

# Contec Board

## Technical Sheet

### General features

Lightweight, fire resistant\*, water penetration resistant\*\*, pest resistant, fast and easy to install, versatile and affordable. Contec Board is an AAC, steel reinforced board. Reinforcement is Grade 70 steel covered with an anti-corrosive coat. Contec Board can be cut and drilled with conventional tools.

\* Under ASTM E119-95 UL®

\*\* ASTM E514

### Uses

Contec Board can be used as cladding for external non-loadbearing walls in metal or wood frame construction. Suitable for residential, commercial and industrial buildings.

### Dimensions

**Length:** 8 and 10 ft.

**Width:** 24 in.

**Nominal Thickness:** 2 and 3 in.

### Properties

Characteristic	GB3.3/0.6 (37 pcf) <sup>(1)</sup>
Design weight (pcf)	45
Modulus of elasticity (psi)	249,000
Drying shrinkage (in/ft)	0.003
Thermal expansion coefficient (1/°F)	$4.4 \times 10^{-6}$
Resistance to freezing <sup>(2)</sup>	0.979

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

Material	Thickness* in	Thermal Resistance "R" ft <sup>2</sup> h °F / Btu
Contec Board GB3.3/0.6 Density 37 pcf K = 0.97 Btu in / ft <sup>2</sup> h °F	2 (1 15/16)	2.02
	3 (2 15/16)	3.03

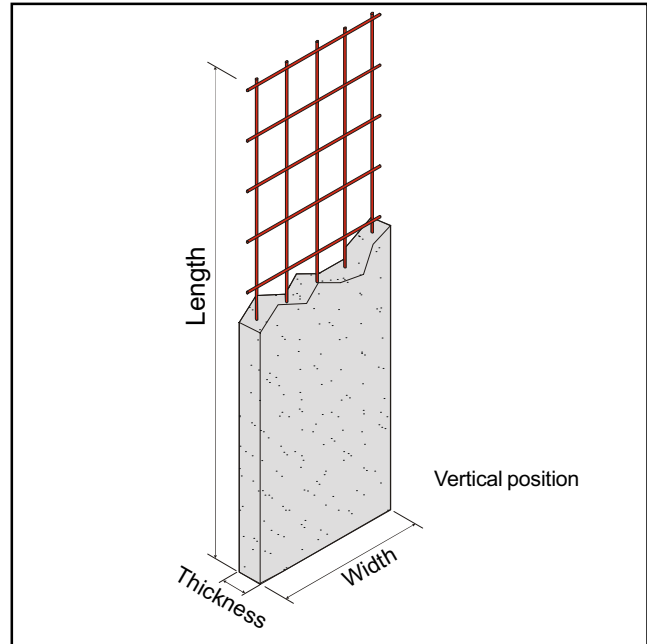


Fig. 1: Contec Board (AAC steel reinforced board).

Thickness* in	Length ft	Design Weight		Pieces per Pallet	Area Covered per Piece ft <sup>2</sup>
		psf	lb/piece		
2 (1 15/16)	8	7.37	117.97	16	16
	10				
3 (2 15/16)	8	11.06	176.96	10	20
	10				

Material	Thickness* in	Fire Rating Hrs.	UL Design Numbers (UL Fire Resistance Directory)
Contec Board GB3.3/0.6 (Wood frame assembly)	3	1	U 358
Contec Board GB3.3/0.6 (Metal frame assembly)	3	2	V 420

\* Nominal dimension (Exact dimension)

## Design considerations

- Contec Board 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. Contec Board should be installed in the vertical position.
- The wind loads, according to the region and Local Building Codes, will determine the number of screws and furring channels required in each Contec Board.
- Foundation should be constructed with a brick ledge (Fig. 2, a) or by installing a galvanized steel angle (Fig. 2, b).
- Structure: Framing should be designed according to Local Building Codes (including Contec Board weight).
- Furring channels for supporting Contec Board should be attached to structure (a 2" X 4" wood beam can be used instead of furring channels in wood frame construction.)
- Asphalt felt should be installed on all wall area before Contec Board installation to provide for a vapor barrier.
- Control joints may be vertical and horizontal and are placed to prevent random cracking due to thermal expansion and contraction.
- Vertical control joints should be spaced at 20 ft maximum from each other and at the corners. The width of the vertical control joints should be 3/8" and should be sealed with backer rod and caulking.
- Horizontal control joints should be placed for two-story construction between the upper and the lower Contec Boards. The width of the horizontal control joint should be 5/8" for metal frame or 1" for wood frame, and should be sealed with backer rod and caulking.

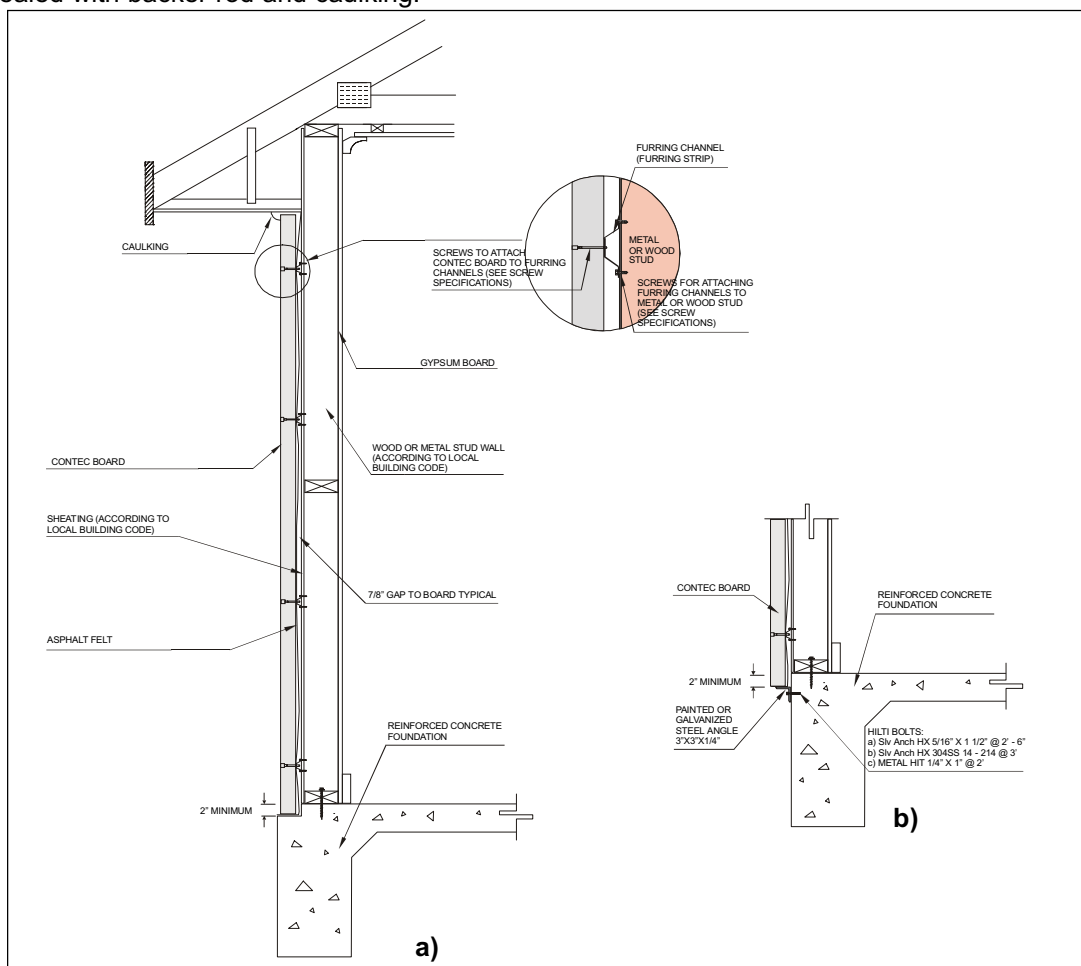


Fig. 2: Typical cross section for a Contec Board construction. Foundation with: a) Brick ledge, b) Painted or galvanized angle.

## Furring channel specifications

Galvanized steel 20-Gauge, minimum G 60. (Top hat profile).

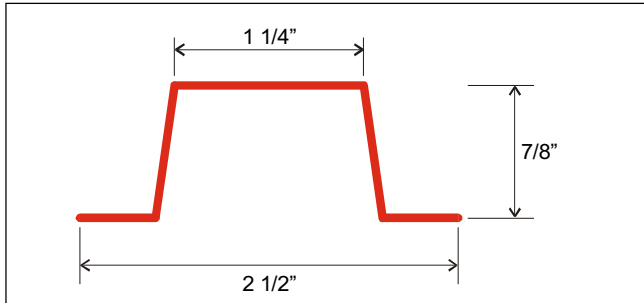


Fig. 3: Typical furring channel cross section.



Fig. 4: Galvanized furring channel.

## Screws specifications

Type of Screw	Installation	Stories	Wind (mph)	Number of furring channels per Contec Board <sup>(1)</sup>	Number of screws per furring channel <sup>(2)</sup>			Total of Screws per Contec Board
					Top furring channel	Middle furring channels	Bottom furring channel	
14-10 X 100 mm Bugle Rib Head Type 17	Contec Board exterior face to furring channel	First Story	≤ 80	4	2	3	2	10
			up to 110		3	4	3	14
		Second Story and up	≤ 80	5	2	3	2	13
			up to 110		3	4	3	18

<sup>1</sup> Maximum spacing is 30" and maximum spacing for corner boards for high wind zones (> 100 mph wind speed) is 24".  
<sup>2</sup> For Fire resistance requirements, see UL Design No. U 358 and V 420 in Fire Resistance Directory.

Table 1: Screws for attaching **Contec Board 8 ft** length to furring channels.

Type of Screw	Installation	Stories	Wind (mph)	Number of furring channels per Contec Board <sup>(1)</sup>	Number of screws per furring channel <sup>(2)</sup>			Total of Screws per Contec Board
					Top furring channel	Middle furring channels	Bottom furring channel	
14-10 X 100 mm Bugle Rib Head Type 17	Contec Board exterior face to furring channel	First Story	≤ 80	5	2	3	2	13
			up to 110		3	4	3	18
		Second Story and up	≤ 80	6	2	3	2	16
			up to 110		3	4	3	22

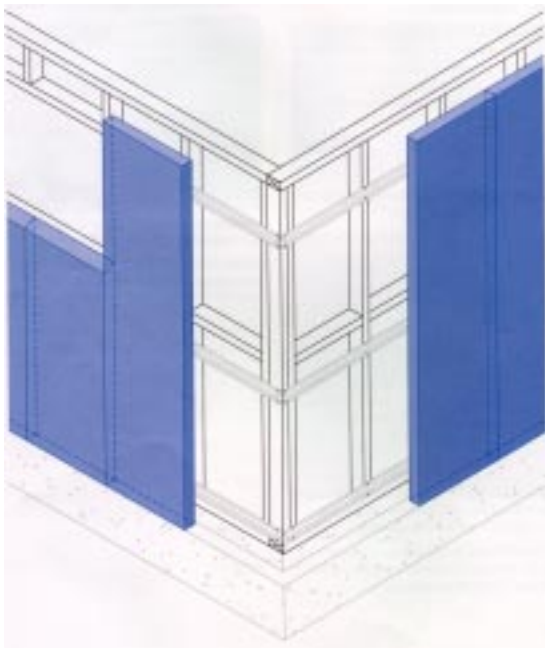
<sup>1</sup> Maximum spacing is 30" and maximum spacing for corner boards for high wind zones (> 100 mph wind speed) is 24".  
<sup>2</sup> For Fire resistance requirements, see UL Design No. U 358 and V 420 in Fire Resistance Directory.

Table 2: Screws for attaching **Contec Board 10 ft** length to furring channels.

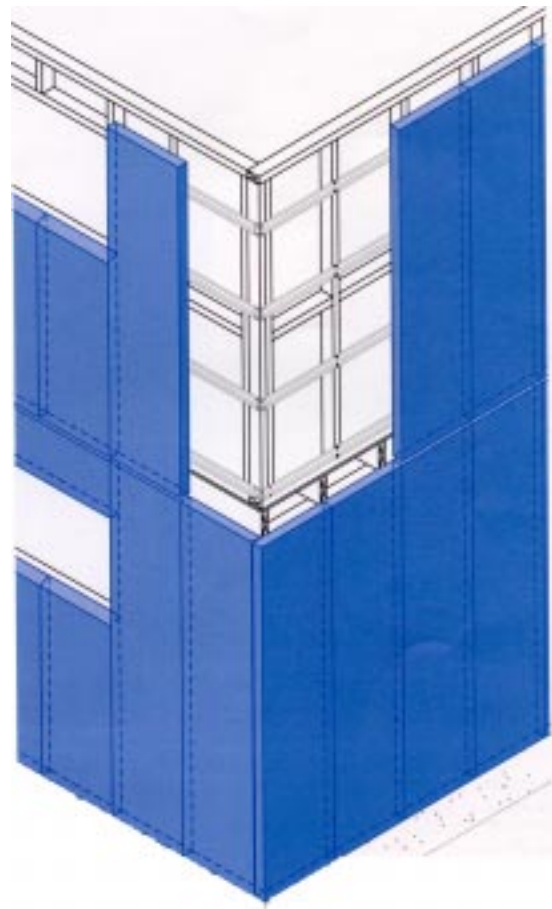
Application	Distributor	Type of screw	Size
To fix furring channel to wood stud frame:	Grabber	Hex Head Self Drilling	8 X 1"
	ITW Buildex	Trugrip GT Hex Head	9-15 X 1"
To fix furring channel to metal stud frame:	Grabber	Hex Head Self Drilling	8 X 5/8"
	ITW Buildex	#3 Teks Self Drilling Fastener Hex Head	10-16 X 5/8"

Note: For screws quantity, see material estimation guidelines.

Table 3: Screws for attaching furring channels to stud frame.



*Fig. 5: One-story construction.*



*Fig. 6: Two-story construction.*