

Crawlspace/Foundation Assessment

Property Address

00000 Anystreet (Yourtown, USA)

Date 12/3/2004

Ordered By: John Q. Public



Crawlspace/Foundation Assessment



Foundation at rear, drive side of structure indicates bowing/movement of foundation.



Pointer shows area of foundation at rear, drive side corner which is damaged due to movement and/or moisture.

Crawlspace/Foundation Assessment (cont.)



Another view at rear, drive side corner shows significant damage/movement of the foundation. Note that the downspout terminates at foundation. This home has missing gutters in many locations and downspouts which terminate at foundation. These conditions are directing large amounts of water toward the foundation and into the crawlspace.



Shaded area shows interior area along center of building which has settled significantly. This has caused the majority of floors to slope toward the center of the building.

Crawlspace/Foundation Assessment (cont.)



Floor joists are spliced without proper support at splice point. This can cause floor settlement and has a high likelihood of failure.



Floor joist improperly cut/notched and improperly supported at sill plate. The joists along the wall line are in danger of failure due to poor placement of cuts. Pointer shows area where sill plate is missing altogether. The sill plate acts to tie the floor and exterior walls to the foundation.

Crawlspace/Foundation Assessment (cont.)

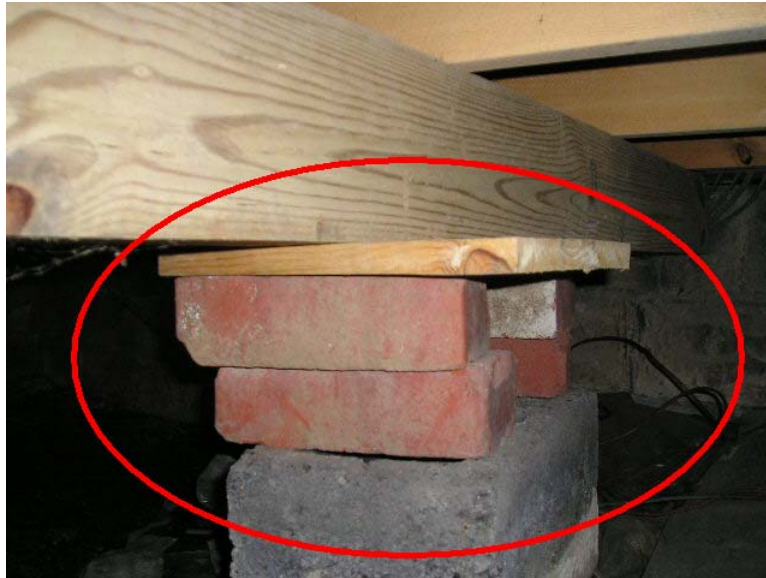


Frame around opening to crawlspace has rusted away. This leaves the crawlspace exposed to extreme weather conditions which could freeze plumbing supply and/or waster lines and also adds another avenue for water penetration into the crawlspace.



Improperly supported beam which supports floor joists. This support system is inadequate for the loads imposed. The installation was performed without placing a vapor break (plastic) between masonry and framing. This allows water to wick up the masonry and will cause framing to rot and/or compress and will eventually cause failure of the beam.

Crawlspace/Foundation Assessment (cont.)



Another case of improperly supported main support beam. The beam is placed directly on shims/masonry. This will cause moisture to wick into the framing and will lead to rot and/or failure of the component.



Concrete block supporting main floor beam has settled significantly due to constant exposure to water which erodes the supporting soils. This is causing significant settlement in the floors within the building.

Crawlspace/Foundation Assessment (cont.)



Pointers show leaning support piers in various locations under the main floor. The piers are all in varying stages of failure. Also note the wood and other debris on crawlspace floor. This has led to extensive microbial amplification sites which are partially to blame for moldy odors in building.



More failing piers in another area of crawlspace. Piers have settled and are no longer plumb. The piers will fail at some point if this situation is not corrected. The failure of any of these damaged piers could cause significant structural damage. Again, note the wet/rotted debris present. This is causing a significant amount of microbial amplification. This image also shows a partial, non-functional vapor barrier (plastic sheet on earth).

Crawlspace/Foundation Assessment (cont.)



More debris and damaged piers in crawlspace.



Daylight is visible through foundation walls in various locations throughout the crawlspace. The missing vent shows exterior grade which is higher than vent and is directing water directly into the crawlspace.

Crawlspace/Foundation Assessment (cont.)



Shaded areas show improperly terminated floor joists. Pointer shows another area of foundation where daylight is visible through openings.



Improperly notched floor joist. Arrow indicates another opening to daylight through foundation.

Crawlspace/Foundation Assessment (cont.)



Wood has been improperly used to support floor joists in various locations. The wood supports are placed directly on earth causing moisture to wick upward via capillary movement. The supports are in various stages of deterioration and failure.



Masonry block is severely deteriorated from moisture exposure. This pier is a main beam support and is in danger of failure in the near term. This could cause significant ensuing damage to the structure.

Crawlspace/Foundation Assessment (cont.)



Improperly supported floor joists. These supports are deflecting causing the floor joists to move differentially. These piers do not meet acceptable construction practices.



Water running through crawlspace on top of vapor barrier.

Crawlspace/Foundation Assessment (cont.)



Masonry pier support has settled into the earth due to moisture exposure. This has caused significant settlement to occur in beams and joists.



Area along sill plate shows rot and microbial amplification.