

NOAH+ STANDARD

Please note that the following items are to be considered the NOAH+ Standard and all have been required as of August 15, 2022.

When ANSI standard is silent on matters, Inspector may address the matter utilizing commonly available standard/code such as but not limited to IRC latest edition, AWC, APA or other related and current standards/codes.

- Electric water heaters may be installed in the bathroom in a closed cabinet.
 - Propane water heaters may not be installed in the bathroom unless they are installed in a sealed enclosure so that combustion air will not be taken from the living space, or it is a Direct-Vent type. IRC M2005.2
 - If a full air exchange system isn't being used, then we will accept the bathroom fan controlled by a humidistat as an alternative.
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- Ice & Water Shield underlayment shall be installed as indicated and inspected prior to covering during the Dry-In of Stage 2.

*Roof pitch of 4/12 or less, entire roof shall be covered.

*Roof pitch greater than 4/12, roof eaves up a minimum of 3 feet into building line shall be covered.

- "A" frame style roofs require one of the following at framing. Collar ties placed at maximum distance of 48" OC OR Metal Ridge Strap, min 24" in length.
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- All homes with a loft over 24" high must have a guardrail installed. **(ANSI 5-10.7)**
- A loft measuring 35sq ft or greater shall have a primary and secondary means of egress. (Example: Window 24" X 17" or Outdoor Passage 18" X 48") (ANSI 3-2.1)
- All open sided stairs are required to have a Guard rail 34" high with openings no greater than 4". **(ANSI 5-10.7)**

- Cantilevered floor systems supporting exterior walls shall have solid full depth blocking placed in every joist bay over the metal trailer frame.
 - **C.Section AQ104 LOFTS(1)Section AQ104.1 Minimum loft area and dimensions.** Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AQ104.1.1 through **AQ104.1.3.(a)Section AQ104.1.1 Minimum area.** Lofts shall have a floor area of not less than 35 square feet (3.25 m²).**(b)Section AQ104.1.2 Minimum dimensions.** Lofts shall be not less than 5 feet (1524 mm) in any horizontal **dimension.(c)Section AQ104.1.3 Height effect on loft area.** Portions of a loft with a sloping ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. **Exception:** Under gable roofs with a minimum slope of 6:12. portions of a loft with a sloping ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.
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- Properly sized headers and jack studs are required.

Examples of properly sized headers:

*4"x4", up to 4ft span.

*double 2"x4", up to 4ft span.

*single 2"x6", up to 4ft span.

*double 2"x6", up to 6ft span.

*single 2"x10", up to 6ft span.

*double 2"x8", up to 8ft span.

*double 2"x10", up to 9ft span.

*double 2"x12", up to 10ft span.

Spans Greater than 10ft. are handled on a case-by-case basis.

Loft minimum floor system for loft spans 7' 10" or less

*single 2"x4" @12"OC

*double 2"x4" @24"OC

*single 4"x4"@ 24"OC

*single 2"by6" @ 24"0

- All designs must meet 140 mph wind loads.

Example: All king studs require mechanical fasteners (No L brackets), and all common studs. This is only the studs that go from the bottom plate unbroken to the top plate. When using Go Bolts (All thread rod) mechanical fasteners are only needed on studs that are greater than 6' from the rod. This can be done by using (Simpson H2.5 twist rafter ties or equivalent).

Wall sheathing nail patterns 1/2" CDX OR 7/16" - 9/16" OSB sheathing nailed 4" inches on edges and 8" in field for walls. 8 D ring shank or screw with metal studs all edges with solid backing. Roof sheathing 1/2" CDX or 7/16" OSB for 16" on center (or 9/16" for 24" on center rafters).

Roof sheathing nail patterns 3" on edges and 6" in field.

Walls must be anchored to the trailer with 1/2" anchor bolts 4' on center and strapping, Simpson H 2.5 or equivalent securing rafter to the top plate.

Properly sized headers and jack studs are required.

- Exterior weather resistant barrier (house wrap or similar product) shall be placed on walls unless zip board or other approved product is utilized.
- Insulation Requirements are Roof R-19 or greater, Wall R-13 or greater and Floor R-13 or greater. A vapor barrier must be installed between the insulation and the subfloor.

Exception to Floor Insulation, Hawaii.

Idaho, follow state/county guidelines.

- **Trailer/metal chassis:** IF there is a metal pan, venting must be installed in every bay of the metal pan before installing the insulation.
 - A thermal break must be installed between metal trailer and subfloor.
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- All windows and doors must be insulated. All windows and doors jambs must be insulated full depth
 - All penetrations of the bottom and top plates shall be sealed using fire rated sealant, fire chalk or equal.
 - Electric panels may not be installed in a bathroom, closet or stairs and wet area.
 - Smoke detectors shall be hard wired and interconnected with battery back up
 - If the structure you are building is 30' long or less, only ONE Smoke detector is required. If the structure is 31' long or more, at least TWO smoke detectors are required. In this case, the smoke detectors must be interconnected. Any closed off area, such as a loft or bedroom, must have it's own smoke detector.
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- Builders will now have the option of using International Plumbing Code 903.6 Extension Through the Walls. Vent Terminals through the wall shall terminate not less than 10" above ground and not under an overhang with soffit vents. Side wall vents shall be protected against birds or rodents from entering the vent. You must terminate 4' below, 3' above and 10' horizontal of an opening or air intake.
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ANSI 119.5 covers:

1. Fuel Systems and Equipment
2. Health, Fire and Life Safety
3. Plumbing Systems and

4. Construction Requirements.

And

NFPA 70 (National Electric Code) is used for the electrical with special attention to Article 551 and 552 (RVs and PMRVs).

ADDITIONS TO NOAH+ STANDARD 1/1/23

- Water Pressure Test will need to be performed during Stage 3 - Rough Plumbing and Stage 5 - Final.
- Houses should be clear of debris during inspection to allow inspectors to have a clear view.
- A bathroom fan set by a timer set to turn on frequently throughout a 24-hour period to help eliminate moisture through out the home or may also install a humidistat.
- The home must be connected to electric to complete stage 5 at which GFCI will be tested and lights must be on.
- Warning labels must be applied where needed.
- A 2" washer drainpipe shall be used.
- Ice and Water Shield or equivalent must be used according to its proper product installation.
- Tempered glass/protective film must be used in lofts.
- Smoke detectors must be hard wired and interconnected.
- Smoke Detectors: If the structure you are building is 30' long or less, only ONE Smoke detector is required. If the structure is 31' long or more, at least TWO smoke detectors are required. In this case, the smoke detectors must be interconnected.

Any closed off area, such as a loft or bedroom, must have it's own smoke detector.

OLD NOAH+ STANDARD FOR REFERENCE

ANSI 119.5 covers:

1. Fuel Systems and Equipment,
2. Health, Fire and Life Safety
3. Plumbing Systems and
4. Construction Requirements.

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NFPA 1192

We "plus" these with structural and energy guidelines.

PLUS:

R 13 INSULATION IN WALLS AND FLOOR

R 19 INSULATION IN CEILING.

STUDS 16" OC (24" O.C. with advanced framing method) MINIMUM, 2X4 WOOD OR METAL STUDS, OR SIP PANELS
½ CDX OR 7/16 - 9/16" OSB SHEATHING NAILED 4" ON EDGES AND 8" IN FIELD FOR WALLS. 8 D RING SHANK OR
SCREWS WITH METAL STUDS ALL EDGES WITH SOLID BACKING

HOUSE WRAP OR ZIP BOARD

ROOF SHEATHING ½ CDX OR 7/16 (OR 9/16 FOR 24" OC RAFTERS) OSB SHEATHING NAILED 3" ON EDGES AND 6"
IN FIELD FOR WALLS. 8 D RING SHANK.

INSULATED WINDOWS AND DOORS.

ROOF/WALLS ANCHORED TO THE TRAILER WITH ½" ANCHOR BOLTS 4' OC AND STRAPPING. (EX SP1 & SP2
SIMPSON HANGERS ON TOP AND BOTTOM STUDS, H 2.5 SECURING RAFTER TO THE TOP PLATE.

PROPERLY SIZED HEADERS AND JACK STUDS.

UNDERLAYMENT AS NEEDED.

AIR EXCHANGER OR OTHER MOISTURE CONTROL.

Framing wall to bottom plate connection.

In addition to the rafter ties (Hurricane ties) you will also have to mechanically attach all exterior king wall studs to the bottom plate. This is only the studs that go from the bottom plate unbroken to the top plate. This can be done by using Simpson H2.5 twist rafter ties or equivalent.

Builders will now have the option of using International Plumbing Code 903.6 Extension Through the Walls. Vent Terminals through the wall shall terminate not less than 10" above ground and not under an overhang with soffit vents. Side wall vents shall be protected against birds or rodents from entering the vent. You must terminate 4' below, 3' above and 10' horizontal of an opening or air intake.