

Sustainability

City of Vancouver Zero Emissions Building Plan: New buildings to be zero emissions by 2030

The building will meet the City of Vancouver's new Zero Emissions Building Plan, which includes measures leading the way towards healthy and resilient buildings. The project is targeting significant energy and greenhouse gas emissions reductions over typical design, and it will build in long-term reliable savings using passive design concepts like high performance windows and walls, and recovering heat from exhaust air.

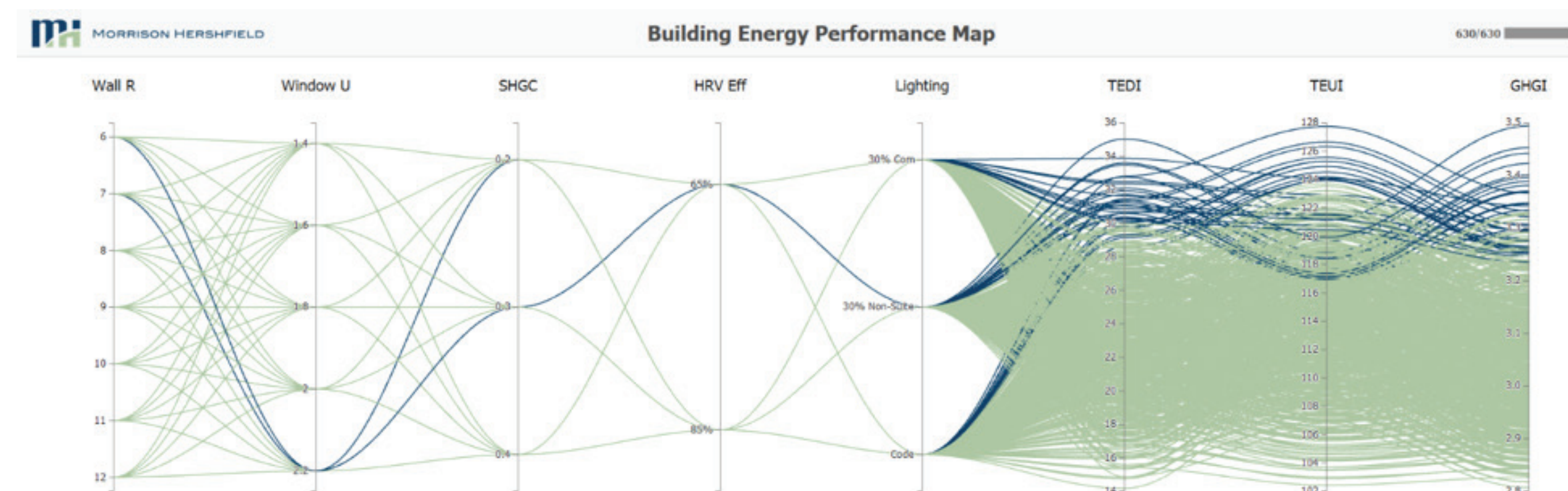
	CITY TARGETS
ZERO EMISSIONS BUILDINGS	Performance Limits
	Airtightness Testing
	Enhanced Commissioning
	Energy Metering and Reporting
	Report Embodied Emissions
HEALTHY BUILDINGS	Report Refrigerant Emissions
	Direct Ventilation
RESILIENT BUILDINGS	Low-Emitting Materials
	Indoor Air Quality Testing
RESILIENT BUILDINGS	Green Rainwater Management
	Resilient Water Access

City of Vancouver High-Rise Targets

	2016 Rezoning	2020 Rezoning	2025 Rezoning
TEDI (ekWh/m ²)	32	18	10
TEUI (ekWh/m ²)	120	TBD	TBD
GHGI (kgCO ₂ e)	6.0	5.0	0

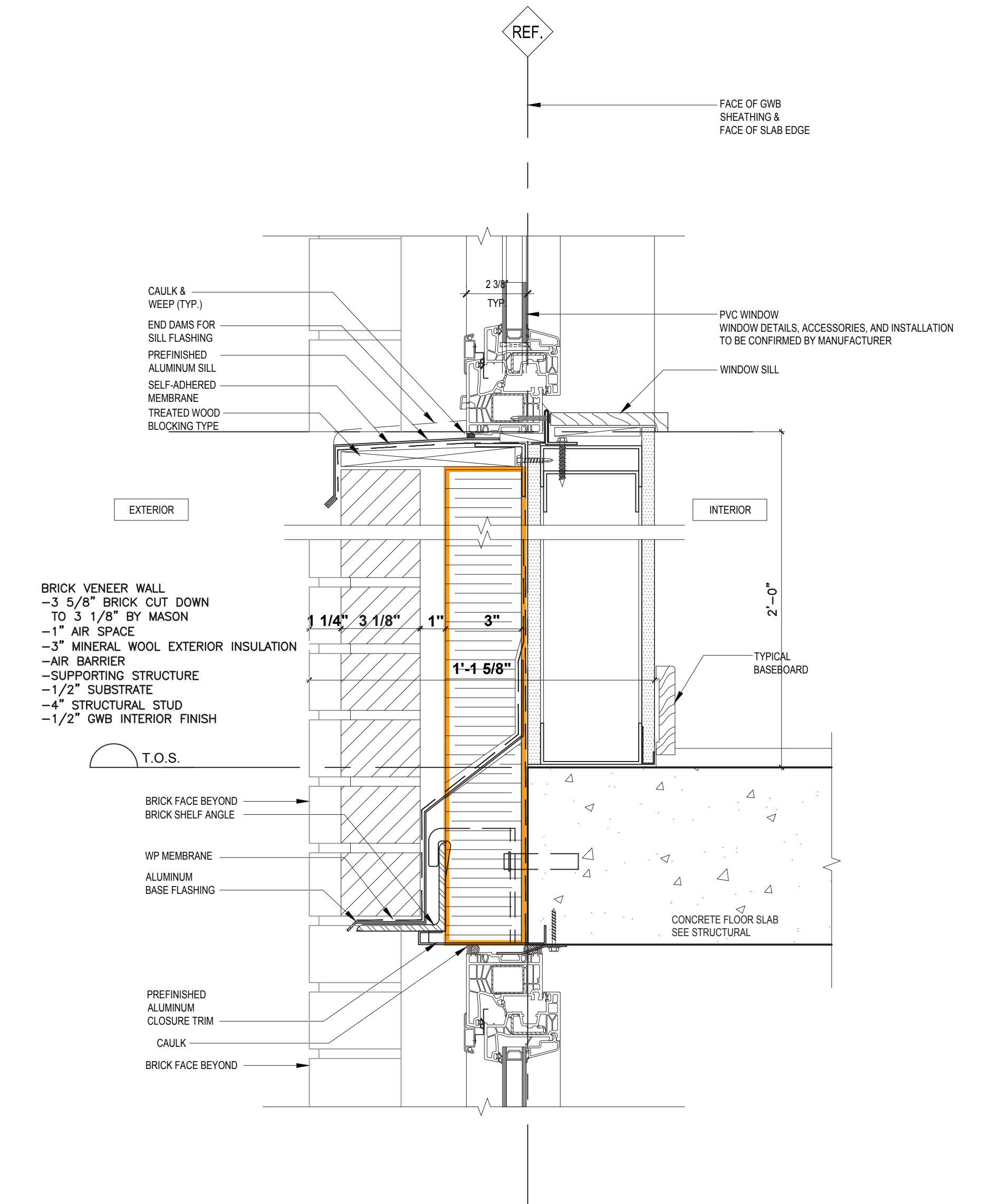
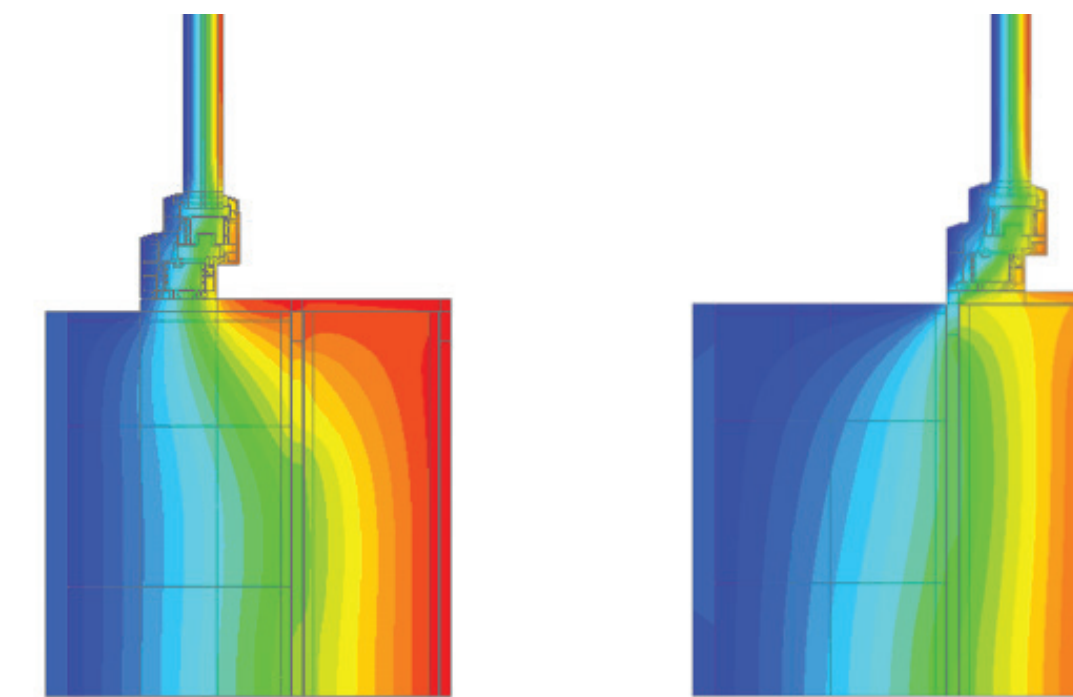
Energy Performance

- Parametric energy modelling used to optimize energy performance in early design
- Air to air heat recovery providing “free” heat to incoming ventilation air
- High performance envelope with minimized thermal bridging



Building Envelope

- Exterior insulated assemblies and attention to thermal bridging to improving thermal performance
- Air leakage will be tested using blower door testing, controlling the amount of air loss through the envelope



Passive Cooling

- Passive cooling study early in design to ensure temperatures are comfortable
- Operable windows
- High performance low-e coatings for windows improving thermal performance and limiting solar heat gains

