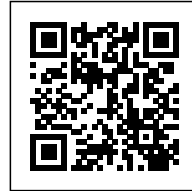




80 ATLANTIC: MASS TIMBER BUILDING

Posted on January 28, 2020 by martabuges



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80 Atlantic: Mass Timber Building
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Ontario's first mass timber commercial building in over a hundred years, 80 Atlantic pioneers a new urban office typology for potentially many more timber frame projects across the province. Designed by Quadrangle for Hullmark, with partner BentallGreenOak on behalf of Sun Life Assurance Company of Canada, the new 90,000-square-foot, five-storey building completes a courtyard with 60 Atlantic (also realised by Quadrangle and Hullmark) to create a paired commercial development. Hullmark requested that the building harmonize with the Liberty Village neighbourhood, noted for its wealth of converted factories and warehouses, and that it should attract high-calibre, creative class tenants.



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Revisions to the Ontario building code in 2015 made it possible to build commercial wood buildings up to six storeys high, so Hullmark and Quadrangle saw this as an opportunity to demonstrate leadership in the rapidly developing field of mass timber and to attract tenants seeking a premium workplace environment associated with innovation and sustainability.

80 Atlantic brings back all the features that people love about historic brick and beam workplaces: the open spacious layout, generous ceiling heights, and the warm look and feel and even smell that are known to have a positive impact on human wellbeing. Gone, however, are the dust, the draughts, the poor acoustics, energy inefficiency, and obtrusively placed pipes and cables. At 80 Atlantic, an engineered floor plenum integrates the mechanical, electrical and telecommunications systems and tucks these out of view beneath tenants' feet. HVAC ducts in the plenum keep the air moving and temperatures comfortable. Wiring runs from floor to ceiling in channels concealed inside the "huggable" columns. Unobscured by ducts or bulkheads, the natural wood columns and ceilings are on display throughout.

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As a building material, wood offers more than aesthetic appeal – it is also highly sustainable. Whereas building materials such as concrete and steel generate high levels of emissions, wood beams sequester carbon for the life of the building. The reduced carbon impact of this wooden structure is equal to almost 30 years of operational energy. Also, prefabricated mass timber panels can be manufactured off site, thereby improving construction safety, reducing area disruption, reducing waste, and decreasing overall construction time.

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At 80 Atlantic, a south-facing curtain wall provides unobstructed views of the timber interiors while bathing the interiors with daylight. The other three façades are constructed of well-insulated porcelain rain screen panels that respond to the masonry punched-window context of the area and use high-quality operable windows to provide users with more control over their environment.

To integrate the building with its surroundings, Quadrangle conceived of 80 Atlantic as a dialogue with 60 Atlantic, with glazed façades mirroring the opposite structure across a shared sunken courtyard. The dialogue extends through the materiality – from the raw Corten steel of 60s vertical circulation blocks to the refined copper facing for the elevator core at 80 and the buff brick of 60

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and the complementary toned panels at 80. 80 also pulls back from 60 at its southwest corner to allow the heritage façade to remain exposed.



Users enter 80 Atlantic through the courtyard by following a path flanked with plantings down to the lobby entrance, which is sunk below grade and has a soaring double-height wood-lined ceiling. The first level is actually concrete instead of timber because of the larger floor spans required and necessary separation between office and retail use. The upper floors are composed of glulam beams and columns, on which are installed nail-laminated timber (NLT) floor decking panels. The floors have an acoustic layer that includes a lightweight concrete topping to minimize deflections in the floor and to provide an even surface.

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On these upper floors, tenants can enjoy the lingering scent of wood, while the building's striking transparency provides them with sweeping views of the lake. They can also take advantage of a spacious outdoor terrace on the third floor.



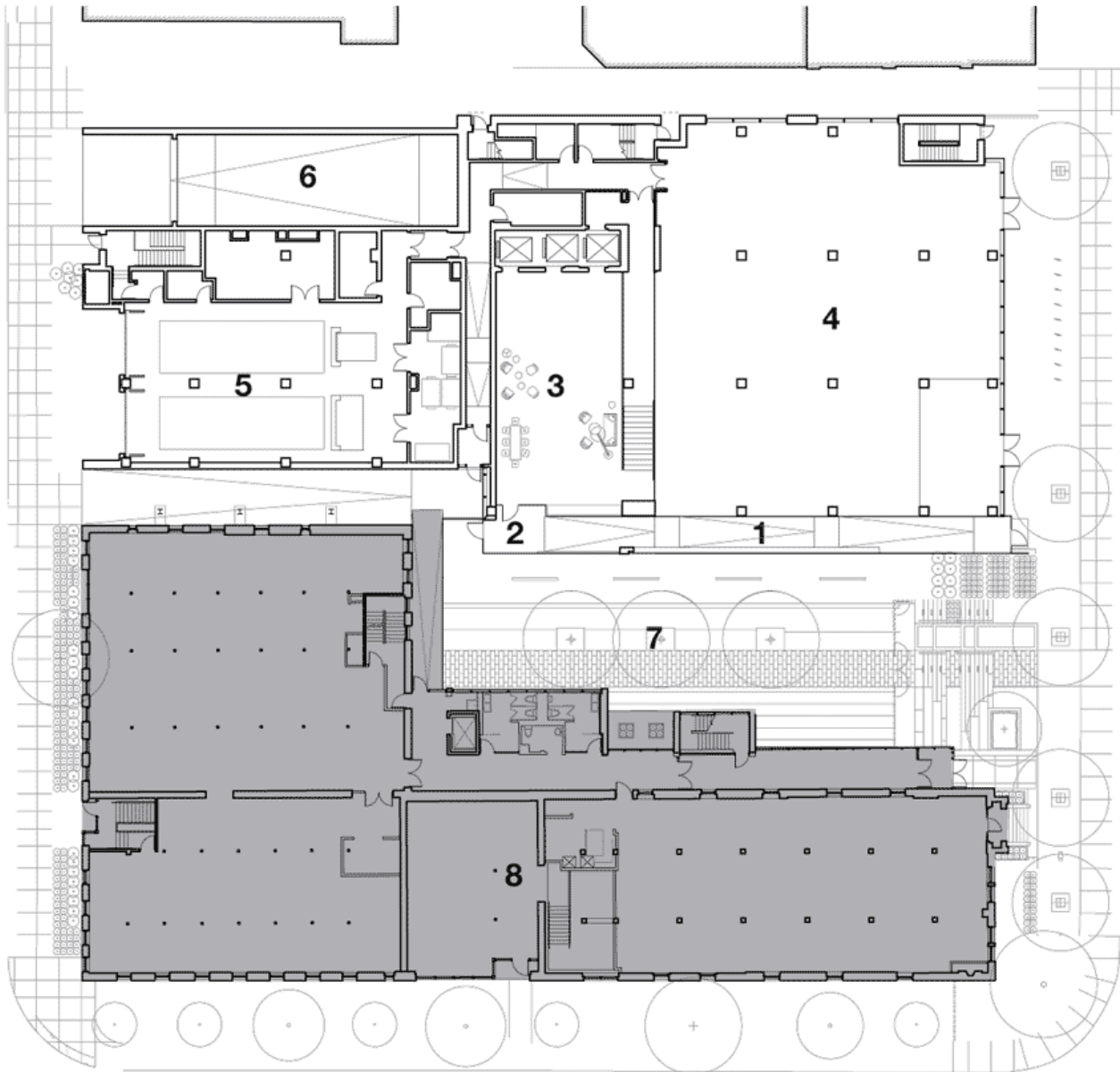
Hullmark took a chance with this unusual development by adopting a construction methodology still in its infancy, but owing to the quality, uniqueness, and appeal of the final product, the developer was able to attract lead tenant Universal Music Canada, as well as co-working giant Spaces and the hybrid management consulting, design and branding agency Jackman Reinvents – all prime tenants, paying premium rents to be in this first-of-its-kind building. The interiors have been left raw for fit-out, exposing long expanses of the NLT and columns, and empowering the tenants to make the

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space their own while still celebrating the nature of this 21st-century wood building.



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|--------------------------------|--|
| 1 ENTRY RAMP | 5 SHARED STORAGE BETWEEN 80 AND 60 ATLANTIC |
| 2 MAIN ENTRY | 6 RAMP TO PARKING |
| 3 OFFICE LOBBY / LOUNGE | 7 COURTYARD |
| 4 RETAIL | 8 60 ATLANTIC |



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