

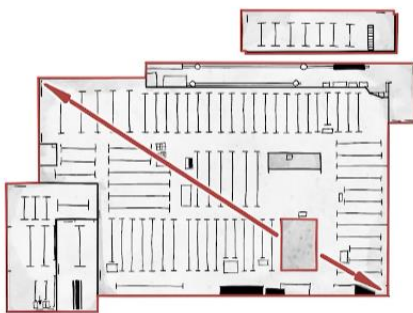
PROTECTING MULTIPLE HAZARD CLASSES

SPRINKLER HAZARDS AND OCCUPANCY SERIES BY MEYERFIRE UNIVERSITY | OCTOBER 2022

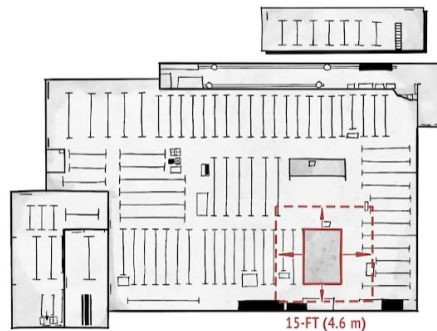
SUMMARY

Sprinkler **Occupancy Hazard Classifications** describe the fuel load and fire severity for an area. One room, or area, can have multiple hazard classifications. When this happens, what options do we have to address this?

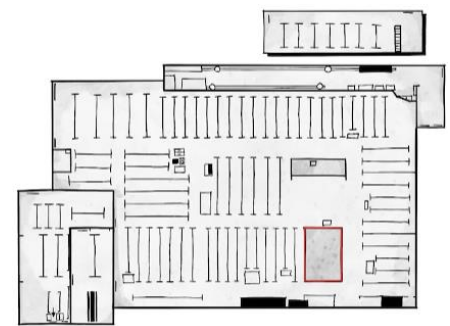
1. Protect for the **higher hazard** throughout the whole building.
 - This is the most-conservative approach. If this is a small building, it could help keep things simple.
2. **Extend the higher hazard into the lower-hazard area** by at least 15-ft (4.6 meters).
 - The distance (15-ft / 4.6 m) is driven by NFPA 13 Section 19.1.12 (2019-2022 Edition) or Section 11.1.2 (2016 and older editions).
 - This approach will require additional floor area to be protected as if its under the higher hazard.
3. **Separate the hazards** and limit each hazard classification to only its area.
 - This is a physical separation only, not fire-resistance-rated construction. This could be a draft curtain, sheet-metal separation, or a soffit; enough of a barrier that is stops movement of a hot gas layer.
 - Separating the hazards allows each area to be calculated at its' own design criteria, which could help save on material sizes and labor. It could even help save on equipment with sizes that are driven by the higher-hazard area, such as fire pumps or water storage tanks.



Option #1: Protect for Higher Hazard Throughout
(Note this could be costly for larger buildings)



Option #2: Extend Higher- into Lower-Hazard Area



Option #3: Physically Separate & Maintain Hazards
(Each area is calculated at its' own classification)

CODE/STANDARD REFERENCES



NFPA 13 – 2019-2022: 19.1.12 Extension of Higher-Hazard into Lower-Hazard Area (Section 11.1.2 in older editions)

VIDEO LINK

www.meyerfire.com/university/how-to-protect-multiple-hazard-classifications

GET MORE LIKE THIS

This page is from MeyerFire University. Get updates & more here:
[Join MeyerFire University](#) | [Course & Video Catalog](#) | [Video Library](#)