

# INSTALLATION GUIDE MDC SUPPORT SYSTEM

Ancon MDC Bracket Angle Support Systems are generally fixed to concrete and steel frames. Adjustment is provided in every direction to allow for tolerance in the structural frame. Vertical, horizontal and lateral tolerances are catered for in the following procedures.

## CAVITY VARIATION

Variations in cavity size are overcome in two ways,

1. Increase in cavity is accommodated by inserting full height stainless steel shims between the structural face and the back of the MDC bracket. The maximum allowable shim thickness for a given project is stated on our layout drawings. Shims can be included between the bracket and the frame up to a maximum thickness of the outside diameter of the fixing bolt, or 16mm, whichever is less. In exceptional circumstances, increased shimming can be accommodated, after consultation with our Technical Staff.

When utilising shims, they must be of sufficient length to extend to the bottom of the bracket.

2. Decrease in cavity is overcome by re-positioning the brick on the support angle, thus increasing the amount of actual support under the brick. This operation may necessitate cutting the brick to clear the angle radius. Design criteria govern the extent of allowable movement.

## HORIZONTAL ADJUSTMENT

This form of continuous support system is designed with 10mm nominal gaps between individual angles. Horizontal cast-in channel, or horizontal slots in the steelwork (provided by others) facilitate adjustment of the angles.

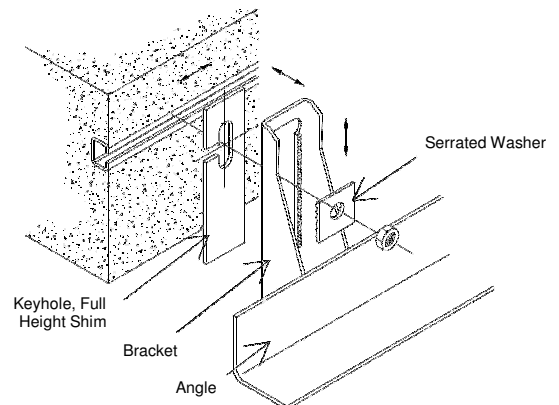
## VERTICAL ADJUSTMENT

The vertical slot in the back of the MDC bracket allows up to 60mm vertical adjustment. i.e.  $\pm 30$  mm.

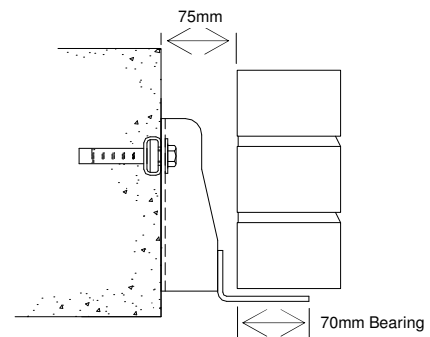
## FIXINGS

It is important to utilise the fixings supplied as these are an integral component of the design. Serrated washers must be installed in the correct orientation i.e. serrations horizontal to match those on the bracket. Ensure nuts are tightened to the specified tightening torque specified on the drawings (see Installation Guide - Bolts).

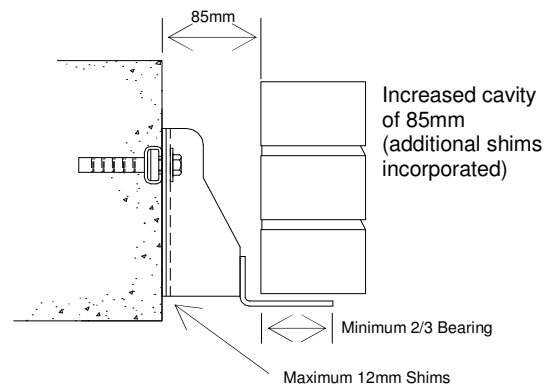
## ADJUSTMENT OF MDC SUPPORT SYSTEM



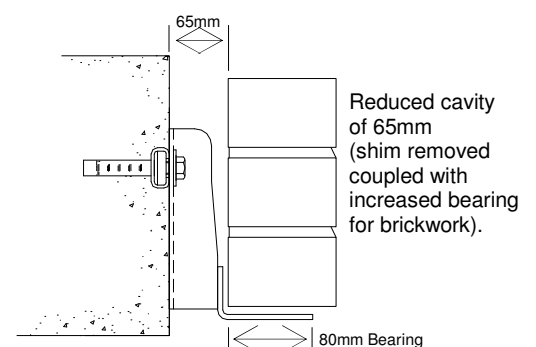
## DESIGN CAVITY



## INCREASED CAVITY



## REDUCED CAVITY



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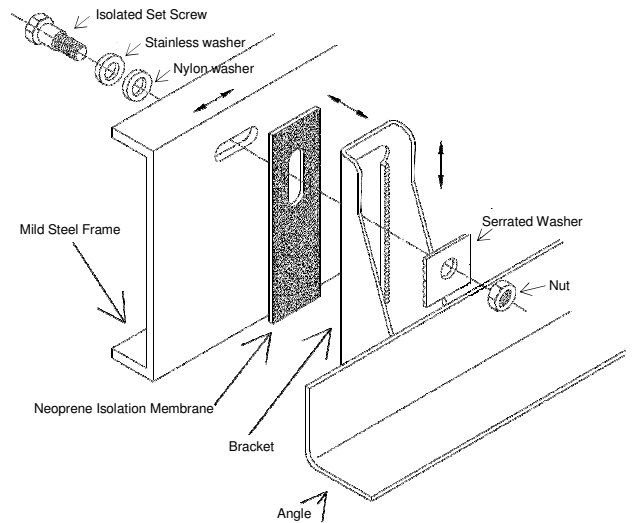
## BI-METALLIC CORROSION

Ancon Support Systems are manufactured from grade 304 (1.4301 to EN 10088) stainless steel and will be suitable for most building applications.

Bi-metallic corrosion may occur in a damp environment where the stainless steel support system is bolted to the structural steel frame. This will not affect the stainless steel, but could slightly increase the corrosion rate of the carbon steel.

When MDC Systems are fixed back to steel structures, the structural component may be isolated from the stainless steel support system to prevent the possibility of bi-metallic corrosion. This can be achieved in one of two ways.

1. Painting the areas that will be in contact with the support system.
2. Inserting an isolation shim (as shown opposite).



**PREVENTION OF BI-METALLIC CORROSION**

## WALL TIES AND RESTRAINT FIXINGS

Wall ties must be provided at a recommended maximum horizontal spacing of 450mm within 300mm above the support angle.

## SAFETY PRECAUTIONS

Ancon stainless steel products are produced from sheared plate. As with all such industrial fabrications, these may present sharp edges. **Suitable personal protective equipment should be worn at all times during handling and installation.**



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The Construction applications and details provided in this guide are indicative only.

In every case installation should be entrusted to appropriately qualified and experienced persons.

Normal handling precautions should be taken to avoid physical injury. Ancon Building Products cannot be held responsible for any injury as a result of using our products, unless such injury arises as a result of our negligence.