

Mold: A Design Checklist

Contributed by Victor O. Schinnerer & Company Inc.

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SUMMARY

Construction-related professional service firms are at risk of becoming targets for mold claims from clients and third parties. A firm can minimize its risk of exposure to such claims by being mindful of mold as an issue during every phase of a project. The following checklist, while not intended to be comprehensive, may help to reduce the likelihood of mold proliferation in the buildings you design.

PROJECT PLANNING

Determine whether mold already exists

If you are involved in remodeling a facility, determine whether a preexisting condition has introduced mold. Do not proceed unless the facility owner has recognized and remedied the cause and effects of the mold.

Select building products carefully

Be prepared to show that you used a rational selection process for any new materials and systems. What materials were used and why? What benefits do the materials provide that others do not? What environmental systems were recommended? Did the manufacturer's technical (not marketing) literature address mold prevention?

Communicate with your client

Explain to your client the risks, both known and unknown, of specific designs, materials, and systems. Document your explanations in writing.

DESIGN CONSIDERATIONS

Design for maintenance

Consider, recommend, and implement design solutions that will facilitate preventive maintenance to limit excessive humidity and moisture intrusion.

Block mold from proliferating

Collaborate with your mechanical engineer to limit the introduction of outdoor fungi into the building air. Among the possible design solutions: a tight

structural envelope; filtration of intake air; and appropriate climate control systems.

Help prevent water accumulation

Design roof drainage and exterior features to eliminate water accumulation in or near occupied areas.

CONSTRUCTION PHASE SERVICES

Educate your client

Educate your clients to recognize that superior construction practices, techniques, and materials can inhibit mold growth.

Discuss contract terms

Ask whether the contractor is reducing its insurance costs through an exclusion of mold-related claims from its policies. If the building owner accepts such a limitation, it would be reasonable for you to require both the owner and the contractor to defend and indemnify you against third-party claims due to mold.

Prevent damp materials

Insist that contractors protect construction materials and the building site from excessive moisture. Specify the level of dehumidification for the project so that proper "drying in" takes place during construction.

Focus on proper construction

Provide a sufficient level of construction-phase services to reduce the probability of water intrusion by exterior wall leaks, faulty foundation drainage, improper installation of vapor barriers, and improper application of sealants and flashings.

COMMISSIONING AND OPERATIONS

Leave behind proper documentation

Provide the owner with detailed manufacturer's instructions for proper maintenance of materials, systems, and equipment as they relate to moisture

control. Retain a list of the information you have provided.

Make a smooth transition

Follow up with the project owner during the project correction period so that any construction errors are remedied.

RESOURCES

More Best Practices

The following AIA Best Practices provide additional information related to this topic:

- 11.06.01 Ventilation for Durability in Residential Design
- 11.02.02 Quality Control: A Working Drawings Preparation Checklist

Feedback

The AIA welcomes member feedback on Best Practice articles. To provide feedback on this article, please contact bestpractices@aia.org.

Key Terms

- Building performance
- Physical design
- Weather tightness
- Water tightness



VICTOR O.
SCHINNERER
& COMPANY, INC.

Two Wisconsin Circle
Chevy Chase, MD 20815-7022
301-951-9746
www.planetAEC.com

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