Computer Models For Fire and Smoke

Model Name: ASMET

Version: 1.00

Classification: Package of Engineering Tools

Very Short Description: ASMET consists of a set of equations and a zone fire

model for analysis of smoke management systems for atria

and other large spaces.

Modeler(s), Organization(s): John H. Klote, NIST

User's Guide: Klote, J.H. 1994. Method of Predicting Smoke Movement

in Atria With Application to Smoke Management, National

Institute of Standards and Technology, NISTIR 5516.

Technical References: Klote, J.H. 1994. Method of Predicting Smoke Movement

in Atria With Application to Smoke Management, National

Institute of Standards and Technology, NISTIR 5516.

Validation References: None

Availability: NIST

Price: None

Necessary Hardware: PC 386

Computer Language: C++

Size: 142 KB

Contact Information: John H. Klote, JHK, Inc., McLean, VA, phone 703-356-

1691

Detailed Description:

ASMET (Atria Smoke Management Engineering Tools) consists of a set of equations and a zone fire model for analysis of smoke management systems for large spaces such as atria, shopping malls, arcades, sports arenas, exhibition halls and airplane hangers. Tools include plume mass flow with and without virtual origin correction, plume centerline temperature, and a C++ version of the ASET-B program called ASET-C.