

Idle Pallet Storage TECHNICAL BULLETIN

Storing idle pallets can create a severe fire hazard, whether it's inside or outside your building. Wood pallets dry out over time and become splintered. In this state, they're susceptible to easy ignition from even the smallest source. Idle pallet storage can also be the most difficult challenge for sprinkler systems.

The safest place for idle pallets is outside and away from the building or in an exterior building or trailer. If you need to store pallets in your building, follow these guidelines for proper storage. Doing so can limit the exposure and potential destruction of your valued property.

General

- Idle pallets should always be stored flat. Stacking pallets on their sides increases the fire hazard.
- Arrange the pallets in orderly piles to ensure they won't tip over easily.
- Store the idle pallets in a separate area of the building, away from flammables and compressed gases.

Outside Storage

- Idle pallets should be stored outside in an area not easily accessible to passersby.
- Store them away from your building following these distance guidelines:
 - Fewer than 50 pallets should be stored at least 20 feet from the building;
 - 50-200 pallets should be stored at least 30 feet from the building; and
 - More than 200 pallets should be stored at least 50 feet from the building.

Inside Storage – Wood or Metal

- Idle pallets should not be stored in warehouse racking. The exception is if your sprinkler system is specifically designed for rack idle pallet storage.
- Limit interior storage of idle pallets. Limit stacks to four six-foot high piles. Another group of four stacks can be stored eight feet apart. The stacks should be 25 feet from any other commodity storage.



- If you must stack idle pallets higher than 6 feet, your sprinkler system should be designed specifically with ESFR heads for this type of storage.

Did you know that using plastic pallets instead of wood pallets can affect how well your sprinkler system operates? While plastic pallets have the same surface area as wood, they have higher heat release. If ignited, plastic pallets can quickly overwhelm your sprinkler system if it's not designed to extinguish burning plastic pallets.

There are two types of plastic pallets: reinforced and unreinforced. Unreinforced pallets have a better fire rating than reinforced. When storing plastic pallets, follow the same general and outside storage guidelines you would follow with wood pallets. Follow these guidelines when storing idle plastic pallets inside.

Inside Storage - Plastic Pallets

- Storing interior idle plastic pallets requires a specifically-designed sprinkler system with ESFR heads. You may store two piles up to four feet high, but your sprinkler system must still have a special design. Again, no other commodity can be stored within 25 feet of the pallets.
- Idle plastic pallets can be stored in a cutoff room. The room must have both an exterior wall and a fire rating of three hours. Storage in the cutoff room is limited to 12 feet. If you don't have an ESFR system in your building, the cutoff room must be protected by specific design according to NFPA 13.
- Rack storage of idle plastic pallets is also discouraged. If pallets are stored in the rack, your sprinkler system should be specifically designed for this type of storage.

