



MDS;mds  
12<sup>th</sup> April, 2007

Dear Mr Liddle

**Retractable ladders and compliance with AS 1657, Fixed platforms, walkways, stairways and ladders – Design, construction and installation**

The concept of your ladder, that extends for use and then retracts when not in use has great potential for industry.

The question of whether such a ladder is 'fixed' poses some difficulty, since a fixed ladder is most commonly fixed in place at both top and bottom, using bolts or sometimes, welding into place. They are also often tied back into the supporting structure to prevent lateral movements.

Your ladder design is intended to extend and retract, which is not dealt with in AS 1657 at all. I do not believe that the design can be classed under AS/NZS 1892.1, the Standard dealing with portable metal ladders either.

The Scope of AS 1657 states that it sets out requirements for fixed platforms, walkways, stairways and ladders which are intended to provide means of safe access to and safe working at places normally used by operating, inspection, maintenance, and servicing personnel. My understanding is that your retractable ladder is intended for getting away from a dangerous situation on mobile plant (as opposed to earth-moving machinery which is covered by AS 3868), which further reinforces my belief that AS 1657 is not fully applicable.

I am not aware of any Australian Standard that could be applicable to your design, and so all I can suggest to you is that you design and construct the ladders to comply with AS 1657 as far as is practical; things like stile dimensions, rung separators, loading should be considered.

I would draw your attention to Notes beneath Clause 1.2 Application, within AS 1657. These say that it is not always possible for some structures and vehicles to comply completely with AS 1657, and in these cases to comply with the relevant standards for loadings. I am of the opinion that your ladder design could be considered as either a special structure, or vehicle.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Michael Sanderson".

Michael Sanderson

Projects Manager – Industrial and Safety