

#### **PIRANHA T10 HC**

MULTI-FAMILY RESIDENTIAL

**60 TOWNHOMES** 

JUNE 2012 · SHARC 660 APRIL 2016 · PIRANHA T10 MARCH 2020 · PIRANHA T10 HC

ADERA

STANTEC CONSULTING LTD.
INTEGRA ARCHITECTURE

## PRODUCT INSTALLED

PROJECT TYPE PROJECT SIZE

COMMISSIONED

DEVELOPER ENGINEER ARCHITECT

# Multi-Award Winning Sustainable Townhomes

The Seven35 building on the North shores of Vancouver is a multi-award winning development and is the first installation of the PIRANHA wastewater heat recovery system.

At the forefront of sustainable building, Seven35 has aggressively adopted several SHARC beta installations and became a key proving ground of SHARC and PIRANHA efficiency to the world (see EPRI Incubate Energy Challenge.)

In March 2020 the 60 sustainable, two-story townhomes installed a **PIRANHA T10 HC** which uses wastewater to recover and save homeowners up to 75% in energy costs.



**QUICK FACTS** 

Built Green Gold



GHG production reduced by 90%



Most energy efficient and sustainable community

Installed heat capacity of 120,000 Btu/h Energy savings of 75%

The average water usage per town home is 250 gallons per day at an average exiting temperature of 20°C (68°F).



#### **SPECS & PERFORMANCE**



PIRANHA T10 HC PROJECT TYPE DOMESTIC HOT WATER & COOLING

PROJECT SIZE 60 TOWN-HOMES APPLICATION
DHW+
COOLING

MAX. DHW TEMP. APPROX. % DHW LOAD

DESIGN ENERGY OUTPUT (MBH) DESIGN COOLING CAPACITY (MBH)

AVERAGE EFFICIENCY (COP)

BASELINE

BASELINE EFFICIENCY

140°F/ 60°C 100%

120

96

3.7

NATURAL GAS 85%

### **IMPACT**

GHG REDUCTION (metric t CO<sub>2</sub>e/year)

49.6

NET ENERGY REDUCTION (MMBTU/year)

**720** 

AVOIDED FOSSIL FUELS (therm/year)

9,350

ENERGY REDUCTION VS BASELINE

78%

APPROXIMATE IMPACT

> CARS OFF ROAD 10.8

TREE
OFFSETTING
CO2e

2,255

### **GLOSSARY**

**DHW** · DOMESTIC HOT WATER

**COP** • COEFFICIENT OF PERFORMANCE
AVERAGE EFFICIENCY (i.e. 3.7=370%)

#### **HEATING ASSUMPTIONS**

**BOILER AT OPTIMUM CONDENSING** 





Check out the pilot results at: sharcenergy.com/incubatenergy/

