SCOT TECH CONSULTING
CONSULTING STRUCTURAL AND CIVIL ENGINEERS

16 March 2009
Ref: ST0539

Design Quintessence
Attention: Ian Wood
Unit 25
7-9 Percy Street
Auburn NSW 2144

RE: Load Tables for F42P Truss

We have been asked to analyse the proposed F42P Truss and provide a set of load tables.

Summary

Chord Members	6082 T6	ϕ50 x 3mm		
Bracing	6082 T6	ϕ25 x 2mm		
Diagonals	6082 T6	ϕ25 x 2mm		
Coupler	6082 T6			
Spigot	2011T6			
Pins	Fup	565 MPa	Fyp	310MPa

	ϕ50 x 3mm Truss
Allowable Normal Force in Main Chord	38.7kN
Allowable Normal Force in Bracing	12.6kN
Moment of Inertia X axis	27.38E6 mm^4
Moment of Inertia Y axis	0.246E6 mm^4
Allowable Bending Moment	Varies based on span

Assumptions:

1. Frame has not been designed to resist wind loads
2. The loads specified are in addition to self weight loads
3. All loads are to be applied to the bottom chord of the frame
4. Trusses are to be connected using standard connectors supplied by manufacturer.
5. Spans need to be supported at each end

Yours faithfully

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The B & A Scott Family Trust (A.B.N. 97 286 590 837) trading as Scott Tech Consulting Pty Ltd (A.C.N. 003 876 499)

Truss Type 1: ϕ50 x 3mm Chords

Loaded on Bottom Chord

UDL		
Span	LL	Def
mm	kg/m	mm
1000	1101	0
2000	550	1
3000	367	2
4000	172	3
5000	70	3
6000	33	3

PL		
Span	LL	Def
mm	kg	mm
1000	1104	0
2000	1102	1
3000	718	2
4000	404	3
5000	211	3
6000	93	2

TABLE 1

Loaded on Top Chord

UDL		
Span	LL	Def
Mm	kg/m	mm
1000	1101	0
2000	550	1
3000	346	2
4000	114	2
5000	45	2
6000	21	2

PL		
Span	LL	Def
mm	kg	mm
1000	1104	0
2000	1102	1
3000	608	2
4000	293	2
5000	123	2
6000	41	1

TABLE 2