



On XX/XX/XXXX, Harris Engineering Real Estate Inspections, Inc. performed an inspection on the house at XXXX Road, Burton, Texas. The inspection was performed exclusively for Mr. Country Estate Buyer. We make no representation to the use of this report by any other party. No representation is made to any environmental aspects/hazards of this property.



The house was under construction at the time of the inspection. This is a one story residential structure with a post-tension cable reinforced concrete foundation. The foundation, framing, roof, exterior hardboard material, exterior wall sheathing, mechanical rough-in, electrical rough-in, and plumbing rough-in had been substantially completed. The purpose of this inspection was to determine whether these items had been completed in a workmanlike manner. We have performed no design analysis on any item. **No representation is made to future performance.** Please consult the builder's warranty.

The following deficiencies were observed:

- It is recommended that you obtain engineer sealed foundation design documents and forward them to our office for review. It is our understanding that there has been some soil fill material placed below the foundation. It is recommended that you consult with the builder and foundation design engineer for soil pad construction specifications and compaction testing documents. Please forward these documents to our office for review.
- Post-tension cables had been stressed. However, these had not been cut and grouted.



- Excessive framing distortion had occurred. The outside walls were unplumb, leaning toward the outside. The front wall of the living room was leaning out 2" in the 10' height. The rear wall of the living room was leaning out 1" in its 10' height. The front porch columns were leaning out. The front porch column unplumbness varied, with a maximum unplumbness of approximately 2½" in the 10' height. Rear porch columns were leaning out up to 1' in their 10' height. This excessive framing distortion was attributed to inadequate roof and ceiling framing, particularly at the family room area. There were a lack of rafter ties. It is our understanding that no engineering design had been performed. The builder was on-site at the time of the inspection. This condition was discussed with the builder. It is our understanding that the builder has consulted with a design engineer. The design engineer should perform a repair design and create detailed documents for proper repair of this condition. It is requested that you obtain engineering design documents and forward them to our office for review. It is recommended that you request the design engineer to perform on-site inspections during the repair process and that the design engineer verify that repairs have been properly performed. I had a brief telephone conversation with the design engineer. He stated that there would be rafter ties at 8' on-center. Rafter ties would generally be expected at 4' on-center. Please communicate this concern to the design engineer. Appropriate repairs should be made to bring the walls to a plumb condition. Industry standards are that walls shall be level, plumb, and square to all adjoining openings or other walls within 3/8" of an inch in 32" measurement.



- The roof covering had not been installed. There were a lack of roof-top vents.
- A roof support strut had been removed near the family room fireplace. This is in need of being installed. Roof support struts shall be spaced at no more than 4' on-center.



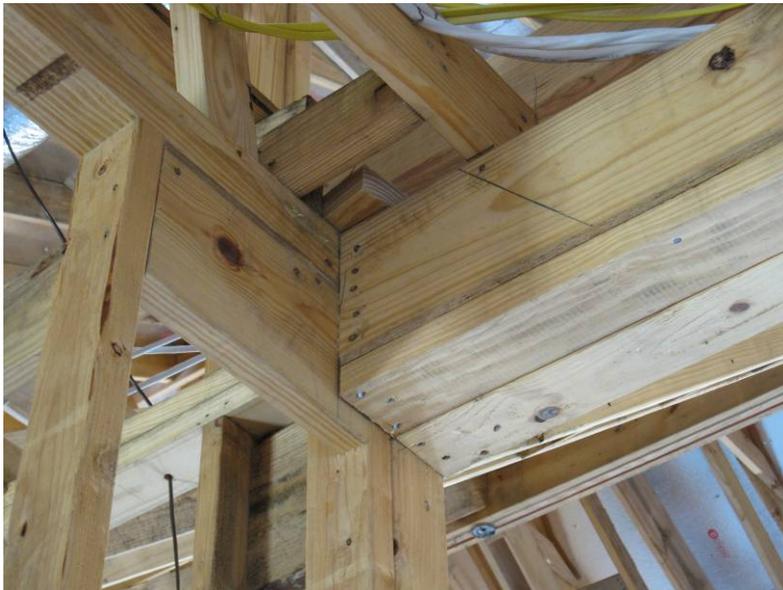
- Fireplaces and chimneys had not been completed. The family room fireplace had inadequate clearance to combustibles. A minimum 1½" clearance to combustibles is required. Top flashings had not been installed at both of the chimneys.



- There was a lack of Z-flashing at horizontal siding projection details at the left ends of the two left porches. Flashing is needed at horizontal siding projection details.



- There were a lack of joist hangers or a lack of stud support under both ends of a ceiling beam over the rear door alcove area. Proper support is needed for the ends of these beams.



- There was inadequate access to mechanical equipment and water heater location in the attic. Proper walkways and work space are needed.
- The junction boxes for the outdoor wall lights were installed relatively low.



- There were various areas of missing nail protector plates.



- There was a lack of insulation at water supply piping. All water supply piping is in need of being insulated, particularly over exterior porches and near exterior walls.



- The plumbing vents had not been connected in the attic. These had not been extended through the roof.



- The water supply had not been connected for the kitchen sink.



- The water heater had not been installed.

Should you desire, additional inspections could be performed. A reinspection could be performed to determine whether these items have been corrected. A final inspection is generally performed prior to closing, near or at the time of your final walk-through with the builder. Please contact our office for scheduling. The builder should verify that all of these repairs have been made prior to covering with insulation and drywall. Should there be any questions as to whether these items have been corrected, please contact our office.

The foundation showed only slight unlevelness, as measured with a laser level. There was a foundation elevation difference of approximately 1" from the high point to the low point across the surface of the foundation. There were a few small hairline cracks in the concrete that were considered normal. **No representation is made to future performance.** It is recommended that you request foundation construction documentation from the builder. The design engineer would generally be expected to perform progress inspections during construction of the foundation.

This report contains the opinions of Harris Engineering Real Estate Inspections, Inc. It is possible that differing conclusions could be obtained from other companies. It is a pleasure to have been of service. Please call should you have any questions or need future inspections.

Harris Engineering  
Real Estate Inspections, Inc.  
F-7281



David Harris, P.E.  
President



