York University Building Standards

Note to the Designer/Architect/Engineer: These Standards are basic minimum criteria to be met in preparing the final project specifications for this section, which is the responsibility of the Designer

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3.1 Installation requirements for water bottle refill stations and for public drinking water fountains

Prepared by: Paul	Reviewed by: Helen	Authorized by: Richard
Mayol, Project Manager,	Psathas, Senior	Francki, Assistant Vice
Office of the Vice	Manager, Environmental	President Campus
President Finance and	Design & Sustainability,	Services and Business
Administration	CSBO	Operations
	Peter Thompson, Sr.	
	Advisor, Institutional	
	Space Planning, Office of	
	the VP F&A Patrick	
	Saavedra, Steve Sicluna,	
	Manager, Maintenance,	
	CSBO	
	Ron Ogata, Manager,	
	Renovations, CSBO	

1.0 GENERAL

1.1 Scope of Work

.1 This standard is a component of the York University, CSBO Building Standard for Plumbing Fixtures focusing specifically on indoor public water fountains and indoor water bottle refill stations

1.2 **Guideline Principles**

- .1 The placement of indoor public water fountains shall be based on the building occupancy load, and ease of access to potable water and drain, as well as electrical connection. Ideally, water fountains shall be located near or adjacent to public washrooms. As a minimum requirement, there shall be at least one (1) public water fountains per building floor.
- .2 The placement of indoor water bottle refill stations shall also be based on the building occupancy load, and ease of access to potable water and drain, as well as electrical connection, as well as pedestrian traffic patterns. Ideally, water bottle refill stations shall be located near cafeterias, or other high pedestrian traffic use area. As a minimum requirement, there shall be at least one water bottle refill station per building. Additional water bottle refill stations shall be considered based on building use, occupancy, pedestrian traffic patterns, available institutional resources and other considerations.

1.3 Sustainable Design Requirements

- .1 For projects pursuing LEED certification the following sustainability standards include:
 - LEED WEc3: Water Use Reduction .1

1.4 **Quality Assurance**

.1 Public drinking water fountains and water bottle refill stations shall be installed in accordance with Ontario Building Code

and other standards and requirements that are applicable including public health regulations

.2 For new buildings or major renovations contractor shall provide all fixtures and trim using a single manufacturer where possible.

1.5 Reference Standards

.1 Installed equipment must meet most recent version of: Ontario Building Code

Ontario Plumbing Code

B45S1-04 - Supplement #1 to CAN/CSA-B45 Series-02, Plumbing Fixtures

AODA Accessibility for Ontarians with Disabilities Act (AODA)

ANSI/NSF61 (2011) Drinking Water System Components – Health Effects

ASME A112.19.5-2011/CSA-B45.15-11 - Flush valves and spuds for water closets, urinals, and tanks

1.6 Related York University Standards:

- .1 Interior Signage Standard Manual, CSBO
- .2 Metal

1.7 Submittals (Shop Drawings)

.1 Submit complete manufacturer's specifications sheets and shop drawings for all fixtures including installation, maintenance and cleaning instructions

1.8 Installation Instructions

- .1 Provide manufacturers' written installation instructions for fixtures as required
- .2 Provide all fixtures for the installation of the drinking water fountains and water bottle refill stations as required

1.9 Maintenance Data

.1 provide relevant manufactures' written maintenance data for incorporation into York University maintenance manuals

1.10 Warranty (Standard Warranty and Extended Warranty)

.1 Provide in writing warranty on both product and installation

for a period of one year from the date of system acceptance from York University.

2.0 PRODUCTS

- 2.1 Public drinking water fountains (for indoor applications)
 - .1 shall have the following features:
 - .1 Self contained, barrier-free wall hung
 - .2 Electric refrigerated having a water chilling capacity of 10°C based on 27°C inlet and 32°C ambient, 115 volts, 60 Hz single phase
 - .3 Shall be equipped with have self-closing controls on the front or side of the fountain
 - .4 Barrier-free and be compliant with AODA guidelines for Plumbing Elements and Facilities
 - .5 Have a minimum water flow rate of at least 30 litres per hour @ 10°C
 - .6 Shall be manufactured to operate on 20 psi to 105 psi water supply line
 - .7 Se designed and manufactured so as to be completely lead-free, this includes no lead soldering
 - .8 Shall contain a strainer with easily cleanable screen to allow trapping of waterborne particulate of 140 microns and larger
 - .9 Shall be certified to ANSI/NSF61 (2011) Drinking Water System Components Health Effects
 - .10 Shall be manufactured of heavy gauge stainless steel, vitreous china, ABS plastic or other materials conducive to low maintenance and easy of cleaning
- 2.2 Water bottle refill stations (for indoor applications)
 - .1 shall have the following features:
 - .1 self contained, barrier-free wall hung
 - .2 sanitary hands-free optical sensor operated with a 30second shut-off timer
 - .3 capable of filling bottles or cups
 - electric refrigerated having a water chilling capacity of 10°C based on 27C inlet and 32C ambient, 115 volts, 60 Hz single phase
 - .5 barrier free be compliant with AODA guidelines Plumbing Elements and Facilities
 - .6 Silver ion anti-microbial protection
 - .7 quick fill rate of at least 2 litres per minute for

- refrigerated unit
- .8 automatic purge cycle once every 24 hours to assure a fresh water supply
- .9 have a minimum water flow rate of at least 30 litres per hour @ 10°C
- .10 shall be manufactured to operate on 20 psi to 105 psi water supply line
- .11 shall meet NSF/ANSI 42 and 53 for lead reduction and lead free construction including no lead soldering
- .12 shall be certified to ANSI/NSF61 (2011) Drinking Water System Components Health Effects

2.3 Acceptable Products

- .1 Public Drinking Water Fountains (indoor use)
 - .1 Elkay EZS8 stainless steel water fountain
 - .2 Haws Wall mounted stainless steel water cooler item HAWHWUACP8
- .2 Water Bottle Refill Stations
 - .1 Haws Brita Hydration Station
 - .2 Elkay EZH2O Surface Mounted LZWSSM hands free operation
- .3 Drinking Fountain and water bottle refill station combination
 - .1 Elkay Cooler Kit LZS8WSLK wall mounted water fountains with incorporated wall mounted water bottle refill station. Water cooler kit is incorporated
- .4 Retrofits for existing stainless steel water fountains
 - .1 Halsey Taylor Universal Glass Filler Assembly Kit

3.0 EXECUTION

- 3.1 Installation requirements for water bottle refill stations and for public drinking water fountains:
 - .1 shall be installed in such a manner so as to provide a barrier-free access and shall be wall hung flush mounted, or can be
 - .2 barrier-free and freestanding
 - .3 Placement of drinking water fountains as well as water bottle

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- refill stations must taken into consideration access for persons using mobility devices such as wheelchairs, walkers, scooter and canes
- .4 The installation of drinking water fountains shall be such that the front and side controls for the operation of the fountain are located at a height that is not greater than 900- to 1000 mm above the finished floor
- .5 Controls shall be pressure plate operated requiring a maximum force of no more than 22.2N
- .6 The installation of water bottle refill stations shall be such that the tray upon which a cup or a bottle rests for filling is located 900 to -1000 mm above the finished floor
- .7 Water bottle refill stations shall be equipped with York
 University standard signs denoting the type and use of
 installation to be placed flush mounted adjacent to the fixture
 and flag mounted above the fixture. Please refer to Interior
 Signage Standard Manual, CSBO
- .8 Public drinking public water fountains shall be equipped with York University standard signs denoting the type and use of installation to be placed flush mounted adjacent to the fixture and flag mounted above the fixture. Please refer to Interior Signage Standard Manual, CSBO

End of Section