

## Can establishing a roofing association help improve roof safety?

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Roof work is dangerous and a fall from height is the most serious hazard associated with it. Falls from roof remain a stubborn and perennial problem across different industries in Singapore. Falls accounted for 35% of all workplace fatalities and 43% of major injuries in Singapore in 2015. The lesson derived from a research project conducted by Safety and Resilience Research Unit (SaRRU), National University of Singapore, is that even though roof safety is fraught with complexity, the roof industry has not been doing some basic things well; roofing practices are often disorganized and unregulated; unqualified roofers work on roof without adequate supervision and necessary PPE; developer/owners have limited ownership of roof safety; small roof contractors have problems to find right safety tools and equipment from the market; roofers access fragile roofs without taking adequate safety precautions.

Considering multiple factors that come into play, preventing falls is challenging and it seems that there is no quick fix to the problem. To reduce falls from roof, establishing a roof association, e.g. the roofing association of Singapore (RAS) should be a strong step to take. In fact, roofing associations were established in other countries like the U.S., UK, Australia, and New Zealand and these associations are playing important roles in representing the interests of and speaking for their members. A united voice from roof contractors, manufacturers, distributors, and specialist would also be beneficial to improve roof safety if the following issues are addressed:

### (1) Best practice

WSH Council developed and published 'Workplace Safety and Health Guidelines —Working safely on roofs' in 2013. Although the guideline provides good information about control measures against falls, in its aim to cover most roof work scenarios, it is too general to be applied to specific scenarios in real life. As the industry representative, the RAS, in association with relevant government agencies, can bring together roof contractors of all sizes in the industry and update current guidelines of working safely on roof. By detailing right solutions to specific scenarios according to roof work, roof type, material, slope, etc., safety standard of the roof industry can be upgraded.

### (2) Safety education and training

The roof industry's safety knowledge is still low. There is no doubt that safety education and training is still essential, although it is a topic full of platitudes. It becomes critical in the Singapore context where the roof industry employs highly transient foreign labor with relatively low levels of safety awareness and knowledge. The risks workers posed are in part rooted in poor safety awareness and fatal underestimation of the risk of

working on roof. RAS can bring roof-oriented education and training to members. Different training programs can cover different topics, such as construction method, technology, and health and safety. These can be good complement to current ‘working at height’ training programs organized by different industry training providers.

### (3) Information

RAS should be well equipped to offer information, advice, and guidance on roof work. Roof contractors vary in terms of size and capacity and small businesses often have problems to obtain useful information about new products, technology, and safety equipment from the market. RAS should establish a platform where members can share safety stories, design for safety ideas, technology, and knowledge. In addition, by working with roof associations in other nations, RAS can promote innovation and the transfer of technology. This can help members improve competitiveness and safety performance as well.

### (4) Tendering process

One common dilemma facing roof contractors is the conflict between low profit margin and high cost involved in buying and installing safety tools and equipment. The conflict becomes more painful in current context where tendering systems are largely dominated by price. When developer/owners stay out of investment on roof safety, roof contractors can do nothing more than implementing relatively cheap, while not reliable, administrative controls. RAS can have significant influence on tendering process. As a trusted voice of roof industry, RAS can engage with policymakers and developers/owners to advance tendering policy and process issues, making roof safety management easier for roof contractors. For example, developers/owners may consider to set a separate budget for safety and thus ease the financial burden of roof contractors.

### (5) Licensing

Roofing is a specialist trade. But it is not uncommon that unqualified roof contractors win roof projects. RAS should develop and manage a licensed roofing worker program to elevate roofing workers’ skills, knowledge, and professionalism. Different license could be targeted to different roofing contractors like residential, commercial, and industrial. RAS can encourage developers/owners to integrate the licensing into tendering process so as to make sure only qualified and licensed roof workers can work on roof.

Of course, it is never easy to form a roof association from scratch in Singapore. It requires hard work and good planning and should be founded upon the principles of volunteerism, democracy, and common interest. Nevertheless, it is believed that it can potentially lead to safer roof work for the industry.

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