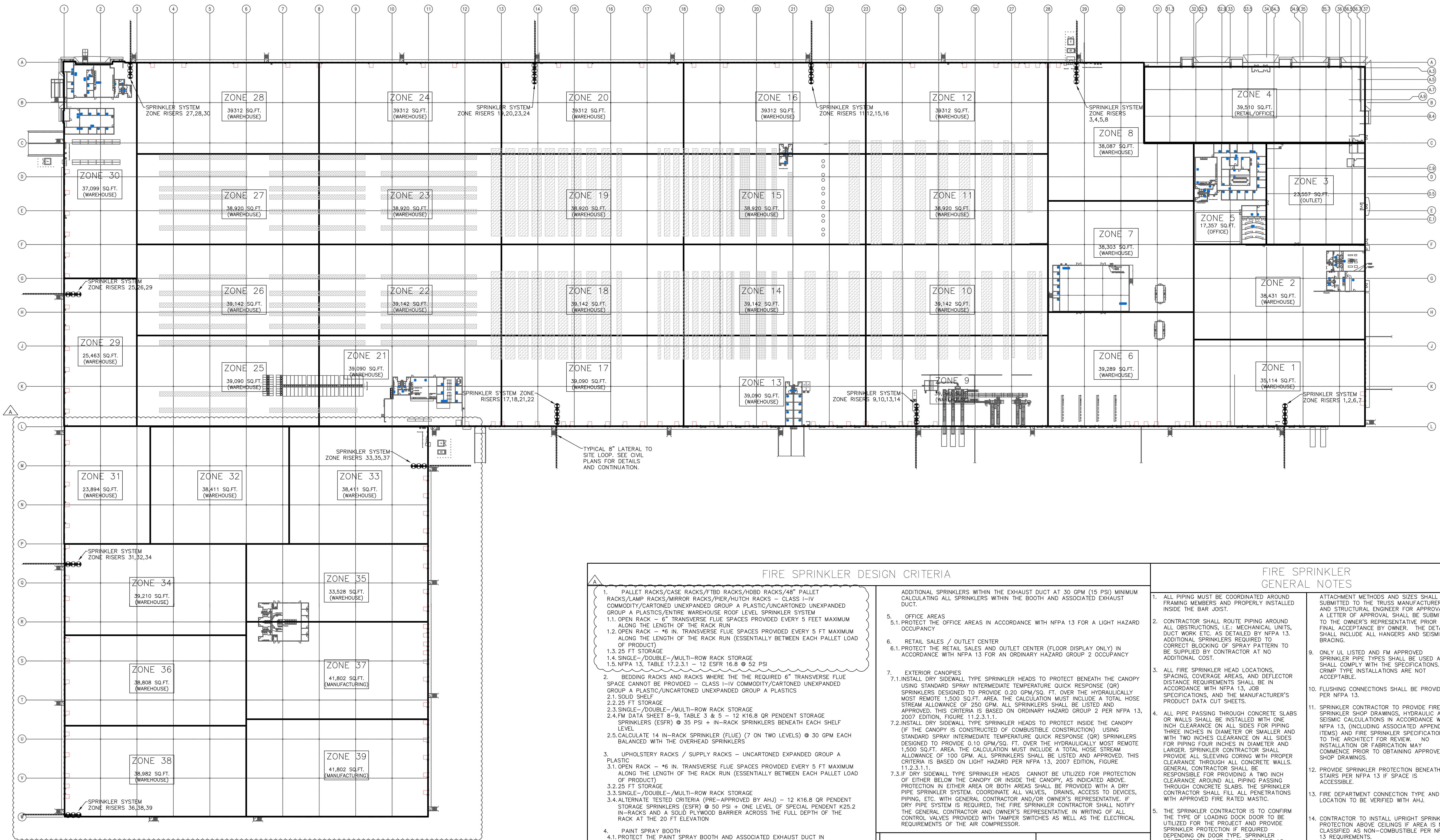
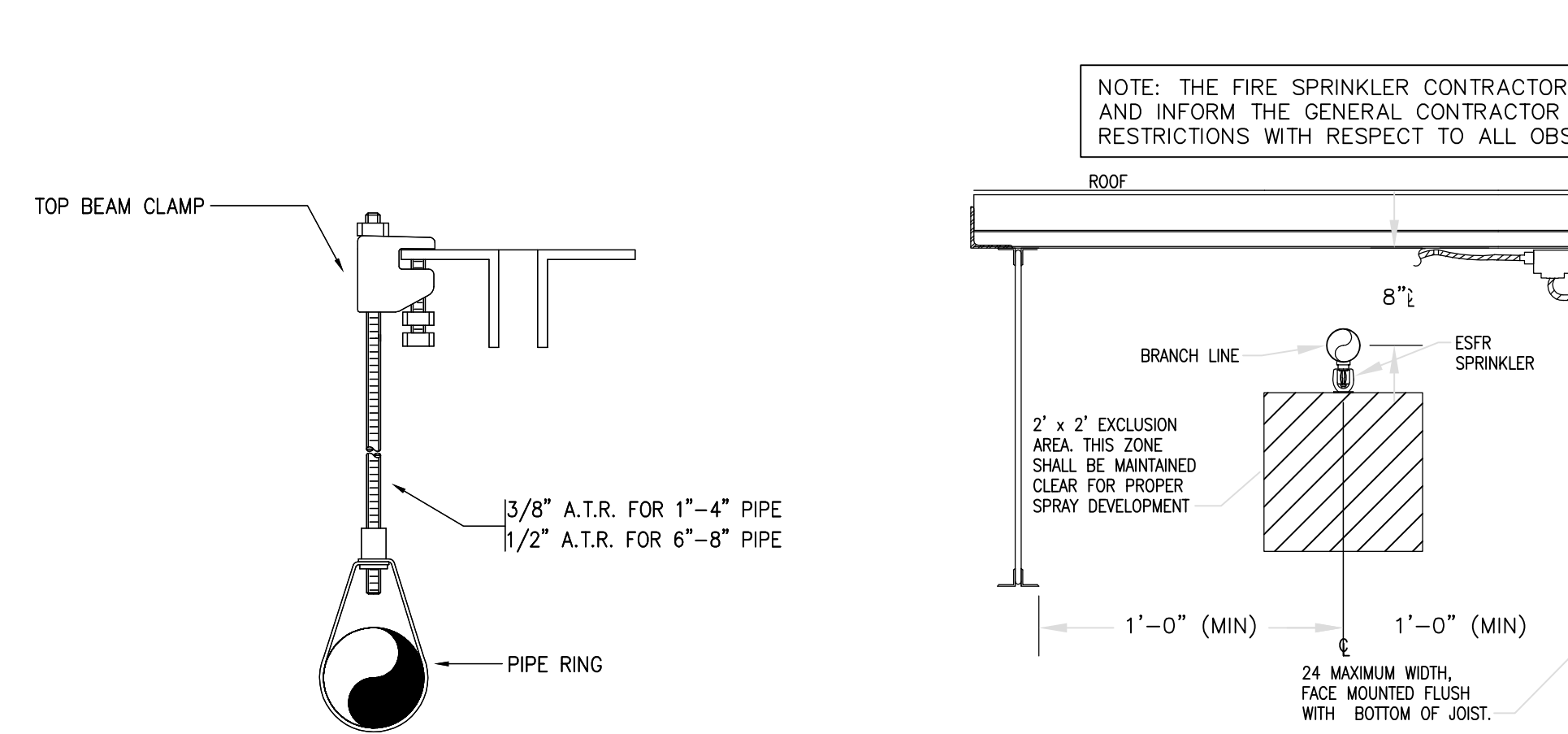




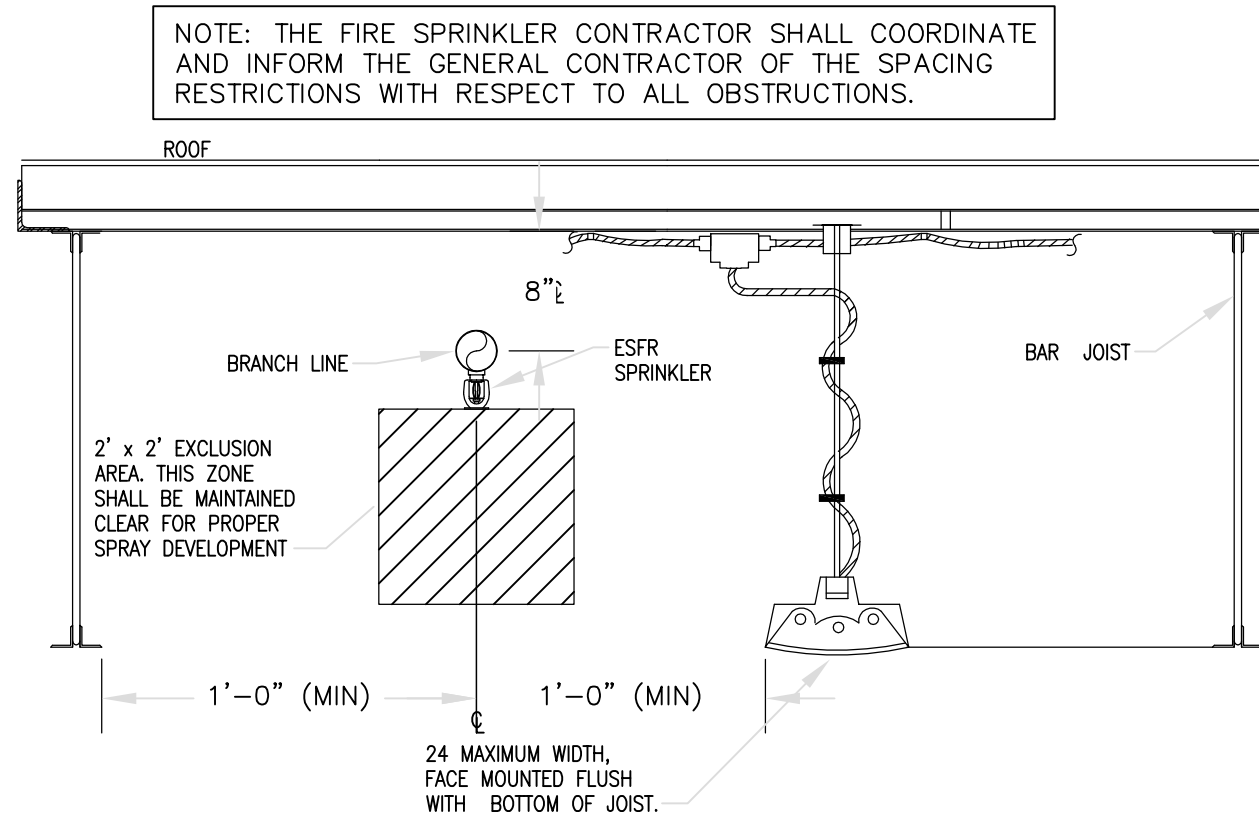
FIRE PROTECTION ZONING LAYOUT

SCALE: 1" = 60'



HANGER DETAIL

NTS

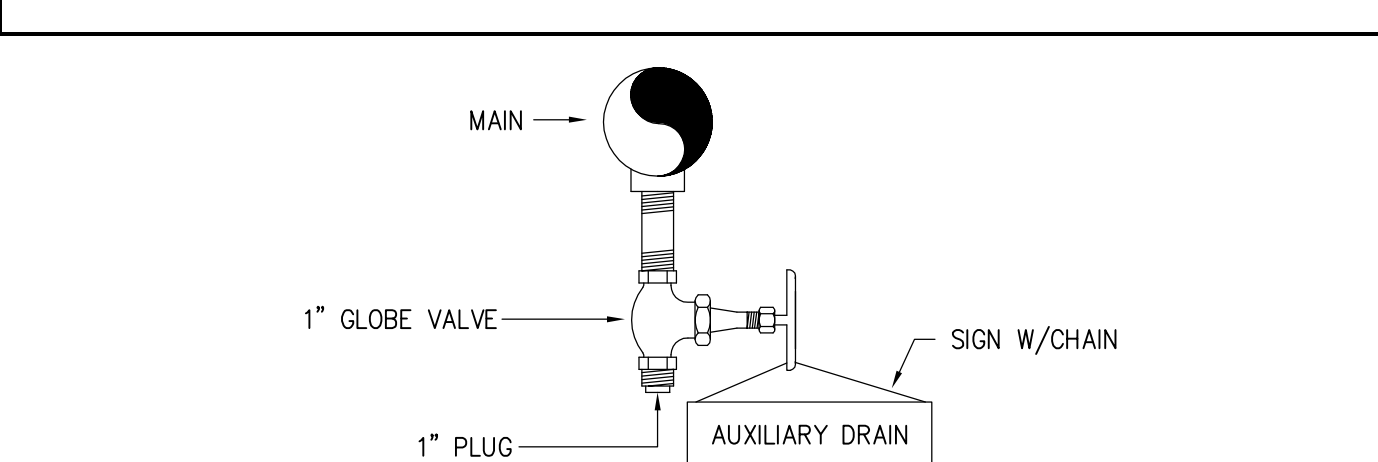


OBSTRUCTION CLEARANCE DETAIL: ESFR

NTS

FIRE SPRINKLER DESIGN CRITERIA

1. PALLET RACKS/CASE RACKS/FTBD RACKS/HDBD RACKS/48" PALLET RACKS/LAMP RACKS/MIRROR RACKS/PIER/HUTCH RACKS - CLASS I-IV COMMODITY/CARTONED UNEXPANDED GROUP A PLASTIC/UNCARTONED UNEXPANDED GROUP A PLASTICS/ENTIRE WAREHOUSE ROOF LEVEL SPRINKLER SYSTEM
1.1. OPEN RACK - 6" TRANSVERSE FLUE SPACES PROVIDED EVERY 5 FEET MAXIMUM ALONG THE LENGTH OF THE RACK RUN
1.2. OPEN RACK - *6 IN. TRANSVERSE FLUE SPACES PROVIDED EVERY 5 FT MAXIMUM ALONG THE LENGTH OF THE RACK RUN (ESSENTIALLY BETWEEN EACH PALLET LOAD OF PRODUCT)
1.3. 25 FT STORAGE
1.4. SINGLE-/DOUBLE-/MULTI-ROW RACK STORAGE
1.5. NFPA 13, TABLE 17.2.3.1 - 12 ESFR 16.8 @ 52 PSI
2. BEDDING RACKS AND RACKS WHERE THE THE REQUIRED 6" TRANSVERSE FLUE SPACE CANNOT BE PROVIDED - CLASS I-IV COMMODITY/CARTONED UNEXPANDED GROUP A PLASTIC/UNCARTONED UNEXPANDED GROUP A PLASTICS
2.1. SOLID SHELF
2.2. 25 FT STORAGE
2.3. SINGLE-/DOUBLE-/MULTI-ROW RACK STORAGE
2.4. FM DATA SHEET 8-9, TABLE 3 & 5 - 12 K16.8 OR PENDENT STORAGE SPRINKLERS (ESFR) @ 35 PSI + IN-RACK SPRINKLERS BENEATH EACH SHELF LEVEL
2.5. CALCULATE 14 IN-RACK SPRINKLER (FLUE) (7 ON TWO LEVELS) @ 30 GPM EACH BALANCED WITH THE OVERHEAD SPRINKLERS
3. UPHOLSTERY RACKS / SUPPLY RACKS - UNCARTONED EXPANDED GROUP A PLASTIC
3.1. OPEN RACK - *6 IN. TRANSVERSE FLUE SPACES PROVIDED EVERY 5 FT MAXIMUM ALONG THE LENGTH OF THE RACK RUN (ESSENTIALLY BETWEEN EACH PALLET LOAD OF PRODUCT)
3.2. 25 FT STORAGE
3.3. SINGLE-/DOUBLE-/MULTI-ROW RACK STORAGE
3.4. ALTERNATE TESTED CRITERIA (PRE-APPROVED BY AHJ) - 12 K16.8 OR PENDENT STORAGE SPRINKLERS (ESFR) @ 50 PSI + ONE LEVEL OF SPECIAL PENDENT K25.2 IN-RACKS AND A SOLID PLYWOOD BARRIER ACROSS THE FULL DEPTH OF THE RACK AT THE 20 FT ELEVATION
4. PAINT SPRAY BOOTH
4.1. PROTECT THE PAINT SPRAY BOOTH AND ASSOCIATED EXHAUST DUCT IN ACCORDANCE WITH NFPA 33 - EXTRA HAZARD GROUP 2 (0.40 GPM/SQ FT) +



AUX. DRAIN DETAIL

NTS

FIRE SPRINKLER CONTRACTOR INSTALLATION, COORDINATION & RESPONSIBILITY STATEMENT

THE SPRINKLER CONTRACTOR IS TO REVIEW AND UNDERSTAND ENTIRE SCOPE OF THE SPRINKLER WORK AND TO FULLY COORDINATE LOCATIONS OF PIPING AND SPRINKLER HEADS WITH ALL DRAWINGS AND DESIGN DOCUMENTS TO AVOID, OR PROTECT BENEATH, ALL OBSTRUCTIONS. ALL POTENTIAL SPRINKLER OBSTRUCTIONS WILL NOT BE IDENTIFIED ON THE DRAWINGS AND DESIGN DOCUMENTS, SOME WILL BECOME NECESSARY DUE TO VARIOUS INFRASTRUCTURE AND OTHER CONDITIONS THAT WILL OCCUR DURING FIRE PROTECTION FULL-DESIGN AND THE OVERALL SET OF CONSTRUCTION ACTIVITIES. IT WILL BE THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR TO DESIGN FOR AND FIELD COORDINATE ALL NECESSARY SPRINKLER LOCATIONS TO PROVIDE PROTECTION BENEATH OR AROUND ANY AND ALL OBSTRUCTIONS AS REQUIRED PER NFPA 13. COORDINATE THOROUGHLY WITH ALL OTHER TRADES TO ENSURE ADEQUATE PROTECTION IS PROVIDED. THE OWNER, DESIGN ENGINEERS AND ARCHITECTS WILL NOT BE RESPONSIBLE FOR PROBLEMS OR COSTS ASSOCIATED WITH CONTRACTOR COORDINATION.

CRITERIA LEGEND

SYMBOL	DESCRIPTION
[Symbol]	BEDDING RACKS (2)
[Symbol]	UPHOLSTERY RACKS (3)
[Symbol]	PALLET RACKS (1)

FIRE SPRINKLER GENERAL NOTES

1. ALL PIPING MUST BE COORDINATED AROUND FRAMING MEMBERS AND PROPERLY INSTALLED INSIDE THE BAR JOIST.
2. CONTRACTOR SHALL ROUTE PIPING AROUND ALL OBSTRUCTIONS, I.E. MECHANICAL UNITS, DUCT WORK ETC. AS DETAILED BY NFPA 13. ADDITIONAL SPRINKLERS REQUIRED TO CORRECT BLOCKING OF SPRAY PATTERN TO BE SUPPLIED BY CONTRACTOR AT NO ADDITIONAL COST.
3. ALL FIRE SPRINKLER HEAD LOCATIONS, SPACING, COVERAGE AREAS, AND DEFLECTOR DISTANCE REQUIREMENTS SHALL BE IN ACCORDANCE WITH NFPA 13, JOB SPECIFICATIONS, AND THE MANUFACTURER'S PRODUCT DATA CUT SHEETS.
4. ALL PIPE PASSING THROUGH CONCRETE SLABS OR WALLS SHALL BE INSTALLED WITH ONE INCH CLEARANCE ON ALL SIDES FOR PIPING THREE INCHES IN DIAMETER OR SMALLER AND WITH TWO INCHES CLEARANCE ON ALL SIDES FOR PIPING FOUR INCHES IN DIAMETER AND LARGER. SPRINKLER CONTRACTOR SHALL PROVIDE ALL SLEEVING CORING WITH PROPER CLEARANCE THROUGH ALL CONCRETE WALLS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TWO INCH CLEARANCE AROUND ALL PIPING PASSING THROUGH CONCRETE SLABS. THE SPRINKLER CONTRACTOR SHALL FILL ALL PENETRATIONS WITH APPROVED FIRE RATED MASTIC.
5. THE SPRINKLER CONTRACTOR IS TO CONFIRM THE TYPE OF LOADING DOCK DOOR TO BE UTILIZED FOR THE PROJECT AND PROVIDE SPRINKLER PROTECTION IF REQUIRED DEPENDING ON DOOR TYPE. SPRINKLER CONTRACTOR TO VERIFY AND PROVIDE AS NEEDED.
6. SPRINKLER CONTRACTOR SHALL PROVIDE ANY NECESSARY TRAPEZOID MEMBERS IN ACCORDANCE WITH NFPA 13 AND AS PER ANY REQUIREMENTS BY THE STRUCTURAL ENGINEER OF RECORD.
7. ALL PIPING SHALL BE COORDINATED WITH ALL DRAWINGS, AND IS TO BE INSTALLED SO AS TO BE HIDDEN FROM VIEW ABOVE ANY NON-STRUCTURAL CEILINGS. CONCEAL ALL PIPING WHERE POSSIBLE.
8. FIRE SPRINKLER SHOP DRAWINGS WITH DETAILS SHOWING HANGERS, FASTENERS, ATTACHMENT METHODS AND SIZES SHALL BE SUBMITTED TO THE TRUSS MANUFACTURER AND STRUCTURAL ENGINEER FOR APPROVAL. A LETTER OF APPROVAL SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE PRIOR TO FINAL ACCEPTANCE BY OWNER. THE DETAILS SHALL INCLUDE ALL HANGERS AND SEISMIC BRACING.
9. ONLY UL LISTED AND FM APPROVED SPRINKLER PIPE TYPES SHALL BE USED AND SHALL COMPLY WITH THE SPECIFICATIONS. CRIMP TYPE INSTALLATIONS ARE NOT ACCEPTABLE.
10. FLUSHING CONNECTIONS SHALL BE PROVIDED PER NFPA 13.
11. SPRINKLER CONTRACTOR TO PROVIDE FIRE SPRINKLER SHOP DRAWINGS, HYDRAULIC AND SEISMIC CALCULATIONS IN ACCORDANCE WITH NFPA 13, (INCLUDING ASSOCIATED APPENDIX ITEMS) AND FIRE SPRINKLER SPECIFICATIONS TO THE ARCHITECT FOR REVIEW. NO INSTALLATION OR FABRICATION MAY COMMENCE PRIOR TO OBTAINING APPROVED SHOP DRAWINGS.
12. PROVIDE SPRINKLER PROTECTION BENEATH STAIRS PER NFPA 13 IF SPACE IS ACCESSIBLE.
13. FIRE DEPARTMENT CONNECTION TYPE AND LOCATION TO BE VERIFIED WITH AHJ.
14. CONTRACTOR TO INSTALL UPRIGHT SPRINKLER PROTECTION ABOVE CEILINGS IF AREA IS NOT CLASSIFIED AS NON-COMBUSTIBLE PER NFPA 13 REQUIREMENTS.
15. INSTALL HOSE STATIONS THROUGHOUT BUILDING AS REQUIRED BY NFPA 13 AND AHJ. VERIFY REQUIREMENTS AND LOCATIONS WITH AHJ AND OWNER'S REPRESENTATIVE.
16. PIPING IS NOT PERMITTED TO BE RUN BENEATH SKYLIGHTS OR ADJACENT TO ROOF HATCHES.

WATER SUPPLY INFORMATION

WATER WILL BE SUPPLIED FROM A NEW CITY FIRE PUMP AND TANK(S) ADJACENT TO THE BUILDING. THE CITY WILL PROVIDE WATER SOURCE TO MEET A DEMAND OF 2000 GPM @ 95 PSI AVAILABLE AT THE BASE OF RISER. 10 PSI SAFETY FACTOR IS TO BE UTILIZED IN CALCULATIONS.

APPLICABLE CODES

NEPA STANDARD: NFPA 13

EDITION: 2007

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02/10/14
BID SET
02/28/14
REVISION A

REVISIONS
NO. 1
REMARKS
COORDINATION

ROOMS TO GO
400 Perimeter Center, Terrace, Suite 800
Atlanta, GA 30346
Phone: (678) 475-0499
FAX (678) 475-1398

FIRE SPRINKLER CRITERIA AND DETAILS
Distribution Center, Retail Store and Outlet Store
for
ROOMS TO GO
City of Dunn
Hannett County, North Carolina

09/17/13
DATE
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Solutions Group LLC

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400 Perimeter Center, Terrace, Suite 800
Atlanta, GA 30346
Phone: (678) 475-0499
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