

# Understanding what went wrong

## Investigating the de-bonding of vinyl flooring at a health centre

When a contractor insisted that damp was causing recently-installed vinyl flooring to de-bond, BRE were asked investigate

### The problem

Soon after vinyl flooring was laid in a new health centre, bubbles began to appear, signifying that it had de-bonded from the sub-floor. The flooring was replaced but the problem persisted in some areas. Following an investigation in the two affected areas, the flooring contractor reported that the problem was caused by damp, rather than poor workmanship. However, the main contractor wanted to be sure so called on BRE's expertise.

### Our approach

Putting things right when things go wrong can be expensive and understanding who or what is responsible can be difficult. Drawing on 90 years' worth of experience of research, testing and consultancy, BRE is able to provide you with the independent advice to understand the problem.

In this case, BRE carried out a full visual and intrusive investigation of the flooring, which involved lifting the vinyl, examining the condition of the materials and measuring the dampness levels of the subfloor in 20 locations across the site. This more extensive investigation than the one carried out by the flooring contractor, revealed that the subfloor wasn't damp enough to cause the failure

of the vinyl flooring. There were, however, several problems with the workmanship during installation, which led to a weak bond between the primer and smoothing compound that caused the flooring to de-bond.

### Our recommendation

BRE recommended that the vinyl in the affected areas was removed, the surface of the screed properly prepared and primed and a rapid-setting smoothing compound laid. BRE also provided a specification for replacing the flooring in a short time window and recommended a room-by-room approach to repairs to minimise disruption.

### Three causes of cracking and curling

- Dampness not being properly measured
- Using the wrong primer or not priming the floor at all
- Using too little adhesive

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