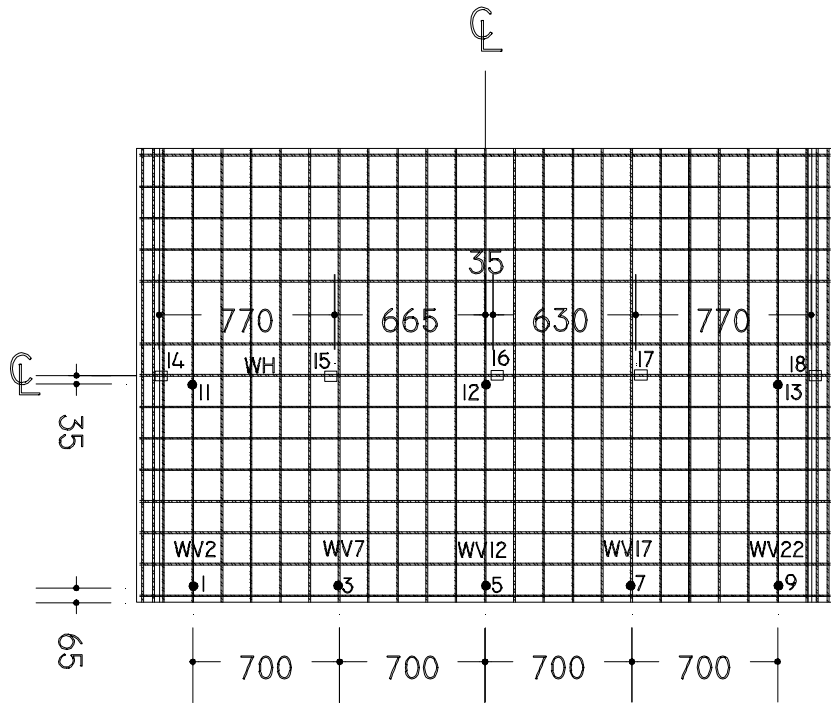
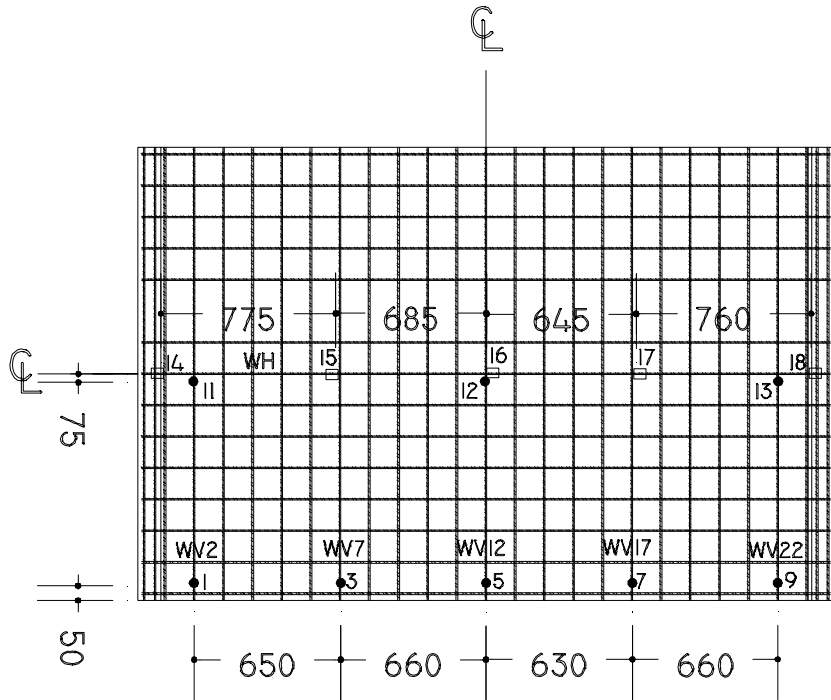


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Electrical Resistance Strain Gauges

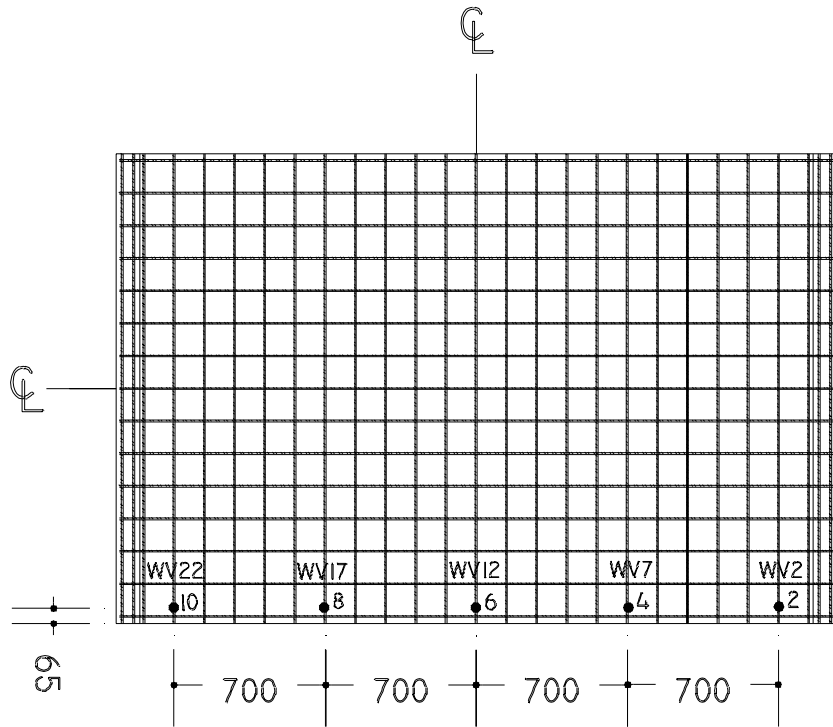


DP1 Web Strain Gauges, West Face

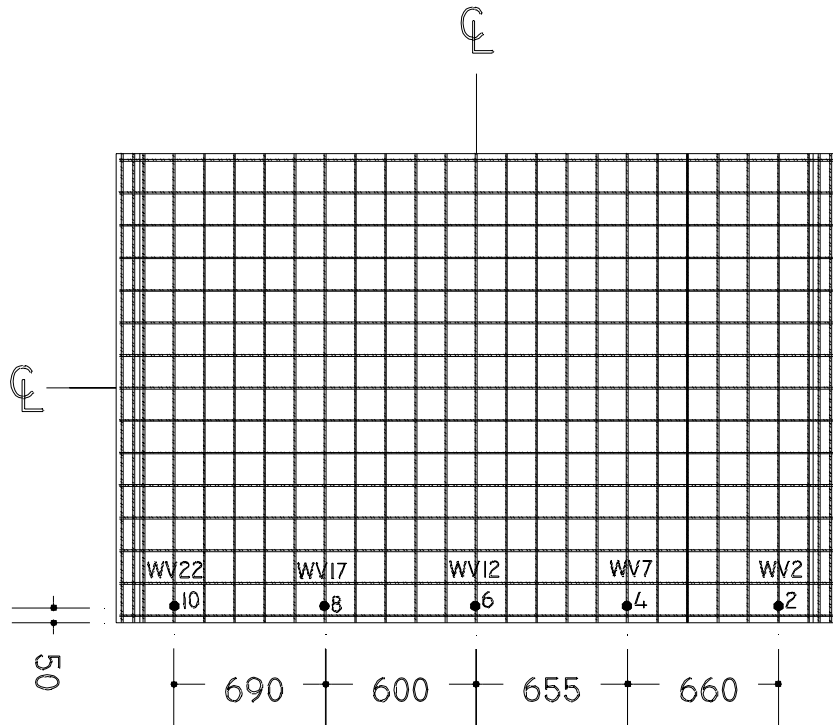


DP2 Web Strain Gauges, West Face

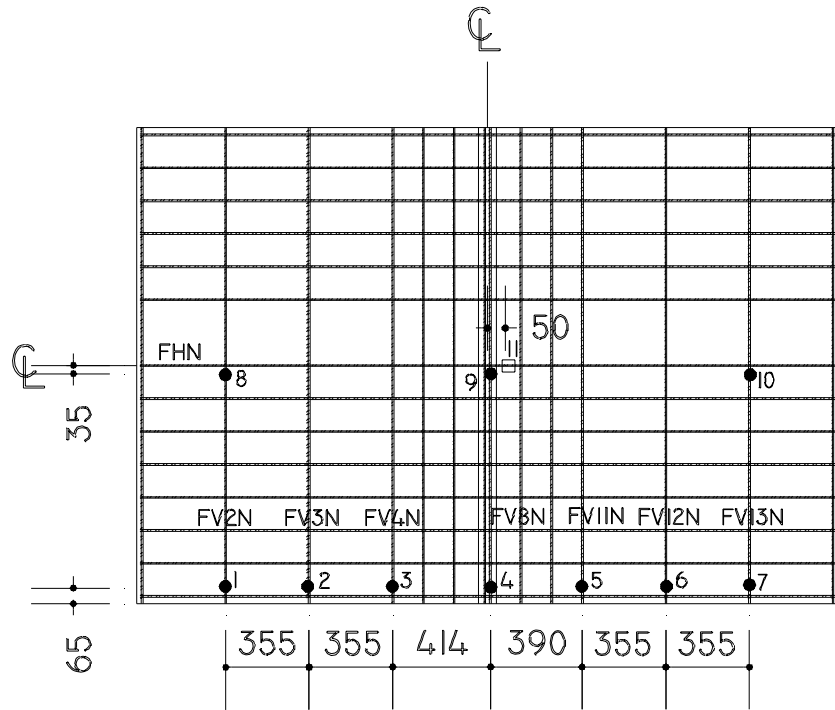
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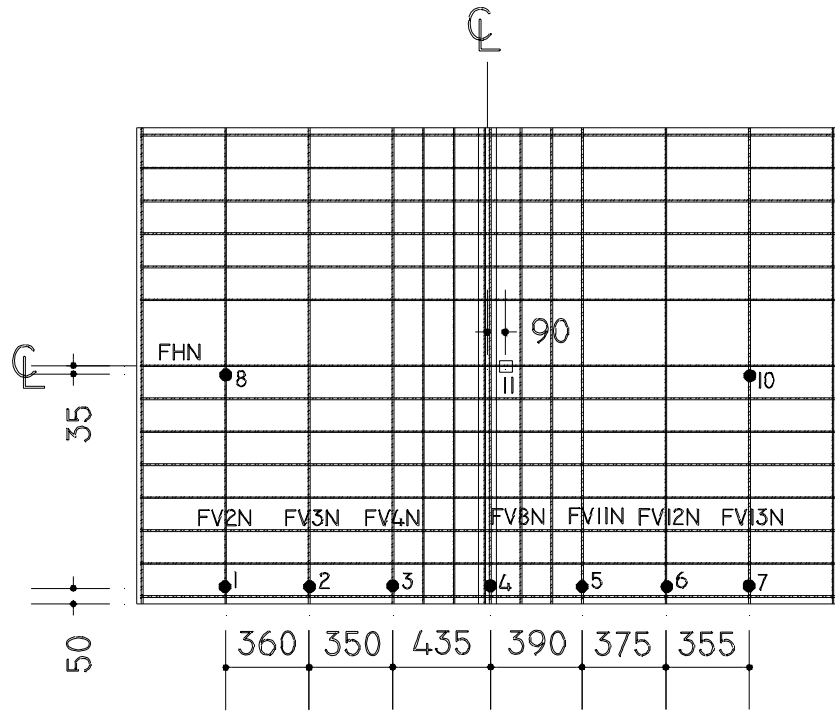
DP1 Web Gauges, East Face



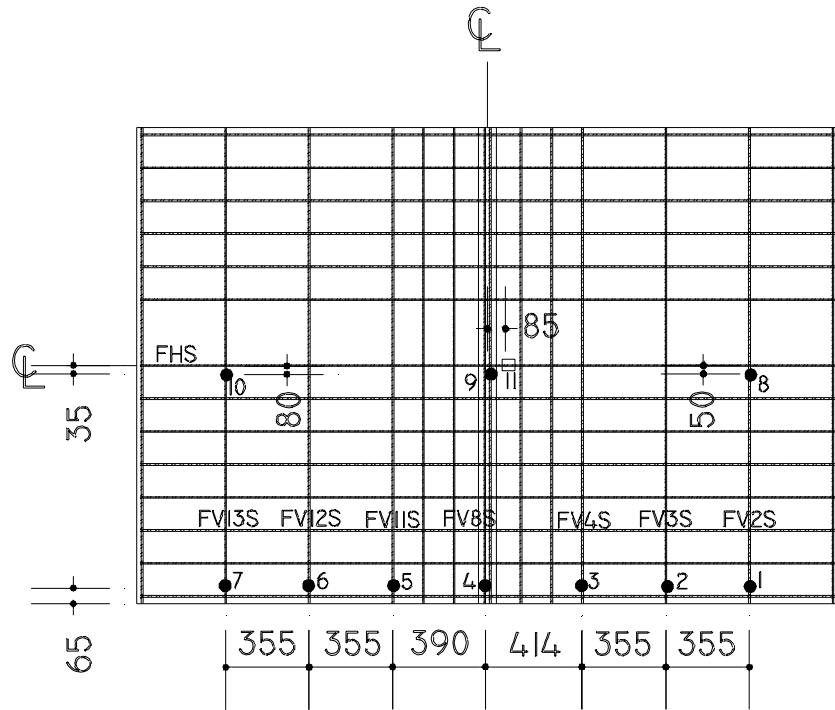
DP2 Web Gauges, East Face



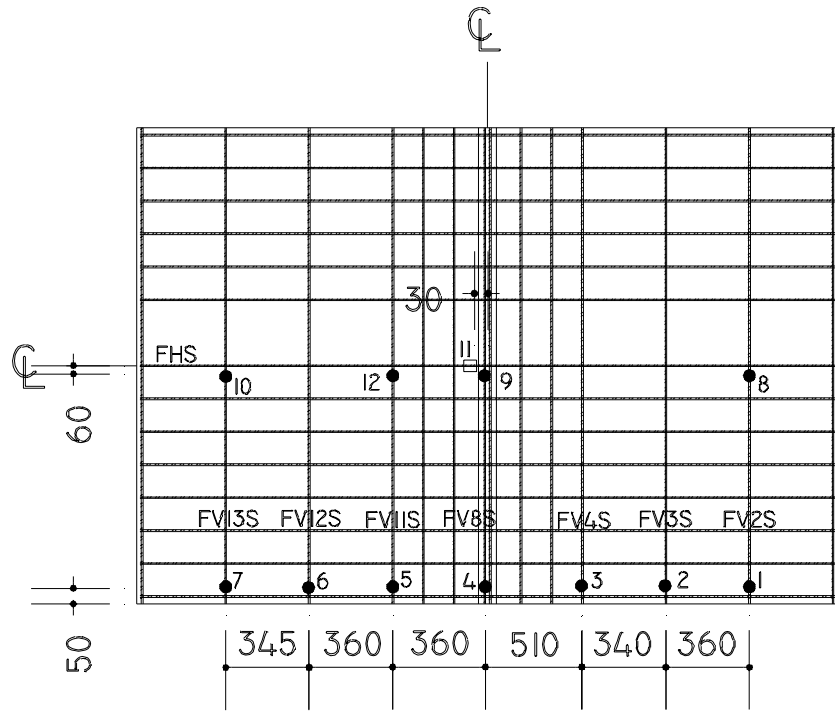
DP1 Flange Strain Gauges, North Face



DP2 Flange Strain Gauges, North Face



DP1 Flange Gauges, South Face

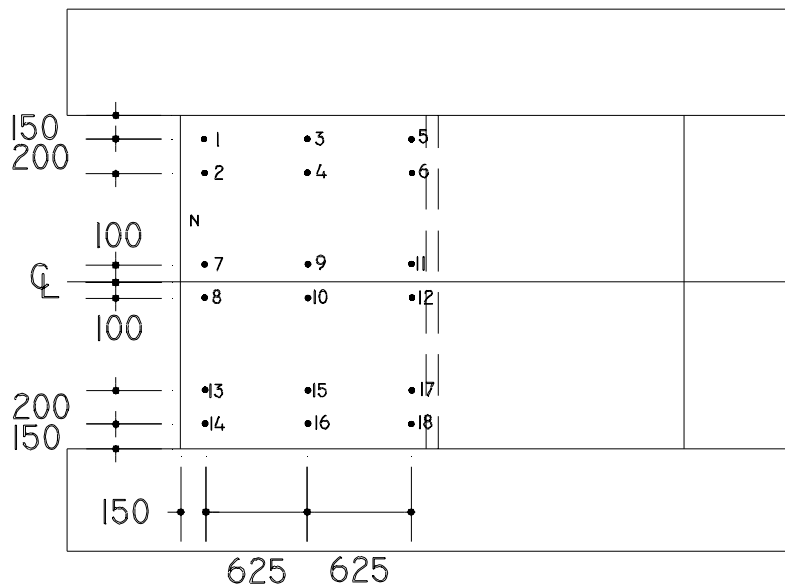


DP2 Flange Gauges, South Face

Concrete Surface Gauges

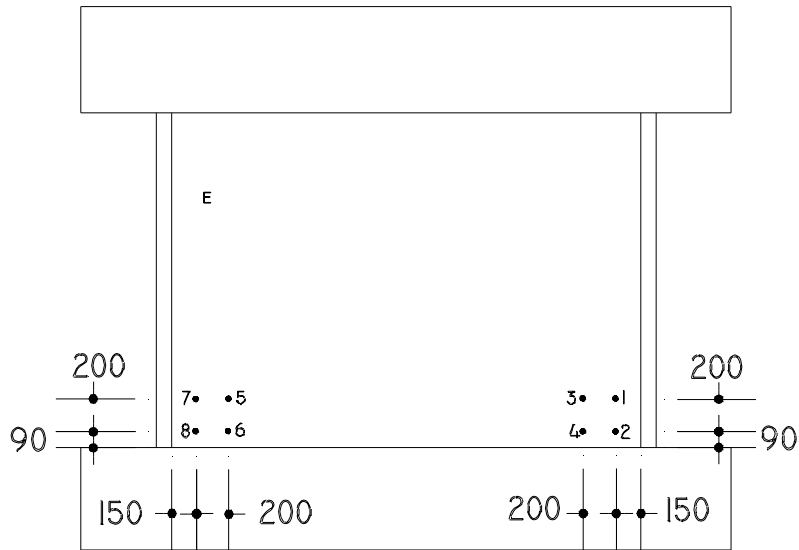
A total of 54 targets were placed on the flange walls. Of these, 18 gauges were mounted on each of the outer and inner face of the northeast flange wall. The remaining 18 were placed on the outer face of the southwest flange wall. Prior to testing, it was assumed that the main cracking in the flange walls would be flexure-dominant; therefore, only vertical readings between adjacent targets were recorded based on a gauge length of 200 mm.

On the web wall, eight targets were mounted on the east face to measure the surface strains at the north and south toes. A grid 200 x 200 mm was used in this region, where high strains and possible failure by concrete crushing was expected to occur. A 200 mm gauge was used to record horizontal and vertical strains within the grid, and a 283 mm gauge measured the diagonal strains. The figure below shows the location of the surface targets on the outer face of the northeast flange wall. A similar pattern was used for the Zurich targets mounted to the inner northeast and outer southwest flanges. Note that north refers to the flange wall on the strong wall side.



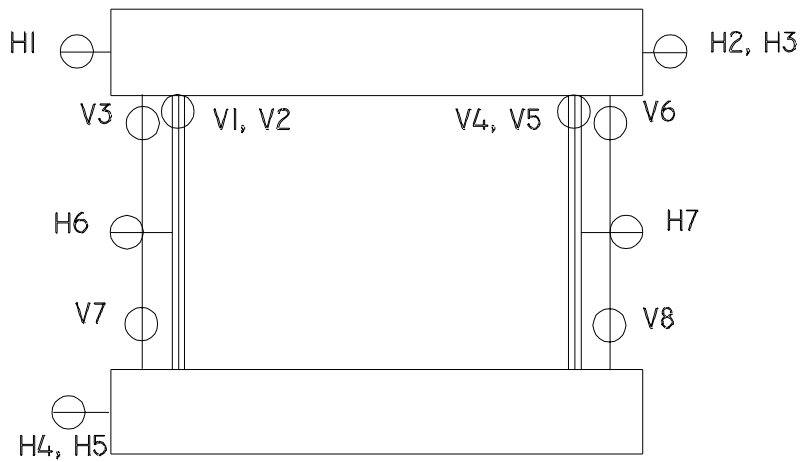
Flange Zurich Targets

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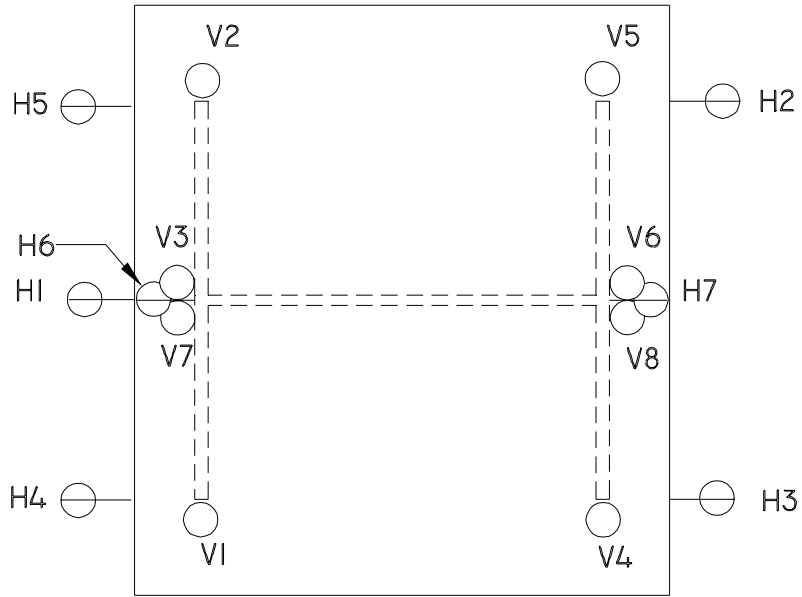
Web Zurich Targets

Linear Variable Differential Transducers (LVDTs)

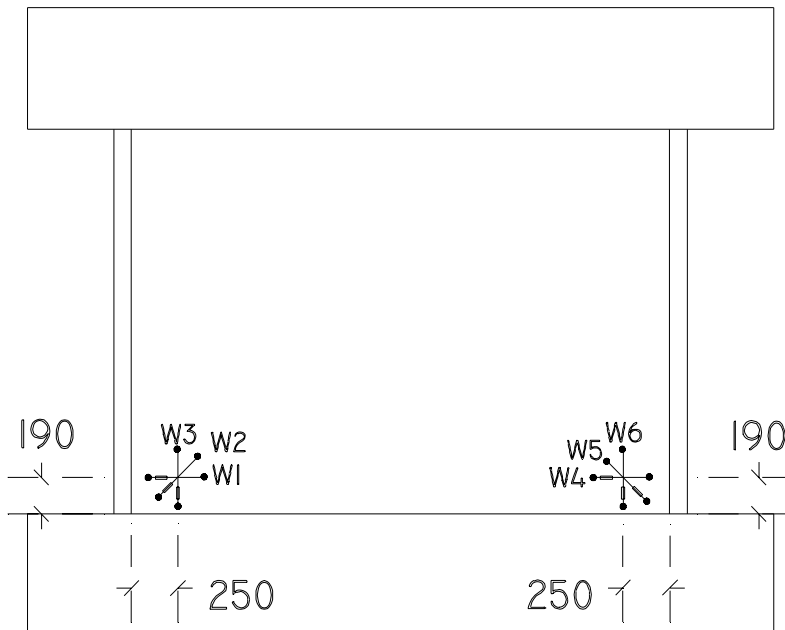


Elevation View of LVDTs

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Top View of LVDTs



Web Wall LVDTs