



Installation Manual

Builder / Dealer
Builder / Dealer Address

Job: No.

Customer
Customer Address

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Introduction

This guide contains an overview of the modular home installation process and builder responsibilities. We recommend you consult with Heritage Homes on these items prior to delivery and installation as specifications and expectations will vary.

The term “builder” refers to the authorized Heritage builder; Heritage Homes of Nebraska sells its products to authorized builders, not to homeowners. The terms “onsite by others” and “by others” means somebody other than Heritage Homes of Nebraska and typically means the material or labor, or both, is not provided by Heritage Homes of Nebraska.

The builder should become familiar with the details of the modular plans and modular construction techniques. The builder will need to understand his responsibilities and duties as it relates to project completion; there will exist materials and labor not provided by the factory but required for the completion of the project. The Sales Order and Work Order describe in detail the items purchased either installed as part of the modular or shipped loose with the modular, and/or shipped separately. This Installation Manual describes general aspects of the modular not specifically spelled out in the Sales order.

Installation Overview

The building arrives at the construction site in one or more sections. Additional materials for modular stitch is loaded into the sections or shipped on an additional trailer. This may be rough or finish materials, sub-assemblies, electrical, mechanical, and /or plumbing materials.

Each section is removed from the transport trailers and is rolled on to the foundation or crane set. The sections are then secured to the foundation and fastened together at the floor and roof.

Any sub-assemblies to complete the modular building envelope are installed, roof sheathing applied, organic felt and/or waterproof underlayment, and finish roofing is completed or applied, exterior finishes, including soffits, siding, eaves, corner and trim boards are completed.

The electrical crossover connections are completed. Light fixtures are hung and/or completed; wiring of miscellaneous circuits may be required by others to complete the electrical system. The plumbing vent piping is completed.

The interior trim, doors, and flooring are installed, exterior doors/jamb need to be adjusted and insulated. A whole-house cleanup is recommended prior to move-in.

The modular is now installed ready for electrical, plumbing, and mechanical completion, as well as any additional structures such as garage, porch, etc.

General Contractor / Builder Responsibilities:

1. Order the crane.
2. Place modulares on foundation.
3. Glue rim joist to sill plate.
4. Level floors at mating wall openings.
5. Bolt the sections of the structure together through adjacent microlams.
6. Install center support posts as per requirement on plans.
7. Install ridge cap shingles, and finish roof-top on hinge and cap roofs.
8. Complete installation of furnace flue and fireplace flue through roof.
9. Make electrical connections between modules.
10. Install and finish gable-ends OSB, foamboard, and siding and soffits.
11. Install foamboard insulation on ends of house.
12. Install tie-downs from modular to sill plate.
13. Install perimeter insulation between floor joists.
14. Teardown and prepare trailers for return to factory.
15. Adjust interior doors as required, including trim and cabinet doors and drawers.
16. Hang/re-hang and insulate exterior doors, Heritage ships them in the opening as temporary.
17. Assemble and install mating-wall doors and cased or drywall openings.
18. Complete the installation of exterior and interior light fixtures and globes.
19. Install stair-rail and balusters not installed at factory.
20. Grout tile floors and areas not grouted at factory.
21. Re-caulk bath tubs and counter backsplash.
22. Putty and wipe down interior doors and trim.
23. Finish floor coverings, seam carpet and/or vinyl as required.
24. Repair drywall cracks in walls and ceilings.
25. Paint touch up interior walls.
26. Install factory supplied appliances.
27. Touch up exterior paint including painting of any unpainted trim and ends of modular.
28. Install insulation in cantilevered areas between joists.
29. Finish the soffits, eaves, and fascia of the modular.
30. Install siding on end walls, gable ends and other locations not installed at factory.
31. Install exterior trim boards at corners; along foundation and exterior trim features not installed at factory.
32. Clean house, windows, floors, counters, woodwork, tubs, etc.

Installation Detail

Foundation

A Heritage Homes structure shall be supported on a load bearing perimeter foundation. The foundation shall be designed to the general foundation construction guidelines prescribed by the International Building Code, locally approved prescriptive standards, or by a Professional Engineer. The foundation plan provided by Heritage Homes of Nebraska, Inc. is for dimensional purposes only. This drawing indicates the perimeter dimensions of the foundation and centerline support locations required. The annotations on the drawing indicate code compliance items and good construction practices.

The perimeter foundation walls shall be constructed of poured concrete, mortared concrete block, or an all weather wood wall. The perimeter foundation walls may provide for a full foundation or a crawl space. The footings shall be set at a depth below the frost line as determined by the authority having jurisdiction.

The sill plate should be installed per instruction prior to the arrival of the house on the job site. Heritage Homes is not responsible for materials and installation of the sill plate. The builder should install anchor bolts or tie-straps, according to state or local codes; whichever is acceptable to fasten the plate to the foundation. It is important the anchor bolts do not stick up above the plate unless local code directs differently. Plate materials should comply with local codes.

In addition, the foundation must be square, level, and the correct height. The plate must be checked for square and level prior to the house arriving on site. Heritage Homes standard for square is $\frac{1}{2}$ " and level is $\pm\frac{1}{4}$ ". If the foundation is out of square the builder can adjust the plate to within tolerances. Note: The preceding methods are suggested and may not be approved by some local building codes and financing authorities. Builders should consult with local building code officials and financing authorities for specific information.

Crawl space foundations shall be provided with under floor ventilation. Access into the crawl space is required once the home is set. A crawl access of 2'-0"x 2'-6" is to be in an appropriate location. The finish grade shall be a minimum of 8" below the top of the foundation wall for protection against decay.

Support Columns/Walls

Support columns and walls must be located on the centerline of the modular mating lines. These columns must be located per the foundation print. The columns height must be equal to the height of the foundation wall. Stick built support walls must be completed and in place before delivery/set.

When jack posts are used instead of support columns, the jack posts must meet code requirements and have adjustable screw tops. The length of the jack post is to be equal to the distance from the basement floor to the top of the basement wall, not including the top plate.

Steel Beams

Special preparations need to be completed when incorporating steel beams into the basement and support system. The top flange of the steel beam should be no less than 6" wide. This is not a strength requirement, but a dimensional requirement. Heritage Homes of Nebraska, Inc. does not suggest steel beam sizes and/or specifications, the Builder shall obtain such information from a qualified engineer.

Mating Wall Connection

Once the sections are leveled they shall be secured together at the floor rim joist. Locations of all connections shall be shimmed as required to provide a firm connection without separating a factory connection.

Floor Connection: The floor sections shall be secured together as follows: (see plan detail)

½-inch diameter carriage bolts with washers at the centerline of the perimeter joist at a spacing of 6'-0" o.c. See figure below. Gaps from ¼" to 1 ½" should be shimmed with any material with a compressive strength of at least 200 psi. Dimensional wood should be a minimum of a 2"x4" and 6" in length. Any grade and species is acceptable. Plywood, hardboard, OSB, etc. should be a minimum of 2"x 2". For gaps exceeding 1 ½", Heritage Homes of Nebraska, Inc. should be contacted to determine any necessary modifications.

Note: All carriage bolts shall be installed in an area where there is solid material within each section. Shims shall be installed at all connection points to prevent the separation of factory connections at the floor joist.

Rim joists shall be pre-drilled for carriage bolts.

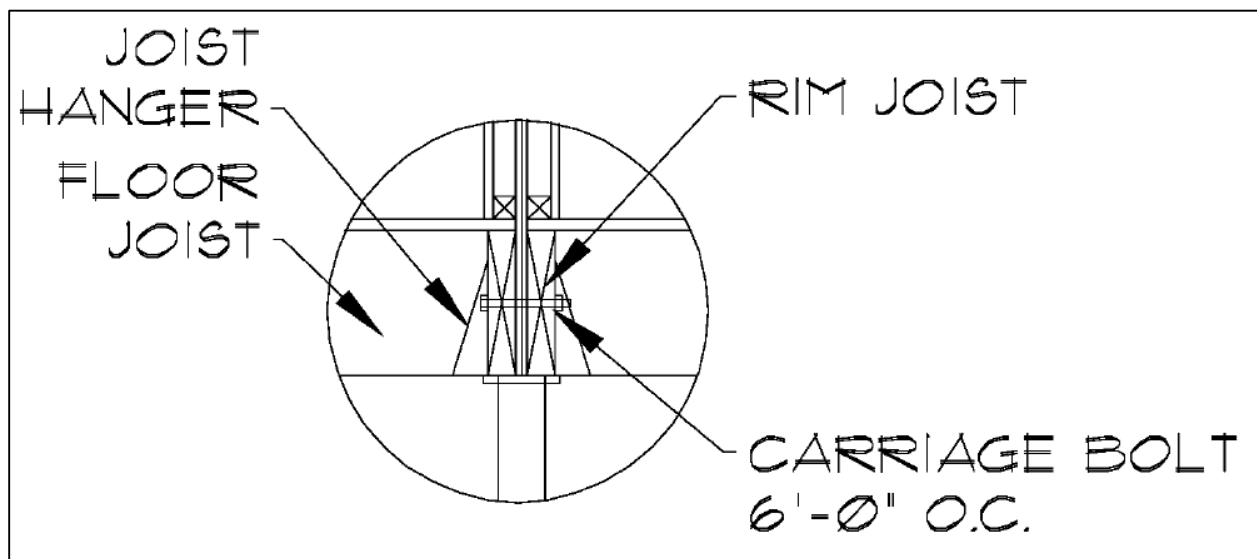


Figure 1: Mating wall detail.

Raising the Hinged Roof

The factory built sections will arrive wrapped with shipping material. Prior to the setting of the section, the shipping material will be removed. The engineered roof trusses will have to be raised into their final position. The following is a step-by-step description of the process.

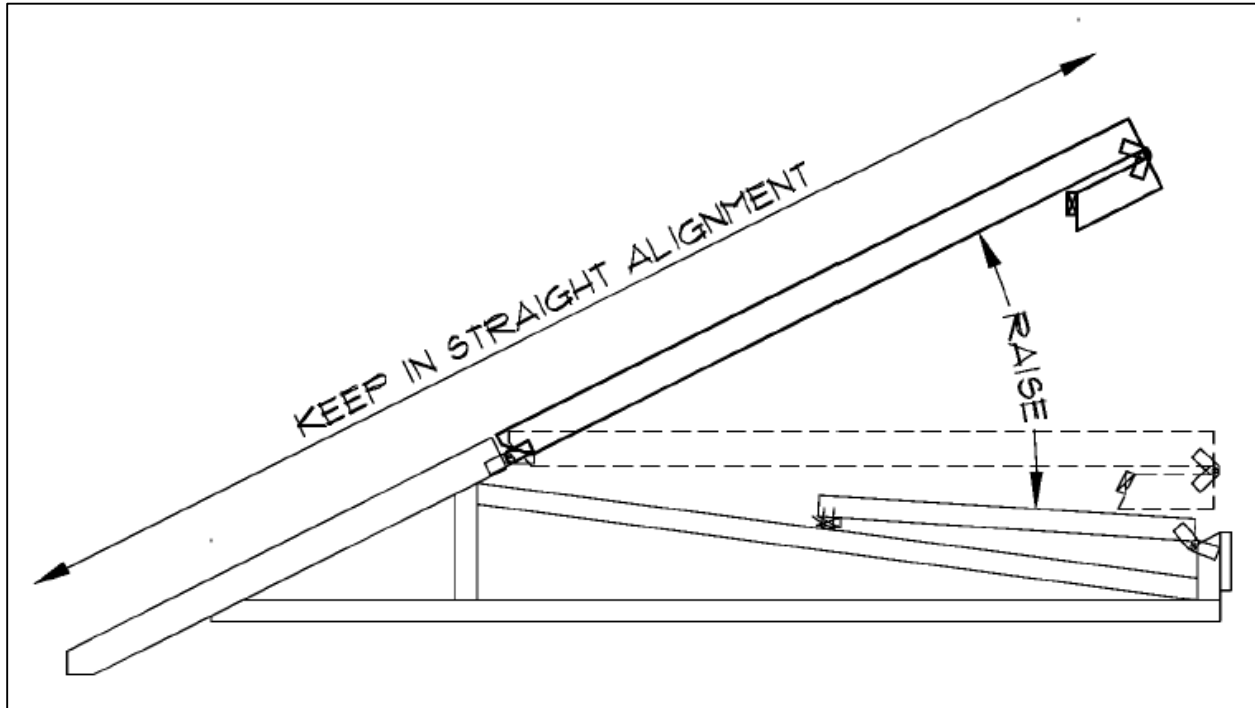


Figure 2: Hinge truss detail.

The upper panel of the top chord is raised in alignment with the fixed lower section of the top chord. This will put the top chord truss segments in alignment.

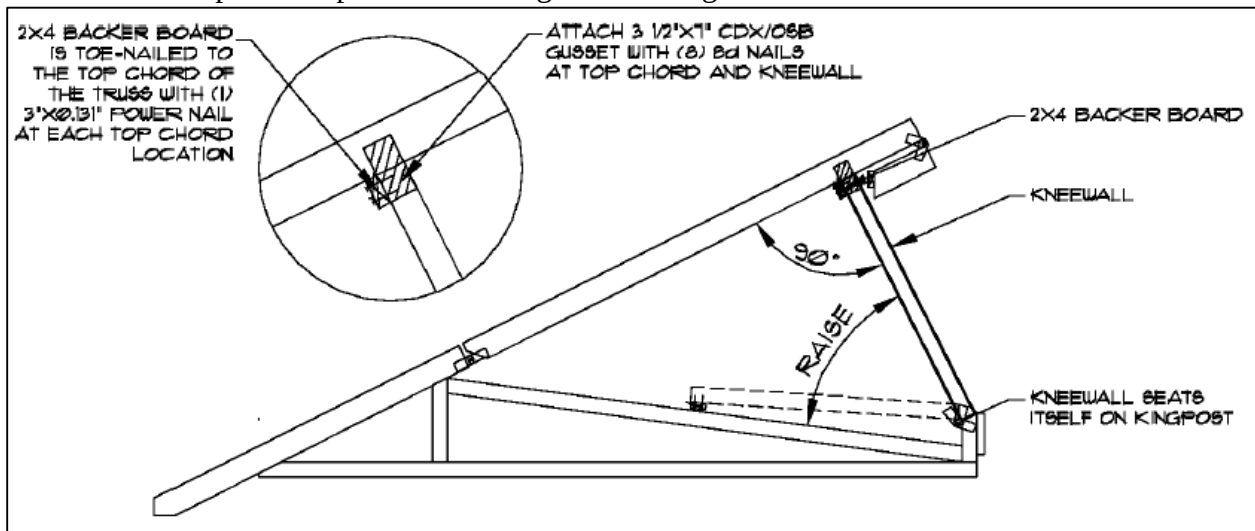


Figure 3: Hinge truss detail.

Bring the top of the knee wall up until the knee wall sits itself squarely on the truss kingpost and has a 90° angle to the truss top chord. Toe-nail the knee wall to the top chord through the 2X4 backer board, according to the detail. Install provided gusset on one side of each truss over top of knee wall and truss top chord area when indicated on the cross-section page(s) in the final set of plans.

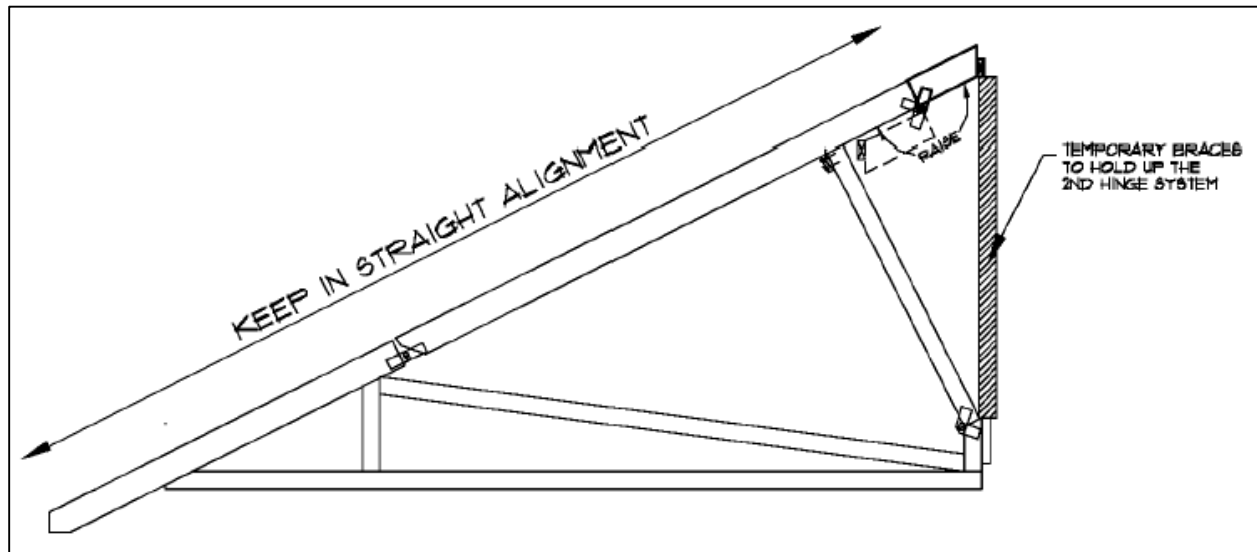


Figure 4: Hinge truss detail.

Some units will have a second hinge for hauling purposes. These units will need to have this section raised and temporarily braced. Extra bracing is provided in the ship loose package. Once again, keep the sections of all top chord segments in alignment.

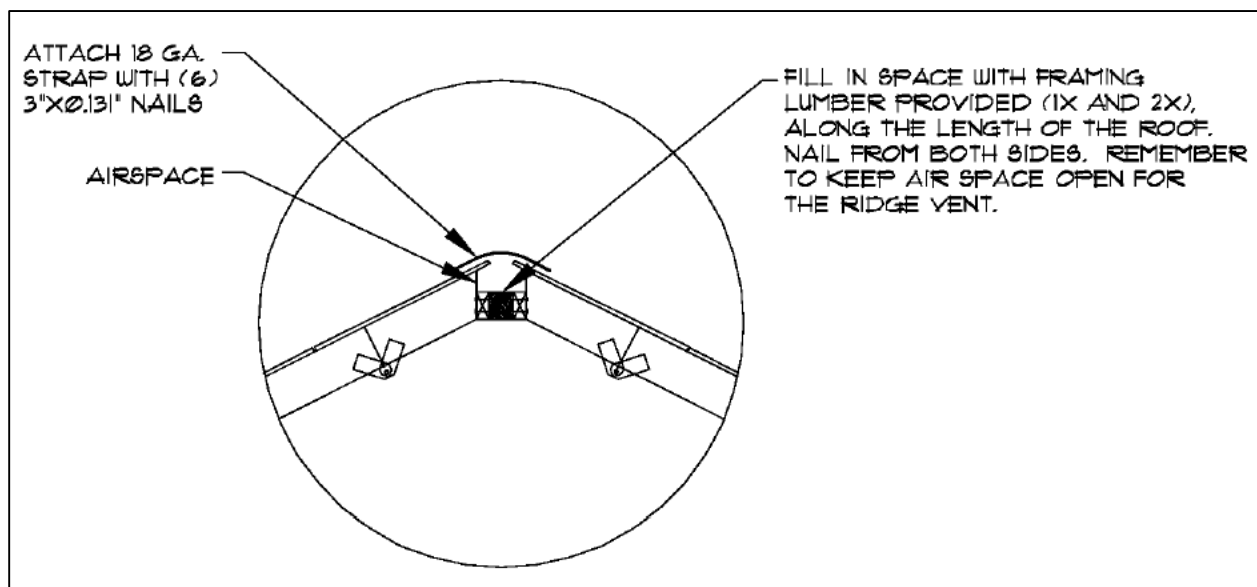


Figure 5: Ridge detail.

When both sides of the roof sections are raised, fill in the space between the top roof sections with 1X and/or 2X lumber provided. Do this along the whole length of the roof and nail from both sides. Remember to keep the fill boards low enough as not to block the air space needed to vent through the ridge. Install provided 1"X12" 18 ga. straps at 6'-0" on center with minimum (6) 3"X0.131" nails as indicated in the diagram.

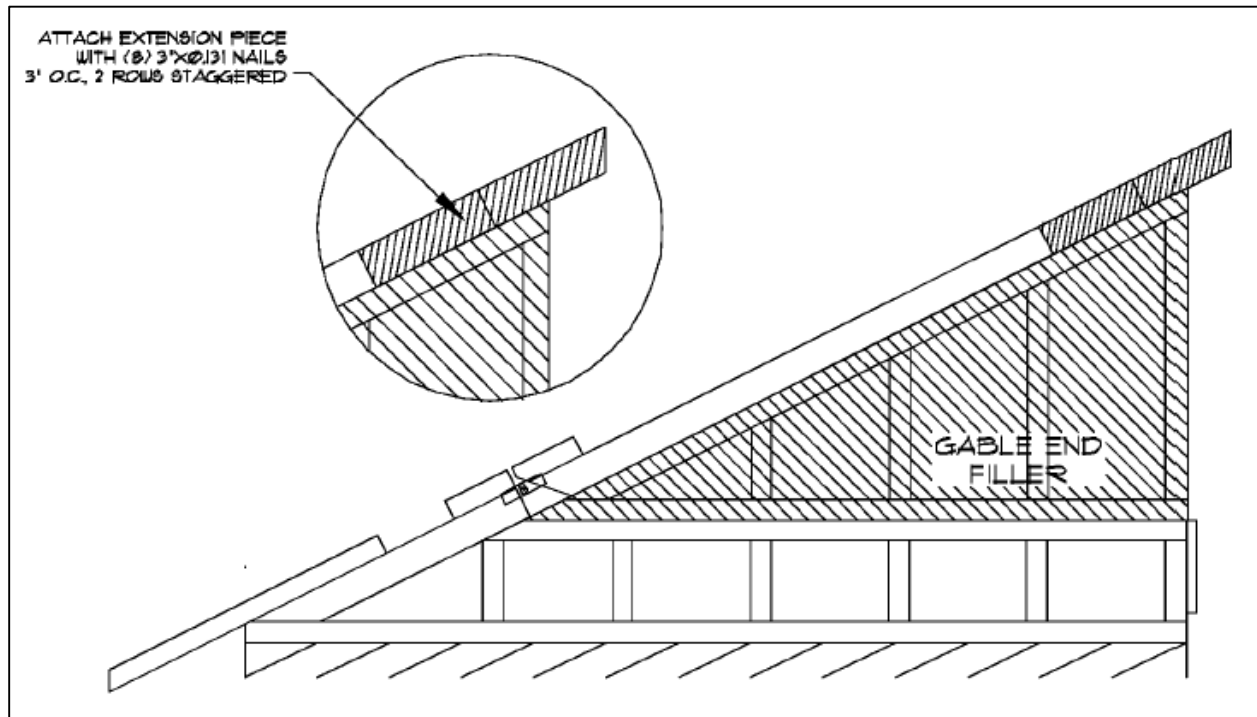


Figure 6: Gable hinge truss detail.

Upon completion of raising all hinged segments of the roof, place the provided gable end filler panels at each end of the roof and attach the gable truss in place by toe-nailing 3"X0.131" nails at 16" on center. Attach provided top chord extension piece with (8) 3"X0.131" nails, 2 rows staggered, 3" on center. This piece will either be a 2X4 or a 2X6 depending on the size of the top chord of the truss. Install gable sheathing with 10d nail 6" on center at the perimeter and 12" on center in the field. Install roofing underlayment over sheathing with a roofing nail at 12" on center. Finish shingling the roof per manufacturer's specifications. Install the provided continuous ridge vent per manufacturer's specifications.

Standard Roof Connection

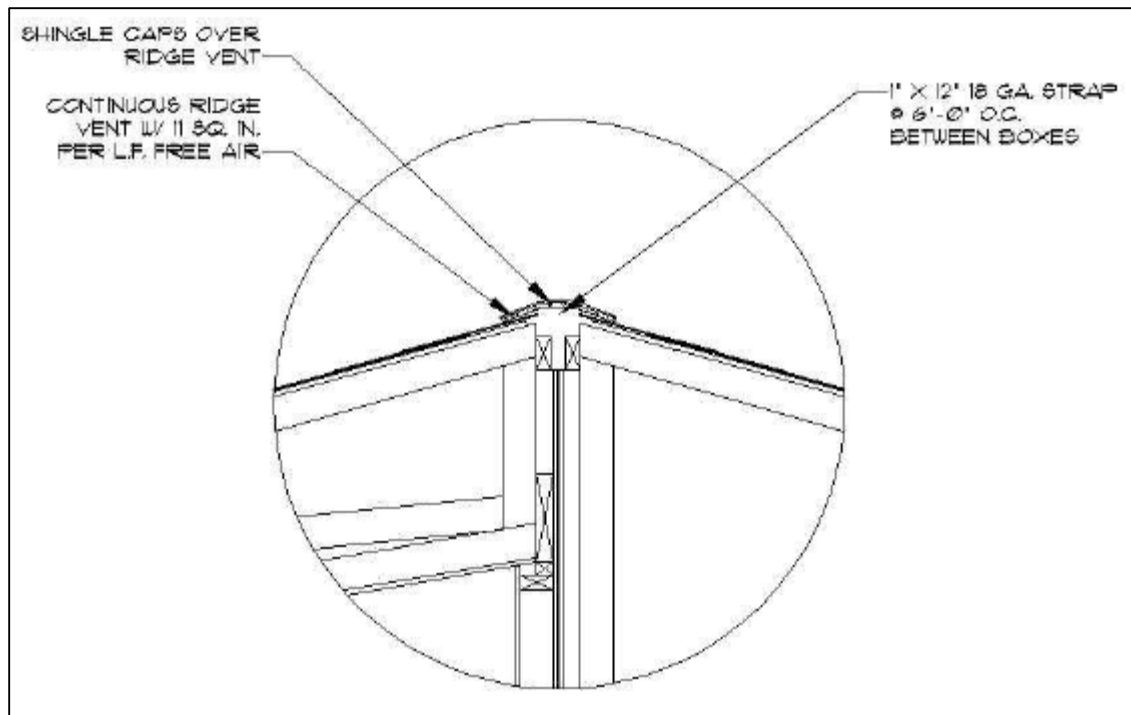


Figure 7: Standard roof truss detail.

Install 1"X12" 18 gauge strap at 6'-0" on center between the boxes as indicated in Figure 6A. Finish shingling the roof per manufacturer's specifications. Install the provided continuous ridge vent per manufacturer's specifications.

Installing a Capped Roof

The factory built sections will arrive wrapped with shipping material. Prior to the setting, the shipping material should be removed from each individual section before it is lifted on to the foundation. Once all of the sections are connected to the foundation, the engineered truss system can be completed by capping the roof.

There are several types of roof systems Heritage Homes of Nebraska, Inc. offers, see the appropriate roof type below for further instruction.

4/12 Standard Wall Height Capped Roof

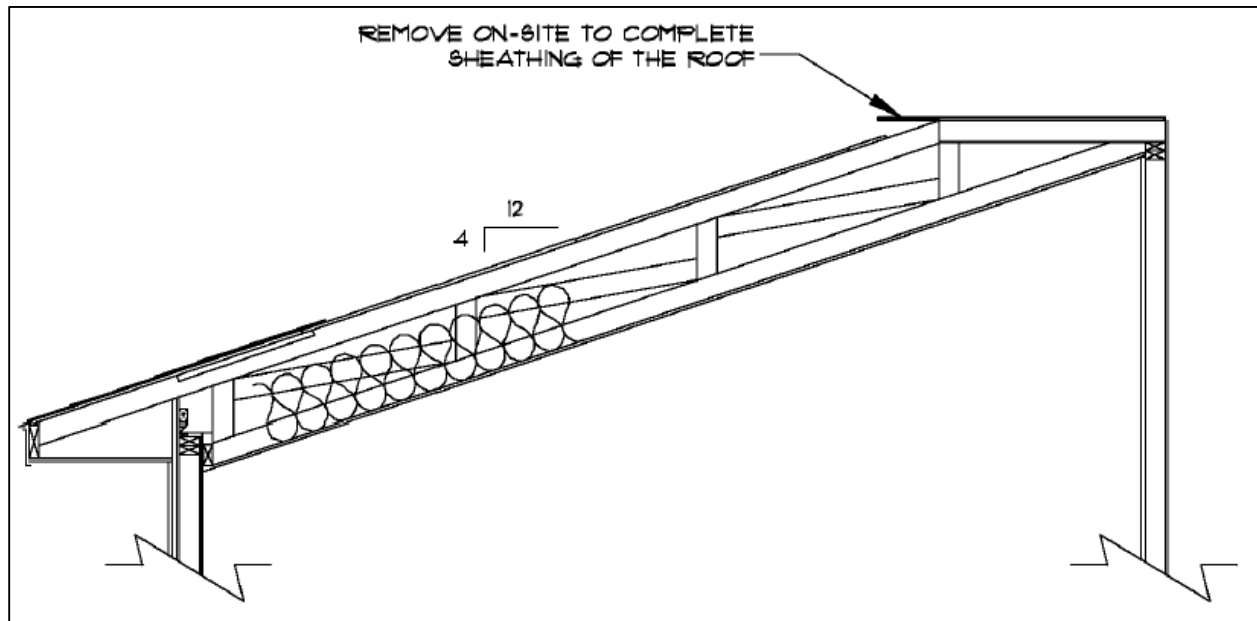


Figure 8: Cap truss detail.

On all 4/12 standard and prow roof houses, a piece of the roof sheathing will need to be removed first. The sheathing is tacked down in place for easy removal. See drawing above.

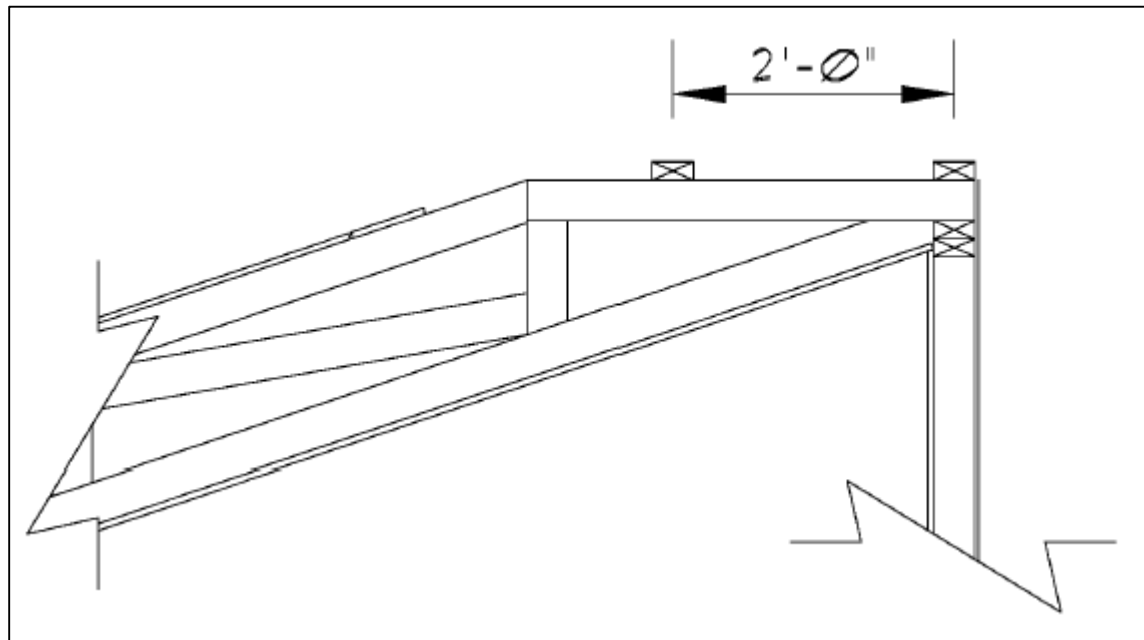


Figure 9: Cap truss detail.

Next install the provided 2X4 lateral bracing at 24" on center as shown in the diagram. Nail the bracing down to the top chord with (2) 0.131"X3" power nails.

Place the caps on the roof according to the locations provided on the Roof Cap Layout. This layout is included in the appendix of the installation manual. Attach each cap by toe-nailing the bottom chord of the cap with (2)10d common nails to the lateral braced just installed. The cap may need to be shimmed so the roof will plane out. If necessary, use the shimming material provided and make sure the connection between the roof cap and the lateral is tight. Install the provided ship loose insulation. Finish installing the cap as indicated on the diagram below.

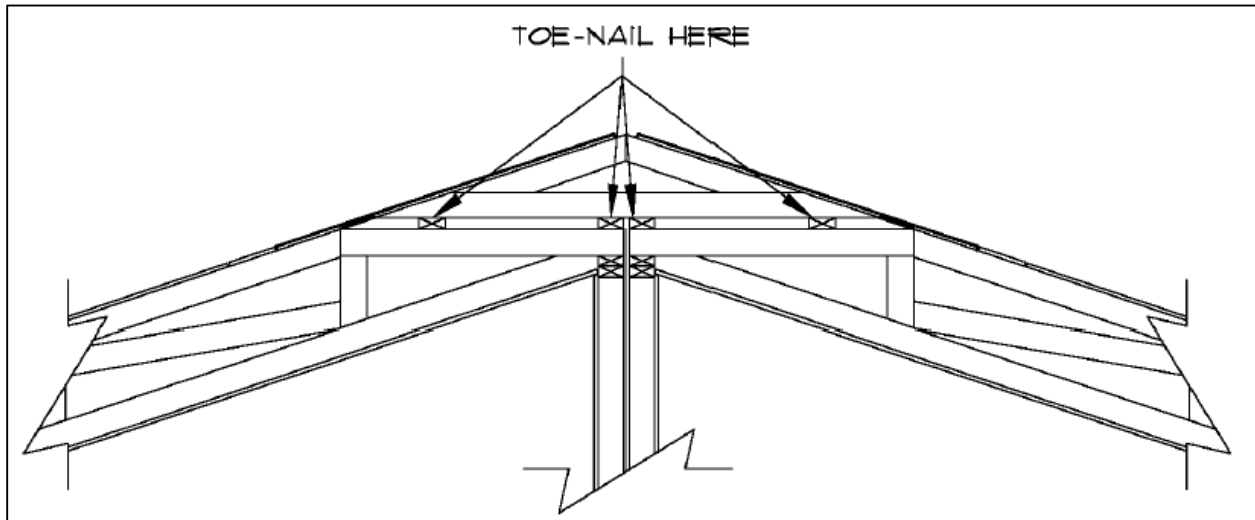


Figure 10: Cap truss detail.

Install the roof sheathing removed earlier and refasten over the top of the caps with 8d common or gun nails spaced 4" on center per truss. After the sheathing is completely installed, the underlayment, shingles, and continuous ridge vent need be installed. Install the roofing underlayment over the sheathing with a roofing nail at 12" on center. Finish shingling the roof per manufacturer's specifications. The installation information for the shingles will be located on the shingle bundle. Install the provided continuous ridge vent per manufacturer's specifications. The manufacturer's instructions will be included in each package.

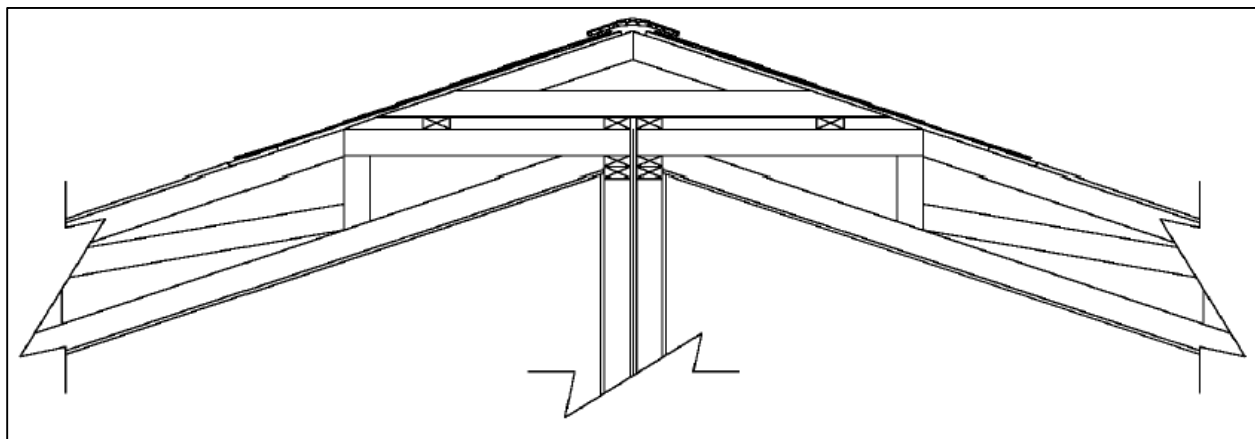


Figure 11: Cap truss detail.

Non-Standard Capped Roof

Remove the 12" ventilation strip of sheathing running the length of the roof on each section. If a 12" strip is not precut, the installer must cut this strip out prior to installing any cap trusses for each modular section. This opening will allow air to ventilate throughout the roof.

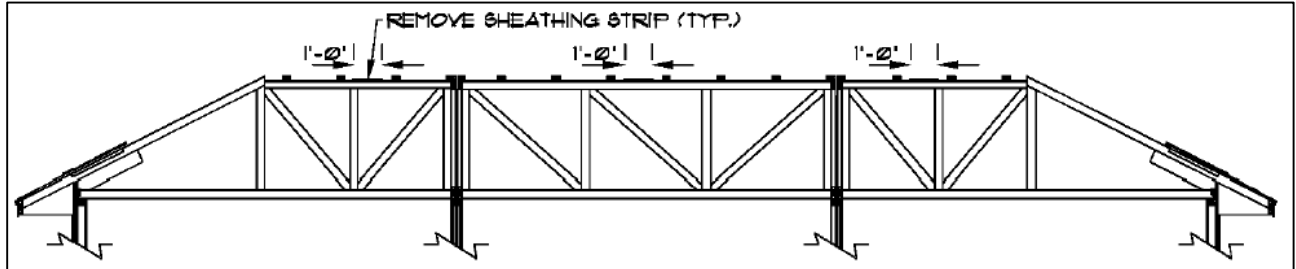


Figure 12: Cap truss detail.

Place the caps on the roof according to the locations provided on the Roof Cap Layout. This layout is included in the appendix of the installation manual. Attach each cap by toe-nailing the bottom chord of the cap with (2)10d common nails to the lateral braced just installed (see Figure 9). Finish installing the cap as indicated on the appropriate diagram on the following pages.

Installation A:

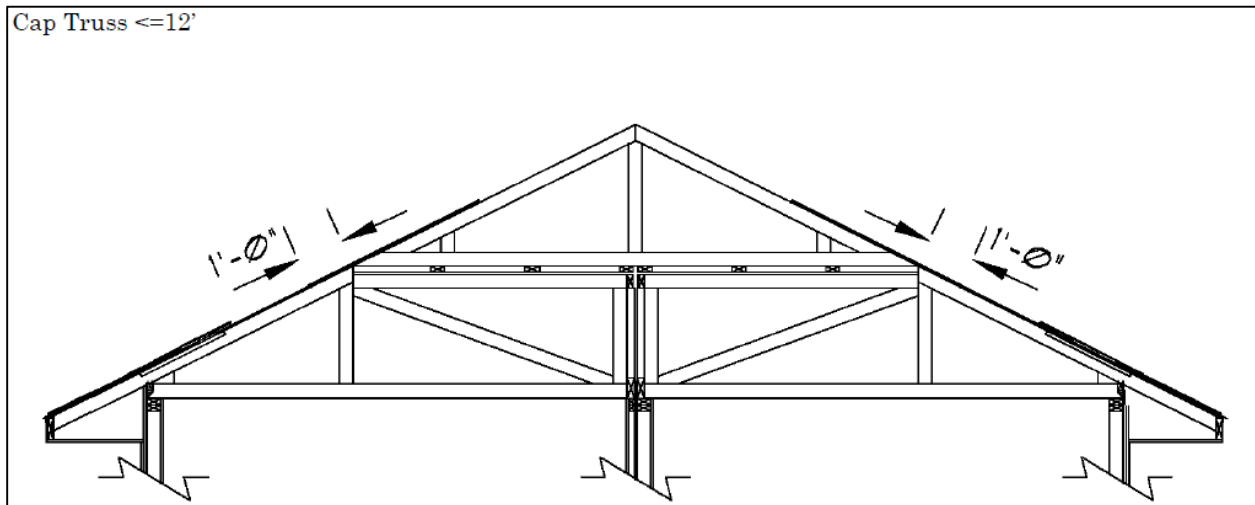


Figure 13: Cap truss detail.

In addition to properly connecting the cap truss to the braces, a minimum of a 12" overlap of sheathing connected with 8d nails spaced 4" on center is required.

Installation B:

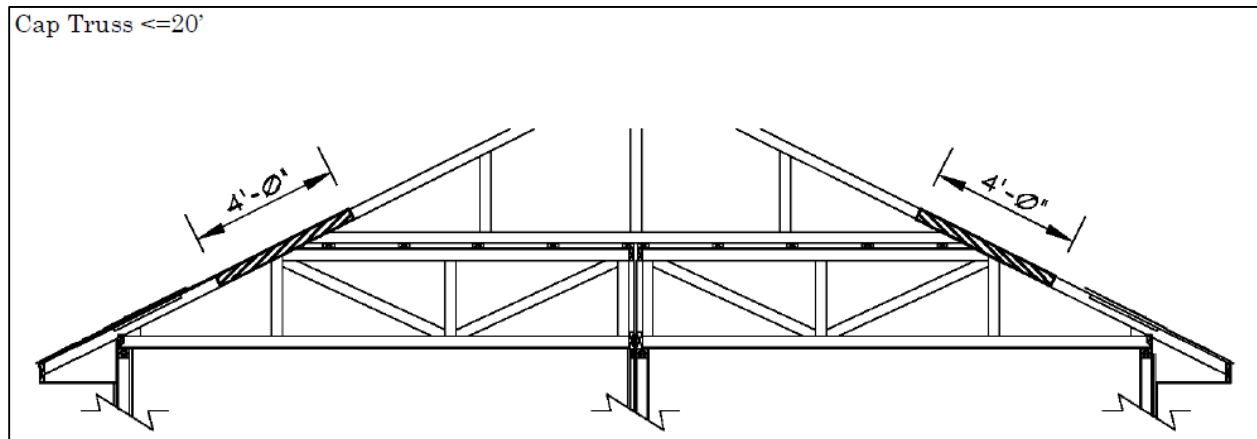


Figure 14: Cap truss detail.

In addition to properly connecting the cap truss to the braces, install a 2X4 SPF #3 or better scab (1 side only) with 10d common nails 4" on center.

Installation C:

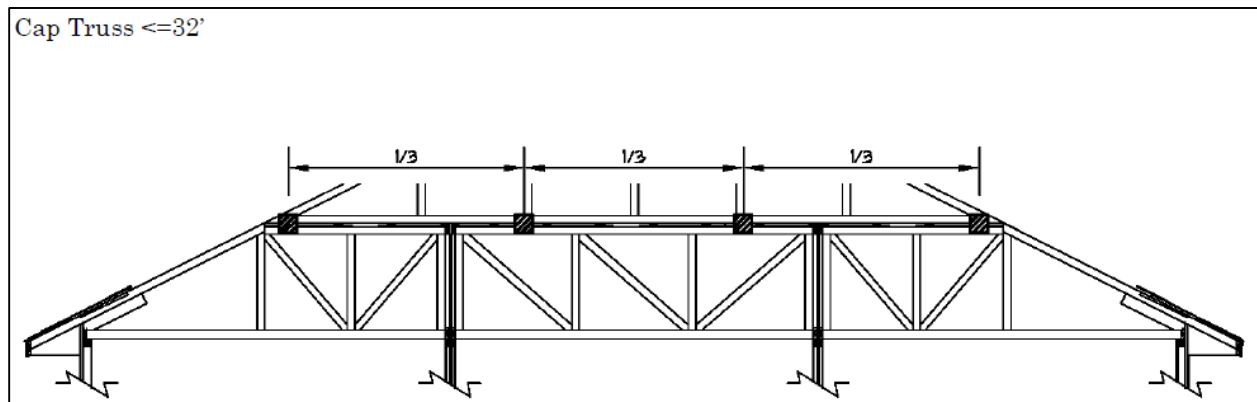


Figure 15: Cap truss detail.

In addition to properly connecting the cap truss to the braces, install the precut 8"X8"X1/2" sheathing gussets (both sides) with (8) 8d common nails per side of gusset. (4) in the cap bottom chord and (4) in the base truss flat top chord. Install each gusset at the 1/3 points of the truss as indicated on the diagram. If in the event one of the gussets cannot be installed as detailed, call Heritage Homes for details. In most cases, toe-nailing will be sufficient. Extend all flues, vent pipes, and exhaust vents through the capped roof area. Install roof sheathing over the capped section of the house per sheathing layout indicated on the diagrams from the previous page. This must be followed to get maximum performance for the wind uplift. The roof sheathing will tie the capped roof section into the already existing roof. Use a 10d nail 6" on center at the perimeter of the sheathing and 12" on center in the field to secure the roof sheathing. After the sheathing is completely installed, the underlayment, shingles, and continuous ridge vent needs be installed. Install the roofing underlayment over the sheathing with a roofing nail at 12" on center.

Finish shingling the roof per manufacturer's specifications. Install the provided continuous ridge vent per manufacturer's specifications.

Roof Penetrations

All penetrations of the finish roofing shall be flashed to make watertight. This may include the installation of metal flashing for flue chases, skylights, or roof jacks for vent piping, and flue pipes.

All penetrations of exterior finishes shall be inspected for weather tightness, caulk or flash as required to prevent moisture from entering the wall cavity. Roof penetrations shall be sealed with a bead of asphalt roofing cement or caulk as required.

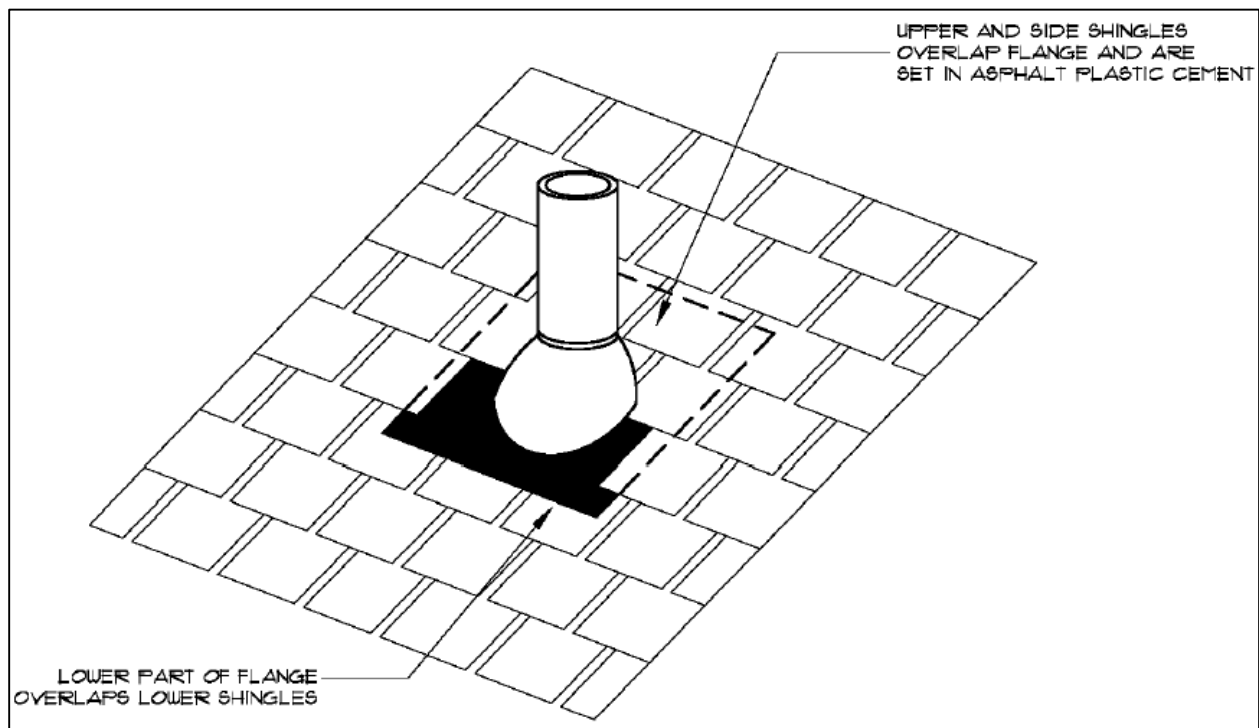


Figure 16: Flue pipe detail.

Roofing

Sheathing

Sheathing may need to be installed to complete the roof. Install all provided roof sheathing by nailing the each sheet with a staple (1-1/2" leg, 1/2" crown, 16 ga.) 6" on center at the perimeter and 12" on center in the field.

Underlayment

Underlayment may need to be installed to complete the roof. For roof slopes less than a 4/12 pitch (refer to the final set of plans page S2.1 for pitch), underlayment shall be two layers applied

in the following manner. Apply a 19-inch strips of underlayment felt parallel with and starting at the eaves, fastening with a roofing staple at 12" on center, sufficiently to hold in place. Starting at the eave apply a 36-inch wide sheets of underlayment, overlapping successive sheets 19 inches, and fastened with a roofing staple 12" on center, sufficiently to hold in place. For roof slopes 4/12 or greater, underlayment shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches, fastened 12 inches on center with a roofing staple, sufficiently enough to hold in place. End laps shall be offset by 6 feet. For underlayment installed for a house in a high wind zone (refer to cover page for a wind speed of 110 mph or greater), shall be installed with corrosion-resistant fasteners. Fasteners are to be applied along the overlap, not farther apart than 36 inches on center.

Shingles

Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage shank with a minimum 3/8 inch diameter head, and a minimum of 1-1/4 inch length. Asphalt shingles shall have the minimum number of fasteners required by the manufacturer. For normal application, asphalt shingles shall be secured to the roof with at least 4 fasteners per strip shingle or 2 fasteners per individual shingles. For shingles installed for a house in a high wind zone (refer to cover page for a wind speed of 110 mph or greater) special methods of fastening are required. Refer to manufacturer's instructions for the required fastening schedule.

Foundation Connection

The building shall be secured to the foundation at the exterior walls as follows:

- a. The engineered floor trusses or joists shall be fastened to the sill plate with hurricane clips at a spacing of 48" o.c. Each clip requires a total of (10) 8d nails, 5 in the joist and 5 in the plate.
- b. The end rim joist shall be secured with 16d nails at a spacing of 6" o.c.

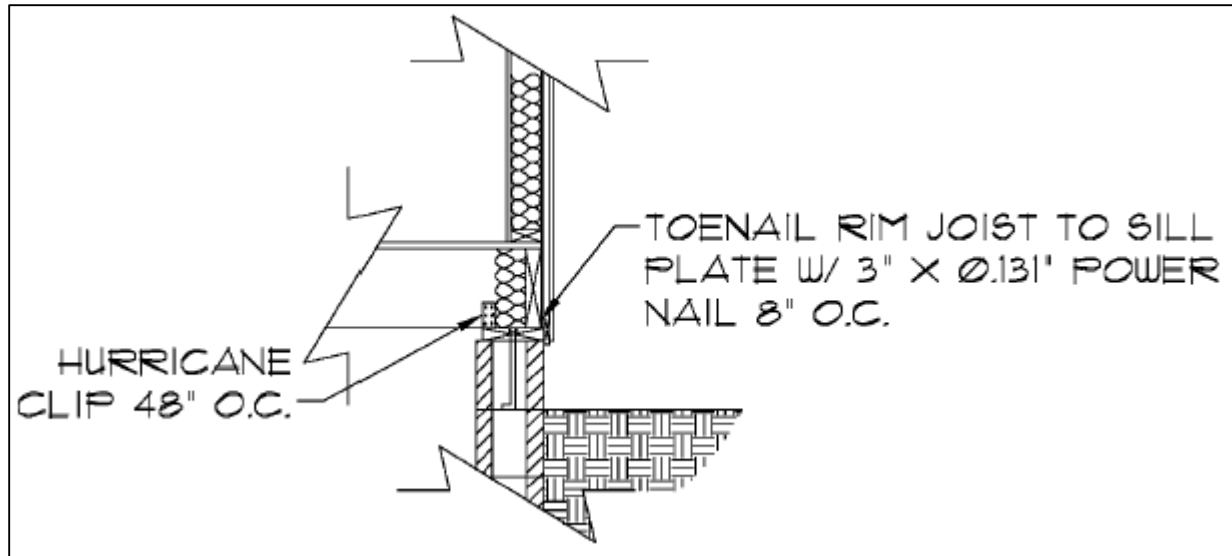


Figure 17: Foundation connection detail.

Insulation

Insulation will need to be installed at the mating wall line, rim joist perimeter, and also on the exterior end walls. Expandable polyurethane foam shall be applied around the total perimeter of the sections to resist air infiltration at the mating surfaces of the ceiling, end walls, and floors. Install provided pieces (16" or 19.2") of pre-cut R-13 batt insulation around the rim joist perimeter of the sections. Install the provided rigid foam at the exterior of the end walls. Attach the foam with 3/4" foam staple (1-1/2" leg, 1" crown, 16 ga.) 16" on center in both directions.

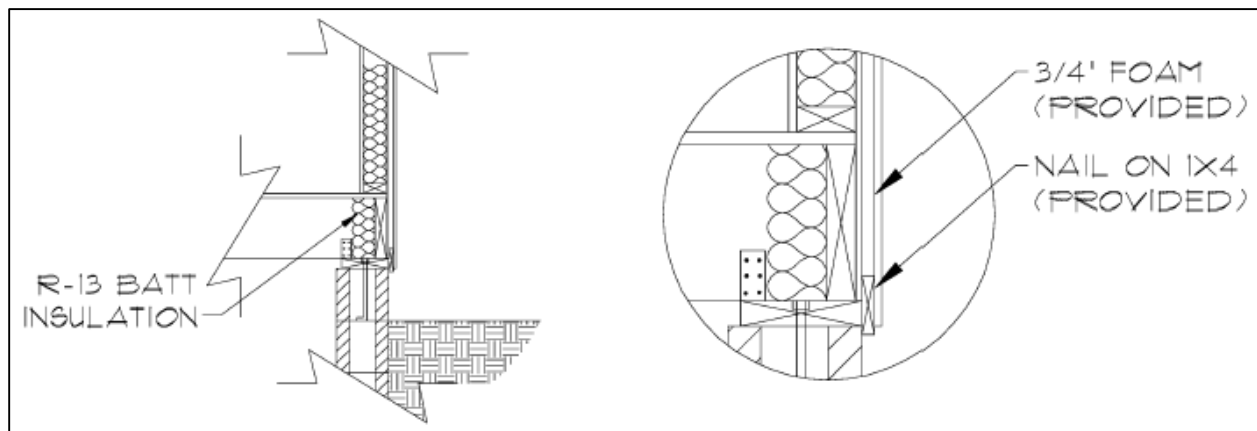


Figure 18: Perimeter insulation detail.

On prow style houses, provided batt insulation will need to be added across the marriage line. See Figure 19.

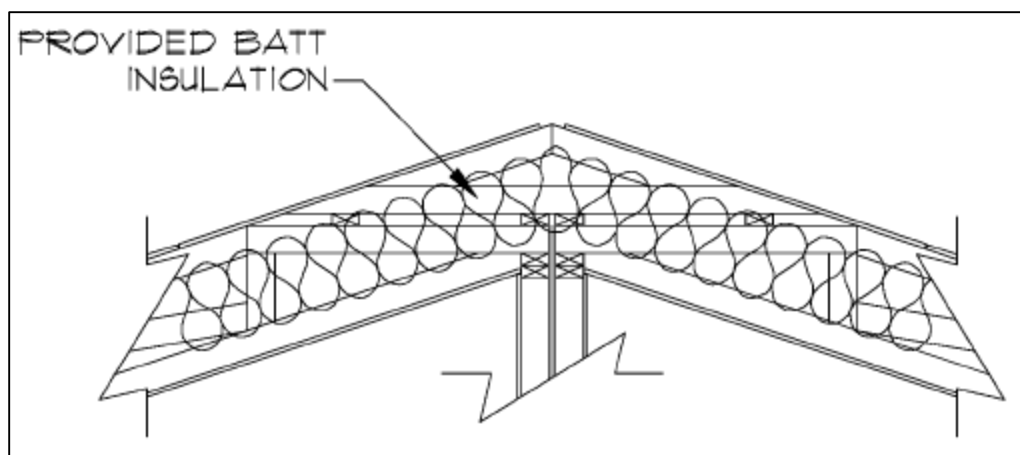


Figure 19: Roof insulation detail.

Completing Siding, Trim, and Soffit Siding

Vinyl Siding: The bottom course of siding on the sides and end of the building shall be installed. Nail on provided 1X4's around the perimeter of the deck of the house to be used as a nailer for the starter strip. Secure a starter strip with 1-½ inch siding nails, then secure the course of siding with 1 ½ inch nails, the course of siding above may then be locked into the bottom course. The siding shall be attached loose to allow for expansion and contraction. The ends and splices shall be as per manufacturer instructions. The ends of the building shall have siding applied per manufacturer installation instructions. The appropriate accessories shall be used at doors, windows, and vertical walls, etc. The vinyl corner trim shall be installed to complete the installation. Any roof overhangs that are incomplete shall have vinyl fascia and soffit material applied as required.

LP SmartSide Lap Siding: The bottom course of siding on the sides and ends of the building shall be installed. Secure a bevel strip with 1 ½ inch siding nails, then place the course of siding and secure with 1 ½ inch nails, at the top and bottom. The ends and splices shall be as per manufacturer instructions. The ends of the building shall have siding applied per manufacturer installation instructions. The appropriate trim shall be applied at door, windows, and inside/outside corners. Any roof overhangs that are incomplete shall have required fascia and soffit material applied.

LP SmartSide Panel Siding: The required pieces of panel siding shall be installed vertical on the ends of the builder per manufacturer installation instructions. A trim board shall be applied around the perimeter of the building. The appropriate accessories shall be used at doors, windows, and vertical walls etc. The corner trims shall be installed to complete the installation. Any roof overhangs that are incomplete shall have fascia and soffit material applied as required.

Cedar Lap Siding: The bottom course of siding on the sides and end of the building shall be installed. Secure the course of siding with 1 ½ inch stainless steel nails, at the top and bottom. The ends and splices shall be as per manufacturer instructions. The ends of the building shall have siding applied per manufacturer installation instructions. The appropriate trim shall be applied at doors, windows, and inside/outside corners. Any roof overhangs that are incomplete shall have required fascia and soffit material applied.

Cedar Channel Rustic Siding: The bottom course of siding on the sides and end of the building shall be installed. Secure the course of siding with 1 ½ inch stainless steel nails, at the top and bottom. The ends and splices shall be as per manufacturer instructions. The ends of the building shall have siding applied per manufacturer installation instructions. The appropriate trim shall be applied at doors, windows, and inside/outside corners. Any roof overhangs that are incomplete shall have required fascia and soffit material applied.

Fir-Log Siding: The bottom course of siding on the sides and end of the building shall be installed. Secure the course of siding with 3” stainless steel nails, at the top and bottom. The ends and splices shall be as per manufacturer instructions. The ends of the building shall have siding applied per manufacturer installation instructions. The appropriate trim shall be applied at doors, windows, and required fascia and soffit material applied.

Trim and Soffit

Metal Fascia and Soffit: F-channel is used at the gable ends of the soffit as the receiver for the vinyl siding. Undersill is used as the siding receiver at the soffit eaves. Above these receivers, attach F-channel against the structure. The F-channel will be the receiver for the vinyl soffit material. At the sub-fascia area, the vinyl soffit will need to be secured by fastening the soffit to the sub-fascia. Later, the bottom lip of the fascia will cover these fasteners.

Rake: The rake extension shall be complete above the 1st hinge point of the roof in the same manner as the eave.

Cedar Fascia and Soffit: Precut 3/8” soffit materials shall be secured to the sub-fascia and a nailer at the exterior wall. Cedar Fascia Board shall be secured to the sub-fascia with 8d stainless steel nails at 16” o.c.

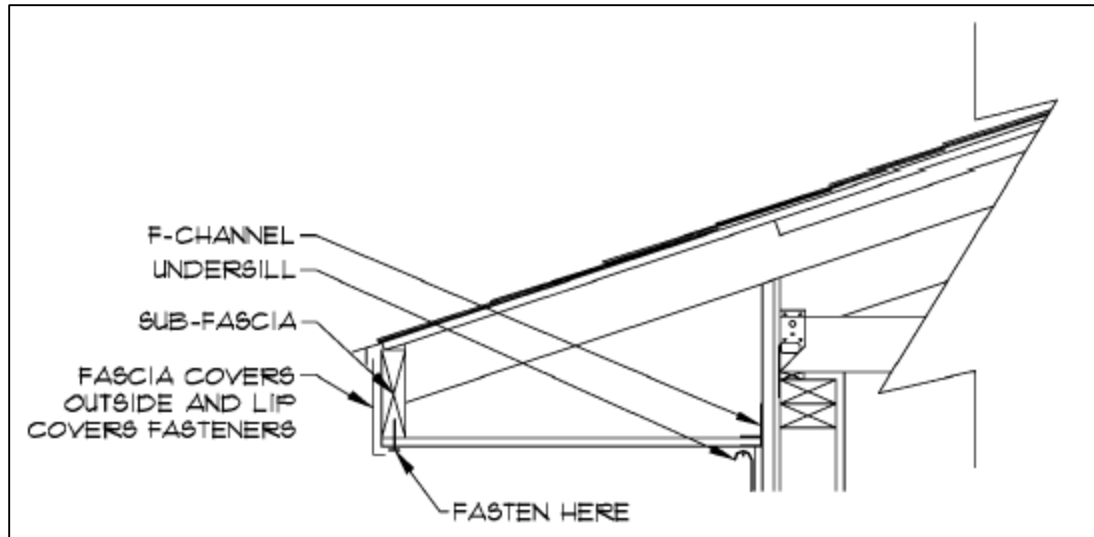


Figure 20: Vinyl fascia and soffit detail.

Plumbing

Water Supply

Builder is responsible for all site work related plumbing materials and labor including, but not limited to, hot and cold lines, water heater, floor drain, sump pit, basement bathroom roughin, septic stub line, house waste lines, water softener disconnects, filtration system, outside hose bibs, water heater and water heater installation.

The water system is designed for a maximum service pressure of 80 pounds per square inch. If the building is to be located in a water district where the supply pressure exceeds 80 pounds per square inch a pressure reducing valve shall be installed, it may also be required by local code. A shut-off valve shall be installed between the water supply and the building inlet.

Crossovers: Crossover connections shall be required on the hot and cold supply piping. Remove the cap and cut the required length of pipe to join the two ends of piping. Sweat the pipes together using couplings and lead free solder. Insulate as required to protect from freezing.

Testing: The water supply system shall be tested per state and local requirements.

Drainage System

Assembly and Support: To provide a complete system, drains shall be extended to the sewer connections indicated on the drawings, and vents connected to through the roof penetrations. If horizontal pipes are installed they shall be supported at a maximum of 4'-0" o.c. All drain lines shall be installed with a minimum of ¼ inch per foot slope. All connections and continuations shall be with approved fittings.

Testing: Upon completion of the DWV, piping the system shall be tested per state and local requirements.

Electrical

Service Feeders and Panel

A 200 AMP 120/240-volt AC electrical distribution system is pre-wired for connection to an electrical service system. A qualified installer shall determine feeder size. The service panel shall be located, if prepared for location below the floor system service panel shall be removed from shipping position and secured in compliance with the National Electric Code (NEC). The electrical service shall be grounded per the NEC.

Crossover Connections

There are two locations where crossovers will be located to provide the general light circuits to the adjacent sections from the section that the service panel is installed. Any 15 AMP or 20 AMP circuit that will cross from one section to another will be connected at the crossover location with a snap connector. This connector is used on home runs, switch legs, and circuit continuations. Circuits over 20 AMP that cross to an adjacent section will be completed at the service panel. The attic shall be inspected for any crossovers to complete and continuation of a circuit and the completion of the smoke alarms.

Finish Electrical

To complete the electrical system some devices may require installation. GFI receptacles, light fixtures, and smoke alarms are some devices that may require installation. These devices shall have the installation instructions provided with them.

Phone

Phone jacks are located throughout the building. The jack is wired with a 4 pair conductor. This wire is coiled below the jack with enough length to reach all points of the building exterior. The wire from each jack shall be routed to the location determined as the entrance of the phone service for completion by the phone company.

Cable

Cable TV rough-ins are located throughout the building. An open box with a pull wire is installed. The coax cable and trim plate is the responsibility of the local service provider.

Testing

When all electrical and bonding connections have been completed the system shall be tested for continuity, polarity, and operation.

Continuity Test: This test shall be performed before power is provided to the system. This is a test between the equipment ground and all non-current carrying metal parts.

Polarity Test: This test shall be performed with all circuits energized. This is a test of the polarity and grounding of the 120-volt devices. The GFCI receptacles shall be tested at this time for proper operation.

Operational Test: This is a test of all devices and fixtures. All fixtures shall be checked for operation. All receptacles shall be checked for operation, switched receptacles shall be checked for operation by the switch. Test all 240-volt receptacles to verify power to both legs of the circuit. Appliance power sources shall be tested. Smoke detectors shall be tested per manufacturer instructions.

Mechanical Equipment

Verify the flues for gas appliances have been properly installed and extend through the roof with flashing and cap. Verify the wiring is complete for electrical appliances and no additional connections are required.

Gas fired appliances shall be checked for type of fuel required to operate, natural gas, or liquefied petroleum gas. Some appliances may require modifications be made to operate with the gas supplied to the site. Qualified personnel shall do these modifications per manufacturer's instructions.

Verify that buildings with appliances installed have unobstructed source of combustion air. Appliances installed in the field may require combustion air ducts to comply with the local building codes.

Verify the condensate lines terminate at a location in compliance with local building codes.

Ducts

Heritage installs register boots in the floor system. Crossover connections may be required to be completed on 2-story and loft homes at time of set.

Fuel Supply Systems

Each gas appliance on or above the first floor is installed with a fuel gas connection. The fuel supply system is to be sized and installed by qualified personnel. Heritage Homes of Nebraska, Inc. will not provide any gas piping within a building.

Air Conditioners

Certain projects may include furnace and air conditioners from Heritage, in this case the air conditioning unit will need to be set and condensate lines be routed between the condensing unit and coil. The electrical disconnect shall be secured and the power conductor installed. The electrical connections to power and control the condensing unit shall be completed by qualified personnel. The control wire will be coiled in the floor system for continuation to the unit.

Appliances

Appliances purchased as part of the home from Heritage such as ranges, cook top, and oven venting appliances shall be vented to the exterior per manufacturer instructions. This vent shall be per local codes for location of termination and support.

Clothes Dryer: Buildings provided with a space for clothes dryer shall be provided with a recessed dryer vent box. This vent box will need to be extended to the exterior and terminated with an approved damper.

Fireplaces

There are three types of fireplaces that maybe installed in a building, and EPA wood burning fireplace, a top vent gas appliance, and a direct vent gas appliance. The type of fireplace and its location will determine the work required completing the installation.

Wood burning fireplaces will require the completion of the chimney to a point 2 feet higher than the highest point within 10'-0". This shall be done with listed sections of chimney pipe; the pipe shall be terminated with a spark arrestor and rain cap. Verify the combustion air ducts have been terminated to the exterior.

Direct vent gas appliance's flue installation shall be completed by onsite contractor. Verify the combustion air ducts have been terminated at the exterior.

Interior Finishes

Wall Finishes

During the shipping and setting process cracks will develop in the drywall. These cracks will need to be repaired after the home is set on the foundation and after the interior of the home has been conditioned. Re-paint the wall as required to complete the repair. The drywall and paint repair costs shall be by the builder, not Heritage Homes.

Doors and Openings

The common wall between adjacent sections will have openings to be completed. Doors and materials are provided for the openings that require doors; jamb stock and casing is provided for walk-through openings. Large openings may be finished with gypsum wallboard jams. In some buildings the ceiling may continue from one section to the other, this will require gypsum wallboard to be applied to the ceiling. The wallboard shall be finished to match the adjacent ceiling finish. There may be surfaces that require gypsum wallboard to be applied and finished.

Floor Finishes

Most floor coverings are installed in the factory. When vinyl flooring, wood flooring, or ceramic tile continues into the adjacent section, the largest area will be installed in the manufacturing facility and the remaining flooring shall be installed in the field. It is the builder's responsibility to finish the flooring. Flooring not installed in the factory but purchased by the builder is to be completed by the builder, some supporting materials such as mastic may not be included. Ceramic tile areas larger than 4'x4' installed at the factory will not be grouted; grouting is the responsibility of the builder, grout is shipped loose.

General Contractor / Builder Site-Work Responsibilities

(including but not limited to)

Foundation:

1. Permits, fees, inspections, testing.
2. Foundation and footings and flatwork.
3. Excavation & Backfill.
4. Exterior foundation damp-proofing and drain tile and sump pit.
5. Sill plate and sealer.
6. Wood center support wall or steel jack columns.
7. Foundation ground rod.
8. Foundation insulation.
9. Basement stairs.
10. Any other work required to meet state and local codes.

Plumbing:

1. Any items pertaining to plumbing not provided or finished at the factory.
2. Permits, fees, inspections, testing.
3. Waste & water supply connections.
4. Water Heater.
5. Roof vents piping and connection in attic.
6. Master shutoff valve, meter, backflow device, and pressure regulator.
7. Connect all supply, drain, waste, and vent piping.
8. Tighten all shutoff/valve fittings, fixture supply and drain lines, and check for leaks.
9. Any other work required to meet state and local codes.

Electrical:

1. Any items pertaining to electrical not provided or finished at the factory; Heritage does not provide the circuit breaker for the water heater and/or furnace.
2. Permits, fees, inspections, testing.
3. Electrical service and connection to building and panel.
4. Meter, meter socket, and conduit.
5. Ground rod.
6. HVAC & Water heater electrical.
7. Basement, garage, and porch electrical; lights, smoke detector, doorbell wiring, outlets, etc.
8. Any other work required to meet state and local codes.

HVAC:

1. Any items pertaining to HVAC not provided or finished at the factory.
2. Permits, fees, inspections, testing.
3. Furnace.
4. Plenum supply and return system.
5. Any other work required to meet state and local codes.