

## On the Blocked-off Finite-Volume Radiation Solutions in a Two-Dimensional Enclosure

**Authors :** Gyo Woo Lee, Man Young Kim

**Abstract :** The blocked-off formulations for the analysis of radiative heat transfer are formulated and examined in order to find the solutions in a two-dimensional complex enclosure. The final discretization equations using the step scheme for spatial differencing practice are proposed with the additional source term to incorporate the blocked-off procedure. After introducing the implementation for inactive region into the general discretization equation, three different problems are examined to find the performance of the solution methods.

**Keywords :** radiative heat transfer, Finite Volume Method (FVM), blocked-off solution procedure, body-fitted coordinate

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