

# HYDRAULIC DESIGN INFORMATION SHEET

Name: **SOLEIL CENTER - CONFERENCE**

Location: **4501 CREEDMOOR ROAD  
RALEIGH, NC**

Building: **SOLEIL CONFERENCE CENTER**

Contractor: **ABL FIRE PROTECTION**

File Name: **Soleil 2nd Floor OH1.the**

Construction:  Combustible  Noncombustible

Occupancy: **MECHANICAL ROOM**

AHJ:

Date: **November 16, 2007**

System No.: **2ND FLOOR**

Contract No.: **2698**

Drawing No.: **FP-13C**

Calculated by: **EJE**

Ceiling Height: **VARIES** ft

## SYSTEM DESIGN

NFPA 13:  Light Hazard  Ordinary Hazard Group: 1  Extra Hazard Group:

Figure: \_\_\_\_\_ Curve: \_\_\_\_\_

Other (Specify):

Specific Rulling:

Made By: \_\_\_\_\_

Date: \_\_\_\_\_

Area of Sprinkler Operation: **1500** sqft  
Density: **0.15** gpm/sqft

Area per Sprinkler: **130max** sqft

Hose Allowance Inside: \_\_\_\_\_ gpm

Hose Allowance Outside: **250** gpm

Rack Sprinkler Allowance: \_\_\_\_\_ gpm

System Type:  Wet  Dry  Deluge  Pre-Action

SPRINKLER or NOZZLE

Make: **VIKING**

Model: **VK-300 UPRIGHTS**

Size: **1/2** in K-factor: **5.6**

Temperature Rating: **165** °F

## CALCULATION SUMMARY

Flow Required: **1,271.73** gpm Pressure Required: **52.56** psi At: **TEST/CONNECTION**

"C" Factor Used: Overhead: **120** Underground: **140**

## WATER SUPPLY

### WATER FLOW TEST

Date: **08-31-07**

Time: **12:00 pm**

Static: **106** psi

Residual: **92** psi

Flowing: **1470** gpm

Elevation: \_\_\_\_\_ ft

### PUMP DATA

Rated Capacity: \_\_\_\_\_ gpm

At: \_\_\_\_\_ psi

Elevation: \_\_\_\_\_ ft

### TANK OR RESERVOIR

Capacity: \_\_\_\_\_ gals

Elevation: \_\_\_\_\_ ft

### WELL

Proof Flow: \_\_\_\_\_ gpm

Location: **EXISTING HYDRANTS ON EDWARDS MILL ROAD**

Source of Information: **BASS, NIXON & KENNEDY, INC.**

## COMMODITY STORAGE

Commodity: \_\_\_\_\_

Storage Height: \_\_\_\_\_

Storage Method: Solid Pile: \_\_\_\_\_ %

Class: \_\_\_\_\_

Area: \_\_\_\_\_

Palletized: \_\_\_\_\_ %

Location: \_\_\_\_\_

Aisle Width: \_\_\_\_\_

Rack: \_\_\_\_\_ %

## RACK STORAGE

Single Row

Conventional Pallet

Automatic Storage

Encapsulated

Double Row

Slave Pallet

Solid Shelving

Nonencapsulated

Multiple Row

Open

### FLUE SPACING

Longitudinal: \_\_\_\_\_ in Transverse: \_\_\_\_\_ in

### CLEARANCE FROM TOP OF STORAGE TO CEILING

\_\_\_\_\_ ft \_\_\_\_\_ in

Horizontal Barriers Provided: \_\_\_\_\_