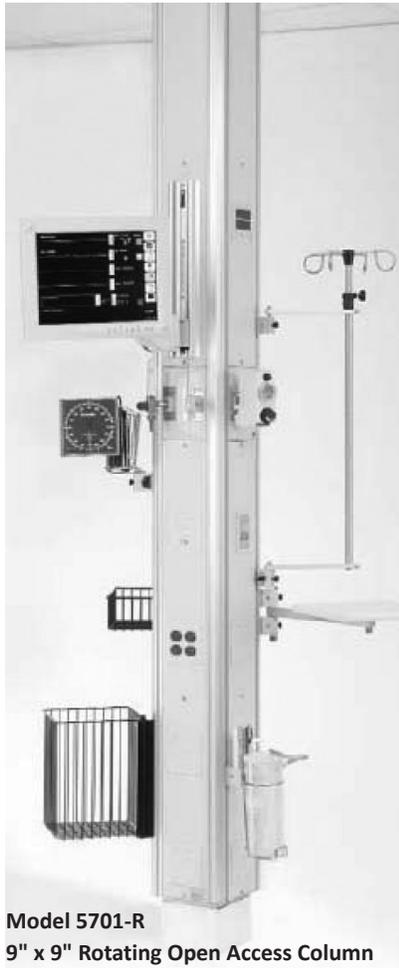




**MODULAR**  
SERVICES COMPANY

# INSTALLATION MANUAL

## ROTATING OPEN ACCESS COLUMN



## OVERVIEW

The Rotating Open Access Column is a UL-listed, vertically oriented, multi-sided hospital modular service assembly. This system uses vertical component chases to conveniently locate standard and emergency electrical services, as well as medical gas and communications services, as required. Columns are available in various configurations. See Figure 1 for typical components of the unit.

## UNPACKING AND INSPECTION

1. Upon receipt of units and prior to unpacking, inspect shipping containers for damage. Document any damage found and notify the carrier and Modular Services Company.
2. Locate the carton for the unit you wish to install. Labels at each end of the carton identify the unit type and general description of contents, as well as the room number or area of installation (if applicable).
3. Clear a large work area near the location where the column is to be installed.
4. Unpack unit from shipping containers, taking care not to damage unit. Dispose of all excess packaging material, leaving the cardboard under the column to protect the face during installation.
5. Verify that all components are included, according to the packing slip.
6. Inspect units for defects in materials or workmanship prior to installation. It is the responsibility of the customer to report any damage or deficiencies to Modular Services immediately upon discovery.

## PREPARATION

A support superstructure (by others) is to be constructed above the finished ceiling (see Figure 2 for suggested means of support). The Rotating Open Access Column includes a 1/4" steel rough-in plate which must be firmly attached to the superstructure, either by welding it in place or attaching it with bolts. The rough-in plate must be level to within 1/4" in order for the column to rotate properly.

Also included with the unit is a service entry bracket containing bulkheads to facilitate connection of medical gas and electrical services to supply lines. After installation of the rough-in plate, the service entry bracket is bolted to the top of the rough-in plate (Figure 3).

Review the final approved shop drawings and the submittal booklet, which will provide technical details specific to your installation, such as:

- Wiring diagrams
- Equipment types and quantities
- Shop drawings of each type unit
- Room numbers and location in the facility (if applicable)

Figure 1.

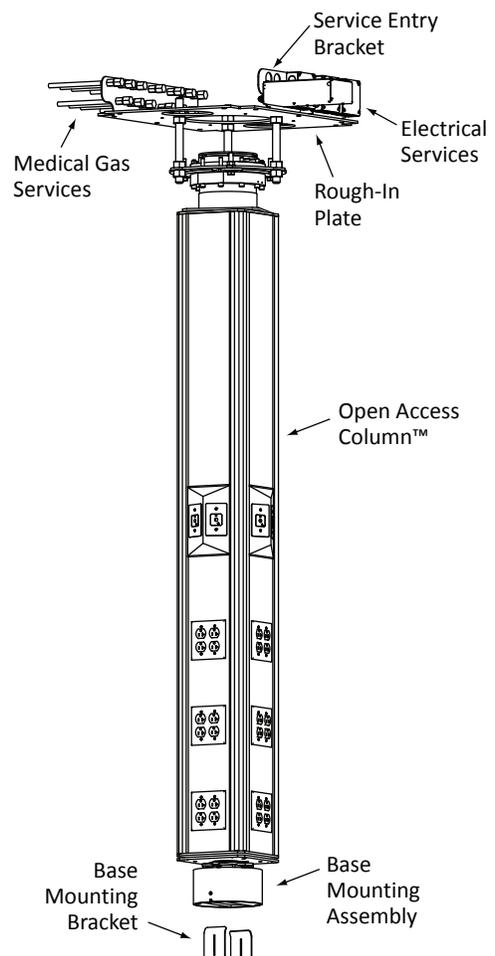
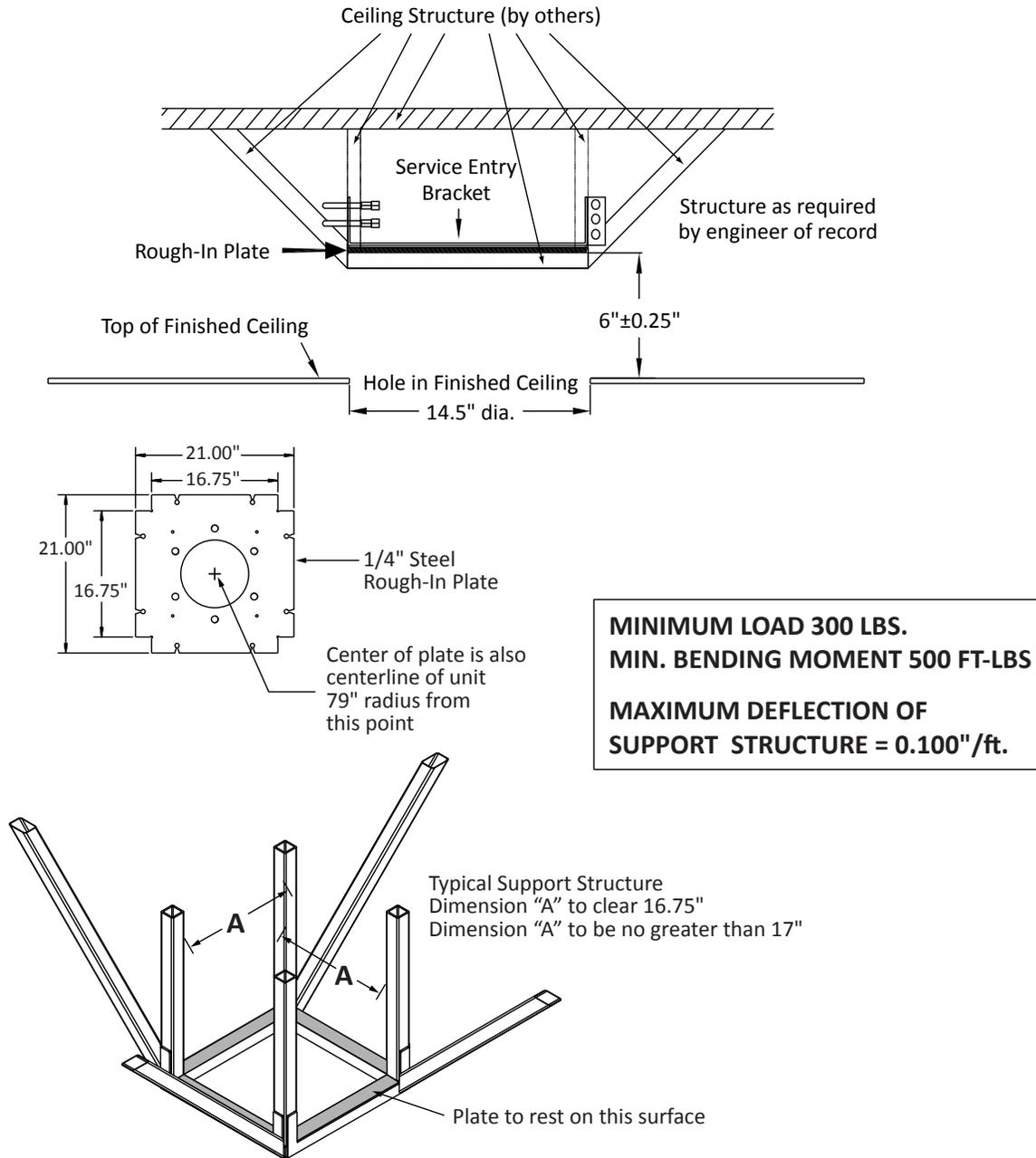


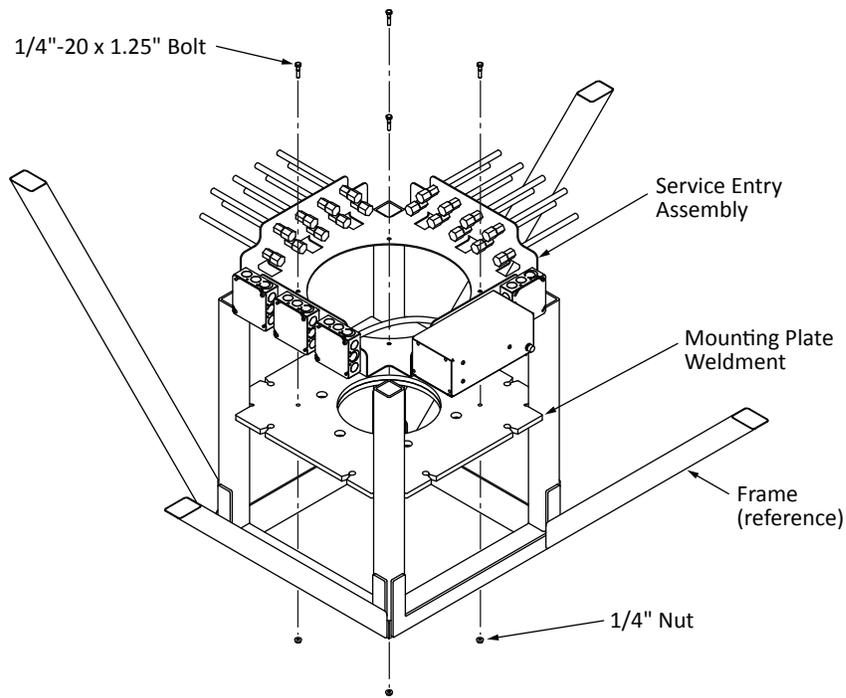
Figure 2.



1. All design, fabrication and materials other than the rough-in plate assembly are the responsibility of the engineer of record.
2. Rough-in plate is to be welded or bolted to support structure by customer/contractor, subject to engineer of record's approval and must be level within 1/4".

**NOTE:** Rough-in plate is mounted on top of structural supports, as shown above.

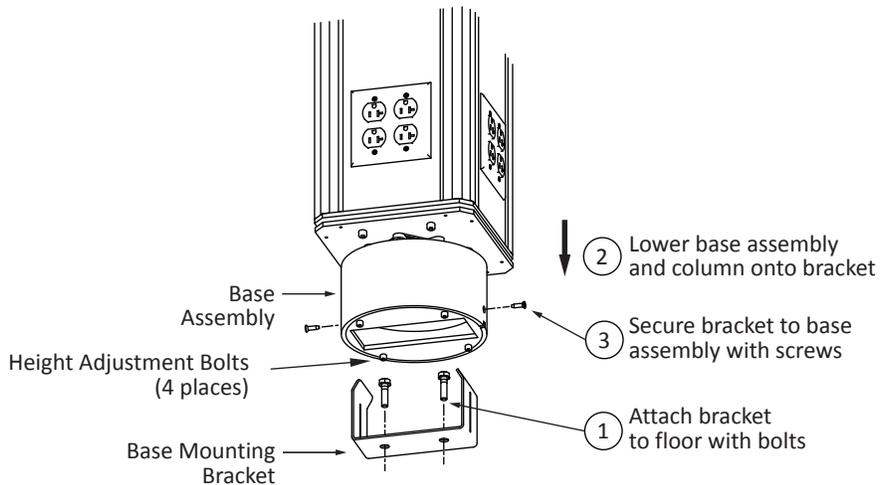
Figure 3.



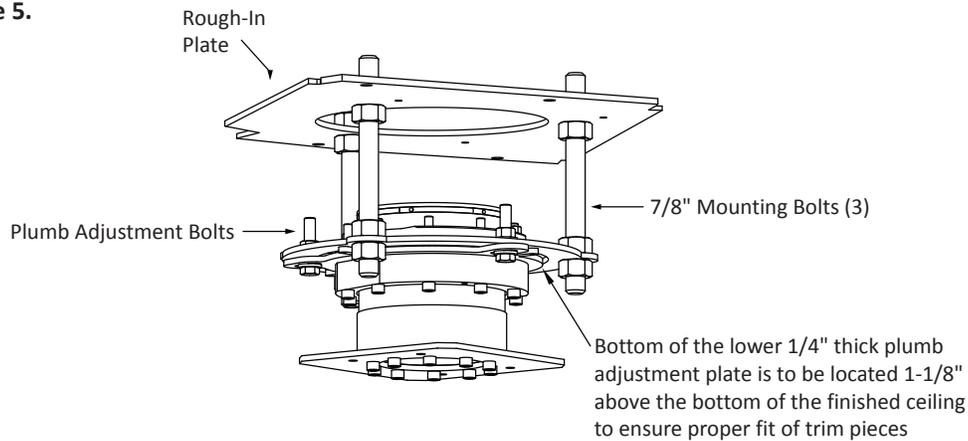
### UNIT INSTALLATION

1. Remove the base mounting bracket from the base assembly (Figure 4).
2. From the centerline of the rough-in plate, plumb down and mark the floor at the center line.
3. Using the base mounting bracket as a template, drill holes for 1/2" diameter Hilti Kwik bolts (or equivalent fastener) in the finished floor at the exact position where the Rotating Open Access Column is to be located.
4. Install anchor bolts in the floor and position the column over the base mounting bracket.
5. Using the height adjustment bolts on the bottom of the base assembly (Figure 4), adjust the height of the column so that the bottom 1/4" thick plumb adjustment plate is 1-1/8" above the bottom of the finished ceiling to ensure proper fit of trim pieces.
6. A formed Kydex® base cover is supplied for use around the base once all anchorage is complete.

Figure 4.



**Figure 5.**



7. Attach the top of the unit to the rough-in plate using 7/8" bolts and nuts (Figure 5).
8. Loosen the plumb adjustment bolts at the top of the unit and plumb the column.
9. Retighten the plumb adjustment bolts.
10. Tighten all remaining bolts on the column and base.
11. The column is now ready for the final utility connections to be performed by the appropriate trade personnel.

### **MEDICAL GAS SERVICE CONNECTIONS**

1. Use extreme care in making the medical gas service connections.
2. Each single-point connection has been provided with a color-coded medical gas label.
3. Do not connect the medical gas hoses from the column below to the DISS checks on the service entry bracket until all brazed connections and testing of medical gas piping systems have been completed.

Medical gas systems provided by Modular Services have been cleaned, purged, brazed, blown down, labeled, and tested for cross connections and leaks in accordance with the most recent edition of NFPA 99. They are certified to be compliant to all of these requirements and to be leak free. The medical gas system installer is responsible for connecting this manufactured assembly to the pipeline in compliance with all applicable sections of the latest edition of NFPA 99.

During the process of connection to the pipeline there are multiple potential sources of contamination or damage to seals which could result in leaks. First, although Modular Services takes care to protect the ends of our piping system and the openings of station inlets/outlets to avoid contamination, it is at this point that these contamination prevention measures must be removed which exposes the system to the construction environment. Secondly, instrumentation must be inserted into the station inlets/outlets to properly purge the system while it is being brazed in accordance with the requirements of NFPA 99. Lastly, station inlet/outlet front body assemblies (if product is shipped with them installed), which are only rated to a maximum of 100 PSI, must be removed to conduct the initial pressure test which is required to be conducted at a minimum of 150 PSI. After this test is complete the front bodies must be reinstalled to conduct the standing pressure test.

In accordance with NFPA 99 section 5.1.12.2, the installer is required to test the distribution piping in its entirety, which includes the medical gas manifolds provided by Modular even though they have been pretested at the factory. Because of the multiple potential sources of contamination or damage to seals listed above, the installer is to be held responsible for repairing or replacing any seals which have been contaminated or damaged as a result of the process of connecting to the pipeline. The installer shall also be responsible for protecting the station inlets/outlets against contamination after the factory protection has been removed.

Modular Services warrants all defects in piping materials, brazed joints, and workmanship but cannot warrant leaking seals once the factory provided contamination prevention materials are removed from either the end of the piping or the station inlet/outlet.

### **ELECTRICAL SERVICE CONNECTIONS**

1. Ensure that all electrical power circuits are locked off prior to hook-up.
2. Review the wiring diagram or shop drawings.
3. All connections are labeled on the unit at the point of connection.
4. Connect conduits and wiring from the column below to the electrical junction boxes on the service entry bracket and make connections inside the boxes, as required.

**NOTE: The brake electronics require an input voltage of 120 volts AC only.**

5. Test electrical connections in accordance with state and local codes.

### **LOW-VOLTAGE PROVISIONS**

1. Provisions have been made for the installation of such items as nurse call, code blue, telephone outlets, television outlets, heart monitor outputs, etc., according to the project drawings.
2. These devices are to be mounted directly to the component backboxes and over the decorative panel. Removal of the decorative panel is not required for installation of equipment by others.
3. Test equipment in accordance with state or local codes.

### **CARE AND MAINTENANCE**

1. Clean with mild detergent and warm water.
2. Avoid build-up of excessive moisture, as it can damage mechanisms in the unit.
3. Disinfect as required with disinfectant approved by the Environmental Protection Agency.
4. To remove difficult spots or stains, use standard household cleansers and a soft-bristled brush.
5. For parts or repairs, contact your sales representative. **NOTE: Do not use lubricants or oils on unit.**

### **INSTALLATION TERMS AND CONDITIONS**

Each Modular Services unit, or unit section, shall be completely pre-wired for normal, emergency and low voltage according to the approved submittal. Communication devices and wiring shall be supplied by others. These devices include nurse call, television, code blue, telephone, monitor jacks, etc.

The customer shall be responsible for all electrical conduits (above the junction boxes), wiring hook-up of electrical services, and if applicable, interconnect wiring between sections. All hardware light fixtures shall be installed, wired and lamped by contractor. After installation is complete, the customer shall test equipment functions, as well as electrical receptacles and ground, in accordance with the National Electrical Code.

Medical gas contractor shall be responsible for piping and hook-up of all medical gas services. The medical gas contractor shall be responsible for purging, pressure testing, gas identification, and system certification in accordance with NFPA 99.

Modular Services Company shall have no responsibility or liability for delays, however caused. Owner shall hold Modular Services harmless from damages or injury related to any failure or neglect of owner, its employees, agents or licensees. Modular Services shall not be liable for consequential damages; makes no warranties, expressed or implied; and assumes no obligation other than those expressly contained herein.

## WARRANTY

Modular Services Company warrants that all equipment assemblies shall be free from defects in material and workmanship for a period of 12 months from date of the owner's acceptance to the installing contractor or the date the equipment is put into service, whichever comes first. Warranty excludes electric lamps and/or any material not furnished by Modular Services. Warranty does not cover damage due to improper installation and/or abuse.

It is the responsibility of the customer to report any noted product deficiencies to Modular Services immediately upon discovery. It is the responsibility of Modular Services to expediently resolve the discrepancy. Any modification made to the product without the written authorization from Modular Services will void this warranty.

Also, in the event product modifications or repairs are made without the written consent of Modular Services, Modular Services shall not be held liable for any cost associated with the modification or repair.

**There are no warranties of fitness which extend beyond the description on the face hereof.**



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