HIGH-PILE COMBUSTIBLE STORAGE PERMIT

APPLICATION

Required for storage of combustible materials on interior racking greater than 12’-0” high OR for high hazard commodity storage greater than 6’-0” high

All applicable codes, including: NFPA 13 & 72, 2012 IFC & 2012 IBC with NN Amendments- see Building website

Please Note: For permit submission both Part A and Part B shall be provided. Permit may be issued upon approval of Part A Plan Review, however, Part B Plan Review shall be approved in order to obtain a Certificate of Occupancy.

Part A: Building Division Requirements

- (3) Three copies of Exiting Plan – showing racking layout exit paths with occupancy load (#) to each exit
- (3) Three copies of Lighting Plan - including emergency lighting
- (3) Three copies of Structural Racking Details - including seismic anchoring and bracing
- All docs and drawings signed/stamped by a NV Licensed Design Professional

Part B: Truckee Meadows Fire Protection District (TMFPD) Requirements

- Part B shall be completed by an approved TMFPD 3rd party professional
- See attached application packet with samples and detailed instructions
COMMERCIAL HIGH-PILED COMBUSTIBLE STORAGE BUILDING
PERMIT APPLICATION- Part A

Parcel Number:__________________Address:_________________________________________

Suite:___________________________

Business/Tenant Information:

Property Owners Name:__________________________Phone No.:________________________
Mailing Address:__________________________________________________________
Tenant Name:____________________________________Phone No.:_______________________
Description of Business ______________________Fax No.:_____________________________
Address:________________________________________Email:___________________________

***Nevada licensed contractor is required to sign of all commercial permits***

Contractor Information:

Contractor:______________________________Contact Name:________________________
Address:__________________________________________________________
Phone No.:________________________Fax No.:_____________________________
Nevada License No.:________________________County Business License No.:_______________
License Classification:________________________Dollar Limit:___________________________

Design Professional Information:

Architect’s Name:__________________________Phone No.:________________________
E-Mail Address:____________________________Fax No.:___________________________
Engineer’s Name:__________________________Phone No.:________________________
Permit #__________________

COMPLETE BOTH SIDES

Revised 06/10/2017

C:\My Documents\Washoe\Part A High pile.doc

E-Mail Address________________________________ Fax No.:____________________

PERSON TO CONTACT REGARDING THIS PROJECT

Name and Company________________________________ Phone No.:____________________
E-Mail Address________________________________ Fax No.:____________________

Project Information:

Contract Price $_________________________
Use and Occupancy Classification:________ Type of Construction:______Sq ft______
Use and Occupancy Classification:________ Type of Construction:______Sq ft______
Use and Occupancy Classification:________ Type of Construction:______Sq ft______

Fire Sprinkler System Yes No
Fire Alarm Yes No
Septic System Yes No
Grease or Sand/Oil Interceptor Existing New Not Applicable

Description of Work:

Building Code Information:

Building Height:__________ No. of Stories:______________ No. of Units:______________
Edition of Code:__________ Building Code Used:______________________________

Applicant (print)_________________________________________________ Date:____________________

Signature________________________________________________________

***Nevada licensed contractor is required to sign on all commercial permits***

COMPLETE BOTH SIDES
Revised 06/10/2017
C:\My Documents\Washoe\Part A High pile.doc
HIGH-PILED COMBUSTIBLE STORAGE
Plan Review Application

APPLICANT / SUBMITTING FIRM

Name: ____________________________________________________________

Address: _________________________________________________________

City: __________________________________ State: __________ Zip: __________

Contact Person: ___________________________________________ Phone: __________________

BILLING INFORMATION

* PARTY RESPONSIBLE FOR PAYMENT OF ALL FIRE MARSHAL SERVICES ASSOCIATED WITH THIS PLAN THIS SUBMITTAL *

Name: ____________________________________________________________

Address: _________________________________________________________

City: __________________________________ State: __________ Zip: __________

Contact Person: ___________________________________________ Phone: __________________

STORAGE LOCATION

Where is the proposed high-piled combustible storage facility located?

Location Name: ____________________________________________________

Address: _________________________________________________________

City: __________________________________ State: __________ Zip: __________

Contact Person: ___________________________________________ Phone: __________________

*** THE ABOVE INFORMATION MUST BE COMPLETELY FILLED OUT OR PLANS WILL NOT BE PROCESSED ***

FMO USE ONLY: A/P # __________________________ Date Received: ______________ Logged In By: __________
Who should we contact for technical questions about this plan submittal?

Contact Person: _________________________  Phone: _________________________

Company/Firm Name: _________________________

Email: _________________________  Alternate Phone: _________________________

STORAGE AREA IDENTIFICATION

(1) What area(s) of the storage location will be used for high-piled combustible storage?

A. Are there multiple storage areas separated by a 1-hour fire protection rating? ....  □ YES  □ NO

   If YES, items 1-7 shall be prepared for each “separated” high-piled storage area associated with the project.

B. Description or name of high-piled storage area: __________________________________________

C. Aggregate Area: ____________________  D. Ceiling Height: ____________________

E. Is the high-piled storage area accessible to the public? ...........................................  □ YES  □ NO

   If YES, a separate evacuation plan required by IFC 3201.4 shall be prepared and submitted with this plan.

COMMODITY CLASSIFICATION

(2) Describe Materials in Storage; Declare Commodity Classification; Specify Limitations

A. Description of combustible materials stored: __________________________________________

B. Commodity classification(s) per IFC 3203 (i.e., Class I - IV, High-Hazard): ____________________

C. Use of flame-retarding modifiers to change the commodity classification: ............  □ YES  □ NO

D. Does the physical form of the material change the commodity classification? ......  □ YES  □ NO

E. If yes to C or D, provide documentation validating related changes in commodity classification. F. Specify commodity class limitations in accordance with IFC 3204  (Check One)

   □ Commodity class shall not exceed the class specified above in item B

   □ Commodity class may exceed the class specified above in item B where items 1, 2, 3 apply

      1) Engineering analysis demonstrates the higher hazard commodity is adequately protected by an automatic sprinkler system.

      2) The area occupied by the higher hazard commodity shall not exceed 120 square feet.

      3) Additional areas of the higher hazard commodity storage shall be separated by 25 feet.

      Higher Hazard Commodity Allowed: ____________________

G. Amount of Group A plastics are classified as high-hazard commodity? ...............  □ YES  □ NO
HAZARDOUS MATERIALS

(3) Are hazardous materials part of the proposed high-piled combustible storage plan?

A. Identify if the following hazardous materials are part of the proposed high-piled storage plan. Refer to the IFC chapter indicated for material-specific storage limitations and/or requirements.

☐ Hazardous Materials  *(IFC Chapter 50)*  ☐ Flammable/Combustible Liquids  *(IFC Chapter 57)*

☐ Aerosols  *(IFC Chapter 51)*  ☐ Combustible Fibers  *(IFC Chapter 52)*

B. Other Hazardous Materials: ________________________________________________________

C. MSDS for Hazardous Materials Stored Included with Plan Submittal? .............. ☐ YES  ☐ NO

FIRE PROTECTION / LIFE SAFETY REQUIREMENTS

(4) What fire protection and life safety features required by IFC 3206.2 are provided?

A. Automatic Fire-Extinguishing System Provided .......................................................... ☐ YES  ☐ NO

B. Fire Detection System Provided ................................................................. ☐ YES  ☐ NO

C. Fire Department Access Doors Provided.......................................................... ☐ YES  ☐ NO

D. Smoke and Heat Removal Provided ................................................................. ☐ YES  ☐ NO

E. Draft Curtains Provided .................................................................................. ☐ YES  ☐ NO

F. Number and Rating of Fire Extinguishers Provided: ____________________________________________

G. Provide additional information if a footnote in IFC Table 3206.2 applies.

Footnote Letter(s): ______________________________________________________________________

Footnote Letter(s): ______________________________________________________________________

Footnote Letter(s): ______________________________________________________________________

FIRE SPRINKLER SYSTEM

(5) Tell us the general details about the fire sprinkler protection provided.

A. Fire Sprinkler System Provided ................................................................. ☐ YES  ☐ NO

B. Type of System ......................................................... ☐ WET    ☐ DRY    ☐ OTHER: ______________

C. Sprinkler System Design Density and Area: __________________________________________

D. In-Rack Sprinklers Provided ................................................................. ☐ YES  ☐ NO

E. ESFR Sprinkler Heads Provided ................................................................. ☐ YES  ☐ NO

F. Sprinkler K-Factor: _____________________  G. Sprinkler Head Temperature: ______________

H. Sprinkler Spacing in Square Footage: ________________________________________________
NOTICE: Detailed information requested in items 6 and 7 listed below shall be provided for each separate high-piled combustible storage arrangement or configuration where storage methods or storage design specifications are different. For example, if solid-pile storage, rack storage, and bin box storage is to be located in the same high-piled storage area, a separate copy of this page will be required for each. In addition, each separate arrangement or configuration shall be shown in the plan.

### STORAGE ARRANGEMENT / CONFIGURATION

(6) **Specify applicable storage arrangements, rack configurations, pallet materials/types.**

A. High-Piled Storage Arrangement(s):
   - [ ] Solid-Piled
   - [ ] Shelf Storage
   - [ ] Rack Storage
   - [ ] Automated Storage
   - [ ] Bin Boxes *(less than 5 feet)*
   - [ ] Bin Boxes *(exceeding 5 feet)*
   - [ ] Records Storage

B. Shelf Information:
   - Depth of the shelves *(inches)*: __________
   - Height between shelves *(inches)*: __________

C. Rack Configuration:
   - [ ] Single Row
   - [ ] Double Row
   - [ ] Movable
   - [ ] Multiple Row
   - [ ] Other _______________________________________

D. Pallet Storage Information: *(Select all that apply)*
   - [ ] Wood
   - [ ] Conventional
   - [ ] Plastic
   - [ ] Plastic, UL 2335
   - [ ] Banded
   - [ ] Unbanded
   - [ ] Encapsulated
   - [ ] Nonencapsulated
   - [ ] Other _______________________________________

E. Solid Pile Information:
   - [ ] Pallet
   - [ ] Dunnage
   - [ ] Skids
   - [ ] Other: ______________________

F. Maximum Pile Dimension: ________________

G. Maximum Pile Height: ________________

H. Maximum Pile Volume (cubic feet): ______________________________________

Additional Information: ______________________________________

### AISLE WIDTH / STORAGE-RELATED DIMENSIONS

(7) **Specify applicable aisle widths, flue spaces, and maximum storage heights/clearances.**

A. Minimum Required Aisle Width: ______________________________________

B. Transverse Flue Space: ____________________________
   - [ ] Not Required or Not Applicable

C. Longitudinal Flue Space: ____________________________
   - [ ] Not Required or Not Applicable

D. Maximum Storage Height: ______________________________________

E. Clearance from Top of Storage to Sprinkler Head Deflector: ________________
ILLUSTRATED PLANNING GUIDE

HIGH-PILED STORAGE PLAN

As Specified in the Permit Application Guideline for High-Piled Storage

This illustrated planning guide is intended to assist in the development of a high-piled storage plan. More specifically, it can be used to guide designers through a thirteen point process for completing the high-piled storage floor plan. In addition, this guide also provides examples of required markings and signage associated with high-piled combustible storage. However, this guide is not intended to prescribe the required template to be used to prepare the plan submittal, and is for illustration purposes only. Designers are reminded to consult the high-piled storage permit application guideline for all documentation requirements related to high-piled storage plans.

When Required. A high-piled storage plan shall be submitted for any of the following circumstances or conditions: 1) At the time of building permit application for new structures designed to accommodate high-piled combustible storage; 2) When requesting a change of occupancy/use or when increasing the storage hazard of an existing high-piled combustible storage arrangement; 3) At the time of application for an operational permit (i.e., Fire Prevention Code Permit) to maintain any high-piled combustible storage area.

Minimum Required Copies. Three (3) copies of the high-piled storage plan shall be included in the plan submittal. This typically includes the high-piled combustible storage plan review application, required plan review documents, and completed evacuation plan for public accessible storage areas and large mercantile occupancies.

Floor Plan Specifications. Designers shall provide a scaled floor plan of the building showing locations and dimensions of all high-piled combustible storage areas and storage arrangements. Scaled drawings shall be: 1/8 inch = 1 foot. Dimensional drawings are not acceptable.

For more information about high-piled combustible storage planning requirements in Washoe County Fairfax County, contact the Fire Prevention Bureau at 775-326-6005.
All the basic plan information should be shown on the plans.

1. Type of Plan
2. Sheet Number
3. Location Name / Address
4. Designer Information on every page
5. Codes and Standards Used on every page
6. Notes / General Comments
All the basic plan information should be shown on the plans (cont.):

7. Symbol Legend

8. Scale $1/8” = 1’$  

9. Sprinkler System Information

<table>
<thead>
<tr>
<th>Encapsulated Storage</th>
<th>Density / Area</th>
<th>Temperature of Heads</th>
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<tr>
<td>No</td>
<td>0.2 / 2000</td>
<td>165°</td>
<td>No</td>
<td>8 ft</td>
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NFPA 13 or 231 design curve and reduction information.

Code and Standards:

IFC: (2012)  
NFPA 13: [Edition Year]

Designer Company Name  
Company Address

Drawn By:  
Date:

Location Name – Tenant  
Location Address w/ Suite Number

High-Piled Storage Plan  
HPS-001
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NFPA 13 or 231 design curve and reduction information.

10. Create a plan view of your

Scale 1/8” = 1’

Symbol Legend

Code and Standards:
IFC: (Edition Year)
NFPA 13: (Edition)

Designer Company
Name Company
Address

Drawn By: Date:

Location Name – Tenant
Location Address w/ Suite Number

High-Piled Storage Plan HPS-001
11. Create a plan view of your high-piled storage area. Identify each arrangement.
12. Identify each high-piled storage arrangement and restrictions to storage height.

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NFPA 13 or 231 design curve and reduction information.

Notes:

1. **Rack Storage** – Double Row Racks – Class IV Commodity
   - Max Storage Height is 15 feet
   - Transverse flue space is 6 inches.
   - Longitudinal flue space is not required.

   - Max Storage Height is 15 feet, limited to 120 sq./ft.
   - Transverse flue space is 3 inches.
   - Longitudinal flue space is not required.

3. **Pile Storage** – Class III Commodity using wood crates –
   - Max Storage Height is 17.5 feet,
   - Maximum pile dimension is 100 ft.

4. **Shelf Storage** – Class III Commodity – Open record storage
   - Max Storage Height is 17.5 feet

1. Building Square Footage: 23,000
2. High-Piled Combustible Storage Square Footage: 13,500
3. Fire extinguishers: Rating 4A: 40B: C
4. Fire department access doors are required.
5. Heat and smoke ventilation is required.

Symbol Legend

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   Maximum pile dimension is 100 ft.
4. Shelf Storage – Class III Commodity – Open record storage
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5. Heat and smoke ventilation is required.

Codes and Standards:
IFC: 2012
NFPA 13: (Edition Year)

Designer Company
Name Company
Address

Drawn By:  Date:

Location Name – Tenant
Location Address w/ Suite
Number

High-Piled Storage Plan  HPS-001

13. Show location of fire extinguishers, maximum storage signs, no smoking signs, sprinkler shutoff valves, fire department access door, fire department key box, etc.
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   Max Storage Height is 17.5 feet

1. Building Square Footage: 23,000
2. High-Piled Combustible Storage Square Footage: 13,500
3. Fire extinguishers: Rating 4A: 40B: C
4. Fire department access doors are required.
5. Heat and smoke ventilation is required.

Symbol Legend:
- FE: Fire Extinguisher, 4A: 40B: C
- NS: No Smoking Signs
- MSH: Maximum Storage Height
- FDA: Fire Department Access Door
- KB: Fire Department Key Box
- CLG – xx’-xx” Ceiling Height
- Automatic Smoke/Heat Vents

Codes and Standards:
- IFC: 2012
- NFPA 13: (Edition Year)

Designer Company Name
Company Address

Drawn By: Date:

Location Name – Tenant
Location Address w/ Suite Number

High-Piled Storage Plan HPS-001

This is an example of the completed plan. Remember you are responsible for the plan creation and providing all the relevant information as it pertains to your business.
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- **FE**: Fire Extinguisher, 4A: 40B: C
- **NS**: No Smoking Signs
- **MSH**: Maximum Storage Height
- **FDA**: Fire Department Access Door
- **KB**: Fire Department Key Box
- **CLG**: Ceiling Height
- **Automatic Smoke/Heat Vents**: Automatic Smoke/Heat Vents

**High-Piled Storage Plan**

**HPS-001**
This is the required signage for “No Smoking”.
Signage should be clearly legible, visible from distances of approximately 25 feet, display lettering on a contrasting background, and proportion wording approximately as shown:

HIGH-PILED COMBUSTIBLE STORAGE

NO SMOKING

BY THE ORDER OF THE FIRE MARSHAL
Storage Height Limitation Signage

• Visual indication shall be as described below. Alternative means may be approved where a written request is submitted for review.

Storage along a wall.

Max Storage Height Sign.

• Provide a line to indicate max storage height.

[Diagram of storage along a wall with indication of max storage height and do not store above this line.]
Storage Height Limitation Signage

Storage located in aisles.

* Max Storage Height
20 ft

Do Not Store Above
This Line

Storage

Storage

Storage

20 ft

- *Sign not to scale. Sign is larger to show detail.
- Sign is suspended from under ceiling.
- The sign line located and measured from finished floor.