



Reynaers  
Aluminium

# X1 Media City Towers

Manchester Commercial Project Tour –  
1<sup>st</sup> September 2022

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## X1 Media City Towers, Salford

<b>Architect:</b>	<b>Falconer Chester Hall</b>
<b>Main Contractor:</b>	<b>Vermont</b>
<b>Façade Contractor:</b>	<b>Staticus</b>
<b>Client:</b>	<b>Knight Knox International</b>
<b>Reynaers systems:</b>	<b>CW65-EF (OS Profiles) CS77 Windows</b>



# X1 Media City Towers, Salford

Characteristic Wind Load Design:  $1.23\text{KN m}^2$

Glass Spec: Double Glazed  
44.2/18/55.2  
(RW (C,Ctr) 43 (-2, -6))

Large front cover cap: 300mm

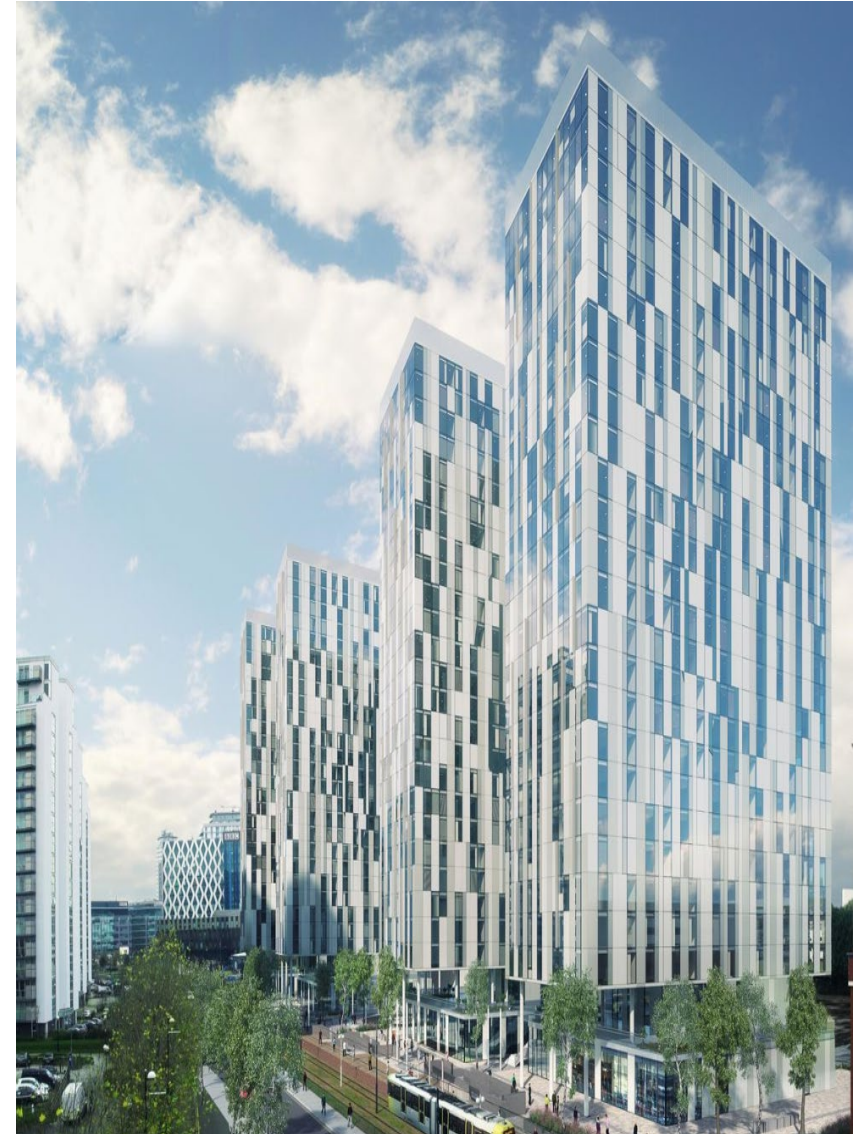
Live slab deflection: +/- 12mm

Max weight of element: 380Kg

Bottom hung window open in: 1.0m x 2.3m

Flanking sound insulation: 46db

Thermal Requirement:  $U_{cw} - 1.3\text{W/m}^2\text{K}$



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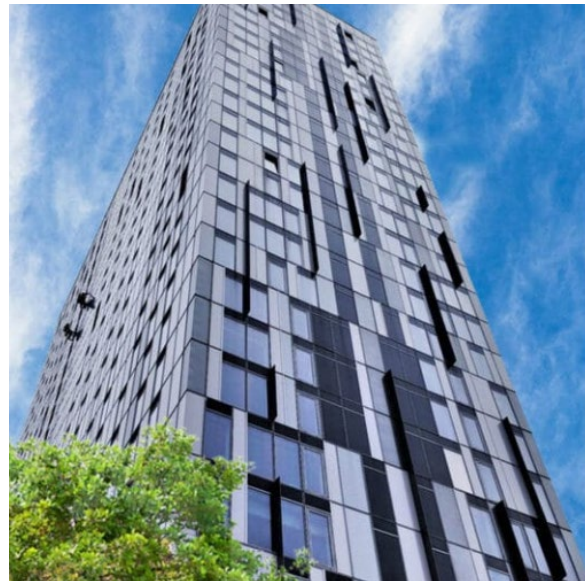
# X1 Media City Towers, Salford

## Project Specifics:

Four towers will eventually complete the site at the heart of Media City, Salford, which are of very similar design. It was important to try and get the modular size of the facade correct in the first go so that it could be replicated across the four.

Overall, the scheme comprises circa 50,000m<sup>2</sup> of residential and commercial space across four 26-storey towers, with one- two- and three-bedroom flats in the total of 1,100 apartments.

Facilities at X1 Media City include an on-site cinema, private gymnasium and secure underground parking, as well as the ground and first floors.



# X1 Media City Towers, Salford

## Unitised Project Specifics:

### Advantages

Complete **assembly in the workshop**: frame structure, fixed and opening cassettes, glass or cladding, part of higher level of quality delivered to site.

Very **fast installation on site** of the finished modules by a limited number of people with help of a site crane or a scaffolding necessary), reduces damage by other trades. health and safety benefits.



# X1 Media City Towers, Salford



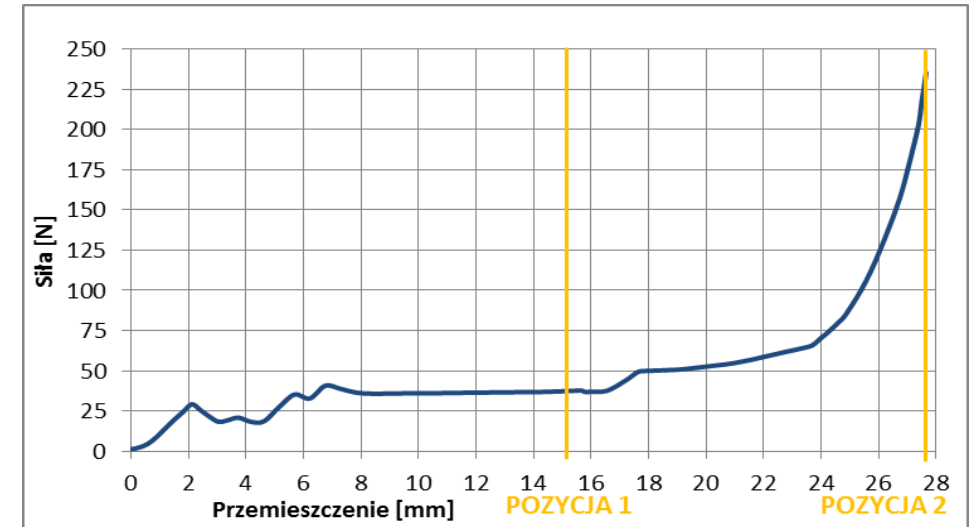
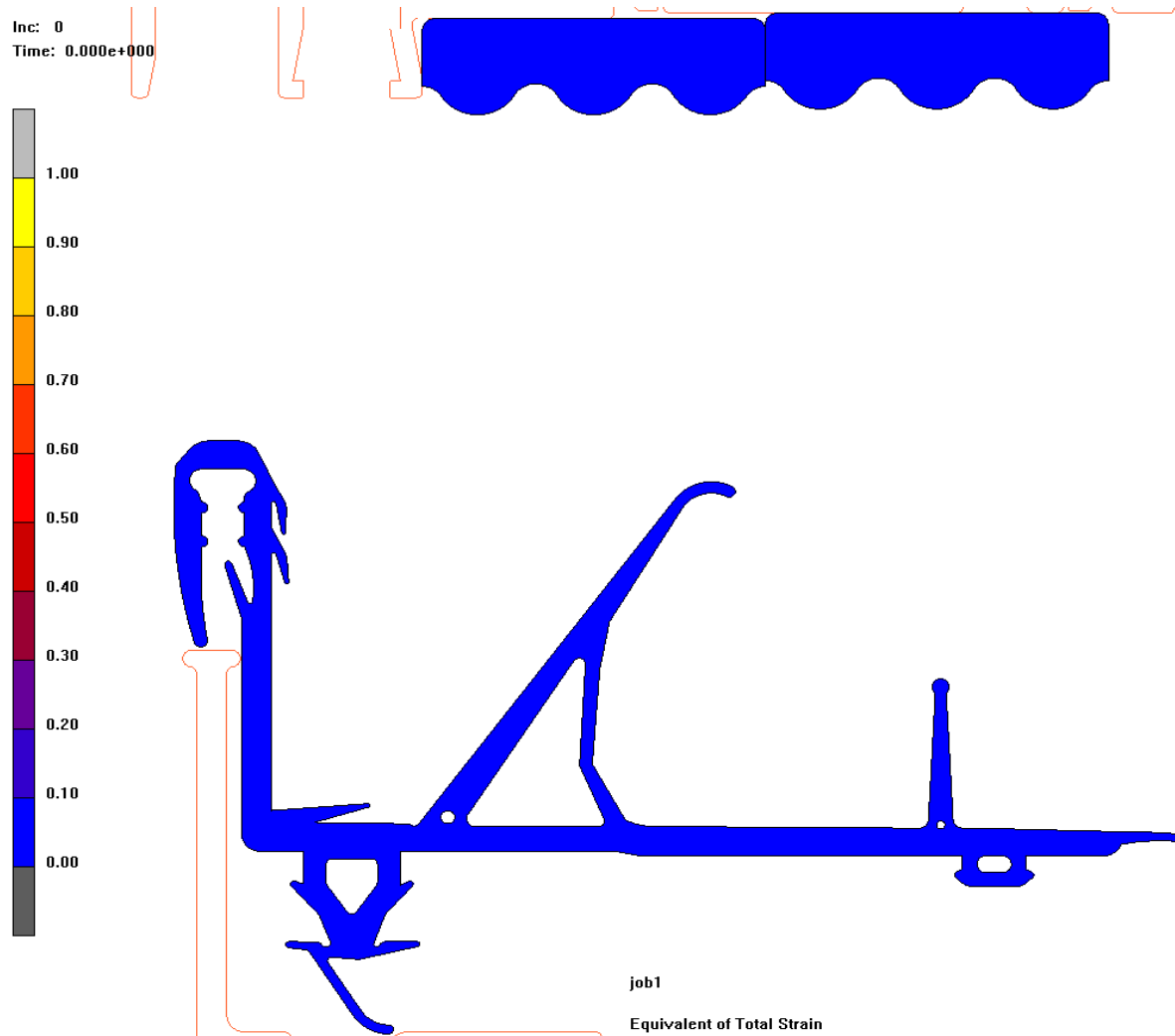
## Unitised Project Specifics:

**Installation from the inside** of the building (high towers)  
Designed to the **building movements and dilatations**.

**Limited transfer of impact noises** from floor to floor (flanking transmission) or horizontally from room to room as with a traditional continuous stick system. Large façade surface allows **bespoke solutions**

# X1 Media City Towers, Salford

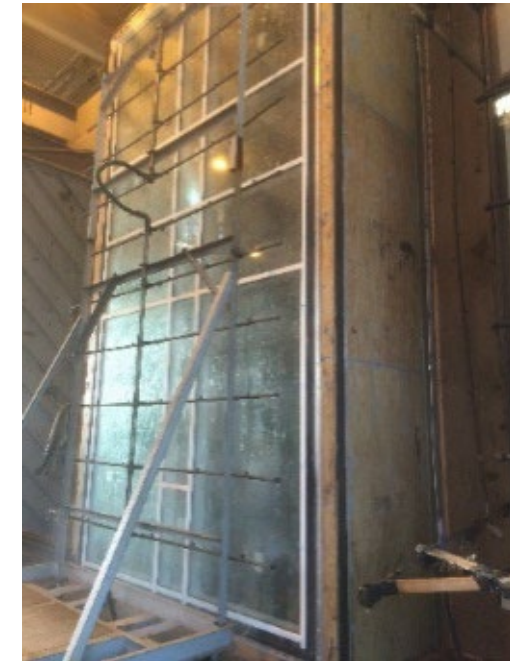
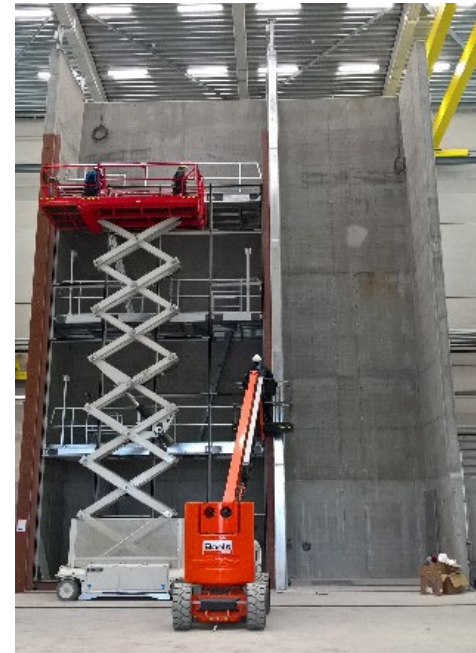
Live load slab deflection +/-12mm – simulation of gasket  
Material: 70 ShA - length Of Sample: 100mm



# X1 Media City Towers, Salford

## Technical Details: Air, Wind & Water

At Reynaers we can test in house prior to applying for 3<sup>rd</sup> party certification to ensure the performance of our products meet or exceed the project requirements.





# X1 Media City Towers, Salford

## Technical Details: Air, Wind & Water

- AWW Windows & Doors
  - 2 test walls, 8 positions for test elements
  - 4 operating units (per 2 test positions)
  - Maximal dimensions:
    - Width 20m x Height 6m
    - Width 5m x Height 6m
  - Maximal testing pressure: 7500Pa (~380km/h)
  - Test methods following EN / AS / ASTM / NAFS
  - Official reports can be provided by accredited notified bodies (SKG, UL, Ift)



[CLICK HERE to view video of Reynaers Test Facility Windows & Doors](#)

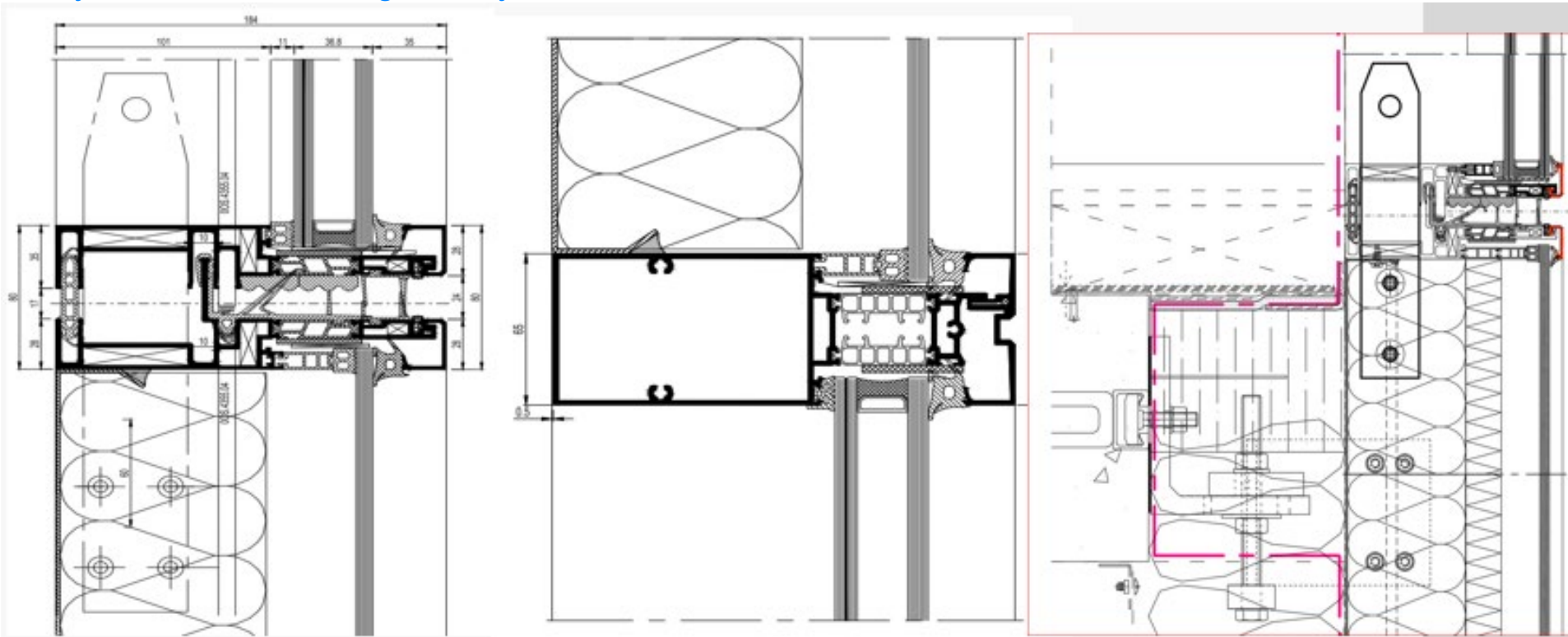
# X1 Media City Towers, Salford

## Technical Details

Reynaers offer project specific bespoke solutions to meet the clients and architects requirements. 'this is done internally with Reynaers 100 in house façade engineers input.

This is further enhanced by Reynaers in house testing facility – one of the largest independent facilities in Europe.

[Reynaers AWW Testing Facility](#)

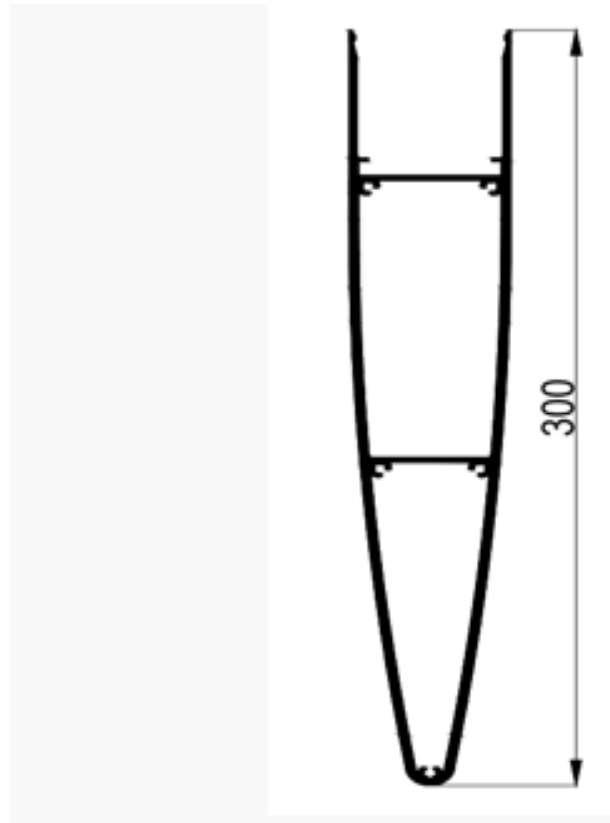
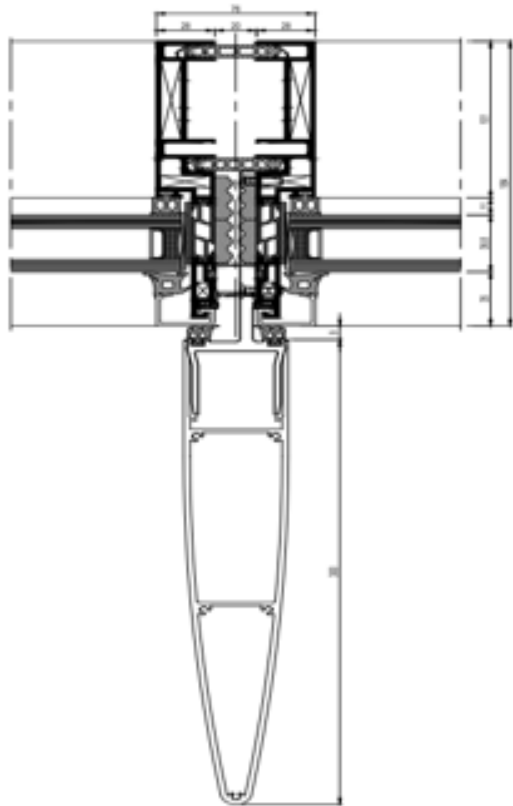


# X1 Media City Towers, Salford

**Technical Details – 300mm deep cover cap, fixation through CW Façade.**

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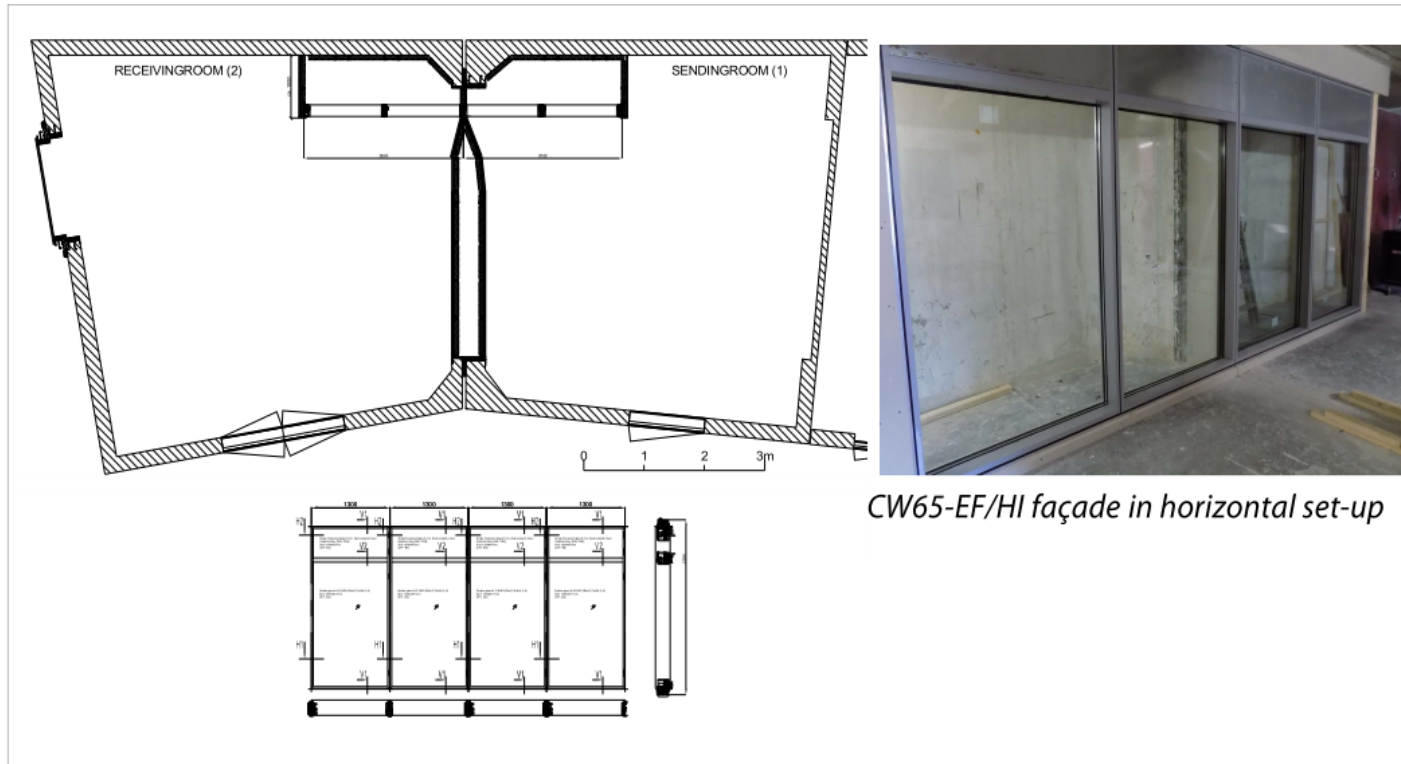


# X1 Media City Towers, Salford

## Technical Details: Horizontal Flanking Test

Test was carried out in the Laboratory of Acoustic at Pautz at Mook, Netherlands. The aim of the test was to determine the flanking sound insulation of CS65EF/HI.

### f2.1 Measurement set-up horizontal flanking

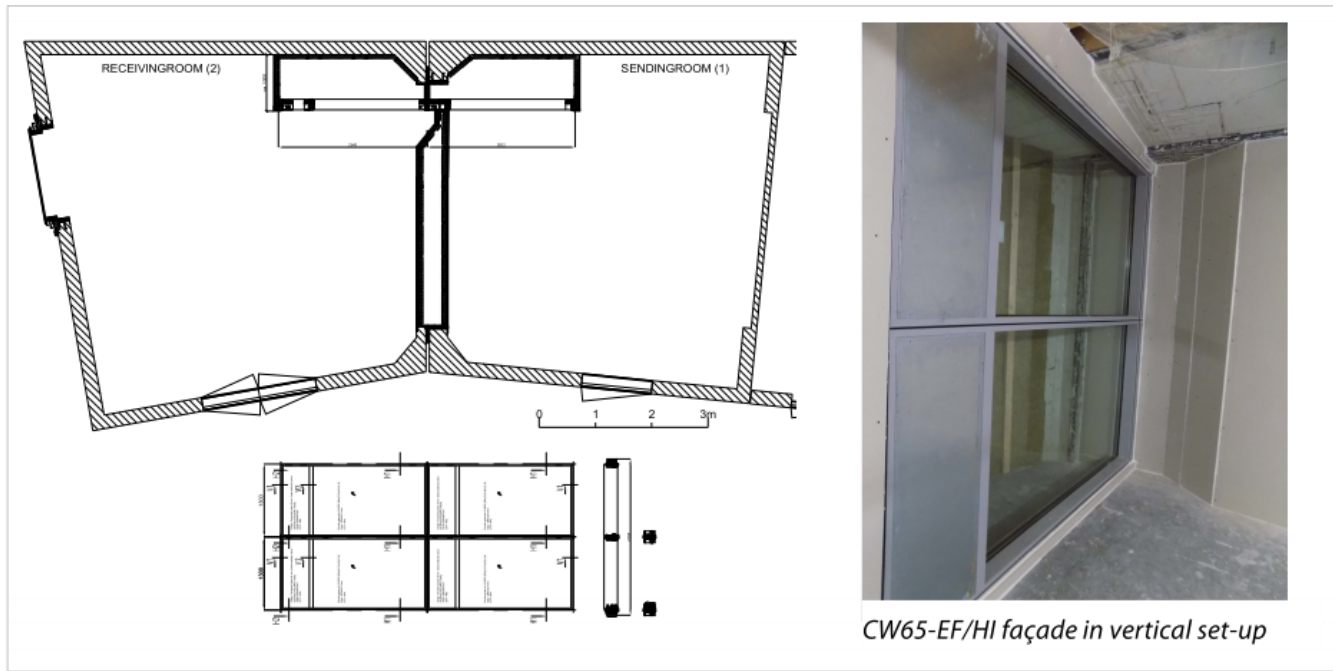


# X1 Media City Towers, Salford

## Technical Details: Vertical Flanking Test

Test was carried out in the Laboratory of Acoustic at Pautz at Mook, Netherlands. The aim of the test was to determine the flanking sound insulation of CS65EF/HI.

f5.1 Measurement set-up vertical flanking

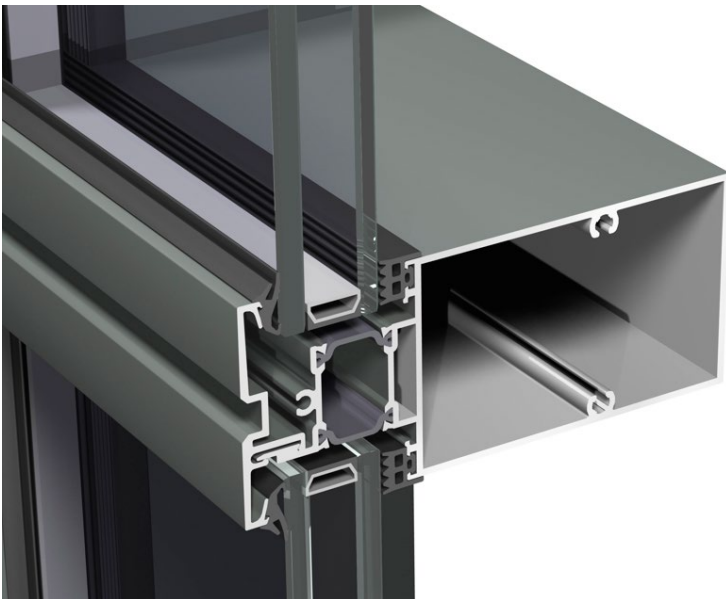


# X1 Media City Towers, Salford

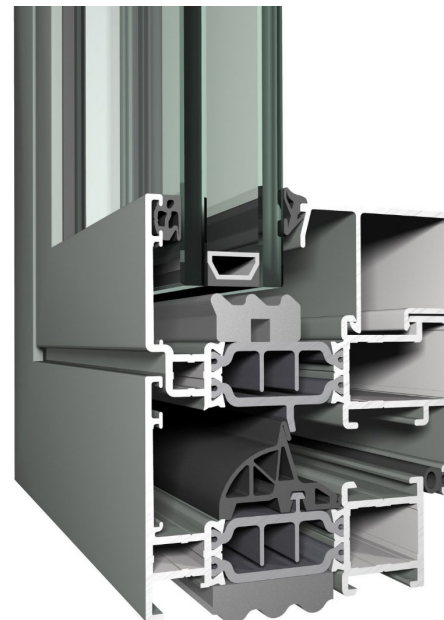
## Technical Details: Project System Selection

With any project it is important to have façade products capable to meet or exceed the requirements that will be placed on the building. In particular the Air, Wind & Water considerations must be reviewed, with the site wind speed being taken into consideration and importantly the required differential pressures. Below are the products that were put forward for the X1 Media City Towers.

CW65-EF – Unitised Façade

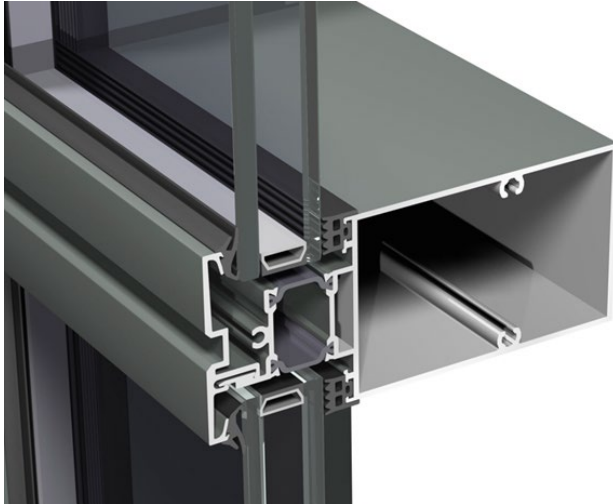






CS77 - Windows



# X1 Media City Towers, Salford

## Product Details:



TECHNICAL CHARACTERISTICS	FUNCTIONAL	HIGH INSULATION	STRUCTURAL GLAZED
Max. dimensions W x H	1.600 mm x 3.700 mm	1.550 mm x 3.500 mm	1.600 mm x 3.700 mm
Interior visible width	65 mm	65 mm	65 mm
Exterior visible width	65 mm	65 mm	16 mm joint between glass
Glass thickness	From 4 to 36 mm	From 10 to 60 mm	From 4 to 40 mm
Glass weight	300 kg	300 kg	250 kg
Element weight	700 kg	700 kg	700 kg
Types of vent	All Reynaers Aluminium systems, top hung window, POW window	—	—
PERFORMANCES	FUNCTIONAL	HIGH INSULATION	STRUCTURAL GLAZED
 Thermal insulation	$U_i$ down to 2.5 W/m <sup>2</sup> K, depending on the profile combination	$U_i$ down to 1.5 W/m <sup>2</sup> K, depending on the profile combination	$U_{i,g}$ down to 7.6 W/m <sup>2</sup> K, depending on the profile combination and glass composition
 Air tightness	600 Pa (Class A4)	600 Pa (Class A4)	700 Pa (Class AE 700)
 Wind load resistance	1800 Pa	1800 Pa	1400 Pa
 Water tightness	1200 Pa (Class RE 1200)	1200 Pa (Class RE 1200)	1200 Pa (Class RE 1200)

ConceptWall 65-EF  
Curtain Walls

# X1 Media City Towers, Salford

## Product Details:

### Glazing

Rebate height	25 mm	Max. glass thickness - frame/element	52 mm
Glazing method	Dry glazing Siliconized glazing Internal glazing External glazing Glazing bead	Min. glass thickness - vent	4 mm
Min. glass thickness - frame/element	4 mm	Max. glass thickness - vent	63 mm

ConceptSystem 77

Technical information





# X1 Media City Towers, Salford

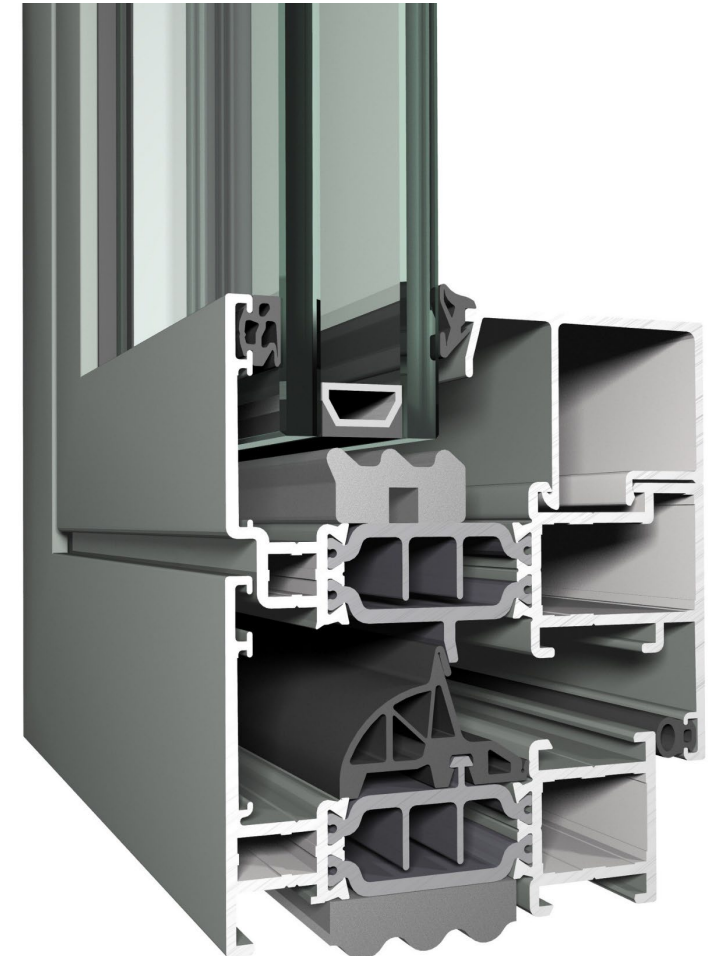
## Properties

### Max. dimensions & weight

Min. height of element	668 mm	Max. height of vent	2800 mm
Max. height of element	2868 mm	Min. width of vent	450 mm
Min. width of element	518 mm	Max. width of vent	1200 mm
Max. width of element	1268 mm	Max. weight of vent	374 lbs
Min. height of vent	600 mm		

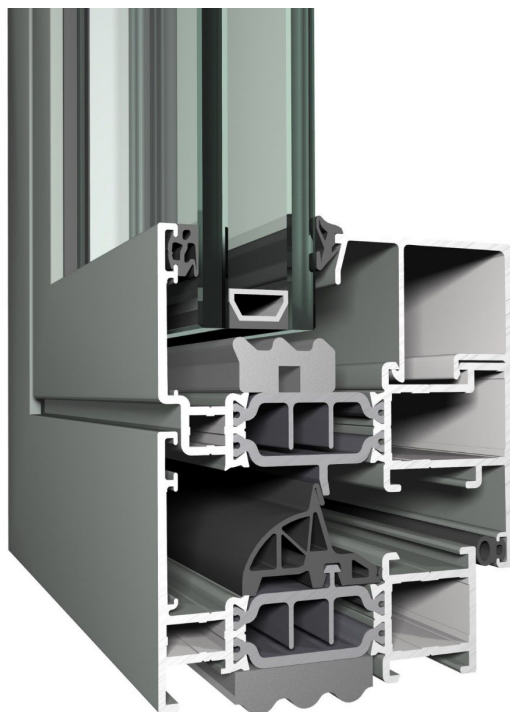
### Sightlines

Min. frame width (inward opening)	51 mm	Min. frame-vent width (outward opening)	93.5 mm
Min. vent width (inward opening)	33 mm	Min. width T-profile	76 mm
Min. frame-vent width (inward opening)	89 mm	Depth frame	68 mm
Min. frame width (outward opening)	175 mm	Depth Vent	77 mm
Min. vent width (outward opening)	76 mm	Depth frame-vent	77 mm



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## Product Details:



## Performance

### Energy

Thermal insulation - Uf

1.8 W/m<sup>2</sup>K

Thermal insulation - Uw

1.5 W/m<sup>2</sup>K

### Comfort

Air tightness

Class 4 (600Pa)

Wind load resistance

Class C3 (1200Pa)

Water tightness

Class 9A (600Pa)

### Safety

Burglar resistance

RC2  
RC3  
WK2  
WK3  
PAS 24

Bullet resistance

FB4  
FSG  
Kalashnikov

Opening & closing resistance

Class 3

Fire resistance

EI<sub>1</sub> 30  
EI<sub>2</sub> 30  
EI<sub>2</sub> 60



Reynaers  
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**Together  
for better**