

DEVELOPMENTS OF PHYSICAL CONTAINMENT (PC2) AT THE NEW ZEALAND CONTROLLED ENVIRONMENT LABORATORY

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The New Zealand Controlled Environment Laboratory has developing the capability to meet the demand for specialist containment research facilities for genetic and biotechnology applications under controlled environments. Developments include upgrade of five CE rooms to meet physical containment requirements. Incorporated in the area are media/potting facilities, plant handling and sterilisation facilities as well as basic laboratory equipment for plant growth analyses and microscopy. The contained area is operated in a manner providing control of access and physical isolation from the remainder of the laboratory, as well as the external environment.

The CE rooms offer precision control over temperature, water vapour pressure, lighting, CO₂ and nutrient supply as well as the capability for control of variable light intensity. The design of the CE rooms as separate stand-alone units allows further containment features within rooms, such as higher levels of physical isolation.