EFFECT OF GROOVE AT CAR PARK EXTRACTION SYSTEM

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To my beloved wife
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ABSTRACT

Efficient smoke removal system from a car park is very important to maintain visibility and other safety factors for drivers. In this study, the effect of grooves and transverse grooves on car park extraction system was investigated through numerical simulations. Simulations of car park extraction system performance were carried out for five cases of different groove geometries along with a fire source simulating a car fire. Results indicate that the transverse grooves arrangement is observed to contribute minimum back layering of flow of throughout the whole domain. This indicates higher visibility for the domain. However, higher temperature distribution is also observed for the same type of groove arrangements.
ABSTRAK