

The Commercial Inspector

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ask the inspector

Q. My building has some cracks in the interior walls. Is this bad? Do I need to be worried?

A. Although there is not an exact method for determining how serious a wall crack is without hiring an expert to examine the wall and the surrounding structural components, there are methods to analyze the crack and the surrounding area to determine whether it is a surface blemish or a larger problem.

Most buildings settle during the first few months or years after construction, so minor cracks can be typical. The direction and size of the crack can help determine the severity of the issue: For example, a crack that runs in a vertical direction and is consistent in width may be a sign that it was created when the entire foundation settled slightly after construction.



However, a crack that runs horizontal or runs at a jagged 45-degree angle may be evidence of a more serious problem, especially if the crack gets wider as it goes up or down. This could be evidence of just one area or section of foundation movement or settlement.

Most engineers agree that narrow vertical cracks are most often caused by minor settlement or normal material shrinkage. Wide vertical cracks (exceeding 3mm or 1/8 inch in width) or cracks that get wider or narrow-

snapshots from the field

What's Wrong With This Photo?



- A) This crack is a structural issue because it is vertical.
- B) This crack may be cosmetic in nature, but should be monitored for additional movement.
- C) This crack may be a structural issue because it is horizontal.
- D) None of the above.

(answer on the back)

er may be caused by significant settlement problems that will probably require detailed engineering inspection and evaluation.

If your building has a basement or crawl space, now is a good time to check for con

for your information

Check Your Building for Water Intrusion

Water can be a powerful enemy when it comes to buildings. Keep your building dry and prevent water intrusion by checking two key areas of your building: the basement or crawl space, if you have one, and the roof.



cerning cracks, moisture and mold — all of which can be a sign of water intrusion. If you notice signs of moisture, contact a professional to locate and resolve the problem.

It is also a good time to check the roof of your building for any signs of improper drainage, pooling or areas that need repair.



maintenance matters

Check and Clean Roof Drains

If you're lucky enough to not have snow-covered roofs, then March is a great time to clean your roof drains. First, make sure that the drains are functioning properly, then follow these easy steps to clean the drains:

1. Put on work gloves. Bring a 5-gallon bucket, a socket and ratchet, and a wire brush to the roof.



2. Locate a roof drain near the exterior wall line of the building. Keep the socket and ratchet and wire brush nearby. Remove



any buildup of leaves and debris from the metal grate and use the bucket as a trash bin.

3. Use the socket and ratchet to loosen and remove the bolts that secure the grate to the drain hub. Lift off the grate and clean it over the bucket with the wire brush. Clean the rim of the hub with the brush.
4. Reattach the grate with the original bolts. Repeat the steps, if necessary, and then clean the remaining roof drains.

did you know?

Keep Water in Check

Many factors can contribute to water intrusion in a commercial building, but here are three simple ways to divert and contain water to keep it from invading your building:

1. Positive grading around the building. Make sure that the soil and ground around your building slants away from the building. If the ground slants toward the building, then it delivers water to your building's foundation, which can cause water intrusion.
2. Built-in roof drains. If water is intruding through the roof and ceilings, or if it's pooling on the roof, then these roof drains will help remove and divert it.
3. Retention ponds. Studies have shown that properly maintained retention basins and gardens can be very effective at removing pollutants and can provide necessary storage volumes during larger storm events.

Snapshots from the field

The correct answer is B) This crack may be cosmetic in nature because the crack is at a wall/ceiling joint, but should be monitored for additional movement.