

Improving indoor environmental quality and supporting health and wellbeing with indoor plants, green roofs and green walls

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Plants and vegetative green infrastructure such as green roofs and walls have significant potential for improving the quality of indoor environments and a growing body of research suggests a beneficial effect on the health, wellbeing and productivity of building occupants. This paper provides an overview of the evidence on the key pathways through which vegetation in the environment can help support or enhance human health and wellbeing, and highlights key evidence for: (i) indoor potted plants; (ii) green roofs; (iii) green walls. Potential risks or negative impact on health and wellbeing are also discussed, and how these issues can be managed or overcome. Careful consideration of building characteristics, environmental context and occupant preference is essential in order to make best use of plants and green infrastructure to support human health and wellbeing. Further research is needed to ensure that green infrastructure technologies are sustainable in design and provide multiple environmental benefits.

IEQ, Health, Wellbeing, Green Infrastructure, Biophilic Design, Green Roofs, Green Walls