

Contec Slab Panel

Technical Sheet

General Features

Lightweight, fire resistant*, water penetration resistant**, pest resistant, fast and easy to install, versatile and affordable. Contec Slab Panel is an AAC, steel reinforced element. Reinforcement is Grade 70 steel covered with an anti-corrosive coat.

* Under ASTM E119-95 UL®

** ASTM E514

Uses

Contec Slab Panels can be used as floor or roof simply-supported slabs on Contec Masonry Components or CMU's loadbearing walls, wood, steel or concrete beams, etc. Suitable for residential, commercial and industrial buildings.

Dimensions

Length: Up to 20 ft.
Width: 24 in.
Nominal Thickness: 4, 5, 6, 7, 8, 10 and 12 in.

Properties

Characteristic	Strength Class	
	GB3.3/0.6 (37 pcf) ⁽¹⁾	GB4.4/0.7 (44 pcf) ⁽¹⁾
Design Weight (pcf)	45	52
Minimum compressive strength, f_c (psi)	497	710
Modulus of Elasticity (psi)	249,000	355,000
Drying shrinkage (in/ft)	0.003	0.003
Thermal Expansion Coefficient (1/°F)	4.4×10^{-6}	4.4×10^{-6}
Resistance to Freezing ⁽²⁾	0.979	0.979

⁽¹⁾ Maximum dry density.
⁽²⁾ Ratio of final versus initial volume of sample subjected to freeze/thaw cycles.

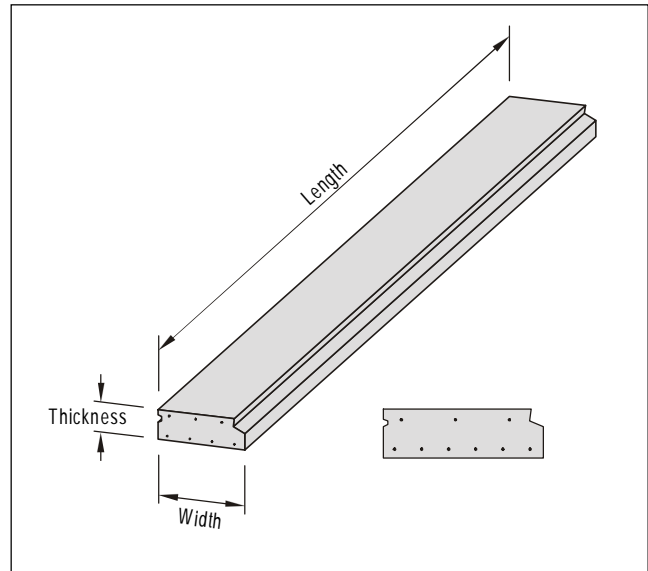


Fig. 1: Contec Slab Panel (AAC steel reinforced element).

Thickness * in	Design Weight			
	GB3.3/0.6		GB4.4/0.7	
	psf	lb/ft	psf	lb/ft
4 (3 7/8)	14.75	29.51	17.20	34.43
5 (4 7/8)	18.43	36.89	21.51	43.04
6 (5 7/8)	22.12	44.27	25.81	51.65
7 (6 7/8)	25.81	51.65	30.11	60.25
8 (7 7/8)	29.49	59.02	34.41	68.86
10 (9 13/16)	36.87	73.78	43.01	86.08
12 (11 13/16)	44.24	88.54	51.61	103.29

* Nominal dimension (Exact dimension)

Thermal properties

Thickness *	Thermal Resistance "R"	
	GB3.3/0.6	GB4.4/0.7
4 (3 7/8)	4.05	3.36
5 (4 7/8)	5.06	4.20
6 (5 7/8)	6.07	5.03
7 (6 7/8)	7.08	5.87
8 (7 7/8)	8.09	6.71
10 (9 13/16)	10.12	8.39
12 (11 13/16)	12.14	10.07

Fire Performance

Material	Thickness in	Fire Rating Hrs.	UL Design Number (UL Fire Resistance Directory 1998)
Reinforced Slab Panels GB3.3/0.6 and GB4.4/0.7	6 and up	4	U909, P932
Note: Testing performed at Underwriters Laboratories, Inc., under ASTM E119 (UL/ANSI 263) "Fire Tests of Building Construction and Materials".			

Design considerations

- Contec AAC Slab Panel can be used as floor or roof systems and shall be designed in order to comply with safety and serviceability requirements as specified by ACI 318-95 and following guidelines of ACI 523.2/R-96.
- The service loads according to the region and Local Building Codes will determine the maximum span.
- Slab panels can be supported by Contec Masonry Walls, regular masonry walls and concrete or steel beams.

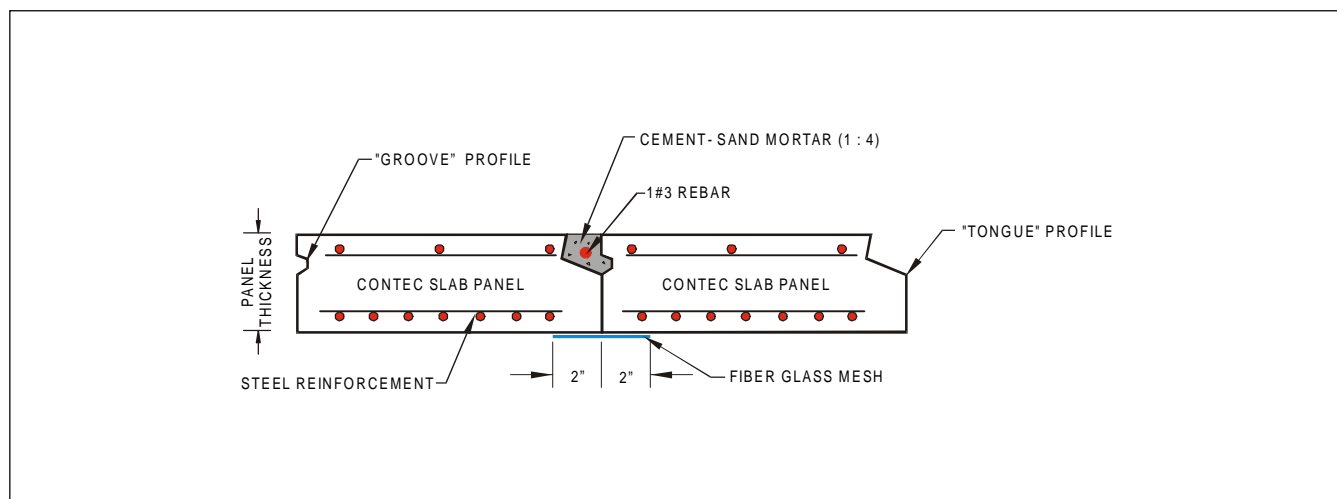


Fig. 2: Typical cross section in Contec Slab Panels.