

## SHAC Live - Green Roof Technology Demonstration

Modern, practical, and affordable green roof technology

### Why green roofs?

Reduce storm water peak flow; lengthen roofing material life; provide amenity; support biodiversity; clean water; potential retrofit option for heavy roofs.

Our design shows best of green roof technology with practical NZ implementation

Single-course extensive pitched roof and intensive flat roof. Green wall.

Modular construction to enable prefabrication of waterproofed roof elements. Bolt on, click together roofing panels.

Designed to meet German Green Roof Standards - "FLL Guidelines 2008"

Compatible with NZ standard 3604 and following the NZ Membrane Group Code of Practice

Flat intensive roof - designed as a 3.0 kPa floor

Pitched extensive roof - designed as a "heavy" roof.

Growing media uses local waste streams; designed to be tested to ASTM 2397 and 2399

Prefabricated structural insulated panels that are simultaneously structure and best practice insulation

Christchurch manufactured materials for cost effective implementation

Using tussock [Narrow-leaved snow tussock *Chionochloa rigida*] and NZ natives

Novel use of roof corrugations to reduce plant summer water stress

Green roofs reduce on average 2/3rd of the runoff from a non vegetated roof

[O'Sullivan et al (2013)], University of Canterbury



Tim Bishop  
tim@shac.org.nz  
021 705 346



Rachael Annan  
annan.rachael@gmail.com  
027 535 0720



Clayton Prest  
clayton@spacecraft.co.nz



Richard Jack  
0274 362 582  
richard@equus.co.nz



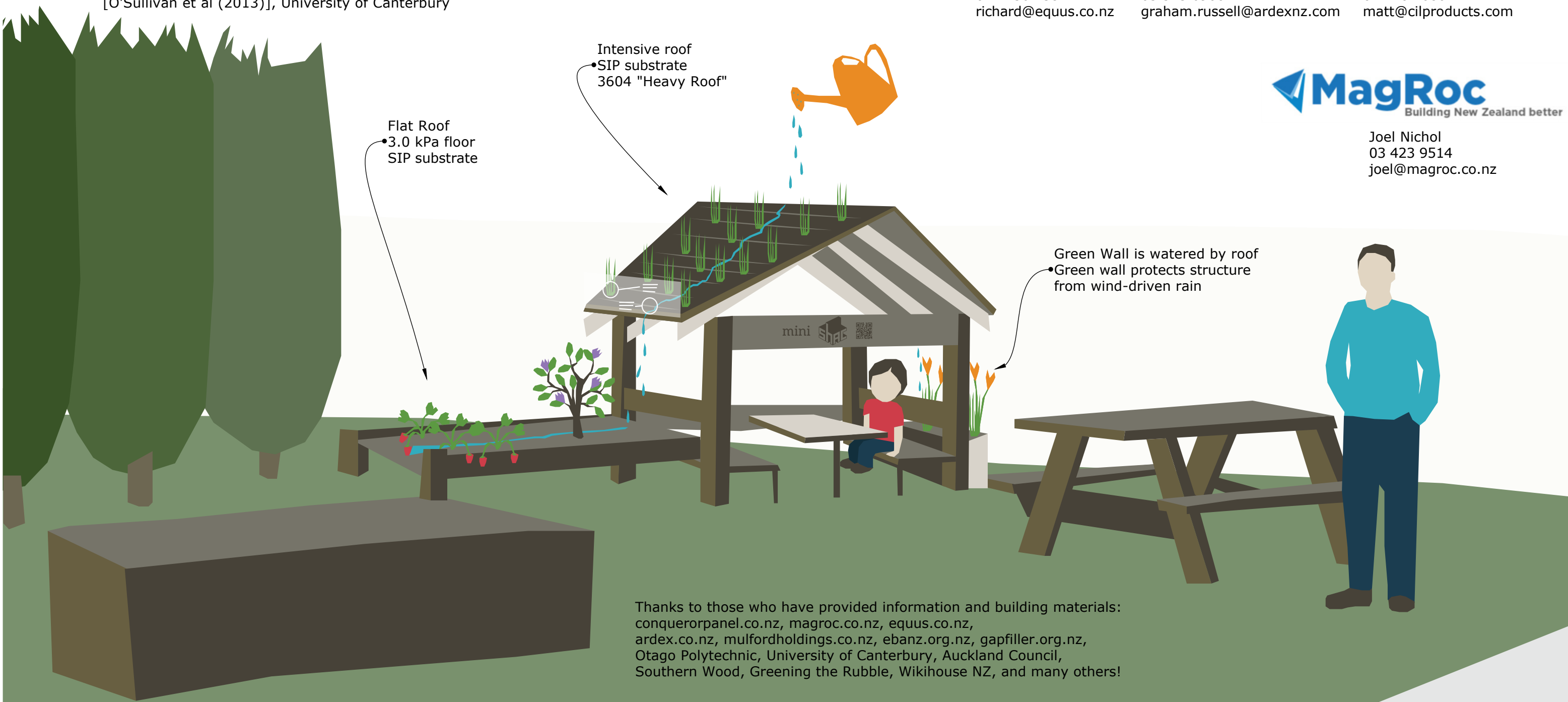
Graham Russell  
03 373 6900  
graham.russell@ardexnz.com



Matt Sheppard  
021 702 080  
matt@cilproducts.com



Joel Nichol  
03 423 9514  
joel@magroc.co.nz



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conquerorpanel.co.nz, magroc.co.nz, equus.co.nz,  
ardex.co.nz, mulfordholdings.co.nz, ebanz.org.nz, gapfiller.org.nz,  
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