S220 Standard for Professional Inspection of Hard Surface Floor Coverings

Second Limited Public Review (March 2026) Draft shows Proposed Changes to Current Standard.

Note to Reviewers: *These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions). Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.*

Section B Definitions

Claimant: the party who initiates a claim seeking compensation, corrective action, or resolution.

1.1.3 Certified Independent Inspectors

Certified ~~independent~~ inspectors *should* be independent, and their inspections *should* be free from influence and conflict of interest that might be perceived by claimants to be biased toward a manufacturer, retailer, or installer.

2.2 Qualifying Inspectors

It is recommended c~~C~~ommissioning parties ~~should~~ take reasonable steps to determine whether an inspector's qualifications are appropriate for a particular concern. Commissioning parties may ask the inspector for evidence of current certification, relevant experience regarding the concern requiring inspection, references, and proof of general liability insurance.

2.3.1 Understanding the Commission

It is recommended c~~C~~ommissioning parties ~~should~~ be specific about what areas or concerns are to be inspected. The inspector *should* address concerns related to the scope specified on the request; however, if other concerns on the same material are brought to the attention of the inspector, the inspector *should* consult with the commissioning party as to how to address the additional concerns.

3.3 Report Writing Sequence

The inspector *should* obtain temperature/humidity data logs (e.g., HVAC app, in situ probe) including historical data (i.e., setbacks, corporate controlled settings), if they are available. These *should* not be used in place of the inspector's measurements.

4.1 Inspecting Hardwood Flooring

Inspectors *should* follow the manufacturer's instructions and label directions for the ~~safe~~ use of tools.

4.2 Inspecting Laminate Flooring

Inspectors *should* follow the manufacturer's instructions and label directions for the ~~safe~~ use of tools.

4.3 Inspecting Resilient Flooring

Inspectors *should* follow the manufacturer's instructions and label directions for the ~~safe~~ use of tools.

4.4 Inspecting Ceramic and Stone Floor Covering

Inspectors *should* follow the manufacturer's instructions and label directions for the ~~safe~~ use of tools.

7 Wood Flooring Inspection

For a wood flooring inspection, the inspector *should* observe, collect, and document the following:

- if the wood floor is engineered, solid, or assembled solid;
- species of wood;
- ~~width of the~~ board dimensions;
  - width
  - thickness
  - length

- affected area of concern;
- approximate amount of installation affected (localized or widespread);
- if the condition is increasing in frequency or severity;
- substrate/subfloor underlayment type;
- grade level of substrate/subfloor;
- moisture testing of material and substrate/subfloor, if possible;
- prior moisture testing results, if available;
- relative humidity and temperature:
  - of installed space; and
  - of crawl space/basement.
- crawl space:
  - conditioned, ventilated, open;
  - type of conditioning system (e.g., HVAC, dehumidification, passive);
  - insulation;
  - moisture barrier;
  - distance from bottom of joists to ground;
  - evidence of water or moisture;
  - sump pump; and
  - is there ground cover:
    - coverage complete; and
    - properly seamed.
  - ventilation:
    - operational;
    - blocked;
    - open; and
    - closed.
  - if open, type of ground.
- try to ascertain acclimation of product(s);
- installation method; and
- describe maintenance procedures and products used.

7.5 Cupping

During a wood flooring inspection, the inspector *should* observe, collect, and document the following:

- when the condition was first observed;
- if there is a pattern to the condition, if so description;
- if there is a crawl space/basement, describe condition (i.e., ground cover, joist to soil measurement, insulation, type of subfloor, visible moisture/puddles);
- any evidence of water damage (e.g., water intrusion, plumbing leaks);
- measure the depth of concave deviation;
- appearance of uninstalled boards;
- gapping visible between boards;
- measure multiple board spans (depending on board width);
- measure width of board;
- moisture content of flooring in relation to subfloor (take and record readings at multiple depths to prove the progression of the moisture gain or loss);
- check for separating layers in engineered products;
- maintenance methods, products, and frequency used;
- examine impermeable products in area of concern (i.e., rubber mat); and
- attempt to ascertain acclimation of product.

7.8 Gloss Variation

During a wood flooring inspection, the inspector *should* observe, collect, and document the following**:**

- appearance compared to adjacent or unaffected areas;
- lighting conditions – eliminate shadows and glare, (i.e., shadowbox, inspection light):
  - walk around the planks of concern – viewing angle can change appearance.
- gloss meter reading variations;
- ~~look for~~ texture variations;
- amount of affected boards;
- pattern or recurrence of concern;
- maintenance products;
- maintenance procedures;
- compare flooring to attic stock and/or store sample; and
- ~~check for~~ buckling, cupping, or crowning

7.14 Splits/Cracks

During a wood flooring inspection, the inspector *should* observe, collect, and document the following**:**

- flatness of material (i.e., cupping or crowning);
- measure depth, length, and width of the splits/cracks;
- location of splits/cracks;
- finish and stain characteristics over/around/in split;
- visible change in stain;
- finish separation;
- presence of filler; and
- grading allowances.

7.16 End Lift

A condition where the ends of installed engineered wood flooring boards deviate from the flat plane and appear raised or curved upward.

During a wood flooring inspection, the inspector *should* observe, collect, and document the following**:**

- acclimation of product;
- moisture readings;
- temperature and humidity readings;
- maintenance procedures;
- poor adhesion;
  - hollow spots
- confirm humidifier/dehumidifier and HVAC year-round settings.

8 Laminate Flooring Inspection

For a laminate flooring inspection, the inspector *should* observe, collect, and document the following:

- affected area of concern;
- approximate amount of installation affected (i.e., localized or widespread);
- measurement of the widest and longest continuous span without a break/transition;
- number of doorways/cased openings, and sizes if applicable;
- substrate/subfloor type;
- type of underlayment;
- presence of moisture barrier/retarder and type;
- grade level of substrate/subfloor;
- if the condition is increasing in frequency or severity;
- moisture testing of material and substrate;
- prior moisture testing results, if available;
- relative humidity and temperature:
  - of installed space; and
  - of crawl space/basement.

- if crawl space is present:
  - conditioned, ventilated, open;
  - type of conditioning system (e.g., HVAC, dehumidification, passive);
  - insulation;
  - moisture barrier;
  - distance from bottom of joists to ground;
  - evidence of water or moisture;
  - sump pump; and
  - is there ground cover:
    - coverage complete; and
    - properly seamed.
  - ventilation:
    - operational;
    - blocked;
    - open; and
    - closed.
  - if open, type of ground.
- describe maintenance procedures and products used.

9 Stone, Ceramic Flooring Inspection

For a stone or ceramic tile inspection, the inspector *should* observe, collect, and document the following:

- affected area of concern;
- type of material, (e.g., porcelain, ceramic, stone);
- nominal format of the tile (to include size and edge configuration) and the pattern of the installation;
- finish of the surface (e.g., glazed, polished, honed, flamed);
- type of grout and general width of the joint;
- substrate/subfloor type;
- grade level of substrate/subfloor;
- moisture testing of material and substrate/subfloor;
- prior moisture testing results, if available;
- type of underlayment;
- type of overall construction and support system (e.g., pier and beam, joists, crawl space, slab);
- try to ascertain acclimation of the product;
- if the condition is increasing in frequency or severity; and
- maintenance procedures and products.

9.1.4 Tile Cracking

During a stone or ceramic tile inspection, the inspector *should* observe, collect, and document the following**:**

- ~~confirm~~ perimeter expansion joints and field soft joints;
- ~~check if~~ presence of cracking crosses several tiles and continues through adjoining grout joints;
- ~~check to see if there is a~~ presence of repeat pattern to the condition;
- ~~measure~~ presence of deflection, if applicable;
- ~~examine the floor for the~~ presence of hollow tiles; and;
- ~~examine for~~ presence of fine lines which may indicate compression cracking.

10 Resilient Flooring Inspection

For a resilient flooring inspection, the inspector *should* observe, collect, and document the following:

- type of installation (e.g., glue down, floating, loose lay);
- description of concern;
- approximate amount of installation affected (i.e., localized or widespread);
- description of any attempted repairs and methods used in repair;

- substrate/subfloor type;
- type of underlayment;
- presence of moisture barrier/retarder and type;
- grade level of substrate/subfloor;
- moisture testing of material and substrate/subfloor;
- prior moisture testing results, if available;
- floor prep performed;
- if the condition is increasing in frequency or severity;
- relative humidity and temperature of:
  - installed space;
  - substrate; and
  - crawl space/basement.
- If there is a crawl space:
  - conditioned, ventilated, open;
  - type of conditioning system (e.g., HVAC, dehumidification, passive);
  - insulation;
  - moisture barrier;
  - distance from bottom of joists to ground;
  - evidence of water or moisture;
  - sump pump; and
  - is there ground cover:
    - coverage complete;
    - properly seamed;
  - ventilation:
    - operational;
    - blocked;
    - open; and
    - closed.
  - if open, type of ground;
- if it is a floating installation:
  - measurement of the widest and longest continuous span without a break/transition;
  - expansion space at vertical obstructions;
  - pinch points;
  - deflection;
  - presence of additional underlayment; and
  - floor surface flatness field test.
- space between moldings, transitions, jambs, and the surface of the flooring; and
- describe maintenance procedures and products used.

References

~~ATF Floorcovering Dictionary 1997 3rd edition; Academy of Textiles and Flooring, Anaheim, CA 92806~~

~~Laminate Flooring Inspection Guidelines, December 2003, Inspector Training Services, Huntsville AL, 2003, Will Stoner, Certified Inspector and Instructor~~

National Laminate Flooring Association (NALFA), LF-01 Specifications and Test Methods - 2019