

Computer Models For Fire and Smoke

Model Name: R-VENT

Very Short Description: Smoke ventilation for a single room environment

Modeler, Organization: SINTEF, Norway

References: Oystein meland and Eimund Skaret.: Engineering relations in Smoke Control Design. STF15 A87050. Trondheim 1987.

Availability: Available, for sale.

Hardware: MS-DOS compatible computer. EGA or VGA graphics display, 320 kB or memory and MS-DOS floppy drive.

Language: Borland, Turbo pascal

Size: 200 kB

Detailed Description:

R-VENT is designed to optimize smoke ventilation systems (vent area), in case of a fire. The equations are based on the zone technique, where the fire source is given at a time – heat release rate curve. The program calculates the ventilation rates necessary to keep the thickness of the hot gas layer constant.

R-VENT is menu driven and has graphical presentation of results.

Limitation:

Single room environment only. The heat output must be predetermined and input.