



SONA

Land bound by Polygon Street, Stockport Road,
and Brunswick Street, Manchester

Supporting precedent study of buildings within
Manchester utilising perforated cladding panels
and aluminium louvres on the main façade to
provide ventilation to services

AUDERBURN
ARCHITECTS

Introduction

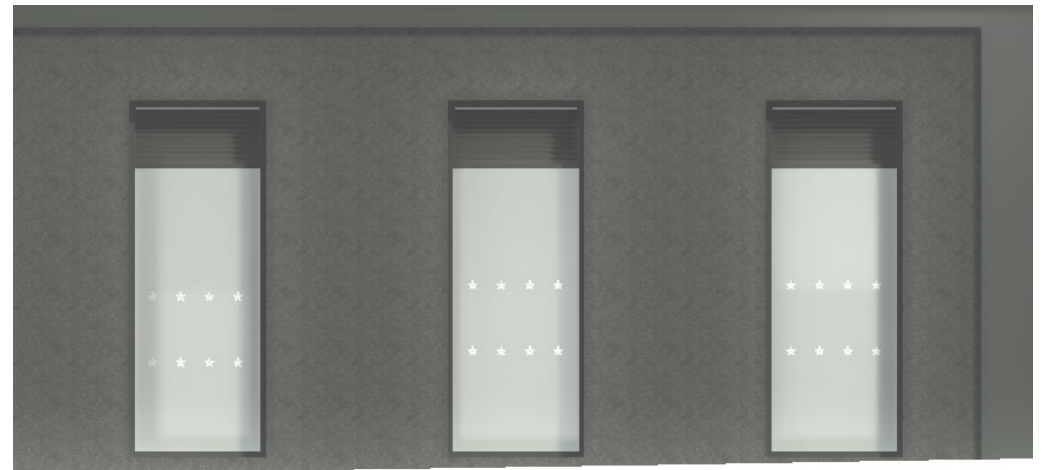
This precedent study has been provided by Audere BW Architects, on behalf of our client, to support the use of perforated cladding panels and aluminium louvres on the main façade to provide ventilation to services in SONA.

This document refers to recently approved and constructed buildings within Manchester that are utilising perforations and louvres within the façade, and schemes that have recently received or applied for permission to include louvres within the façade of existing buildings.

The ABWA non-material amendment drawing package and ABWA drawing 2066-ABWA-Z1-ZZ-DR-A-(12)-0100 is to be read alongside this precedent study.



Proposed SONA perforated cladding



Proposed SONA ground floor louvres

Section 1 - Perforated cladding and louvres within main façade

Recently completed buildings



A - Kampus MCR, Aytoun Street

Mixed use neighbourhood (including residential) by Capital and Centric

Kampus forms part of **Manchester's City Centre Regeneration Area** and has created a "vibrant and creative neighbourhood" encompassing "significant residential accommodation, in addition to leisure and retail outlets" (*Manchester City Council, date unknown*).

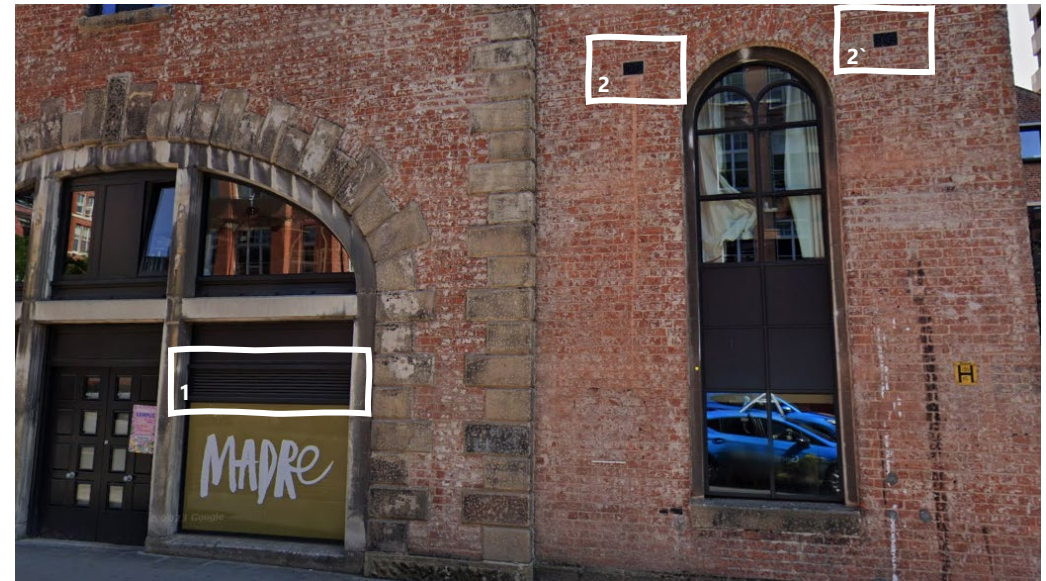
Completed in April 2022, the scheme includes over 1000 apartments and has created a diverse community in its own distinct subdistrict. Permission was initially granted in September 2016 for the renovation of two listed Victorian warehouses and a 60s Brutalist tower, as well as an area of new build high rise.

The various elements of the scheme all include perforated cladding panels and/or ground floor louvres. We note that this scheme was approved and constructed much later than SONA.

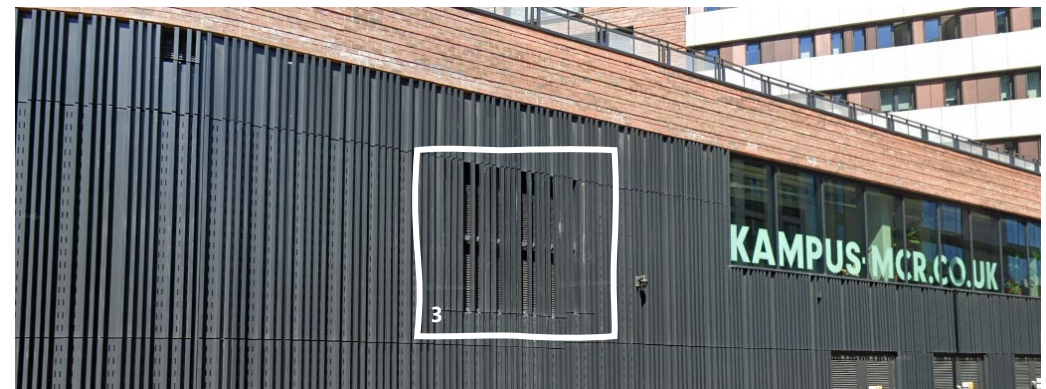
1. Ground floor aluminium louvres, which appear to be set much lower in the elevation than those proposed for SONA, within one of the Grade II listed Victorian warehouses.
2. New, colour-contrasting, air bricks have been installed within the façade of one of the Grade II listed warehouses. Whilst the design and colour of these are sensitive to the existing building, they are still a new addition to the building as part of the Kampus scheme.
3. Perforated / hit-and-miss cladding panels are used obscure the louvres that are recessed within the main external wall – this is seen within the black cladding that wraps around the perimeter of the building on Aytoun Street and the A6. The proposed perforations for SONA are much less intrusive than this and the vent behind will not be visible due to the size of the perforations. This elevation of Kampus shown in the image also sits on a major road (A6) – the majority of the proposed louvres for SONA sit within the Polygon elevation, which is secondary to Stockport and Brunswick.

Sources

https://www.manchester.gov.uk/info/500113/city_centre_growth_and_infrastructure/7900/city_centre_regeneration_area/9
<https://www.placenorthwest.co.uk/kampus-street-plans-revealed/>
<https://www.placenorthwest.co.uk/gallery-250m-kampus-completes-in-manchester/>



1 & 2 – Louvres and air bricks within the Grade II listed warehouse façade on Chorlton Street



3 – Louvres and hit-and-miss cladding within primary elevations (Google street view)

B – Hampton by Hilton, Northern Quarter

Hotel by Create Developments

The Hilton site in NOMA / the Northern Quarter forms part of **Manchester's City Centre Regeneration Area** – development in this area “builds on the area's heritage and character as well as providing new, high-quality buildings” (*Manchester City Council, date unknown*).

The 221-bedroom hotel received planning consent in July 2016, and completed in early 2020.

The permitted scheme included large expanses of perforated aluminium panels on the two side (Baptist Street and Ludgate Hill) elevations. The design of the panels were then confirmed in a condition discharge application and have since been installed. Louvred doors and panels have also been installed.

1. Louvred doors with side and head panels have been installed to provide ventilation to the substation. They have been colour matched to the alloy to reduce the impact on the elevation. A similar louvres strategy has been applied to SONA on the secondary Polygon elevation
2. Perforated panels have been utilised to provide ventilation to the basement vehicular access, without drawing attention to the services behind the panel. A similar strategy has been used on SONA to provide the required ventilation to the air brick behind the Cembrit panel, whilst obscuring the vent and creating more of a feature out of the panel.

Sources

https://www.manchester.gov.uk/info/500113/city_centre_growth_and_infrastructure/7900/city_centre_regeneration_area/13
<https://www.placenorthwest.co.uk/create-set-to-start-on-sharp-street-hilton-hotel/>
<https://www.insidermedia.com/news/north-west/hampton-by-hilton-eyes-noma-check-in>



1 & 2 – Louvres and perforated cladding to provide ventilation (Google street view)

C – Ancoats Gardens, Northern Quarter

Apartments scheme by Beech Holdings

Ancoats Gardens sits opposite the Hilton Hotel in NOMA / the Northern Quarter, which forms part of **Manchester's City Centre Regeneration Area** – development in this area “builds on the area’s heritage and character as well as providing new, high-quality buildings” (*Manchester City Council, date unknown*).

At the time of writing, the scheme is still under construction, however it was permitted by the council in May 2018. Once complete, the building will provide 155 apartments.

A significant amount of louvres are found on every elevation at ground floor level, both above windows and in standalone door and panel arrangements.

1. Ground floor aluminium louvres sit above windows and in panels, and are colour matched to the windows. A similar, but smaller scale, strategy is proposed for SONA.



1 – Louvres above windows at ground floor (Google street view)

Sources

https://www.manchester.gov.uk/info/500113/city_centre_growth_and_infrastructure/7900/city_centre_regeneration_area/13
<https://www.placenorthwest.co.uk/ancoats-gardens-reaches-highest-point/>

D – Parkway Gate, City Centre

Student accommodation refurbishment by Unite Students

Parkway Gate is a student accommodation building to the south of the city centre, owned by Unite Students.

The property has recently undergone a £38 million refurbishment, which saw the replacement of the cladding for fire safety works, replacement windows and the inclusion of air source heat pumps. Approval for the works was granted in 2021. The site consists of 3 blocks.

The works also involved the addition of louvres within the main façades.

Block 1 / Corten-clad building

Certificate of Lawfulness 128675/LP/2020 –

On the south elevation of Block 1, a primary elevation facing the Ring Road, 2No. 550x150mm louvres were added to each of the 17 floors – 34 in total on one elevation. On the north elevation, 4No. louvres per floor were added over 15 floors – 60 in total. On this particular block across the four elevations, 117No. Louvres have been added to the face of the cladding.

Full planning 131188/FO/2021 –

The planning drawings approved look to show an additional 113 louvres across the four elevations, totalling 230. Based on the limited recent Google street views available, it is this amount that have been added to the façades.

Block 2 / blue spandrel-clad building

Certificate of Lawfulness 128675/LP/2020 –

58No. louvres were permitted for the north elevation. There were no louvres indicated for the other elevations.

Full planning 131188/FO/2021 –

The planning drawings approved appear to show a total of 213No. louvres across all elevations, including 31No. louvres above windows on the south elevation facing the Ring Road.

Sources

<https://urbanliving.news/esg/manchester-student-blocks-to-get-65-million-refurb/>
Planning documents - 128675/LP/2020 and 131188/FO/2021



Block 1 – louvres within south elevation at each level (image from Google street view from Ring Road)



Block 2 – louvres above windows on south elevation (image from Google street view from Ring Road)

D – Parkway Gate, City Centre

Student accommodation refurbishment by Unite Students

Block 3 / alloy-clad building

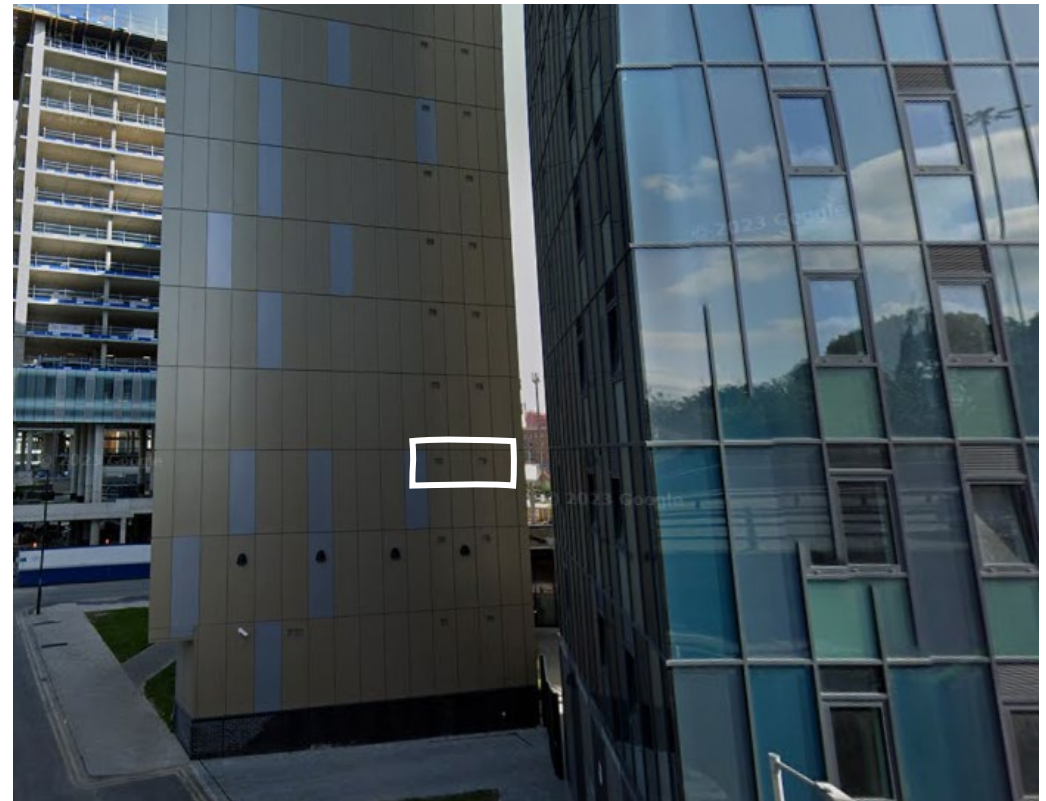
Certificate of Lawfulness 128675/LP/2020 –

A total of 50No. Louvres were permitted for the east and west elevations. There were no proposed louvres for the north or south (Ring Road facing) elevations.

Full planning 131188/FO/2021 –

The approved planning drawings indicate a total of 108No. new louvres across all elevations, including the primary Ring Road elevation.

In total, across the three blocks, **551 new louvres have been permitted and installed** during the façade works. This includes a significant amount along the primary Ring Road elevations. Whilst the new louvres have been colour matched to the external wall finish, this is clearly more impactful than the strategy proposed for SONA, and on a site situated in a more prominent position within the city centre and alongside the busiest road.



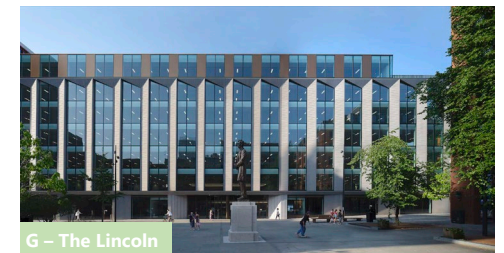
Block 3 – louvres above within south elevation at each level (image from Google street view from Ring Road)

Sources

<https://urbanliving.news/esg/manchester-student-blocks-to-get-65-million-refurb/>
Planning documents – 128675/LP/2020 and 131188/FO/2021

Section 2 – Applications requesting permission to use louvres within the façade

Existing buildings with applications currently lodged with Manchester City Council



E - Kampus MCR, Aytoun Street

Mixed use neighbourhood (including residential) by Capital and Centric

Application number: 136478/FO/2023

Application date: 14th March 2023 (public consultation complete)

Description: Installation of aluminium louvres in facade of existing commercial and restaurant units at ground and first floor of Blocks C and Block F

Key points about existing building(s)

Kampus forms part of **Manchester's City Centre Regeneration Area** and has created a "vibrant and creative neighbourhood" encompassing "significant residential accommodation, in addition to leisure and retail outlets" (*Manchester City Council, date unknown*).

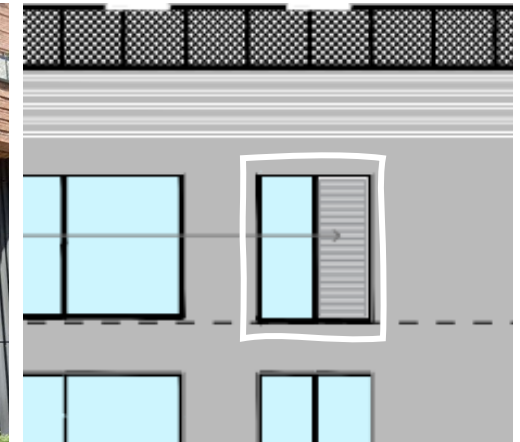
Proposal

The proposal seeks to include louvres within the façade and within existing openings on elevations on both primary and secondary roads. The application form notes that pre-application advice was sought from the council regarding louvre configuration and following a site visit with a planner, the proposed positions within the application were a result of the discussions held. Examples of proposed positions are to the right of this page, with the same positions identified on the current building.

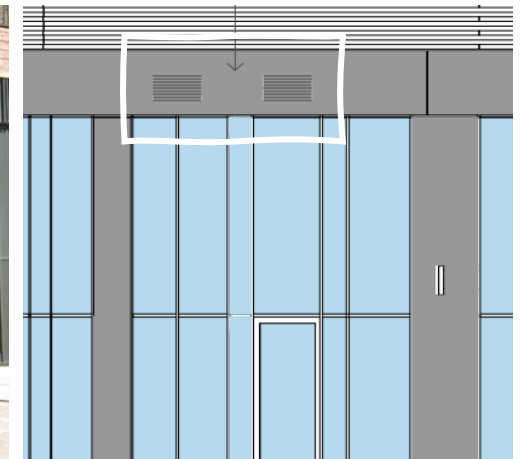
Sources

Planning documents - 136478/FO/2023

https://www.manchester.gov.uk/info/500113/city_centre_growth_and_infrastructure/7900/city_centre_regeneration_area/9



New louvre proposed within existing opening on Minshull Street (existing image from Google street view and proposals from planning documents)



New louvres proposed above existing openings (existing image from Google street view and proposals from planning documents)

F – Manchester New Square, Princess Street and Whitworth Street

Residential building with commercial units at ground floor by Urban and Civic

Application number: 136956/FO/2023

Application date: 12th May 2023 (public consultation complete)

Description: Installation of additional louvres at ground floor level

Key points about existing building(s)

Manchester New Square sits within the **Whitworth Street Conservation Area**. It complements and enhances “the important existing historic context, and to carefully and sensitively reconnect the site to its surroundings, including Rochdale Canal” (*Simpson Hough, date unknown*).

Proposal

The proposal seeks permission to include 3No. louvres above an existing door and glazing, which are colour matched to the frames. The elevation is a secondary elevation.



Existing arrangement (Google street view)



New louvres proposed above existing openings (planning documents)

Sources

Planning documents - 136956/FO/2023

<https://www.simpsonhaugh.com/projects/manchester-new-square>

G – The Lincoln, Brazennose Street

Grade A office building with commercial units at ground floor by Marshall CDP / M&G

Application number: 137276/FO/2023

Application date: 13th June 2023 (public consultation complete)

Description: Replacement of existing fan light over glazed door to western elevation to provide fresh air intake louvres.

Key points about existing building(s)

Prominent position within city centre

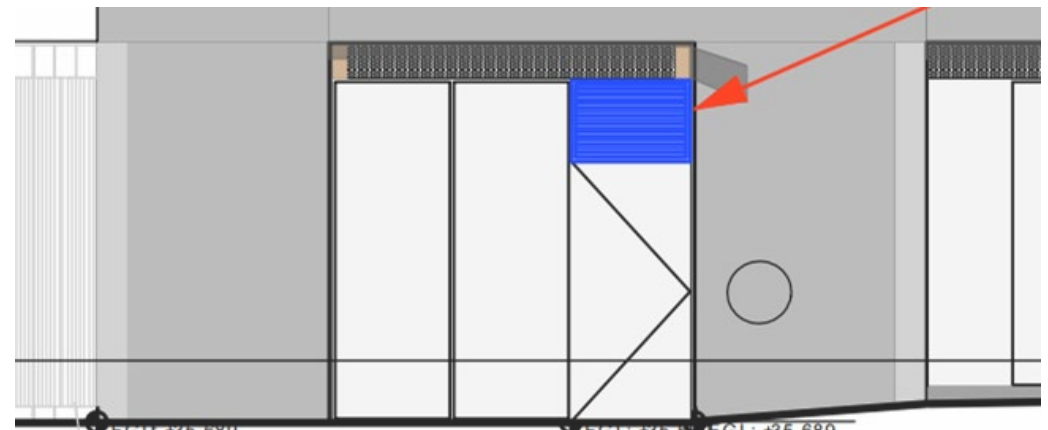
Proposal

The proposal seeks permission to include a louvre above an existing door, replacing two areas of glazing, which is colour matched to the frames. The elevation is a secondary elevation.

It is also noted that existing louvres are positioned at the head of all curtain walls at ground floor.



Existing arrangement - two glazed panels (Google street view)



Proposed louvre within two existing openings (planning documents)

Sources

Planning documents - 137276/FO/2023

H – 200-204 Deansgate

Office building with commercial units at ground floor

Application number: 136701/LO/2023

Application date: 11th April 2023 (public consultation complete)

Description: Listed Building Consent for elevational alterations including new shop front, replacement louvres and installation of awnings and erection of 2 x internally illuminated projecting signs and 1 x externally illuminated fascia sign

Key points about existing building(s)

Grade II listed building (Royal London House) situated within the **Deansgate Conservation Area**

Proposal

The scheme seeks permission to provide 3No. larger louvres to the ground floor of the Little Quay Street elevation, in order to facilitate the continued use of the building. The impact of the louvres on the building is minimised through colour matching and positioning them along a road generally used for servicing.



Existing Little Quay Street elevation (Google street view)



Proposed louvres on Little Quay Street elevation (planning documents)

Sources

Planning documents - 136701/LO/2023

Conclusion

Impact of proposed louvres / ventilation strategy on SONA when compared to existing buildings within the city

When comparing the schemes outlined in this document to the proposed alterations to SONA, it can be concluded that the impact caused by the inclusions to SONA to facilitate the ventilation strategy is minimal.

Ventilation to ground floor

To achieve the ventilation requirements for the ground floor services, and to reduce the impact on the building in its context, louvres have been positioned along Polygon Street where possible so that they can be contained within an elevation that will generally be used for servicing. Polygon Street is a secondary road and building functions along this elevation include the bin store, bike store, and plant rooms.

Aside from one panel on the Brunswick Street elevation, the louvres have been positioned above existing openings. This is a language commonly found on buildings across the city, as outlined in this document. Similarly, as existing buildings adapt to meet current demands (presented by the market, future end user requirements, and regulations), there are more examples of the inclusion of louvres and vents to facilitate these demands, as seen in the Unite scheme through their provision of air source heat pumps. The ground floor of SONA has been reconfigured in order to provide an engaging and healthy environment that better supports the end users; the louvres at ground floor are required to enable this new use to properly function.

It is also worth noting that the louvred panel within the alloy cladding on Brunswick Street and the louvred panel above the bin store door are required for smoke ventilation, the sizes of which have been determined by a specialist. The panel on Brunswick Street within the alloy is proposed to sit behind the cladding, and the panel will be perforated to obscure the louver.

All louvres at ground floor are proposed to be colour matched to the existing doors / window frames / alloy cladding, in order to reduce the impact. Similarly, this is a strategy commonly implemented across the city.

There are evidently more impactful schemes within the city, some contained within this document, that have had similar strategies approved – for example, Unite Students have doubled the number of vents and louvres (including on more primary facades), and this strategy was permitted by MCC.

Ventilation to apartments

The ventilation strategy applied to the apartments has resulted in the termination of vents within the main façade. Similarly to the ground floor louvres, the vents in the upper floors are necessary to provide a healthy and sustainable living environment, which not only benefits the end users, but the building fabric too.

Where the vent terminations occur in the brickwork, a terracotta air brick has been proposed to reduce the impact on the façade. Air bricks are commonly found across the city, and the inclusion of such has recently been permitted for the Grade II listed warehouse at the Kampus scheme. Arguably, new air bricks on the main façade of a listed building have a greater impact on the heritage asset.

In two instances vents terminate within the alloy cladding, and a colour matched alloy grille is proposed.

The remaining required ventilation is achieved through air bricks / vents in Cembrit panels. The original intent was to provide a colour matched alloy grille on the face of the Cembrit panel to better obscure the grille on the elevation. This has been rejected by MCC who do not want to see building services on the elevation, although there is recent precedent in the city for colour matched vents in cladding – a large scale, more impactful example of this is found at the Unite scheme included in this study. To overcome this, despite it being a strategy already accepted by MCC, the proposed vents now sit behind the Cembrit panel with perforations added to provide the required ventilation. A current and successful example of this language is on the Hampton by Hilton building in the Northern Quarter. The perforations obscure the vent and create more of a feature of the Cembrit panel.

When reviewing the proposed elevations with the amended Cembrit strategy, it is clear that the impact of the vents has been reduced as much as possible through design measures. Comparing this to other permitted and constructed schemes across the city, similar languages are found within the SONA strategy but on a much smaller scale.

