

MEP Installation Best Practices

PROJECT TITLE: HVAC REFURBISHMENT

CLIENT: DEPUTY HIGH COMMISSION OF CANANDA,
LAGOS.

DOCUMENT TITLE: MECHANICAL GOOD PRACTICE

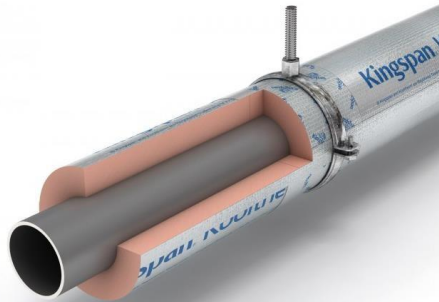
PROJECT NO: M374

DATE: SEPTEMBER 28, 2018

Mechanical – Piping Support System



Thermal bridge broken as lagging not carried through, hence pipe in contact with steel bracket directly.



Phenolic block used at pipe bracket, with insulation connected with vapour barrier seal to ensure no thermal bridge

Mechanical – Ductwork Insulation



Inadequate insulation installation.



Insulation to have complete coverage and be vapour sealed. Thermal bridge between the ductwork support and the duct must also be separated – insulation must be installed between the duct and support.



Mechanical – Supports



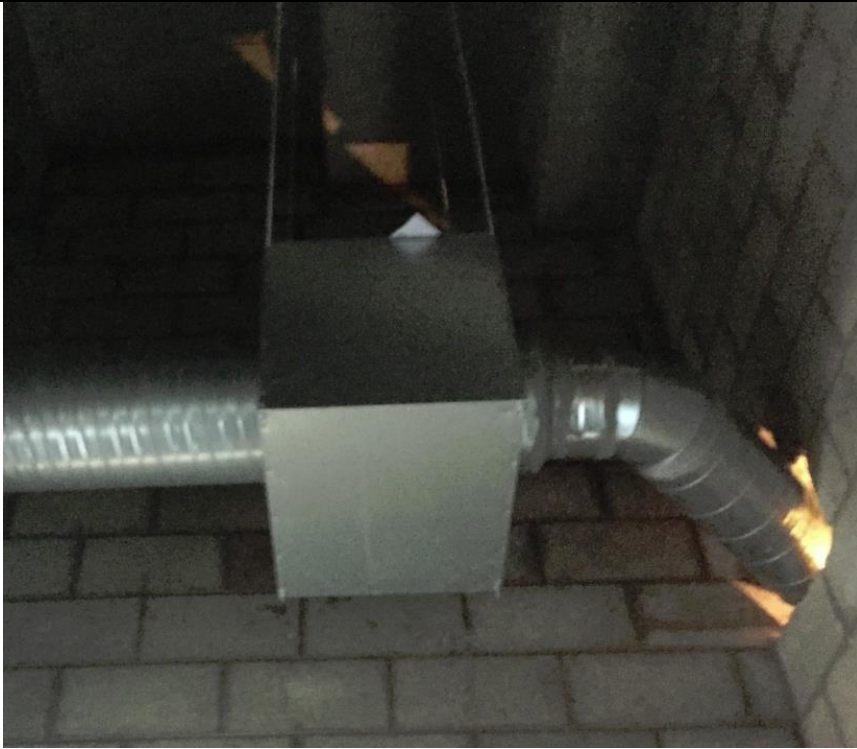
Long section of pipework unsupported. Wed Apr 20 2016 12:18:30

✘



Pipework supports at regular intervals – details in mechanical specification.

✔



Excessively long threaded drop-rods supporting equipment and ductwork.

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Threaded drop-rods shall be maximum 1.5m long.

✔

MEP – Fire Stopping



Fire stopping completely sealing up opening, and pipework sleeves installed to protect pipework.





Fire stopping attempted with fire rated plasterboard, however no fire seal achieved.

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Fire seal completed around service penetrations.

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Mechanical – Condensate drainage pipework installation



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No trap or self-sealing HEPVO trap installed to prevent odours travelling back through condensate pipework.



✔

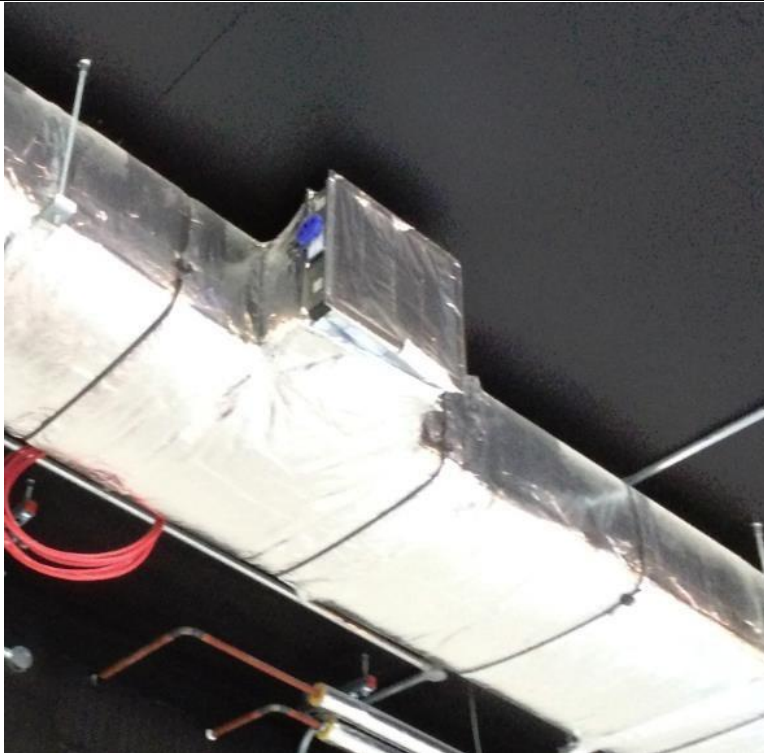
HEPVO waterless self-sealing trap provides odour prevention.

Mechanical – Protection during Construction Phase



Ductwork open-ended during the construction period.

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Ensure all pipework and ductwork is sealed to prevent ingress of dust and debris during the construction period.

✔

Mechanical – Ductwork supports



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Duct support poorly installed leading to separation from threaded rod.





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Duct supports must be correctly installed. Thermal bridge between the ductwork support and the duct must also be separated – insulation must be installed between the duct and support without insulation being damaged.



Mechanical – Ductwork labelling

Mechanical – Ductwork insulation

Mechanical – Flexible ductwork installation

		<p>✘</p>
		<p>✔</p>

Mechanical – Plenum box and diffuser installation

	 A photograph showing a ceiling with a grid of metal beams. A large, cylindrical, silver-wrapped duct is installed in a way that it is not properly supported or sealed, and it appears to be partially obstructing the airflow path. A square diffuser is visible below the duct.	<p style="text-align: center;">✘</p>
	 A photograph showing a ceiling with a grid of metal beams. A square diffuser is installed in a recessed plenum box. The diffuser is properly supported and sealed, and the plenum box is correctly installed above the diffuser, ensuring proper airflow distribution.	<p style="text-align: center;">✔</p>

