April 2017

Technical Bulletin









Reference

The Work at Height

REGULATIONS

Working at height:

HSP 004

Working at height

HSMRA 004.01

Example

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Working at height considerations



Summary

Proactive site monitoring of one of our contractors, engaged on flow monitoring activities, identified a number of issues associated with working at height whilst installing rain gauges.

The rain gauges were routinely being placed on building roofs, thereby requiring the contractor to work at height on potentially fragile roofs, using their adopted method of access by a ladder. Although the contractor had identified a hierarchal approach to accessing roofs (using alternatives to ladders), no alternative measures were actually being used.

Further investigation found that rain gauges were regularly being sited on roofs as ground-based sites were perceived to be less secure and less technically desirable.

A project meeting was held with the contractor and network modelling team. Despite there being a number of factors to be considered to ensure the suitability of information from the surveys, the team collaborated to explore alternative techniques and arrangements that could be used.

The MWH project manager develop a weighted matrix to take into account all the factors needed to be considered to deliver the survey including: working at height, time, cost, data quality, model location, and security.

The contractor has also implemented the use of a 'monkey tower' to significantly reduce the need to use ladders.

This revised approach has significantly reduced the need to access roofs to place rain gauges mitigating the risks associated with working at height.

Key Learning Points

- ☐ The greatest opportunity to reduce risk is during the planning and design stage
- ☐ Follow a hierarchal approach when planning work at height
- ☐ Always monitor sub-contractors when on site
- ☐ Review contractor risk assessments to ensure stated controls are suitable, and being followed

The Outcome

RG Location Scoring

		Parameter [Scale 1-10 (10 better)]						
Location	Roof / Ground Based	Time	Cost	Data Quali- ty	Model Loca- tion	Securi- ty	Safety	Total [%]
Official Weather Station	Ground	10	9	10	3	10	10	88.3%
Primary School	Ground	9	9	8	8	5	10	82.3%
Residential Garden	Ground	6	8	5	8	8	10	77.3%
Fall Arrest	Roof	4	5	10	8	8	8	74.8%
High School	Ground	9	9	6	8	2	10	73.5%
Airfall	Roof	4	6	10	8	8	7	73.5%
Monkey Tower	Roof	4	3	10	8	8	8	72.3%
Private Weather Station	Ground	10	10	2	3	8	10	72.0%
Herras Fencing	Ground	3	6	9	8	6	9	72.0%
Mobile Elevated Platform	Roof	3	2	10	8	8	8	69.8%
Primary School (Existing RAMS)	Roof	6	6	10	8	10	1	64.5%
High School (Existing RAMS)	Roof	6	6	10	8	8	1	61.0%

Parameter	Weight	Best	Sub- Total
Time	5	10	50
Cost	5	10	50
Data Quality	7	10	70
Model Location	6	10	60
Security	7	10	70
Safety	10	10	100
•	•		400

Note: the weightings can be changed to suit a particular project