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Numerical investigation of single-sided natural ventilation driven by buoyancy and wind through variable window configurations

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## Highlights

- Six window styles are examined in combined buoyancy and wind-driven ventilation
- Dominant force in buoyancy- and wind-driven airflow varied for wind and window styles
- Counteracting wind and buoyancy phenomena in the windward condition is identified
- Proper orthogonal decomposition is applied to predict natural ventilation rates

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