Benefits of Lapitec on Indoor Air Quality

With occupant health being at the forefront of building design, the quality of the air inside a building is becoming increasingly important. The amount of time people spend indoors (upwards of 90% of their time) is substantially higher than time spent outside, making indoor air quality even more important. Improved indoor air quality has been proven to improve well-being and productivity. A surfacing material that could help improve indoor air quality is a powerful tool for designers and homeowners alike.

While NOx is widely known as an outdoor air pollutant, it also contributes to poor indoor air quality and can impact occupant health. Indoor activities like using ovens, stoves, fireplaces, and other appliances as well as emissions from furniture and outdoor air coming in can all introduce pollutants into the indoor air.

Is there a surface that could help clean the air indoors? Lapitec, suitable for flooring, walls, and countertops, can do just that.

Lapitec's integral Bio-Care technology has been proven to break down NOx through the use of Titanium Dioxide (TiO2) and its reaction with visible light. TiO2 has been widely researched and is used as a powerful compound that serves as a photocatalyst, reacting with light to break down these pollutants. Lapitec, from its initial production, sought to incorporate this technology to create a healthy interior surface. This powerful combination not only helps clean the air, but it can also kill and break down e-coli and staphylococcus bacteria on its surface.

Not only is Lapitec the highest performing man-made surface available, it also creates healthier interior environments through the use of Bio-Care.

Works Cited

Ballari, M.M., and A. E. Cassano. “Visible Light TiO2 Photocatalysts Assessment for the Indoor Air Decontamination.” Journal of Inorganic Materials, vol. 23, no. 3, Apr. 2008, pp. 260–262., doi:10.3724/sp.j.1077.2008.00464.

Bedjanian, Yuri, and Atallah El Zein. "Interaction of NO2 with TiO2 surface under UV irradiation: products study." The Journal of Physical Chemistry A 116.7 (2012): 1758-1764.

“Environmental Benefit of Photocatalytic Coatings.” Green Millennium, Green Millennium, www.greenmillennium.com/benefit/.

Wu, Qingping, and R. O. E. L. Van De Krol. "Selective photoreduction of nitric oxide to nitrogen by nanostructured TiO2 photocatalysts: role of oxygen vacancies and iron dopant." Journal of the American Chemical Society 134.22 (2012): 9369-9375.