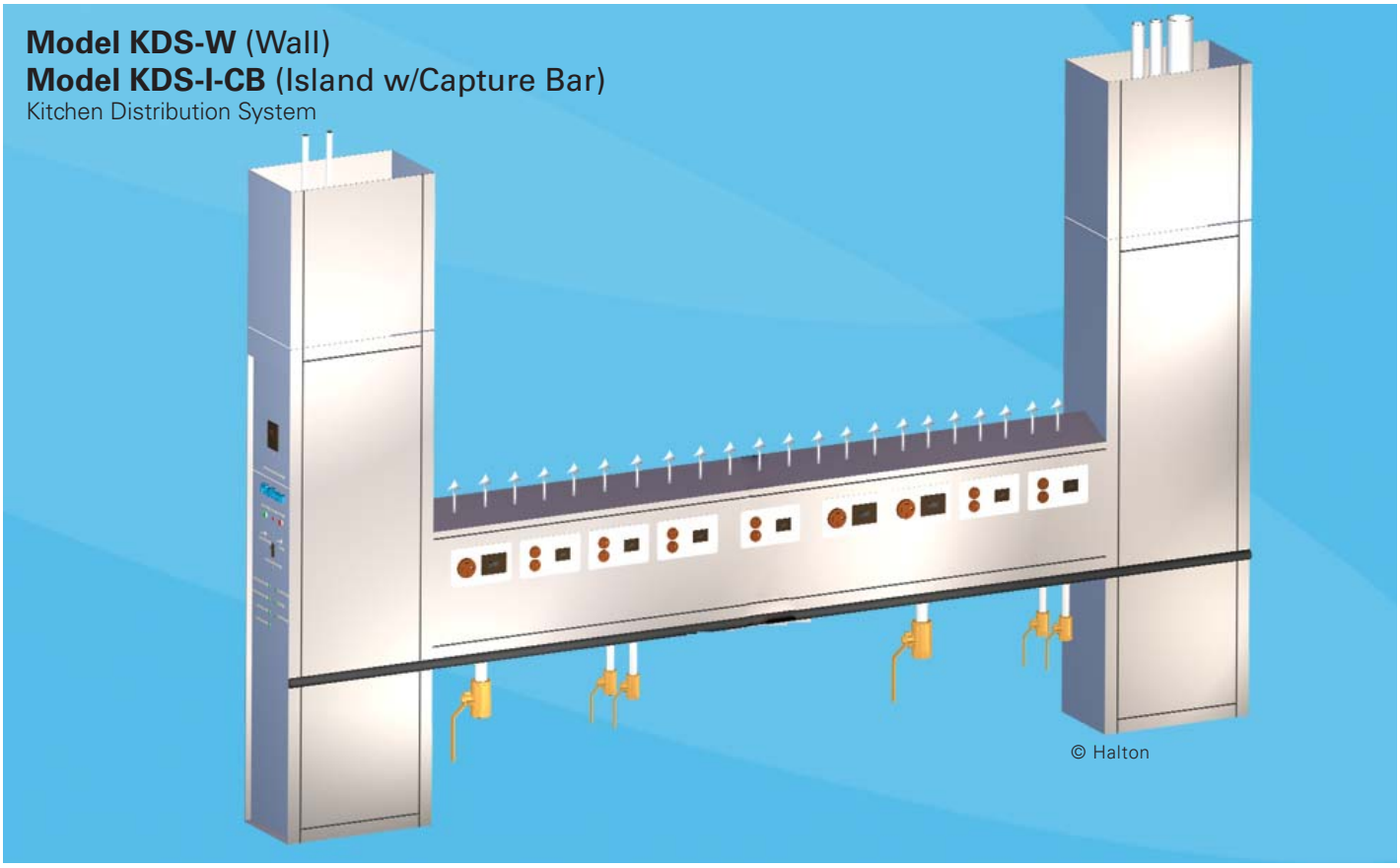
Model KDS-W (Wall)
Model KDS-I-CB (Island w/Capture Bar)
Kitchen Distribution System



20/KDS/XXXX/0909/EN

- Electrical - Main breaker and shunt trip, distribution breakers and the required industrial breakers. Single phase or 3-phase safety shunt trip breakers.
- Gas - Gas main with automatic shut off valve, tap for equipment, and shut off valve for each piece of equipment served.
- Water - Hot and cold water lines with taps and valves for separate equipment requirements
- Steam - Steam and condensate returns with taps and valves.
- Controls - Built in controls for fire system interlock and fan controls.
- Equipment Label - Identifies appliance connection locations.
- Capture Bar - Exhaust air entrainment feature for island style applications

Application

The Halton Kitchen Distribution System (KDS) is a custom built general utility center that provides distribution controls for as many foodservice equipment mechanical services as required. It can include any combination of gas, hot water, cold water, chilled water, compressed air, electrical power, fire and safety control, steam supply and condensate return line... all in a single stainless steel structure.

Consultant Specification

The Utility Distribution System shall be Halton model KDS and shall consist of (one/two) riser(s) and a raceway shipped in (one/two/three) section(s) for field assembly and connection to services by the appropriate trades. The riser(s) shall also have an extension for field installation that joins to the riser(s) at a level below the bottom of the companion exhaust hood so that the hood may be installed prior to the KDS. The exterior of the riser(s) and the raceway shall be constructed of 304 type stainless steel, number 4 finish, not less than 18 Ga. Internal bracing shall be galvanized steel. All riser access doors shall be hinged and have pull and turn latches. Raceway panels shall be held in place by screws. The raceway shall have a peaked top to shed water. The KDS shall have a neoprene bumper strip running the full length of the raceway.

There shall be a single point main electrical field connection to the KDS. The KDS shall have main breaker with a shunt trip sized to have a capacity at least 20% greater than the load of the originally-specified cooking equipment being connected.

The main breaker and the shunt trip shall be housed in a riser. Power shall be distributed through the raceway through suitably sized wire. Bus bars are optional. The raceway shall have removable plates on which there are mounted point of use breakers and receptacles for connection of individual appliances. Halton reserves the right to substitute a direct connection for the receptacle when the electrical load is so great that supplying a receptacle is not practical. There shall be a "stop" button located on a riser to shut off the supply of electricity and fuel gas to the individual appliances in the event of an emergency.

There shall be a single point connection for both domestic hot and cold water. There shall be quarter-turn ball valves located in a riser to isolate the main KDS water lines should the need arise. Hot and cold water lines shall be type "L" hard-drawn copper. Branch connections shall be located at suitable points along the length of the raceway and shall consist of a quick disconnect with integral ball valve and a flexible hose. Both water lines shall be insulated with ½" open cell foam.

There shall be a single point connection for fuel gas. The fuel gas line shall be sized to have a capacity at least 20% greater than the load of the originallyspecified cooking equipment being connected. There shall be a quarter-turn ball valve located in a riser to isolate the main KDS fuel gas line should the need arise. For single inlet fuel gas systems there shall be a solenoid gas valve located in a riser. For looped fuel gas systems there shall be one solenoid gas valve shipped loose for installation before the tee to the loop in the fuel gas line. The field installation of the solenoid gas valve is the responsibility of the mechanical division. Fuel gas lines shall be schedule 40 iron pipe. All joints in the main gas line are made with NPT fittings. Branch connections shall be made at suitable points along the length of the raceway and shall consist of a quarter-turn ball valve and a flexible hose. There shall be a gas reset button located on a riser to enable resetting of the gas solenoid valve after a power outage.

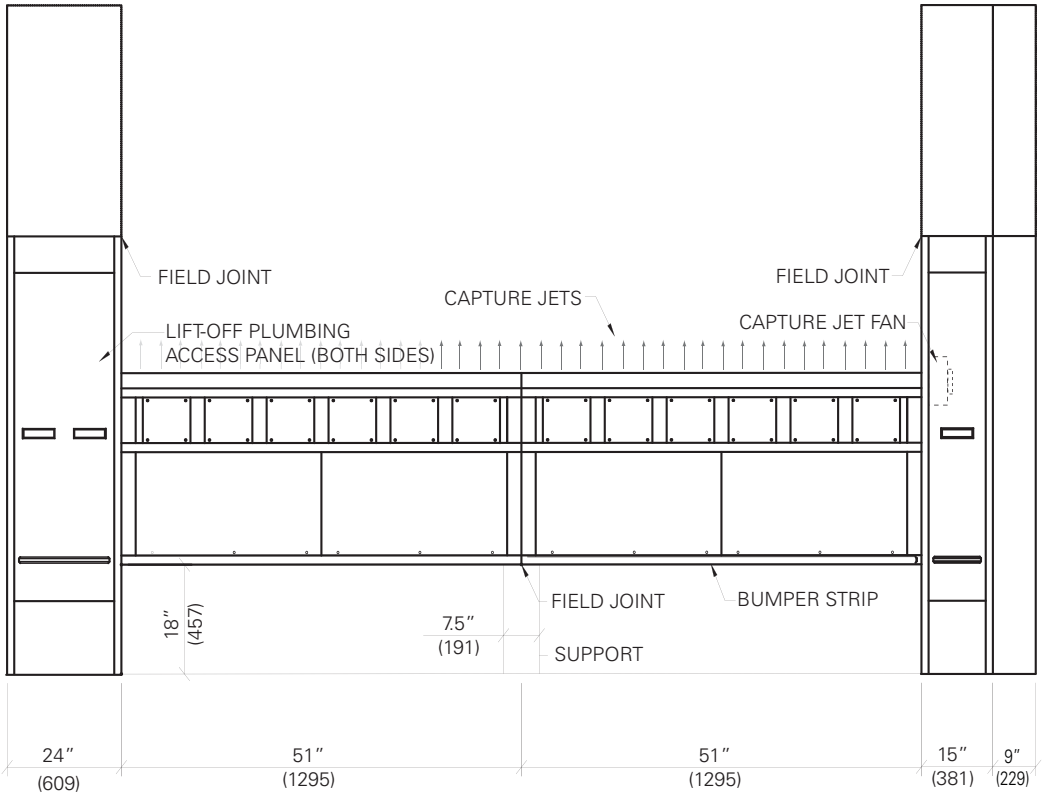
There shall be a single point connection for steam supply. There shall be a quarter-turn ball valve located in a riser to isolate the main KDS steam line should the need arise. Steam lines shall be schedule 40 iron pipe insulated with ½" closed cell foam. All joints in the main steam line are made with NPT fittings. Branch connections shall be located at suitable points along the length of the raceway and shall consist of a quarter-turn ball valve and a flexible hose. There shall be a steam trap located in a riser.

There shall be a single point connection for condensate return. There shall be quarter-turn ball valves located in a riser to isolate the main KDS condensate return line should the need arise. The condensate return line shall be schedule 40 iron pipe insulated with ½" closed cell foam. Branch connections shall be located at suitable points along the length of the raceway and shall consist of a quick disconnect with integral ball valve and a flexible hose.

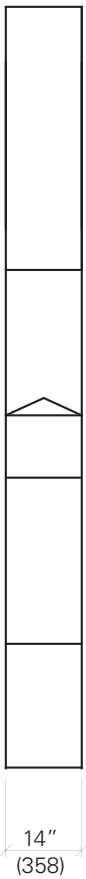
The island configuration of the KDS's horizontal raceway will be finished with a peaked plenum to incorporate Halton's patented Capture Jet technology to reduce the exhaust airflow rate required and to improve capture and containment efficiency of the respective hoods. The Capture Jet air shall be introduced through a special discharge panel and be of sufficient velocity to assist the thermal plume toward the KSA grease extractors. The Capture Jet fan shall be internally mounted in the vertical riser(s) prewired with speed control.

Modifications & Options

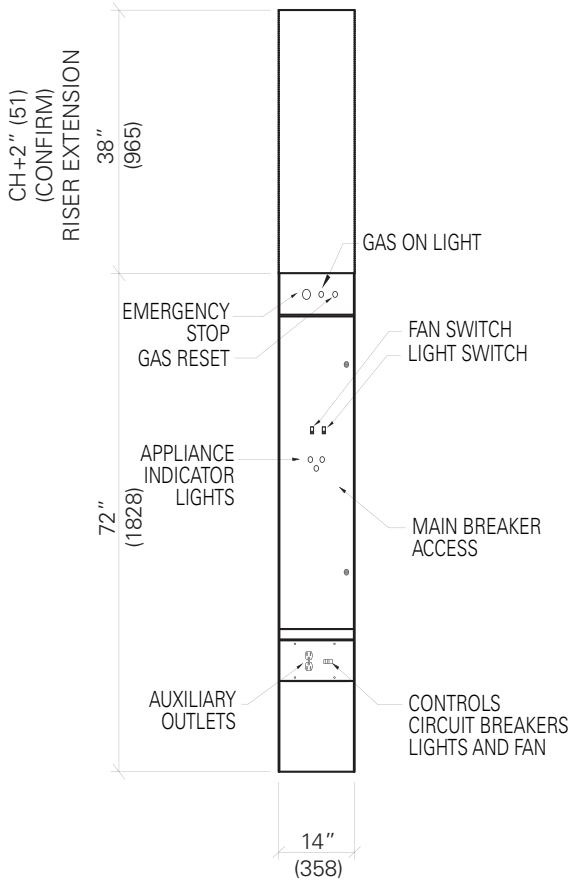
- Hoses and quick disconnects.
- Electrical cords and plugs.
- Restraining devices.
- Ground fault protection.
- Circuit status indicators.
- Bumper rails.
- Exhaust hood controls in the risers.
- Fire protection piping and controls in the risers.
- Fan motor starters contractors and labeled field wire terminals
- Prison package.
- Fill faucets.
- Water filters.
- M.A.R.V.E.L. Demand Control w/ VFD by Halton
- Displacement Venitlations



FRONT ELEVATION VIEW



LEFT SECTION VIEW



RIGHT END VIEW