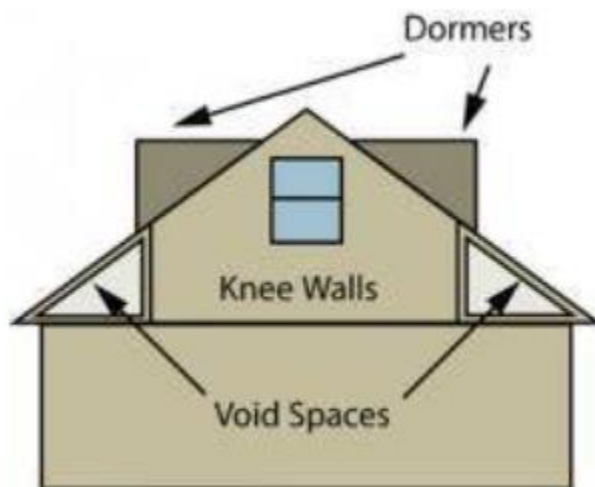


Training Bulletin

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Dangers of Knee Walls



- Excessive pressure buildup: Knee walls can create a large void between the ceiling and the roof, which can cause excessive pressure buildup if not properly ventilated. This can lead to structural damage.
- Knee walls can create a hazardous situation for fire spread due to the large void space they create, allowing for horizontal and vertical flame and smoke spread.
- Unprotected rafters within the void space can allow fire to spread to the ridge line, creating an environment of extreme heat and low visibility.
- To combat this, coordinated efforts between an engine and truck company can prioritize fire attack and ventilation in the attic space, with a focus on opening interior walls and dormers for horizontal and vertical ventilation.
- The best area to make a gable cut for vertical ventilation is where a dormer is present, cutting adjacent to the intersecting line where the peak of the ridge pole and main roof meet.

<https://www.firerescue1.com/fireground-operations/articles/hidden-dangers-fires-in-knee-walls-sQkoiy2V5KWyQPAt/>

Submit a potential Training Bulletin topic via email to: Training@cambridgefire.org