SECTION 15001.PPRS – PLUMBING AND FIRE PROTECTION

This is a listing of the trade preferences and approved manufacturers for plumbing and fire protection components at Brown University as specified by Division 2 and the Engineering Group. The Department of Facilities Management Operations Group must first approve any deviations from this list.

1) General Plumbing System Requirements:
   a) All risers must have isolation valves. [15100, 15300 sections1]
   b) New service gate boxes must be supplied with a lock and key unless approved by Plumbing Supervisor. [15100 sections]
   c) Fire Protection Inspectors test trap shall be 4” with a 4 X 8 increasing coupling with a piece of 8” pipe minimum 24”.
   d) Fire Protection piping shall be minimum Schedule 40, all sizes. Piping may be Victaulic type.
   e) Trap Primers shall be installed with a solenoid valve and a timer.
   f) All ball valves will be full port, not standard.

2) Lavatory Flush Valves and Faucets:
   a) Sensor-type (touchless) lavatory faucets and flush valves to be hard-wired to a local 120VAC-to-low-voltage power-limited control power transformer where possible. Provide with water turbine-style charger where not hard-wired. Sink faucets to be configured as warm water (adjustable).
   b) Minimize use of high-reflective surfaces in toilet stalls where sensor-type flush valves are installed to reduce false valve operation.

3) Booster Pumps and Ejector Pumps [15443 section]:
   a) Sewage ejector pumps to be “grinder-type”.
   b) Provide duplex ejector pumps for all sewage and storm water ejector pumps, with automatic alternating lead/lag controls.
   c) Domestic water booster pumps to be duplex type, with each pump powered from a variable speed drive (VFD). VFD to be controlled with automatic alternating lead/lag controls, and VFD speed control paced from a system pressure transducer.
   d) All domestic water booster pumps and ejector pumps to be wired to building BAS system for common alarm.

1 Listing of related sections is for convenience and is not all-inclusive. Affected sections or drawings where specific design requirements are to be specified, or related sections where applicable Brown University Design and Construction Guidelines may appear, are indicated in brackets [ ]. 15400 sections means all related 15400 sections including any sections from 15400 through 15499.
e) All domestic water booster pumps and ejector pumps to be connected to building Emergency Standby power distribution system.

4) Approved Manufacturers:
   a) Backflow Preventers [15110, 15140 sections]
      i) Watts
      ii) Febco – Vertical use
      iii) Ames
   b) Valves [15110, 15140 sections]
      i) Ball Valves
         (1) Apollo
         (2) Milwaukee
      ii) Gate Valves
         (1) Jenkins
         (2) Fairbanks
      iii) Swing Check Valves
         (1) Jenkins
         (2) Fairbanks
      iv) Flush Valves
         (1) Sloan Royal
         (2) Toto
      v) Building Mixing Valves
         (1) Symmons
      vi) Tub and Shower Valves
         (1) Symmons Temptrol
   c) Faucets [15140 sections]
      i) American Standard
      ii) Kohler
      iii) Symmons
      iv) Chicago
      v) Gerber
      vi) Toto
   d) Floor drains [15150 sections]
      i) Zurn
ii) Josam

iii) Watts

e) Grease Receptors [15150 sections]

i) Thermaco

f) Fire Protection [15300 sections]

i) Dry Valve
   (1) Tyco
   (2) Victaulic

ii) Wet Valve
   (1) Tyco
   (2) Victaulic

iii) Inspector’s Test Stations
   (1) Tyco
   (2) Victaulic

iv) Sprinkler Heads
   (1) Tyco
   (2) Victaulic

g) Circulators [15400 sections]

i) Taco bronze or stainless steel

h) Flush Valve Toilets

i) American Standard

ii) Kohler

iii) Toto

iv) Mansfield

i) Water Closets (Where approved)

i) American Standard

ii) Kohler

iii) Mansfield

iv) Toto

j) Toilet Seats

i) Bemis

ii) Olsonite
iii) Church

k) Urinals
   i) American Standard
   ii) Kohler
   iii) Mansfield

l) Lavatories
   i) American Standard
   ii) Kohler
   iii) Mansfield
   iv) Toto

m) Shower Stalls and Bath Tubs
   i) Lasco – fiberglass
   ii) American Standard – cast iron
   iii) Kohler

n) Stainless Steel Sinks
   i) Elkay 18 gauge

o) Water Coolers  Note – provide with gooseneck water dispenser
   i) Elkay
   ii) Halsey Taylor
   iii) Oasis

p) Sump Pumps  [15440 sections]
   i) Normal Use:
      (1) Grundfus KP200 or KP350
   ii) Hot Pits (i.e. steam condensate)
      (1) Zoller

5) Approved Manufacturers for Laboratory Specialties
   a) Laboratory fixtures  [12000 sections]
      i) Chicago
      ii) Kewaunee
      iii) Watersaver
   b) Safety equipment
      i) Haws
ii) Chicago

iii) Guardian

iv) Leonard (thermostatic type for eye wash and emergency showers)

c) Acid waste pipe [15100 sections]

i) Lab Line, mechanical joint only

ii) Enfield, mechanical joint only

iii) Fuse Seal, 3” and larger

End of Section