

Sliding Of Components

The components of Conform slide and interlock together to provide a finished stay-in-place formwork for walls. The ease with which the components can be erected can vary depending on the a number of factors.

The individual components of Conform are manufactured to provide loose joints with a tolerance of + 0.25 mm (+ 0.010"). However, several factors affect final tolerance in the field and the ease of sliding of the components during erection of the walls.

Some of the factors that affect the ease of construction can be influenced by the erection procedures and the contractor should make all efforts to provide the best conditions possible for the erection of the components.

- a) True, straight and untwisted components** – All components should be stored on a flat level surface in straight, closely packed piles so that the components are not bowed or twisted.
- b) True, straight and undamaged legs and grooves** – The box connector legs and panel grooves of all components should be handled and stored to avoid bending, twisting, or damaging of the interconnecting legs and grooves.
- c) Undamaged ends** – The ends of components should be protected from damage when handling and storing the components. The end of a box connector leg must not scrape or bind against the side of the panel groove, since the sharp edges can scrape the side of the groove and inhibit the sliding of components. In some cases, the contractor might chamfer or round the end of the box connector leg to prevent the scraping action.

- d) Dry, clean and undamaged faces** – The faces of box connector legs and panel grooves of all components should be stored free of all dirt and debris and protected so that faces are dry, clean and undamaged. Box connector legs and panel grooves must be cleaned of all surface dirt just prior to erection and may be lubricated with WD40, Armor-All Vinyl Cleaner or Liquid detergent immediately prior to erection or as erection proceeds. Air borne dust and dirt will adhere to a wet or lubricated surface and inhibit the sliding of components. **Do not leave wet and lubricated pieces exposed to dusty conditions.**
- e) Erection at moderate temperatures** – The recommended temperature of the components, at time of erection, is between 10°C to 30°C (50°F to 86°F). All components must be stored to avoid excessive heat build up and to avoid cold temperatures. The polymer material has a high coefficient of thermal expansion and excessive variation in temperature may affect the tolerance at the interlocking joints.
- f) Uniform temperature for all faces** – The components should be stored to maintain the same temperature on all sides, since the exposure of one side to higher temperatures, i.e. the sun, can cause bowing of the components which will inhibit sliding.
- g) Erection in moderate wind conditions** – The components should be erected when wind conditions are light. This will avoid bowing of the components due to wind pressures and also will make it easier to handle and align the joints plumb and parallel.

- h) Plumb and parallel joints** – The components should be erected so that all joints are plumb and parallel to each other. If components are erected at a slight angle to each other the box connector legs and panel grooves will scrape and bind which will inhibit the sliding of the components. If a scraping action is started as the pieces are initially interconnected, it may be necessary to remove the excess scraped material from the leg or groove of the components.
- i) Continuous sliding action** – The components should be slid together in a continuous action. The material in close contact has a high coefficient of static friction and a low coefficient of dynamic friction. Once the pieces are in motion, it should be maintained at a steady constant rate until the components are completely in place. A slow constant sliding action is preferable to a stop and start action.
- j) Adequate bracing** – The components should be erected with adequate bracing to prevent movement of components that are already erected, as new components are installed. If movement of existing components is not prevented, it will be difficult to align the joints plumb and parallel to each other.