

INSIDE YOUR HOME – HORIZONTAL DAMP

What are the causes of and cures for horizontal damp? If you've got small patches of damp on your internal faces of external brick walls, you've probably got horizontal damp. Thankfully, it's easily repaired.

Horizontal or 'penetrating' damp occurs when water moves in a horizontal direction through walls at any height, creating a damp patch. This happens when there is a defect of some sort. The most common cause is bad bricklaying of cavity brick external walls – leaving mortar joints less than perfectly full can create gaps where water can build up or allowing excess mortar falling into the gap in the centre of walls, which stops the damp-proof course from working properly and forms a bridge for water to cross and create damp patches. It can also be caused by cutting holes in walls, defective flashing, footing movements that cause cracks, a leaking water supply or waste pipe, failure of tile grouts in shower alcoves and drips or overflows from air conditioning or hot water systems.

An historic indication is where there is no cavity to external brick walls – allowing moisture to penetrate through inner and outer skins of brickwork – often enabled by bricks being laid in a traditional form of cross wall bond, e.g. Colonial Bond.

The sources tend to create small, localised patches of dampness and decay while rising damp usually affects the base of a whole building. In most cases, where the single wall is soundly built, the moisture evaporates from the brick more quickly than it penetrates so it's not (less of) a problem.

If you think the problem is due to rain penetration, it is often easier to diagnose horizontal dampness when you have cavity walls rather than solid walls. With cavity walls, you can see that the walls are becoming damper with rainfall and are quickly drying out afterwards. On solid walls, the thickness leads to more diffuse damp patches which people sometimes confuse with condensation. If you have solid walls that you think are due to a rain penetration problem, look for what happens to walls, doors and windows during periods of heavy driving rain. Sometimes with this type

of dampness, it can be difficult to determine the exact source of the problem so it's a good idea to consult a specialist to confirm before taking any action.

Once you're confident that what you have is a horizontal dampness problem, you can repair the isolated patches by applying on a waterproof cement render 2 coat system to the outside of the wall.

Some painted-on coatings can also be used to do this, albeit losing effectiveness where/if cracking occurs to the wall system or a part thereof. Obscure or pigmented coatings are fine to use but a clear coating such as a silicone type will probably be the most effective. Make sure you follow the manufacturer's instructions closely to ensure this is done correctly. If there are gaps or cracks in the mortar, these need to be repaired before you apply the coating otherwise the coating will end up delivering more water to the gap!

If the wall is plastered and the horizontal damp penetration is severe and has built up over time, you will probably have to strip off the section of plaster and re-plaster just as you would for rising damp.

Horizontal damp is often found to internal walls where adjacent rooms include shower or bath recesses or where a water-based service pipe has failed while being embedded in the wall. Once the source of moisture is understood, remediation will include stripping back all damp plaster, allowing the masonry to dry out, before applying a flexible waterproof membrane to the shower/bath recess and reinstating finishes to each side of the wall. Well proven products and applicators should be used, and waterproofing certification provided.

If you would like to talk to an Archicentre Australia architect about a particular matter please call us on 1300 13 45 13 or go to www.archicentreaustralia.com.au