

**Note:**

1. Section properties are in accordance with CSA-S136-94.
2. Loads greater than 10 kPa or 200 psf usually indicates heavy concentrated or moving loads. Generally additional negative and transverse reinforcing steel must be considered.
3. Loads are based on steel conforming to ASTM A653 grade 33 (ASTM A653M grade 230) steel with a minimum yield stress of 33 ksi and 230 MPa.
4. Properties of concrete are based on 2300 kg/m<sup>3</sup> (145pcf), normal density concrete having a minimum compressive strength of 20.7 MPa (3 ksi)
5. For normal applications of CD36 composite steel floors, no additional reinforcing steel, other than temperature mesh for shrinkage crack control is required. With slab thicknesses published in these tables a minimum wire mesh of 6x6 – 10/10 (152x152 – MW9.1/MW9.1) is recommended. For additional details see CSSBI S3-88.
6. Loads for the deck acting as a form include slab weight and a construction load of 21 psf, uniformly distributed live load which has been accounted for in the load table. (CSSBI 12M-96 standard)
7. Slab thickness is measured from top of concrete to bottom of steel deck.
8. Agway Metals Inc. (LSD) composite load tables and physical properties are based on tests performed by Dr. R.M. Schuster P.Eng. Professor of Structural Engineering, University of Waterloo, Ontario, Canada using the CSSBI S2-85 standard for testing of composite slabs.

**EXAMPLE** (Use of CD36 Load Table)**CD36 Composite Slab (Metric)**

Determine the specified live load that can be placed on the 38mm Agway CD36 composite slab, given the following information:

**Given:**

- Steel Deck
  - Base steel design thickness = 0.762 mm
  - Yield Strength = 230 MPa
- Concrete
  - Normal density = 2300 kg/m<sup>3</sup>
  - Overall slab depth = 120 mm
- Double Span length, each = 2.2 m
- Specified superimposed dead load, W4:
 

a) floor finish	0.45 kPa
b) partition	<u>0.75 kPa</u>
<b>DL = 1.20 kPa</b>	

The maximum specified load in (**kPa**) from the load table must be  $\geq (LL + 1.25 DL/1.5)$  where;  
 LL = Specified live load  
 DL = Specified superimposed dead load

From the appropriate load table, the maximum specified load is **17.3 kPa**, therefore,  
 $17.3 \geq (LL + 1.25 DL/1.5)$ ,  
 and the specified live load is  
 $LL = 17.3 - 1.25 (1.20)/1.5 = \underline{16.3 \text{ kPa}}$

One shore support is required at midspan in each span.

**Note: The self-weight of the steel deck and concrete slab have already been accounted for in the maximum specified load given in the load table.**



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