

Fire Protection Equipment Submittal

Webster University Interdisciplinary Science Bldg.

8274 Big Bend
Webster Groves, MO 63119



FIRE PROTECTION EQUIPMENT DATA

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NAME OF PROJECT: **Webster University Interdisciplinary Science Building
8274 Big Bend Blvd.
Webster Groves, MO 63119**

AHERN PROJECT NO.: **461259**

SPECIFICATION NO.:

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STAMP

Prepared By:

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Dana Mitchell,
Senior Designer

EQUIPMENT/MANUFACTURER

Pipe

SHEET 100

Pipe—NFPA 13, UL/FM as noted

Schedule 10 Steel Pipe

SHEET 101

Pipe—NFPA-13, UL/FM

Schedule 40 Steel Pipe

Valves

SHEET 208

Gate valve—(2 1/2" thru 12") 250-lb. wwp iron body gate valve—meets AWWA C-509 standard, flanged—UL/FM

Nibco Fig F-607-RW

SHEET 211

Grooved-end butterfly valve with built-in tamper switch (2" thru 12") ductile iron—UL/FM as noted—two (2) factory mounted internal supervisory switches

Victaulic 705 Firelock® Butterfly Valve

SHEET 213

Grooved swing check valve (2-1/2", 3", 4", 6", and 8") 175 psi—UL/FM as noted, rubber faced check valve approved for use in fire service systems. Valve may be installed vertically or horizontally.

Viking Model D-1/G-1

SHEET 215

Bronze OS & Y gate valve, threaded ends (1" - 2"), 175 psi—UL/FM

Nibco T-104-O

SHEET 216

Bronze angle valve, 175-lb. wwp, (1-1/4" - 2"), threaded ends, renewable disc

Nibco T-301-W

Valves (Cont.)

SHEET 217

Bronze globe valve, 175-lb. wwp, (1/2" - 1"), threaded ends, renewable disc

Nibco KT-65UL

SHEET 219

Bronze globe valve—175-lb. wwp, (1-1/4" - 2"), threaded ends—UL as noted

Nibco KT-211-W-UL

SHEET 220

Bronze side outlet globe valve (1/4"), 3-way, 400-lb. wwp, threaded ends

Nibco KT-291-W3

SHEET 222

Soft-seat Swing Check Valve, threaded top, 200-lb. wwp

Nibco Bronze Check Valve Model KT-403-W

SHEET 223

Bronze ball valve (*domestic use only*), 300-lb. wwp, (1/4" - 3"), threaded ends—UL/FM as noted

Nibco KT-580/585-70-UL

SHEET 224

Bronze ball valve—provides slow opening & closing properties in a quarter turn valve with built-in tamper switch—two (2) sets of contacts—UL/FM (threaded ends Victaulic 1" - 2"); (grooved ends Victaulic 1-1/4" - 2" and Milwaukee 2-1/2")

Victaulic Series 728 FireLock® / Milwaukee BB-SC Series Ball Valves

SHEET 225

Pressure relief valve—1/2" & 3/4" inlet, all bronze construction & stainless steel spring, calibrated—adjustable range 50-175 psi

Watts 530C

Valves (Cont.)

SHEET 226

Inspector's test/pressure relief valve for gridded systems

AGF Model 1011A

SHEET 228A

Double check valve assembly (*2-1/2" thru 10"*) flanged, flanged by grooved, or grooved by grooved, 175 psi—UL/FM as noted—backflow prevention to prevent potable water contamination caused by cross connection

Zurn® Wilkins Model 350A-OSY (FxF), 350A-OSYFG (FxG), & 350ABGVIC (GxG)

SHEET 240

Two-piece, full port, chrome plated, threaded ends forged brass ball valve (*1/2 thru 2-1/2"*) PTFE seats—UL/FM as noted

Threaded Ball Valve KITZ Code #58 (AKSZA)

Hangers

SHEET 300

Standard duty loop hanger for suspension of non-insulated stationary pipe lines—UL/FM as noted

Pentair Standard Duty Loop Hanger 115

SHEET 301

Steel Beam clamp (*1/2"*) with set screw—structural attachment to top or bottom of metal beams or bar joists—UL Listed/FM Approved as noted

Pentair/Caddy® Universal Beam Clamp 300

SHEET 301A

Beam clamp (*3/8"*) cold rolled steel with a plated hardened cup point set screw and lock nut—structural attachment to top or bottom of metal beams or bar joists—UL/FM as noted

Globe's Silver Hawk Series 100 Universal Beam Clamp

Hangers (Cont.)

SHEET 302

Carbon steel screw anchor with an internally threaded hex washer head (1/4" X 1-5/8" | 3/8")—ICC-ES Listed and FM Approved as noted

Hilti KWIK HUS-EZ Screw Anchor

SHEET 303

Riser clamp for use with steel pipe—UL Listed & FM Approved for 3/4" thru 8" sizes. Complies with Federal Specification A-A-1192A (Type 8) and Manufacturers' Standardization Society ANSI/SP-69 and SP-58 (Type 8)

PHD Manufacturing, Inc. Riser Clamp Fig. 551

SHEET 308

Retains the beam clamp in its attached position to the structural member for use in preventing hanger failure—UL Listed as noted

Afcon #162 Universal Restraining Strap

SHEET 309

Pipe Clamp for use on smaller pipe sizes allowing the restraining clamps to be attached to the pipe—UL/FM as noted

B-Line, by Eaton, Pipe Clamp for Sway Bracing Fig. B3140 (Tolco Fig. 4)

SHEET 310

Sleeve expansion anchors—UL/FM as noted

Powers® Lok-Bolt™ Sleeve Expansion Anchors

SHEET 312

12-gauge steel channel for use with trapeze hangers

Gregory Strut Products Model G132OS, G582OS, G582A, G712OS, & G712A

SHEET 315

Surge restrainer used to restrict the upward movement of smaller branch line piping (1/2" - 2") during sprinkler operation—UL Listed

Pentair Hanger Surge Restraint SR6

Hangers (Cont.)

SHEET 322

Direct vertical attachment in Metal Deck and Purlin for 1/4" and 3/8" rod—UL/FM as noted

Sammy Xpress™ Model XP 20 & XP 35

SHEET 325

Steel Bar Joist Attachment (#CSBBARJEG) and Universal Structural Attachment (#CSBUNIV05EG/CSBUNIV075EG)

Pentair Structural Attachments

SHEET 326

Easy (1" thru 6") and Standard (8" and 10") Universal Sway Brace

Pentair Longitudinal Sway Brace

SHEET 327

Quick Grip Lateral Sway Brace (Jr. 1" thru 2") and (2-1/2" thru 8")

Pentair Lateral Sway Brace

Sprinklers

SHEET 423

Quick response dry pendent sprinkler head, 5.6 K-Factor—UL/FM as noted

Viking QR Dry Pendent Sprinkler VK176

SHEET 427

Quick response upright sprinkler head—small thermosensitive glass bulb spray sprinkler, 5.6 K-Factor, UL/FM as noted

Viking Microfast® QR Upright Sprinkler VK300

SHEET 428

Quick response pendent sprinkler head—small thermosensitive glass bulb spray sprinkler, 5.6 K-Factor—UL/FM as noted

Viking Microfast® Pendent Sprinkler VK302

Sprinkler (Cont.)

SHEET 429

Quick response, horizontal sidewall sprinkler head, 5.6 K-Factor—UL/FM as noted

Viking Microfast® Horizontal Sidewall VK305

SHEET 430

Quick response upright sprinkler head—small thermosensitive glass bulb spray sprinkler, 8.0 K-Factor—UL/FM as noted

Viking Microfast® QR Upright Sprinkler VK350

SHEET 431

Quick response pendent sprinkler head—small thermosensitive glass bulb spray sprinkler, 8.0 K-Factor—UL/FM as noted

Viking Microfast® Pendent Sprinkler VK352

SHEET 432

Standard and quick response concealed pendent sprinkler heads, standard orifice, 5.6 K-Factor—UL/FM as noted

Viking Mirage® Concealed Pendent Sprinkler VK462

SHEET 449

Spare sprinkler cabinet for ESFR and other large frame heads (6) (ESFR, Large Drop, ELO)—red enamel steel with close fitting hinge

Fire Protection Products

SHEET 451

Spare head cabinet & appropriate sprinkler wrench (12)—red enamel steel all welded joints and close fitting hinge

Tyco Spare Head Cabinet

SHEET 452

Slip-on Style Model E-1 Recessed Escutcheon and Model F-1 Adjustable Escutcheon—UL/FM as noted (Expansion Plate optional)

Viking Model E-1 and F-1 Escutcheons

Sprinkler (Cont.)

SHEET 453

One-piece sprinkler head guard—UL/FM as noted

Viking Model D-1 Sprinkler Guard

SHEET SP-1

Standard/Quick Response extended coverage upright sprinkler—UL/FM as noted

Viking Model VK532

SHEET SP-2

Standard/Quick Response extended coverage pendent sprinkler—UL/FM as noted

Viking Model VK534

SHEET SP-3

Mirage Quick Response extended coverage concealed pendent sprinkler—UL/FM as noted

Viking

SHEET SP-4

RA5114 Reliable Model G5-56 Dry Pnd Concl'd—UL/FM as noted

Reliable

Fittings

SHEET 500

Flexible couplings for Fire Protection Systems—UL/FM

Victaulic Style 75 Flexible Coupling

SHEET 501

Reducing coupling ($2 \times 1''$ through $8 \times 6''$)—UL/FM

Victaulic Style 750 Reducing Couplings

SHEET 503

FireLock fittings—elbows, tees, & caps—UL/FM

Victaulic FireLock Fittings

Fittings (Cont.)

SHEET 504

FireLock rigid couplings (*1-1/4" through 8"*) use with C-shaped gasket on wet-type system installations and use with FlushSeal gasket on dry-type system installations—UL/FM

Victaulic Style 005 FireLock Rigid Couplings

SHEET 505

Grooved flange (*2" through 8"*)—UL/FM

Victaulic Style 744 FireLock Flange Adapter

SHEET 506

Mechanical tees—grooved or threaded, bolted branch outlets—UL/FM

Victaulic Styles 920 and 920N

SHEET 508

Rigid, installation-ready coupling for fire protection pipe joining—UL Listed and FM Approved for standard pipe services up to 365-psi

Victaulic FireLock EZ® Rigid Coupling Style 009N

SHEET 510

Threaded Mechanical Branch Tee-type used in 1-1/4 thru 2-1/2"—UL/FM as noted

Anvil Star / Anvil International Fittings MT-30

SHEET 513

Schedule 10 and Schedule 40 Grooved Weld Outlet Fittings for use in fire sprinkler systems 300-PSI, UL/FM as noted

Grooved Welded Pipe Outlets Cerieco Brand™

SHEET 514

Threaded weld outlet fittings, 300 psi—UL/FM

Welded Steel Pipe Outlets Cerieco Brand™

Fittings (Cont.)

SHEET 515

Ductile Iron threaded pipe fittings joining arrangement for piping 4" and smaller 500-psi service—UL/FM as noted

AnvilStar™ SPF™ Ductile Iron Threaded Fittings

SHEET 517A

Galvanized Malleable Iron pipe fittings—UL/FM as noted

Smith-Cooper International Galvanized Malleable Iron Pipe Fittings

SHEET 518

Braided Flexible Hose Assemblies connect the branch line to the sprinkler head using a flexible stainless steel hose and steel bracket assembly, available in 31" to 72" length, in 1/2" and 3/4" outlet sizes—UL/FM as noted (*Braided AH2/AB7 FM Approved; Braided AH2/AB1 UL Listed & FM Approved*)

Victaulic® VicFlex™ Series AH2 Braided Flexible Hose Assembly

Alarms

SHEET 600

Waterflow Detector with retard, vane-type for use on wet systems, S10 & S40 steel pipe, (2" – 8")—UL/FM as noted

System Sensor WFD Series

SHEET 602

Supervisory switch, 1/2" NPT, adjustable nipple, weather resistant—UL/FM - for use with post indicator valve

Potter PCVS-2

SHEET 606

6" Model PBA1206 electric vibrating type bell

Potter Electric Signal Company PBA1206

SHEET 608

Air/Water Pressure Gauge, used to monitor water pressure at system riser (3-1/2")—UL/FM

Air/Water Gauges

Hose

SHEET 802

2-1/2" Female to Male Hose Valve

Potter Roemer Model 4065

SHEET 803

(4615) 1-1/2" or (4625) 2-1/2" Caps and Chains

Potter Roemer 4600 Series

Miscellaneous

SHEET 900

Wall/Ceiling escutcheon plates, used to trim piping through walls & ceilings

Plastic Wall Plates

SHEET 902

Sprinkler identification signs with enamel finish—for use in identifying all system control, main and auxiliary drain, and inspectors test valves

Sprinkler ID Signs

SHEET 906

Firestop sealant—intumescent caulk for use in restoring fire rating to wall penetrations for steel and plastic pipe—UL/FM as noted

STI SpecSeal Series LCI Intumescent Sealant

SHEET 913

Pipe markers for indoor and outdoor line service identification and system color coding

MS-900 Self Adhesive Pipe Markers

SHEET M-1

Free standing fire department connection inlet connections

Potter Roemer Model/Series No. 5761-5792

SHEET M-2

TotalPac 3 self contained – double interlock preaction system electric / pneumatic release

Fire Pump

SHEETS ATTACHED

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