12. Development of Fire Safety Design Method Based on Performance-Code

Seijin Nakaya, Mitsuo Kadoya, Hiroyasu Shinohara, Masafumi Moteki, Yoshio Ogawa

The Building Standard Law is revised and many performance-based codes are adopted into wider parts of it, which are put into effect in 2000. In this revision, registered evaluation measures of evacuation safety and that of fire proof have been enacted.

Computer programs to estimate safety and design manuals to use those programs for these codes are developed.

Through experiences of applying these programs and manuals to some real projects, that there are many advantages in the design of refugee facilities, smoke extraction apparatus and fire protect design of structures, are found out. And necessary working hours for applying these design methods, and problems in applying these design methods have been cleared.

Key words: the building standard law, performance-based codes, evaluation measures for evacuation, evaluation measures for fire proof