Structural Calculations:

Steel Batten Capacity

VR Access Solutions

Reference: #1480-C1a

Date: September 2015

Revision Schedule

Revision	Date	Description
A	09/15	Capacities for 2.5 m board at t = 1.8 mm added to summary tables.

CONTENTS

INTRODUCTION

The following calculations derive the safe maximum working loads of the VR Scaffolding Solutions steel batten intended for use in system scaffold.

The calculations check the batten against the requirements of Load Class 6 in accordance with BS EN 12811-1:2003, and also derive the maximum allowable loading. Batten lengths of 2.5m, 1.8m, and 1.3m (Max SWL only) are assessed.

Safe working loads should be compared with unfactored applied loads. The values quoted are figures in isolation, relative to the stated component only – supporting components must be validated as being suitable to carry the forces applied to them.

SUMMARY

Strict compliance with the requirements of the code means 'partial area loads' must be considered, which are dependent on the size of the scaffold bay. For the purposes of these calculations. 2.5 m x 1.3m and 1.8 m x 1.3 m bays have been considered.

Batten Length (m)	Load Class	Max Load (kN/m²)
1.3	-	15.0
1.8	LC6	14.2
2.5 (t = 1.8mm)	LC4	7.3
2.5 (t = 2.4 mm)	LC6	10.1

Alternative bay sizes will require a re-assessment of the above specified load classes.