

Article 97-3 Dosage of Halocarbon Clean Agent Fire Extinguishing Systems shall be provided in accordance with the following regulations:

1. Required dosage shall be calculated by the following equation and approved by central authorities:

$$W = \frac{V}{S} \left(\frac{C}{100 - C} \right)$$

W: Required dosage for the protected space (kg)

V: Net volume of protected space (m³, with deduction of volumes of impermeable and immovable solids)

S: At the minimum temperature of the protected space (t°C), specific volume at 1 atmosphere (m³/kg)

| Agent Type | Formula of Specific Volume |
|------------|----------------------------|
| HFC-23 | s=0.3164+0.0012t |
| HFC-227ea | s=0.1269+0.0005t |
| FK-5-1-12 | s=0.0664+0.0002741t |

C: Design Concentration percentage (% , volume percentage)

2. In case of 2 or more protection areas in a building, the higher value of required dosage shall apply.