

Cosinus Slide[®] X- and T-Crossing

Important: There is no need to cut the Crossing Element anymore. It is now adjustable like the Cosinus Slide[®] Joint.

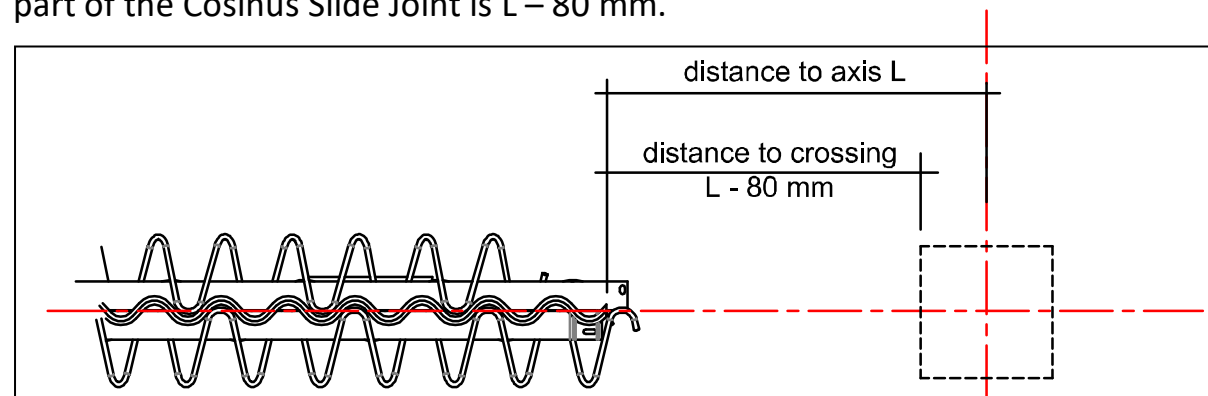
Make sure you have the correct crossing element that corresponds to the floor and joint height.

Avoid L-connections as much as possible. Those may block, fail and induce cracks in the concrete floor. If L-connections are inevitable create those by cutting and welding the profiles properly. Do not forget additional reinforcement at the outer side of the L-connection. We recommend using pre-opened joints (foam) for L-crossings in order to minimize the risk of failures.

Step 1: Define the exact location of the joint crossing and measure the length L between last placed joint profile and the axis.

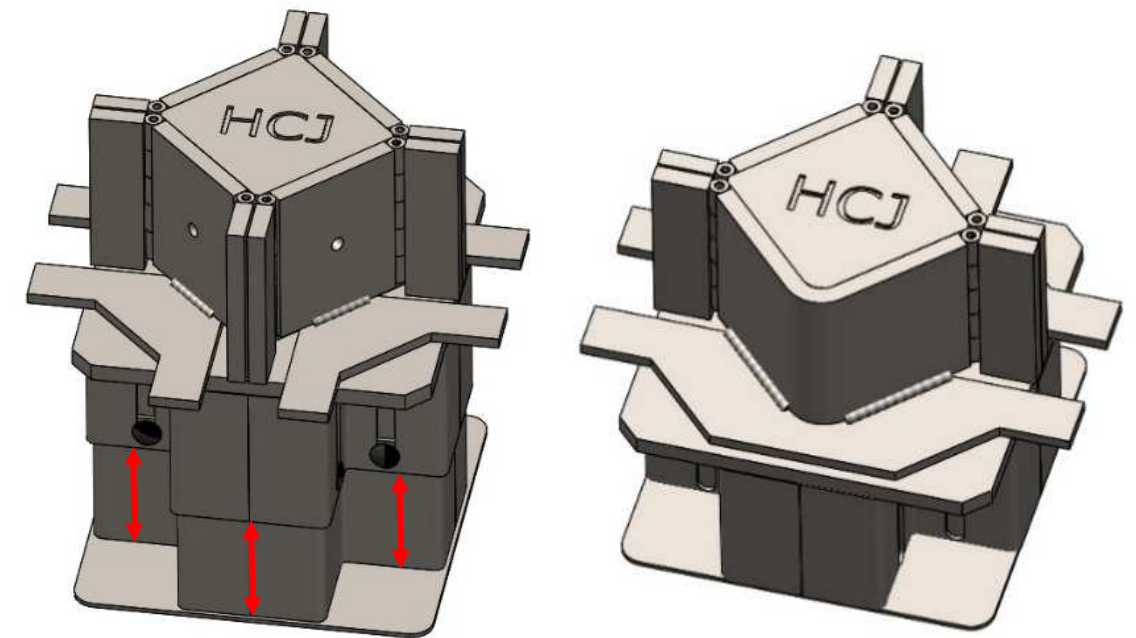
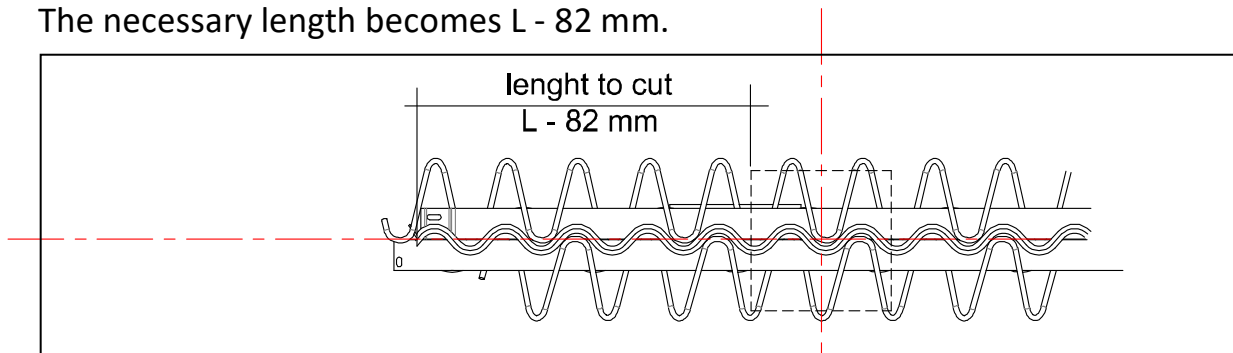
All length has to be measured from the end of each respective upper sinus wave.

The crossing element has a size of 160 x 160 mm. Thus the length of the missing part of the Cosinus Slide Joint is $L - 80$ mm.

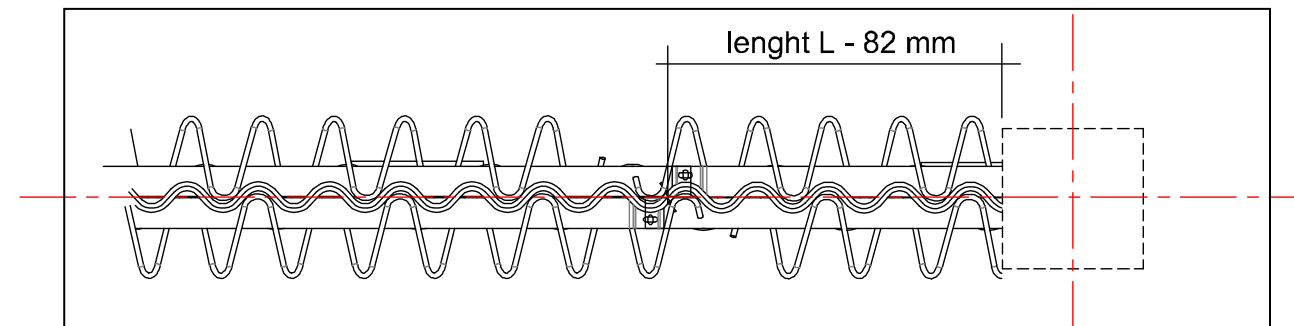


Step 2: Cut the Cosinus Slide Joint to the necessary length. In order to make sure the crossing element will fit, deduce a tolerance of 2 mm.

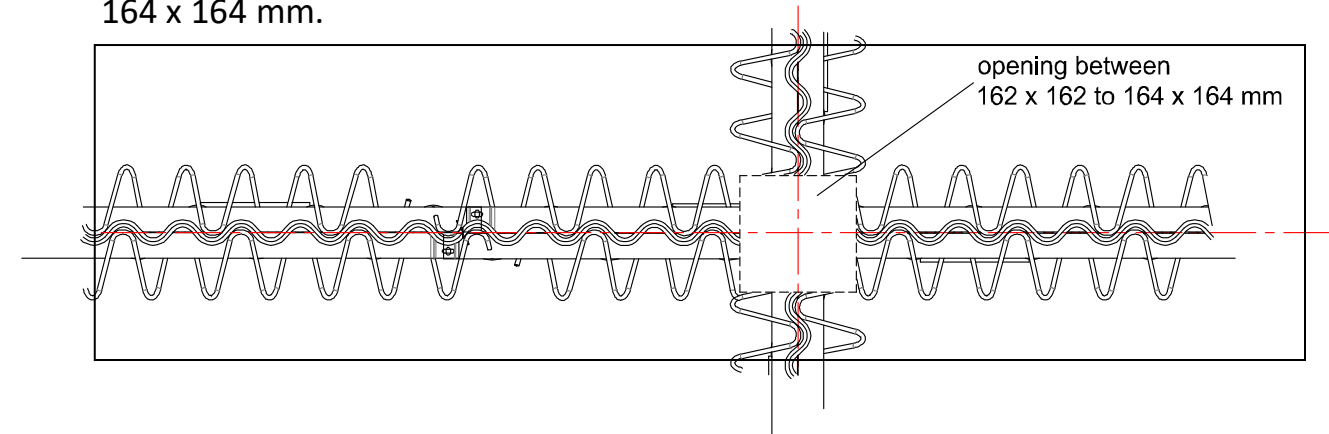
The necessary length becomes $L - 82$ mm.



Step 3: Place, align and fix precisely the cut joint profile as usually to the last installed Cosinus Slide Joint.



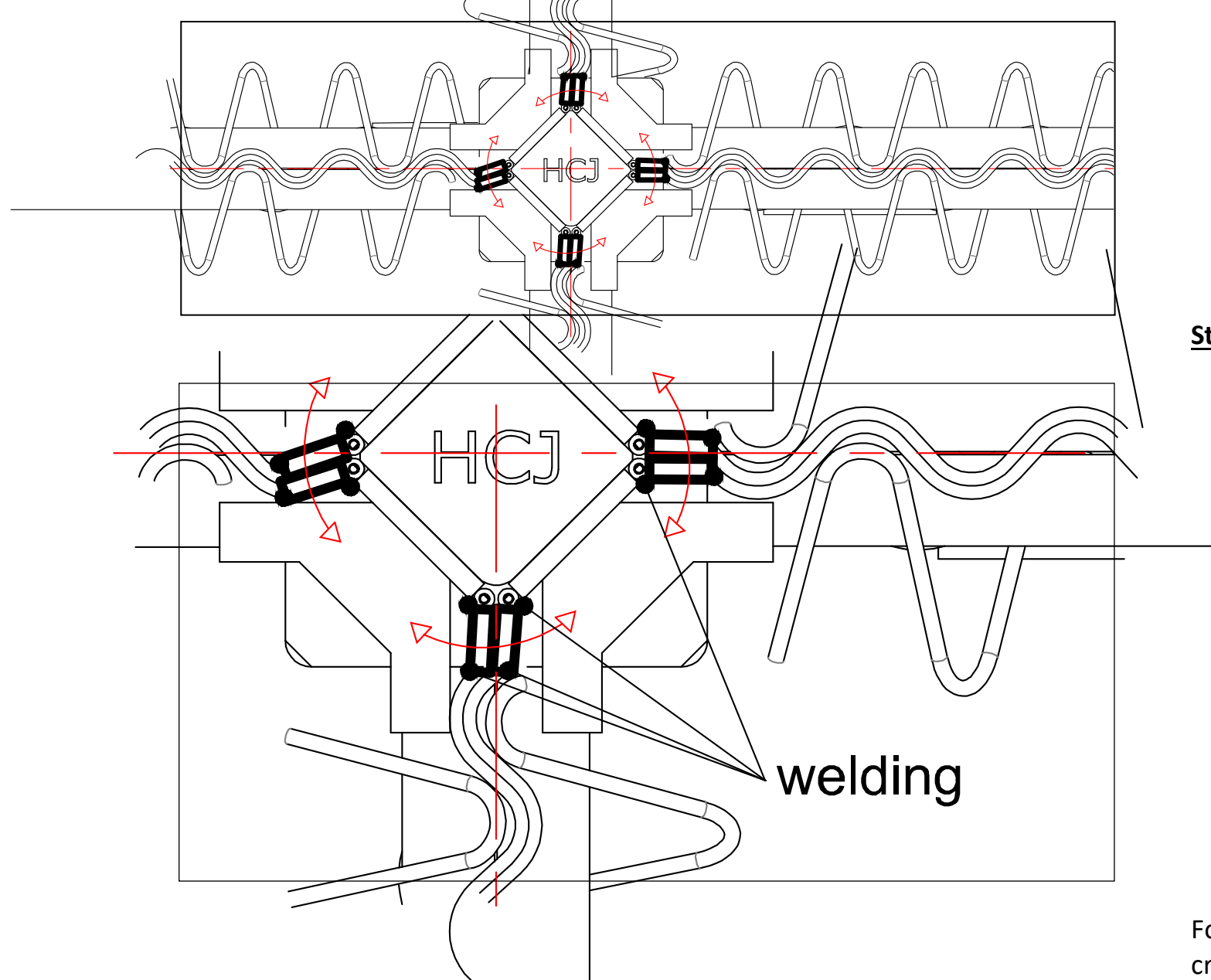
Step 4: Continue this way until you have placed the profiles all around the intersection of the joints. Make sure that the square opening has between 162 x 162 mm and 164 x 164 mm.



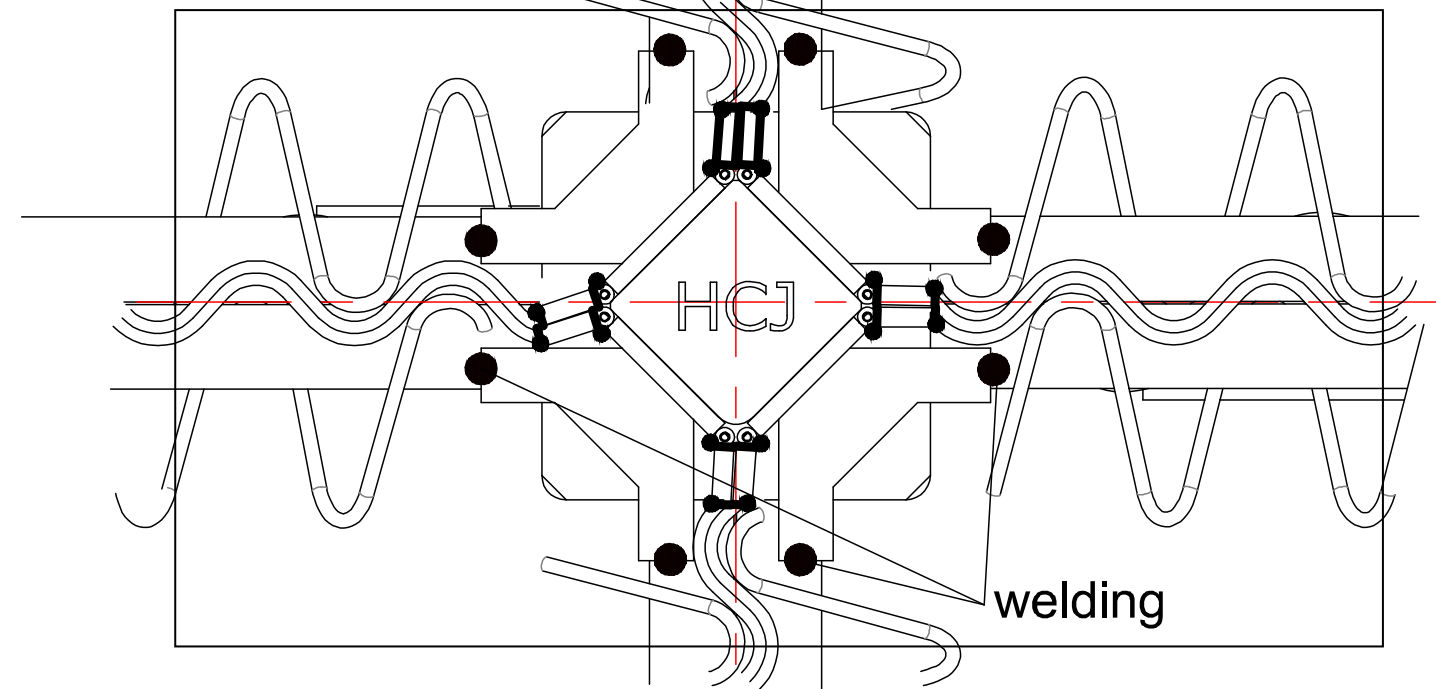
Step 5: Slide the crossing element into gap between the profiles. It will automatically be levelled out and aligned in the correct position.

Now bring the movable parts of the crossing element in line with the upper parts of the sinus wave of each profile and weld each outer side of the sinus wave to the corresponding movable part of the crossing element.

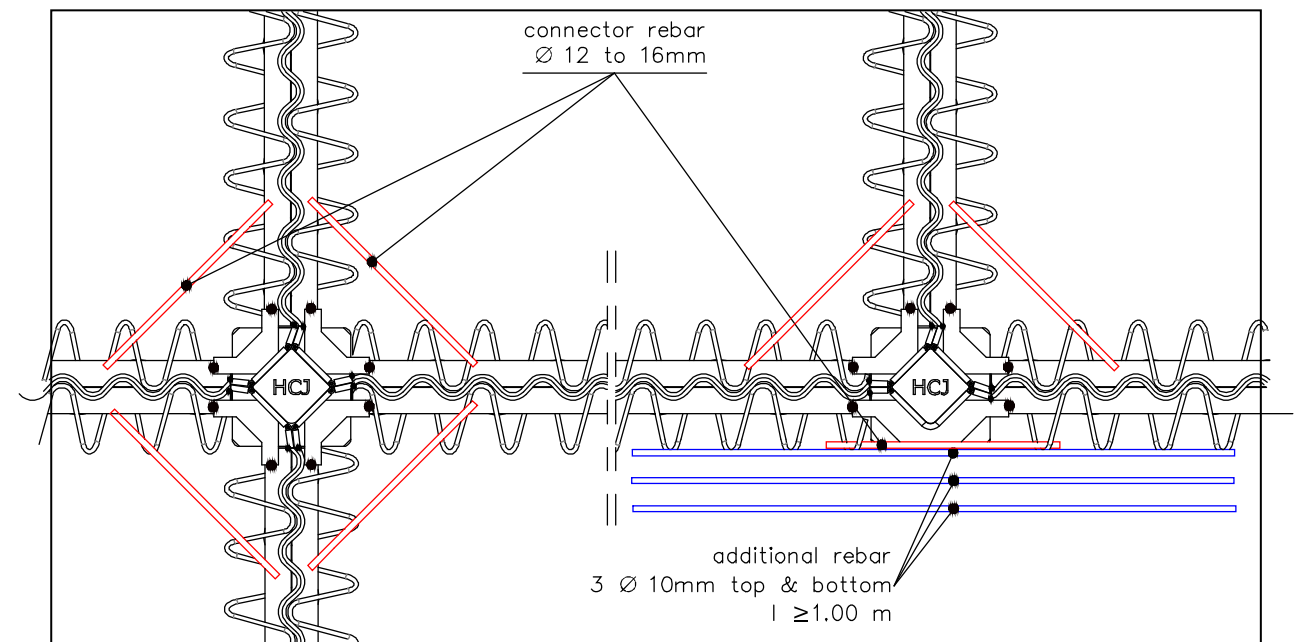
All locations that require welding are highlighted with a coloured mark.



Step 6: Now weld also the horizontal parts.



Step 7: Place some additional rebars to reinforce the corners and to prevent uncontrolled concrete cracking at a T-crossing.



Following the pre-described steps should lead to an impeccable result with all joints and crossing elements flush and even at the concrete top level.

Make sure that in the concrete pouring and finishing process no material exceeds the top level of the profiles and crossing elements.

In case of need, little grinding may help to achieve final flatness requirements.