A breath of fresh air for social housing

We spend 80% of our time indoors and take it for granted that the air we breathe is clean and pollutant-free. **Harjit Sandhu, domestic sector manager at British Gypsum** takes a look at how air quality is an important consideration for social housing projects and the solutions that are available to improve indoor air.

Impurities found in living spaces can cause health problems and a reduction in general wellbeing. Volatile organic compounds (VOCs) are chemicals emitted as gases into the atmosphere from sources, such as new furnishings and cleaning products, and can, in high doses, contribute to health issues in both children and adults. For example, formaldehyde, a common VOC, has been linked to increased risk of headaches, lethargy, asthma attacks and allergic reactions by the World Health Organisation (WHO). All of these problems can make the home environment uncomfortable for social housing residents.

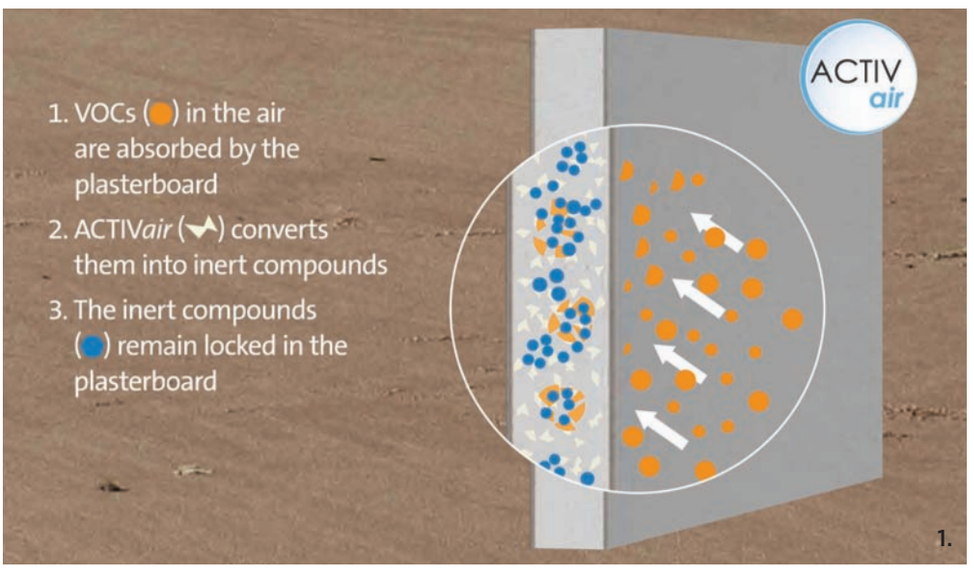
Considering all of this, it is no surprise that indoor air quality is becoming an increasingly important concern during the design stage of new social housing developments. Housing association specifiers, therefore, must understand all of the options open to them to tackle the problem while at the same complying with any legislative requirements.

> "Construction materials that don't just limit the initial emission of VOCs, but actively reduce concentrations in interior spaces, can help housing associations create high-quality homes that support residents' wellbeing."

Searching for a solution

The most common method of addressing the issue of air quality in homes is to ensure adequate ventilation. However, whilst this is still an essential component of the air quality equation, ventilation is not very effective when it comes to specifically eliminating VOCs. In fact, studies have shown that ventilation systems alone only reduce VOC levels by between 10 and 30 per cent.

Alternatively, 'low VOC' construction materials, which have been reformulated to release fewer chemicals than standard products, can be used to tackle the issue. While they are ideal for limiting the initial emission of VOCs in internal spaces, they have very little effect on concentrations of pollutants brought into the building post-handover, so whatever solutions housing association specifiers opt for must also address air quality long-term.



Vanquishing VOCs

There are state-of-the-art products available now that actively reduce the level of VOCs in the atmosphere, such as British Gypsum's innovative ACTIVair technology. Incorporated into the manufacturer's plasterboards, ceiling tiles, and its new PureFinish high-performance skim finish plaster (available from March 31st, 2014), ACTIVair absorbs VOCs from the air, before converting them into inert compounds to prevent their re-emission at a later date. The technology has been proven to reduce the concentration of VOCs in interior spaces by as much as 70 per cent[1], and with a lifetime of up to 50 years, it provides a long-term solution to the problem of VOCs in social housing.

ACTIVair works effectively under standard paints, so housing association specifiers do not have to source specialist coatings. What's more, the technology does not impact on the fire or acoustic properties of the plaster or plasterboard it is used in, making it ideal for use in large-scale developments, such as apartment blocks, and other buildings that have particular requirements to meet.

A breath of fresh air for residents

Construction materials that don't just limit the initial emission of VOCs, but actively reduce concentrations in interior spaces, can help housing associations create high-quality homes that support residents' wellbeing.

1. British Gypsum's ACTIVair technology
2. ACTIVair is incorporated into British Gypsum's plasterboards, ceiling tiles and the manufacturers new PureFinish high performance skim finish plaster

For further information please visit:
www.british-gypsum.com/activair

[1] The effectiveness of ACTIVair technology has been tested by the accredited Eurofins laboratory. The test shows that ACTIVair decomposes up to 70 per cent of the formaldehyde in a controlled environment.