

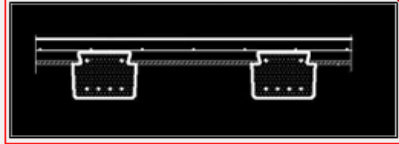


ULTRADESIGNER  
RELEASE NOTES

Project   
Client   
Engineer

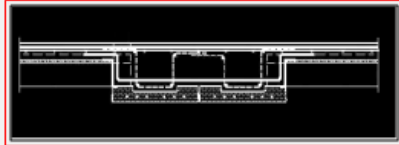
State

**AUTO SIZE**  
Auto size sheets?  
 No  Yes



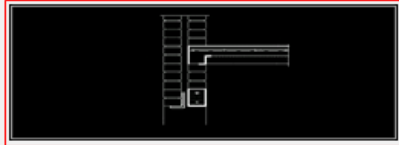
ULTRAFLOOR SLAB DESIGN

SLAB DESIGN  
HELP



ULTRASHELL BAND DESIGN

**SUPPORT**  
 LEFT HAND SIDE  
 RIGHT HAND SIDE



LINTEL DESIGN

**ULTRAdesigner**  
 Project: \_\_\_\_\_  
 Client: \_\_\_\_\_ State: **NSW**  
 Engineer: \_\_\_\_\_

**GENERAL INPUT PARAMETERS**

**SPAN** 8000 mm **TOPPING** 70 Over LUF beam  
**BEAM SIZE** 200R **PROPPING**  No  Yes Level with supports

**SUPPORT SYSTEM**  Walls  Concrete  Steel  Ultrashell  
 Wall Width (mm) 150  
**CONTINUITY**  Simple Span  End Span  End Span  Internal Span  
**SETDOWNS** All Supports Length 250 2 No. N12 /bay (Reo only in +ve flexure)  
**CONCRETE**  25 MPa  32 MPa  40 MPa  50+ MPa

**INFILL** Type Board Width 600  
**CONFIG**  Single  Double **BUILD GROUP**  
**MESH**  SL72  SL82  SL92  SL102  
**ENVIRONMENTAL**  A1  A2  B1  B2  C  
 Interior  Temperate  Arid  Tropical  
**USAGE**  Domestic / Office / Retail / Carpark  Trafficable Roof  Non-Trafficable Roof  Storage / Other

**DISTRIBUTED LOADS**  
 SDL 1  kN/m  kPa **Full Uniform**  
 LL 1.5

**POINT LOADS**  
 SDL  kN  kN/m **Midspan**  
 LL  kN  kN/m

**Extra Full Uniform**  
 SDL  kN/m  kPa  
 LL  kN  kN/m

**Offset 1**  
 SDL  kN  kN/m  
 LL  kN  kN/m  
 Z1' (mm) \_\_\_\_\_

**Offset 2**  
 SDL  kN  kN/m  
 LL  kN  kN/m  
 Z2' (mm) \_\_\_\_\_

**Offset 3**  
 SDL  kN  kN/m  
 LL  kN  kN/m  
 Z3' (mm) \_\_\_\_\_

Note: kN/m loads are on one beam only (eg. Wall), whilst kPa loads are across full width of deck (eg. Planter)

**END MOMENTS**

LHS Moment: SDL  kNm  kNm/m  
 LL  kNm  kNm/m  
 RHS Moment: SDL  kNm  kNm/m  
 LL  kNm  kNm/m

Note: Moments are in addition to calculated end moments from standard continuity cases. A positive moment is one which creates hogging at the support, and as such are opposite hand each end.

**DETAILED OUTPUT** [USE WIDE SCREEN](#) [RETURN TO MAIN MENU](#)

**SHORT TERM: CONSTRUCTION**

Attribute	Value	Utilisation	Pass/Fail
ØMu (-ve/+ve)	-17.9 / 19.9 kNm/m	0.42	Pass
ØVuc	Varies	0.54	Pass
M.ser (-ve/+ve)	-16 / 27.2 kNm/m	0.51	Pass
Dead Load Δ	0mm (Span/110888)	0.00	Pass
Total Δ	0.4mm (Span/10052)	0.03	Pass

**LONG TERM: COMPOSITE**

Attribute	Value	Utilisation	Pass/Fail
ØMu (+ve)	59.9 kNm/m (midspan)	0.85	Pass
ØMu (-ve)	N12 200 Total Length (mm) 3000	0.92	Pass
ØVuc	Varies	0.68	Pass
M.ser (-ve/+ve)	Varies	0.76	Pass
Total Δ	18.2mm (Span/440)	0.57	Pass
Incremental Δ	L/500 11.7mm (Span/685)	0.73	Pass
Soffit Δ	L/250 18.2mm (Span/440)	0.57	Pass
Durability Achieved	A2		Pass
Crack Control	Minor		
Fire Rating	120/120/120		

**ANALYSE**

**USEFUL INFORMATION**

Attribute	Value
General Slab Self Weight	3.67 kPa (114.2mm average topping concrete)
Long Term LHS Reaction	DESIGN 15.19 DL + 4.68 LL = 25.24 Ult (kN/m)
Long Term RHS Reaction	DESIGN 22.15 DL + 7.32 LL = 37.56 Ult (kN/m)
Natural Frequency	6.23 Hz

[VIEW DRAFTING DETAILS](#)

**STRENGTH DIAGRAMS**

