



East Fork Fire Protection District

Fire Prevention Division
1694 County Rd. Minden, NV 89423
Phone (775) 782-9040

Permit Number: _____

Date Received: _____

HIGH-PILED 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, 2018 IFC & 2018 IBC
with NN Amendments*

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: East Fork Fire Protection District (EFFPD) Requirements

- Part B shall be completed by an approved EFFPD 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 # _____

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



East Fork Fire Protection District

PART B HIGH PILE COMBUSTIBLE STORAGE PERMIT

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:** _____

ARCHITECT, ENGINEER, PLAN DESIGNER

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 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 East Fork Fire protection District, contact the Fire Prevention Division at 775-782-9040.

⑥ Notes:

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

⑤ Code and Standards:
IFC: (2012)
NFPA 13: (Edition Year)

④ Designer Company Name
Company Address
Drawn By: Date:

③ Location Name – Tenant
Location Address w/ Suite Number
① High-Piled Storage Pla ② HPS-001

Notes:

9

Sprinkler System Information				
Encapsulated Storage	Density / Area	Temperature of Heads	ESFR Heads	Aisle Width
No	0.2 / 2000	165°	No	8 ft
NFPA 13 or 231 design curve and reduction information.				

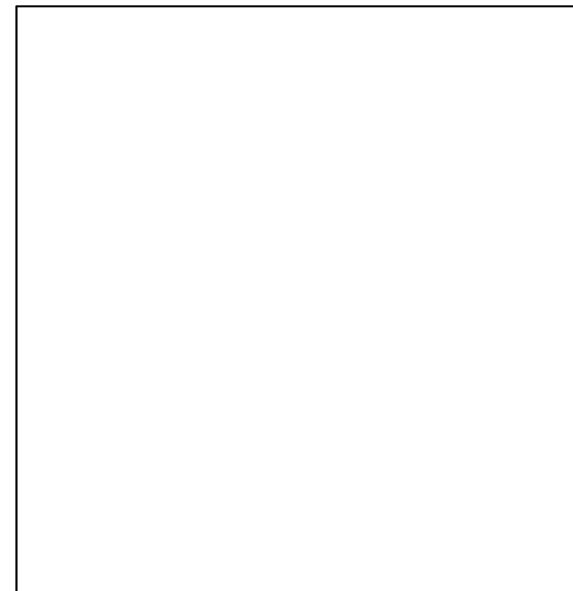
All the basic plan information should be shown on the plans (cont.):

7. Symbol Legend

8. Scale 1/8" = 1' 8 Scale 1/8" = 1'

9. Sprinkler System Information

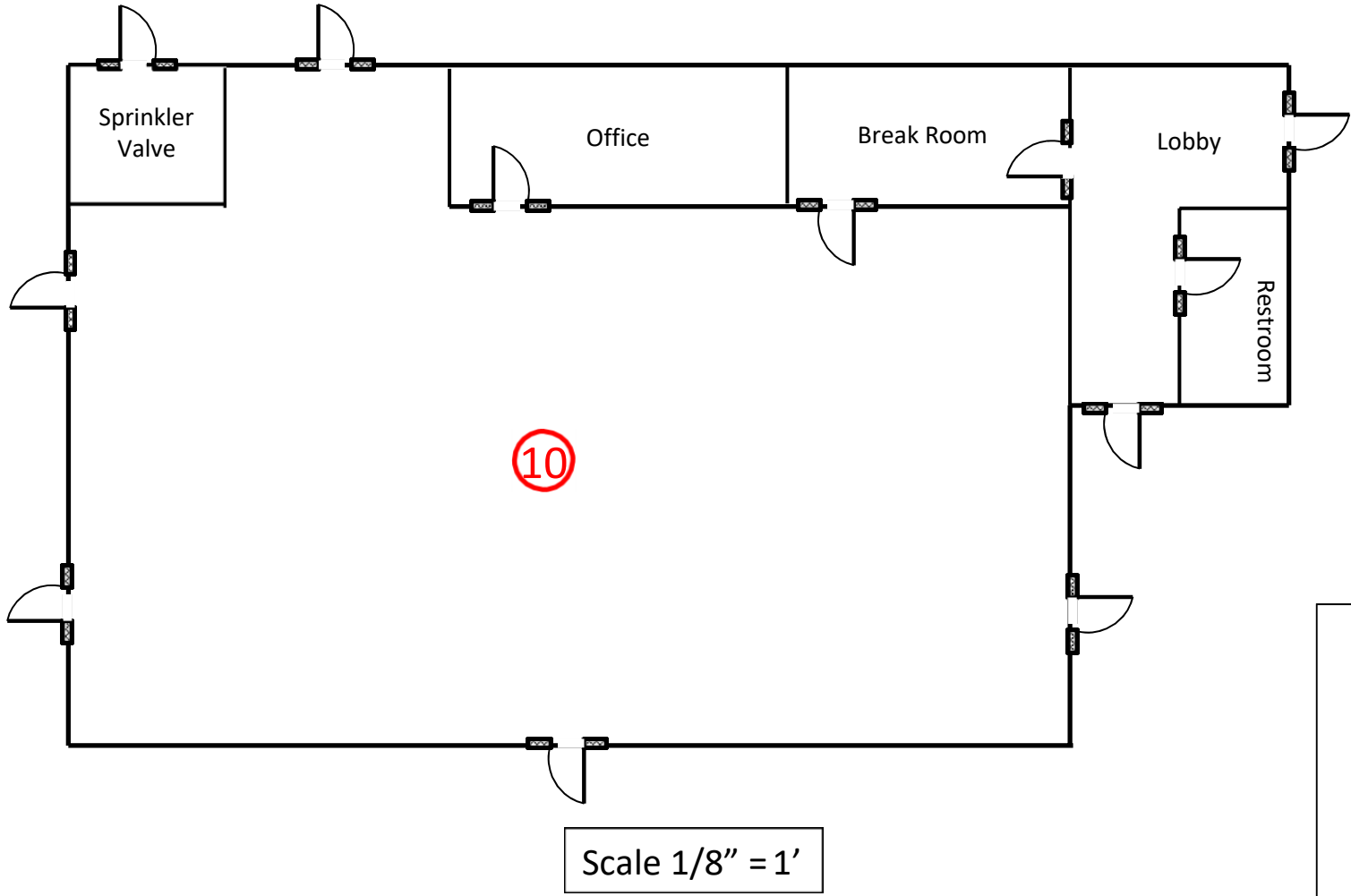
7 Symbol Legend



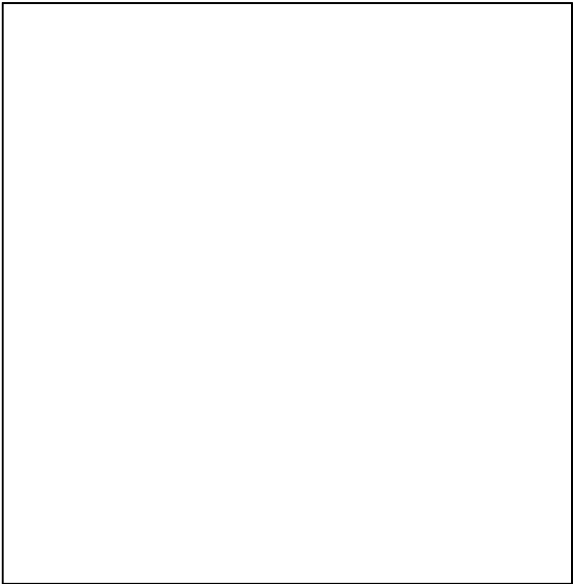
Code and Standards:	
IFC: (2012) NFPA 13: (Edition Year)	
Designer Company Name Company Address	
Drawn By:	Date:
Location Name – Tenant Location Address w/ Suite Number	
High-Piled Storage Plan	HPS-001

Sprinkler System Information				
Encapsulated Storage	Density / Area	Temperature of Heads	ESFR Heads	Aisle Width
No	0.2 / 2000	165°	No	8 ft
NFPA 13 or 231 design curve and reduction information.				

Notes:



Symbol Legend



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

Designer Company
 Name Company
 Address

Drawn By: Date:

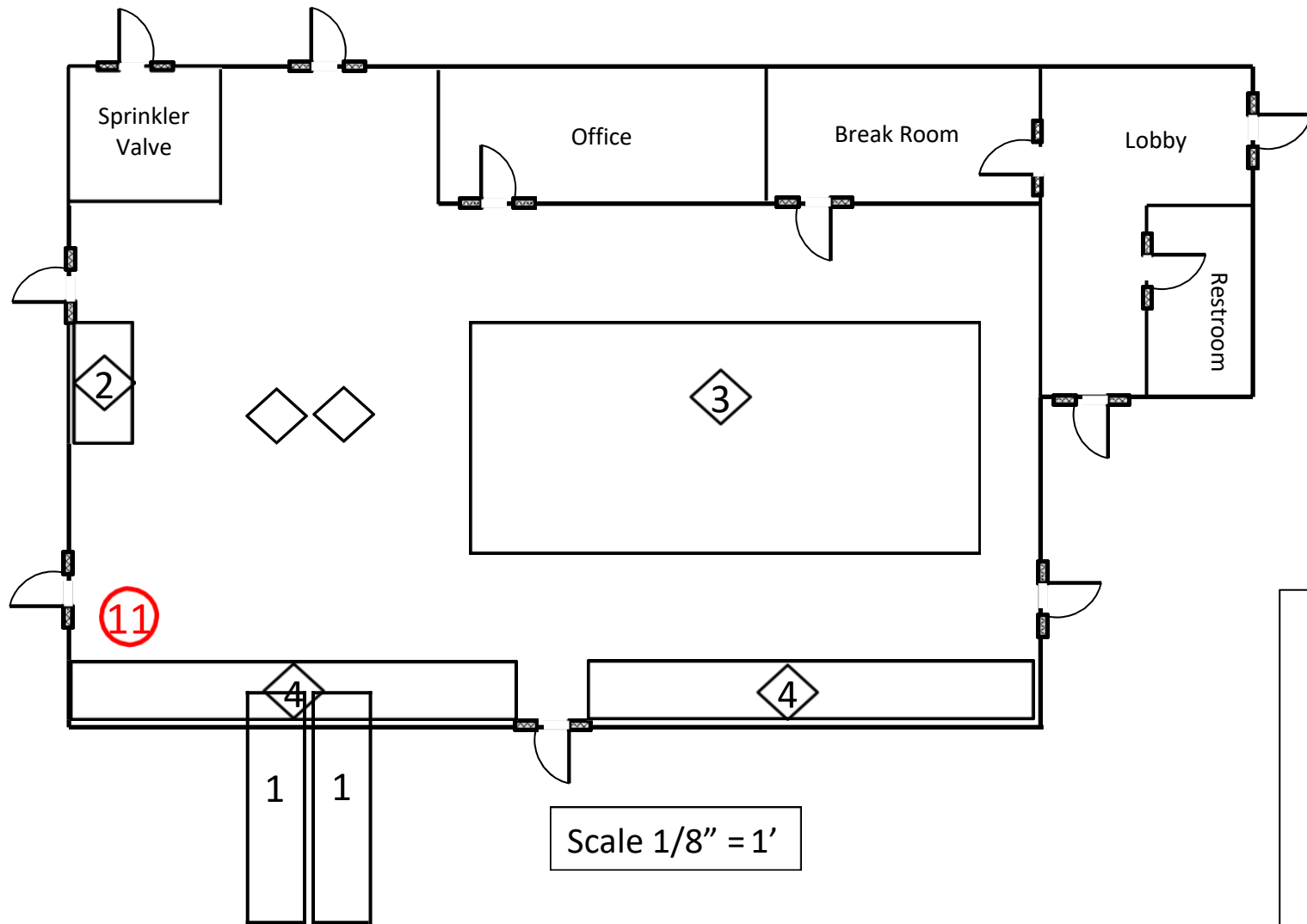
Location Name – Tenant
 Location Address w/ Suite Number

High-Piled Storage Plan	HPS-001
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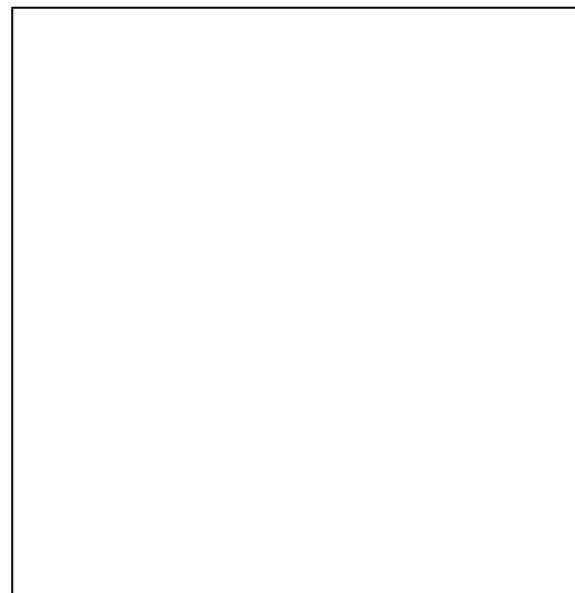
10. Create a plan view of your

Sprinkler System Information				
Encapsulated Storage	Density / Area	Temperature of Heads	ESFR Heads	Aisle Width
No	0.2 / 2000	165°	No	8 ft
NFPA 13 or 231 design curve and reduction information.				

Notes:



Symbol Legend



Code and Standards:
 IFC: (2018)
 NFPA 13: (Edition
 Year)

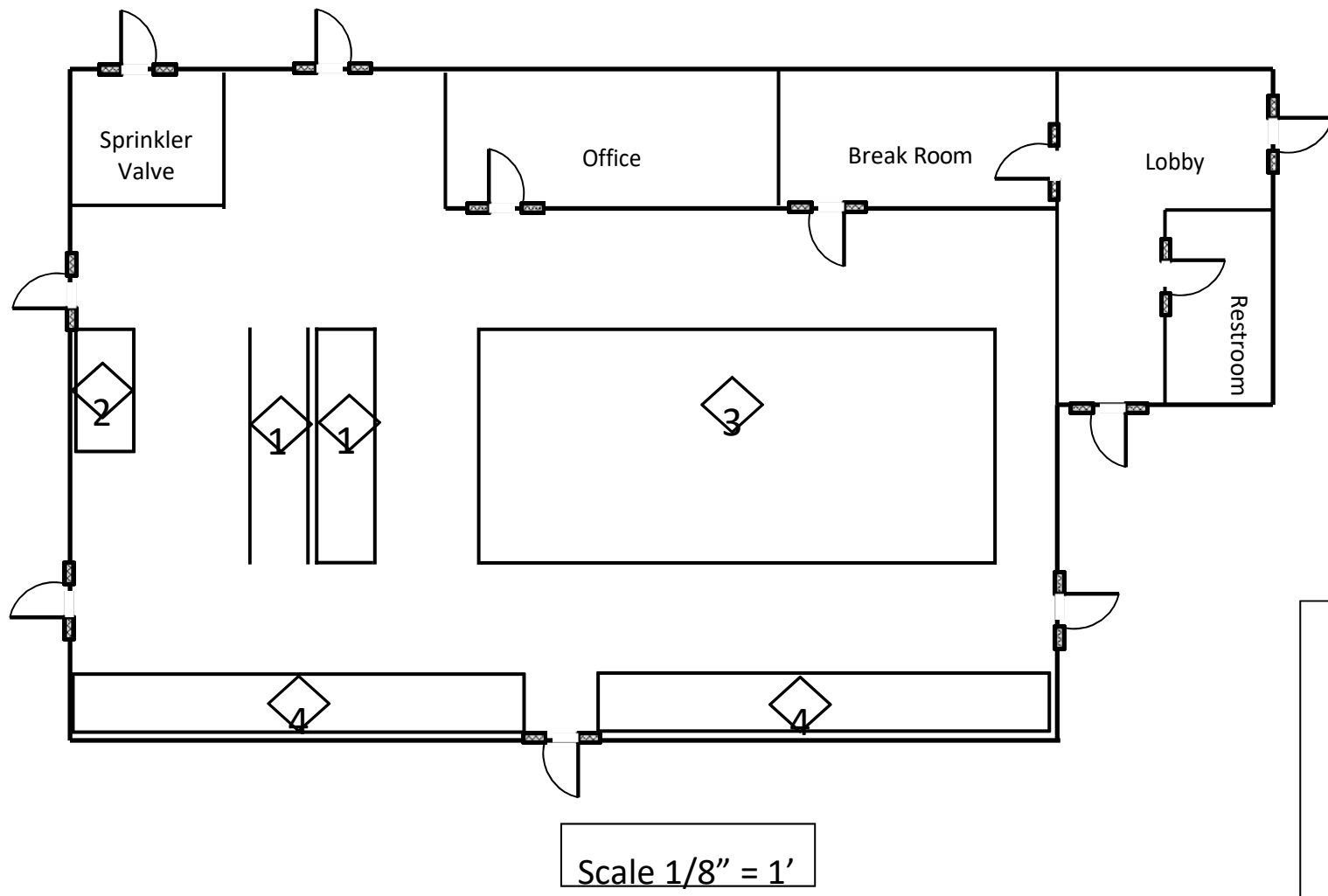
Designer
 Company Name
 Company
 Drawn By: Date:

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

Sprinkler System Information

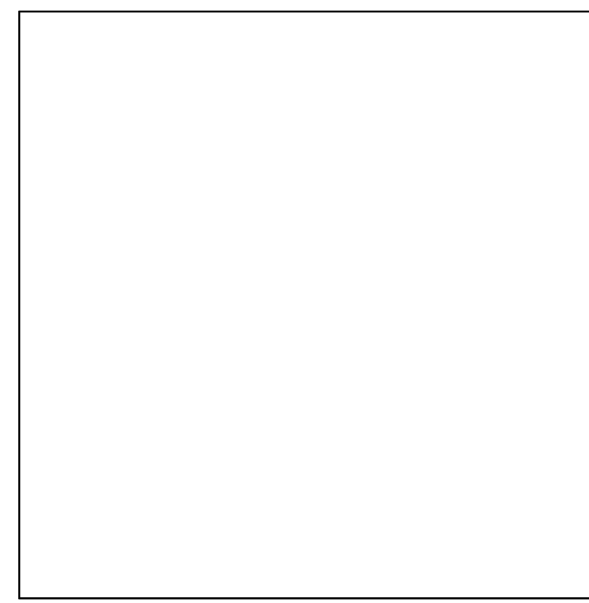
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No	0.2 / 2000	165°	No	8 ft
NFPA 13 or 231 design curve and reduction information.				



Notes: 12

- 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.
 - 2 **Rack Storage** – Single Row Racks – High-Hazard Storage –
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



Code and Standards:
IFC: (2018)
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

12. Identify each high-piled storage arrangement and restrictions to storage height.

Sprinkler System Information

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NFPA 13 or 231 design curve and reduction information.				

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13 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
[Dotted Box]	Automatic Smoke/Heat Vents

Codes and Standards:

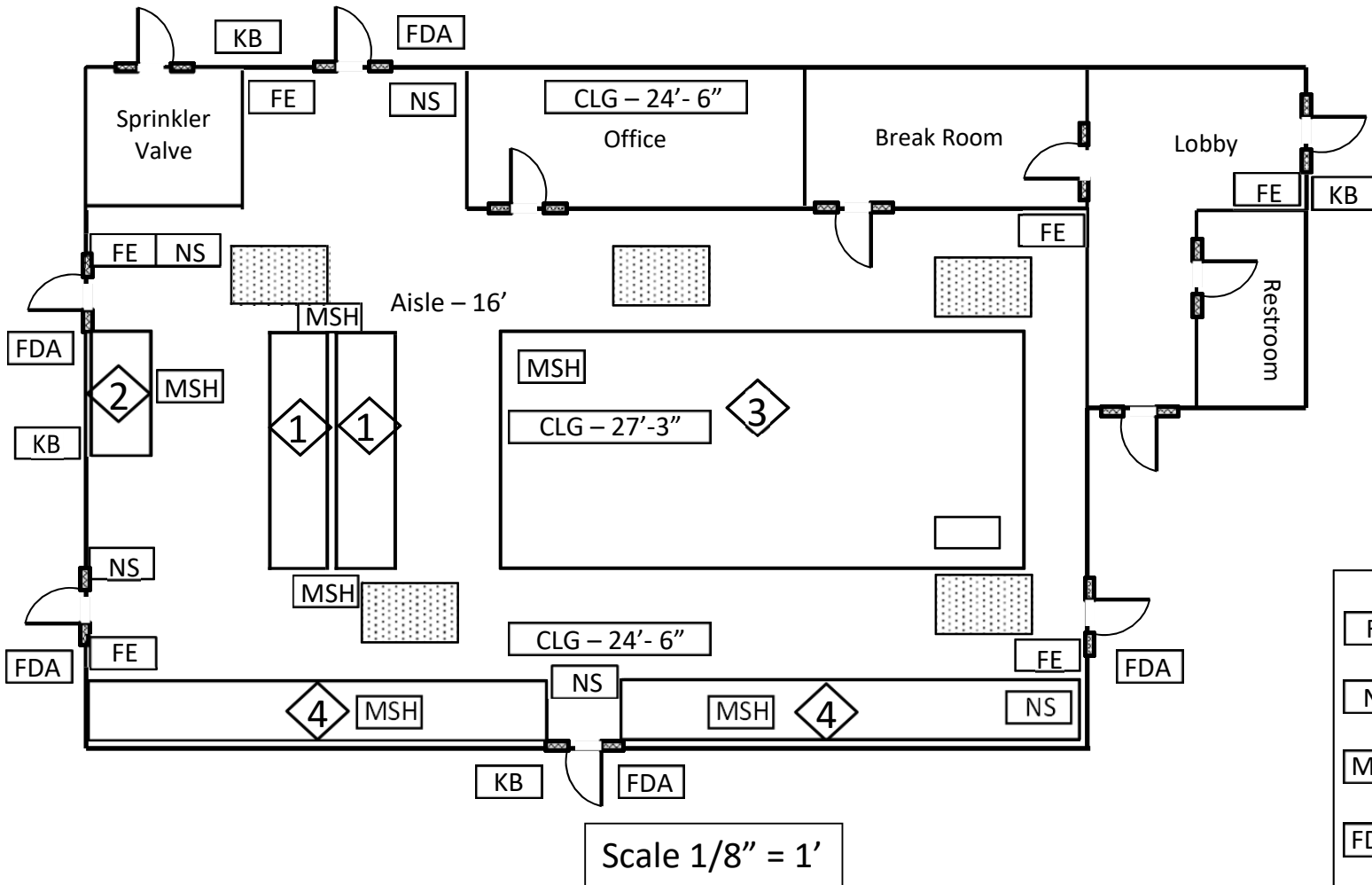
IFC: 2018
NFPA 13: (Edition Year)

Designer Company
Name Company
Address

Drawn By: Date:

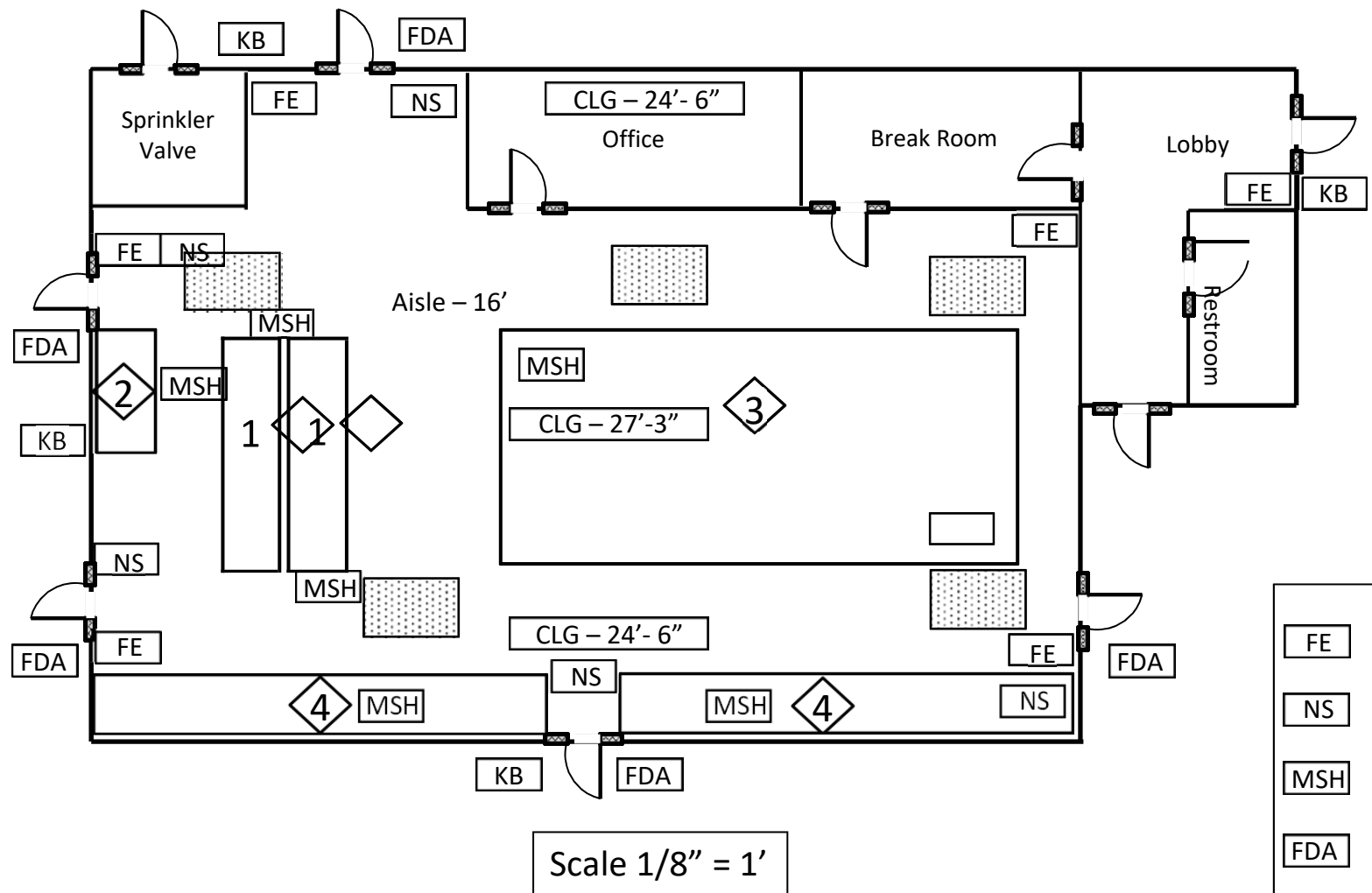
Location Name – Tenant
Location Address w/ Suite
Number

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 .

Sprinkler System Information				
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[Stippled Box]	Automatic Smoke/Heat Vents

Codes and Standards:	
IFC: 2018 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

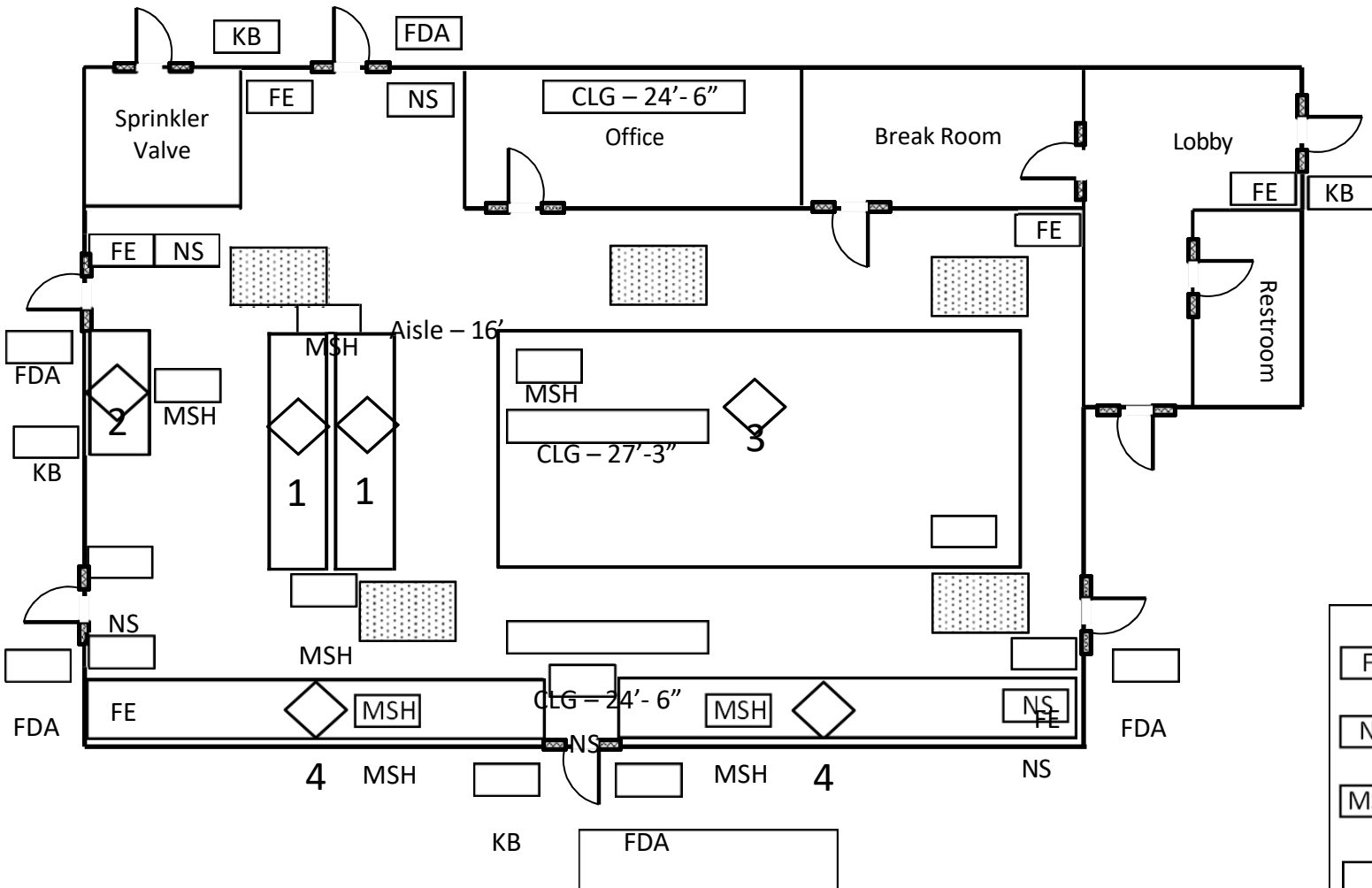
This is an example of the completed plan. Remember you are responsible for the plan creation and providing all the relevant information as it pertains to your business.

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Scale 1/8" = 1'

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CLG - xx'-xx"	Automatic Smoke/Heat Vents

Codes and Standards:
IFC: 2018
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 the required signage for “No Smoking”.

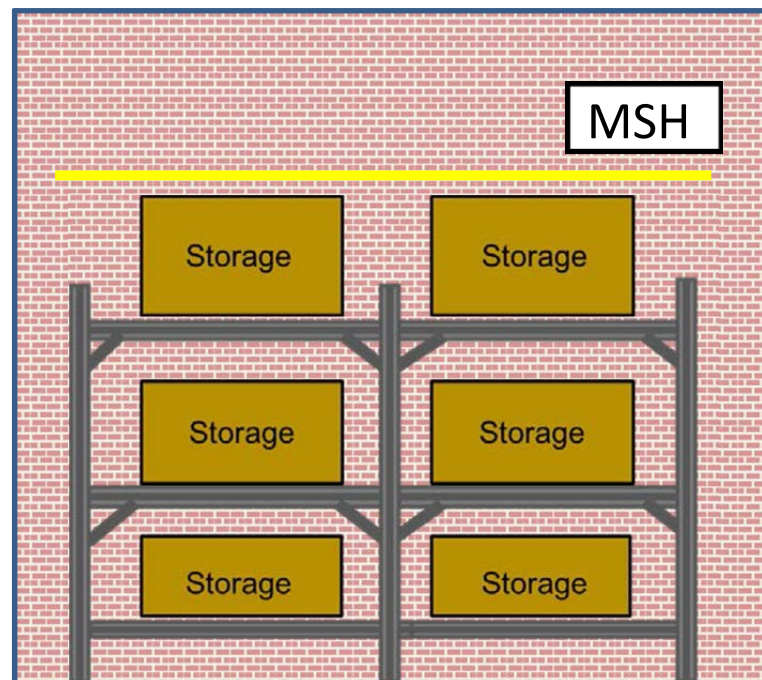
Signage should be clearly legible, visible from distances of approximately 25 feet, display lettering on a contrasting background, and proportion wording approximately as shown:



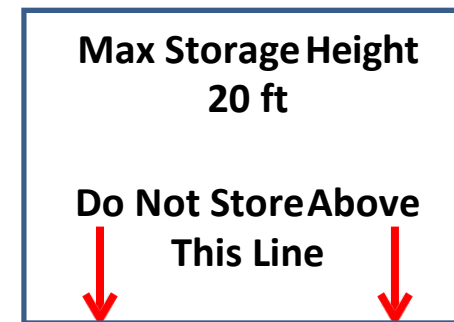
Storage Height Limitation Signage

- 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.

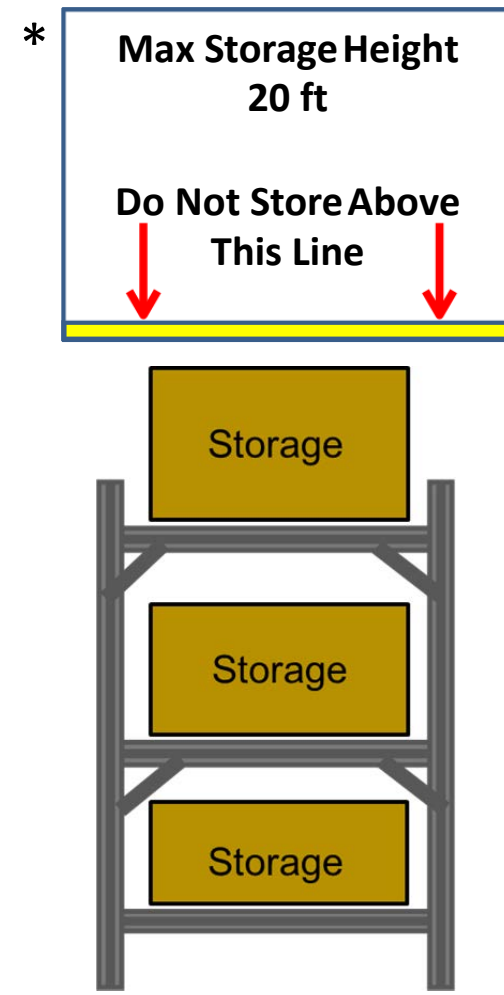


- Provide a line to indicate max storage height.

MSH = Max Storage Height Sign

Storage Height Limitation Signage

Storage located in aisles.



- *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.