**CORE WATER LINE**
- 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM,
- 125 PSI MAX STATIC PRESSURE, 1.5 GPM PER FOOT OF HOOD
- 3/4 INCH NPT FITTING, CONNECTED TO SUPERVISED, DEDICATED LINE WITH NO MANUAL SHUT-OFF VALVES
- CONNECT TO BUILDING FIRE SPRINKLER WATER LINE (REDUCE PRESSURE)
- INSTALLED BY WATER SPRINKLER CONTRACTOR
- STAINLESS STEEL, COPPER, OR STEEL PIPE ONLY

**HOT WATER LINE**
- 140-170°F, 30 TO 70 PSI OPERATING PRESSURE,
- MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM,
- 125 PSI MAX STATIC PRESSURE, 0.7 GPM PER FOOT OF HOOD
- 3/4 INCH NPT FITTING, INSULATED
- INSTALLED BY PLUMBER

**ELECTRIC DUCT FIREFRST**
- 4 WIRES, 24VDC
- BLACK WIRES BETWEEN 25 AND 23
- WHITE WIRES BETWEEN 26 AND 24
- HIGH TEMP (94°F) WIRE ONLY
- ADDITIONAL FIREFRST WIRE ONLY (ADDITIONAL FIREFRST WIRE IN SUPERVISED LOOP)
- INSTALLED BY THE FIRE SYSTEM CONTRACTOR

**BUILDING ALARM PANEL**
- 2 WIRES & GROUND, 120 VAC, 15 AMP SERVICE
- WIRE TO H1 AND N1
- WIRED BY ELECTRICIAN

**CORE COMMUNICATIONS CABLE**
- CAT5 CABLE
- MUST BE INSTALLED TO A LOCAL AREA NETWORK WITH VALID INTERNET ACCESS
- INSTALLED BY FIRE SYSTEM CONTRACTOR

**HOOD DRAIN**
- 1-1/2 INCH NPT
- CONNECTED TO BUILDING GREASE TRAP
- 2 DRAINS ON 30 INCH TALL HOODS
- 2 DRAINS ON 24 INCH HOODS
- 10 FEET AND LONGER
- INSTALLED BY PLUMBER
- STAINLESS STEEL, COPPER, OR STEEL PIPE ONLY

**ELECTRIC PULL STATION PART #STI-SS2431**
- PROTECTIVE COVER MUST BE INSTALLED

**GAS VALVE**
- ASSEMBLY PART NUMBER - CORE-GVR
- FACEPLATE PART NUMBER - SC-MT-GVR
- PUSHBUTTON PART NUMBER - D7-F2X11
- LAMP PART NUMBER - PF50CG5-24VDC-W6

**GAS VALVE RESET**
- ASSEMBLY PART NUMBER - CORE-GVR
- FACETAL PART NUMBER - SC-MT-GVR
- PUSHBUTTON PART NUMBER - D7-F2X11
- LAMP PART NUMBER - PF50CG5-24VDC-W6

**FLOOR DRAIN**
- 1 1/2 IPS PIPE DRAIN
- INSTALLED IN FLOOR, NEAR APPLIANCES
- ONE DRAIN REQUIRED PER 10 FEET OF HOOD
- FLOOR DRAINS MAY BE USED TO DRAIN HOOD
- INSTALLED BY PLUMBER

**POWER TO ELECTRIC APPLIANCE**
- ELECTRIC PULL STATION
- PART #STI-SS2431
- PROTECTIVE COVER MUST BE INSTALLED

**GAS VALVE POWER**
- 2 WIRES & GROUND, 24 VDC WIRE TO 35 AND N1D
- INSTALLED BY FIRE SYSTEM CONTRACTOR

**GAS VALVE BODY**
- THREADED NPT CONNECTIONS, MAX 15 PSI
- INSTALLED BY PLUMBER

**NOTE:** See Installation, Operation, and Maintenance Manual for further Instructions
WALL MOUNTED CORE TOTAL FLOOD PROTECTION INSTALLATION SUMMARY

CORE WATER LINE - 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM, 125 PSI MAX STATIC PRESSURE, 1.5 GPM PER FOOT OF HOOD, SIZED TO MATCH WALL MOUNT PACKAGE, CONNECTED TO SUPERVISED, DEDICATED LINE WITH NO MANUAL SHUT-OFF VALVES C-CONNECT TO BUILDING FIRE SPRINKLER WATER LINE (REDUCE PRESSURE), INSTALLED BY WATER SPRINKLER CONTRACTOR STAINLESS STEEL, COPPER, OR STEEL PIPE ONLY

APPLIANCE PROTECTION SOLENOID, 2 WIRES AND GROUND, BLACK TO WC2, WHITE TO N1D, WIRE SECURED TO WATER LINE TO AVOID CONTACT WITH HOOD, WIRED BY FIRE SYSTEM CONTRACTOR

HOT WATER LINE - 140-170°F, 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM, 125 PSI MAX STATIC PRESSURE, 0.7 GPM PER FOOT OF HOOD, SIZED TO MATCH WALL MOUNT PACKAGE, INSULATED, INSTALLED BY PLUMBER

ELECTRIC DUCT FIRESTAT - 4 WIRES, 24VDC CONNECT BLACK WIRES BETWEEN 25 AND 23 CONNECT WHITE WIRES BETWEEN 26 AND 24 HIGH TEMP (842°F) WIRE ONLY (ADDITIONAL FIRESTATS WIRED IN SUPERVISED LOOP), INSTALLED BY THE FIRE SYSTEM CONTRACTOR

END-TO-END OR BACK-TO-BACK CONNECTION POINT INSTALLED AND PROVIDED BY PLUMBER

SHUNT TRIP BREAKER WIRES - 2 WIRES, 120V AC, CONNECT 120VAC TO SKC, 5T TO A1 ON SHUNT COIL, AND A2 ON SHUNT COIL TO NEUTRAL, INSTALLED BY ELECTRICIAN

HOOD DRAIN - 1-1/2 INCH NPT CONNECTED TO BUILDING GREASE TRAP 2 DRAINS ON 30 INCH TALL HOODS 2 DRAINS ON 24 INCH HOODS 10 FEET AND LONGER, INSTALLED BY PLUMBER STAINLESS STEEL, COPPER, OR STEEL PIPE ONLY

GAS VALVE RESET ASSEMBLY PART NUMBER - CORE-GVR FACEPLATE PART NUMBER - SC-MT-GVR PUSHBUTTON PART NUMBER - D7-F2X11 LAMP PART NUMBER - PF50CG5-24VDC-W6

FLOOR DRAIN - 1 1/2 IPS PIPE DRAIN INSTALLED IN FLOOR, NEAR APPLIANCES ONE DRAIN REQUIRED PER 10 FEET OF HOOD, FLOOR DRAINS MAY BE USED TO DRAIN HOOD, INSTALLED BY PLUMBER

GAS VALVE POWER - 2 WIRES & GROUND, 24 VDC WIRE TO 35 AND N1D INSTALLED BY FIRE SYSTEM CONTRACTOR

GAS VALVE BODY, THREADED NPT CONNECTIONS, MAX 15 PSI, INSTALLED BY PLUMBER

NOTE: See Installation, Operation, and Maintenance Manual for further Instructions
# CORE TOTAL FLOOD INSTALLATION RESPONSIBILITY

**PLUMBER:**
1. Connect Hot Water Line.
2. Connect Hood Drain(s), Stainless Steel, Copper, or Steel Pipe Only.
3. Connect all End-To-End and Back-To-Back Hood Water Line Connections. Plumbing is field supplied for this. Field plumbing must not exceed height of vacuum breaker in main utility cabinet. Remove plug from main hood spray bar and connect to next hood. Stainless Steel, Copper, or Steel Pipe Only.

## PLUMBING CONTRACTOR REQUIREMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Connection</th>
<th>Temperature</th>
<th>Pressure</th>
<th>Flow Rate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Water Line</td>
<td>3/4 inch NPT</td>
<td>140 to 170°F</td>
<td>30 to 70 psi</td>
<td>0.7 GPM Per Ft. of Hood</td>
<td>Insulate Hot Water Pipe, Minimum Pressure Dependent on Length of Hood System</td>
</tr>
<tr>
<td>End-To-End Hood Connection</td>
<td>3/4 inch NPT</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Connect with NPT Pipe, Seal All Threads, Hood Connection Provided</td>
</tr>
<tr>
<td>Back-To-Back Hood Connection</td>
<td>3/4 inch NPT</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Connect with NPT Pipe, Seal All Threads, Hood Connection Provided</td>
</tr>
<tr>
<td>Floor Drain(s)</td>
<td>1/2 inch IPS</td>
<td>N/A</td>
<td>100 to 150 PSI</td>
<td>One Drain required Per 10 Feet of Hood</td>
<td></td>
</tr>
<tr>
<td>Surfactant Line</td>
<td>1/4&quot; OD Tubing</td>
<td>N/A</td>
<td>70 PSI</td>
<td>N/A</td>
<td>Surfactant Line Must Not Be in Contact With the Hood Surface.</td>
</tr>
<tr>
<td>Backflow Preventer Drain Line</td>
<td>Varies</td>
<td>N/A</td>
<td>Gravity Drain</td>
<td>N/A</td>
<td>Installed when package has a backflow preventer. See backflow Preventer Manual for details.</td>
</tr>
</tbody>
</table>

**BUILDING SPRINKLER CONTRACTOR:**
1. Connect CORE Water Line to Building Wet Sprinkler System. Stainless Steel, Copper, Or Steel Pipe Only

## SPRINKLER CONTRACTOR REQUIREMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Connection</th>
<th>Temperature</th>
<th>Pressure</th>
<th>Flow Rate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE Water Line</td>
<td>3/4 inch NPT</td>
<td>Non-Heated</td>
<td>30 to 70 PSI</td>
<td>1.5 GPM Per Ft. of Hood</td>
<td>Water Line Must Be Supplied and Have No Manual Shut-Off Valves. Minimum Pressure Dependent on Length of Hood System</td>
</tr>
<tr>
<td>End-To-End CORE Connection</td>
<td>3/4 inch NPT</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Connect with NPT Pipe, Seal All Threads, Hood Connection Provided</td>
</tr>
<tr>
<td>Back-To-Back CORE Connection</td>
<td>3/4 inch NPT</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Connect with NPT Pipe, Seal All Threads, Hood Connection Provided</td>
</tr>
</tbody>
</table>

**ELECTRICIAN:**
1. Wire main control panel per included schematic.
2. Wire all fans per included schematic.
3. Wire Shunt Trip Breaker.
4. Wire UDS Appliance Kill Switch, if equipped.

## ELECTRICAL REQUIREMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Connection in Panel</th>
<th>Connection on Device</th>
<th>Voltage</th>
<th>Amperage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shunt Trip Breaker</td>
<td>SKC &amp; ST</td>
<td>Call (A1 &amp; 2A)</td>
<td>120 VAC</td>
<td>&lt; 1.0 Amps</td>
<td>Connect 120VAC to SKC, 411 to A1 and 2A to Neutral. If powered from control package, use H1 for 120VAC and N1 for Neutral.</td>
</tr>
<tr>
<td>Control Panel Power</td>
<td>H1 &amp; NC</td>
<td>Circuit Breaker</td>
<td>120 VAC</td>
<td>15 Amps</td>
<td>Control Panel Power MUST Not Be Run Through Shunt Trip Breaker</td>
</tr>
<tr>
<td>UDS Appliance Kill switch</td>
<td>SKC &amp; KS</td>
<td></td>
<td>120 VAC</td>
<td>&lt; 1.0 Amps</td>
<td>Kit Switch terminals Must Be in Series With Other Kit Switches</td>
</tr>
</tbody>
</table>

**BUILDING/SAFETY ALARM CONTRACTOR:**
2. Complete Final Hookup of System.
3. Perform Final Fire System Test.
4. Fill Surfactant Tank.

## FIRE SYSTEM CONTRACTOR REQUIREMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Connection in Panel</th>
<th>Connection on Device</th>
<th>Voltage</th>
<th>Amperage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Valve Reset Button</td>
<td>PUSHBUTTON HTU &amp; 411 LAMP 35 &amp; N1D</td>
<td>PUSHBUTTON HTU &amp; LAMP RED &amp; BLACK</td>
<td>24 VDC</td>
<td>&lt; 1.0 Amps</td>
<td>4 Wires. PUSHBUTTON, H1D to 3, 411 to 4, LAMP, 35 to Red, N1D to BLACK.</td>
</tr>
<tr>
<td>Remote Pull Station(s)</td>
<td>22 and 25 = Line 1  21 and 26 = Line 2</td>
<td>1 &amp; 2</td>
<td>24 VDC</td>
<td>&lt; 1.0 Amps</td>
<td>Wire pull station terminal 1 between terminals 22 and 25. Wire pull station terminal 2 between hood terminals 21 and 26. Pull Station Cover must be installed. If surface mounted, use cover extension STI-6531B.</td>
</tr>
<tr>
<td>Building Alarm</td>
<td>AL1, AL2</td>
<td>Varies</td>
<td>MAX 120VAC</td>
<td>Up to 10 Amps</td>
<td>Fire Alarm Relay Contacts for Building fire Alarm located in the CORE Electrical Control Panel.</td>
</tr>
<tr>
<td>PCU &amp; Other CORE Interlocks</td>
<td>IIA, ILB, ILC</td>
<td>IIA, ILB, ILC</td>
<td>Signal</td>
<td>&lt; 1.0 Amps</td>
<td>CORE SYSTEM 1 IIA, to CORE SYSTEM 2 IIA, CORE SYSTEM 1 LL, to CORE SYSTEM 2 LL, CORE SYSTEM 1 ILC, to CORE SYSTEM 2 ILC. Connections to COMM Module, if wall mounted or PCU CORE.</td>
</tr>
<tr>
<td>Trouble Relay</td>
<td>TBC, TBL, TOK</td>
<td>Varies</td>
<td>MAX 120 VAC</td>
<td>Up to 10 Amps</td>
<td>Trouble relay Contacts for Building Mangement System Trouble Input or Building Fire Alarm System Trouble Input.</td>
</tr>
<tr>
<td>CORE Total Flood Solenoid ***</td>
<td>WC2 &amp; N1D</td>
<td>Black &amp; White</td>
<td>24 VDC</td>
<td>&lt; 1.0 Amps</td>
<td>2 Wires and Ground. Black to WC2, White to N1D, and Green to Ground. Cable secured to water line to avoid contact with Hood.</td>
</tr>
<tr>
<td>FIRE INTERLOCK ***</td>
<td>HC1, HC1</td>
<td>HC1, HC1</td>
<td>MAX 120VAC</td>
<td>Up to 10 Amps</td>
<td>Fire Alarm Relay Contacts for Building fire Alarm located in the CORE Electrical Control Panel.</td>
</tr>
<tr>
<td>CORE Communications Cable</td>
<td>RJ-45 Jack</td>
<td>Internal Connection</td>
<td>Signal</td>
<td>&lt; 1.0 Amps</td>
<td>Connect CAT5 Cable to Local Area Network with Valid Internet Connection.</td>
</tr>
<tr>
<td>EMSplus Control Package</td>
<td>MSA, MBB, MBC</td>
<td>MSA, MBB, MBC</td>
<td>Signal</td>
<td>&lt; 1.0 Amps</td>
<td>Network connections between Wall Mounted UDS and Wall Mounted EMSplus.</td>
</tr>
</tbody>
</table>

**APPLICABLE STANDARDS:**
1. ETL listed under report number 313231SAT-004 to Standard UL300 (Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment)
3. NFPA 17A (Standard on Wet Chemical Extinguishing Systems)
4. CORE System provides UL300 Listed Appliance, Duct and Plenum Protection.
HOT WATER LINE - 140-170°F, 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM, 125 PSI MAX STATIC PRESSURE, 0.7 GPM PER FOOT OF HOOD, 3/4 INCH NPT FITTING, INSULATED, INSTALLED BY PLUMBER.

CORE WATER LINE - 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM, 125 PSI MAX STATIC PRESSURE, 1.5 GPM PER FOOT OF HOOD, 3/4 INCH NPT FITTING, CONNECTED TO SUPERVISED, DEDICATED LINE WITH NO MANUAL SHUT-OFF VALVES, CONNECT TO BUILDING FIRE SPRINKLER WATER LINE (REDUCE PRESSURE) INSTALLED BY WATER SPRINKLER CONTRACTOR.

STAINLESS STEEL, COPPER, OR STEEL PIPE ONLY.

HOT WATER LINE
- 140-170°F, 30 TO 70 PSI OPERATING PRESSURE,
- MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM,
- 125 PSI MAX STATIC PRESSURE,
- 0.7 GPM PER FOOT OF HOOD,
- 3/4 INCH NPT FITTING, CONNECTED TO BUILDING FIRE SPRINKLER WATER LINE (REDUCE PRESSURE) INSTALLLED BY WATER SPRINKLER CONTRACTOR.

CORE ELECTRICAL BOX. CONTAINS POWER SUPPLY (1606-XLP), CORE CONTROL (PCBCORE), BATTERIES (BP7-12), AND TERMINAL BLOCKS.

CORE Water Side
- Surfactant Pump. (50000-805)
- Temperature and Pressure gauge
- 3/4" Solenoid Valves
- Surfactant Injection with check valve
- 3/4" Solenoid Valve for CORE Appliance
- Prime Push Button (D7-F2X11)
- Test/Arm Selector Switch (ZB5AD2, ZB5AZ103)

CORE Water Side
- Vacuum Breaker
- Main Shutoff Valves
- 3/4" Solenoid Valves
- Surfactant Tank (WWSCTANK2.0CORE) Screwed to UC Shield (2 Places)
- Prime Push Button (D7-F2X11)
- Test/Arm Selector Switch (ZB5AD2, ZB5AZ103)
**WALL MOUNTED CORE TOTAL FLOOD CONTROL CABINET VIEW**

**CORE WATER LINE** - 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM
125 PSI MAX STATIC PRESSURE, 1.5 GPM PER FOOT OF HOOD
3/4 INCH NPT FITTING, CONNECTED TO SUPERVISED, DEDICATED LINE WITH NO MANUAL SHUT-OFF VALVES INSTALLED BY WATER SPRINKLER CONTRACTOR STAINLESS STEEL, COPPER, OR STEEL PIPE ONLY

**SURFACTANT LINE** - 1/4" OD TUBING CONNECTING SURFACTANT PUMP WITH INJECTION POINT ON HOOD, LINE MUST NOT COME IN CONTACT WITH THE HOOD SURFACE INSTALLED BY PLUMBER

**HOT WATER LINE** - 140-170°F, 30 TO 70 PSI OPERATING PRESSURE, MINIMUM PRESSURE DEPENDENT ON LENGTH OF HOOD SYSTEM
125 PSI MAX STATIC PRESSURE, 0.7 GPM PER FOOT OF HOOD
3/4 INCH NPT FITTING, INSULATED, INSTALLED BY PLUMBER

**NOTE:** IF WALL MOUNT CORE PACKAGE CONTAINS A BACKFLOW PREVENTER, AN ADDITIONAL DRAIN MUST BE RUN AND CONNECTED TO BACKFLOW PREVENTER. SEE BACKFLOW PREVENTER MANUAL FOR ADDITIONAL INFORMATION.
CORE Protection Fire System

The Self Cleaning hood is required to be installed to achieve CORE Protection. The daily basic operation of the CORE Protection system is identical to the Self Cleaning hood. In the event of a hood fire, CORE Protection is activated.

If the hood Firestat installed in the riser senses a temperature hotter then its internal set point or if the remote manual pull station is pulled, an electric signal is sent to the appliance protection fire system and the hood duct and plenum water system. An electric solenoid operated Automan activates the appliance surface protection system. An electric water solenoid is energized allowing the flow of water to the hood duct and plenum through the Self Cleaning hood spray bar. At the same time, surfactant is continually injected into the water stream to help suppress the fire.

Once the fire system is activated, a “Fire System Activated” light is illuminated on the hood control panel and an audible alarm sounds. All gas and electric appliances under the hood must be electrically interlocked to shut off. This is achieved via a gas valve relay and/or a shunt trip breaker. A timer is also energized upon fire system activation. The timer is set for 30 minutes and keeps the water spray system running for a minimum of 30 minutes. This is necessary to help extinguish all remaining duct fire potential.

The fire system is electrically operated and thus requires a battery backup system. In the event of a loss of electrical power, all gas and electric appliances under the hood must be electrically interlocked to shut off. This is achieved via a gas valve relay and/or a shunt trip breaker. The battery backup will automatically energize upon a loss of power. The battery backup will monitor the fire system circuit for up to three days and be able to operate the fire system circuit for a minimum of 30 minutes. Once power is restored, the battery will automatically recharge.

CORE Protection Reset Overview

There are multiple actions required to reset the fire system. First, the duct Firestat must be cooled to below its internal set point and the remote pull station must be reset using a standard Allen wrench key. Once both of these devices have been reset, the timer will automatically stop the fire system once its time duration has ended. An alternative method to bypassing the timer is to press the fire system reset button on the face of the CORE control cabinet. This will de-energize the timer and reset the system. NOTE: The Firestat must be cool and the remote pull station must be reset for this button to work.

The appliance protection fire system must be recharged with surfactant and nozzle caps must be reinstalled.

After a fire, full inspection by a certified professional must be conducted prior to restarting the fire system.

CORE Application Specific Details

Self Cleaning Hoods
Self Cleaning Hood option is required to apply CORE Protection. High Efficiency, High Velocity Cartridge, SOLO, or COMBO filters are required. If substitute filters are utilized, product warranty is void and there is no guarantee in performance.

Solid Fuel Appliances
Solid Fuel Appliances produce sparks that can travel into ductwork. These appliances require SOLO filters and an additional Firestat at the duct discharge near the fan if the ductwork exceeds 10 feet in length or contains horizontal duct runs. Indicate on ductwork drawing where Firestat is to be installed with quick seal. All additional Firestats are wired into the supervised loop with the first Firestat. Duct should be insulated per code requirements. If substitute filters are utilized, product warranty is void and there is no guarantee in performance. Self Cleaning Hoods and ETL listed ductwork are also required.

Duct Firestats
A Firestat must be installed at 50 Feet intervals when the duct length exceeds 50 Feet.

IMPORTANT:
Any deviation from any of the manufacturer's recommendations in this document or the operation and installation manual must be approved by the owner of this equipment and voids the warranty and performance guarantee of this product.


24V SUPERVISED LOOP INSTRUCTIONS

Supervised Loop Installation

Loop must be continuous between the Firestats and Pull Stations. Quantity of each components may vary.

Pollution Control Unit may not have a pull station installed. In this case, install a jumper between terminals 21 and 26, as well as terminals 22 and 25.

Multiple pull stations and fire sensors can be used on each panel. When installed, they are wired in a Daisy-Chain style as shown.

Connection Between Multiple CORE Systems

There is an RS-485 connection in each CORE panel. To connect multiple CORE panels, simply connect matching terminals from one panel to the next in series. Use 18 to 24 GA shielded, single twisted pair wire for wire runs.
Valve Supervision Switch
The pressure reducing valve must be installed with an approved supervision switch. Switch part numbers and support brackets are listed in the table. The switch comes with two single pole, double throw switches for connections to the building panel.

The Switch must be attached per Pressure Reduction Valve Bracket instructions.

Valve Supervision Switch Bracket
Valve Bracket contains necessary parts and instructions to adapt the supervision switch to the valve.

Pressure Reducing Valve
The pressure reducing valve must be installed before the CORE Protection package to reduce the sprinkler line incoming pressure and volume. This pressure reduction is based upon the incoming pressure and volume. See table for reduction percentage.

Valve is available in 1 1/2" NPT connections.

Pressure Monitoring Switch
The pressure Monitoring Valve comes with two single pole, double throw switches, each with an adjustable setpoint. This setpoint can be anywhere between 10 and 60 PSI. Part number for this component is PL-PS402.

Switch is available with a 1/2" NPT connection.

<table>
<thead>
<tr>
<th>Complete Parts Kit</th>
<th>UR-20 Valve</th>
<th>Reduction Presentage</th>
<th>Supervision Switch</th>
<th>Switch Bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR-20-W KIT</td>
<td>UR-20-W</td>
<td>28.7%</td>
<td>PL-PCVS2</td>
<td>80574001</td>
</tr>
<tr>
<td>UR-20-X KIT</td>
<td>UR-20-X</td>
<td>33.8%</td>
<td>PL-PCVS2</td>
<td>80574001</td>
</tr>
<tr>
<td>UR-20-Z KIT</td>
<td>UR-20-Z</td>
<td>56.5%</td>
<td>PL-PCVS2</td>
<td>80574001</td>
</tr>
</tbody>
</table>

Wiring Connections For Supervision Controls