

## Behavior of Beam-Column Nodes Reinforced Concrete in Earthquake Zones

**Authors :** Zaidour Mohamed, Ghalem Ali Jr., Achit Henni Mohamed

**Abstract :** This project is destined to study pole junctions of reinforced concrete beams subjected to seismic loads. A literature review was made to clarify the work done by researchers in the last three decades and especially the results of the last two years that were studied for the determination of the method of calculating the transverse reinforcement in the different nodes of a structure. For implementation efforts in the columns and beams of a building R + 4 in zone 3 were calculated using the finite element method through software. These results are the basis of our work which led to the calculation of the transverse reinforcement of the nodes of the structure in question.

**Keywords :** beam-column joints, cyclic loading, shearing force, damaged joint

**Conference Title :** ICCBE 2015 : International Conference on Civil and Building Engineering

**Conference Location :** Montreal, Canada

**Conference Dates :** May 11-12, 2015