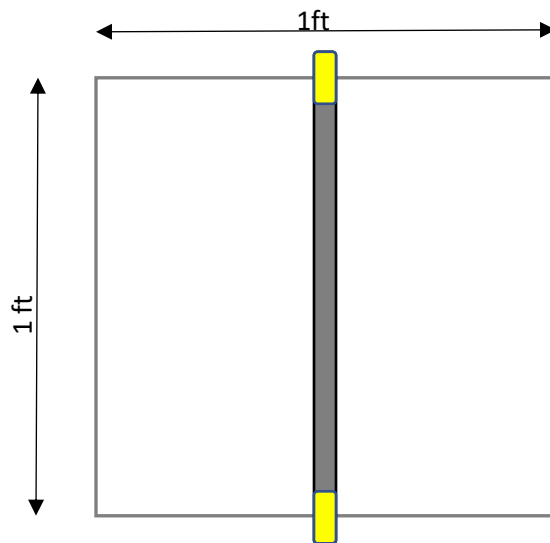


Concrete Sample for iCOR and XCELL Demo

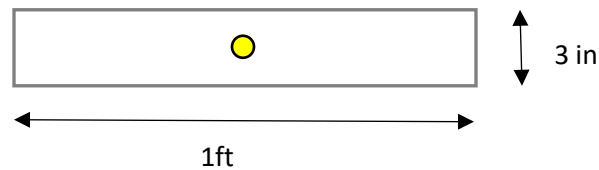
This document is quick guide to build demo samples for the iCOR and XCELL. Given dimensions can be modified if a smaller or larger samples are required, a second bar can also be added perpendicular to the first one.

1ft x 1 ft x 3 in concrete sample with one embedded bar

Top view



Side view



Rebar

Use a 14 in long bar with the diameter of your choice, #3, #4 or #5 would be perfectly acceptable for this application. Put epoxy on 2 inches at each end of the rebar. The epoxy will prevent the corrosion to occur at the extremities of the bars and at the concrete and rebar interface on the edges. This will force the corrosion to occur towards the middle of the sample.



Cover

A cover of around 1 to 2 in would be ideal.

Self-tapping screw

To make any easy connection with the reinforcement, simply use a self-tapping screw made out of grade 316 LN stainless steel, or any other type of stainless that is proven to resist to your exposure condition. Only cover the rebar with epoxy once the self-tapping screw is installed, the connection between the self-tapping screw and the rebar should be epoxy coated. Leave part of the self-tapping screw exposed to make the connection possible.

