



RED OAK FIRE RESCUE HIGH PILE STORAGE OPERATIONAL PERMIT



Annual Fee: \$100

Any building with a clearance height exceeding 12' is considered High Pile and will require a High Pile Storage Permit in accordance with section 32 of IFC 2018.

Date: _____

Business Name: _____

Physical Address: _____

Mailing Address: _____

Emergency Contact Name: _____ Phone No.: _____

Type of Business: _____

Square Footage of Building: _____ Building used as (check one): Industrial Commercial

Describe the type of Business: _____

Are you the (check one): Owner Renter Lessee

Owners Name: _____ Phone No.: _____

3201.3 Construction documents. At the time of application for a storage permit, plans and specifications shall be submitted for review and approval. In addition to the information required by the *International Fire/Building Code*, the storage permit submittal shall include the information specified in this section. Following approval of the plans, a copy of the *approved* plans shall be maintained on the premises in an *approved* location. The plans shall include the following:

1. Floor plan of the building showing locations and dimensions of *high-piled storage areas*.
2. Usable storage height for each storage area.
3. Number of tiers within each rack, if applicable.
4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.
5. Aisle dimensions between each storage array.
6. Maximum pile volume for each storage array.
7. Location and classification of commodities in accordance with Section 3203.
8. Location of commodities which are banded or encapsulated.
9. Location of required Fire Department access doors.
10. Type of fire suppression and fire detection systems.

11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.
12. Type, location and specifications of smoke removal and curtain board systems.
13. Dimension and location of transverse and longitudinal flue spaces.
14. Additional information regarding required design features, commodities, storage arrangement and fire protection features within the high-piled storage area shall be provided at the time of permit, when required by the *fire code official*.

3201.4 Evacuation plan. An evacuation plan for public accessible areas and a separate set of plans indicating location and width of *aisles*, location of *exits*, *exit access* doors, *exit* signs, height of storage, and locations of hazardous materials shall be submitted at the time of permit application for review and approval. Following approval of the plans, a copy of the *approved* plans shall be maintained on the premises in an *approved* location.

3203.2 Class I commodities. *Please check all that apply to your location.*

- Alcoholic beverages not exceeding 20-percent alcohol
- Appliances noncombustible, electrical
- Cement in bags
- Ceramics
- Dairy products in nonwax-coated containers (excluding bottles)
- Dry insecticides
- Foods in noncombustible containers
- Fresh fruits and vegetables in nonplastic trays or containers
- Frozen foods
- Glass
- Glycol in metal cans
- Gypsum board
- Inert materials, bagged
- Insulation, noncombustible
- Noncombustible liquids in plastic containers having less than a 5-gallon (19 L) capacity
- Noncombustible metal products

3203.3 Class II commodities. *Please check all that apply to your location.*

- Alcoholic beverages not exceeding 20-percent alcohol, in combustible containers
- Foods in combustible containers
- Incandescent or fluorescent light bulbs in cartons
- Thinly coated fine wire on reels or in cartons

3203.4 Class III commodities. *Please check all that apply to your location.*

- Aerosol, Level 1 (see Chapter 28)
- Combustible fiberboard
- Cork, baled
- Feed, bagged
- Fertilizers, bagged
- Food in plastic containers
- Furniture: Wood, natural fiber, upholstered, nonplastic, wood or metal with plastic-padded and covered armrests
- Glycol in combustible containers not exceeding 25 percent

- Lubricating or hydraulic fluid in metal cans
- Lumber
- Mattresses, excluding foam rubber and foam plastics
- Noncombustible liquids in plastic containers having a capacity of more than 5 gallons (19 L)
- Paints, oil base, in metal cans
- Paper, waste, baled
- Paper and pulp, horizontal storage, or vertical storage that is banded or protected with *approved* wrap

- Paper in cardboard boxes
- Pillows, excluding foam rubber and foam plastics
- Plastic-coated paper food containers
- Plywood
- Rags, baled
- Rugs, without foam backing
- Sugar, bagged
- Wood, baled
- Wood doors, frames and cabinets
- Yarns of natural fiber and viscose

3203.5 Class IV commodities. *Please check all that apply to your location.*

- Aerosol, Level 2 (see Chapter 51)
- Alcoholic beverages, exceeding 20-percent but less than 80-percent alcohol, in cans or bottles in cartons
- Clothing, synthetic or nonviscose
- Combustible metal products (solid)
- Furniture, plastic upholstered
- Furniture, wood or metal with plastic covering and padding
- Glycol in combustible containers (greater than 25 percent and less than 50 percent)
- Linoleum products
- Paints, oil base in combustible containers
- Pharmaceutical, alcoholic elixirs, tonics, etc.
- Rugs, foam back
- Shingles, asphalt
- Thread or yarn, synthetic or nonviscose

3203.6 High-hazard commodities. *Please check all that apply to your location.*

- Aerosol, Level 3 (see Chapter 51)
- Alcoholic beverages, exceeding 80-percent alcohol, in bottles or cartons
- Commodities of any class in plastic containers in carousel storage
- Flammable solids (except solid combustible metals)
- Glycol in combustible containers (50 percent or greater)
- Lacquers, which dry by solvent evaporation, in metal cans or cartons
- Lubricating or hydraulic fluid in plastic containers
- Mattresses, foam rubber or foam plastics
- Pallets and flats which are idle combustible
- Paper and pulp, rolled, in vertical storage which is unbanded or not protected with an *approved* wrap
- Paper, asphalt, rolled, horizontal storage
- Paper, asphalt, rolled, vertical storage
- Pillows, foam rubber and foam plastics
- Pyroxylin
- Rubber tires
- Vegetable oil and butter in plastic containers

3203.7 Classification of plastics. Plastics shall be designated as Group A, B or C in accordance with Sections 3203.7.1 through 3203.7.4.

3203.7.1 Group A plastics. Group A plastics are plastic materials having a heat of combustion that is much higher than that of ordinary combustibles, and a burning rate higher than that of Group B plastics. Examples of Group A plastics include, but are not limited to, the following: *Please check all that apply to your location.*

- ABS (acrylonitrile-butadiene-styrene copolymer)
- Acetal (polyformaldehyde)
- Acrylic (polymethyl methacrylate)
- Butyl rubber
- EPDM (ethylene propylene rubber)
- FRP (fiberglass-reinforced polyester)
- Natural rubber (expanded)
- Nitrile rubber (acrylonitrile butadiene rubber)
- PET or PETE (polyethylene terephthalate)
- Polybutadiene
- Polycarbonate
- Polyester elastomer
- Polyethylene
- Polypropylene
- Polystyrene (expanded and unexpanded)
- Polyurethane (expanded and unexpanded)
- PVC (polyvinyl chloride greater than 15-percent plasticized; e.g., coated fabric unsupported film)
- SAN (styrene acrylonitrile)
- SBR (styrene butadiene rubber)

3203.7.2 Group B plastics. Group B plastics are plastic materials having a heat of combustion and a burning rate higher than that of ordinary combustibles, but not as high as those of Group A plastics. Examples of Group B plastics include, but are not limited to, the following: *Please check all that apply to your location.*

- Cellulosics (cellulose acetate, cellulose acetate butyrate, ethyl cellulose)
- Chloroprene rubber
- Fluoroplastics (ECTFE, ethylene-chlorotrifluoroethylene copolymer; ETFE, ethylene-tetrafluoroethylene copolymer; FEP, fluorinated ethylene-propylene copolymer)
- Natural rubber (nonexpanded)
- Nylon (Nylon 6, Nylon 6/6)
- PVC (polyvinyl chloride greater than 5-percent, but not exceeding 15-percent plasticized)
- Silicone rubber

3203.7.3 Group C plastics. Group C plastics are plastic materials having a heat of combustion and a burning rate similar to those of ordinary combustibles. Examples of Group C plastics include, but are not limited to, the following: *Please check all that apply to your location.*

- Fluoroplastics (PCTFE, polychlorotrifluoroethylene; PTFE, polytetrafluoroethylene)
- Melamine (melamine formaldehyde)
- Phenol
- PVC (polyvinyl chloride, rigid or plasticized less than 5-percent; e.g., pipe, pipe fittings)
- PVDC (polyvinylidene chloride)
- PVDF (polyvinylidene fluoride)
- PVF (polyvinyl fluoride)
- Urea (urea formaldehyde)

HOUSEKEEPING AND MAINTENANCE

3205.1 Rack structures. The structural integrity of racks shall be maintained.

3205.2 Ignition sources. Clearance from ignition sources shall be provided in accordance with Section 305 of IFC 2015.

3205.3 Smoking. Smoking shall be prohibited. *Approved* "No Smoking" signs shall be conspicuously posted in accordance with Section 310 of IFC 2015.

3205.4 Aisle maintenance. When restocking is not being conducted, aisles shall be kept clear of storage, waste material and debris. Fire Department access doors, aisles and *exit* doors shall not be obstructed. During restocking operations using manual stocking methods, a minimum unobstructed aisle width of 24 inches (610 mm) shall be maintained in 48-inch (1219 mm) or smaller aisles, and a minimum unobstructed aisle width of one-half of the required aisle width shall be maintained in aisles greater than 48 inches (1219 mm). During mechanical stocking operations, a minimum unobstructed aisle width of 44 inches (1118 mm) shall be maintained in accordance with Section 3206.9.

3205.6 Designation of storage heights. Where required by the *fire code official*, a visual method of indicating the maximum allowable storage height shall be provided.

3206.9 Aisles. Aisles providing access to *exits* and Fire Department access doors shall be provided in *high-piled storage areas* exceeding 500 square feet (46 m²), in accordance with Sections 3206.9.1 through 3206.9.3. Aisles separating storage piles or racks shall comply with the current NFPA. Aisles shall also comply with Chapter 10.

RACK STORAGE

3208.2.1 Plastic pallets and shelves. Storage on plastic pallets or plastic shelves shall be protected by *approved* specially engineered *fire protection systems*.

3208.2.2 Racks with solid shelving. Racks with solid shelving having an area greater than 32 square feet (3 m²), measured between *approved* flue spaces at all four edges of the shelf and shall be in accordance with this section.

Exceptions:

1. Racks with mesh, grated, slatted or similar shelves having uniform openings not more than 6 inches (152 mm) apart, comprised of at least 50 percent of the overall shelf area, and with *approved* flue spaces are allowed to be treated as racks without solid shelves.
2. Racks used for the storage of combustible paper records, with solid shelving, shall be in accordance with the current NFPA.

3208.5 Extra-high-rack storage systems. Approval of the *fire code official* shall be obtained prior to installing extra-high-rack combustible storage.

I hereby certify that I have completed this questionnaire, I am an authorized agent of the named business, and I know the information contained herein to be true and correct.

Name (Please Print): _____

Signature: _____ **Date:** _____