

## BACKGROUND

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### BENEFITS OF NEDLAW LIVING WALLS

- NEDLAW Living Walls deliver a number of unique and significant benefits. They include improved air quality, improved work environments, increased energy efficiency and eligibility for LEED approved credits in the areas of design, environmental quality and energy and the atmosphere.
- Indoor air quality is recognized as one of the top health issues we face. Air in our indoor environments is negatively affected by a number of factors including volatile organic compounds (VOCs), formaldehyde, odours, spores and dust.
- Traditional methods of improving indoor air quality include bringing 'fresh air' in from the outside and conditioning it through heating or cooling, depending on the time of year. However, these methods are costly, both in terms of their environmental and financial impacts.
- NEDLAW Living Walls bring natural outdoor air cleaning processes inside and use interior plantscapes and a patented air biofilter system to effectively remove many common indoor air contaminants at a fraction of the cost required for traditional ventilation and conditioning systems.
- Under laboratory conditions, up to 90% of formaldehyde and 70% of VOCs were removed with a single pass through a NEDLAW Living Wall biofilter.<sup>1</sup>
- NEDLAW Living Walls improve the aesthetics and physical work environments of the facilities in which they are installed.
- Increasingly, links are being made between the greening of indoor spaces and the health and well-being of occupants. Links have been established between the integration of plant greenery into work environments, decreases in common office ailments, decreases in employee absenteeism and increased employee productivity.<sup>2</sup> NEDLAW Living Walls are able to contribute to these improvements with a minimal interior footprint.
- NEDLAW Living Walls represent an effective way of obtaining more fresh air at a lower energy cost compared to traditional air systems.

- Leadership in Energy and Environmental Design (LEED) is the Green Building Rating System™ that encourages the adoption of sustainable green building and development practices. It is a third-party certification program and an internationally accepted benchmark for the design, construction and operation of high performance green buildings.<sup>3</sup>
- NEDLAW Living Walls are eligible for multiple LEED credits associated with innovation in design.

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1 Darlington, A., M.A. Dixon and C. Pilger 1998. The use of biofilters to improve indoor air quality: the removal of toluene, TCE and formaldehyde. *Life Support and Biospheric Science*. 5:63-69.

2 Fjeld, T. 1998. The effects of indoor foliage plants on Health and Discomfort symptoms among office workers. *Indoor Built Environment* 1998:7; 204-209.

3 Canadian Green Building Council website ([Cagbc.org](http://Cagbc.org)).