3. The shear strength increases as the clamping bar increases for the relatively small ratios of bar area to shear plane area of concrete. For large diameter of clamping bars, the increases are unnoticeable. The result confirms the validity of placing a limit associated with concrete strength on the dependable shear strength.

4. The development of tensile strains in the clamping reinforcement passes through three stages namely, before cracking stage, yielding of reinforcement stage and residual strength stage. The large strain at yielding of bars provides the beneficial ductility of the shear transfer mechanism.

5. The ACI and ECP code equations provide conservative estimates of shear strength while AASHTO code may lead to un-conservative estimation especially at concrete strength exceeding $40N/mm^2$.

6. The ECP code is conservative particularly for the relatively low ratio of area of clamping reinforcement to the shear cross sectional area. For relatively high concrete strength the ACI and ECP codes are conservative when compared to the prediction of the analytical models.

7. The shear capacity due to the dowel behavior of the rebars is significantly influenced by the compressive strength of the concrete rather than by the yield strength of the rebars. The maximum dowel force of the rebars increases by increasing concrete strength.

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