## **Facilities Design Standards**

# Division 21 – Residential Kitchen Fire Suppression Systems

Revision Date: 11/08/2023

#### 1. Design & Performance Criteria:

- a. Wet Chemical fire suppression system mounted in cabinet and in hood over all cook-top surfaces whether counter-based or stove-based that automatically releases suppression agent in the event of fire on the cooktop.
- b. Location: all residential ranges and cook tops in UVM residential and non-residential buildings
- c. Coordinate space in cabinet above cooking surface to accommodate suppression unit equipment and related piping and cords.

## 2. Reference Standards:

- a. UL 300A Fire Suppression System
- b. NFPA 17A Standard for Wet Chemical Extinguishment Systems

## 3. Submittals to be reviewed by University:

- a. All product data
- b. Shop Drawings indicating location of unit in casework above cooking surface and coordination with building alarm systems and cooking surface power or fuel source.

#### 4. Products, Materials & Equipment:

- a. Basis of design
  - i. Manufacturer: Guardian Safety Solutions International
  - ii. Models
    - 1. Guardian 500 for range hoods above cooking surfaces
    - 2. Guardian 600 for range hoods mounted to wall mounted microwave above the cooking surface
  - iii. Model: as selected by design professional for compatibility with cooking surface hood type, size, and height above the cooking surface.
- b. Unit shall release by fusible link and/or heat sensor.

#### 5. Installation, Fabrication, and Construction:

- a. Unit shall disconnect cooking surface from power/fuel upon activation.
- b. Provide units in all kitchens and kitchenette facilities with a cooking surface.
- c. Unit mounts in cabinet above cooking surface

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- d. Installation and testing require a VT Technically Qualified Person (TQP) credential (T2 – Chemical Suppression), manufacturer qualification, and all required State and/or local AHJ permits and inspections
- e. Unit shall be tied into fire alarm system when one is present in the building
- f. For properties in the City of Burlington, the unit shall report to a master radio call box (MRCB), if present, as a distinct zone for "kitchen suppression system", or equivalent labeling (consult with the AHJ); reprogramming of an existing MRCB may be required if this zone does not already exist
- g. For properties outside the City of Burlington, the unit shall report via fire alarm system communicator to a UL listed central station, if so equipped
- h. Unit shall report to UVM Police Services via the building management system in buildings not equipped with a fire alarm system

### 6. Warranties:

- a. Manufacturer's standard product warranty
- b. Installer's standard warranty on installation