

Computer Models For Fire and Smoke

Model Name: NRCC1

Very Short Description: Fire growth model for single compartments.

Modeler, Organization: H. Takeda, National Fire Laboratory, Institute for Research in Construction, National Research Council of Canada.

References:

1. Takeda, H., and Yung, D., "Simplified Fire Growth Models for Risk-Cost Analysis," Fourth CIB Workshop on Fire Modeling, February 12-14, 1990, National Institute of Standards and Technology, Gaithersburg, MD 20899, U.S.A.
2. Takeda, H., and Yung, D., "Simplified Fire Growth Models for Risk-Cost Assessment in Apartment Buildings," submitted to journal of Fire Protection Engineering.

Availability: Program will be available in the future. Calculations can be made by NRCC at present.

Hardware: IBM-compatible PC

Language: FORTRAN 77

Size: 90 kB

Detailed Description:

Input:

Room size and door open or closed.

Output:

Burning rate, room temperature, wall temperature, air supply rate and gas concentrations (oxygen, CO, CO₂).

Assumptions:

One zone model.

Limitations:

Single compartment.