Horizon® 1000 Headwall System (P1000)

TECHNICAL DATA SHEET

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Figure 1. Horizon®[1] 1000 Headwall System (P1000)

General

The Horizon® 1000 Headwall System (P1000) shall be UL-Listed for the United States (KEZR and KEXS) and Canada (KEZR7 and KEXS7) by Underwriters Laboratories Inc.®[2].

The Horizon® 1000 Headwall System (P1000) manufacturer may coordinate with the architects and manufacturers of the equipment not supplied by the system manufacturer to ensure compatibility with the equipment.

The mechanical contractor shall provide the primary services and make connections to the appropriate installed mechanical equipment of the Horizon® 1000 Headwall System (P1000) as shown on plans and as herein specified.

The electrical contractor shall install the Horizon® 1000 Headwall System (P1000) and related equipment, wiring, and conduit and make necessary connections as shown on the plans and as herein specified.

The recommendation of the National Fire Protection Association (NFPA®[3]), the National Electrical Code®[4] (NEC®[5]) for the United States (CAN/CSA-C22.1 and CAN/CSA-C22.2 No. 0 for Canada), NFPA®-99 (CAN/CSA-Z305.1 and Z318.6 for Canada), as well as state and local codes that apply to product installations - shall be adhered to in all respects. The installing contractor shall be responsible for compliance with all local, state, and federal codes applicable to this installation. After installation, the equipment must be examined and tested by the installing contractor to assure compliance with the above codes and to determine that the assembly has been installed correctly and is functioning properly.

The manufacturer will examine and test each unit for compliance with specification requirements.

Follow the installation instructions in manuals IS563, IS564, and IS806. (In the seismic code area, contact WittRock for additional information concerning all preparation.)

Submittals and Verifications

Shop drawings will be submitted in accordance with the supplemental, general, and special conditions of the specifications and contract documents.

The Horizon® 1000 Headwall System (P1000) manufacturer shall submit within 30 days of the contract award complete detailed shop drawings. The shop drawings show dimensions, details, and interface to related services, which require cutting or close fitting.

Manufacturing fabrication will not be started until the complete final approved drawings are received.

1. Horizon® is a registered trademark of WittRock Services, Inc.
2. Underwriters Laboratories Inc.® is a registered trademark of Underwriters Laboratories Inc.
3. NFPA® is a registered trademark of National Fire Protection Association, Inc.
4. National Electrical Code® is a registered trademark of National Fire Protection Association, Inc.
5. NEC® is a registered trademark of National Fire Protection Association, Inc.

Horizon® 1000 Headwall System (P1000)

DETAILED PRODUCT SPECIFICATION

The Horizon® 1000 Headwall System (P1000) manufacturer shall provide physical samples only if specifically required, and the cost of same has been negotiated.

The color of the HPL is selected by the architect or the customer from the manufacturer's standard line. The manufacturer shall submit the color charts.

The manufacturer reserves the right to furnish the Horizon® 1000 Headwall System (P1000) and its related components with improvements in design and/or material at the time of manufacturing.

Product Description

The Horizon® 1000 Headwall System (P1000) consists of a series of horizontal raceways that are mounted behind the patient bed at specified levels. These raceways provide the following functions:

- Placement of electrical devices.
- Placement and means of repositioning medical gases.
- Physical structure for supporting ancillary equipment.
- Routing of plumbing external of the headwall fixed gases.

Raceway and Service Chase designated as follows:

- (Pl00001) Horizon® Headwall System—3 raceway
- (P100002) Horizon® Headwall System—2 raceway

(See Figure 1.)

Each raceway contains barriers to accommodate any mix of normal power, *critical branch power, or communication service desired. Device outlets are spaced at 6" (15.24 cm) intervals or multiples thereof.

Electrical services can be supplied from an optional 4 1/2" (11.43 cm) deep x 13" (33.02 cm) wide service chase extending from the finished ceiling line to a height 10" (25.40 cm) above the floor.

The service chase can be installed to supply raceways from either the left or right side, for private room configuration or centrally for semi-private room configuration.

Electrical services for the raceway devices shall be supplied from the service chase by means of pre-wired connectors. Distribution to these pre-wired connectors shall be supplied from the appropriate service chase junction box by a cable harness assembly.

The connection of incoming electrical services will be made in the designated junction box of the service chase.

The Horizon® 1000 Headwall System (P1000) is mechanically configured to permit the installation of auxiliary equipment, i.e.; manometer, vacuum bottle holder, etc. by the use of moveable mounting clamps, which enable the user to conveniently locate such equipment.

The medical gas distribution shall be thru a pre-assembled gas manifold located centrally below the (middle) gas raceway.

Service to moveable secondary gas outlets (quick or DISS) shall be thru indexed hose assemblies connected to DISS check valves on the pre-assembled gas manifold.

Medical gas/vacuum supply to the pre-assembled gas manifold is thru copper service drops from the appropriate zone distribution system. Copper drops (installed by others) are located in a cavity behind the surface mounted service chase.

Access to the pre-assembled gas manifold or removal of secondary gas outlets is accomplished by tilting or removing quick release panels installed between the gas (middle) and bumper (bottom) raceways.

Materials and Construction

Horizon® Raceways Members—The Horizon® raceway members are constructed of heat treated aluminum extrusion. Exposed aluminum surfaces are anodized. The interior of the rail contains enclosed wireways for the segregation of different electrical services.

- Fascia—The fascia will run the full length of the raceway and be punched to permit device installation as designated. Fascia shall consist of HPL backed with steel.

- Device Cover Plates—Device cover plates are made of formed aluminum. The plates will cover devices or empty 1-gang boxes. All cover plates are single-gang.

Service Chase—The service chase is constructed of steel with slide-in panels. The chase shall consist of three sections:

- Distribution wireway with 20 ga barriers for the segregation of electrical services supplying the Horizon® Raceways.
- Expansion section to accommodate varying ceiling heights.
- Main junction boxes for the connections of incoming electrical services.

The horizontal slide-in panels shall be HPL backed with steel. The slide-in panels shall be held in place with anodized aluminum trim extrusions. When the vertical trim is removed, the slide-in covers shall be removable by sliding them out for ease of access and maintenance.

Grounding and Bonding—Each raceway shall have a grounding post located inside the access cover on the end adjacent to the service chase. Each receptacle shall have a grounding conductor attached to the ground screw and terminated at the grounding post. Ground conductors shall be stranded copper with green colored insulation. Ground conductors shall be terminated with machine applied compression fittings. The grounding post shall have a grounding conductor 10 AWG or greater, which shall be terminated at a reference ground bus in the service chase.

The reference ground bus in the service chase shall be connected to the power source reference ground located in the main junction box thru a 6 AWG stranded copper conductor with green insulation. The power source reference ground bar shall be so installed as to ensure frame grounding of the complete system and shall accept a 4 AWG or smaller building grounding conductor.

Electrical Wiring—Wire for standard power, *critical branch power, and lighting circuits shall be stranded copper and color-coded in accordance with the wiring diagram.

Medical Gas/Vacuum Manifold—The Horizon® 1000 Headwall System (P1000) manufacturer furnishes the medical gas/vacuum manifold assembly complete with DISS indexed check valves and/or plugs in locations shown on shop drawings. Copper tubing for the manifolding is of type K, conforming to ASTM B 88. Oxygen and air shall be 1/2" (1.27 cm) nominal ID., and 5/8" (1.59 cm) OD The vacuum shall be 3/4" (1.91 cm) nominal ID and 7/8" (2.22 cm) OD All copper tubing shall be free of oil and foreign material. All brazing of joints shall be with silver brazing alloy (melting point 1000° F (537.78° C) minimum) and complete manifolded systems shall be pressure-tested to 150 psi (1034.21 kPA) to ensure a tight gas seal. The mechanical contractor shall provide all service connections to the medical gas/vacuum manifold and then shall perform and certify all pressure tests as required by NFPA®[1] - 99 and/or contractual documents.

Optional Equipment and Devices

The following optional equipment and devices are available on the Horizon® 1000 Headwall System (P1000):

- Chart Light
- Night Light
- Electrical Receptacles
  - Single and Duplex
  - Tamper-Resistant
  - Locking
  - Isolated Ground
- Grounding Receptacles
- SPST and 3-Way Switches
- Telephone Provision
- Code Blue Emergency Call Button
- Nurse Call Station
- STAT Clock/Timer (P967) Provisions
- Monitor Equipment Provision
- Blank Provisions
- Dimmer Switch
- Timed Light Switch
- Circuit Breaker Panel
- Specialite™[2] Patient Light (P645)

1. NFPA® is a registered trademark of National Fire Protection Association, Inc.

- SideCom®[1] Bed Interface
  - Low Voltage Light Switching
- Low Voltage Remote Light Switching

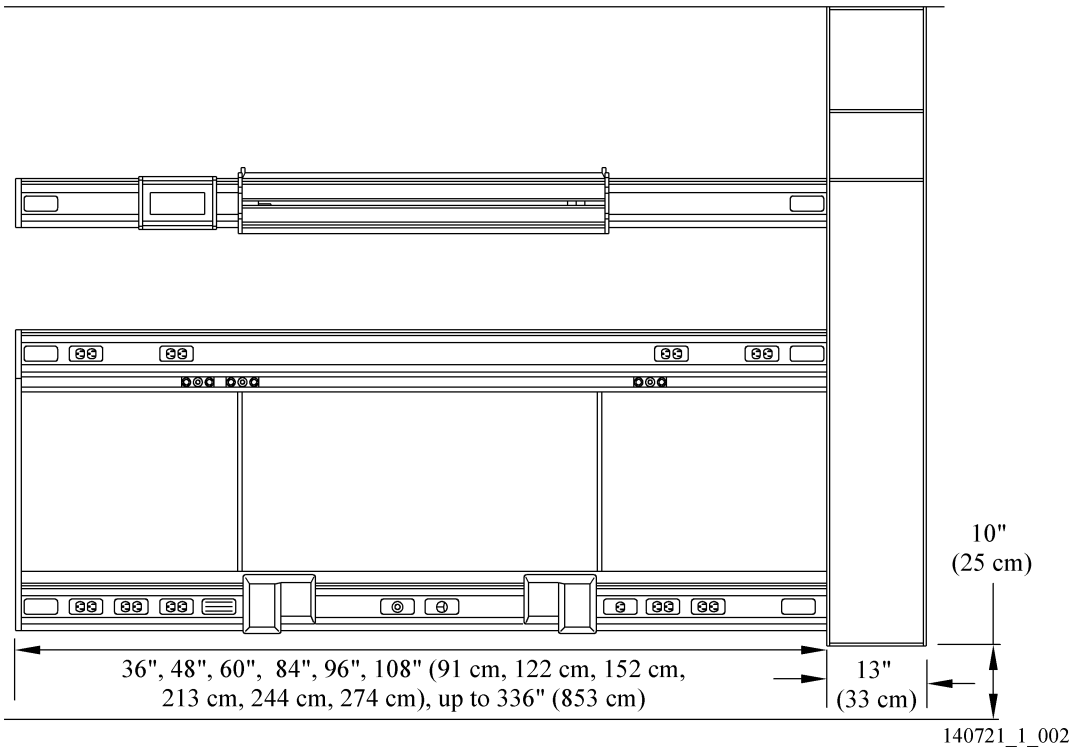
See Detailed Product Specification 140737, Architectural Products Accessories, for details related to the Specialite™ Patient Light (P645).

See Detailed Product Specification 140738, Architectural Products Optional Equipment and Devices, for details related to the above optional equipment and devices.

2. Specialite™ is a trademark of WittRock Services, Inc.
1. SideCom® is a registered trademark of WittRock Services, Inc.

DETAILED PRODUCT SPECIFICATION

Figure 2. Horizon® 1000 Headwall System (P1000) Dimensions



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DETAILED PRODUCT SPECIFICATION

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