



STRUCTURAL & CIVIL

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 Reference: 12251ltr08
 Date: 10/10/05

STRUCTURAL DESIGN CERTIFICATE

Element Description	Stairwell Scaffold
Scaffold Owner	Stair Safe Scaffold
Site Address	All Buildings

We,

Harcourt Consulting Engineers being "Structural Engineers" within the meaning of the Standard Building Regulation 1993, hereby certify that this office is responsible for the structural design of Stairwell Scaffold system described and indicated on drawings 12251-S1 & S2. This work was designed in accordance with the relevant provisions of the Building Codes of Australia, all relevant Australian Standards and in accordance with sound, and widely accepted Engineering Principles. It meets the requirements of AS/NZS 1567.1:1995 Scaffolding Part 1: General Requirements for a "Light Duty" scaffold.

Stair Scaffold Description

The scaffolding system is intended to fill or span a void in a building during construction to allow access primarily for finishing works such as plastering and painting. In accordance with AS/NZS 1567.1:1995, the maximum load permitted in each bay of a *light duty* scaffold system is 250 kg. Timber and aluminium *planks* form the working surface. The planks are supported using a variety of methods as required for a particular installation. The planks can rest on floor edges, be supported by *wall brackets*, or span to *support beams*. Wall brackets are fixed to the wall while the supporting beams connect either to wall brackets or *support posts*. Descriptions of the components are as follows:

Planks:

The planks are certified by their manufacturer for a maximum 225 kg load. The planks are approximately 560 mm wide and range in length from 1200 to 3000 mm. They are constructed of aluminium frames with plywood surfacing and weigh approximately 12.5 kg/m².

Support Beams:

48.3x3.2mm GR 300 PLUS CHS spanning a maximum of 2400mm. Where spans exceed 2400 mm, intermediate posts or stronger rail sections must be used. These beams are supported either by wall brackets or support posts.

Wall Brackets:

2mm galvanised J-shaped channel section with two 50x50x3.0mm EA x 50 mm long welded to base of bracket to offset bracket 12mm from studs. Each angle is fixed to the wall studs using a Type 17, No. 14 screw (6.3 mm diameter x 75 mm long).

Support Posts:

65 x 65 x 2.0 SHS posts maximum 500 mm tall with 200 x 200 x 2.0 mm base plates fixed to the floor with minimum 2-Type 17, No. 14 screws or 2- 6 mm diameter "Dynabolts".



Robert P. Harcourt,
CHARTERED ENGINEER (AUSTRALIA)

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