

## Pinnacle Eco-Comfort Underlay and VOC's

Amongst informed and environmentally aware parties more and more attention is being given to the effects of VOC's. This being said there is still some difference of opinion and confusion as to what they are and how they affect human health and well being over time.

Firstly to define Volatile Organic Compounds -VOCs refers to organic chemical compounds which have significant vapour pressures and which can affect the environment and human health. VOCs are numerous, varied, and ubiquitous. Although VOCs include both man-made and naturally occurring chemical compounds, it is the anthropogenic (effect or object resulting from human activity) VOCs that are regulated, especially for indoors where concentrations can be highest. VOCs are typically not acutely toxic but have chronic effects. Because the concentrations are usually low and the symptoms slow to develop, analysis of VOCs and their effects is an area where new work is constantly being undertaken and updated.

Health and Safety is a very important value at Pinnacle Underlay, we have to be certain our team who work in the factory are not exposed to dangerous VOCs during the manufacturing project where the underlay is "cooked" and extensive tests were carried out by CRL Energy Limited on our behalf. Hence we know for sure there are no detrimental VOC's produced in the manufacturing process.

It follows then that when our underlay is used in a new home it is perfectly safe.

There is research that has been undertaken using crumbed rubber as a low cost alternative for the removal of non-polar heavy compounds present in gasoline and incomplete combustible products from contaminated drinking water. Results suggest this is a viable process which indicates that rather than releasing VOC's in your home Pinnacle Eco-Comfort underlay may actually absorb them.

There is also research available which states when rubber decomposes (which takes a very long time) VOC's are given off.

The USA environmental protection agency is a good place to start if you wish to compile your own research <http://www.epa.gov/iaq/voc.html>.

Acting in good faith we have carried out our own testing with no negative results. The fact of the matter is that there is so much conflicting information out there nobody knows for sure, just like global warming we have to draw our own conclusions.

We do know people who suffer from Asthma are acutely sensitive to VOC's and we have our underlay installed in homes of people whom suffer from asthma and they have reported no negative reaction to our underlay.

Finally if you are concerned about the smell of rubber David, a very discerning and environmentally aware client who built a wonderful new home on Waiheke Island had this to say

***"Yes all is working beautifully and we are delighted with the experience. One of the major 'surprises' of this house (though hoped for and anticipated) is that there is no 'new' smell to it. There are no fumes or emissions from products we have chosen and it is a delight to be inside. I am certain your product has contributed significantly to this atmosphere."***