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## SUMMARY REPORT

**Client:** New Construction Buyer  
**Inspection Address:** Camelot Homes, Glendale , Arizona  
**Inspection Date:** 1/3/2005  
**Inspected by:** Sean Preston

This Summary Report is intended to provide a convenient and cursory preview of the conditions and components that we have identified within our report as needing service. It is obviously not comprehensive, and should not be used as a substitute for reading the entire report, nor is it a tacit endorsement of the condition of components or features that may not appear in this summary. Also, the service recommendations that we make in this summary and throughout the report should be completed well before the close of escrow by licensed specialists, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property.

The inspection report can be viewed on the Internet  
www.hproinspect.com  
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### *Components and Conditions Needing Service*

#### **Structural**

##### **Exterior Wall Framing**

###### **Hold-Downs**

- 1.1 - At the south wall a number of the hold downs are not fastened to the foundation. Recommend proper fastening per engineering specifications.  
*See Attached Picture(s) - Figure Set 1*

###### **Top Plate**

- 1.2 - At wall intersections and corners the Top Plates of the bearing walls must overlap. The top plates were inspected and there was not proper overlap at the Up Stairs Back Right Bedroom Southwest corner and the Southwest corner of the Atrium (near stairwell). Recommend repair as prescribed by engineer.

R602.3.2 Top plate. Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates shall be offset at least 24 inches (610 mm). Plates shall be a nominal 2 inches in depth (51 mm) and have a width at least equal to the width of the studs.  
*See Attached Picture(s) - Figure Set 2*

### Header

- 1.3 - The strapping at the header in the lower level bedroom is not properly fastened. Recommend installation of additional approved fasteners.  
*See Attached Picture(s) - Figure Set 3*

### Shear Wall Framing

#### Proper Fastening

- 1.4 - The fastening of the sheathing at the stairwall wall is not proper, Greater than 20% of the nails are not properly driven. Proper fastening technique is important as this shear wall contributes to the structural integrity of the home.

2000 IBC 2304.9.2 Sheathing nails or other approved sheathing connectors shall be driven so that their head or crown is flush with the surface of the sheathing.

*See Attached Picture(s) - Figure Set 4*

### Fire Stopping

#### Presence of Fire Stopping

- 1.5 - There are numerous locations where the required firestopping materials is not present. There are too many locations to practically list, In general, the penetrations that do not meet the firestopping requirements include the gas line penetrations, the data/video cabling penetrations. Recommend installation of firestopping materials at locations mentioned as well as any other locations that are not noted but required.

602.8 Fireblocking required. Fireblocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space. Fireblocking shall be provided in wood-frame construction in the following locations.

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs; as follows:
  - 1.1. Vertically at the ceiling and floor levels.
  - 1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
2. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R311.2.2.
4. At openings around vents, pipes, and ducts at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion.
5. For the fireblocking of chimneys and fireplaces, see Section R1001.16.
6. Fireblocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.

*See Attached Picture(s) - Figure Set 5*

### Bearing Beam

#### Column

- 1.6 - The column supporting the bearing beam is not properly fastened to the foundation. At the west side of the beam, the column is fastened with only one bolt. Recommend repair per engineering specifications.  
*See Attached Picture(s) - Figure Set 6*

#### Strapping

- 1.7 - At the bearing beam, the strapping connecting the trusses on either side requires additional fasteners. Each available hole within the straps require fasteners. Recommend addition of specified fasteners.  
*See Attached Picture(s) - Figure Set 7*

### Exterior

## Foundation

### Condition of Stem Walls

- 2.1 - It appears that the size of the footers is being altered. An anchor is exposed while another anchor was found unattached adjacent to the post. Recommend ensuring adequate attachment is present at modified footers and repair of the concrete to protect any exposed anchors from the elements and provide an aesthetically pleasing finished product.  
*See Attached Picture(s) - Figure Set 8*

## Window Flashing

### Flashing

- 2.2 - The window flashings at the following locations is not properly installed:  
Room at North East corner of home  
Master Bedroom closet  
Stairwell - Presence of unattached flashing, confirm proper flashing at all windows

The flashing is to be installed in a manner that all laps shed water, with the lower level overlapped by the upper levels and the lower level terminating on the exterior side of the felt paper.  
*See Attached Picture(s) - Figure Set 9*

## Roof/Attic

### Truss System

#### Broken Truss

- 3.1 - A broken truss was located at the second story East side at the North side of the house. Counting back from the North wall towards the master bedroom closet it is the 9th truss. The web at the East side of the truss is beginning to split. Recommend repair as prescribed by an engineer.  
*See Attached Picture(s) - Figure Set 10*

## Plumbing

### Potable Plumbing

#### Water Pipe

- 4.1 - There is a leak present at the extension to the hose bibb serving the Atrium area. Recommend repair by plumber.  
*See Attached Picture(s) - Figure Set 11*

## Heat A/C

### HVAC System

#### Condensor Coil

- 5.1 - The secondary condensate line for the HVAC system mounted at the East side of the home does not extend to the exterior. The condensate line terminates within the master bathroom. Recommend extending the condensate line to the exterior.

M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.  
*See Attached Picture(s) - Figure Set 12*

## Flue

### Termination Clearances

5.2 - The flue for the hot water heater appears to be positioned too close to the PVC piping for the central vacuum system. The clearance to combustibles for type B venting is 1". Recommend increasing the clearance.

*See Attached Picture(s) - Figure Set 13*

## Exhaust Fans

### Ductwork

5.3 - At the shared bath on the second level, the exhaust fan duct work is damaged and constricted. Recommend replacement of this section of the duct.

*See Attached Picture(s) - Figure Set 14*

## Struct Wire

### Branch System

#### Wiring

6.1 - At the lower level bedroom, a data/video cable is run against the gusset plate. Recommend moving the cable to protect from damage.

*See Attached Picture(s) - Figure Set 15*

## Other

### Windows

#### Tempered Glass

7.1 - A window is missing at the master bedroom closet

## Electrical

### Branch System

#### Non Metallic Sheathed Cable

8.1 - At the middle back bedroom adjacent to the East wall second level, a section of the wirings protective sheath is damaged. Recommend replacement of this section of cable.

*See Attached Picture(s) - Figure Set 16*

# INSPECTION PICTURES



Figure Set - 1 There are numerous hold downs not fastened at the south wall

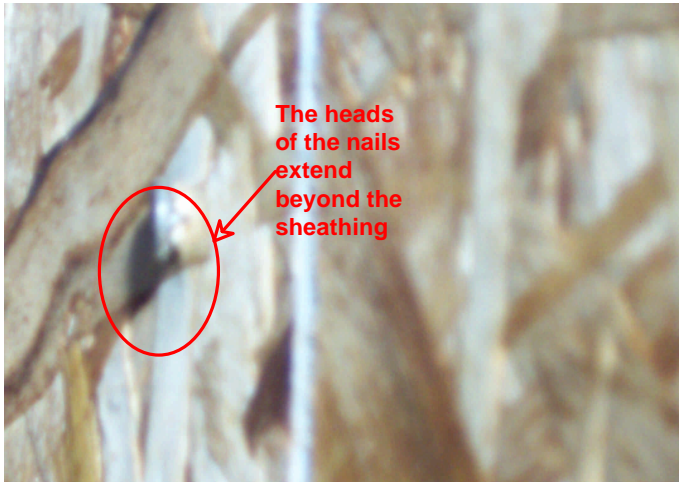


Figure Set - 2 The top plate must overlap at wall intersections and corners



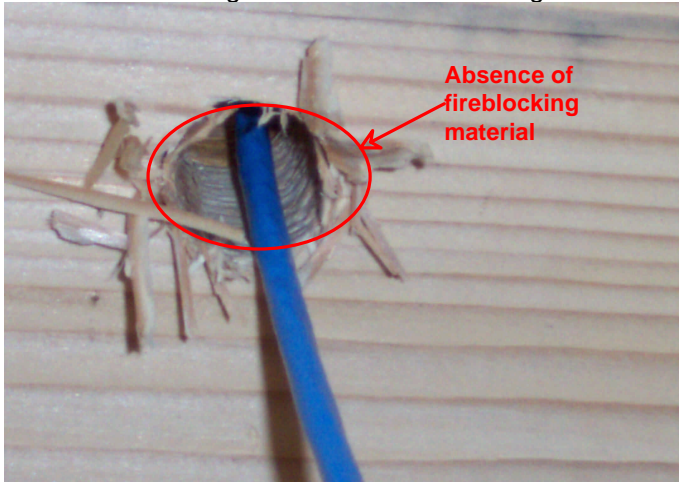
Figure Set - 3 The strapping at the header in the lower level bedroom is not properly fastened

# INSPECTION PICTURES



The heads  
of the nails  
extend  
beyond the  
sheathing

Figure Set - 4 The fastening of the sheathing at the stairwell wall is not proper



Absence of  
fireblocking  
material

Figure Set - 5 Firestopping is required at penetrations



Second  
anchoring  
device is  
not  
attached.

Figure Set - 6 The column supporting the bearing beam is not properly fastened to the foundation

# INSPECTION PICTURES

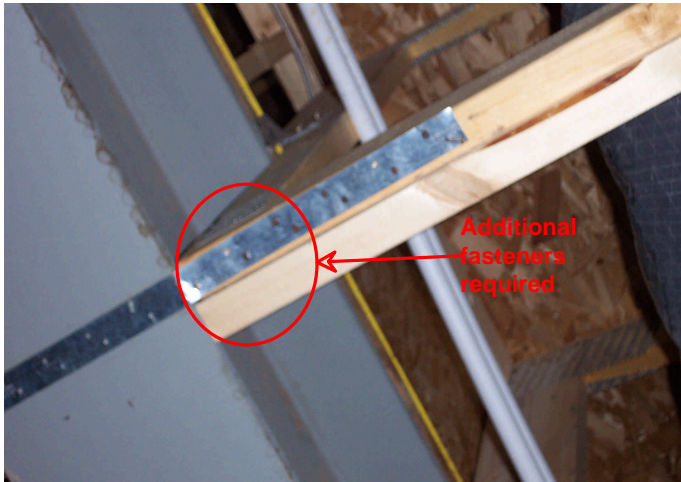


Figure Set - 7 Additional fasteners required at strapping adjacent to bearing beam



Figure Set - 8 The footers for the posts at the rear patio are in the process of being modified

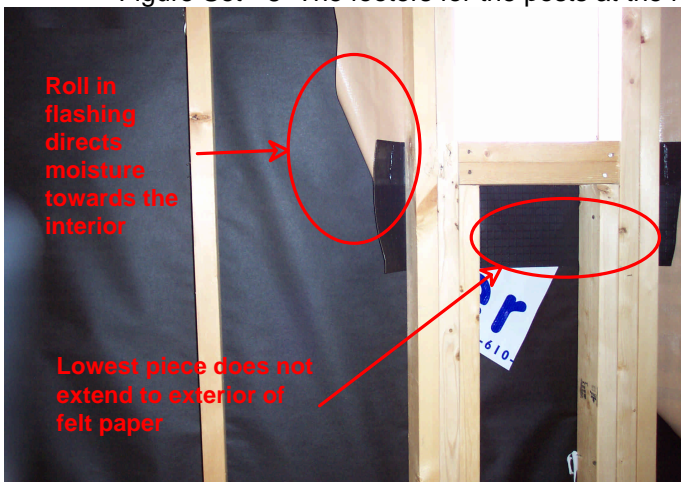


Figure Set - 9 The window flashing at various locations is not properly installed

# INSPECTION PICTURES

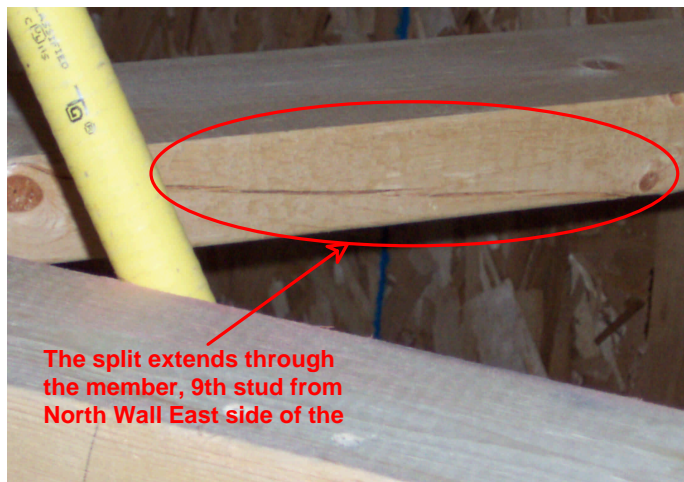


Figure Set - 10 A broken truss was located at the second story East side at the North side of the house



Figure Set - 11 Leak present at hose bib

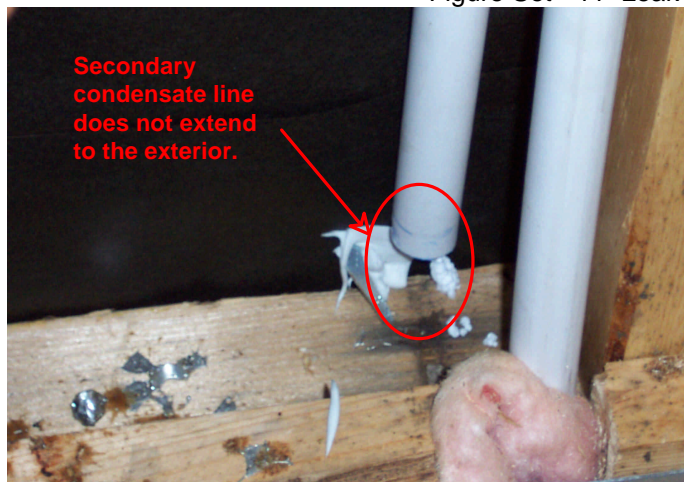


Figure Set - 12 The secondary condensate line does not extend to the exterior



# INSPECTION PICTURES

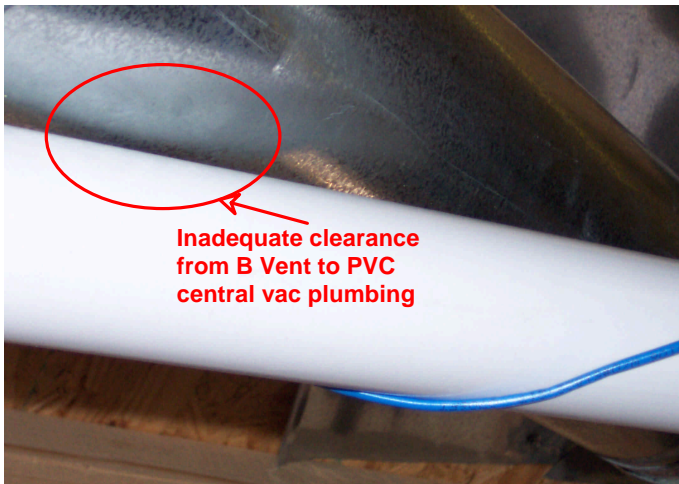


Figure Set - 13 Improper clearance to combustible materials at hot water heater flue



Figure Set - 14 The ductwork for the exhaust fan is constricted

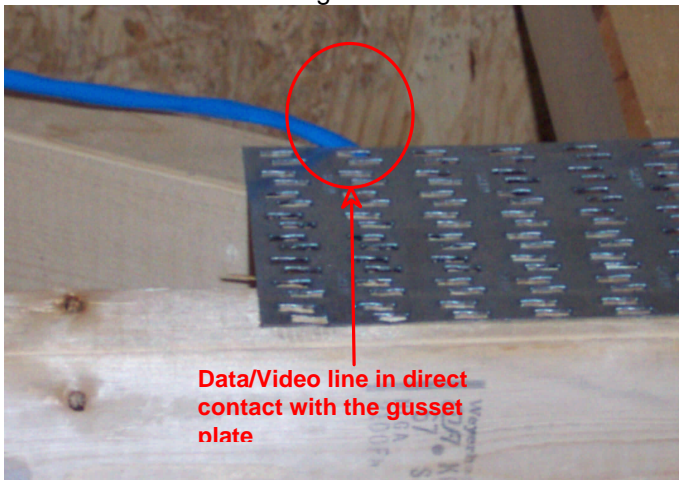


Figure Set - 15 The structured wiring is in contact with the gusset plate

## INSPECTION PICTURES



Figure Set - 16 The sheathing is torn on a section of the electrical cable



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## **CONFIDENTIAL INSPECTION REPORT**

PREPARED FOR:

**New Construction Buyer**

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### **INSPECTION ADDRESS**

Camelot Homes, Glendale , Arizona

### **INSPECTION DATE**

1/3/2005



**This report is the exclusive property of the Hummingbird Property Inspection and the client whose name appears herewith, and its use by any unauthorized persons is prohibited.**

## GENERAL INFORMATION

**Inspection Address:** Camelot Homes, Glendale , Arizona  
**Inspection Date:** 1/3/2005  
**Weather:** Clear and Dry - Temperature at time of inspection: 85 Degrees

**Inspected by:** Sean Preston

**Client Information:** New Construction Buyer  
**Structure Type:** Conventionally Framed  
**Furnished:** No  
**Number of Stories:** Two

**Structure Style:** Single Family Dwelling

**Structure Orientation:** North

**Approx.Year Built:** In Process  
**Unofficial Sq.Ft.:** 3500

**People on Site At Time of Inspection:** Buyer(s)

### PLEASE NOTE:

**The service recommendations that we make in this report should be completed well before the close of escrow by licensed specialists, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property.**

Report File: New Construction Sample

## Section 1.0 - Structural

The inspection of the Structural Components of the home include the exterior and interior wall framing, the installation of shear walls, the ceiling joists or truss system, floor decking, and fire stopping. The review of the structural components addresses the installation procedures and their compliance with generally accepted trade practices. The notching and boring of framing members are inspected for compliance with standards set forth to maintain the structural integrity of the framing member.

The securing of the framing members to the foundation is inspected for proper fastening techniques. Depending on the progress of the installation of insulation, this visual inspection will be limited to the unobstructed observation of such areas.

The shear walls are integral components in the homes structure. These walls are designed to support the structure when lateral forces are placed on the structure such as high wind and flood waters. The installation of the shear walls are designed by engineers. The installation process of the shear walls will be inspected.

The ceiling joist and truss system will be visually inspected for modified and damaged framing members and the gusset plates will be inspected for damage. The presence of fire stopping materials will be inspected.

### Exterior Wall Framing

#### Sill Plate

##### *Functional Components and Conditions*

1.1 - The sill plate is to be constructed of a material that is treated or naturally decay resistant. The sill plate is of treated lumber that is in acceptable condition.

#### Anchor Bolts

##### *Functional Components and Conditions*

1.2 - Multiple Story - The anchor bolts are properly spaced within 4 foot intervals and within 12" of sill plate seams. The installation is acceptable

#### Hold-Downs

##### *Components and Conditions Needing Service*

1.3 - At the south wall a number of the hold downs are not fastened to the foundation. Recommend proper fastening per engineering specifications.



#### Top Plate

##### *Components and Conditions Needing Service*

1.4 - At wall intersections and corners the Top Plates of the bearing walls must overlap. The top plates were inspected and there was not proper overlap at the Up Stairs Back Right Bedroom Southwest corner

and the Southwest corner of the Atrium (near stairwell). Recommend repair as prescribed by engineer.

R602.3.2 Top plate. Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates shall be offset at least 24 inches (610 mm). Plates shall be a nominal 2 inches in depth (51 mm) and have a width at least equal to the width of the studs.



### Corner Framing

#### Functional Components and Conditions

1.5 - At the exterior corners, a minimum of 3 studs must be used. All corners met this specification

### Load Path

#### Functional Components and Conditions

1.6 - The framing members carrying the load properly distribute the load with 2/3rds coverage of the lower member.

### Notching Tolerances

#### Functional Components and Conditions

1.7 - R602.6 Drilling and notching.studs.Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25 percent of its width. Studs in nonbearing partitions may be notched to a depth not to exceed 40 percent of a single stud width. Any stud may be bored or drilled, provided that the diameter of the resulting hole is no greater than 40 percent of the stud width, the edge of the hole is no closer than 5/8 inch (15.9 mm) to the edge of the stud, and the hole is not located in the same section as a cut or notch. See Figures R602.6(1) and R602.6(2).

#### Exceptions:

1. A stud may be bored to a diameter not exceeding 60 percent of its width, provided that such studs located in exterior walls or bearing partitions are doubled and that not more than two successive studs are bored.
2. Approved stud shoes may be used when installed in accordance with the manufacturer's recommendation.
2. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R311.2.2.
4. At openings around vents, pipes, and ducts at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion.
5. For the fireblocking of chimneys and fireplaces, see Section R1001.16.
6. Fireblocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.

## Bracing

### *Functional Components and Conditions*

1.8 - R602.10.3 Braced wall panel construction methods. The construction of braced wall panels shall be in accordance with one of the following methods:

1. Nominal 1-inch-by-4-inch (25.4 mm by 102 mm) continuous diagonal braces let in to the top and bottom plates and the intervening studs or approved metal strap devices installed in accordance with the manufacturer's specifications. The let-in bracing shall be placed at an angle not more than 60 degrees (1.06 rad) or less than 45 degrees (0.79 rad) from the horizontal.
2. Wood boards of 5/8 inch (15.9 mm) net minimum thickness applied diagonally on studs spaced a maximum of 24 inches (610 mm). Diagonal boards shall be attached to studs in accordance with Table R602.3(1).
3. Wood structural panel sheathing with a thickness not less than 5/16 inch (7.9mm) for 16-inch (406mm) stud spacing and not less than 3/8 inch (9.5mm) for 24-inch (610 mm) stud spacing. Wood structural panels shall be installed in accordance with Table R602.3(3).
4. One-half-inch (12.7 mm) or 25/32-inch (19.8 mm) thick structural fiberboard sheathing applied vertically or horizontally on studs spaced a maximum of 16 inches (406 mm) on center. Structural fiberboard sheathing shall be installed in accordance with Table R602.3(1).
5. Gypsum board with minimum 1/2-inch (12.7 mm) thickness placed on studs spaced a maximum of 24 inches (610 mm) on center and fastened at 7 inches (178 mm) on center with the size nails specified in Table R602.3(1) for sheathing and Table R702.3.5 for interior gypsum board.
6. Particleboard wall sheathing panels installed in accordance with Table R602.3(4)
7. Portland cement plaster on studs spaced a maximum of 16 inches (406 mm) on center and installed in accordance with Section R703.6.
8. Hardboard panel siding when installed in accordance with Table R703.4. Exception: Alternate braced wall panels constructed in accordance with Section R602.10.6 shall be permitted to replace any of the above methods of braced wall panels.

## Header

### *Components and Conditions Needing Service*

1.9 - The strapping at the header in the lower level bedroom is not properly fastened. Recommend installation of additional approved fasteners.



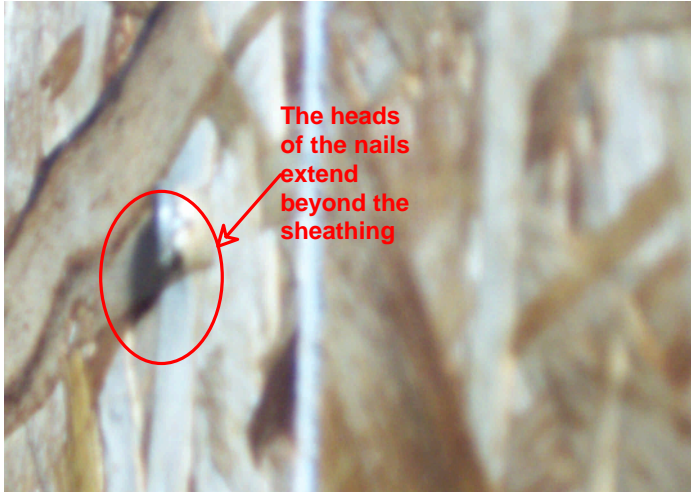
## Shear Wall Framing

### Proper Fastening

#### *Components and Conditions Needing Service*

1.10 - The fastening of the sheathing at the stairwall wall is not proper, Greater than 20% of the nails are not properly driven. Proper fastening technique is important as this shear wall contributes to the structural integrity of the home.

2000 IBC 2304.9.2 Sheathing nails or other approved sheathing connectors shall be driven so that their head or crown is flush with the surface of the sheathing.



### Panel Joints

#### *Functional Components and Conditions*

1.11 - R602.10.7 Panel joints. All vertical joints of panel sheathing shall occur over studs. Horizontal joints in braced wall panels shall occur over blocking of a minimum of 1 1/2 inch (38 mm) thickness.

Exception: Blocking is not required behind horizontal joints in Seismic Design Categories A and B and detached dwellings in Seismic Design Category C when constructed in accordance with R602.10.3, Braced-wall panel construction method 3 and Table R602.10.1, method 3, or where permitted by the manufacturer.

## Floor Decking

### Sheathing Support

#### *Functional Components and Conditions*

1.12 - The floor decking is in acceptable condition for this phase of construction

## Fire Stopping

### Presence of Fire Stopping

#### *Components and Conditions Needing Service*

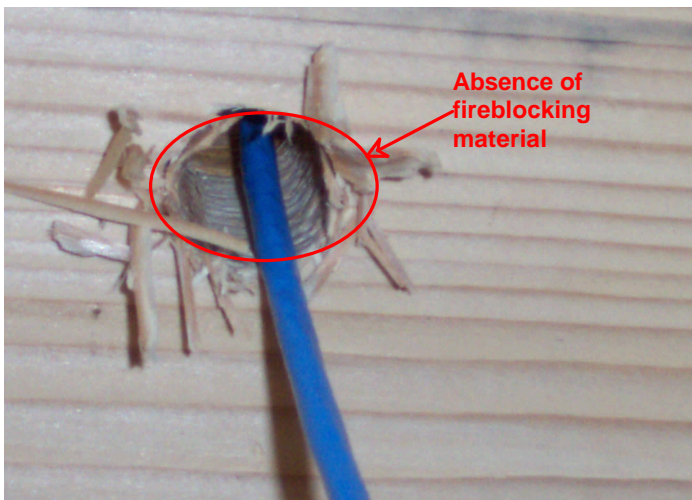
1.13 - There are numerous locations where the required firestopping materials is not present. There are too many locations to practically list, In general, the penetrations that do not meet the firestopping requirements include the gas line penetrations, the data/video cabling penetrations. Recommend installation of firestopping materials at locations mentioned as well as any other locations that are not noted but required.

602.8 Fireblocking required. Fireblocking shall be provided to cut off all concealed draft openings (both



vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space. Fireblocking shall be provided in wood-frame construction in the following locations.

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs; as follows:
  - 1.1. Vertically at the ceiling and floor levels.
  - 1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
2. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R311.2.2.
4. At openings around vents, pipes, and ducts at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion.
5. For the fireblocking of chimneys and fireplaces, see Section R1001.16.
6. Fireblocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.



## Boring of Holes

### Electrical

#### *Functional Components and Conditions*

- 1.14 - There is proper protection for electrical running through the studs. The observed studs with holes bored within 1 1/4 inch from the edge have the proper protection plate.

### Plumbing

#### *Informational Components*

- 1.15 - The proper protective plates are in place for the plumbing

## Bearing Beam

### Column

#### *Components and Conditions Needing Service*

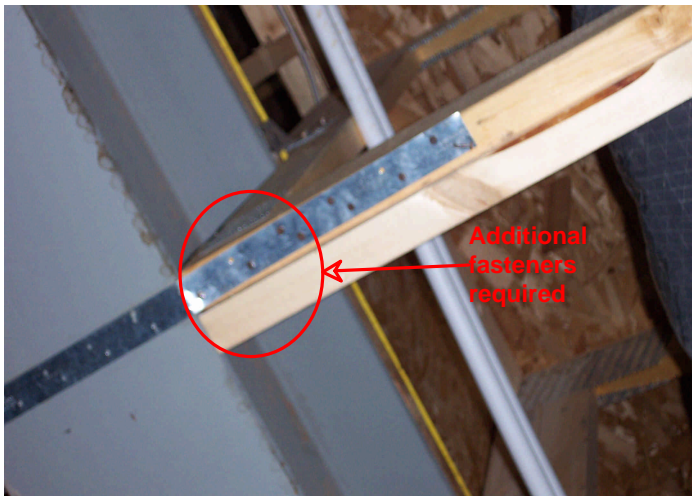
- 1.16 - The column supporting the bearing beam is not properly fastened to the foundation. At the west side of the beam, the column is fastened with only one bolt. Recommend repair per engineering specifications.



### Strapping

#### *Components and Conditions Needing Service*

1.17 - At the bearing beam, the strapping connecting the trusses on either side requires additional fasteners. Each available hole within the straps require fasteners. Recommend addition of specified fasteners.



## Section 2.0 - Exterior

The evaluation of the exterior includes a visual inspection of the homes foundation system, wall covering, flashings at penetrations and any retaining walls that may be found on the property.

The inspection of the foundation includes the identification of the foundation type and a visual inspection of the stem walls. The inspection of the stem walls includes identifying abnormal cracks and rock pockets.

The inspection of the wall covering is dependant upon the progress of the installation of the wall covering. At this point in the construction process, it is common for the wall covering to be midway through the process. The installation of the weep screed is inspected for proper sealing at the stem wall. In a home clad with stucco, the lath is observed for proper fastening techniques.

The installation of the flashing is evaluated to confirm the presence and proper installation of the flashing system. Depending on the progress of the exterior wall covering, some of the flashing materials

may not be able to be observed.

If the home is situated on a lot which utilizes retaining walls, the retaining walls are visually inspected. Many retaining walls require special engineering design. The engineering specifications of the retaining walls is not reviewed during the inspection. The report may request further review of the retaining wall as it pertains to the engineered design.

## Foundation

### Elevation

#### *Informational Components*

2.1 - The distance between the sill plate and the finished grade should be no less than 8 inches. Because the inspection was performed prior to the completion of the construction, it is recommended that the grading be monitored and final grade reinspected at the completion of the construction to ensure proper difference in elevation.

### Condition of Stem Walls

#### *Components and Conditions Needing Service*

2.2 - It appears that the size of the footers is being altered. An anchor is exposed while another anchor was found unattached adjacent to the post. Recommend ensuring adequate attachment is present at modified footers and repair of the concrete to protect any exposed anchors from the elements and provide an aesthetically pleasing finished product.



## Wall Covering

### Stucco over Wire Fabric

#### *Functional Components and Conditions*

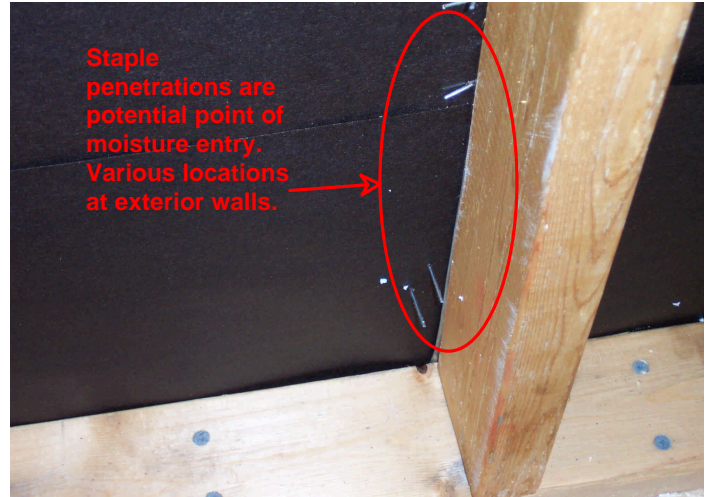
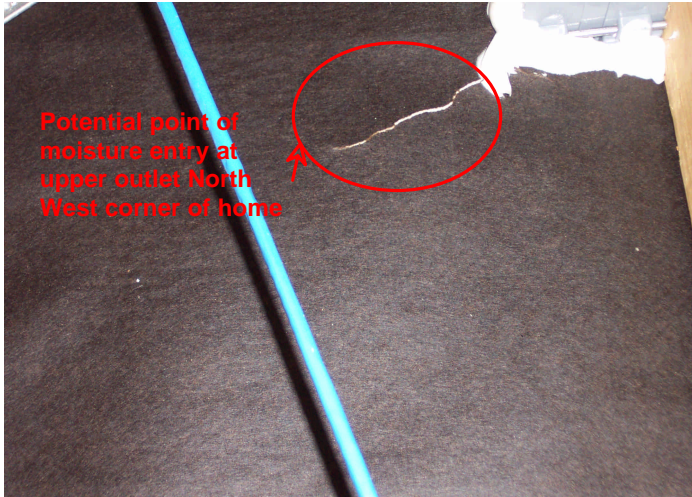
2.3 - The installation of the paper and the lath is proper

#### *Informational Components*

2.4 - R703.6.1 Lath. All lath and lath attachments shall be of corrosion-resistant materials. Expanded metal or woven wire lath shall be attached with 1 1/2-inch-long (38 mm), 11 gage nails having a 7/16-inch (11.1 mm) head, or 7/8-inch-long (22.2 mm), 16 gage staples, spaced at no more than 6 inches (152 mm), or as otherwise approved.

2.5 - The building is wrapped in a felt paper moisture barrier. There are a number of potential points of entry for moisture. Recommend proper sealing of the following areas:

Upstairs Front Right Bedroom, multiple staple penetrations and at the outlet box on the upper West wall  
The upstairs East Wall has numerous unsealed staple penetrations



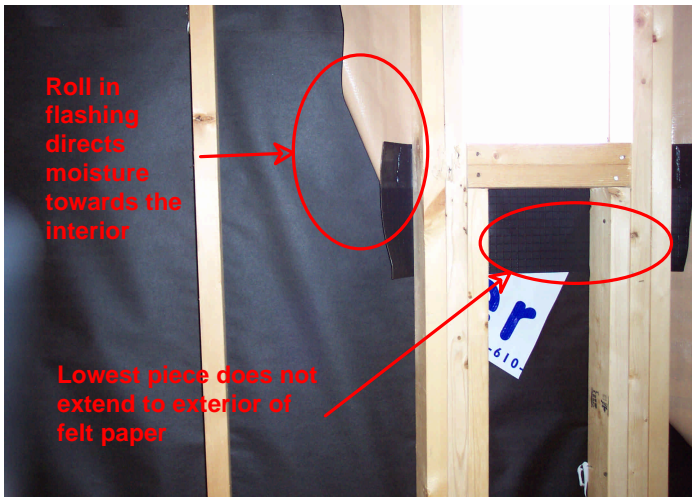
## Window Flashing

### Flashing

#### *Components and Conditions Needing Service*

- 2.6 - The window flashings at the following locations is not properly installed:
  - Room at North East corner of home
  - Master Bedroom closet
  - Stairwell - Presence of unattached flashing, confirm proper flashing at all windows

The flashing is to be installed in a manner that all laps shed water, with the lower level overlapped by the upper levels and the lower level terminating on the exterior side of the felt paper.



## Retaining Walls

### Retaining Walls in Excess of 4 feet

#### Functional Components and Conditions

2.7 - The retaining wall at the west side of the property is in acceptable condition



#### Additional Information Required

2.8 - The retaining wall has an excess of 4 feet of backfill. Retaining walls of this type require engineering design. Recommend consulting builder to assure that the wall is built to engineer specifications.

## Section 3.0 - Roof/Attic

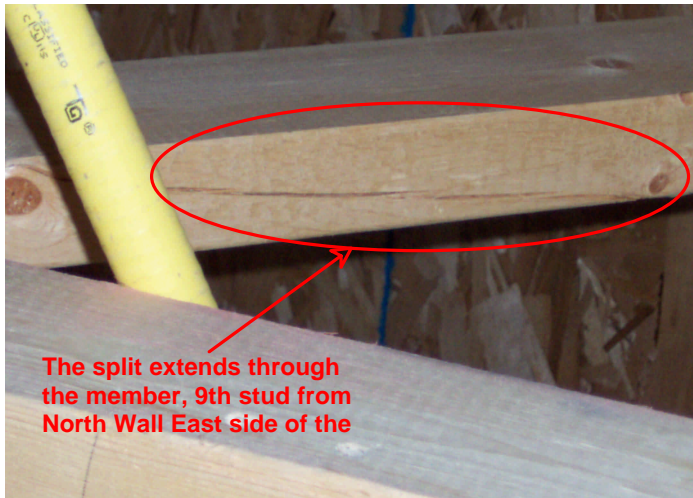
The areas in the roof and attic system inspected include the truss system, the roof sheathing, presence of ventilation and proper access to the attic area.

### Truss System

#### Broken Truss

##### Components and Conditions Needing Service

3.1 - A broken truss was located at the second story East side at the North side of the house. Counting back from the North wall towards the master bedroom closet it is the 9th truss. The web at the East side of the truss is beginning to split. Recommend repair as prescribed by an engineer.



## Roof Sheathing

### Type of sheathing

#### *Functional Components and Conditions*

- 3.2 - The roof is sheathed with OSB and is in acceptable condition
- 3.3 - The roof sheathing meets or exceeds minimum thickness requirements, of 15/32 inch.
- 3.4 - The proper blocking is in place at the peak

### Sheathing reinforcement

#### *Functional Components and Conditions*

- 3.5 - The roof sheathing appears to be properly attached. Because a ladder was not used in this inspection, the viewing of the attachment is limited.

## Ventilation

### Combination of Roof and Soffit Vents

#### *Functional Components and Conditions*

- 3.6 - Ventilation is provided by roof and soffit vents, the ventilation is acceptable

## Attic Access

### Mechanical Equipment Present

#### *Functional Components and Conditions*

- 3.7 - When mechanical equipment is housed within the attic area, the minimum opening size of the access point is 22 inches x 30 inches. The opening meets these specifications
- 3.8 - There must be an accessible light operated by a switch at the attic access door.

#### *Informational Components*

- 3.9 - The minimum width of the service platform is 24 inches.

## Section 4.0 - Plumbing

The components of the plumbing system that are evaluated include the potable water plumbing, drain waste and venting system, the gas components and the hot water heater. The system is inspected for proper securing and placement/protection within the framing. The capacity of the supply and waste are visually inspected to conform to guidelines but no calculations are performed to determine it's adequacy. At this stage the hot water heater is typically not installed, therefore it is not inspected.

### Potable Plumbing

#### Water Pipe

##### *Functional Components and Conditions*

- 4.1 - P2708.2 Water-supply riser. The water supply riser from the shower valve to the shower head outlet shall be secured to the permanent structure.
- 4.2 - A full bore gate or ball valve must be used for the water main valve. The home is supplied with 1 1/2 copper with the shut off at the left side of the home.
- 4.3 - Faucet takeoff fittings must be rigidly supported.
- 4.4 - The supply plumbing throughout the home is copper

##### *Components and Conditions Needing Service*

- 4.5 - There is a leak present at the extension to the hose bibb serving the Atrium area. Recommend repair by plumber.



### Drain Waste Vent Plumbing

#### Traps and Trap Arms

##### *Functional Components and Conditions*

- 4.6 - Vent opening should not be below weir of trap, except toilet

#### Cleanouts

##### *Functional Components and Conditions*

- 4.7 - Cleanout locations must remain accessible

## Gas Components

### Gas Piping

#### *Informational Components*

4.8 - The plumbing of the gas line within the home is of flexible piping

## Venting

### Island Sink

#### *Functional Components and Conditions*

4.9 - Island sink is vented with drain fittings only  
Drain serving island shall serve no other fixtures upstream from return vent  
Island sink cleanout in vertical section of foot vent

### Vents

#### *Functional Components and Conditions*

4.10 - Horizontal vent 6 inches above fixture flood rim  
Vent pipe below flood level rim must be drainage pattern  
No flat venting  
Minimum one vent to exterior

## Hot Water Heater

### Location

#### *Functional Components and Conditions*

P2801.6 Water heaters installed in garages. Water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor.

### Pressure and Temperature Relief Line

#### *Functional Components and Conditions*

4.12 - P2803.6.1 Requirements of discharge pipe. The outlet of a pressure relief valve, temperature relief valve or combination thereof, shall not be directly connected to the drainage system. The discharge from the relief valve shall be piped full size separately to the floor, to the outside of the building or to an indirect waste receptor located inside the building. In areas subject to freezing, the relief valve shall discharge through an air gap into an indirect waste receptor located within a heated space, or by other approved means. The discharge shall be installed in a manner that does not cause personal injury or property damage and that is readily observable by the building occupants. The discharge from a relief valve shall not be trapped. The diameter of the discharge piping shall not be less than the diameter of the relief valve outlet. The discharge pipe shall be installed so as to drain by gravity flow and shall terminate atmospherically not more than 6 inches (152 mm) above the floor. The outlet end of the discharge pipe shall not have a valve installed.

## Placement within wall

### Proper distance from face of stud

#### *Functional Components and Conditions*

4.13 - The plumbing properly maintains a distance of 1 1/2 inches from nails and or has the proper protection plates in place.



## Section 5.0 - Heat A/C

The HVAC is inspected in regards to proper installation and securing of the system and it's components. The registers are inspected for proper hanging technique and attachment to the ductwork. The ductwork is inspected for proper supports and potential obstructions in the airflow. The placement of ductwork as it pertains to blue prints is not inspected. The flue system is visually inspected for proper attachment, securing and clearance to combustibles. The HVAC inspection does not determine the proper sizing of the equipment nor the proper balancing of the system.

### HVAC System

#### Combustion Air

##### *Functional Components and Conditions*

5.1 - Must be greater than 10 foot distance between the return and the combustion air

#### Condensor Coil

##### *Functional Components and Conditions*

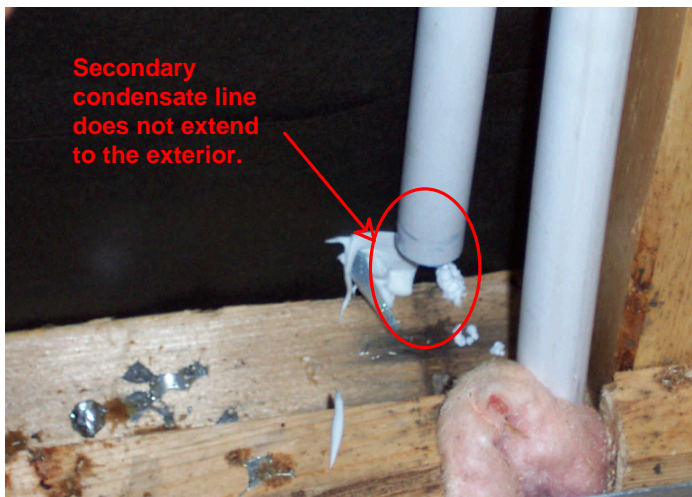
5.2 - Working space minimum 30 inches by 30 inches

5.3 - Secondary drain pan required if mounted above framing

##### *Components and Conditions Needing Service*

5.4 - The secondary condensate line for the HVAC system mounted at the East side of the home does not extend to the exterior. The condensate line terminates within the master bathroom. Recommend extending the condensate line to the exterior.

M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.



### Ductwork

#### Installation

##### *Functional Components and Conditions*

5.5 - Duct joints must be airtight

5.6 - The flex duct must be supported by 1 1/2 inch strap every four feet or per manufacturers specifications.

## Insulation in unconditioned space

### *Functional Components and Conditions*

5.7 - Insulation of ductwork must meet R5 inside building or R8 outside of building

## Registers

### Support

#### *Functional Components and Conditions*

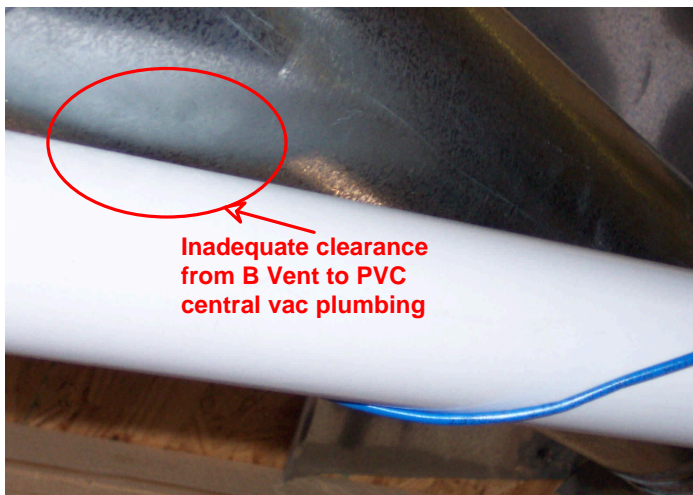
5.8 - The registers must be properly supported

## Flue

### Termination Clearances

#### *Components and Conditions Needing Service*

5.9 - The flue for the hot water heater appears to be positioned too close to the PVC piping for the central vacuum system. The clearance to combustibles for type B venting is 1". Recommend increasing the clearance.



## Exhaust Fans

### Ductwork

#### *Functional Components and Conditions*

5.10 - The exhaust fan duct work is properly supported

#### *Components and Conditions Needing Service*

5.11 - At the shared bath on the second level, the exhaust fan duct work is damaged and constricted. Recommend replacement of this section of the duct.



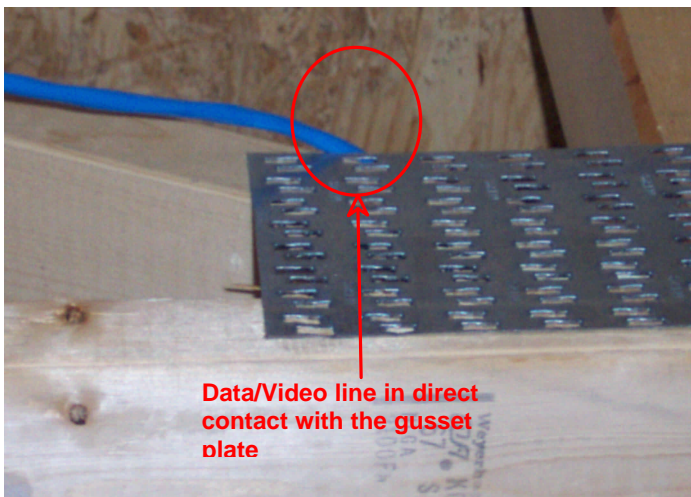
## Section 6.0 - Struct Wire

### Branch System

#### Wiring

##### *Components and Conditions Needing Service*

6.1 - At the lower level bedroom, a data/video cable is run against the gusset plate. Recommend moving the cable to protect from damage.



## Section 7.0 - Other

## Windows

### Tempered Glass

#### *Components and Conditions Needing Service*

7.1 - A window is missing at the master bedroom closet

## Dryer Vent

### Dryer Vent Properly Installed

#### *Functional Components and Conditions*

7.2 - The dryer vent terminates at the exterior, the ductwork is smooth walled without screws and properly fastened.

## Section 8.0 - Electrical

At this stage of the inspection, the electrical system is at the rough stage, The electrical system is inspected for proper clearance to the face of studs, acceptable wiring techniques, the proper support of the wiring, and the attachment of a grounding system. The inspection does not load calculations, voltage limits, proper loading or the tracing of wires. The placement of the electrical boxes is inspected as it pertains to trade practices but not per blueprints or site plans. Because the home is at a rough stage, it is not possible to predict exactly proper placement of the devices.

## Branch System

### Kitchen

#### *Functional Components and Conditions*

8.1 - The placement of the electrical boxes appears to be within code requirements. The code specifies placement of accessible outlets for all counters in excess of 1 feet and spaced within 4 feet on the counters. Without the cabinetry and counters installed, there is no assurance that the observations of the inspection will meet the requirements once the cabinets and counters are installed

#### *Informational Components*

8.2 - E3603.2 Kitchen and dining area receptacles. A minimum of two 20-ampere-rated branch circuits shall be provided to serve receptacles located in the kitchen, pantry, breakfast area, dining area or similar area of a dwelling. The kitchen countertop receptacles shall be served by a minimum of two 20-ampere-rated branch circuits, either or both of which shall also be permitted to supply other receptacle outlets in the kitchen, pantry, breakfast and dining area including receptacle outlets for refrigeration appliances.

8.3 - E3801.4.1 Wall counter space. A receptacle outlet shall be installed at each wall counter space 12 inches (305 mm) or wider. Receptacle outlets shall be installed so that no point along the wall line is more than 24 inches (610 mm), measured horizontally from a receptacle outlet in that space.

E3801.4.2 Island counter spaces. At least one receptacle outlet shall be installed at each island counter space with a long dimension of 24 inches (610mm) or greater and a short dimension of 12 inches (305 mm) or greater.

E3801.4.3 Peninsular counter space. At least one receptacle outlet shall be installed at each peninsular counter

space with a long dimension of 24 inches (610 mm) or greater and a short dimension of 12 inches (305 mm) or

greater. A peninsular countertop is measured from the connecting edge.

### General Purpose Circuits

#### *Informational Components*

E3801.2.1 Spacing. Receptacles shall be installed so that no point along the floor line in any wall space is more than 6 feet (1829 mm), measured horizontally, from an outlet in that space. Receptacles shall, insofar as practicable, be spaced equal distances apart.

## Bathroom

### Informational Components

8.5 - E3603.4 Bathroom branch circuits. A minimum of one 20-ampere branch circuit shall be provided to supply the bathroom receptacle outlet(s). Such circuits shall have no other outlets.

## Utility

### Functional Components and Conditions

8.6 - E3603.3 Laundry circuit. A minimum of one 20-ampere rated branch circuit shall be provided for receptacles located in the laundry area and shall serve only receptacle outlets located in the laundry area.

## Boxes

### Functional Components and Conditions

8.7 - E3805.3.2 Securing to box. All permitted wiring methods shall be secured to the boxes.

Exception: Where nonmetallic-sheathed cable is used with boxes not larger than a nominal size of 2 1/4 inches

by 4 inches (57mm by 102mm) mounted in walls or ceilings, and where the cable is fastened within 8 inches (203

mm) of the box measured along the sheath, and where the sheath extends through a cable knockout not less than 1/4 inch (6.4 mm), securing the cable to the box shall not be required.

8.8 - E3806.5 In wall or ceiling. In walls or ceilings of concrete, tile or other noncombustible material, boxes shall be installed so that the front edge of the box will not be set back from the finished surface more than 0.25 inch (6.4 mm). In walls and ceilings constructed of wood or other combustible material, outlet boxes shall be flush with the finished surface or project therefrom.

### Informational Components

8.9 - E3805.3.1 Nonmetallic-sheathed cable and nonmetallic boxes. Where nonmetallic-sheathed cable is used, the cable assembly, including the sheath, shall extend into the box not less than 1/4 inch (6.4 mm) through a nonmetallic-sheathed cable knockout opening.

## Non Metallic Sheathed Cable

### Functional Components and Conditions

8.10 - Secure within 12 inches of box and at least every 4 1/2 feet

### Components and Conditions Needing Service

8.11 - At the middle back bedroom adjacent to the East wall second level, a section of the wirings protective sheath is damaged. Recommend replacement of this section of cable.



## REPORT CONCLUSION

Congratulations on the purchase of your new home. Inasmuch as we never know who will be occupying or visiting a property, whether it be children or the elderly, we ask you to consider following these general safety recommendations: install smoke and carbon monoxide detectors; identify all escape and rescue ports; rehearse an emergency evacuation of the home; upgrade older electrical systems by at least adding ground-fault outlets; never service any electrical equipment without first disconnecting its power source; safety-film all non-tempered glass; ensure that every elevated window and the railings of stairs, landings, balconies, and decks are child-safe, meaning that barriers are in place or that the distance between the rails is not wider than three inches; regulate the temperature of water heaters to prevent scalding; make sure that goods that contain caustic or poisonous compounds, such as bleach, drain cleaners, and nail polish removers be stored where small children cannot reach them; ensure that all garage doors are well balanced and have a safety device, particularly if they are the heavy wooden type; remove any double-cylinder deadbolts from exterior doors; and consider installing child-safe locks or alarms on the exterior doors of all pool or spa properties.

We are proud of our service, and trust that you will be happy with the quality of our report. We have made every effort to provide you with an accurate assessment of the condition of the property and its components and to alert you to any significant defects or adverse conditions. However, we may not have tested every outlet, and opened every window and door, or identified every minor defect. Also because we are not specialists or because our inspection is essentially visual, latent defects could exist. Therefore, you should not regard our inspection as conferring a guarantee or warranty. It does not. It is simply a report on the general condition of a particular property at a given point in time. Furthermore, as a homeowner, you should expect problems to occur. Roofs will leak, drain lines will become blocked, and components and systems will fail without warning. For these reasons, you should take into consideration the age of the house and its components and keep a comprehensive insurance policy current. If you have been provided with a home protection policy, read it carefully. Such policies may only cover insignificant costs, such as that of roofer service, and the representatives of some insurance companies may deny coverage on the grounds that a given condition was preexisting or not covered because of a code violation or manufacture's defect. Therefore, you should read such policies very carefully, and depend upon our company for any consultation that you may need.

Thank you for taking the time to read this report, and call us if you have any questions or observations whatsoever. We are always attempting to improve the quality of our service and our report, and we will continue to adhere to the highest standards of the industry and to treat everyone with kindness, courtesy, and respect.

Thank you,

Sean Preston  
Inspector

State of Arizona, Certification # 41510  
Hummingbird Property Inspection  
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