*Media contact: Heather West, 612-724-8760, heather@heatherwestpr.com*

# Toronto Metropolitan University’s multifunctional, sustainable

# Daphne Cockwell Health Sciences Complex features Rockfon ceilings

Chicago (Nov. 2022) – Recognized for sustainable design excellence, Toronto Metropolitan University’s Daphne Cockwell Health Sciences Complex (DCHSC) in Toronto was honored by American Institute of Architects (AIA) Committee on the Environment’s 25th annual COTE® Top Ten Awards. This 28-story vertical campus also earned LEED® Gold certification through the Canada Green Building Council.

The DCHSC centralizes four academic departments in one building: the Schools of Nursing, Midwifery, Nutrition, and Occupational and Public Health. Reflecting the values and lessons of these wellness-focused programs, “creating connections for a healthy city” motivated and nurtured the building’s conceptual and physical development.

Perkins&Will designed the DCHSC as an educational community encompassing nearly 300,000 square feet of highly sustainable teaching, research and 332-bed living space. Rockfon acoustic stone wool ceiling panels were specified and installed throughout DCHSC’s first nine floors. The mixed-use tower’s 175,000-square-foot podium supports academic studies with research facilities, clinical experience suites, demonstration kitchens, classrooms, offices, collaboration and study spaces, practical labs, a Creative Technology Lab and a café with fresh produce sourced from the rooftop garden.

Three types of Rockfon ceiling panels and two types of suspension systems were selected to meet each area’s different goals. Patene Building Supply provided a combined total of approximately 100,000 square feet of Rockfon Sonar®, Rockfon Tropic® and Rockfon® Medical™ Standard ceiling panels.

Nelmar Drywall Company installed the panels in Chicago Metallic® 1200 Seismic 15/16-inch and Chicago Metallic® 4500 Ultraline™ 9/16-inch exposed grid ceiling suspension systems. Metric dimensions were confirmed with Rockfon to facilitate planning and installation. Eastern Construction Company served as the general contractor, coordinating the numerous trades within a tight urban site.

***“Completely healthy and transparent”***

Ceiling materials were evaluated for aesthetic, performance and environmental attributes contributing to DCHSC’s design and operations, the occupants’ indoor health, comfort and well-being, and the students’ educational experience. According to the design team, over 250 potential products were rigorously screened and more than 75 percent of materials were assessed as being “completely healthy and transparent over their lifecycle – free of hazardous substances and with full documentation of ingredients.”

Assisting with these material ingredient and product evaluations, Rockfon offers such documentation as Environmental Product Declarations (EPDs), Health Product Declarations (HPDs) and Declare Labels. All of Rockfon’s stone wool products also have been tested and UL® GREENGUARD® Gold Certified for Office and Educational Environments. Low-emitting products are recognized by LEED and other green building programs as contributing to healthy indoor air quality.

*(more)*

Contributing to air quality and cleanliness, Rockfon stone wool ceiling panels naturally resist moisture, mold and mildew without added fungicides. This helps create and maintain a hygienic environment for the DCHSC’s long-term operation and health care application. Rockfon Medical Standard products also do not contribute to the growth of MRSA. They have been tested to meet microbiological class M1 fulfilling the requirements of Zone 4 (very high risk) and comply with ISO Class 5 clean room standards.

***Optimized acoustics enhances experiential learning***

LEED also recognizes acoustic comfort as part of a quality indoor environmental experience. According to DCHSC’s AIA COTE Top Ten award, “Acoustic analysis shaped a finishing strategy that ensures comfort throughout—from residence rooms to multistory public spaces.”

Optimizing acoustics for the DCHSC’s occupants, all partitions run full-height from slab-to-slab, and framing details and equipment locations minimize structural transfer. Public spaces and large classrooms use a combination of absorptive wall and ceiling materials.

Throughout the DCHSC’s first nine floors. Rockfon Sonar delivers exceptional sound absorption, achieving a noise reduction coefficient of up to 0.95 NRC. Rockfon Medical Standard and Tropic also provide high acoustic performance with, respectively, 0.90 and 0.85 NRCs. As the amount of sound absorption increases inside a room, the reverberation time and noise level decrease. This improves speech intelligibility, allowing students to better understand their professors, peers, and at DCHSC, their future patients.

The DCHSC at Toronto Metropolitan University is a dynamic learning space that promotes socially responsive, evidence-informed nursing. Graduates are prepared to address global health needs and provide high quality care for future generations. Innovative experiential learning involves high-tech in-person and virtual simulations. Students participate in comprehensive clinical scenarios within the safety of a supportive teaching and learning environment. These interactive experiences help students develop the competence and confidence to provide skilled and thoughtful care.

In addition to the specialty classrooms, ceiling systems with a high NRC optimize acoustics for multi-purpose spaces. The DCHSC combines study space and circulation to create a vertical “main street,” offering a front door to each department. The detailed design of shared teaching spaces to serve multiple departments effectively reduced the total classroom count. The ground-floor flat classroom showcases a flexible interior space with mobile partitions to expand from small discussion groups to accommodate large lectures and events.

“From the Creative Technology Lab to the state-of-the-art nursing suites, the Daphne Cockwell Health Sciences Complex is an outstanding addition to our campus. It provides much needed learning and research space for our students and faculty to make a sustainable, positive impact on our community,” said Dr. Mohamed Lachemi, president and vice-chancellor of Toronto Metropolitan University.

***Promoting accessibility, connectivity, sustainability***

Accessibility throughout the building and connectivity to the surrounding city also were key in the project’s design. The building sets a new standard for accessibility in Canada and formed the basis for a new Accessibility Design Standard developed for Ryerson. More than 90 percent of the DCHSC’s occupants walk, bike or use public transit. Social and environmental connections, and mental restoration also are promoted through the open floor plan and access to views and natural light.

*(more)*

The white surface of Rockfon’s stone wool panels selected for the DCHSC’s ceilings reflects up to 86 percent of light. Along with maximizing natural and electrical light sources, the diffused lighting supports occupants’ health and wellness by reducing the potential for eye strain due to glare on screens and monitors. Daylight, high-efficiency lighting and occupancy sensors also reduce energy consumption.

At a systems level, high-efficiency equipment, energy recovery ventilators and a hydronic active chilled beam ventilation system reduce heating and cooling consumption, while providing fresh air to occupants. Passive energy reduction strategies incorporate a high-efficiency R25+ envelope. The DCHSC is estimated to use 42 percent less energy than a baseline building, reducing greenhouse gas emissions by 945,000 kg annually.

Overall, the building also incorporated 33.78 percent recycled material content. Rockfon’s ceiling systems are manufactured with recycled content. At the end of their long lifecycle in the ceiling, the metal can be 100 percent locally recycled.

***Designed for longevity, recognized for excellence***

Perkins&Will designed the DCHSC for a 100-year lifespan with anticipated adaptations and renovations. As technology changes, or repairs are needed to HVAC and lighting, Rockfon’s ceiling system allows for easy access to the plenum. Ceiling heights and viewing angles also were calibrated to support potential reconfiguration in service of new modes of teaching and learning.

“Uniquely expressing public space throughout the building, the Daphne Cockwell Health Sciences Complex creates new connections to the adjacent campus at the ground floor and illustrates student life in a vertical axis. This expression reinforces the concept of a vertical campus, successfully integrating the academic and social lives of Ryerson students,” said Ryan Bragg, FRAIC, Architect AIBC, LEED AP, who serves as Perkins&Will’s principal, corporate and commercial, Vancouver studio.

“This type of consolidated yet integrated design is a vibrant and viable solution for urban campuses of the future,” observed Andrew Frontini, OAA, NSAA, FRAIC, LEED AP BD+C, principal and design director of Perkins&Will’s Toronto studios. “Daphne Cockwell Health Sciences Complex is a place where there is continuous 24-hour learning, encouraging environmental, physical and financial sustainability as well as knowledge-sharing among students and faculty. The Complex is an unprecedentedly healthy and transparent building that will inspire institutions across Canada.”

Max Richter, Architect AIBC, MRAIC, CPHD, LEED AP BD+C, and associate principal of Perkins&Will’s Vancouver studio, added, “The most ambitious example of sustainable design at Ryerson, the Complex is intended to be a catalyst for continually improving performance. We designed this project to be a great project not just at the opening, but to be an ongoing resource for Ryerson’s researchers to study. The lessons learned from this building will make the next generation of buildings better.”

Considered one of the industry’s most prestigious sustainable design award programs, COTE Top Ten award-winning projects represent the most innovative green building projects that set the standards in design and sustainability.

**\*\***

***Toronto Metropolitan University, Daphne Cockwell Health Sciences Complex (DCHSC)***

***288 Church St., Toronto, Ontario M5B 1Z5***

* Owner: Toronto Metropolitan University (formerly known as Ryerson University); Toronto; https://www.torontomu.ca
* Architect, interior designer, LEED consultant: Perkins&Will; Toronto and Vancouver; https://perkinswill.com
* General contractor: Eastern Construction Company Ltd.; Scarborough, Ontario; https://www.easternconstruction.com
* Ceiling systems – installing contractor: Nelmar Drywall Company Ltd.; Vaughan, Ontario; http://www.nelmardrywall.com
* Ceiling systems ­ distributor: Patene Building Supply Ltd.; Guelph, Ontario; https://www.patene.com
* Ceiling systems – manufacturer: Rockfon; Chicago; https://www.rockfon.com
* Photographer: Tom Arban Photography Inc.

***About Rockfon***

*Rockfon is part of the ROCKWOOL Group and is offering advanced acoustic ceilings and wall solutions to create beautiful, comfortable spaces.*

*At the ROCKWOOL Group, we are committed to enriching the lives of everyone who experiences our product solutions. Our expertise is perfectly suited to tackle many of today’s biggest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our range of products reflects the diversity of the world’s needs, while supporting our stakeholders in reducing their own carbon footprint.*

*Stone wool is a versatile material and forms the basis of all our businesses. With approximately 11,500 passionate colleagues in 39 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibers for industrial use to insulation for the process industry, and marine and offshore.*

*###*