

SUMMARY

I. Subject

Standardization of the performance test procedure for smoke control system

II. The objective and scope of this research and development

Since hot toxic gas included in the fire is the most principal reason of the death and has the fluid mechanical characteristics unlike air, smoke control method appropriate for the figure and structure of a fire room is needed and each unit of the smoke control system requests high performance according to this characteristics, for which performance test procedures and evaluation criteria must be established.

Domestic criteria involved with the smoke control consist of the pre-investigation by documents and the part inspection, which has a lot of problems because they are far from the performance based evaluation method compared with the references of developed countries.

For this reason, domestic and international references were compared and analyzed, problems being emerged and standard test method and procedure was presented in this study. That is, performance tests were conducted for smoke barriers, natural smoke exhaust ventilators and smoke control dampers and performance requirements and test methods were developed. In particular, availability and applicability of this method was tried to be confirmed too.