

See the

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June 12th, 2025

„The Henderson“ in Hong Kong - Technical Challenges in Glass Design achieving an architectural masterpiece

Kathrin Rauh, Structural Engineer

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- 1 **seele GmbH**
- 2 “The Henderson” – seele’s Scope of Work
- 3 Technical Insights
- 4 Installation

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Founded in 1984 in Gersthofen/Germany, **seele** is a world leader in façade construction for ambitious architecture.



North America

seele canada Inc.
seele, Inc.

Europe

seele (UK) Ltd.
seele france SAS
seele GmbH
se cover GmbH

se-austria GmbH & Co. KG
seele pilsen s.r.o

Middle East

seele middle east FZE
seele middle east – Abu Dhabi
Beteiligungs International Limited

Asia

seele hongkong Ltd.
seele (S) PTE Ltd.
se-project services (TH) Ltd.
se-project services (Malaysia) Sdn. Bhd.
India Branch Mumbai



1.100

Employees



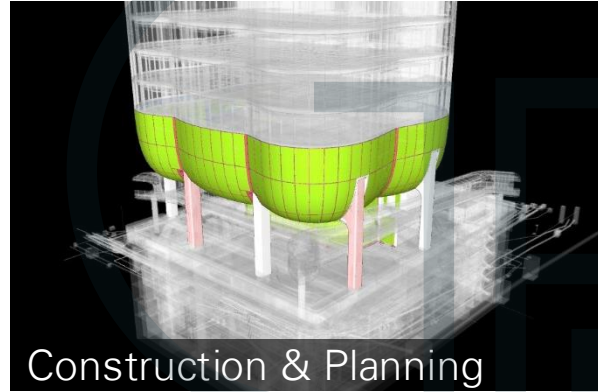
350 Mio. €

Annual turnover

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Range of Services

seele



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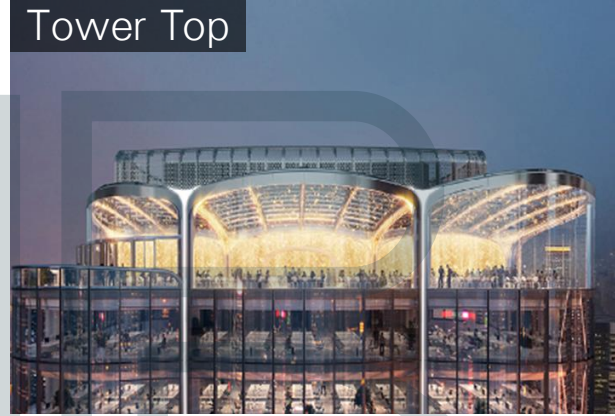
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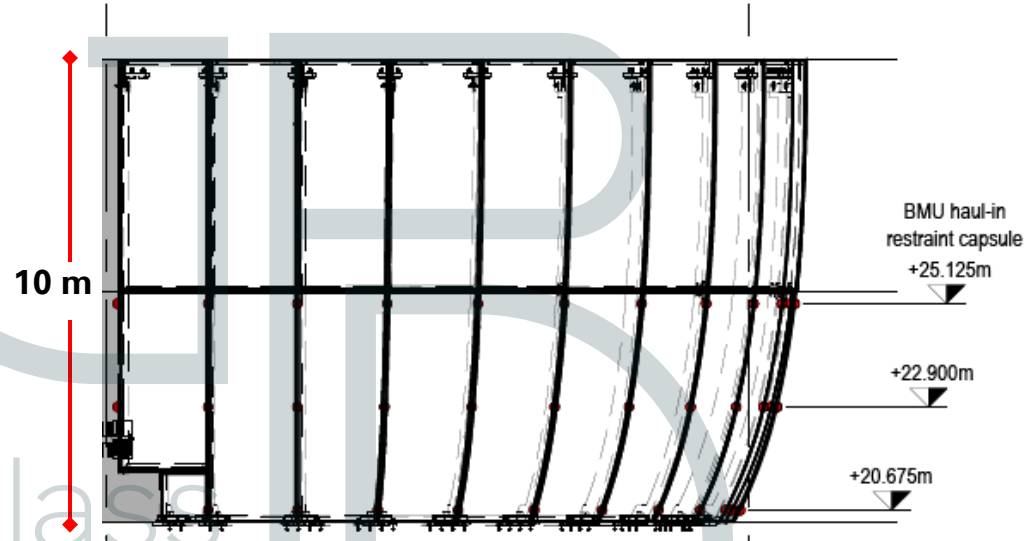
The Henderson

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The Henderson



The Henderson – Podium



1.170sqm steel mullion-transom façade

130 double curved IGUs and steel profiles

The Henderson – Podium



380sqm all-glass façade – 11 m x 2.1 m



750sqm high gloss polished stainless steel cladding

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The Henderson – Tower Top



883sqm

structural glass façade

168

double curved glass panes

119

glass roof beams

503sqm

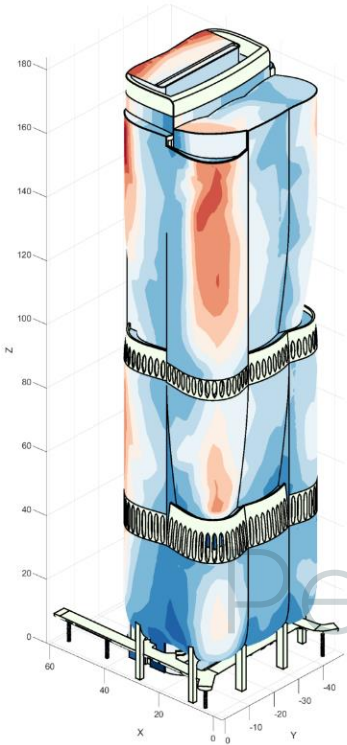
mirror polished sheet metal cladding

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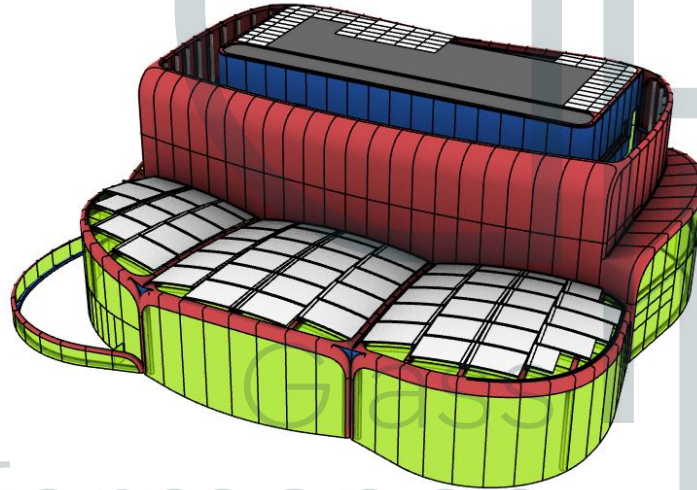
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The Henderson – Structural Challenges

very high wind loads



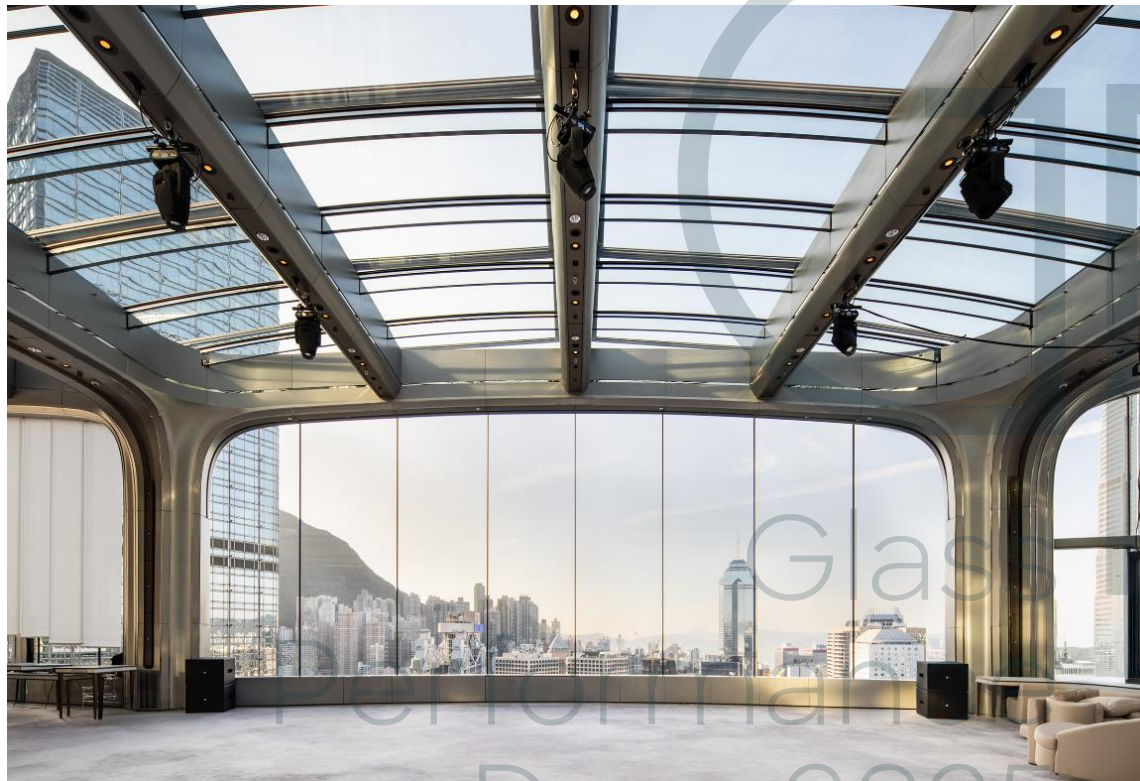
complex geometry



according to COP



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- 6.8 m x 2.1 m
- curved and flat glazings
- glass built-up: 6 x 12 mm FT
- wind loads up to 4.6 kPa
- storey drift of +/- 20 mm
- vertical deflection of substructure

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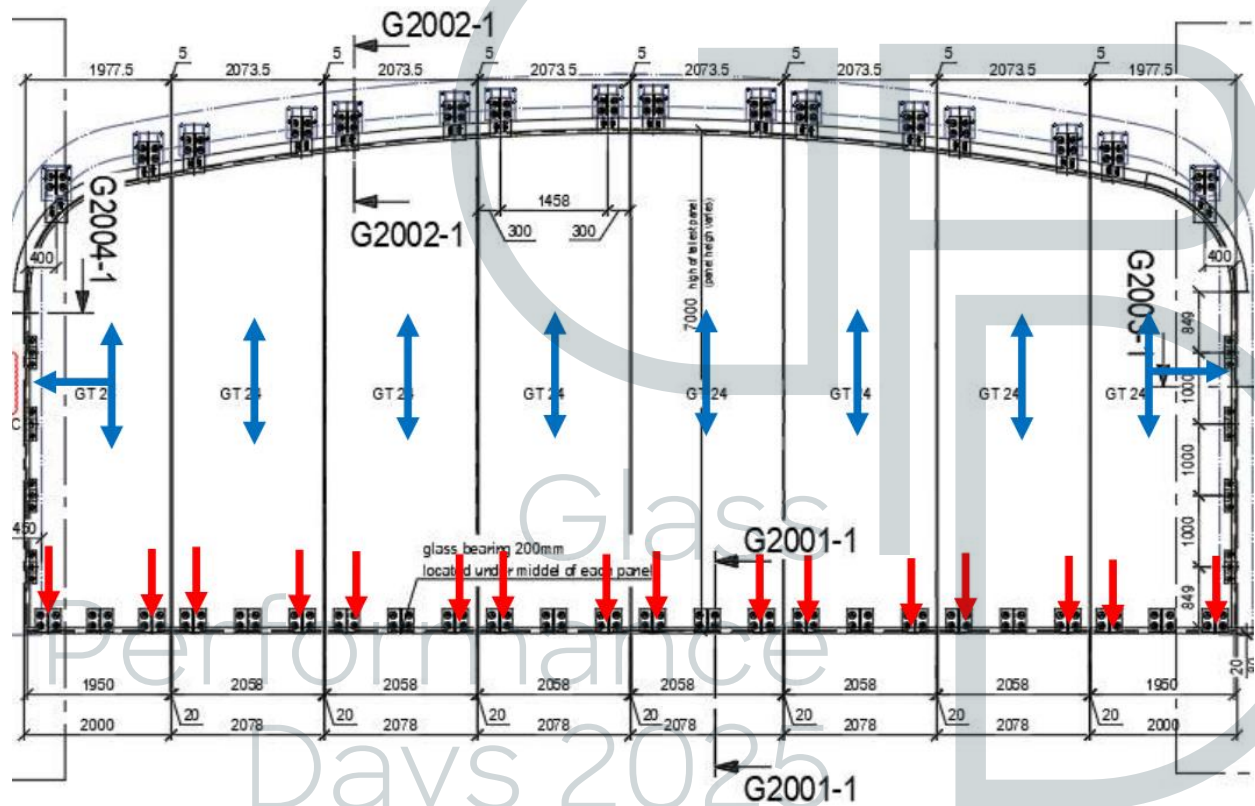
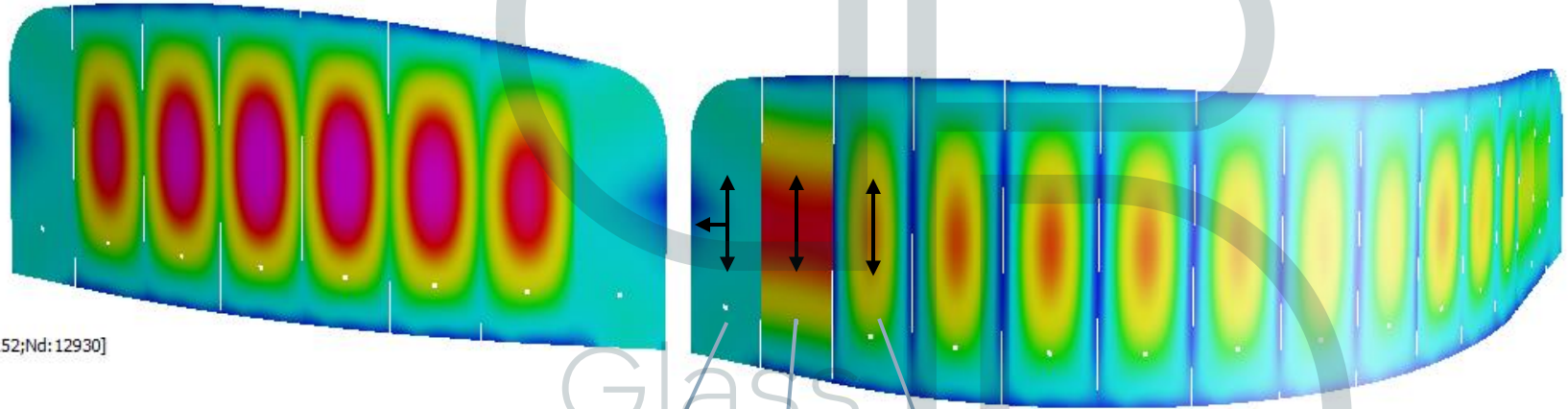


Plate Stress: Principal 11 +z surface (MPa)
Max = 49,7 [Pt:27518;Nd:29441]



Min = -0,5 [Pt:12152;Nd:12930]



flat

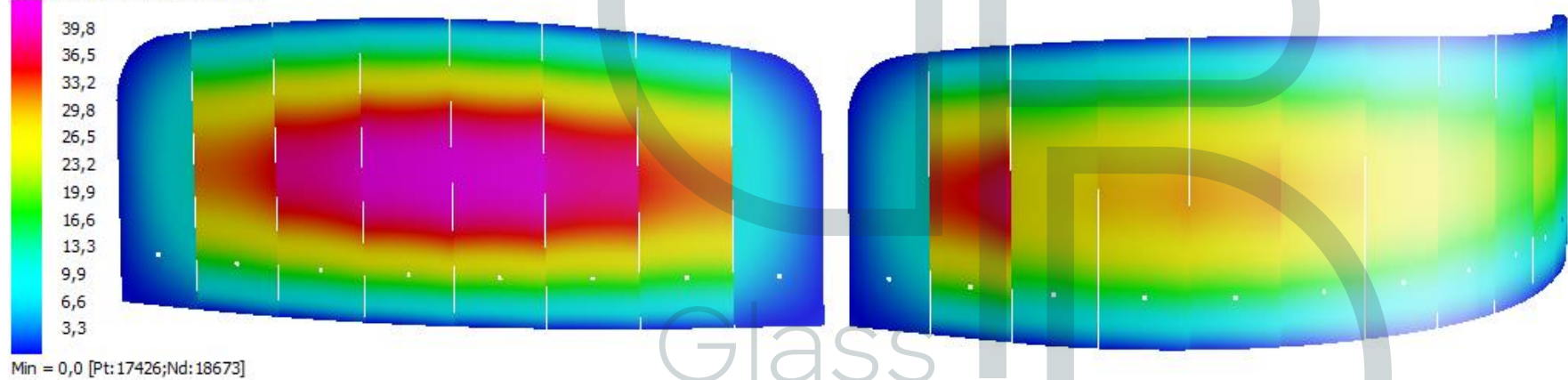
flat

curved

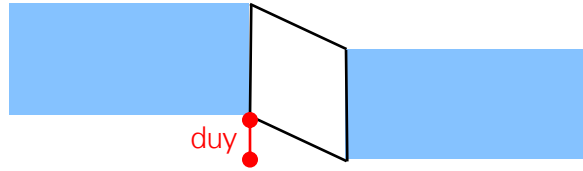
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Plate Disp: D(XYZ) (mm)

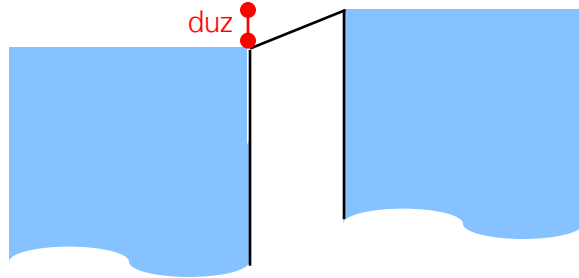
Max = 43,1 [Pt:27488;Nd:28718]



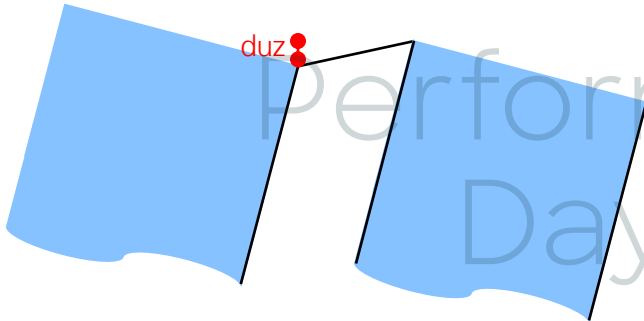
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out-of-plane → e.g. windloads

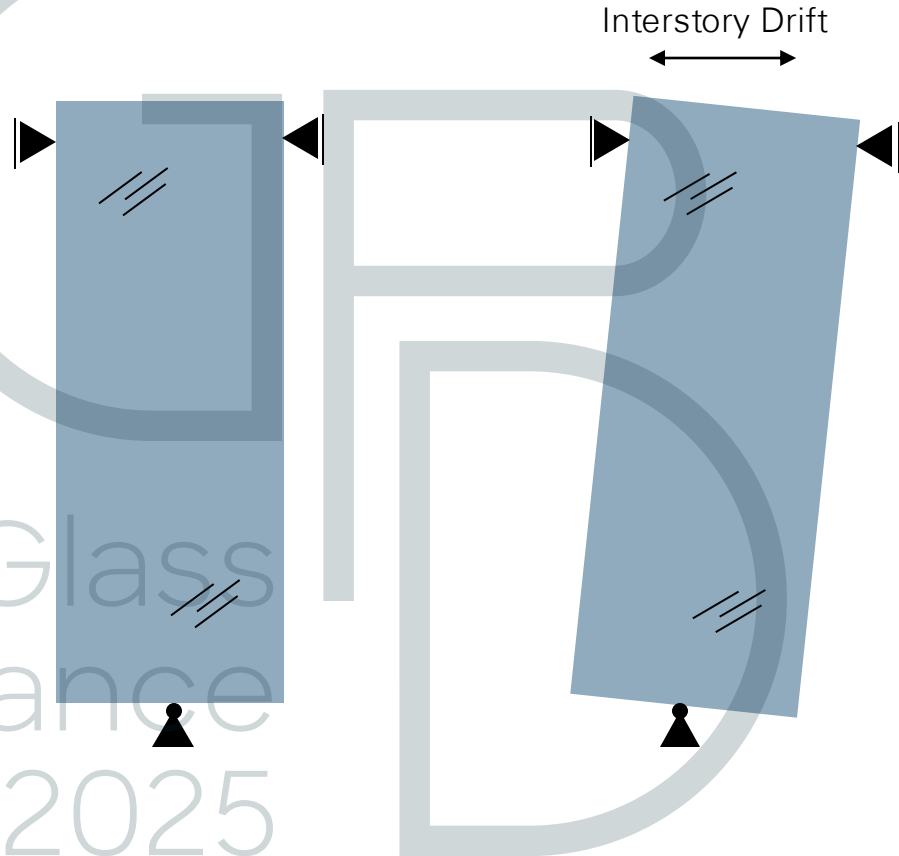


longitudinal direction → e.g. deflection of substructure

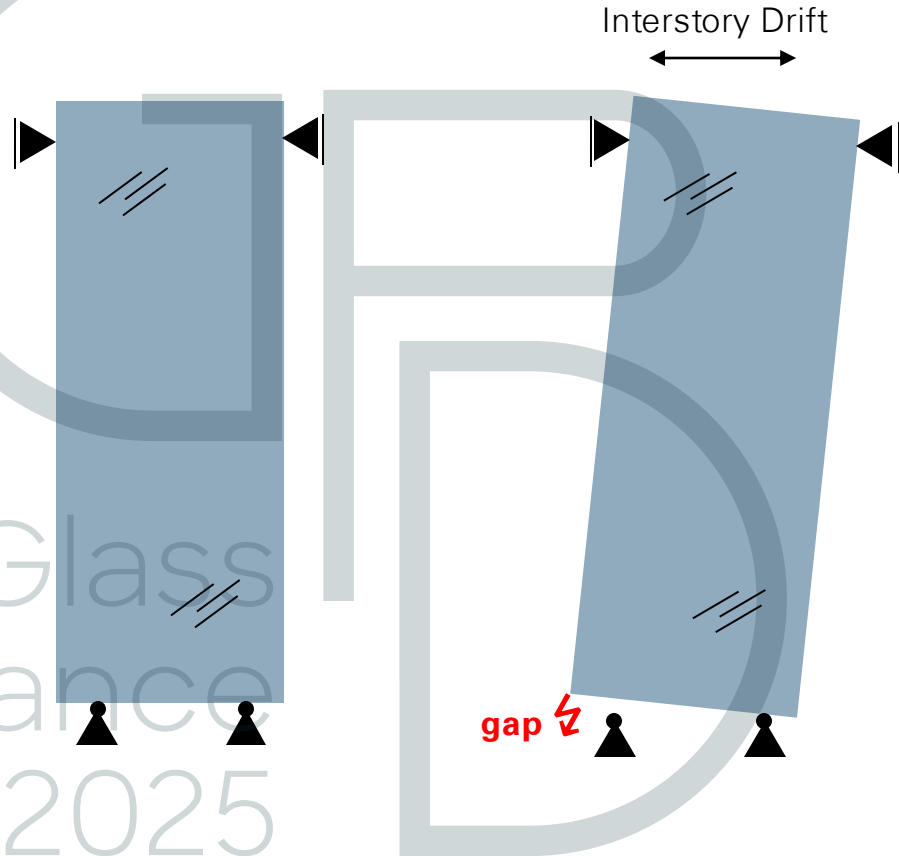


longitudinal direction → e.g. storey drift

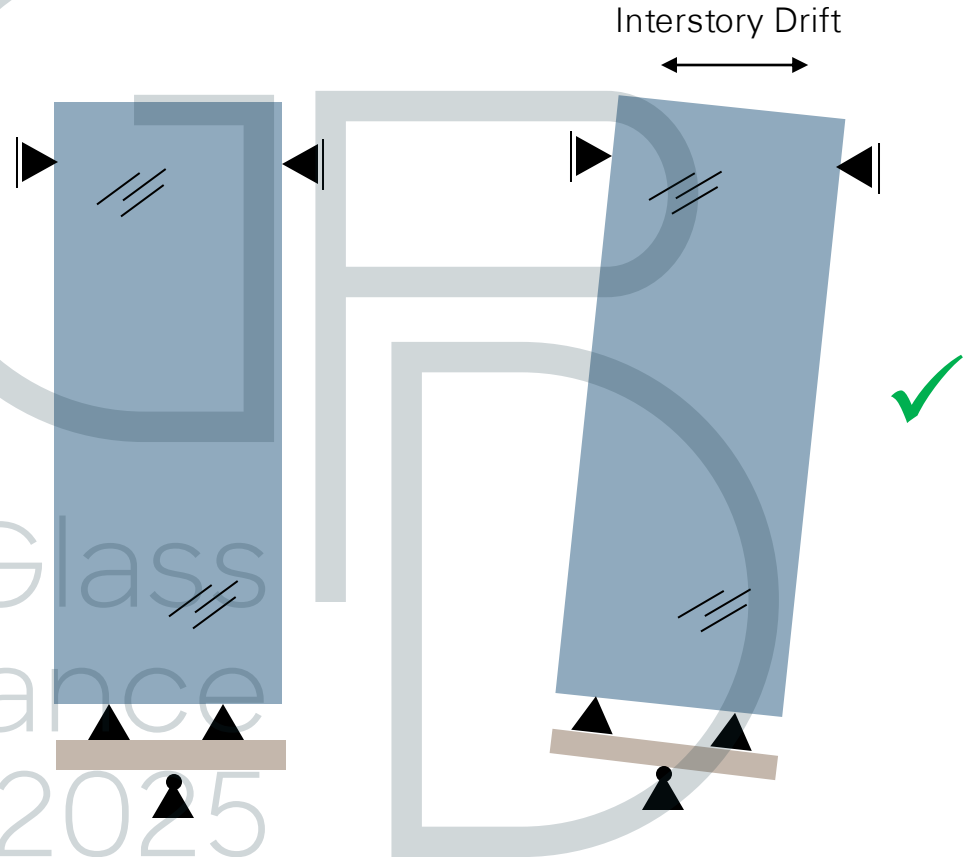
The Henderson – Dead Load Support of Glazing



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The Henderson – Installation

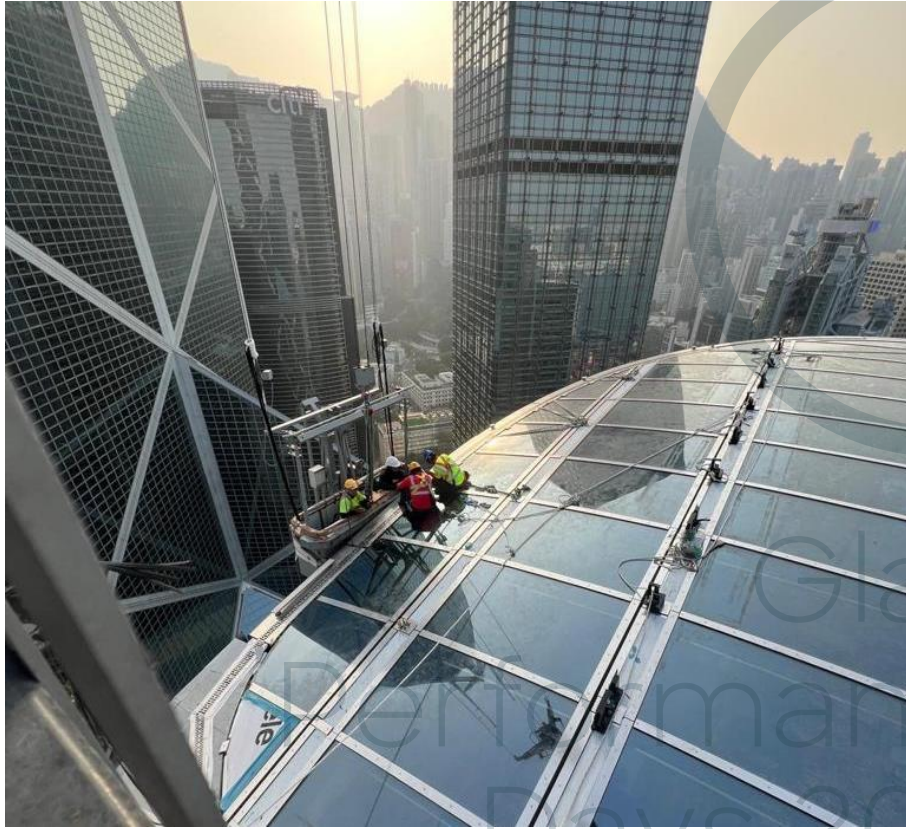


The Henderson – Installation

seele



The Henderson – Installation



Installation after tower crane was removed



the henderson

The Henderson – Architectural vision turned into reality



eleise

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