

ACCEPTANCE TEST CHECKLIST

Date Documents Submitted: _____

Log No.: _____

File No.: _____

Plan Examiner: _____

Date of Approval: _____

Permit No.: _____

Property Information

Building Name: _____

Building Address: _____

Owner's Name: _____

Owner's Address: _____

Owner's Phone: _____ Fax: _____ E-mail: _____

System Designer/Contractor

Company Name: _____

Company Address: _____

Contact Person (Designer): _____

Designer Qualifications: _____

Phone: _____ Fax: _____ E-mail: _____

General

Type of building:

- New Existing Renovation

Pump make: _____ Drive: Electric Diesel

Model No.: _____ Pump rating: _____ gpm @ _____ psi
 Rated speed: _____ rpm

What is fire pump feeding?

- Automatic sprinkler system Standpipe system
 Fire hydrants Other: _____

Present at test:

	Authorized representative	Manufacturer
Pump		
Engine (if diesel)		
Controller		
Transfer switch		

Date the suction piping was flushed prior to hydrostatic test: _____

Flow rate: _____ gpm

Pressure at which piping hydrostatic tested: _____ psi



Fire Pump Acceptance Test**Installation**

- | | | |
|------------------------------|-----------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Certificate for flushing and hydrostatic testing furnished |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Centrifugal fire pump listed for fire protection service |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Horizontal pump/driver on common base plate and connected by a listed flexible coupling |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Guards provided for flexible couplings and flexible connecting shafts |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Base plate securely attached to a solid reinforced concrete foundation |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Indoor fire pump units separated from all other areas of the building by 2-hour fire-rated construction; 1-hour fire-rated construction in buildings protected with an automatic sprinkler system |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | If fire pump unit is located outdoors or if fire pump installation is in a building other than that building being protected by the fire pump, it is located at least 50 feet away from the protected building |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A suitable means for maintaining 40°F provided; 70°F if driver is diesel engine. (<i>Portable units, plug-in units, and hardwired electric units without secured circuit breakers are not reliable</i>) |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Pump room/house provided with normal lighting and emergency lighting |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Pump room/house adequately ventilated and floor is pitched toward drain |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Suction piping is the proper size. (5 inch for 500 gpm) (6 inch for 750 gpm) (8 inch for 1000 or 1500 gpm) (10 inch for 2000 or 2500 gpm) |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | OS&Y valve provided in the suction piping (<i>Butterfly valves not permitted in suction piping</i>) |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | No backflow prevention or other devices are in the suction piping |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | No elbows perpendicular to impeller of horizontal pump are within 10 pipe diameters of the intake flange |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Reducer at pump intake is eccentric and installed with flat side up |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A bypass, at least the required size of the discharge pipe, is provided if the suction supply is of sufficient pressure to be of material value without the pump |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Listed indicating type valves are on each side of the check valve in the bypass and are normally open |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A 3½ inch compound gauge, having a rating of at least 100 psi and a range of at least twice the maximum suction pressure, is provided on the suction piping |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A 3½ inch pressure gauge, with a rating of at least 200 psi and a range of at least twice the working pressure of the pump, is provided near the discharge casting |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A ¾ inch circulating relief valve (1 inch if pump is rated over 2500 gpm) is provided and piped to a drain. (<i>Not needed for engine driven pumps cooled by water from pump discharge</i>) |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A listed, float-operated, automatic, air release valve (no less than ½ inch in size) is provided |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Discharge piping is of the proper size. (5 inch for 500 gpm) (6 inch for 750 or 1000 gpm) (8 inch for 1250 or 1500 gpm) (10 inch for 2000 or 2500 gpm) |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A listed indicating valve is installed on the fire protection system side of the pump |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A check valve is provided between the discharge valve and the pump |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | The pump driver, regardless of diesel or electric, is listed for fire pump service |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | A properly sized relief valve has been provided if pump is diesel driven or if churn pressure can exceed rating of system components. (5 inch for 500 gpm) (6 inch for 750 gpm) (8 inch for 1000 and 1500 gpm) (10 inch for 2000 gpm) |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | No valves are installed in the relief valve piping |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | For diesel engine drivers, there are two storage battery units provided and rack-supported above the floor, secured against displacement, and located where they are readily accessible for servicing and not subject to excessive temperature, vibration, mechanical injury, or flooding |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | For diesel engine driver, storage battery units are provided with battery chargers specifically listed for fire pump service, arranged to automatically charge at the maximum rate whenever required by the state of charge of the battery, and arranged to indicate loss of current |



- Yes No For diesel engine driver cooled by a heat exchanger, the cooling water supply is from the discharge of the pump and taken prior to the discharge check valve
- Yes No The heat exchanger piping for a diesel engine driver is equipped with an indicating manual shutoff valve, an approved flushing-type strainer, a pressure regulator, an automatic valve listed for fire protection service, and a second indicating manual shutoff valve
- Yes No Heat exchanger piping of a diesel engine driver is equipped with a pressure gauge installed in the cooling water supply system on the engine side of the last manual valve
- Yes No Heat exchanger piping of a diesel engine driver is provided with a bypass line
- Yes No The outlet provided for the wastewater line from the heat exchanger has a discharge line not less than one size larger than the inlet line, discharges into a visible open waste cone, and has no valves
- Yes No Diesel fuel supply tank has a capacity of 1 gallon per engine horsepower plus 10%
- Yes No Diesel fuel supply tank is located aboveground
- Yes No Exposed fuel lines are provided with guard or protecting pipe
- Yes No The test header or flowmeter is tapped between the discharge check valve and the discharge valve provided for annual fire pump flow testing (If a flowmeter is used, verify that it is arranged so as to test both pump performance and suction supply)
- Yes No Proper number of listed 2½ inch hose valves is provided on test header (2 for 500 gpm) (3 for 750 gpm) (4 for 1000 gpm) (6 for up to 2500 gpm)
- Yes No Test header piping is of the proper size (4 inch for 500 gpm) (6 inch for 750 and 1000 gpm) (8 inch for up to 2500 gpm) (10 inch for 2500 gpm)
- Yes No If test header piping is over 15 feet in length, the next larger piping size is used
- Yes No A drain valve is located at a low point of the test header pipe between the normally closed test header valve and the test header
- Yes No If a flowmeter is provided, meter system piping is of the proper size. (5 inch for 500 and 750 gpm) (6 inch for 1000 and 1250 gpm) (8 inch for up to 2500 gpm)
- Yes No If the meter system piping exceeds 100 feet equivalent of pipe, the next larger size pipe is used
- Yes No Jockey pump is provided with sensing line totally independent from that of main pump sensing line
- Yes No The sensing lines both tap the discharge pipes between the check valve and the discharge control valve of the pumps they respectively serve
- Yes No Both sensing lines are ½ inch and brass, copper, or series 300 stainless steel piping, tube, and fittings
- Yes No Two check valves are installed in each pressure sensing line at least 5 feet apart
- Yes No No shut off valves in the sensing lines

For diesel driven pumps, verify that the following alarms are provided on the controller and operative:

- | | |
|--|--|
| <input type="checkbox"/> Low oil pressure | <input type="checkbox"/> Battery failure/battery missing |
| <input type="checkbox"/> High engine temperature | <input type="checkbox"/> Battery charger failure |
| <input type="checkbox"/> Failure to start | <input type="checkbox"/> Low (less than $\frac{2}{3}$) fuel level |
| <input type="checkbox"/> Shutdown on overspeed | |

For diesel driven pumps, verify that the following alarms are provided and transmit to a constantly attended location:

- Pump running
- Controller main switch in a position other than "AUTOMATIC"
- Trouble on controller or engine

For electric driven pumps, verify that are the following alarms are operative:

- Loss of power
- Phase reversal
- Pump running



- Other _____
- Yes No Verify that the cut-in and cut-out of the jockey pump is properly set.
- Yes No Verify that the cut-in of the main pump is properly set.
- Yes No Verify that all valves are supervised open. *(Test header and flowmeter valves should be supervised shut)*
- Yes No Verify that the pump performance met or exceeds the demands of the systems supplied by pump. (See results below.)

Test Results

Test	Discharge Pressure	Intake pressure	Net pressure	Speed	Nozzle Size and Pitot Pressures	gpm
1						
2						
3						
4						
5						

Inspector: _____ Date: _____

Approval

Inspector: _____ Date: _____

Approved Yes No

If no, reason(s):

Notes: