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Date: 03/10/2025

To: Dale Stiles

TriPointe Homes
5440 Wade Park Blvd
Raleigh, NC 27607

Dale.Stiles@TriPointeHomes.com

919-464-6937

Re: HVAC Platform Issue

Location: Lot 281 Serenity (Fuquay-Varina, NC)

JDS Project No.: RDU2502346 Date of Inspection: 03/10/25

A representative of JDS Consulting arrived on site to observe the issues reported to us by the client, which are presented, along with our recommendations, in this report.

## **Observations**

The client requests specifications on modifying (2) roof trusses A01A and (2) A01 and A02 to allow for more HVAC platform. The client wishes to span an HVAC platform from the 3<sup>rd</sup> roof truss from the right exterior wall to the 2<sup>nd</sup> A01 roof truss from the right most A01A. The client wishes to move the 2<sup>nd</sup> floor HVAC access door wall approximately 32" forward to accommodate the HVAC platform, to do this the client wishes to move the 3-31 vertical web member and move it between points 4 and 37.

## Recommendations

Based on our on-site observations and review:

A01:

- 1. Bottom Chord: Install 2x12 scabs on each truss that the platform will extend to, from vertical 2-33 to 1' past 31-32. Set the scab such that the top of the scab is level with the highest portion of the 31-32 web. Attach with (3) rows of 10d nails spaced 4" on center into all covered material.
- 2. Wall Vertical: Remove the 3-31 vertical and install a 2x4 vertical at the desired location, tight between the 2-37 and 31-32 webs. Attach the bottom and the top with 24x24x7/16" OSB gusset plate centered on the joints, attached with (2) rows of 10d nails into all covered members. OSB can be notched around living area.
- 3. Diagonal at HVAC: If the 2-31 web member is required to be removed for the HVAC equipment,
  - a. Clean cut and remove the web at joint 2 and joint 31, careful not to damage the gusset plates.
  - b. Install a 2x4 scab full length on the 2-33 and a vertical 2x4 vertical scab the along the full length of the wall vertical. Install the scabs on the same side as the 2x12 scab in item 1. Attach the 2x4 scabs with (2) rows of 10d nails spaced 12" on center.
  - c. At the 2 and 33 joints, as well as the joints at the top and bottom of the vertical in item 2, furr out the adjoining members and install a 24" x 24" x 7/16" OSB gusset plate with (2) rows of 10d nails spaced 4" on center. OSB gusset plate may be vut as needed to form around the roof/ceiling.



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## A01A:

- 1. Bottom Chord: Install 2x12 scabs on (both sides of) each truss that the platform will extend to, from vertical 2-33 to 1' past 31-32. Set the scab such that the top of the scab is level with the highest portion of the 31-32 web. Attach with (3) rows of 10d nails spaced 4" on center into all covered material.
- 2. Wall Vertical: Remove the (double) 3-31 vertical and install a (2) 2x4 vertical at the desired location, tight between the 2-37 and 31-32 webs. Attach the bottom and the top with 24x24x7/16" OSB gusset plate centered on the joints, attached with (2) rows of 10d nails into all covered members. OSB can be notched around living area.
- 3. Diagonal at HVAC: If the 2-31 web member is required to be removed for the HVAC equipment,
  - a. Clean cut and remove the web at joint 2 and joint 31, careful not to damage the gusset plates.
  - b. Install a 2x4 scab full length on (both sides) the 2-33 and a vertical 2x4 vertical scab along the full length of the wall vertical (both sides). Attach the 2x4 scabs with (2) rows of 10d nails spaced 12" on center.
  - c. At the 2 and 33 joints, as well as the joints at the top and bottom of the vertical in item 2, furr out the adjoining members and install a 24" x 24" x 7/16" OSB gusset plate with (2) rows of 10d nails spaced 4" on center. OSB gusset plate may be vut as needed to form around the roof/ceiling.

## A02:

- 1. Bottom Chord: Install 2x12 scabs on each truss that the platform will extend to, from vertical 2-29 to 1' past 27-28. Set the scab such that the top of the scab is level with the highest portion of the 31-32 web. Attach with (3) rows of 10d nails spaced 4" on center into all covered material.
- 2. Wall Vertical: This vertical will stay in place per client.
- 3. Diagonal at HVAC: If the 2-27 web member is required to be removed for the HVAC equipment,
  - a. Clean cut and remove the web at joint 2 and joint 27, careful not to damage the gusset plates.
  - b. Install a 2x4 scab full length on the 2-29 vertical and the 32-27 vertical. Install the scabs on the same side as the 2x12 scab in item 1. Attach the 2x4 scabs with (2) rows of 10d nails spaced 12" on center.
  - c. At the 2, 29, 32, 27 joints, furr out the adjoining members and install a 24" x 24" x 7/16" OSB gusset plate. Attach gusset plate with (2) rows of 10d nails spaced 4" on center into all covered material. OSB gusset plate may be cut as needed to form around the roof/ceiling.

Between the A01A trusses: Install 2x12 ceiling/floor joists perpendicular and attached to the 2x12 scabs with Simpson face mount hangers at 2' on center. Install 3/4" subfloor on top of the ladder frame per manufacturer's specifications for the access platform.

If you have any questions or if I can be of further assistance to you on this project, please contact me at 984-344-4691.

Respectfully Submitted, Patrick Ruff

Reviewing Engineer:
Maxwell C. Danskin, PE