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## **Construction Bulletin**

### **Building Layout and Foundation Dimensions**

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The building layout or foundation dimensions for walls or buildings using Conform, may have to changed from the production or design drawings to suit the field conditions that occur during construction of Conform Walls.

The individual components of Conform are manufactured to a tolerance of  $\pm 0.38$  mm ( $\pm 0.015$ "). However, <u>the actual</u> wall lengths that are achieved during construction in the field, will vary from the theoretical dimensions given on the production or design drawings, due to the large number of components in any given length of wall. Also, thermal expansion and contraction of the polymer affects the actual wall length that is achieved during construction in the field.

Typically, for walls with conventional roofing and for nonload bearing walls, the final length of the walls are adjusted on site, to suit the required dimensions. The last 1 to 2 metres (3' to 6') at the end or corner of a wall is measured and erected as required by substituting alternate pieces in the wall in accordance with the Conform Wall Dimension Chart. Also, alternate pieces are substituted throughout the length of a wall if openings, expansion joints, etc are required at specific locations.

However, where an individual unit width or opening width is repeated with specific components in an identical manner, it may not be possible to substitute alternate pieces i.e. condominium suites or strip mall windows. In this case, the dimensions for the foundations, the steel framing and other items are adjusted to suit the field length of Conform walls.

For components produced after August 1, 2004, field experience has indicated that the layout dimensions should be adjusted as follows:

#### CF4 - 100 mm (4") walls

- 5°C (41°F) reduce the layout dimensions by 0.10% i.e. 10 mm per 10 metres (0.48 " per 40 feet)
- 20°C (68°F) increase the layout dimensions by 0.0% i.e. 0.0 mm per 10 metres (0.0 " per 40 feet)
- 35°C (95°F) increase the layout dimensions by 0.10% i.e. 10 mm per 10 metres (0.48 " per 40 feet)

#### CF6 - 150 mm (6") walls

- 5°C (41°F) increase the layout dimensions by 0.0% ie. 0.0 mm per 10 metres (0.0 " per 40 feet)
- 20°C (68°F) increase the layout dimensions by 0.10% ie. 10 mm per 10 metres (0.48 " per 40 feet)
- **35°C (95°F)** increase the layout dimensions by 0.20% ie. 20 mm per 10 metres (0.96 " per 40 feet)

#### CF8 - 200 mm (8") walls

- 5°C (41°F) reduce the layout dimensions by 0.10% i.e. 10 mm per 10 metres (0.48 " per 40 feet)
- 20°C (68°F) increase the layout dimensions by 0.0% i.e. 0.0 mm per 10 metres (0.0 " per 40 feet)
- **35°C (95°F)** increase the layout dimensions by 0.10% i.e. 10 mm per 10 metres (0.48 " per 40 feet)

#### CF8i - 200 mm (8") walls

- 5°C (41°F) reduce the layout dimensions by 0.20% i.e. 20 mm per 10 metres (0.96 " per 40 feet)
- 20°C (68°F) reduce the layout dimensions by 0.10% i.e. 10 mm per 10 metres (0.48 " per 40 feet)
- 35°C (95°F) increase the layout dimensions by 0.0% i.e. 0.0 mm per 10 metres (0.0 " per 40 feet)

It should be noted that the field conditions may be taken into account when preparing the production or design drawings.

- The dimensions indicated on the design drawings may be adjusted based on the field length of the walls or
- The components indicated on the production drawings may be selected based on the field length of the walls

In either case noted above, it will not be necessary to change the building layout/foundation dimensions.

#### IMPORTANT

The contractor must contact the designer to determine if the field conditions have been incorporated into the dimensioned drawings or production drawings prior to proceeding with the foundation layout or the building construction.

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