



# Case Study



Rainwater at 339  
Veterans, Ontario



Aspiring for *smooth development using MMC*

Constrained by *needing to connect to a mass timber (CLT) frame*



Streamlined by *Innovation*,  
Delivered by Sapphire.



# Rainwater at 339 Veterans, Ontario

- Client:** Sean Mason Homes
- Contractor:** Element 5
- Architect:** 4 Architecture Inc.
- Location:** Barrie, Ontario
- Balconies:** 55 balcony lifts



## History

A fast-growing city known for its scenic waterfront, diverse economy, and rich Indigenous and colonial history; Barrie has played a significant role in Ontario's development over the past two centuries. Barrie was named after British naval officer Sir Robert Barrie, the city grew rapidly with the arrival of European settlers, the construction of the Toronto Road in the 1830s, and the railway in 1865. Incorporated as a city in 1959, Barrie expanded further with the development of Highway 400, becoming a thriving residential and commercial hub. Today, it is home to the latest in Sean Mason Homes' developments, Rainwater at 339 Veterans Drive.



## Streamlined by Innovation, Delivered by Sapphire

Currently under construction and due for completion by Spring 2025, Rainwater at 339 Veterans is a landmark project for Sean Mason Homes and Barrie, Ontario, due to their key aspirations. Firstly, to create a development with ease of information access to keep progress smooth. Secondly – keeping the project sustainable without needing to accept trade-offs in 4 Architecture Inc.'s sustainable and artistic vision.



A crucial constraint for the team at Sean Mason Homes has been finding a sustainable solution for connecting balconies to a mass timber, or Cross-Laminated Timber (CLT) frame. Traditionally, balconies in Canada have been constructed using concrete slabs, with separate balustrading being attached afterwards. Due to the weight of concrete, the use of concrete slabs is not practical with Cross-Laminated Timber, and their application would also be unsuitable given the unsustainable nature of concrete as a material.

Sapphire Balconies was able to step in, providing Sean Mason Homes & 4 Architecture Inc. with a sustainable, innovative solution. By using lightweight, prefabricated balconies, constructed with renewable aluminum, the balconies were both light enough to connect to a CLT frame but also helped to lower the total carbon emissions of the building, taking significant weight off of the structure. The balconies, connected to the frame using an innovative Tie-Rod connection, used small penetrations into the timber frame to stay securely attached, with minimal deflection.



# NBS Specification

## Rainwater at 339 Veterans, Ontario

<b>Manufacturer</b>	Sapphire Balconies Ltd 11 Arkwright, Road Reading, RG2 0LU 0344 88 00 553 <a href="mailto:support@balconies.global">support@balconies.global</a> <a href="http://www.balconies.global">www.balconies.global</a>
<b>Reference</b>	Aluminium Cassette® balconies connected by Tie-Rod system with frameless, structural glass
<b>Balcony anchor</b>	Stainless steel M16 tie-rod connectors with height adjustment swage terminal integrated into the outer fascia of the side balustrade panel. Balcony installed and adjusted into position before locking tie-rod connections onto support hooks
<b>Arms</b>	Not applicable
<b>Cassette® structure</b>	2mm/3mm folded uncoated aluminum structure (Grade 5251) mechanically assembled with stainless steel fixings and electrically isolated clamp system locking to support arms
<b>Soffits</b>	Polyester powder-coated aluminium-controlled draining soffits, controlled drainage to the front of the balcony
<b>Deck finish</b>	Luxura® composite decking in Aged Oak fixed with hidden clips
<b>Toprail</b>	Profiled aluminum handrail including glass support top channel core rail chosen from Sapphire's standard range
<b>Guarding</b>	Clean 4mm + 4mm laminated heat-strengthened glass with extruded aluminum posts and low support rails with decorative trim at deck level to close gap between balcony fascia and inside face of glass
<b>Base fixing</b>	Mechanically fixed to Cassette®
<b>Fascias</b>	Screen-printed obscure band with colour-matched visible fixings



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