

## Conclusion

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The Roof Angel system was tested in accordance with EN795:2012 and CEN/TS 16415:2013, with the substrate ultimate load test used to verify suitability for design with a 2:1 safety factor for all locations.

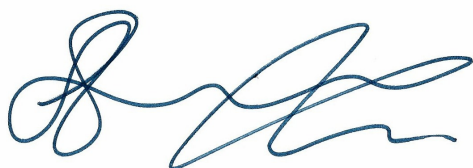
The substrate used in this test is a concrete deck of unknown age and unspecified construction, allowing for worst cast installation validation.

Testing was carried out in normal weather with ambient temperatures around 12 - 18 degrees and minimal moisture.

### Results:

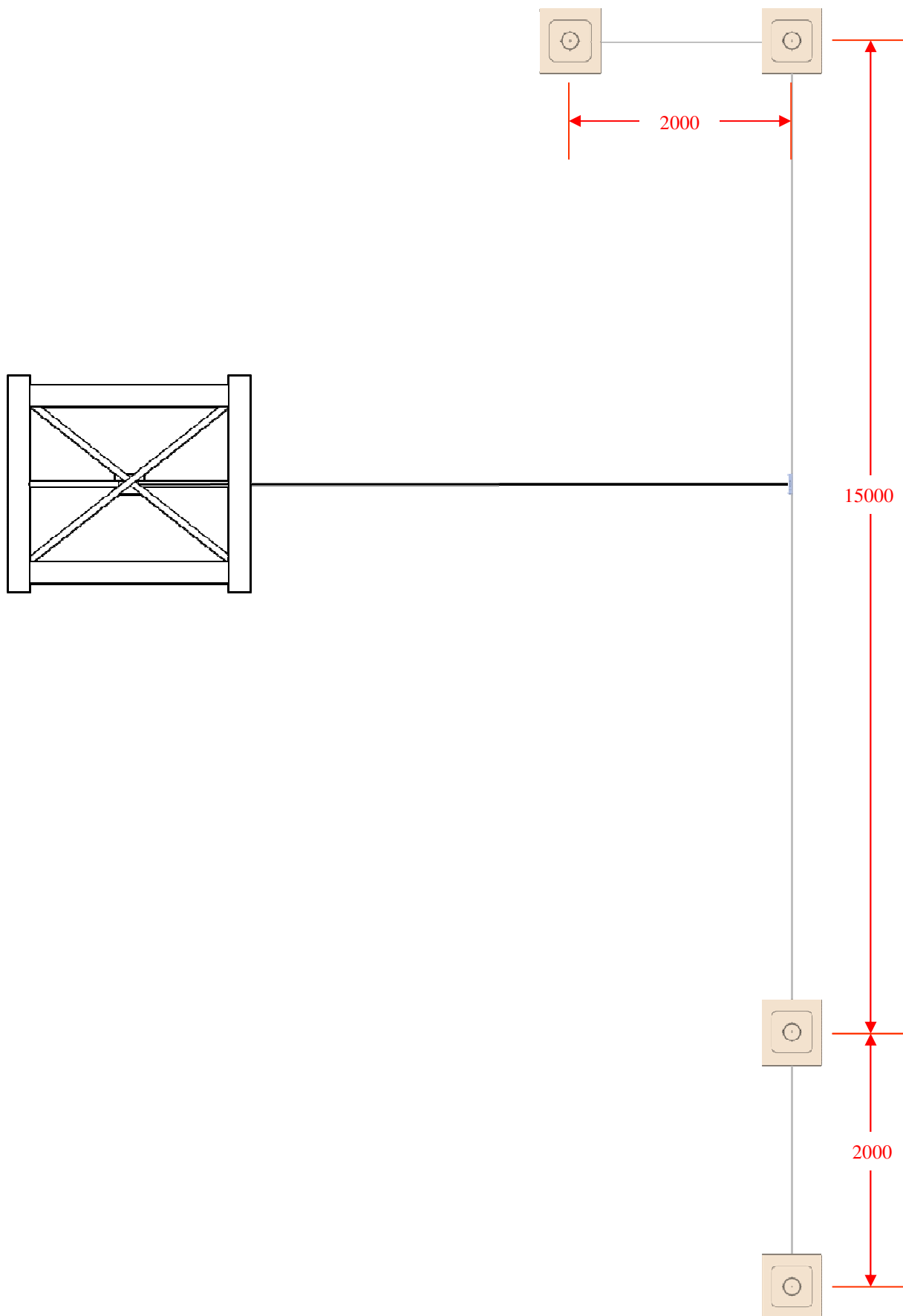
- EN 795:2012                      1 User                      Pass
- CEN/TS 16415:2013            2 Users                    Pass
- CEN/TS 16415:2013            3 Users                    Pass
  
- Design loads for systems fitted to concrete are a maximum value of 18.10kN.

Verified by



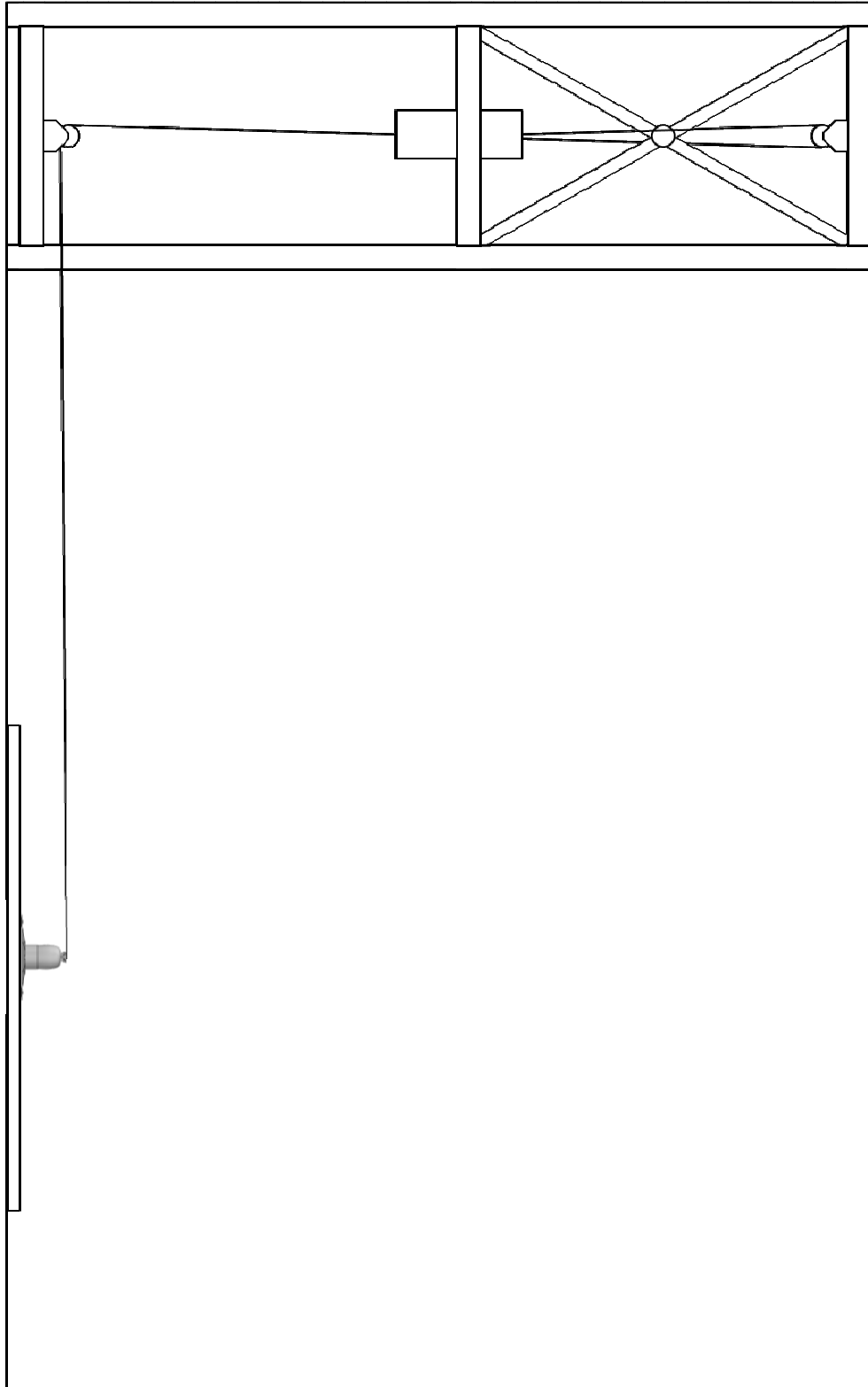
Steve Jervis

## Test Layout



# Test Layout

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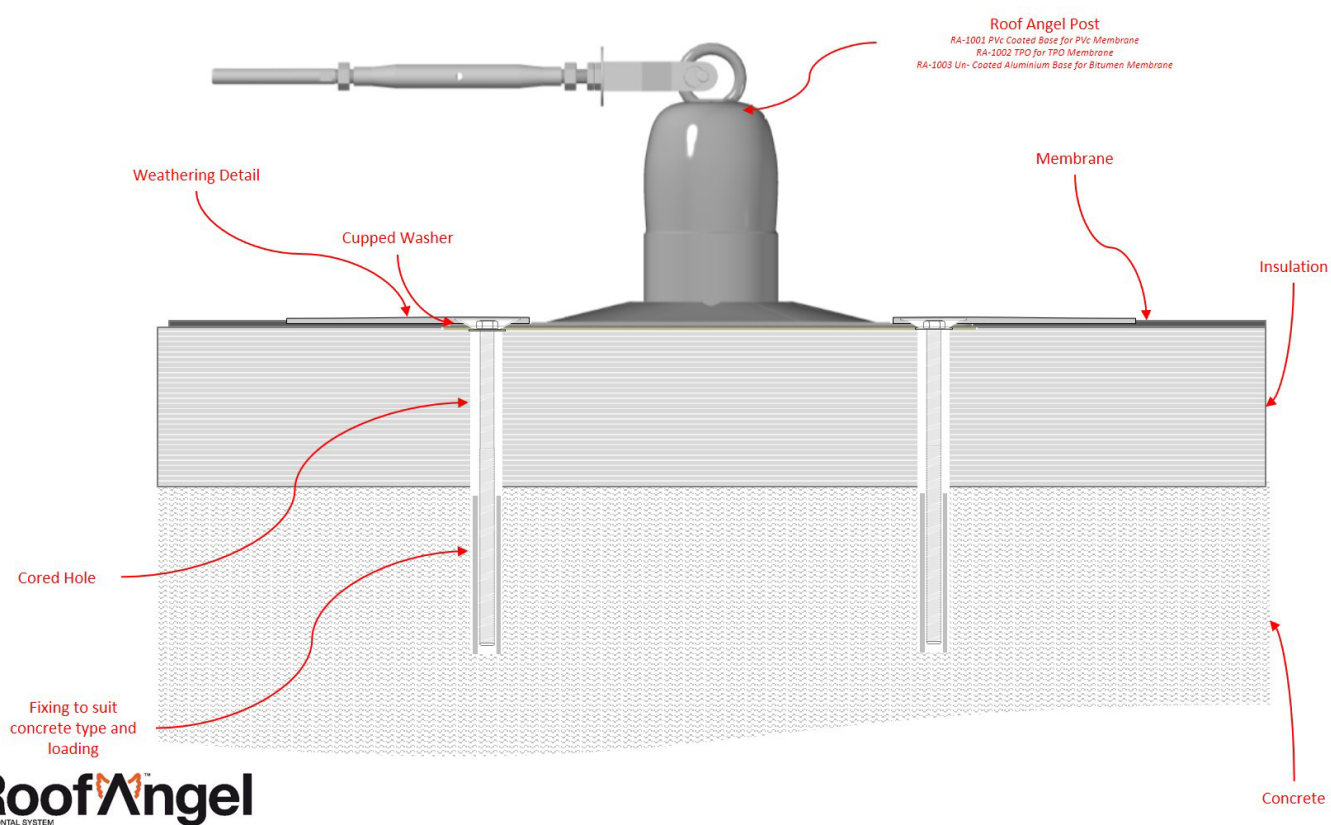


## Sample Details

Roof Sample Material Construction	Roof Angel to concrete deck with insulation build-up and membrane covering.
Roof Sample Dimensions	Concrete Deck to suit layout.
Substructure Construction	Aged, unspecified construction concrete deck
Roof Angel Fixing Method	Fischer FH II Mechanical Anchors

### Fixing Detail

#### Standard anchor fix to Concrete with insulation



# Test Report

November 2018

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Test Report Number	BSI-USCI-1118-01
Product Reference	Roof Angel
Part Numbers	RA-1016 Module RA-1017 Module
Standards Used	EN795:2012 Type A & Type C CEN/TS 16415:2013 for 3 users
Test Description	Test for fixing to concrete with absorbing posts
Date of Issue	November 9 <sup>th</sup> 2018

Report Author	S Jervis
Testing Carried out by	A Harris, D Harrison
Witnessed By	W Ottley, S Jervis
Approved by	S Jervis

## Report Notes

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1. Tests are carried out to an interpretation of test methods and requirements specified in the standard or method specified.
2. Test samples have been stored in warehouse conditions and tested in an uncontrolled environment unless detailed otherwise.
3. Testing carried out in an outdoor environment.
4. Peak forces and arrest distances are stated based on the test method applicable to each result
5. The drop heights have been calibrated to meet the requirements of CEN/TS 16415:2013 and the requirements of EN 795: 2012
6. This report is the property of Better safe International BV and should not be passed to, or used by, any other party without written consent.