

Conclusion

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.

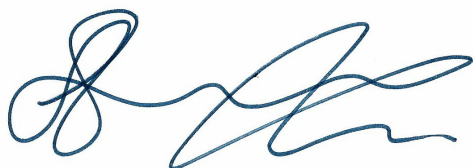
The substrate used in this test is a concrete deck of unknown age and unspecified construction, allowing for worst cast installation validation.

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

Results:

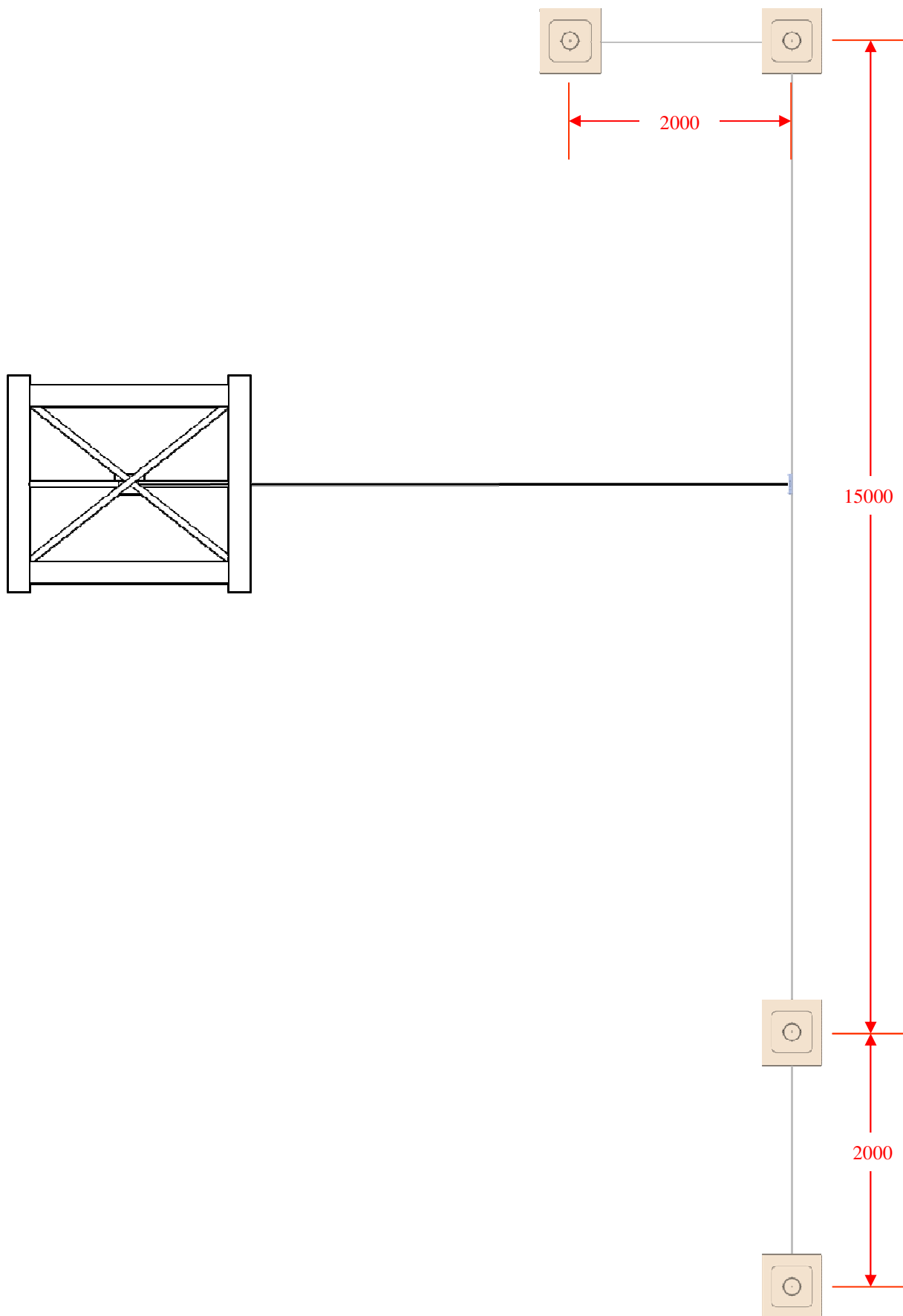
- | | | |
|------------------------------------|---------|------------------------------------|
| ○ EN 795:2012 | 1 User | Pass |
| ○ CEN/TS 16415:2013 | 2 Users | Pass |
| ○ CEN/TS 16415:2013 | 3 Users | Pass |
| ○ System Destruction Failure Point | | No failure – attained MBS of Cable |
| ○ System Destruction Failure Value | | 37.00kN |
| ○ Design loads for systems | | 18.50kN. |

Verified by



Steve Jervis

Test Layout



Test Layout

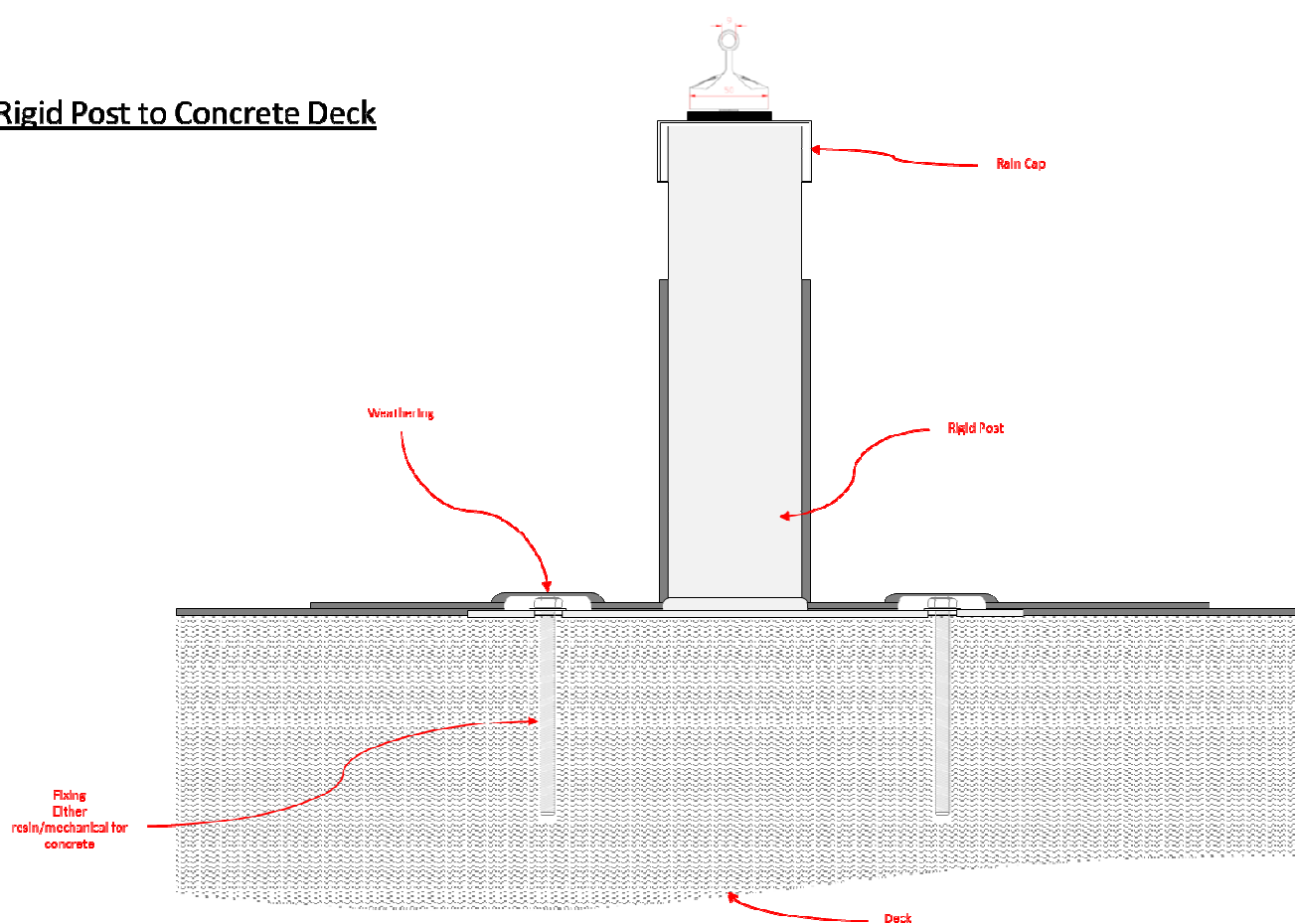


Sample Details

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|-----------------------------------|--|
| Roof Sample Material Construction | Roof Angel to concrete deck. |
| 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

Rigid Post to Concrete Deck



Test Report

November 2018

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|--------------------|---|
| Test Report Number | BSI-USRP-0614-01 |
| 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 th 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

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.