



DAMMON

ENGINEERING, INC.

554 Old Spanish Trail
Slidell, LA 70458
Phone: 985-649-5832

dammonengineering.com
info@dammonengineering.com

June 16, 2020

For: Joan and John Ascherl
226 Hoffman Lane
Waveland, Ms 39576

Dammon Engineering was contacted to request a structural inspection of the referenced new home due to the homeowner noting rainwater build up on the raised covered rear porch and the concern of the structural attachments for it.

Findings:

The tongue and groove decking is installed overall level allowing water pockets to build up and drain towards the house and onto the floor below.

The 2x12 floor joists are installed from side to side with tongue and groove decking attached running front to back. The 2x12 floor joists are attached to (3) 2x12's in the center to create a beam (one of the 2x12's is scabbed on and not in a joist hanger on either side). Some of the 2x12 joist hangers are of different sizes. One of the double 2x12 floor joist are spliced together but in a double joist hanger.

After reviewing the construction drawings it was found that the 2x12 floor joist @ 16" O.C. are designed from front to rear for the covered rear porch but does not state what type of decking to use.

Traditionally, deck boards are laid running perpendicular to the house with a slight slope to it between 1/8" and 1/4" per linear foot for tongue-and-groove floors. If the porch is deeper than 8' then a 1/8" per foot is recommended to avoid a pronounced slant.

Recommendation:

- 1) Remove spliced double 2x12 on double joist hanger and install single 2x12 with proper joist hangers.
- 2) Remove improperly sized, approximately 3 joist hangers, and install proper joist hangers for 2x12 floor joist.
- 3) Remove double joist hangers from center beam and install joist hangers for triple 2x12 for a beam and bolt triple beam together using the pattern attached.
- 4) Install caulking at top between decking and house to prevent water from draining onto the floor below.
- 5) Saw cut the 2x4 bottom plate of the porch in four places to allow build up of water to runoff.
- 6) It is recommended that this porch not be used for heavy loads i.e., spa/hot tub or pool.

Sincerely,

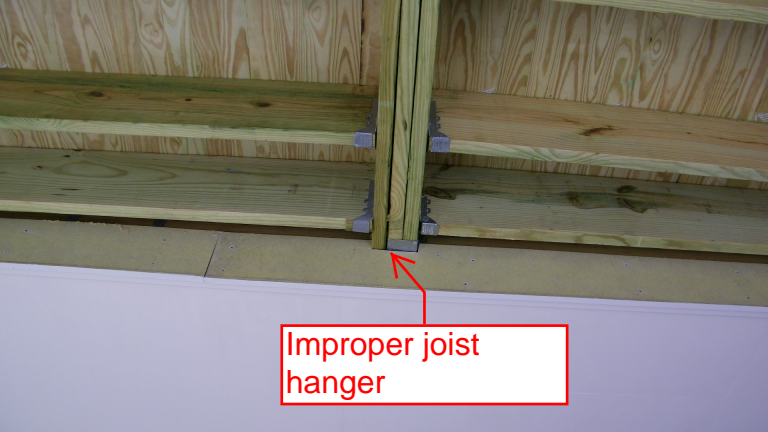
Brian Mistich
Brian Mistich, P.E.



This inspection is limited to the apparent visual conditions of the structural components of this building. It does not cover, nor attempts to cover, any components, items, and/or conditions which, by their nature or location, are concealed or are difficult or hazardous to inspect, or which require the moving of furniture, flooring materials, rugs, fixtures, appliances, or any component-part nailed, bolted, or screwed down or shut. No opinions are expressed regarding conditions which could be discovered only by the disassembly of any component parts, special testing, or removal of any concealing objects.

Inspections are made under normal weather conditions, and are not opinions of the conditions of the property and/or structure which may exist under unusual weather conditions, such as, but not limited to floods, heavy rains or snows, high winds, temperature extremes, or any act of God. Specific hazardous wastes, toxic substances, toxic mold, air and water quality, communicable diseases, asbestos, soil, environmental, radon, carbon monoxide, formaldehyde, building code and termite conditions are not included in this report unless otherwise stipulated.

This report is not a warranty or guarantee of the property inspected, but it is our opinion of its condition at the time inspected. Our liability shall be limited to reimbursement of the total cost of inspection.



Improper joist hanger



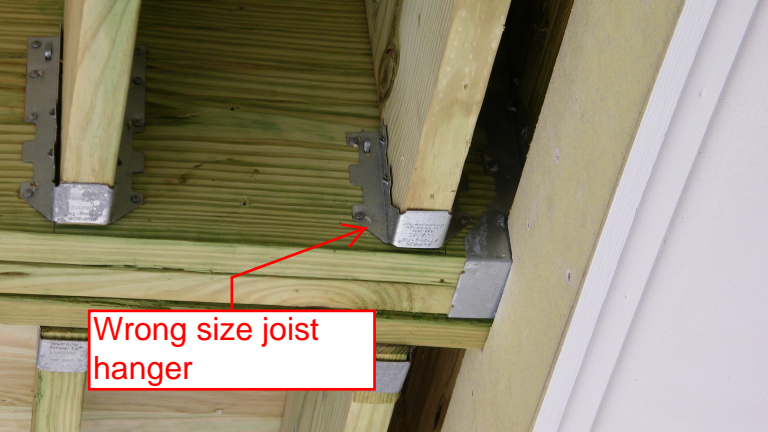
Remove and
replace

Caulk against house



A photograph of a wooden deck under construction. The deck is made of light-colored wooden planks. A red arrow points to a cut in the bottom plate of the railing system. The railing system consists of vertical posts and diagonal bracing. A yellow trash bin is on the left, and a red ladder is on the right. The scene is brightly lit, with shadows cast across the deck.

Saw cut bottom
plate



Wrong size joist hanger

The image shows a close-up view of a wooden roof truss system. The structure consists of numerous wooden beams and joists. A red arrow points to a specific joint where two beams meet. A red-bordered text box is overlaid on the image, containing the text "Bolt beam together".

Bolt beam together