canamsteel Corporation

Project: WEST MIAMI SIX MODEL B

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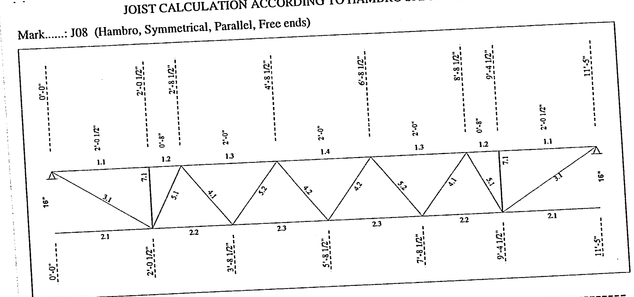
JOIST CALCULATION ACCORDING TO HAMBRO SPECIFICATIONS

Mark.....: J08 (Hambro, Symmetrical, Parallel, Free ends)



LOADING CONDITIONS

(THE SHOWN VALUES ARE REAL)

TOTAL LOAD ...: 430.94 lb/ft + 105.00 lb/ft^2 x 4'-1 1/4" H16

LIVE LOAD ...: 164.17 lb/ft + 40.00 lb/ft^2 x 4'-1 1/4"

HAMBRO

Total Thickness of the Slab	=	3.00 in
Perimeter Joist	=	N
Length of the Extension of the Slab	=	0.00 in
Concrete Density	=	145.00 lb/ft^3
Compression Resistance (f'c)	=	3.00 ksi
Composite Inertia	=	182.02 in^4
Composite Maximum Capacity	=	568.52 PLF
Non-Composite Maximum Capacity	=	568.52 PLF
Non-Composite Loading	= DL =	41.24 PSF LL = 20.00 PSF
Horizontal Shear at the Interface. (Formula 2003).	=	72.14 lb/in (0.092)
Utilization of the Slab	=	0.028
Presence of 'high-chair'	=	N
Type of Hambro (presence of reinforcing)	=	

DEFLECTION

Allowed deflection under live load	=	0.37 in (L/ 360)
Calculated deflection under service live load	=	0.02 in (L/ 8910)
NB: Hambro Deflection: Beam Formula * 1.3 with Composite Inertia = .15 * Steel Inertia		
Joist inertia	=	73.51 in^4
Required camber	=	0.06 in

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