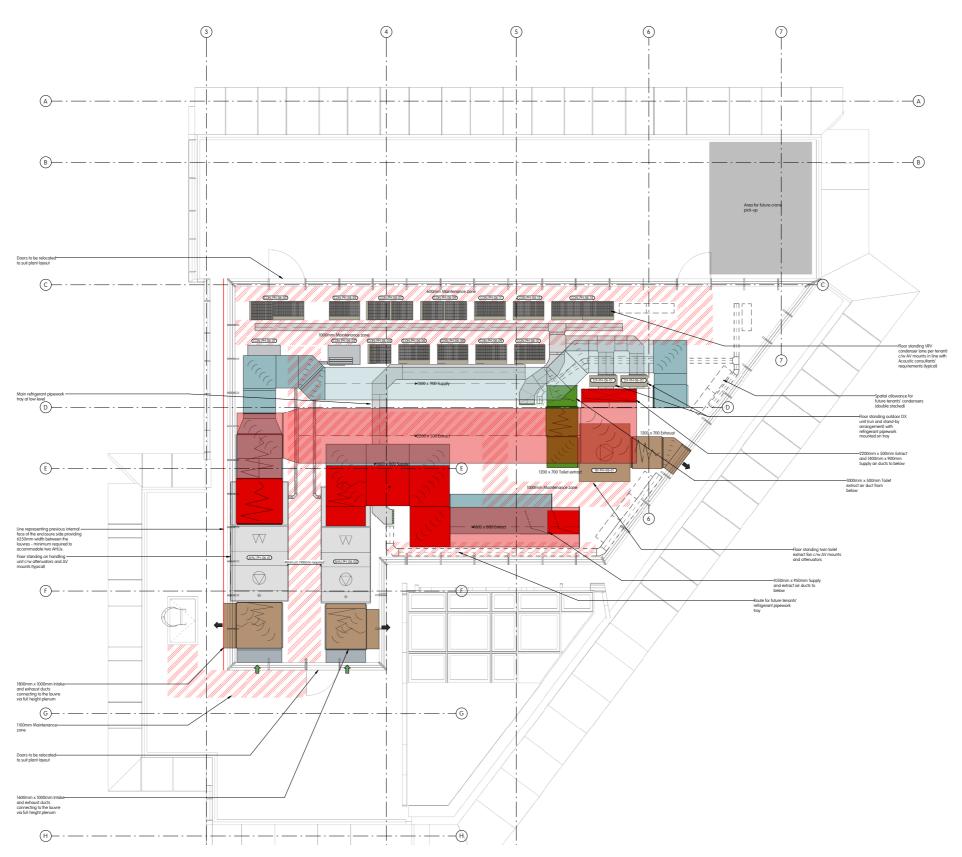
## **Condition 19: Anti Vibration Measures**

Prior to the commencement of the above ground superstructure works details of anti-vibration measures shall be submitted to and approved in writing by the Council. The measures shall ensure that the plant/ equipment and extract/ventilation system and ducting are mounted with proprietary anti-vibration isolators and fan motors are vibration isolated from the casing and adequately silenced. Approved details shall be implemented prior to occupation of the development and thereafter be permanently retained.

## **Condition 19: Anti Vibration Measures**

The air handling units and extracts for the Panther House commercial buildings are located on the roof of Panther House.

Please refer to Vibration Isolator Schedule for details of anti vibration measures.

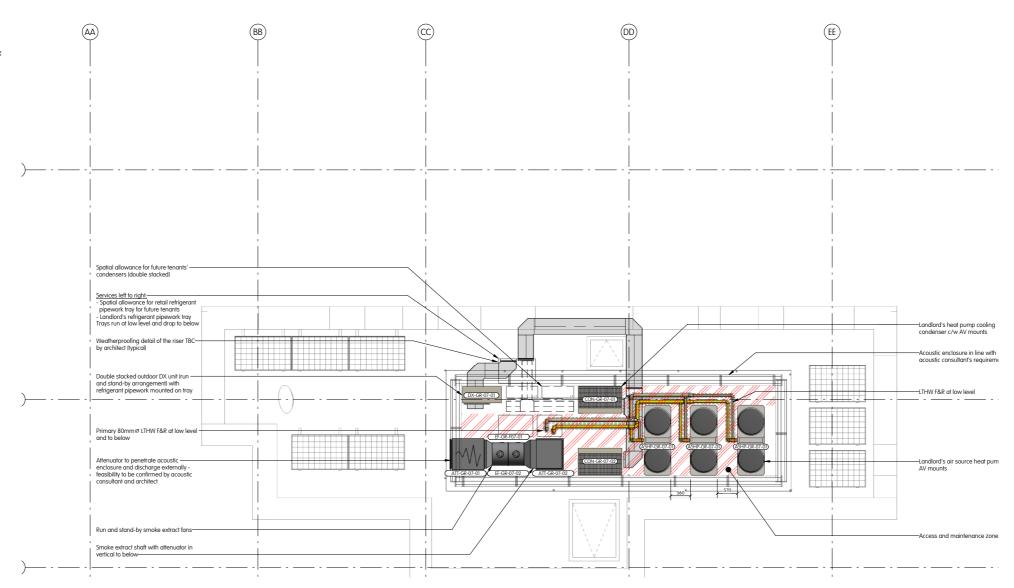


**Panther House Roof Plant** 

## **Condition 19: Anti Vibration Measures**

The air handling units and extracts for the Panther House commercial buildings are located on the roof of Panther House.

Please refer to Vibration Isolator Schedule for details of anti vibration measures.



**Gray's Inn Road Roof Plant** 

AHU-PH-06-02

ASHP-GR-07-01

CON-GR-07-01

CON-GR-07-02

DX-GR-07-01

## **Condition 19: Anti Vibration Measures**



NIS or HNT

NIS

NIS

NIS

NIS

See Note 2

#### **VIBRATION ISOLATOR SCHEDULE**

REF: HT: 27969/VIS

#### **PANTHER HOUSE**

#### Hann Tucker Associates

Woking (Head Office) Tel: 01483 770595

Manchester (Northern Office) Tel: 0161 832 7041

8

4

15

8

12

12

12

12

Revision: 0 Date: 18 May 2022 Comments: None AVM Plant Power Static Deflection Isolator Code System Description Location Base Code Ref. Ref (kW) (mm) Air Handling Unit GIR Landlord's GF Bin Store AHU-GR-00-01 See Note 2 NIS or HNT AHU-PH-00-01 Air Handling Unit Affordable office PH GF plantroom See Note 2 NIS or HNT AHU-PH-00-02 Air Handling Unit Hub and Reception PH GF plantroom See Note 2 NIS or HNT AHU-PH-06-01 Air Handling Unit PH office (Tenant B) PH roof plant enclosure See Note 2 NIS or HNT

Air Handling Unit PH office (Tenant A)

Condensers Flats 10,11,12,13,14 & 15

Air Source Heat Pumps (3No.)

Condensers Flats 2,5,6,7,8 & 9

Condensers UPS Room

| Base Code and Description  AVR: A V Rails  SFB: Steel frame base  CIB: Concrete inertia base  CSP: Concrete split plinth  HTA Spec Ref  4.7.1  4.7.1  4.7.2  4.7.2 | Isolator Code & Description Spec. Ref. NP: Neoprene Pads CSS: Caged steel spring OSS: Open steel spring NIS: Neoprene-in-shear | Isolator Code & Description HSS: Hangers with steel springs HNT: Hangers with neoprene turrets _/R: Restraining or positioning device | HTA Spec. Ref.<br>4.5<br>4.6<br>4.1.1 |
|--|--|---|---------------------------------------|
|--|--|---|---------------------------------------|

PH roof plant enclosure

GIR building roof plant enclosure

GIR roof plant area

GIR roof plant area

GIR roof plant area

Note 1 : To be read in conjunction with HTA's General Specification for Acoustic & Vibration Isolation Materials and Products (available upon request if not supplied).

Note 2 : All cased fans shall have the above specified isolators internally beneath fan/motor frame, and be additionally isolated externally with neoprene pads having 2 mm (min) deflection.

Note 3 : All pipework to be isolated between the plant and the first structural penetration using AV hangers/mounts with the above specified static deflection, and thereafter with brackets having neoprene inserts. CW booster pipework to be isolated on AV hangers throughout.

## **Condition 19: Anti Vibration Measures**



#### **VIBRATION ISOLATOR SCHEDULE**

#### **PANTHER HOUSE**

#### **Hann Tucker Associates**

Woking (Head Office) Tel: 01483 770595

Manchester (Northern Office) Tel: 0161 832 7041

REF: HT: 27969/VIS

| Revision: 0 | Date: 18 May 2022 |                       | Comments: None |                                  |               |            |               |                        |
|-------------|-------------------|-----------------------|----------------|----------------------------------|---------------|------------|---------------|------------------------|
| AVM<br>Ref. | Plant<br>Ref      | System Description    | Location       |                                  | Power<br>(kW) | Base Code  | Isolator Code | Static Deflection (mm) |
|             | EF-GIR-00-01      | Bin Store Extract Fan |                | GR bin store GIR                 |               | See Note 2 | NIS           | 6                      |
|             | EF-PH-00-01       | Bin Store Extract Fan |                | GF bin store PH                  |               |            | NIS           | 6                      |
|             | EF-PH-00-02       | Bin Store Extract Fan |                | GF bin store PH                  |               |            | NIS           | 6                      |
|             | P-GR-LG-01        | M009 Pump Primary     |                | Lower ground floor tank room     | 1.4           | CIB        | NIS           | 8                      |
|             | P-GR-LG-02        | M009 Pump Secondary   |                | Lower ground floor tank room     | 1.5           | CIB        | NIS           | 8                      |
| P003        | GIR CWB 1         | Water Booster Set     |                | Lower ground floor tank room GIR |               | -          | CSS/R         | 25                     |
| P003        | PH CWB            | Water Booster Set     |                | Lower ground floor tank room PH  |               | -          | CSS/R         | 25                     |
|             |                   | Smoke Extract Fan     |                | GIR roof plant room              |               |            | NIS/HNT       | 10                     |
|             |                   |                       |                |                                  |               |            |               |                        |

| Base Code and Description HTA Spec Ref  AVR: A V Rails 4.7.1  SFB: Steel frame base 4.7.2  CIB: Concrete inertia base 4.7.3  HTA Spec Ref  NP: No CSS: Catherina CSS: OSS: Old CSS: Old | Code & Description ef.  Neoprene Pads | Isolator Code & Description  HSS: Hangers with steel springs  HNT: Hangers with neoprene turrets  _/R: Restraining or positioning device | HTA Spec. Ref.<br>4.5<br>4.6<br>4.1.1 |
|--|---------------------------------------|--|---------------------------------------|
|--|---------------------------------------|--|---------------------------------------|

Note 1: To be read in conjunction with HTA's General Specification for Acoustic & Vibration Isolation Materials and Products (available upon request if not supplied).

Note 2 : All cased fans shall have the above specified isolators internally beneath fan/motor frame, and be additionally isolated externally with neoprene pads having 2 mm (min) deflection.

Note 3 : All pipework to be isolated between the plant and the first structural penetration using AV hangers/mounts with the above specified static deflection, and thereafter with brackets having neoprene inserts. CW booster pipework to be isolated on AV hangers throughout.

# **Panther House** Planning Conditions Condition 19: Anti Vibration Measures



**VIBRATION ISOLATOR SCHEDULE** 

REF: HT: 27969/VIS

#### **PANTHER HOUSE**

### **Hann Tucker Associates**

Woking (Head Office) Tel: 01483 770595

Manchester (Northern Office) Tel: 0161 832 7041

| F         | Revision: 2   | Date: 18 May 2022  |                  | Comments: None     |                        |                     |                                   |                |
|-----------|---|--|------------------|--------------------|------------------------|---------------------|-----------------------------------|----------------|
| Syste     | em Description  | escription Location Isolator Code  |                  |                    | Static Deflection (mm) |                     |                                   |                |
| Pipe      | work to AHUs  | k to AHUs First 20 pipe diameters or up to structural penetration. See Note 3. |                  |                    | To so                  | As per AHU external |                                   |                |
| Pipe      | work to Pumps   | s First 100 pipe diameters or up to Structural penetration. See Note 3.        |                  |                    |                        | Н                   | As per pump                       |                |
| Pipev     | Pipework to Chillers First 100 Pipe diameters or up to structural penetration. See Note 3.  |  |                  |                    | Н                      | As per plant        |                                   |                |
| Pipewor   | k to CW Boosters  | Whole length   |                  |                    |                        | HSS/R               |                                   | 25             |
|           |   |  |                  |                    |                        |                     |                                   |                |
|           |   |  |                  |                    |                        |                     |                                   |                |
| Base Code | Description   | HTA Spec. Ref.   | Isolator<br>Code | Description        | HTA Spec.<br>Ref.      | Isolator Code       | Description                       | HTA Spec. Ref. |
| AVR       | AV Rails  | 4.7.1  | NP               | Neoprene Pads      | -                      | HSS                 | Hangers with steel springs        | 4.5            |
| SFB       | Steel frame base  | 4.7.2  | CSS              | Caged steel spring | 4.2                    | HNT                 | Hangers with neoprene turrets     | 4.6            |
| CIB       | Concrete inertia base   | 4.7.2  | OSS              | Open steel spring  | 4.3                    | _/R                 | Restraining or positioning device | 4.1.1          |
| CSP       | Concrete split plinth   | 4.7.4  | NIS              | Neoprene-in-shear  | 4.4                    |                     |                                   |                |
| Note 1    | To be read in conjunction with HTA's General Specification for Acoustic & Vibration Isolation Materials and Products (available upon request if not supplied)   |  |                  |                    |                        |                     |                                   |                |
| Note 2    | All cased fans shall have the above specified isolators internally beneath fan/motor frame, and be additionally isolated externally with neoprene pads having 2mm (min) deflection  |  |                  |                    |                        |                     |                                   |                |
| Note 3    | All pipework to be isolated between the plant and the first structural penetration using AV hangers/mounts with the above specified static deflection, and thereafter with brackets having neoprene inserts. CW booster pipework to be isolated on AV hangers throughout. |  |                  |                    |                        |                     |                                   |                |