft. w/ conditional use permit) except multi-family 35 ft. for multi-family & all other uses	Max. of 3 inches per ft. of required setback	
			58% w/ front porch ≥60 sq. ft.						
			60% w/ detached rear garage						
			63% w/ front porch ≥60 sq. ft. & detached rear garage						
C-1 Office / Residential	5,000 sq. ft.	50 ft. on a public street, or 30 ft. on a public cul-de-sac bulb	65%	Professional Offices: see R-3 Zone; Residential uses, including w/ professional offices: see R-3 Zone	Professional Offices: see R-3 Zone; Residential uses: see R-3 Zone	Professional Offices: see R-3 Zone; Residential uses: see R-3 Zone	35 ft.	See R-3 zone	
			68% w/ front porch ≥60 sq. ft.						
			70% w/ detached rear garage						
			73% w/ front porch ≥60 sq. ft. & detached rear garage						

* Summary (2010). If conflict arises between this summary and the standards of Hood River Municipal Code (HRMC) Chapter 17.03, the HRMC shall prevail.

** Garage that does not face adjacent street may be set back min. of 10 ft. Detached garages that do not face an alley may be set back 5 ft. from alley ROW.

Zone	Min. Lot Size	Min. Frontage	Front Yard Setback	Side Yard Setback	Rear Yard Setback	Max. Height	Projections	Other
C-2 General Commercial	None	50 ft. on a public street, or 30 ft. on a public cul-de-sac bulb	None	None***	None***	35 ft. for residential, 45 ft. for commercial or mixed use	N/A	Use, parking, landscaping, lighting, signs, etc. shall be consistent with the zoning district standards in HRMC Chapter 17.03
LI Light Industrial	None	20 ft. on a public street	None	None	None	45 ft.	N/A	
I Industrial	None	20 ft. on a public street	None	None	None	45 ft.	N/A	
OS Open Space/ Public Facilities	None	None	10 ft. min.	10 ft. for structures ≤ 2 stories, + 1 ft. for each story over 2	10 ft. for structures ≤ 2 stories, + 1 ft. for each story over 2	45 ft.	Max. of 2 inches per ft. of required setback	
RC	Columbia River Recreational/Commercial Zone: See HRMC 17.03.110 for standards.							
EH (overlay)	Environmental Hazard Overlay: See HRMC 17.03.090 and underlying zone for standards.							
* Summary (2010). If conflict arises between this summary and the standards of Hood River Municipal Code (HRMC) Chapter 17.03, the HRMC shall prevail. ***Unless adjacent to residential zone, in which case a 3 ft. setback for structures up to 2 stories + 1 additional ft. for each additional building story.								

HRMC 17.04.120 Maximum Lot Coverage:

A. Definitions:

1. **Lot Coverage:** The percentage determined by dividing (a) the area of a lot covered by the total (in square feet) of: (1) the footprint of the main building; and (2) the footprints of accessory buildings (counting only buildings with footprints larger than one hundred fifty (150) square feet, or with two stories or more); and (3) parking pads and driveways¹; by (b) the gross area of the that lot.

¹For rear garages only, the square footage for parking pads and driveways that use grass-crete shall be reduced by seventy-five (75) percent (e.g., a 300 sq. ft. driveway surfaced in grass-crete is included as 75 sq. ft. for purposes of determining lot coverage). The square footage for parking pads and driveways that use paving stones and other permeable paving materials (other than grass-crete), shall be reduced by fifty (50) percent.

2. **Main Building Footprint Coverage:** The percentage determined by dividing that area covered by a main building footprint by the gross area of the lot on which the main building is located. The main building footprint includes all parts of a main building that rest, directly or indirectly, on the ground, including, by way of illustration and not by limitation, bay-windows with floor area, chimneys, porches, decks supported by posts and with floor heights that are four (4) feet or higher above grade, cantilevered decks with horizontal projections that are four (4) feet or more, and covered breezeways connected to a main building.

B. **Coverage:** Maximum lot coverage applies to any residential dwelling lot in the “R” and “C-1” zones for all existing structures and new construction, except as provided below. Maximum lot coverage for residential dwellings is shown in the table in HRMC Section 17.04.120 and in this summary.

- When a detached garage is provided in the rear yard, the maximum lot coverage may be increased (see table in HRMC Section 17.04.120 and in this summary).
 - When a porch is attached to the front elevation of the residential dwelling and has an area of at least sixty (60) square feet on the front of the building (exclusive of any wrap-around or side porch), the maximum coverage may be increased (see table in HRMC Section 17.04.120 and in this summary).
3. Existing main and accessory structures that are not in conformance with these coverage requirements on September 1, 2006, are permitted to be rebuilt within the building footprint as it existed on September 1, 2006, if the structures are damaged or partially destroyed by fire, wind, earthquake or other force majeure and if construction commences within two (2) years from the date of the calamity.
4. Multi-family dwellings are exempt from the lot coverage requirements.