



**INSULATED PANEL & ARCHITECTURAL CLADDING**  
**MANUFACTURING TOLERANCES FOR FACTORY USE**

**1) General**

- a) All materials, workmanship and details to be as per the approved (subject to comments) contract specific samples panel or panels.
- b) Drawings to be read in conjunction with all other relevant cross referenced FP McCann Ltd drawings or details.
- c) All dimensions to be in mm, unless otherwise noted.
- d) Do not scale from drawings or digital data. If in doubt ASK.
- e) Measure from the SOP (Setting Out Point), noted on the bottom corner of the plan view on each unit drawing.
- f) Dimensions detailed from the SOP as a running dimensions.

**2) Fixings**

- a) All channel type fixings to be cast flush with face.
- b) All threaded type socket fixings to be cast in a 10mm recess, unless noted otherwise specifically on the drawing.
- c) All external fixings to be stainless steel, unless noted otherwise specifically on the drawing.

**3) Dimensions/Tolerance**

Permitted dimensional deviations from those stated on the drawings, shall be in accordance with and not exceed:

<b>CONCRETE</b>	<b>Positive (+)</b>	<b>Negative (-)</b>
<b>Length &amp; Width</b>		
up to 3m	3	3
3m to 6m	5	5
6m to 9m	5	5
9m to 12m	10	10
<b>Thickness</b>		
Up to 500mm	3	3
Greater than 500mm	5	5
<b>Straightness or Bow (deviation from intended line)</b>		
up to 3m	5	5
3m to 6m	5	5
6m to 12m	10	10
<b>Squareness (difference in length of two diagonals)</b>		
2mm per 2m of diagonal, up to a maximum of 9mm	-	-
<b>Twist (any corner should not be more than the dimension stated from the plane containing the other three corners)</b>		
up to 3m	4	4
3m to 6m	5	5

6m to 12m	6	6
<b>Openings (within one unit)</b>		
Size	4	4
Location (to centre of opening from SOP)	4	4
<b>Formed Cut Outs (Taken out the corner of one Panel)</b>		
Size	5	5
Location (to centre of opening from SOP)	5	5
<b>CAST IN SOCKETS &amp; CHANNELS</b>		
Position in Section (Centre of fixing to SOP)	5	5
Position in Length (Centre of fixing to SOP)	5	5
<b>Individual inserts relative to thers within a group</b>	2	2
<b>Orientation</b> (Deviation from square over full length of channel)	5	5
<b>Non-structural cast-in items</b> (Architectural)	5	5
<b>CAST IN CONDUITS AND BOXES (VS LOOPS/RAIL)</b>		
Position in Section (Centre of fixing to SOP)	10	10
Position in Length (Centre of fixing to SOP)	10	10
<b>Position of two boxes</b> (within 500mm from each other)	5	5
Position in Length (Centre of fixing to SOP)	5	5
<b>Squareness on Face</b> (Rotation over length of the box)	5	5
<b>CAST IN VERTICAL TIES (COUPLERS, WELLVOID AND GEWI)</b>		
Position in Section (Centre of fixing to SOP)	5	5
Position in Length (Centre of fixing to SOP)	5	5
<b>Position of two boxes</b> (within 500mm from each other)	5	5
Position in Length (Centre of fixing to SOP)	5	5
<b>Squareness on Face</b> (Rotation over length of the box)	5	5
<b>CAST IN LIFTING ANCHORS</b>		
Position in Section (Centre of fixing to SOP)	5	5
Position in Length (Centre of fixing to SOP)	20	20
<b>REINFORCEMENT</b>		
<b>Cover</b> (Min - as noted on the unit drawing)	5	5
<b>Position of projecting bars</b> (On Plan)	10	10
<b>Length of Projecting bars</b> (From concrete profile)	10	10
<b>Projecting bars for temp Handling</b> (Local to door openings etc.)	20	20
<b>Continuity Boxes and M&amp;E Couplers</b> (Position in section from SOP)	10	10
<b>Continuity Boxes and M&amp;E Couplers</b> (Position in length from SOP)	10	10
<b>Position of well voids</b> (Plan on full length, inc. plumbness)	10	10
<b>Length of well voids</b> (From concrete profile)	10	10

The above stands, unless specifically noted otherwise on the detailed drawings. Any

deviation from the above must be notified to the relevant Design Co-Ordinator for information or corrective action.