



The award-winning function space 'The Cloak' at Auckland Airport included a 208m² green roof meeting a copper mesh 'cloak' screen shrouding two walls of the building.

Stormwater360 were the supplier and designer of the green roof using the LiveRoof® 150mm deep, extensive green roof system.

With some roof faces up to 30-degree pitch, the application of a green roof in an exposed location required technical design expertise and needed to be a pre-vegetated system.

Stormwater360 worked with engineers to develop a lateral support system on the sloping roof faces using mechanically fixed perforated aluminium 'Roof Edge' to support the loads.

Plant selection to match the brief as well as sustain the steep slopes and windy conditions was also a technical task. This was achieved using a selection of pre-rialed native New Zealand grasses, groundcovers and sedum plants pre-grown in the LiveRoof® modules for four months before installation.

Stormwater360's 'LiteRoof®' lightweight green roof growing media ensured successful plant establishment as well as minimising ongoing maintenance costs. The lightweight media meant that the green roof also complied with the maximum available roof loading values.

The benefits of a green roof are numerous including reducing stormwater runoff, and they act as natural air conditioning units with the plants providing evaporative cooling, as well as assisting with insulation in the cooler months. The roof also creates a safe habitat for biodiversity and helps lower urban air temperatures.

