FIRE SPRINKLER DESIGN INTAKE FORM

FIRE SPRINKLER / STANDPIPE / FIRE PUMP
BASIS OF DESIGN & OWNER INFORMATION SHEET
(NFPA 13, 14 & 20 – 2022 Editions)

3D FIRE DESIGN, LLC
20 Siesta Circle, Heath, Texas 75032 | 972-213-3210
gerald@3dfiredesign.com | joshua@3dfiredesign.com
www.3dfiredesign.com

Note: This sheet is intended to capture the information required by the owner / owner's rep / RDP that forms the **basis of design** and Owner's Certificate information for NFPA 13 systems, plus corresponding design data for NFPA 14 standpipes and NFPA 20 fire pumps.

1. GENERAL PROJECT INFORMATION

1. Project Name: _____

2. Project Address: _____

City _____ State _____ ZIP _____

3. Project #: _____

4. Project Scope: _____

5. Owner / Representative / PM: _____

Phone: _____ Email: _____

6. AHJ(s):

☐ Fire Department / Fire Marshal: _____

☐ Building Department: _____

☐ Other: _____

7. General Contractor:

Company Name: _____

Address: _____

City _____ State _____ ZIP _____

Phone: _____ Email: _____

8. Installing Fire Sprinkler Contractor:

Company Name: _____

Address: _____

City _____ State _____ ZIP _____

Phone: _____ Project Manager: _____

9. Code & Standard Editions:

☐ NFPA 13 (2022) Alternate Edition (Year): _____

☐ NFPA 14 (2022) Alternate Edition (Year): _____

☐ NFPA 20 (2022) Alternate Edition (Year): _____

☐ NFPA 72

☐ NFPA 70

☐ NFPA 24

10. Insurance / Special Requirements:

Insurer: _____

☐ FM / Insurer Data Sheets Required

11. Contract Start Point: _____

12. AHJ Hydraulic Calculation Safety Margin Requirement:

☐ 10% Safety Margin

☐ 10 psi Safety Margin

☐ Other: _____

Note: Some jurisdictions require hydraulic calculations to be submitted with an additional safety margin above the calculated system demand. The required margin should be confirmed with the AHJ prior to design commencement and hydraulic calculation completion.

---

2. BUILDING & USE INFORMATION

☐ Construction Type: _____

☐ Stories Above Grade: _____

☐ Below Grade Levels: _____

☐ Building Height: _____ ft

☐ Total Building Area: _____ sq ft

☐ Occupancy Classification: _____

☐ Freezing Areas Present: ☐ Yes ☐ No

☐ Seismic Design Category: _____

---

3. NFPA 13 – SPRINKLER SYSTEM BASIS OF DESIGN (2022)

3.1 Hazard / Commodity / Storage Information

☐ Hazard Classification by Area

☐ Storage Present: ☐ Yes ☐ No

Commodity Class: _____

Storage Type:

☐ Rack ☐ Shelving ☐ Palletized ☐ Solid Pile ☐ Bin Box ☐ Other: _____

Maximum Storage Height: _____ ft

Maximum Ceiling Height: _____ ft

Special Occupancies:

☐ Commercial Kitchen

☐ Stage / Platform

☐ Data Center

☐ High Piled Storage

☐ Hazardous Materials

☐ Attic Spaces

☐ Parking Garage

☐ Foam / Special Systems

3.2 Water Supply Information

☐ Municipal Main

☐ Private Loop

☐ Gravity Tank

☐ Suction Tank

☐ Well

☐ Other: _____

Static Pressure: _____ psi

Residual Pressure: _____ psi

Flow: _____ gpm

Test Date: _____

Underground Size / Material: _____

☐ Existing Supply Adequate

☐ Fire Pump Required

3.2.1 Stub-In & Backflow Preventer

Stub-In Type: ☐ DI ☐ IBR

Backflow Location: ☐ Site Piping ☐ Riser Room

Backflow Make and Model: _____

3.3 Sprinkler System Type & Scope

☐ Wet

☐ Dry

☐ Preaction

☐ Deluge

☐ Antifreeze

Sprinkler Manufacturer: _____

Temperature Rating: _____

Response Type:

☐ Standard

☐ Quick Response

☐ Residential

☐ ESFR

☐ CMSA

Flexible Drops: ☐ Yes ☐ No

Make: _____

Model: _____

Length: _____

Seismic Protection Required: ☐ Yes ☐ No

Manufacturer: _____

Cp or SS or S1 Value: _____

Pre or Post 22.8 TIA: _____

Overhead Door Type:

☐ Coil

☐ Roll Back

Elevator Type:

☐ Traction

☐ Hydraulic

---

4. NFPA 14 – STANDPIPE SYSTEM DESIGN DATA (2022)

☐ Standpipe Required

Classification:

☐ Class I ☐ Class II ☐ Class III

Combined Sprinkler / Standpipe Risers: ☐ Yes ☐ No

System Type:

☐ Automatic Wet

☐ Automatic Dry

☐ Semiautomatic Dry

☐ Manual Wet

☐ Manual Dry

Required Flow: _____ gpm

Required Residual Pressure: _____ psi

Roof Outlet Required: ☐ Yes ☐ No

Pressure Reducing Valves: ☐ Yes ☐ No

Water Supply:

- ☐ City Main
- ☐ Fire Pump
- ☐ Tank
- ☐ Combination

---

5. NFPA 20 – FIRE PUMP BASIS OF DESIGN (2022)

Reason Pump Required:

- ☐ Sprinkler Demand
- ☐ Standpipe Demand
- ☐ High Rise
- ☐ Tank Transfer / Boost

Pump Type:

- ☐ Horizontal Split Case
- ☐ Vertical In-Line
- ☐ Vertical Turbine
- ☐ End Suction
- ☐ Other: _____

Rated Flow: _____ gpm

Rated Pressure: _____ psi

Driver:

- ☐ Electric
- ☐ Diesel

Emergency Power: ☐ Yes ☐ No

Pump Room:

- ☐ Grade Level
- ☐ Basement
- ☐ Other: _____

Ventilation Provided: ☐ Yes ☐ No

Drainage Provided: ☐ Yes ☐ No

Jockey Pump Required: ☐ Yes ☐ No

---

6. DESIGN SOFTWARE

Primary Platform:

- ☑ Revit / HydraCAD

Alternate Platform: (If required an additional fee will be determined)

- ☐ AutoSPRINK

Required Files:

- ☐ Architectural Revit Model
- ☐ Structural Revit Model
- ☐ MEP Revit Model

If DWG Files Only: (Note: if project was created using Revit and Revit files are not being released, then there is an additional cost to use DWGs within Revit)

- ☐ Floor Plans
- ☐ Reflected Ceiling Plans
- ☐ Structural Drawings
- ☐ MEP Drawings
- ☐ Full Height Cross Sections of the Building and Stairwells
- ☐ Site Utility Plans

---

7. ATTACHMENTS REQUIRED

- ☐ Architectural Floor Plans
- ☐ Reflected Ceiling Plans
- ☐ Storage Plans
- ☐ Structural Drawings
- ☐ Water Supply Test
- ☐ Existing System Information
- ☐ Site Plan
- ☐ AHJ Requirements

---

8. OWNER / RDP ACKNOWLEDGEMENT

Owner / Representative: _____

Signature: _____ **Date:** _____

Architect / Engineer of Record: _____

Signature: _____ **Date:** _____