# INSPECTION TEST PLAN CHECKLIST FOR COMMISSIONING

# SPRINKLER & HYDRANT SYSTEMS

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| **Project Name:** | **Project No:** |
| **Address:** | **Area:** |
| **Inspected by:** | **Date:**  / / |
| **NOTE:** This check and inspection should be conducted by an experienced person other than the designer or project manager responsible for the system.  **Requirements:** The QA inspector is required to familiarise himself with the Job specification and all applicable Standards and Codes prior to starting the work.  **Drawings:** The QA inspector should take a copy of all relevant sprinkler design drawings when visiting the site. | |

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| NATURE OF INSPECTION | **Yes** | **No** | **N/A** |
| **1. TOWNS MAIN WATER SUPPLY** |  |  |  |
| * Street stop valve visible and in order |  |  |  |
| * Fire Brigade Suction Booster complies to AS2419.1 |  |  |  |
| * If mains type booster, associated stop valve are monitored, chained & padlocked |  |  |  |
| * Backflow preventor padlocked open |  |  |  |
| * Block Plan and Pressure Limitations notice installed |  |  |  |
| * Emergency instructions specific to job installed |  |  |  |
| **2. WATER STORAGE TANK** |  |  |  |
| * Tank construction & installation satisfactory |  |  |  |
| * Water supply to tank chained and padlocked |  |  |  |
| * Freeboard & overflow provisions satisfactory |  |  |  |
| * Ball/Float inlet valve set correctly for correct free board |  |  |  |
| * High/low level alarms tested and working |  |  |  |
| * Tank full and indication working |  |  |  |
| * Tank overflow provisions satisfactory |  |  |  |
| * Access ladders satisfactory |  |  |  |
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| 1. **ELECTRIC PUMP SET (AS2941)** | **Yes** | **No** | **N/A** |
| * Pump frame bolted to plinth…………………………………………………………. |  |  |  |
| * Pipe supported satisfactory |  |  |  |
| * Controller to AS 2941 & sufficient door clearance |  |  |  |
| * Liquid filled pressure gauges 2500 kPa at each discharge |  |  |  |
| * Suction gauge -100/1600 kPa from TM and/or -100 to 250 kPa compound gauge from tank installed |  |  |  |
| * PRV connected to open drain or re-circulation valve installed |  |  |  |
| * Complying pressure switch arrangement with by-pass |  |  |  |
| * Pressure switch wired correctly for drop in pressure |  |  |  |
| * Pump start setting labelled on pressure switch |  |  |  |
| * Gland drain installed to floor drain or pit or mechanical seal |  |  |  |
| 1. **DIESEL POWERED PUMP SET (AS2941)** |  |  |  |
| * Pump frame bolted to plinth ………………………………………………………. |  |  |  |
| * Gland drain installed to floor drain or pit or mechanical seal |  |  |  |
| * Pipe supported satisfactory |  |  |  |
| * Pump start setting labelled on pressure switch ……………………………… |  |  |  |
| * Controller to AS 2941 |  |  |  |
| * Liquid filled Pressure Gauges 2500 kPa with sufficient door clearance at each pump discharge |  |  |  |
| * Suction gauge -100/1600 kPa from TM and/or -100 to 250 kPa compound gauge from tank |  |  |  |
| * Suction and delivery vibrations bellows (if required by client) or engine on rubber mounts |  |  |  |
| * Starter panel clear of all alarm faults |  |  |  |
| * Exhaust pipe lagged up to 2Metres |  |  |  |
| * Condensate drains installed on exhaust |  |  |  |
| * Suction and delivery isolating valves monitored |  |  |  |
| * Water-cooled with closed primary loop to open drain   **Note**: Air or radiator cooled not acceptable unless room ventilation engineered |  |  |  |
| * Engine Stop mechanism satisfactory |  |  |  |
| * Diesel fuel tank full |  |  |  |
| * Complying pressure switch arrangement with bypass |  |  |  |
| * Pressure switches wired correctly |  |  |  |
| * PRV installed & connected to drain satisfactory (unless overspeed controller installed) |  |  |  |
| * Modulating relief valve installed |  |  |  |
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| **5. JACKING PUMP** | **Yes** | **No** | **N/A** |
| * Pump automatic start/stop operational |  |  |  |
| * Pump sufficiently sized to provide suitable margins between jacking pump, electric pump, and diesel pump cut-in pressures |  |  |  |
| * Pump power supply independent of main fire pumps |  |  |  |
| * Pump check valve upstream of on/off pressure switch (automatic) |  |  |  |
| * Manual override (inching button) provided |  |  |  |
| **6. INSTALLATION RISERS** |  |  |  |
| * Sprinkler / Floor Isolating Valves monitored and accessible |  |  |  |
| * Flow switches accessible and not installed under pipe |  |  |  |
| * Flow switch drains and solenoid valves installed correctly |  |  |  |
| * Ring Main Isolating Valves installed accessible and monitored |  |  |  |
| * Carpark, ground, and podium floor Hose Reels on metered domestic supply |  |  |  |
| * Fire rating of penetrations satisfactory and complete |  |  |  |
| **7. VALVE ROOM** |  |  |  |
| * SSVI plate installed |  |  |  |
| * Room Clean and free of debris |  |  |  |
| * Sprinkler system pressure tested |  |  |  |
| * DN15 test valve and DN 50 min. waste valve installed? (Note: Annubar test valve may double as waste valve if suitably located and labelled |  |  |  |
| * Alarm Gong tested |  |  |  |
| * Alarm line orifice drain installed |  |  |  |
| * Isolating valve locked in correct position ie. Alarm gong, pressure switch |  |  |  |
| * Pipework painted (red for pressurised, black for drain) |  |  |  |
| * Check valve installed above alarm gong isolating valve (if no orifice drain) |  |  |  |
| * Lock, straps, signage & labels |  |  |  |
| * Block plan installed |  |  |  |
| * Spare box installed and filled |  |  |  |
| * D A Fire Service stickers fitted on FIPs, alarm valves, pump starters & spare box |  |  |  |
| * Anubar installed correctly (9 diameters before, 3 after) |  |  |  |
| * Anubar flow test complete |  |  |  |
| * Anubar pipe opening fitted centrally above open drain hole ……………………. |  |  |  |
| **8. GENERAL** | **Yes** | **No** | **N/A** |
| * Test ASE and get certificate of completion from Romteck (or similar) |  |  |  |
| * O & M manual submitted |  |  |  |
| * ‘As built’ drawings submitted |  |  |  |
| * operation of ALL flow switches received on fire indicator panel |  |  |  |
| * Sprinkler installation ITP complete (SF15) |  |  |  |
| * Fire alarm interfacing ITP complete (SF17) |  |  |  |
| * Hose Reel and Hydrant installation ITPCL complete (SF38) |  |  |  |
| **9. NOTES** |  |  |  |
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**Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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