

Visual Examination / Inspection Recommended Guidelines

- **Summary**
 - A summary of the findings and recommendations.
 - The date the inspection was conducted.
- **Description of the property**
 - Owner Name
 - Address of the property (per assessment records),
 - Year built (from assessment records)
 - If applicable, year addition was built, and location of the addition. (This will generally not be on assessment records, but would be on building department records.)
 - type of house (from assessor records)
 - type of basement (e.g. full basement (full perimeter below grade); walk-out basement (approximate % with full height concrete walls); partial height foundation walls (i.e. raised ranch); none (as in slab-on-grade construction))
 - site grading with regard to storm water flow (and where applicable):
 - Existence or lack of eaves
 - Evidence of ponded water
 - Run-off from paved surfaces
 - Other relevant characteristics such as:
 - nearby water bodies
 - tight landscape plantings against the foundation
 - Layout of the foundation (preferably a diagram or sketch with dimensions).
 - Ideally, review assessor's information (sketch, room count, year built, condition, etc.) with the owner during the inspection.
- **Existing Conditions and Background**
 - A general explanation of the potential deleterious effects associated with pyrrhotite affected concrete
 - Existing condition of the concrete foundation walls – interior surfaces and exterior surfaces. (including the extent of exposed surfaces)
 - Report must describe in writing the condition of the visible concrete surfaces based on the visual examination:
 - Shrinkage cracks
 - Cracks judged to be settlement cracks
 - Honeycombing
 - Pour lines
 - Crack patterns associated with the effect of pyrrhotite (web cracking, map cracking, horizontal cracks, etc.)
 - Efflorescence or discoloration not related to form panel variations
 - Any other observations, including surface conditions or other relevant characteristics
 - Observation or possibility of water around the foundation based on the roof and driveway drainage should be noted.
 - If the basement is finished, every effort should be made to take pictures of the interior walls, if possible. Wall coverings (plastic, etc., not the finished walls) should be removed before taking pictures (if it hinders the visual inspection). Note any finishes that conceal concrete walls

- The report should also describe any structural issues such as concrete wall bulging or settling, etc. as a result of the presence of pyrrhotite.
- Include any information from owner, such as:
 - When they started noticing issues
 - How fast deterioration is progressing (if they are marking and measuring the cracks to monitor how they expand, etc.)
- **Photographs**
 - All photos should be labeled with the location within the home (e.g. west side foundation wall). Close-up photos should be next to another photo that matches the location and/or have an identifying feature to enable its location to be identified
 - If no damage has been found, photos of the walls observed will be sufficient.
 - If damage is found photos should include:
 - Areas that are representative of the damage (interior/exterior; vertical/horizontal),
 - Shrinkage cracks, concrete staining, efflorescence, etc.
 - Photos need not include all cracks or effects, but should give an overall understanding that shows the location of the cracks, along with the damage associated with those cracks (close-ups)
 - Photos should be labeled with what they are showing (e.g., shrinkage crack, map cracking, staining associated with pyrrhotite, etc.)
- **Conclusions and Recommendations**
 - Findings of the visual examination
 - Level and type of concrete distress should be noted
 - If there is an “immediate” threat to structural integrity of the home – it should be noted.
 - Recommendations should include where applicable:
 - Stabilization measures
 - Ongoing monitoring
 - Remediation measures
 - Interim measures
 - Potential water diversion measures
- Note: Many towns are using a standard form for assessment reductions. If this home is located in such a town, engineer should be prepared to complete that form with the report.