





















## 6. CONCLUSION

The study focused on mode of failure in cold formed angle section under tensile loading. Here the connection length is increased by increasing the pitch between the holes instead of increasing the number of bolts. In all of the specimens, failure is caused due to the partial net section rupture of the connected leg adjacent to the lead bolt hole. The analysis indicated an excellent agreement with the experimental failure capacities of the specimens with large connection eccentricities. In addition, these models are able to accurately capture the partial net section rupture failure mode observed in the experimental specimens. The factor 1.10, 1.15 and 1.08 were introduced in the proposed equation for the calculation of nominal tensile strength for yielding of gross section, net section failure and block shear failure. Economy are achieved by using the cold formed steel angle sections wherever possible in hot rolled steel structures. The advantages of cold formed steel lie in the ease of forming the variety of shapes designed to use the material effectively and to simplify and the speed up the construction operation.

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