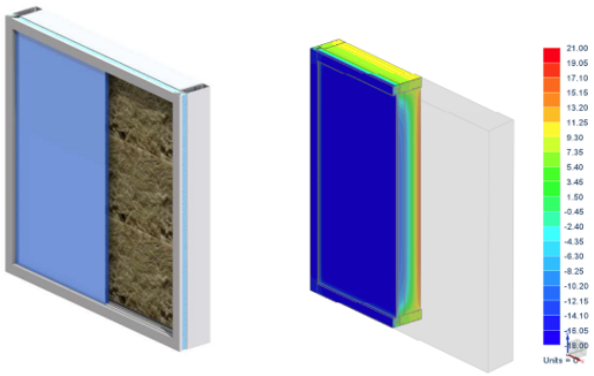
BECOR
Building Envelope Council Ottawa Region

## Webinar Session
**Wednesday, March 26, 2025**
**Noon to 1:00 PM**

# Spandrel Thermal Performance:
# *What Are Your Spandrel Panels Really Doing for Your Project?*

While the thermal performance calculation of discrete vision areas in curtain wall and window wall systems is well understood, when combined with opaque spandrels, it often stretches the limits of common evaluation methods. Recently published spandrel simulation procedures continue to struggle with nonstandard sizes, especially small slab bypass units with high frame to center-of-spandrel ratios; heat flow from adjacent assemblies (vision glazing and building components such as walls, floors, and roofs); and evaluation of interior temperatures, particularly near corners and framing intersections. As a result, there is confusion and inconsistent results in spandrel thermal performance values. Several studies show that conventional 2D thermal simulations may overestimate R-values by 30% compared to physical testing or 3D simulations. This presentation summarizes ongoing research that includes literature review, simulations, and laboratory testing. The objective is to develop improved thermal simulation techniques that more accurately represent the thermal behavior of spandrel assemblies and its integration with the building envelope.




**Anik Teasdale-St-Hilaire, P.Eng., Ph.D., Stantec – Façade Engineer, Principal**

Anik Teasdale-St-Hilaire is a Façade Engineer, Project Manager, and the Team Lead of Stantec's Buildings Specialty Services' New Construction team in Canada East. Her profound academic knowledge of building science and 19 years of practical field experience has served her clients well on a large variety of projects on both sides of the border, including: design and construction review of new residential, commercial, institutional, recreational and health care buildings. She has also performed building envelope condition assessments; failure investigations of glazing, glazing systems, sealant, and roofs; building envelope rehabilitation projects, and hygrothermal simulations of building envelope assemblies. Her career has focused on new construction projects, and since 2017, has converged on façade engineering, with emphasis on glazing and cladding systems, including their energy performance.