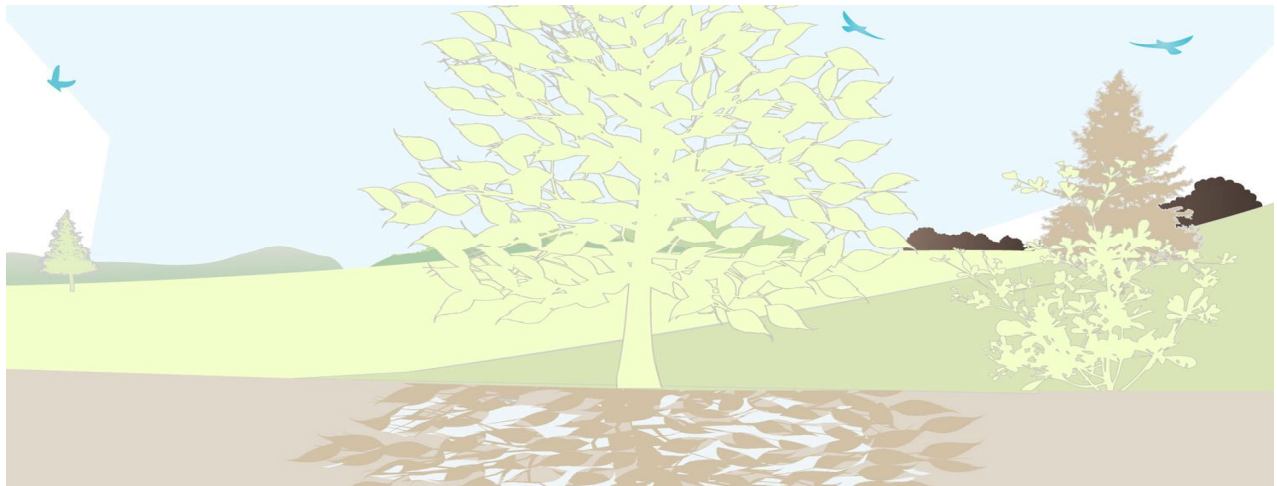


How a combination of interior plants and artificial daylight can affect well-being and effectiveness in buildings



Many clinical studies confirm the beneficial effects of intense, full-spectrum light on sufferers of Seasonal Affective Disorder (SAD) - sometime called the “Winter Blues”. There are also several studies that claim greater benefits of full-spectrum lighting (also called artificial daylight), including improved school results and greater productivity in workplaces.

Full-spectrum lighting closely replicates the light spectrum of daylight and is a purer shade of white than that given by conventional bulbs or fluorescent tubes. In fact, a conventional fluorescent lamp can look pink or yellow in comparison with its full-spectrum equivalent. When used in office buildings, full-spectrum lighting makes the transition from daylight to evening in the winter months less obvious and has been shown to reduce complaints of headaches and eye strain. Sometimes, full-spectrum lighting is fitted into large ceiling panels to create the impression of a skylight.

People living and working in high latitudes, or working in spaces where there is no access to real daylight often suffer more from SAD. During the late 1990s, Professor Tøve Fjeld carried out some studies in several workplaces in Norway, including schools, hospitals and offices. When artificial daylight was introduced, symptoms associated with sick building syndrome (e.g. headaches, irritated eyes, coughs, dry and itchy skin, etc.) reduced, as it was when plants were installed. However, when the two interventions were combined (plants and artificial daylight), there was a synergy - the effects were frequently greater than the sum of the individual interventions.