To: Recipients of FSD Circular Letters

Dear Sirs/Madams,

FSD Circular Letter No. 2/2010
Multi-sensor Detectors in Fire Detection Systems

This Circular Letter announces the criteria for local application of multi-sensor detector in fire detection system.

Pursuant to the discussion in the 21st Fire Safety Standard Advisory Group (FSSAG) held on 20.9.2009, a Sub-working Group of FSSAG under the chairmanship of this Department was formed and tasked to look into the criteria for local acceptance of the installation of multi-sensor detector. After thorough discussions with the industry and respective stakeholders, the Sub-working Group has come up with the criteria of application which were endorsed at the 22nd FSSAG Meeting held on 10.12.2009 and accepted by this Department. The criteria for the installation of multi-sensor detector are specified in List One annexed to this letter.

This letter serves to announce that the aforesaid multi-sensor detectors can be installed according to the criteria in the annex effective on 10 December 2009.

Yours faithfully

(LAW Hung)
for Director of Fire Services

Encl.

Ref. Number and date should be quoted in reference to this letter
List One: Criteria for the installation of multi-sensor detector

The installation of multi-sensor detector shall be accepted by this Department if the detector satisfies all the following criteria:

a. Failure of the carbon monoxide (CO) detection element of the multi-sensor smoke detector shall not adversely affect its normal function and performance as a smoke detector in the application of smoke detector.

b. Fault signal shall be triggered in case of the fault of other detection elements for heat, CO, etc.

c. The multi-sensor detector shall conform to the appropriate standards for smoke detectors such as EN 54-7 or equivalent and listed according to FSD Circular Letter No. 1/2007.

d. In the compliance inspections, field test method for ordinary smoke detector shall be adopted to test the multi-sensor detectors if it is designated as smoke detector in the application.

e. The smoke sensing function of a normal multi-sensor detector shall not be disabled through programming at the AFA control panel.

f. A symbol specifically to indicate multi-sensor detectors used either as smoke or heat detector on the layout plans shall be included in the legend, i.e. “$S_M$” or “$H_M$” in a circle represents multi-sensor detector as smoke detector and heat detector respectively. Appropriate corresponding field test methods shall be adopted to verify its purposed normal function.

g. The spacing limitation and design criteria for smoke detector and heat detector prescribed by BS 5839-1 shall be complied with for the application of multi-sensor detector as smoke detector and heat detector respectively.

h. Only either “smoke detector” or “heat detector” shall be specified in the FS Notes of the general building plan. The term “multi-sensor detector” shall not be used.