

Hydraulic Design Information Sheet

Name - Northwest Regional Youth Center - Area #1 Date - 04-29-16  
Location - Dormitory  
Building - Northwest Regional Youth Center System No. - pre-action  
Contractor - Contract No. -  
Calculated By - Paul C. Link, P.E. Drawing No. - 5  
Construction: ( ) Combustible (X) Non-Combustible Ceiling Height - 13'  
Occupancy - Dorm / educational

S (X) NFPA 13 (X) Lt. Haz. Ord.Haz.Gp. ( ) 1 ( ) 2 ( ) 3 ( ) Ex.Haz.  
Y ( ) NFPA 231 ( ) NFPA 231C ( ) Figure Curve

S Other

T Specific Ruling Made By Date

E  
M Area of Sprinkler Operation - 1500 System Type Sprinkler/Nozzle  
Density - 0.1 ( ) Wet Make  
D Area Per Sprinkler - 150 ( ) Dry Model  
E Elevation at Highest Outlet - 13 ( ) Deluge Size 1/2"  
S Hose Allowance - Inside - (X) Preaction K-Factor 5.6  
I Rack Sprinkler Allowance - ( ) Other Temp.Rat.155  
G Hose Allowance - Outside - 100

N Note

Calculation Flow Required - 340 Press Required - 91.2  
Summary C-Factor Used: 100 Overhead 140 Underground

W Water Flow Test: Pump Data: Tank or Reservoir:  
A Date of Test - 01-14-2016 Cap. -  
T Time of Test - Rated Cap.- Elev.-  
E Static Press - 101 @ Press -  
R Residual Press - 99 Elev. - Well  
Flow - 770 Proof Flow  
S Elevation - 0

U  
P Location - Flow hydrant: west of site  
P Static / residual hydrant: front of building by west driveway  
L Source of Information - KCMO Water Dept. and Jayhawk Fire Sprinkler Co.  
Y

C Commodity Class Location  
O Storage Ht. Area Aisle W.  
M Storage Method: Solid Piled % Palletized % Rack  
M  
S ( ) Single Row ( ) Conven. Pallet ( ) Auto. Storage ( ) Encap.  
R ( ) Double Row ( ) Slave Pallet ( ) Solid Shelf ( ) Non  
T ( ) Mult. Row ( ) Open Shelf  
O C  
R K Flue Spacing Clearance:Storage to Ceiling  
A Longitudinal Transverse  
G  
E Horizontal Barriers Provided: