

REPORT NO.: <u>TR-ALC-240308.01A</u> **ISSUED DATE:** <u>Mar. 8th, 2024</u>

PRODUCT: ALUMIMIUM GLASS CHANNEL SYSTEM

TEST SAMPLES:

ALUMINIUM GLASS CHANNEL SYSTEM (KBS-TOP-FIX-CH)

TEST METHOD:

- 1. Install the alumnium channel onto the concrete base with M12 bolts at nominally 200mm centres.
- 2. Place adjustable wedges and top covers with rubber gasket, and glass panel (WxH=1000x1100mm) into the channel, adjust the wedge and place top cover with rubber gasket to complete the installation of the system.
- 3. A line load is imposed at 1100mm height of the system, and the deflection of the glass is measued under load.

TEST RESULTS:

Tabel 1: Tested with 12mm glass

| Glass | Imposed Line Load (kN/m) | Deflection (mm) | Conclusion |
|------------------------|-----------------------------|-----------------|----------------------------------|
| Tempered Glass 12mm | 0.36 | 18.91 | It's a PASS, tested to 0.36kN/m. |
| | 0.49 | 25 | |

Tabel 2: Tested with 15mm glass

| Glass | Imposed Line Load (kN/m) | Deflection (mm) | Conclusion |
|------------------------|-----------------------------|------------------------|----------------------------------|
| Tempered Glass 15mm | 0.36 | 9.41 | It's a PASS, tested to 0.74kN/m. |
| | 0.74 | 20.35 | |
| | 0.96 | 25 | |
| | 1.50 | 43.02 | |

Tabel 3: Tested with 17.52mm glass

| Glass | Imposed Line Load (kN/m) | Deflection (mm) | Conclusion |
|--------------------------------------------|-----------------------------|-----------------|----------------------------------|
| Laminated and Tempered Glass 17.52mm | 0.36 | 7.99 | It's a PASS, tested to 0.74kN/m. |
| | 0.74 | 18.04 | |
| | 1.12 | 25 | |
| | 1.50 | 36.76 | |

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Tabel 4: Tested with 17.52mm glass

| Glass | Imposed Line Load (kN/m) | Deflection (mm) | Conclusion |
|------------------------|-----------------------------|-----------------|---------------------------------|
| Tempered Glass 19mm | 0.36 | 4.85 | It's a PASS, tested to 1.5kN/m. |
| | 0.74 | 11.92 | |
| | 1.50 | 22.72 | |
| | 1.60 | 25 | |

Tabel 5: Tested with 17.52mm glass

| Glass | Imposed Line Load (kN/m) | Deflection (mm) | Conclusion |
|--------------------------------------------|-----------------------------|-----------------|---------------------------------|
| Laminated and Tempered Glass 21.52mm | 0.36 | 4.28 | It's a PASS, tested to 1.5kN/m. |
| | 0.74 | 10.89 | |
| | 1.50 | 23.75 | |
| | 1.57 | 25 | |

Operators: Dong HJ

Dong HJ

Inspector:

Chang YL