

Kaye Edmonton Clinic

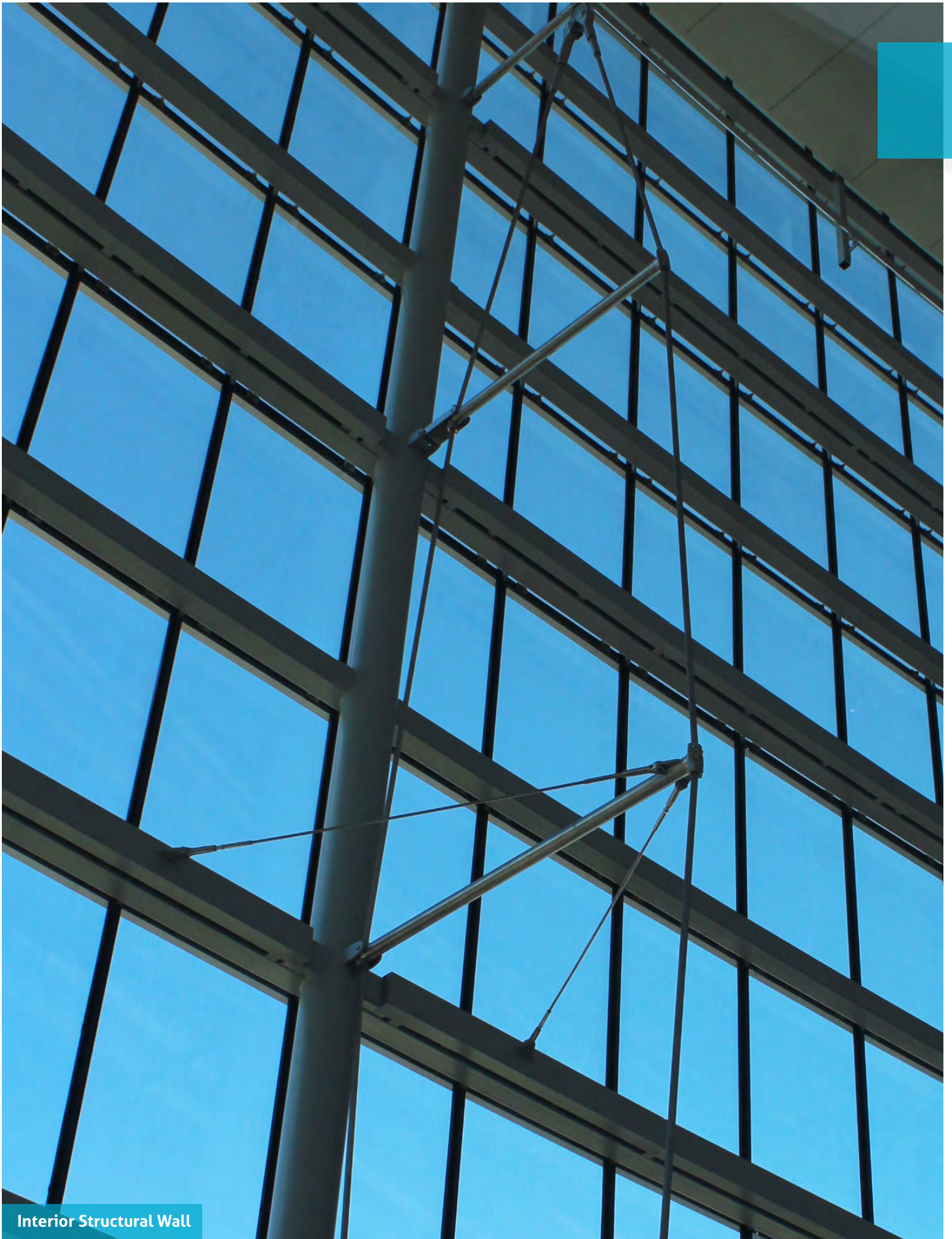
Edmonton, Alberta

STELLAGLASSHARDWARE.COM









Interior Structural Wall

Kaye Edmonton Clinic

Project Overview

Project Name

Kaye Edmonton Clinic South

Location

Edmonton, Alberta

Design Overview

This technically complex project - believed to be the largest bow truss in Canada - involved much collaboration with Stella's engineering team and Dialog's in-house engineering team.

The vastness of this seven-story atrium was made possible with our tension cable support that spans all seven floors. Stella's custom edge support brackets support the double-glazed glass in a visually light manner.

Architect

Dialog

Year Completed

2012

Products Supplied

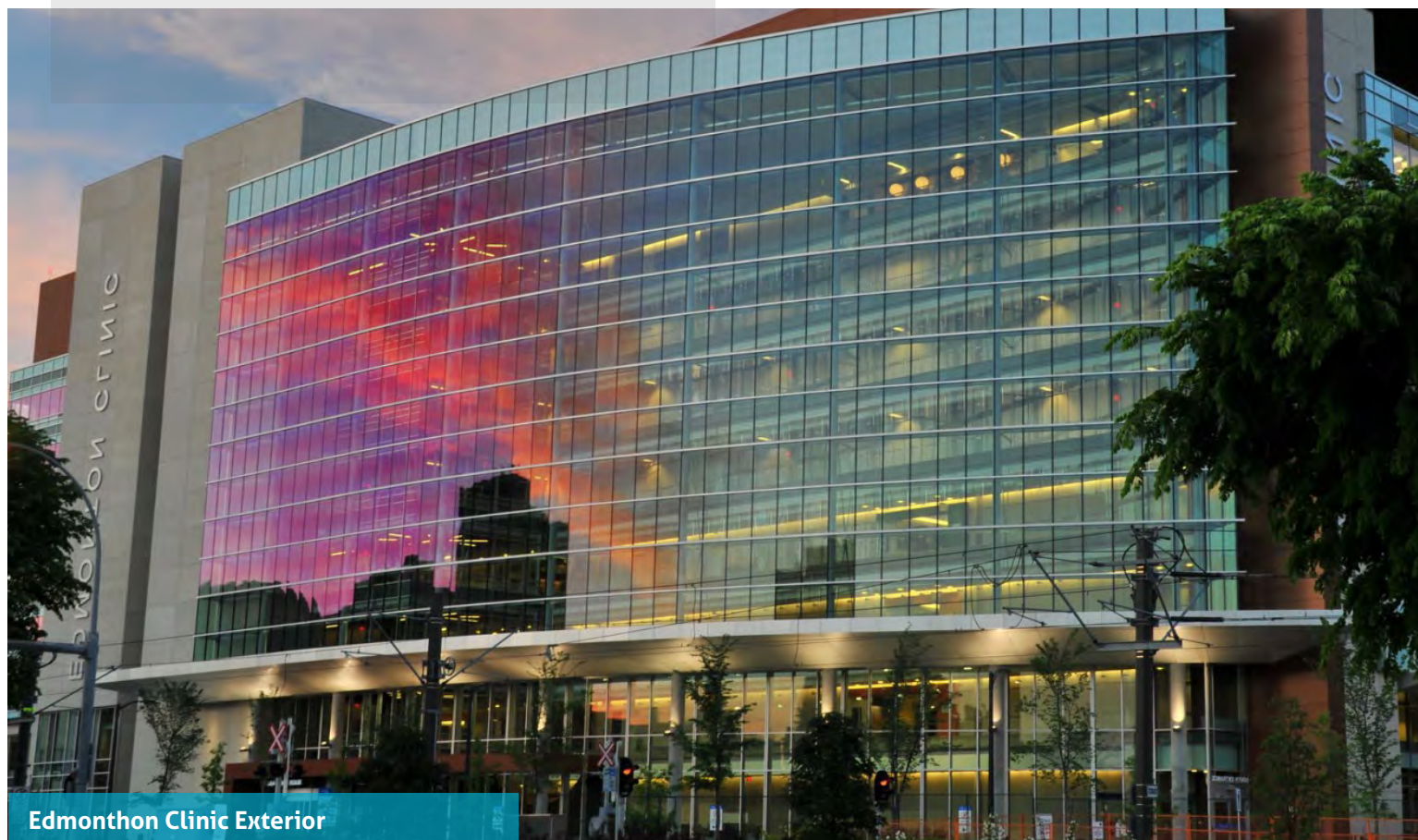
Cable Truss System, Custom Glass Edge-support Brackets, Custom Splice Plates, Custom Fin Shoes, S20 Heavy Duty Spiders with AB602T Articulating Glass Bolts

Design Services

Engineering, Glazing System, Hardware Design, Shop Drawings, Glass Fabrication Drawings

Sector

Civic + Community & Health



Edmonthon Clinic Exterior



Part 1 / Edge Glass Support

Stella made a total of 1224 of these brackets for Edmonton Clinic. An edge-supported glazing support was used to eliminate the need for holes in glass. The edge-support brackets were bolted to horizontal stainless HSS sections and supported glass at the quarter points. Adjustability was the key feature of Stella's design, this was demonstrated by:

- In/out adjustability - for steel variances
- Slotted holes - vertical adjustability at steel connection
- Rotational pivot - for curved surface of the atrium wall
- Front-mounting - for install of beauty cap



Part 2 / Cable Truss System

Edmonton Clinic consisted of seven tension trusses - approximately 26.5m high comprising 36.6mm diameter cables tested to 945kN - which were fixed to the structural steelwork above and below. In collaboration with partner Erdevicki Engineering, Stella created a system that provided structural support for the glass wall allowing the use of slender steel columns that add to the vastness of the atrium. Some of the steps performed with cables are as follows:

- 1) Design
- 2) Test to breaking point
- 3) Installation and field testing

Part 3 / Cable Truss System (Continued)

The scope of the size of resulting clevis and cables that Stella designed, manufactured and supplied is demonstrated in the photo on the left.

- The cable was a total of 366mm diameter thick.
- The clevis was 540mm tall and weighed 12kg.
- The loading capacity of the bow truss system was the equivalent of two fully loaded eighteen wheeler trucks.

Kaye Edmonton Clinic South

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