the BUILDING CONSULTANT

"Real Solutions for Real Problems"

Field Report

Attorney work Product

Project Information

[redacted]

15 Feb 2025

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Field observation report for:
[redacted]

Overview:
In accordance with your request, I have visited the site and conducted a field investigation at [redacted]. The results of our investigation are presented herein.

General Information:
We must start with the premise that a home should be constructed in a good and workmanlike manner as required by the State of Iowa.
The home shall be built according to the minimum requirements of the building code.
The materials used in construction shall be installed to the requirements of the manufacturers of that material.
There are construction standards that guide and direct the construction of the home. The following are examples of construction standards. This list is by no means all inclusive. Both the building codes and manufacturers' installation literature provide these standards, and it is expected any general contractor would be familiar and adhere to these standards at a minimum.

- Walls shall be constructed plumb, level, and square.
- Windows and doors shall be installed plumb, level, and square.
- Openings for windows and doors etc. shall be framed plumb, level, and square.
- The exterior enclosure shall be airtight and watertight to protect against air and water infiltration/exfiltration.
- Below grade walls shall be waterproofed to protect against water intrusion.
- Transitional Flashings shall be installed where one form of wall covering, cladding' meets another.
- Any building materials used should be installed in a manner consistent with their respective installation instruction provided by the material manufactures.
  The above list are examples of requirements the builder must meet to satisfy the building code requirements and those of the various manufacturers for the product materials used in the construction of this home.
-

The home is constructed with Insulated concrete Forms (ICF) at the exterior walls. The brand of form used is identified as Stronghold Insulated Concrete Forms by the Homeowners. The lower-level floor is poured concrete. The main-level floor is a wood framed assembly. The roof is a wood framed truss assembly. The exterior cladding (siding) is LP SmartSide.
The garage floor is a foam form and concrete assembly. The brand of forms has not been identified.
The roof is shingled with a laminated asphalt shingle aka "architectural shake" The brand is not identified but all the brands of these shingles have specific, similar installation details that show where the nail placement is to be located and the measurement offset of the coursing of the shingle from progressing rows of shingles up the roof.
The siding and trims are identified as SmartSide by Louisiana Pacific (LP SmartSide) henceforth
There are many issues with the construction of the home. These issues are listed in this section and further expanded upon in the Observations/ Commentary section of this report.

The home is not at all built in a good and workmanlike manner, rather it is filled with poor workmanship

The general contractor did not properly waterproof the ICF's and water is intruding into the basement and creating issues with microbial action on the drywall which is a hazard and health concern for the occupants.

The entry stoop is not flashed and waterproofed correctly and there is water leaking into the room under the stoop.
The ICF walls were not installed plumb. There is one wall that is out of plumb 1" per 4' of height, leaning out. This makes the 8' door out of plumb 2". The door set off the floor approx. 1 ¼", when opened the door is off the floor approx. 2 ¼". If the wall were leaning in as opposed to leaning out the door would scrape the floor as it opened and would not open to its full extent.

Doors and windows are to be installed Plumb, Level and Square. The ICF's are not set Plumb, Level, and Square. This creates an issue with the spaces left in the ICF's to place the doors and windows. Therefore, the windows and doors are not set properly, Plumb, Level, and Square.

The siding on the home is not installed to the requirements

The State of Iowa requires a building to be built in a good and workmanlike manner.

While we were at the site, I reviewed the exterior cladding on the home and noted several problems with the installation of claddings used that are out of compliance with the LP's installation details for siding and trims used as cladding on this home. LP has specific installation details that are to be followed to install their products to a warrantable installation. LP researched their materials and have come up with details that will give the best and longest performance of their products. Failure to follow the manufacturers' guidelines of installation will yield shortened life of the product and may void the warranty.

I use the installation manuals by LP Corp for SmartSide to evaluate the installation of the sidings and trims.
The building code agrees with the requirements of these manufacturers.

Observations/ Commentary:
Siding
LP SmartSide
The siding and trims used on this home are LP SmartSide, a product by Louisiana Pacific Corp.
I use the installation manuals by LP Corp for SmartSide to evaluate the installation of the sidings and trims.
The building code agrees with the requirements of these manufacturers.

LP has extensive installation documents for specifics of installation of their products.
LP has specific installation details that are to be followed to install their products to a warrantable installation. LP has researched their materials and performance of such and have come up with details that will give the best and longest performance of their products. Many of the details were not followed on this home which will lead to premature material failure and a heightened maintenance of the siding products Failure to follow the manufacturers' guidelines of installation will yield shortened life of the product and may void the warranty.

The siding and trims are poorly installed and have defects including but not limited to:

- **Clearance at deck surfaces.** LP is specific in the requirement of one (1) inch clearance of the siding and trim in an exposed area and 3/8" minimum clearance in a roof protected area for their products above any surface that collects or pools moisture such as porches, patios, walks, etc. Further, the bottom of the trims or siding cut edges or any place where water might hang is to be sealed and painted to prevent moisture from wicking into the material. The builder ignored these and did not see to it these details were performed correctly.
- **Clearance at concrete surfaces.** LP is specific in the requirement of one (1) inch clearance of the siding and trim products above any surface that collects or pools moisture such as porches, patios, walks, etc. Further, the bottom of the trims or siding cut edges or any place where water might hang is to be sealed and painted to prevent moisture from wicking into the material. The builder ignored these and did not see to it these details were performed correctly.
- **Sealing and Painting Cut Edges of Siding and Trims.** LP is specific in the requirement to paint all cut edges and all exposed edges of the siding and trims. The builder ignored these direction and requirements and left many cut edges unsealed and exposed to the weather. These unprotected edges of the trims and siding will wick moisture and start the degradation of the material.
- **Caulking/Sealants** LP is specific in their requirements of gaps at vertical transition points between the siding and whatever material the siding is meeting at its termination i.e window or door frames, trim material. LP specifies a 3/16" gap that is to be caulked over. This gap allows the sealant to go deeper into the grove and have additional

material to adhere to. As this joint experiences movement there is enough sealant material adhering to both surfaces to move through the expansive/compressive cycle and remain adhered and sealed. The builder ignored this joint design and many of the sealant joints are failing in adhesion

- **Penetrations.** LP is specific in the requirement to use a penetration block to properly handle details needed to adequately seal penetrations through the siding such as electrical wires, exhaust vents for dryers, bath fans, and plumbing pipes, etc. The builder installed these penetration blocks on some of the penetrations and missed it on others. The builder failed to adequately seal the sides completely at the top of the block. This leaves hole that is a pathway for moisture to intrude behind the siding and into the ICF wall and through to the back of the interior drywall. The builder ignored installing and adequate watertight seal at the top edges of the penetration blocks.
- **Insulated Concrete Forms (ICF) Assemblies.** LP is specific in its requirements for attachment of their siding products to the walls of the home.
    - • Siding must be fastened with:
    - **-** Min. #8 stainless steel or equivalent, self-drilling tapered head screw.
    - **-** Min. penetration of 3/8 inch (10 mm) beyond the thickness of the nailing flange.
    - • Larger screws may be required by ICF Manufacturer based on the following min. withdrawal requirements.
    - **-** Min. withdrawal value of ICF nailing flange must be 50 lbs. (23 kg) with max. 12 inches (305 mm) o.c. spacing.
    - **-** Min. withdrawal value of ICF nailing flange must be 31 lbs. (14 kg) with max. 6 inches (152 mm) o.c. spacing.

The builder did not follow the manufacturer's instructions to attach the siding with #8 stainless steel screws or their equivalent. Instead the builder chose to use nails to attach the siding. Additionally, even if nails were allowed the placement of the nail in the siding does not meet manufacturers requirements, much of the siding is high nailed which compounds this defective installation. The siding will have to be removed and replaced and fastened correctly to properly remediate this builder defect.

Below Grade Waterproofing. The builder used only a dimpled mat applied over the ICF's for waterproofing. This dimpled mat allows an air gap between the ICF and the dimpled mat material. This does relieve the hydrostatic ground water pressure against the foundation but is by no means a waterproof membrane, it does not seal the ICF surface against water intruding into the ICF assembly moisture intrusion. It only relieves the horizontal pressure and thereby has a minimizing effect on moisture intrusion. The dimple mat is not properly secured at its top edge with a termination bar and sealant. Rather, it is left open in many places allowing moisture into the air space and giving it the potential to work through the joints in the ICF''s and into the finished space as it is in the under garage. There is an area in the lower garage where this moisture is working though the ICF's and is allowing microbial action on the back side of the drywall.
Had this wall been properly waterproofed with a peel and stick membrane designed to waterproof ICF foundations this leak and accompanying microbial action would not be occurring. The builder did not properly waterproof this foundation.. The brand of ICF's used on this project are Stronghold Insulated Concrete Forms. Strongholds cut sheet drawings sow a waterproof membrane applied to the ICF's. A dimpled mat is not a waterproofing membrane. Rather, it is a drainage sheet meant to provide a path for drainage and help eliminate hydrostatic water pressure against whatever it is applied to. In speaking with the tech department at Stronghold they recommend a peel and stick waterproof membrane. The only way to correct this defect is to dig out the foundation, clean it off, properly prime the ICF's and apply a peel and stick waterproof material that is designed to waterproof ICF's

Garage Floor. The garage has a centralized floor drain. The concrete floor is to slope towards the drain so any water on the floor does not puddle and collect. The garage floor was placed and finished in a defective manner with depressions that allow puddles of water to form. There were no relief cuts installed in the concrete floor to control and isolate cracks. floor. This has led to numerous unsightly cracks in the concrete floor. This could lead to a moisture pathway that will leak into the ceiling of the space below.

Adhered Tile Stone Veneer Panels The adhered tile stone veneer panels are missing a drainable weep screed at the

base of the assembly and at the tops of the doors and windows. To try to mitigate the leak at the stoop the builder has taken to trying to caulk closed the joints in the tile panels. This is not at all the strategy to correct this leak. At the time of redoing the stoop and mitigating the water leak into the room below it will require removing some siding and some of the tile panels to turn the water proofing membrane up the side of the ICF's above the stoop concrete. At this time, it would be good to redo the tile panels to the correct details around the windows and door. It is questionable as to the installation of the wire lath and its attachment to the ICF's. The wire lath needs to be installed with screws not wide crown staples as is done in most cases. As this is opened we can see how the lath was fastened to the walls. If found to be stapled I recommend removing all the panels and wire lath and reinstalling the panels over MVIS by Laticrete. This is a system that works much better over ICF's than does the conventional wire lath and scratch coat assembly.

Room under Entry Stoop. The room under the entry stoop leaks water whenever rain is landing on the exterior concrete stoop. The builder has made many attempts to correct this defect but to no avail. The stoop cap is installed without the correctly detailed waterproofing and flashing membrane. The stoop cap needs to be removed and reinstalled over a correctly detailed and installed waterproofing membrane

Entry (Room under stoop) The entry stoop cap is not waterproof and flashed correctly. Whenever rain hits the stoop water immediately leaks into the room under the stoop. The builder has made multiple attempts to fix this but to no avail. The stoop concrete needs to be removed, a proper waterproofing membrane installed and the concrete replaced.

Entry Door. The entry door was not taken care of as it was installed. The metal frame is scratched and damaged and looks like it was dragged across the ground. There are smears of sealant on the finished door itself leaving an unsightly mess.

Deck. The angle nails used in the joist hangers are too short. All angle nails need to be removed and replaced with the appropriate length of fasteners specified by the joist hanger manufacturer. There is stamped instructions on the joist hanger showing what fastener is to be used. The builder ignored these instructions and used the wrong length fastener.
The stair span is greater than 6'-2". Therefore, code requires intermediate support be installed.
The stairs are not mounted correctly at their attachment to the deck at the top specific straps/hangers er required for attaching stairs to the deck.

Lower-Level Garage The exterior wall in this garage has an area where water is intruding through the foundation wall and wetting the drywall and causing a microbial action to take place. This is due to the builder not properly waterproofing the exterior foundation walls. The floor heat tubes are mounted directly to the ICF's. This creates an opening to the exposed foam that is supposed to be covered with a fire barrier such as drywall. There are numerous details such as these that the builder missed or ignored.

Interior finishes This section shows some of the details that were done by the builder. Walls out of plumb, windows not lining up, scratches on finished products, and so forth. There are doors set so far out of plumb and square that they did no operate properly. The builders answer to make adjustments on some of these doors was to try to deepen the routed hinge pockets in the door. The builder literally hacked away at the hinge pocket leaving an unsightly messy and rough hinge pocket. This actually ruins the finish presentation of the door. Ultimately these doors need to be replaced. The doors need to be removed, the openings enlarged, and new door installed. There are undercuts made to the door jambs so the flooring can slide under. The undercuts were made with a dull blade leaving the cut frayed. The builder just left it in this unsightly condition expecting the homeowners either to not notice or accept this substandard work. Ther are interior doors that appear to have been painted with a paint roller the touched up with a paint brush. This leaves roller stippled paint and brush strokes in a door that should be sprayed to give it an acceptable fine finish.

Roof Framing
The roof is a gable roof configuration with the ridge running from front to back There is a dip along the ridge of 2.5" to 3". The attic area at this point is inaccessible due to the roof being a vault and the spray foam insulation being applied to the underside of the roof deck. The spray foam encapsulates the trusses. The only way to assess the dip in the roof is to deconstruct it from the top side.

Shingle Installation. The shingle manufacturers have specific installation instructions which must be followed for the roof

to be a warrantable installation. Failure to follow the instructions can lead to problems which will not be covered by any warranty claim and a loss possibly not covered by the homeowners insurance. The shingle manufacturers have these installation guidelines to provide a method of installation that is followed will stand up to the weather exposure the roof assembly will suffer and provide protection against water intrusion over the life of the properly installed shingle.
There are shingles not properly aligned in their successive courses. The offset spacing from course to course does not match what any shingle manufacture specifies in their installation instructions. The exhaust vent hoods, and pipe flashings are installed incorrectly. There are numerous holes in the shingles where the siding contractor fastened their scaffold brackets through the shingles. The repair stratagem for these holes was to attempt to seal them with caulk. This is a brand new home with a brand new roof. The proper repair for these holes is to replace the affected shingles with new shingles.

This report was prepared based upon observations and information made available to us at the time of our investigation. All opinions rendered herein have been given to a reasonable degree of certainty among experts in the field and are based on my experience, education, and training. I reserve the right to modify these opinions in the event additional information is provided to me for consideration.

Mark A. Parlee,
President,
theBuildingConsultant

Elevations

Elevations

Elevations

Elevations

Observations (Siding)

Clearance at deck surfaces

- **Clearance at deck surfaces.** LP is specific in the requirement of one (1) inch clearance of the siding and trim in an exposed area and 3/8" minimum clearance in a roof protected area for their products above any surface that collects or pools moisture such as porches, patios, walks, etc. Further, the bottom of the trims or siding cut edges or any place where water might hang is to be sealed and painted to prevent moisture from wicking into the material. The builder ignored these and did not see to it these details were performed correctly.

Observations (Siding)

Clearance at deck surfaces

Observations (Siding)

Clearance at deck surfaces

Observations (Siding)

Clearance at deck surfaces

Siding trim is in contact with the deck surface.
LP requires a 1" clearance for their materials in a weather exposed area. The clearance can be reduced to 3/8" under a covered protected area. this area is covered although the roof is high and open at the gable end.
at any rate this trim is not correct and lack the proper clearance of either 3/8" or 1". The bottom edge is not painted as LP requires.

Observations (Siding)

LP Clearance at Deck

LP BUILDING PRODUCTS
SMARTSIDE®
TRIM & SIDING

GENERAL

- At the time of manufacture, siding meets or exceeds the performance standards set forth in ICC-ES-AC321 and has achieved code recognition under ESR-1301, CCNC 11826, APA recognition under PR-N124, and HUD recognition under HUD-MR-1318. For copies of ESR-1301, call LP Customer Support at 1-800-648-6893 or go online at http://www.ice-es.org/reports/pdf_files/ICC-ES/ESR-1301.pdf or http://www.apawood.org.
- Minimum 6 in. clearance must be maintained between siding and finish grade.
- Siding applied adjacent to porches, patios, walks, etc. must have a clearance of at least 1 in. above any surface.
- Minimum 1 in. clearance at intersection with roof line
- Apply siding in a manner that prevents moisture intrusion and water buildup.
- All exposed wood substrate must be sealed in a manner that prevents moisture intrusion and water buildup.
- See alternate fastening options for fastening lap siding to SIP, ICF and Steel Frame assemblies.
- DO NOT USE STAPLES
- SIDING MUST NOT BE IN DIRECT CONTACT WITH MASONRY, CONCRETE, BRICK, STONE, STUCCO OR MORTAR.

Clearance at Deck is to 1" clear.

Observations (Siding)

Clearance at concrete surfaces

- **Clearance at deck surfaces.** LP is specific in the requirement of one (1) inch clearance of the siding and trim in an exposed area and 3/8" minimum clearance in a roof protected area for their products above any surface that collects or pools moisture such as porches, patios, walks, etc. Further, the bottom of the trims or siding cut edges or any place where water might hang is to be sealed and painted to prevent moisture from wicking into the material. The builder ignored these and did not see to it these details were performed correctly.

1" Clearance from concrete is specified by LP SmartSide.

Observations (Siding)

Clearance at concrete surfaces

1" Clearance from concrete is specified by LP SmartSide.

Observations (Siding)

Clearance at concrete surfaces

1" Clearance from concrete is specified by LP SmartSide.

Observations (Siding)

LP Clearance at Concrete

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TRIM & SIDING

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Clearance at concrete is to be 1"

Observations (Siding)

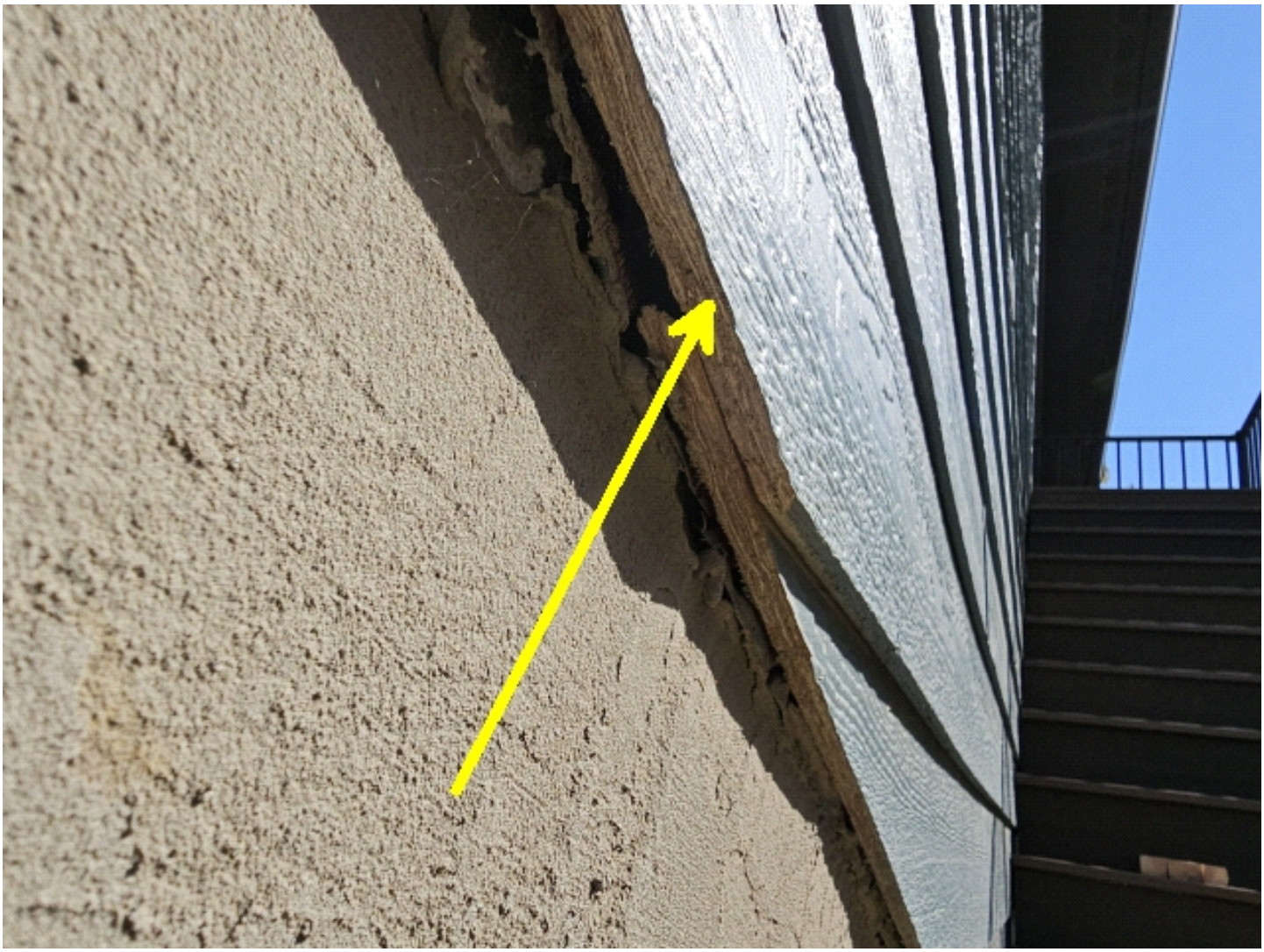
LP Paint and Finish

LP Paint and Finish

- **Sealing and Painting Cut Edges of Siding and Trims.** LP is specific in the requirement to paint all cut edges and all exposed edges of the siding and trims. The builder ignored these direction and requirements and left many cut edges unsealed and exposed to the weather. These unprotected edges of the trims and siding will wick moisture and start the degradation of the material.

Observations (Siding)

LP Paint and Finish

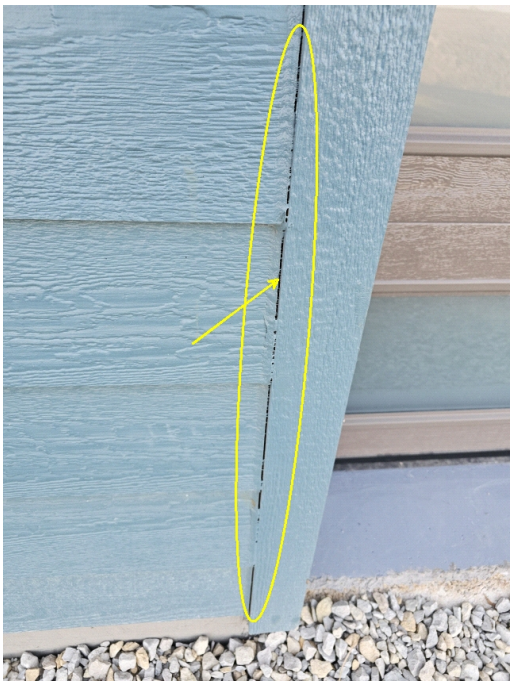


Siding not sealed and painted at the bottom curt edge as required by LP SmartSide

Observations (Siding)

Caulking/Sealants

There are many sealant joint failures on this home.
Most of the sealant failures are due to not leaving and appropriate gap at the transitions. The siding board shrinks as it acclimates and the sealant detail cannot handle the cyclic joint movement and it fails in adhesion due to the poor joint design and profile.
LP specifies a 3/16" gap be left at and vertical transitions such as windows, doors, and trims. The gap is to have sealant applied to close it off to the elements.



Here is an example of a siding board being cut to short.
Instead of replacing it with a proper length the builder just attempted to fill the gap with sealant.

Observations (Siding)

Caulking/Sealants

Required 3/16" gap was not left at the window

Observations (Siding)

Caulking/Sealants

Observations (Siding)

Penetrations

- **Penetrations.** LP is specific in the requirement to use a penetration block to properly handle details needed to adequately seal penetrations through the siding such as electrical wires, exhaust vents for dryers, bath fans, and plumbing pipes, etc. The builder installed these penetration blocks on some of the penetrations and missed it on others. The builder failed to adequately seal the sides completely at the top of the block. This leaves hole that is a pathway for moisture to intrude behind the siding and into the ICF wall and through to the back of the interior drywall. The builder ignored installing and adequate watertight seal at the top edges of the penetration blocks.

End dam sealant not complete at the edges of the metal flashing. This is a moisture pathway behind the siding Which could lead to moisture intrusion into the ICF wall.

Wire inserted into the non-sealed joint.

Wire easily inserted behind the siding, this is an open path for moisture to intrude behind the face of the siding.

Wire inserted into the non-sealed joint.

Observations (Siding)

Penetrations

Wire easily inserted behind the siding, this is an open path for moisture to intrude behind the face of the siding.

Missing penetration mounting block.

Missing penetration mounting block. There is hole left open at the hose bib

Observations (Siding)

LP Penetration Details

Mounting Blocks For Exterior Fixtures

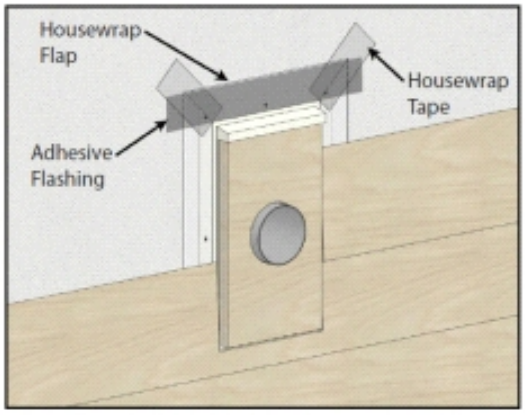
- Trim mounting blocks should extend beyond the face of the siding.
- Prime and paint all cut ends, edges and holes.

On-site assembled:

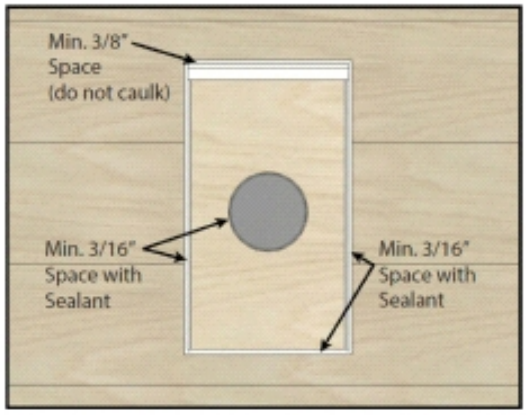
- Use metal Z-flashing with a minimum 4 inch upper leg over the top side of trim mounting block. Leave a minimum 3/8 inch space above Z-flashing and do not caulk. (See diagram 11d)
- Properly integrate the Z-flashing with the housewrap. (See diagram 11c)
- Apply fasteners meeting the specifications in this document.

Pre-assembled:

- Properly integrate the built-in placement flange and flashing with the housewrap. (See diagram 11c)
- Fasten the built-in placement flange to the framing meeting the pre-assembled trim mounting block manufacturer's instructions.
- When installing pre-assembled trim mounting blocks, leave proper spacing at the two sides and bottom between the built-in placement flange and the siding (minimum 3/16 inch). Seal these spaces with sealant. (See diagram 11d)
- Seal the space between the wall-penetrating material or fixture and the mounting block cut-out. (See diagram 11d)



11c



11d

11

Observations (Siding)

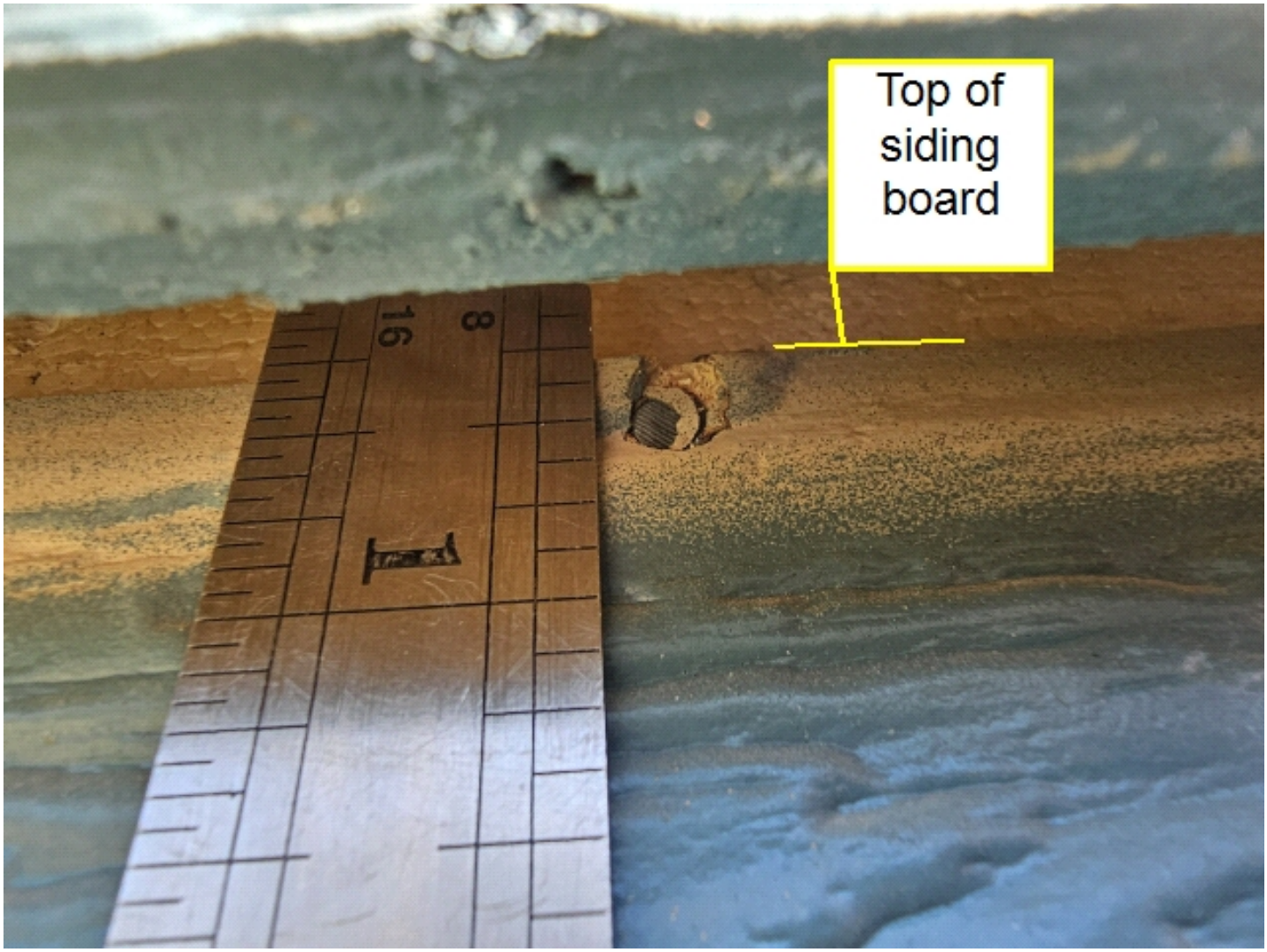
Siding Attachment to Walls

- **Insulated Concrete Forms (ICF) Assemblies.** LP is specific in its requirements for attachment of their siding products to the walls of the home.
    - • Siding must be fastened with:
    - **-** Min. #8 stainless steel or equivalent, self-drilling tapered head screw.
    - **-** Min. penetration of 3/8 inch (10 mm) beyond the thickness of the nailing flange.
    - • Larger screws may be required by ICF Manufacturer based on the following min. withdrawal requirements.
    - **-** Min. withdrawal value of ICF nailing flange must be 50 lbs. (23 kg) with max. 12 inches (305 mm) o.c. spacing.
    - **-** Min. withdrawal value of ICF nailing flange must be 31 lbs. (14 kg) with max. 6 inches (152 mm) o.c. spacing.

Siding is LP SmartSide 8" horizontal lap siding.

Observations (Siding)

Siding Attachment to Walls



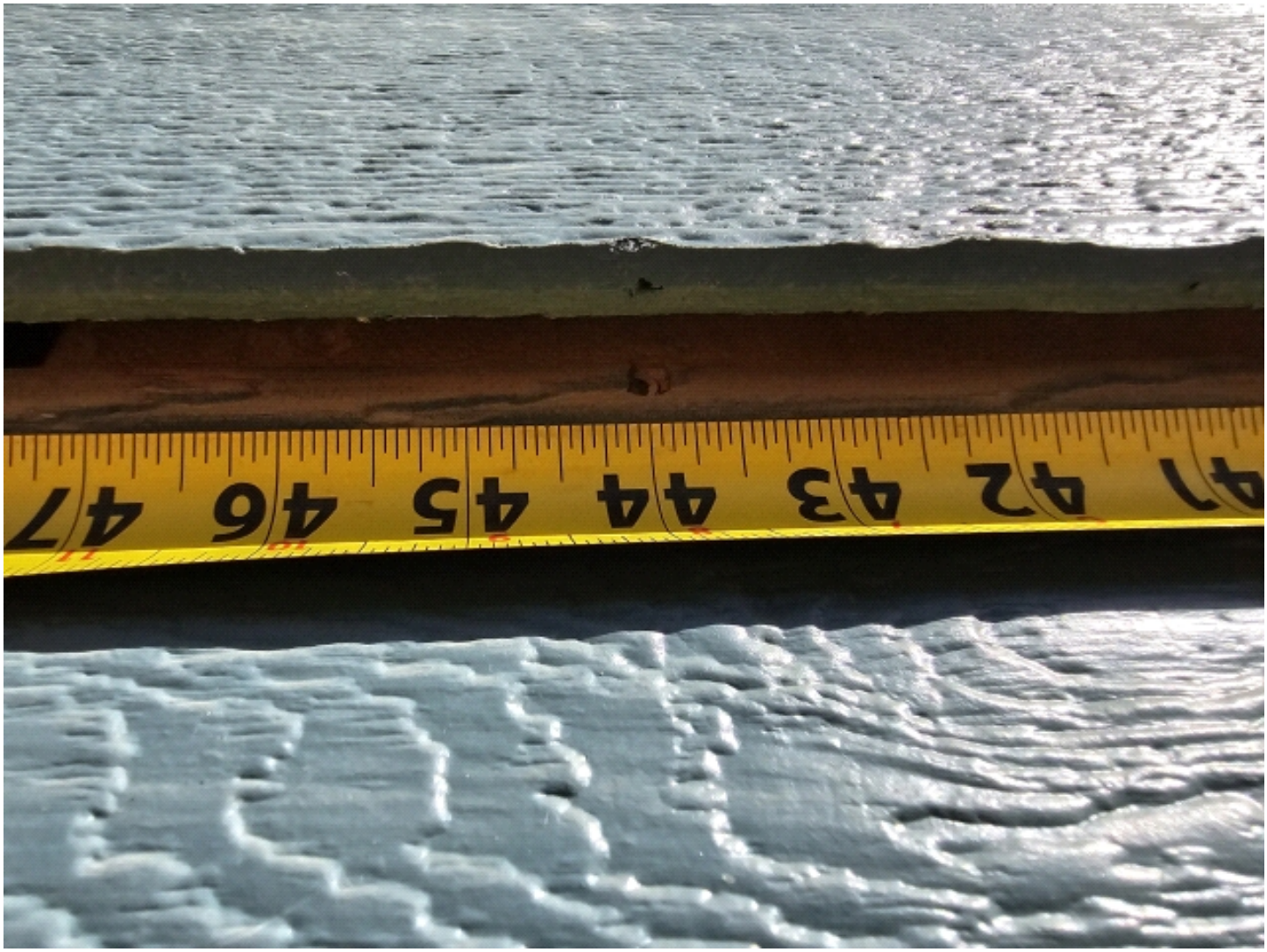
Fasteners are to placed 3/4" down from the top of the board.
The placement is wrong and the type of fastener is wrong

Observations (Siding)

Siding Attachment to Walls

Observations (Siding)

Siding Attachment to Walls



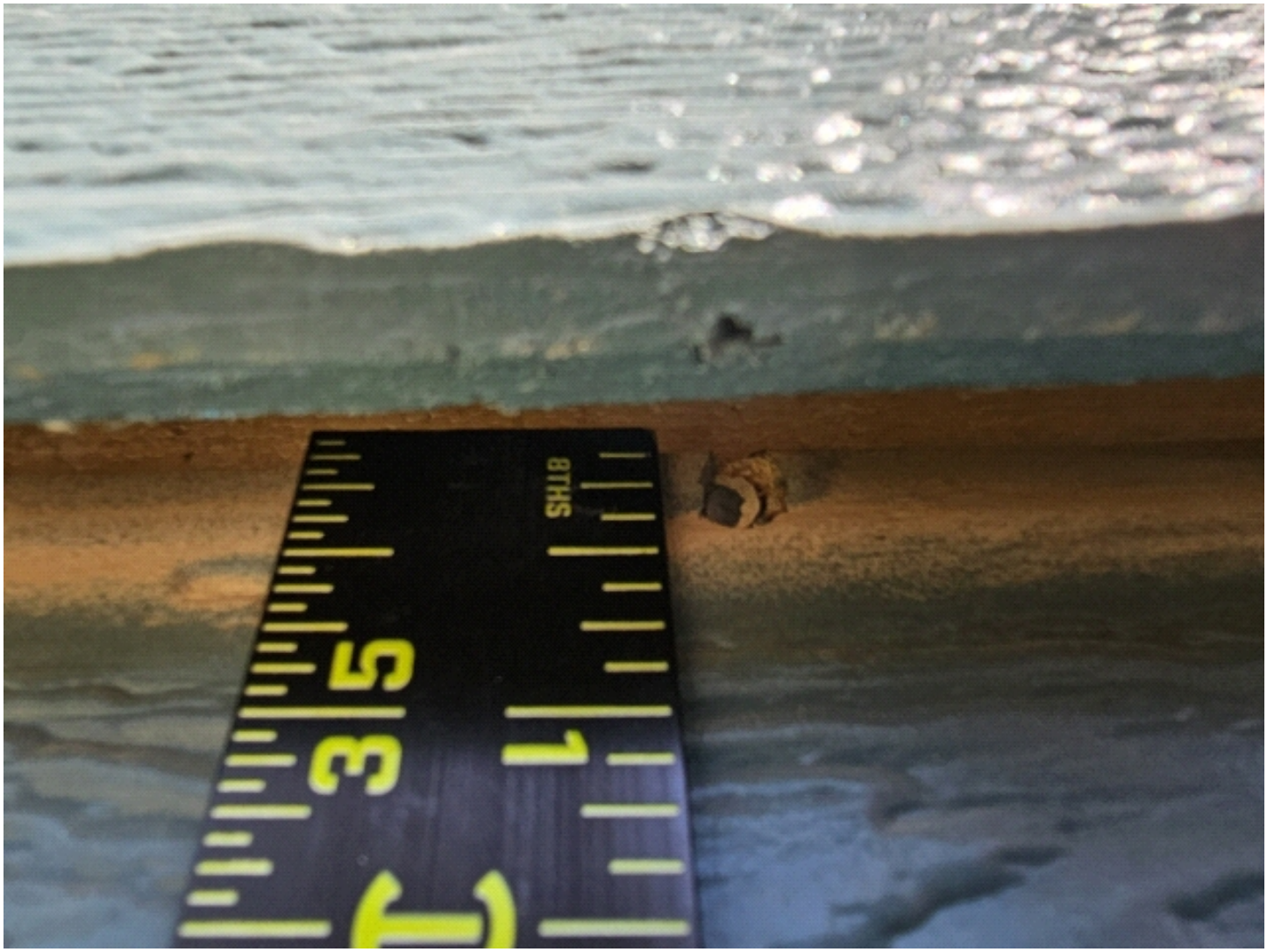
Fasteners are to be a minimum of 24" o.c.
The next fastener to the right is 44" away.
Fasteners used are incorrect.
Placement from the top of thee board is incorrect.
Spacing of fasteners is incorrect.

Observations (Siding)

Siding Attachment to Walls

Observations (Siding)

Siding Attachment to Walls



Observations

Below Grade Waterproofing

Below Grade Waterproofing

The builder used a dimpled mat in an attempt to waterproof the foundation. A dimpled mat is not a waterproofing membrane. Rather, it is a material that allow water a path to drain and thereby controls hydrostatic ground water pressure against the fountain walls.

The dimpled mat is not properly terminated in many areas at its top edge. Water is getting in behind the mat between the mat and the ICF's. This moisture is then migrating through the joints in the ICF's and wetting the interior drywall. This is specifically occurring in the lower level garage wall that is under the upper garage entry wall. The dimpled mat is ineffective at waterproofing these foundation walls.

Below Grade Waterproofing

Dimpled mat not terminated and sealed at it top edge.
This is directly above the leak to the interior in the lower level garage.

Observations

Garage Floor

Garage Floor

The garage has a centralized floor drain. The concrete floor is to slope towards the drain so any water on the floor does not puddle and collect. The garage floor was placed and finished in a defective manner with depressions that allow puddles of water to form.
There were no relief cuts to control and isolate cracks installed in the concrete floor. This has led to numerous unsightly cracks in the concrete floor.

Water does not run to the drain. Evenly.

Observations

Garage Floor

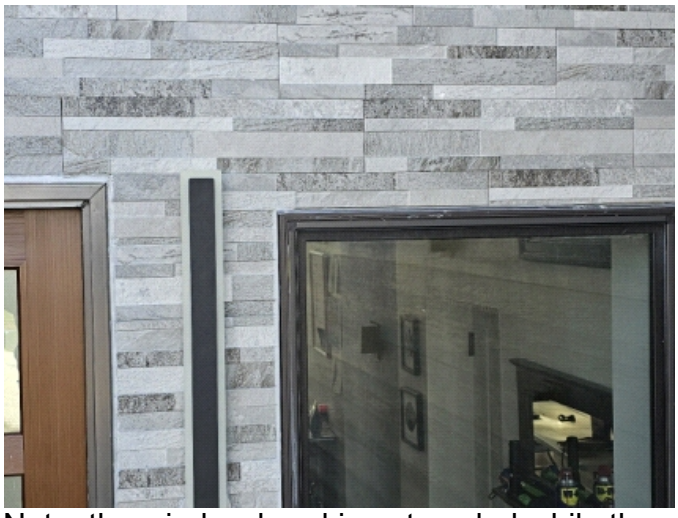
Water collects and puddles.
Floor is not properly sloped towards drain

Observations

Adhered Tile Stone Veneer Panels

No weep screed at bottom of assembly. Brand of panels, not identified, need brand name to review required installation details.

Sealant at door transition blocks any required drain path. Need instructions.



Note, the window head is not sealed while the door head is, why the inconsistency?.

Room under Entry Stoop.

Entry stoop, concrete leaks into under stoop room. Builder has made multiple attempts to stop water leaks. His last attempt was to try to caulk all the seams in the exterior tile.
The stoop cap in not waterproofed and flashed correctly. It needs to be removed and redone to correct details so as not to leak to the interior.

Obvious water intrusion staining running down the interior face of the ICF's.

Water puddling on the floor from the leak at the stoop above.

Framing and sheathing appears wet.

Room under Entry Stoop.

Framing is wet.

Sheathing is wet.

Foam is wet in places.


Water flowed into the interior at the last rainstorm. Below the entry door.

Entry door

Finish scratched on metal frame.

Looks like the door was drug across the ground damaging the finish and leaving grooves in the metal.

Sealant smeared on door frame.

Observations

Entry door


Sealant dribble on door.


Sealant smeared on door.

Observations

Deck

Expansion joint should be used between slab and backplate. Back plaster is terminated on top of slab. Any frost heave will cause damage to backplaster.

Stairs missing attachment brackets.

Stair stringer span is 11'-4". A center span support is required for spans exceeding 6'-2".

Stairs set on slab on grade. Stairs are to sit on frost footing.

Observations

Deck

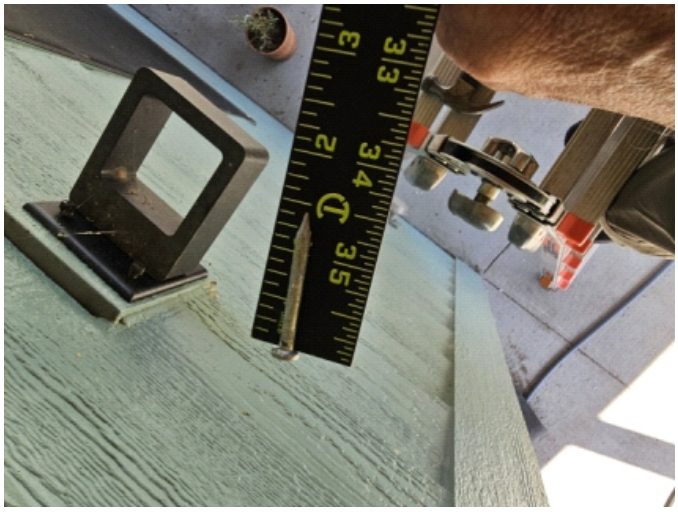
Deck rim joist is attached with 3 nails at 16"o.c.
This deck connection to the ICF's is deficient

Joist hanger shows longer nails to be used at the angle holes. The builder ignored this instruction.

1.5" nails used at angle holes

Observations

Deck



Incorrect length of nails used at angle holes.

Beam bearing hanger installed too close to end of supporting member. Nails are splitting wood , attachment is in question.

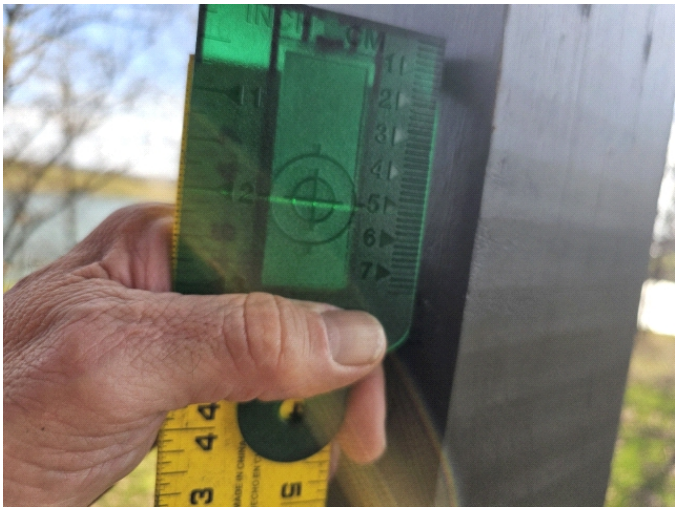
Wood is splitting at nail. Nails used are too short.

Measuring deck surface level plane.

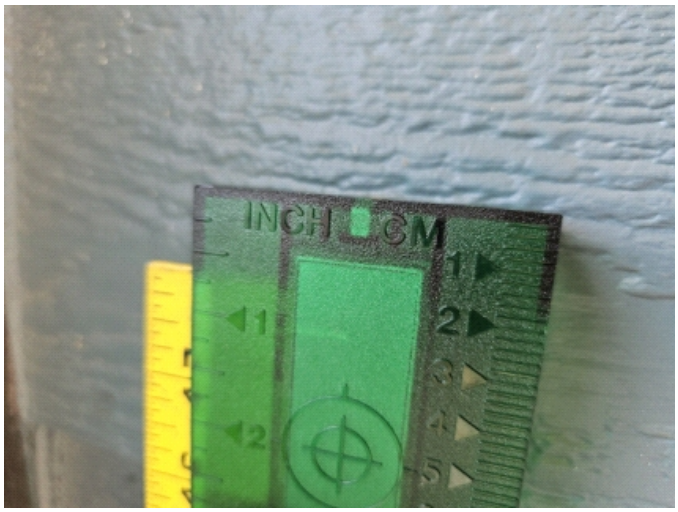
Observations

Deck

47 3/4" center reference.



46 5/8 lake side. This point is 1 1/8" lower than center reference. This should be monitored t0o make sure footings are not moving.



47 1/2 house.

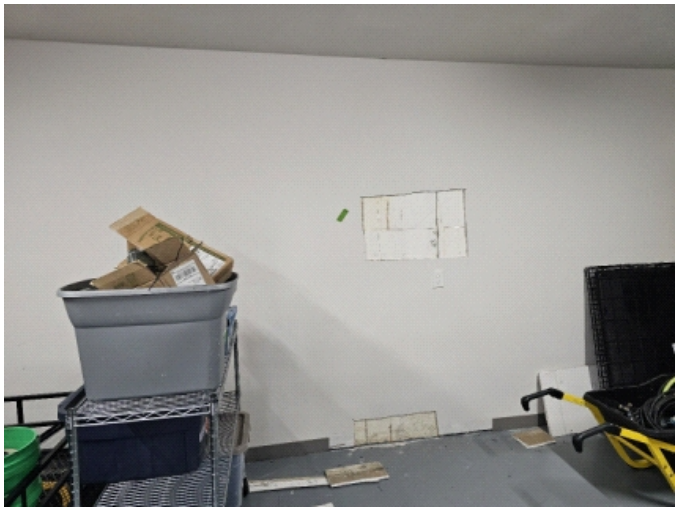
Beam bows out approx 2" in the center of the span.
This appears to be poor framing. Monitor for any movement over time.

Deck

Beam has notable bow outward at center of span.

Observations

Lower Level Garage

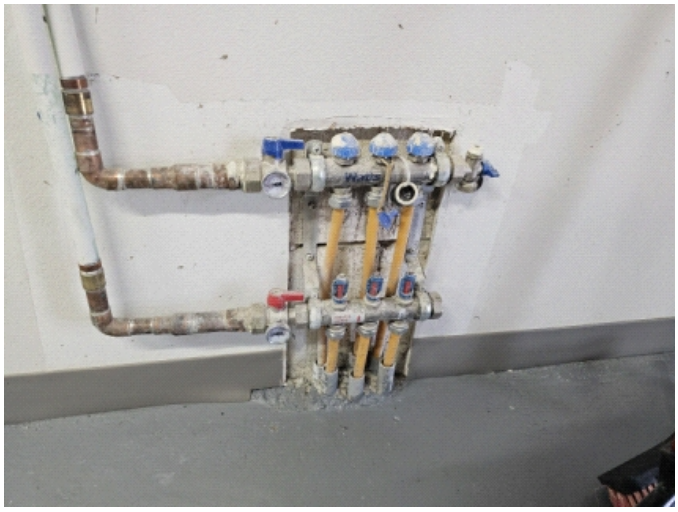


Lower level garage. Foundation is not properly waterproofed and water is intruding creating an issue that wets the drywall resulting in a microbial action taking place on the back side of the drywall.

Plumbing pipes set poorly into the ICF forms not allowing drywall to be placed behind the pipe.
Poor workmanship

Observations

Lower Level Garage



Tubes for in slab heat. tubes are misplaced too close to the ICF and do not allow drywall to cover the foam. The foam is to be completely covered on the interior living space to prevent smoke hazard if exposed to fire.
Tubing assembly was not covered and protected during drywall tenuring, finishing, and painting.
An example of poor and sloppy workmanship in the build of this home.

Observations

Lower Level Garage

Cover plate missing. Builder did not inspect job and ensure subcontractors work was properly completed

Vinyl baseboard already coming loose. Sloppy and incomplete application.

Observations

ICF at Grade

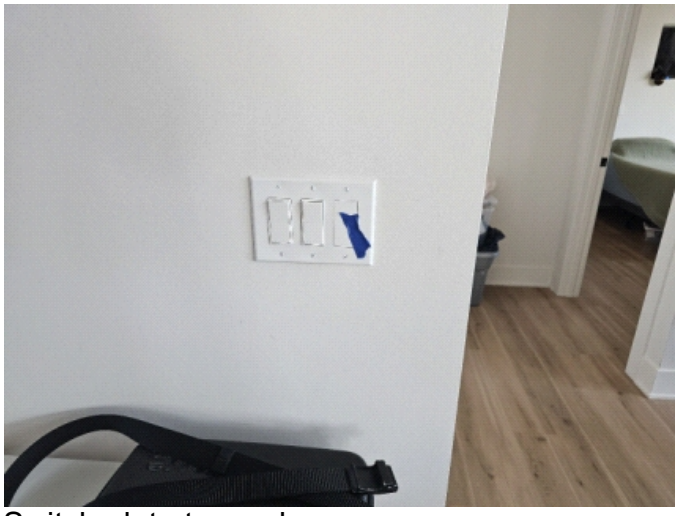
Wire lath exposed, not terminated correctly at base.

All metal lath is to be fully encapsulated in scratch coat to protect against exposure to the weather.

Exposed ICF, blue arrow.
LP SmartSide trim edge left exposed, not properly sealed and painted at the cut edge, which is a requirement of LP SmartSide, yellow arrow.

Interior Finishes

Door and windows do not line up.



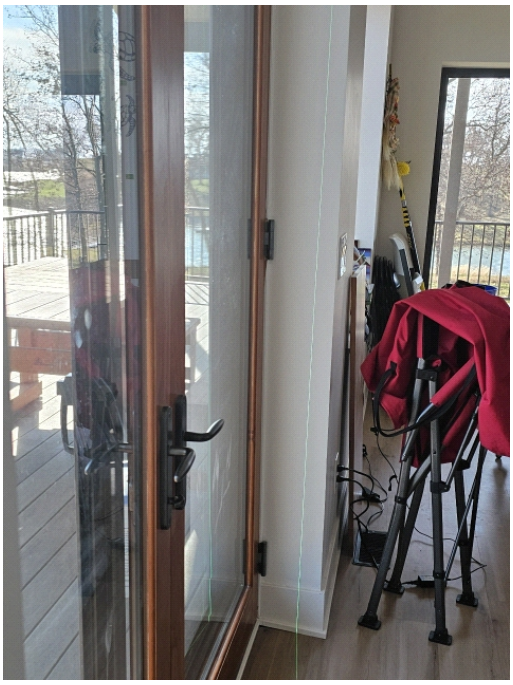
Switch plate to nowhere.

Back wall out of plumb 7/8" in 4'.

Observations

Interior Finishes

Deck door out of plumb.



Back wall is out of plum, approximately two and three quarter inches from top to bottom.

Interior Finishes


Master bedroom window damage.


Example of what builder thinks is final clean.


Drywall finish poor workmanship.


Doors should have extended strike plates. Latch drags on finished wall and scores and damages the surface.

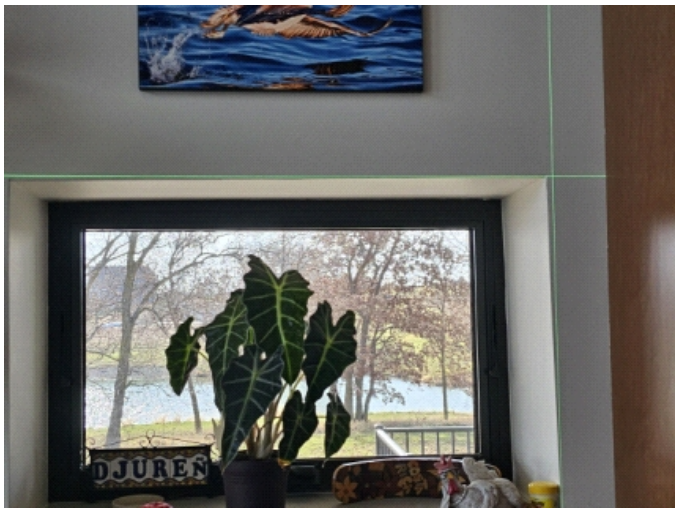
Observations

Interior Finishes

Builder's idea of how to adjust door. Door was not set properly, which required some adjustment. So the builder hacks out the hinge pocket in an attempt to adjust the door.

Undercut saw damaged trim.

Multiple areas where subfloor creeks. Subfloor should have been screwed down.



Drywall returns out of square to window. Very poor workmanship.

Interior Finishes


Two different colored undercabinet lights used.

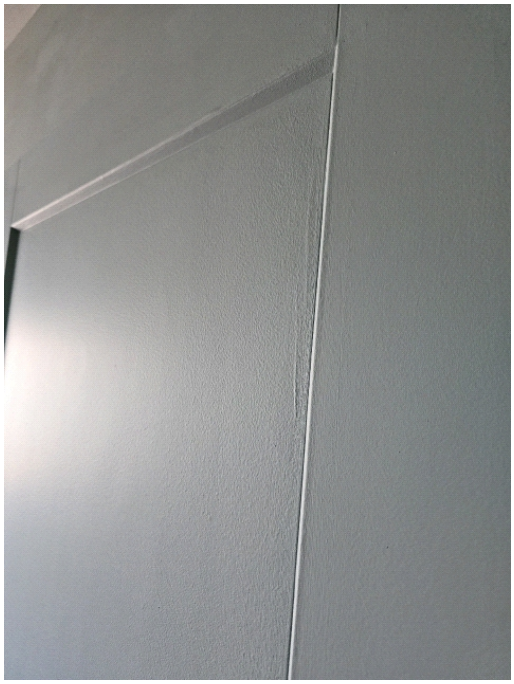

Builder hacked out hinge pockets in an attempt to make adjustments to a door that is not correctly set plumb, level, and square.


Nail holes in trim are not filled.


Sloppy brushstrokes in paint.

Observations

Interior Finishes



Brush strokes and textured finish on doors. Looks like doors were rolled rather than sprayed. Sloppy uneven non uniform finish on doors.

Return corners are out of square.

Measures 36 1/2". Back. 35 3/4" front.

Observations

Roof Framing


Extreme dip in roof framing noted.


Measuring dip in roof.


2.5" dip in roof measured.


Beam bows outward at bottom over span. Beam rotates outward at bottom towards center.

Observations

Roof Shingles

Shingle Installation. The shingle manufacturers have specific installation instructions which must be followed for the roof to be a warrantable installation. Failure to follow the instructions can lead to problems which will not be covered by any warranty claim and a loss possibly not covered by the homeowners insurance. The shingle manufacturers have these installation guidelines to provide a method of installation that is followed will stand up to the weather exposure the roof assembly will suffer and provide protection against water intrusion over the life of the properly installed shingle. There are shingles not properly aligned in their successive courses. The offset spacing from course to course does not match what any shingle manufacture specifies in their installation instructions. The exhaust vent hoods and pipe flashings are installed incorrectly. There are numerous holes in the shingles where the siding contractor fastened their scaffold brackets through the shingles. The repair stratagem for these holes was to attempt to seal them with caulk. This is a brand new home with a brand new roof. The proper repair for these holes is to replace the affected shingles with new shingles.

Vent hood not installed into shingles correctly.

Shingles should lap onto hood at blue arrows. Hood should be nailed to the roof under shingles. Nails at bottom should not be there.

Observations

Roof Shingles

Shingle row offset is not according to manufacturers specification. The shingle manufactures have specific details for the offset and nail placement. If not followed the nails could land under a butt joint and allow moisture to leak under the shingle. This defective installation could void certain sections of the manufacturers warranty as well as be an insurance claim deniability in the event of a leak water loss.

Example of packed holes in shingles where siding scaffold brackets were attached. Case can be made thus roof is not in new condition at turnover as it should be. Shingles with patched holes should have been replaced with new shingles.

Replace damaged shingles.

Observations

Roof Shingles

Replace damaged shingles.

Replace damaged shingles.

Homeowner Provided Photos

HPP Siding

Homeowner Provided Photos
Siding is warping and bulging due to improper fastening.
See LP instruction for attaching LP SmartSide Lap Siding to ICF's
The builder used nails.
LP specifies Min.#8stainless steel or equivalent, self drilling tapered head screw.

Homeowner Provided Photos

HPP Siding