

All Cracked Up

Dealing with cracking plaster

Being a homeowner isn't always everything it's cracked up to be (pun totally intended). Over time (and sometimes not even *that* much time!) things start to move, bend, buckle, crack and fall. So, what do you do when you start to notice those sneaky little lines and cracks appearing in your plaster walls and ceilings? Cracks in plaster are one of the most common issues we get called out for, so here we will run through the reasons behind why these pesky cracks appear in the first place, the types of cracks you are likely to find in your home, what they all mean, and what you should do about them.

Why do I have cracks in my walls, ceilings, and around my windows/doors?

First things first... why does plaster crack? Well, the types of cracks determine the cause, but as a general rule you may find cracks in your plasterwork for the following reasons:

- **Settling**

Let's start with the least frightening (and most likely) cause. If your home is relatively new, you should expect to find cracks appearing along cornices because the house is simply "settling". You might also find some cracks in the timberwork around windows and doors. As the soil settles under your concrete foundation, it causes the house to shift and move in natural ways. This puts some pressure and strain on load-bearing areas, which in turn causes the plaster (and timber) to move and crack. No biggie at all (phew... what a relief) *unless* the cracks are big enough to prevent normal operation of windows and doors, or continue to suddenly grow and expand. Then you are likely to be experiencing an issue with your foundation, which is very much a biggie 😞.

- **Shrinkage**

Concrete dries and shrinks, so sometimes it can cause very narrow, vertical cracks along window areas. If the cracks are wider than about .5cm and/or they are found together with horizontal cracks, you might be looking at a problem with walls moving or tipping.

- **Overloading**

This tends to lead to diagonal stress cracks in a wall. You will generally find these cracks starting at a window or door frame, and usually appear in houses where significant renovations have been done (like adding in windows and doors, putting an additional level onto a home etc...). Having excess weight on an upper level from furniture for example, also creates too much weight for the beams, joists and studs to carry, leading to these types of cracks.

- Humidity

Cracks may also crop up around window edges in houses that are exposed to drastic changes in humidity. Living in Queensland, our humidity levels are always pretty high, but basically wood framing expands and contracts with changes in weather more than plaster does, so this can result in some cracking.

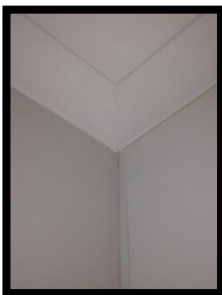
If the crack looks like **this**, what should I do?

Well, to get a good understanding of whether you might have a serious issue, you need to examine the type of crack, but first there are a few major things to be on the lookout for:

- The size of the crack - the smaller and narrower, the better. As a basic rule, if it is a hairline crack that's ok, but anything bigger than that requires professional advice.
- The location of the crack – cracks around joints like cornices/ceilings are pretty common and may not be a huge cause for concern, but cracks through the middle of a room, for example, are not a good sign.
- The shape of the crack (we look at this in just a tic).
- The direction of the crack – in general, cracks can either be vertical or horizontal.
- Secondary symptoms like bowing or popping nails – if cracks are accompanied by a bow or dip in a ceiling, it is a sign of a pretty big problem. Similarly, if you can start to see nail heads coming away from walls, this could mean that the nail has pulled away from the wooden stud, signally structural problems.

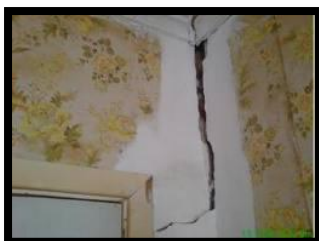
With all this in mind then, what types of cracks do we need to actually worry about?

- Spiderweb (hairline) cracks



These are the normal, common cracks we find as a result of the house settling. These hairline cracks are super narrow and normally found in the joins of your cornices. The cracks will also tend to run vertically down the cornice. These are really the only cracks that you don't need to worry too much about, because they are generally a result of settling.

- Matching cracks

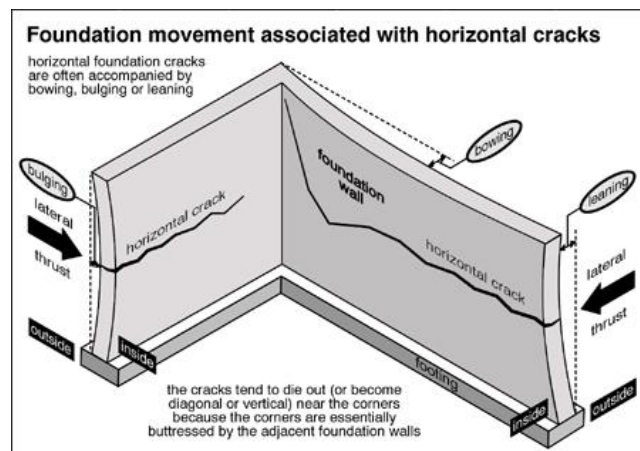


These types of cracks typically run across the length of a ceiling and then continue to run down a wall along the same line. These are not the sorts of cracks you want to find in your home, because they are a sign of structural damage that might be a result of a weak wall

stud or something that has come loose during significant movement. These cracks will also grow in width/size quite quickly, so they need to be looked at ASAP!

- **Horizontal cracks**

If you find a horizontal crack that runs at a jagged 45-degree angle, this could be a sign of something serious going on like severe foundation movement or water damage.



This diagram gives you a good understanding of how serious cracks develop, and why it is so important to address them ASAP!

So what do I do about this?

Whether or not you need to call in the services of a professional really depends on the type of crack you are dealing with. Clearly, if it is just your standard run-of-the-mill settling crack, it is no big deal and you can probably patch it up yourself with some gap-stopper (if it bothers you that much). To be 100% certain that you aren't dealing with anything dangerous and nasty though, we always recommend seeking out professional advice if you are even slightly unsure. For serious cases, engineers will need to be called in (together with builders etc...) to assess the damage and determine the best way forward.

So, although cracks in plaster can potentially be a costly and dangerous issue, if you know what to look out for you can get on top of any developing problems quickly, causing much less damage and dramatically reducing repair costs. As with any type of home maintenance, prevention is key, so if you notice any cracks in plaster that you are concerned about, give us a call today!

Sources:

- HomePro – 'Old Houses And Plaster Cracks'
- How Stuff Works – 'Tips & Guidelines for Plaster Cracks'
- HomeGuides – 'How to Determine if the Cracks in Walls are Serious'
- HomeGuides – 'How to Know When Ceiling Cracks are Structural or Just Old'
- EHow – 'What are the Causes of Cracks Around Window Edges?'

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