


| PLANT, PIPEWORK, FLUE AND DUCTWORK VIBRATION ISOLATION SCHEDULE   |                 |     |   |  |  |   |  |                          |  |
|---|-----------------|-----|---|--|---|---|--|--------------------------|--|
| PROJECT   | Kidderpore      |     |   |  |   |   |  |                          |  |
| SYSTEM  | Various         |     |   |  |   |   |  |                          |  |
| DESCRIPTION   | PLANT REFERENCE | QTY | PIPEWORK/DUCTWORK FLEXIBLE CONNECTIONS REQUIRED? (YES/NO) | FLOATING CONCRETE INERTIA BASE OR STEEL FRAME REQUIRED? (YES/NO) | INERTIA BASE OR STEEL FRAME NOMINAL DIMENSIONS Length x Width x Height (mm)         | VIBRATION ISOLATOR TYPE/SPECIFICATION (Example manufacturer/ product)   | MINIMUM REQUIRED AS FITTED ISOLATOR STATIC DEFLECTION (mm) | APPROX PLANT WEIGHT (kg) | OTHER SPECIAL REQUIREMENTS   |
| All boilers   | tbc             | tbc | YES   | NO   | N/A   | Neoprene Pad<br>(e.g. Parr Acoustics Tico)  | 2mm  | TBC                      | Ensure vibration isolation pads have sufficient high temperature capability. If bolted down to floor, must be correctly/resiliently fixed.   |
| All air handling units (AHUs)   | tbc             | tbc | YES   | NO   | N/A   | Fans to have integral helical spring isolators by AHU manufacturer<br>AHUs to be sited off Neoprene Pad   | 25mm<br>2mm  | TBC                      | Integral OEM (AHU manufacturer) helical springs, fan flexible connector<br>Tico Pad or similar to be used to support AHUs off supporting structure   |
| All run and standby smoke extract fans (e.g. Car Park & roof level)   | tbc             | tbc | YES   | NO   | N/A   | Fans/steelwork to be supported off enclosed springs<br>or spring hangers, complete with noise stop pads<br>(e.g. Christie & Grey ES or SH)          | 35mm   | TBC                      | Ensure even loading and deflection of all isolators.<br>Ensure no contact with fan acoustic enclosure (where fitted) or steelwork.   |
| Fans (e.g. Bin Store extract)   | tbc             | tbc | YES   | NO   | N/A   | Fans/steelwork to be supported off enclosed springs<br>or spring hangers, complete with noise stop pads<br>(e.g. Christie & Grey ES or SH)          | 25mm   | TBC                      | Ensure spring hangers correctly installed, loaded and aligned.<br>Ensure even loading and deflection of all isolators.   |
| Chillers  | tbc             | tbc | YES   | NO   | N/A   | Complete Chiller units to be supported off enclosed springs<br>horizontally restrained, complete with noise stop pads<br>(e.g. Christie & Grey ORS) | 50mm   | TBC                      | Ensure even loading and deflection of all isolators.<br>Ensure all isolators correctly installed, loaded and aligned.  |
| All Primary, Secondary and Shunt LTHW/CHW pumps, CHP pumps  | tbc             | tbc | YES   | YES  | TBC M&E CONTRACTOR<br>Sol Acoustics to approve                                      | Open Coil Helical Spring, with Noise Stop Pad<br>(e.g. Christie & Grey OS)  | 25mm   | TBC                      | Ensure even loading and deflection of all isolators.   |
| All Car Park impulse fans   | tbc             | tbc | NO  | NO   | N/A   | Captive Rubber Hanger<br>(e.g. Christie & Grey RH)  | 2mm  | TBC                      | Ensure even loading and deflection of all isolators.   |
| CHP (entire enclosure and baseframe)  | tbc             | tbc | YES   | NO   | N/A   | Proprietary vertical and horizontal restrained isolators<br>By CHP manufacturer/supplier  | 15mm   | TBC                      | Entire CHP unit (i.e.engine, alternator, baseframe, canopy etc.) must be supported off isolators and outrigger brackets, not simply engine/alternator.   |
| All fan coil units (FCUs)   | tbc             | tbc | YES   | NO   | NO  | Rubber hangers/brackets   | 2mm  | TBC                      | Ensure no non-resilient contact between any building element and CHP unit.<br>FCUs require isolation from supporting building structure<br>FCUs must not contact ceilings/grids  |
| ALL Boiler and CHP Exhaust Flues, support within PLANTROOM  | -               |     | NO  | NO   | N/A   | Spring Hanger<br>(e.g. Christie & Grey SH)  | 50mm   | TBC                      | Ensure sufficient no. of hangers to accommodate required max. unsupported flue spans. Ensure vertical flues at base of risers are fully resiliently supported.   |
| ALL Gas Pipework, support within PLANTROOM  | -               |     | NO  | NO   | N/A   | Captive Rubber Hanger<br>(e.g. Christie & Grey RH)  | 4mm  | TBC                      | Ensure all spring hangers are correctly and equally loaded, not misaligned.<br>Ensure sufficient no. of hangers to accommodate required max. unsupported pipe spans. Ensure pipework is supported via spring hangers only<br>(no plain brackets or other non-resilient supports to be used etc.) |
| ALL hydronic (water) pipework and valves within PLANTROOM   | -               |     | NO  | NO   | N/A   | Spring Hanger<br>(e.g. Christie & Grey SH)  | 50mm   | TBC                      | Ensure sufficient no. of hangers to accommodate required max. unsupported pipe spans. Ensure pipework and valves supported via spring hangers only<br>(no plain brackets or other non-resilient supports to be used etc.)  |
| 50mm dia. or greater, within plantroom envelope and on roof adj. DACs   |                 |     |   |  |   |   |  |                          |  |
| ALL boiler flue, gas pipework, CHP exhaust flue and 50mm+ dia. hydraulic pipework wall and floor penetrations | -               |     | NO  | NO   | N/A   | All wall and floor pipe/flue penetrations must be resilient generally in accordance with Sol standard detail  | N/A  | TBC                      | All boiler flues, gas pipework and hydraulic pipework of 50mm dia. or greater must be resiliently sleeved when passing through plantroom walls and all party floors, in accordance with Sol standard detail ref. P1368-M01   |
| Substation transformers   | -               |     | NO  | NO   | N/A   | All transformers to be vibration isolated from supporting structures  | 2mm  | TBC                      | "Tico" Pad or similar approved by Substation Contractor  |
| ISSUE/REVISION  | -               |     |   |  |   |   |  |                          |  |
| DATE  | 24/04/17        |     |   |  |   |   |  |                          |  |
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| ENGINEER  | SJF             |     |   |  |   |   |  |                          |  |
| SOL REF.  | P1652-S02       |     |   |  |   |   |  |                          |  |