

CHAPTER SEVEN ALTERATIONS AND REPAIRS

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7-1 General.

7-1.1 Permits Permits may be required for some work or some portions of the work outlined in this chapter. Refer to the specific sections of this code, Chapter One, and the authority having jurisdiction for more information.

7-1.2 Alterations. The term “alterations”, as used in this section of this code only, is meant to include any change, addition, alteration, repair, conversion, replacement, modification, refurbishing, re-manufacturing, or removal of any part of the manufactured dwelling or manufactured dwelling equipment. All other sections of the code address only a specific type of alteration (i.e. repair or conversion). This chapter of the code is intended to supplement the structural requirements of the federal **Manufactured Home Construction and Safety Standards 24 CFR 3280**, and the **Oregon One and Two Family Dwelling Specialty Code**, but is not intended to take the place of these codes.

(a) Where ever the requirements of this code differ from the **Oregon One and Two Family Dwelling Specialty Code**, this code shall apply;

(b) Alternate methods permitted in the **Oregon One and Two Family Dwelling Specialty Code**, but not mentioned in this code may be permitted if acceptable to the authority having jurisdiction;

(c) All materials used in the alteration of a manufactured dwelling shall be without

defect. All damaged materials shall be discarded and replaced;

(d) All lumber used in the alteration of a manufactured dwelling shall be kiln dried or shall have a moisture content of 19 percent or less;

(e) Alterations shall not be made to a manufactured dwelling that would eliminate required windows, doors, or ventilation;

(f) Changes in use of a manufactured dwelling shall comply with Chapter 2 of this code;

(g) All electrical alterations shall comply with Chapter 4 of this code;

(h) All plumbing alterations shall comply with Chapter 5 of this code;

(i) All mechanical alterations shall comply with Chapter 6 of this code; and

(j) Fixtures and appliances shall not be altered or converted except where specifically permitted by the fixture or appliance listing and Chapters 4 and 6 of this code.

7-1.3 Alternate Methods. Where it is impractical for the manufactured dwelling to conform to the strict letter of the code, the inspector may accept methods or materials that are substantially equivalent to the code. Engineering may be required to substantiate equivalency if structural components of the manufactured dwelling have been altered or replaced.

7-1.4 Exempt Alterations. The following alterations are exempt from permits but are not exempt from the requirements of this code:

(a) Minor repairs with approved component parts;

(b) Conversion of listed fuel burning appliances in accordance with the terms of their listing;

(c) Adjustment and maintenance of equipment; and

(d) Replacement of equipment or accessories in kind.

NOTE: For a more complete description of what is included in exempt alterations,

see Appendix A for definitions of “minor repair”, “adjustment of equipment”, and “replacement in kind”. See Chapter 1 to determine when permits may be required.

7-1.5 Smoke Detectors or Alarms. Any alterations requiring a permit, made to a manufactured dwelling after the completion of the initial sale, shall have smoke detectors or alarms installed according to Chapter 9 of this code.

7-1.6 Labels. HUD certification labels or state insignias of compliance are not required to be removed from a manufactured dwelling as a result of alterations, as long as the alterations conform to the requirements of this code and have, when required, been permitted, inspected, and approved by the authority having jurisdiction. If replacing or over laying the exterior siding of a manufactured dwelling, carefully remove the label(s) or insignia(s) without damage and reinstall them on the new siding using rivets or screw nails.

WARNING: Do not remove or discard HUD label(s) or insignia(s) of compliance from the manufactured dwelling. HUD label(s) or insignia(s) of compliance certify that the manufactured dwelling has been inspected and found in compliance with the applicable code at the time of original construction. Selling a manufactured dwelling without the original HUD label(s) or insignia(s) of compliance may cause a substantial devaluation of the manufactured dwelling and the possible denial of an installation permit.

7-2 Alterations.

7-2.1 Initial Alterations. Alterations to a manufactured dwelling before or at the time of sale to the first consumer performed or arranged by the manufacturer, dealer, or distributor shall conform to the federal **Manufactured Home Construction and Safety Standards**, the **National Electrical Code**, and the manufacturer’s DAPIA

approved plans. Initial alterations of manufactured dwellings shall be inspected by the Oregon Building Codes Division (IPIA) except for site installed mechanical equipment. Site installed mechanical equipment (i.e. solid fuel burning fireplaces, wood stoves, pellet-fired appliances, heat pumps, and air conditioners) shall be inspected by the local authority having jurisdiction to Chapter 4 and 6 of this code.

NOTE: Based on the federal preemption of **24 CFR 3282.203**, DAPIA approved plans are not subject to Oregon architects and engineers law and are acceptable when stamped by an out-of-state registered professional architect or engineer.

7-2.2 Secondary Alterations. Alterations to a manufactured dwelling after the initial sale to the first consumer shall be inspected by the authority having jurisdiction and shall conform to this code and, where not specific, to the **Oregon One and Two Family Dwelling Specialty Code** and the **National Electrical Code** except for the following:

- (a) Installation or alteration of fuel burning appliances in a manufactured dwelling shall conform with Chapter 6 and the federal **Manufactured Home Construction and Safety Standards 24 CFR 3280**;
- (b) Energy conservation standards are not required to be increased to the levels of the state energy code as a result of alterations being made to a manufactured dwelling; and
- (c) Roof live load capabilities are not required to be increased as a result of an alteration to a manufactured dwelling unless specifically required in this chapter.

7-3 Repairs and Maintenance.

7-3.1 Warranty Work. Repairs or maintenance on a manufactured dwelling, performed by the manufacturer, dealer, or distributor, shall conform with the federal **Manufactured Home Construction and**

Safety Standards, the National Electrical Code, and the manufacturer's DAPIA approved plans.

7-3.2 Non-Warranty Work. Repairs and maintenance on a manufactured dwelling by the homeowner shall conform to the federal or state code in force at the time of original manufacture. Maintenance work which is not exempt from permits according to Section 7-1.4 of this chapter shall be inspected by the authority having jurisdiction.

7-4 Conversion.

7-4.1 Change of Occupancy. Manufactured dwellings converted to a different occupancy classification shall meet the minimum code requirements of the appropriate specialty codes for that specific occupancy. Refer to Chapter Two for more information.

7-5 Re-Roofing.

7-5.1 General. Re-roofing for the purpose of this chapter is considered maintenance work. If the existing roofing is being replaced with equivalent roofing, no permits are required. If the existing roofing is being replaced with a different roofing material a permit may be required from the authority having jurisdiction. All replacement roofing shall be installed according to this code and, where not specific, to the roofing manufacturer's installation instructions, and the **Oregon One and Two Family Dwelling Specialty Code**.

7-5.2 Roofing Removal. Existing roofing material and underlayment, shall be removed prior to installing new roofing material. Damaged or defective rafters, trusses, or sheathing shall be repaired or replaced before installing new roofing material. Replacement roofing shall not be added over existing roofing material.

7-5.3 Roof Penetrations. All plumbing vents, mechanical vents, chimneys, flue pipes, and the electrical masthead shall be flashed and extended through the

replacement roofing and with listed and compatible equipment or material according to the following:

(a) Appliance vent extensions shall be made according to the appliance listing and manufacturer's installation instructions;

(b) Plumbing vents shall extend at least 6 inches (15 cm) above the roof addition and shall not be located within 3 feet (0.91 meters) of any motor driven air intake that opens into habitable rooms;

(c) Fireplace and wood stove chimneys and flues shall extend through the roof a minimum of 3 feet (.91 meters) and a minimum of 2 feet (.61 meters) above the highest portion of the new roof within 10 horizontal feet (3.05 meters); and

(d) Electrical mastheads shall extend above the roof at least high enough to maintain the minimum clearances required in Chapter 4 of this code.

7-5.4 Ventilation. Ventilation shall be provided to the attic space when re-roofing a manufactured dwelling according to **Section 806** of the **Oregon One and Two Family Dwelling Specialty Code**.

7-6 Roof Additions.

7-6.1 Roof Loads. The roof addition shall be designed and constructed for the roof snow loads and wind loads specific to the area the manufactured dwelling is sited according to the requirements of this code, and where not specific, to the **Oregon One and Two Family Dwelling Specialty Code** and the authority having jurisdiction. Manufactured dwelling roof additions added over an existing roof of a manufactured dwelling shall be supported through to the ground according to the following:

(a) Where a roof addition conveys weight on the manufactured dwelling ridge beam, the ridge beam shall be reinforced or the span reduced according to an acceptable design;

(b) Where a roof addition conveys weight on the exterior walls of the manufactured dwelling, the structural headers above

each opening shall be reinforced according to an acceptable design;

(c) Where a roof addition conveys weight on the existing manufactured dwelling roof trusses or rafters, the trusses or rafters shall be reinforced according to an acceptable design;

(d) Where a roof addition conveys weight on the perimeter and marriage line foundation, the foundation shall be increased in capacity or spacing according to an acceptable design;

(e) Roof additions shall be secured to the manufactured dwelling to prevent uplift according to an acceptable design;

7-7 Dormers and Gables.

7-7.1 General. Roof dormers or gables are often added over an existing manufactured dwelling roof for the purpose of tying in a garage, cabana, or porch roof or for aesthetic purposes only.

7-7.2 Minimum Requirements. All dormer and gable roof additions shall be constructed according to the following:

(a) Dormer and gable roof additions shall be constructed according to this section of the code, and, where not specific, to the **Oregon One and Two Family Dwelling Specialty Code** and the roofing manufacturer's installation instructions; or

(b) Dormer and gable roof additions shall be constructed according to this section of the code, the manufacturer's DAPIA approved plans, and the roofing manufacturer's installation instructions; and

(c) To minimize the weight on the existing roof structure, dormers and gables shall only be constructed with kiln dried lumber or lumber having a moisture content of 19 percent or less. Alternate lightweight construction materials may also be used with prior approval from the authority having jurisdiction.

7-7.3 Existing Roofing. To minimize the weight on the existing roof structure, existing roofing material shall be removed prior to installing dormer or gable roof additions.

7-7.4 Tie-Down. Dormer and gable roof additions shall be secured to the manufactured dwelling in such a manner as to prevent uplift and sliding according to this code, the manufacturer's DAPIA approved plans, or **Oregon One and Two Family Dwelling Specialty**.

7-8 Re-Furbishing.

7-8.1 General. Refurbished manufactured dwellings shall be inspected and be issued an insignia of compliance to verify it meets the code prior to occupancy, siting, or being offered for rent, lease, or sale. This section of the code is intended for individuals, families, or their contractors. This section of the code may be used by a government agency for the purpose of rehabilitating low cost housing. This section of the code is not intended for contractors or companies in the business of re-building or re-manufacturing manufactured dwellings for the purpose of rent, lease, or sale.

7-8.2 Qualifications. Manufactured dwellings may be refurbished under the following circumstances:

(a) The manufactured dwelling has been determined to be an unsafe structure according to the provisions in Section 1-3.1 of this code;

(b) The manufactured dwelling has been identified as damaged or out of compliance with the applicable codes;

(c) The manufactured dwelling has no insignia of compliance and needs verification of code compliance for an insurance carrier, government agency, or lending institution;

(d) The manufactured dwelling has been classified as salvage by an insurance company or a government agency;

(e) The manufactured dwelling has been sold "as-is" or "with-all-faults" and needs verification that it complies with the applicable codes according to the provisions in Section 1-3.2 of this code;

(f) The manufactured dwelling has been refurbished, restored, or remodeled and

needs verification that it complies with the applicable codes.

7-8.3 Application. Application for inspection and approval shall be made to the Building Codes Division by letter, phone, fax, or electronic mail. The application shall be made in conformance with current Building Codes Division procedures.

7-8.4 Inspections. One or more Inspections may be required to verify compliance with the codes in effect on the date of manufacturer. If a date is not known, the manufactured dwelling will be inspected to the 1972 edition of **ANSI A119.1 Standard for Mobile Homes** and the 1971 edition of the **National Electrical Code NFPA 70**. Where it is impractical for the manufactured dwelling to conform to the strict letter of the code, the inspector may accept methods or materials that are substantially equivalent to the code. Engineering may be required to substantiate equivalency if structural components of the manufactured dwelling have been altered or replaced. Required corrections, if any, will be identified in writing by the inspector. All corrections shall be completed and re-inspected prior to final approval.

7-8.5 Approval. Once the inspections are made and final approval is given, the inspector will attach an Oregon insignia of compliance to each section of the manufactured dwelling.

7-9 Substantial Equivalence to HUD.

7-9.1 General. A manufactured dwelling built between September 1, 1969 and June 14, 1976 may be upgraded to be substantially equivalent to a home produced in accordance with the June 1976 HUD standards for such dwellings. To receive a report indicating substantial equivalence and an Oregon Insignia of Compliance, all the following must occur:

(a) Application for inspection and approval shall be made to the Building

Codes Division in conformance with current Division procedures.

(b) The home must have been produced between September 1, 1969 and June 14, 1976.

(c) Battery powered or direct wired smoke detectors must be installed in each bedroom and each hallway adjoining bedroom areas.

(d) Ground fault interrupter devices must be installed on exterior receptacles and bathroom outlets. Kitchens and heat tape receptacles are exempt from this requirement.

(e) Each bedroom must have an egress window. The window must have a minimum of 5 square feet opening capacity with a horizontal opening a minimum of 20" and the vertical opening a minimum of 24". The window opening must be within 36" of the floor.

(f) All electrical systems and devices must operate properly and be installed properly.

(g) All plumbing systems and devices must operate properly and be installed properly.

(h) All mechanical systems must operate and be installed properly. Baths must have an exhaust fan or an openable window. Kitchens must have a mechanical exhaust fan.

(i) The structure of the home must be sound, with normal aging accepted. The roof, siding, windows, and doors must not leak. There must be two exit doors remote from each other. The home must be in original condition concerning the design.

(j) Unapproved wood stoves or fireplaces must be removed.

(k) All systems in the home must operate to include doors and windows.

(l) The home cannot have aluminum wiring on the individual branch circuits.

(m) The furnace and water heater compartment walls, ceiling, and all exposed wood must be fully lined with a minimum of 5/16" sheetrock, except for the floor.

(n) The bottom of the cabinets above the range and extending 6" on each side of

the range must be covered with a minimum of 5/16" sheetrock. This includes the space between the range hood and the bottom of the cabinet.

(o) The wall behind the range and extending 6" to each side of the range must be covered with a minimum of 5/16" sheetrock.

7-9.2 Inspections. One or more inspections may be required to verify compliance with the code in effect on the date of manufacturer as well as the required upgrades. Where it is impractical for the manufactured dwelling to conform to the strict letter of the code, the inspector may accept methods or materials that are substantially equivalent to the code. Engineering may be required to substantiate equivalency if structural components of the manufactured dwelling have been altered or replaced. Required corrections, if any, will be identified in writing by the inspector. All corrections shall be completed and reinspected prior to final approval.

7-9.3 Approval. Once the inspections are made and final approval is given, the inspector will attach an Oregon insignia of compliance, to each section of the manufactured dwelling and issue a report indicating the home has been upgraded to achieve substantial equivalence to the 1976 HUD Standard for such dwellings.

7-10 Re-Manufacturing.

7-10.1 General. Re-manufactured manufactured dwellings shall be inspected and be issued an Oregon insignia of compliance to verify the manufactured dwelling meets the code prior to being sited or offered for rent, lease, or sale. This section of the code is intended for contractors or companies in the business of re-building or re-manufacturing manufactured dwellings for the purpose of renting, leasing, or selling manufactured dwellings. This section of the code is not intended for individuals or families for personal home improvements or repair.

7-10.2 Qualifications. Re-manufactured dwellings shall be inspected by the Division and issued an Oregon insignia of compliance under the following circumstances:

(a) The manufactured dwelling has been determined to be an unsafe structure according to the provisions in Section 1-3.1 of this code;

(b) The manufactured dwelling has been identified as damaged or out of compliance with the applicable codes;

(c) The manufactured dwelling has no insignia of compliance and has no way of proving it complies with the applicable codes;

(d) The manufactured dwelling has been classified as salvage by an insurance company or a government agency;

(e) The manufactured dwelling has been sold "as-is" or "with-all-faults" and needs verification that it complies with the applicable codes according to the provisions in Section 1-3.2 of this code;

(f) The manufactured dwelling has been refurbished, restored, or remodeled and needs verification that it complies with the applicable codes.

7-10.3 Requirements. Persons re-manufacturing manufactured dwellings shall comply with the following:

(a) Shall be licensed by the Construction Contractors Board;

(b) Shall be registered with the Building Codes Division as a manufacturer according to OAR 918-500-0300;

(c) Shall be in compliance with ORS 316, 656, 657, and 701.

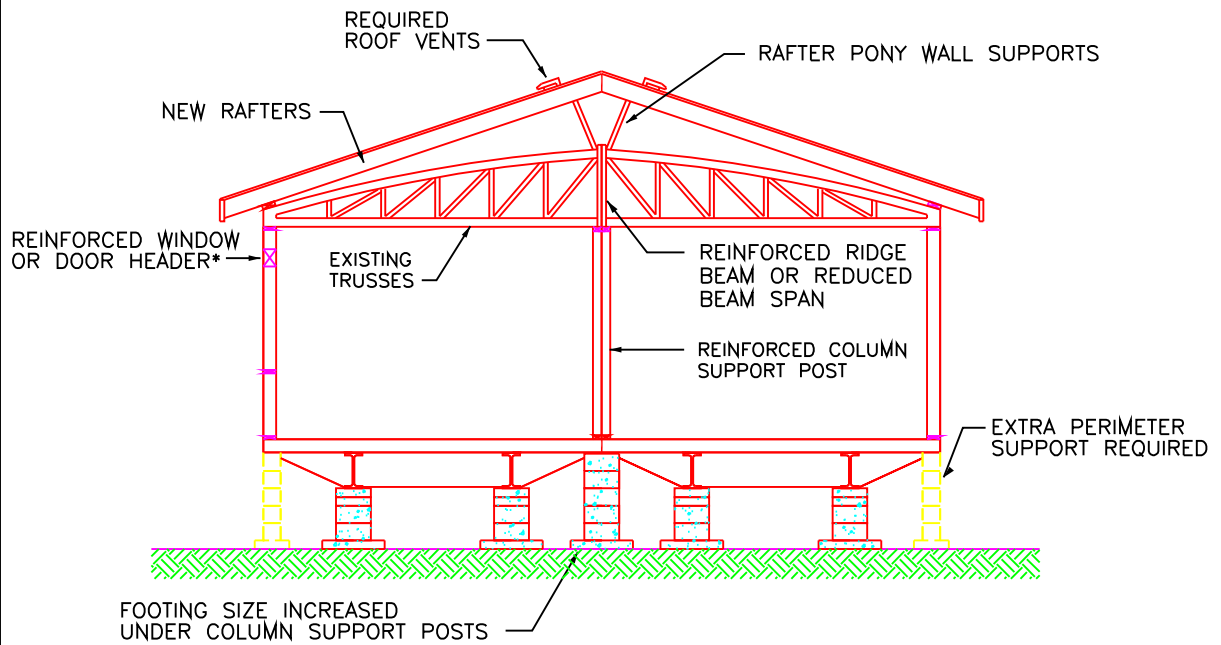
7-10.4 Application. After meeting the minimum requirements in Section 7-10.3 of this code, application for inspection and approval shall be made to the Building Codes Division by telephone, letter, fax, or electronic mail. Application shall be made in conformance with current Building Codes Division procedures.

7-10.5 Inspections. One or more Inspections may be required to verify compliance with the codes in effect on the date of manufacturer. If a date is not known, the manufactured dwelling will be inspected to the 1972 edition of **ANSI A119.1 Standard for Mobile Homes** and the 1971 edition of the **National Electrical Code NFPA 70**. Where it is impractical for the manufactured dwelling to conform to the strict letter of the code, the inspector may accept methods or materials that are substantially equivalent to the code. Engineering may be required to substantiate equivalency if structural components of the manufactured dwelling have been altered or replaced. Required corrections, if any, will be identified in writing by the inspector. All corrections shall be completed and re-inspected prior to final approval.

7-10.6 Approval. Once the inspections are made and final approval is given, the inspector will assure a valid insignia of compliance is affixed to each section of the manufactured dwelling.

*NOTE: A CONTINUOUS HEADER CAN BE PLACED OVER EXISTING SIDEWALL AND/OR ROOF, RATHER THAN REINFORCING EACH INDIVIDUAL WINDOW AND DOOR SIDEWALL HEADER.

NOTE: ALL PLUMBING AND MECHANICAL VENTS SHALL BE EXTENDED THROUGH NEW ROOF ADDITION.

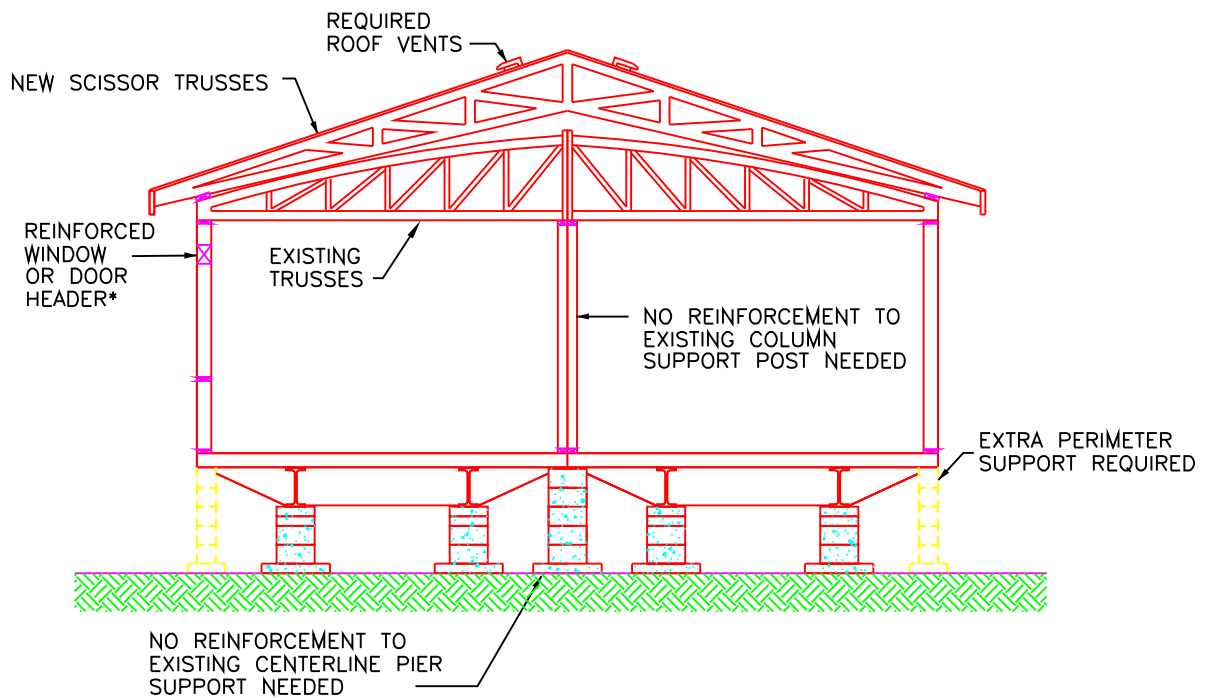


TYPICAL RAFTER ROOF ADDITION

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 7
REV. 12/01/01 RHW		FIGURE 7-6.3A

*NOTE: A CONTINUOUS HEADER CAN BE PLACED OVER EXISTING SIDEWALL AND/OR ROOF, RATHER THAN REINFORCING EACH INDIVIDUAL WINDOW AND DOOR SIDEWALL HEADER.

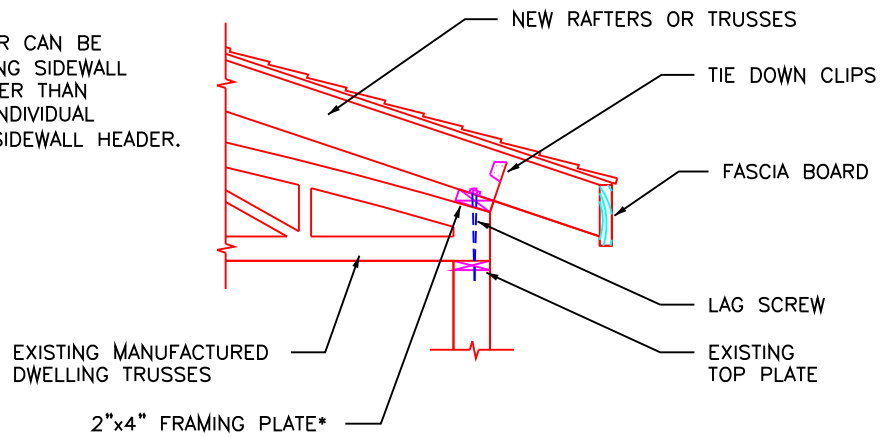
NOTE: ALL PLUMBING AND MECHANICAL VENTS SHALL BE EXTENDED THROUGH NEW ROOF ADDITION.



TYPICAL SCISSOR TRUSS ROOF ADDITION

REV. 12/01/01 RHW	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 7
		FIGURE 7-6.3B

*NOTE:
 A CONTINUOUS HEADER CAN BE
 PLACED OVER EXISTING SIDEWALL
 AND/OR ROOF, RATHER THAN
 REINFORCING EACH INDIVIDUAL
 WINDOW AND DOOR SIDEWALL HEADER.



TYPICAL ROOF ADDITION TIE DOWN

REV. 12/01/01 RHW

MANUFACTURED STRUCTURE
 AND PARK SPECIALTY CODES

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 FIGURE 7-6.3C