

# Risk Alert



Listening. Learning. Leading.®

## Boiler rooms do not double as storage rooms

You often hear homeowners make the complaint, “We like the house—there just isn’t enough closet space.” The same can be said for many other types of facilities.

Over the years, organizations accumulate a great deal of items—boxes of files, paper supplies, holiday decorations, half-empty paint cans, solvents, cleaning supplies, etc. Having the items available is great, but many facilities fail to take the proper precautions when storing these items. A leading mistake is using the boiler or furnace room as a storage area for these combustible materials.



Over a recent period, dozens of Church Mutual customers have experienced fires caused by flammable and combustible materials stored too close to boilers, furnaces, water heaters and other mechanical equipment. The outcome of these fires ranges from minor damage costing several thousands of dollars to destruction of a facility.

### Heat + Fuel + Oxygen = Fire

There are three components needed to start a fire—a source of ignition, fuel and oxygen. A typical fire in a boiler or furnace room is ignited by the open flame or the hot surface of the boiler. The fuel consists of paper, boxes or other combustible material stored in the room. When the correct mixture of the three components is achieved, a fire is inevitable.

Another risk for boiler and furnace rooms is spontaneous combustion of material. This occurs when combustible material in contact with air generates enough heat to ignite. The most common example of this is an oily rag thrown in a pail. Because the pail prohibits moving air from reaching the rag, the combination of the chemicals and the rag creates combustion. The same rag hung on a clothesline would not ignite because the moving air would prevent heat buildup.

### What should your boiler or furnace room look like?

Boiler and furnace rooms are designed with excess space to allow for easier installation and maintenance of the equipment as well as the proper airflow and ventilation needed. Because of this excess space, many facilities succumb to temptation to build shelves for storage in these rooms or just stack items next to the equipment.

(Over)

In addition to the fire hazard, the ability to maintain a boiler when the room is cluttered with various items is difficult. Routine visual examinations of the equipment is almost impossible, and when service is needed, the room must be cleaned just to allow access.

Your boiler or furnace room should:

- Contain no flammable or combustible materials, such as paper, cardboard, paint or other solvents
- Be equipped with a self-closing fire-rated door
- Be equipped with smoke and fire detectors
- Be finished with fire-resistant walls and ceilings
- Contain a CO<sub>2</sub> or dry chemical fire extinguisher
- Be well ventilated to reduce vapor concentrations
- Remain dry
- Be accessible to firefighters

**For a complete collection of the *Risk Alert* series, visit our website and look in the Safety Resources section.**