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Stairform Pty. Ltd.  
14 Curie Court,  
SEAFORD 3198

Attention: Luke McDonald

Re: Standard Guardrails

As requested, we have reviewed the standard stair guardrails, the guardrail stanchions and their base connections for compliance with the guardrail loads specified in the Australian Standard AS1170.2.

1. Guardrails

The 42 x 2.6 CHS top guardrail sections are adequate for the 0.75 kN per metre load requirement, with stanchions spaced up to 2 metres apart.

2. Guardrail Stanchions

The stanchions fixed to the inside of the stair side form were checked for an effective height of 930mm above the nosing, the 42 x 2.6 CHS sections are adequate for a longitudinal spacing of 1100mm, and the 0.75 kN per metre load.

The 42 x 2.6 CHS stanchions bolted to the outside of the stair side form were adequate for a longitudinal spacing of 1000mm, and the 0.75 kN per metre load.

3. Stanchion base plate

The stanchion base plate will be adequate in the arrangement detailed provided the plate thickness is increased to 8mm.

4. The stanchion base connections to the side forms, using 2-M12 bolts at 100mm centres for intermediate stanchions and 2-M12 bolts at 50mm centres for end stanchions only, are adequate for the required load.

5. The lifting lugs will be adequate for an 18 riser form, provided the lugs are fabricated from 3mm plate, and the diameter of the bend results in a maximum distance of 100mm between the welds.

Yours truly,



**Geoffrey Nixon**

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