



MODULAR
SERVICES COMPANY

INSTALLATION MANUAL

2-GAS PROFILE®



OVERVIEW

The 2-Gas Profile® is a UL-listed, vertically oriented medical headwall assembly. The unit is installed directly into the building wall. Jobsite personnel install conduit from field junction boxes to segregated electrical and low-voltage compartments in the assembly. Medical gas and vacuum service connections are made within the footprint of the studs, 6" from the top of the chassis. Drywall is installed, along with any additional wall coverings, and a finish trim kit is attached. Units may be installed in conjunction with Modular's Bed Docker unit.

UNPACKING AND INSPECTION

1. Upon receipt of Profile® 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. Unpack unit from shipping containers, taking care not to damage unit.
4. 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.
5. Finish trim and accessory items supplied with the units are located in additional (separate) cartons. These cartons should remain sealed until all finish work (drywall installation, painting, wall coverings, etc.) has been completed.

FRAMING PREPARATION (Figure 1)

1. Review the final approved shop drawings which will provide you with technical details specific to your installation, such as:
 - Wiring diagrams
 - Equipment types and quantities
 - Shop drawings of each type unit
 - Room numbers and locations in building (if applicable)
2. The configuration (either "as shown" or "opposite") for each room will be noted, either on the architectural plans or on approved shop drawings. Please review these documents to ensure that units are being installed correctly.
3. The interior framing of the stud wall where the unit is to be located should allow for the installation of the Profile® assembly. The unit will be positioned between two studs that are no less than 9.875" apart.

The closed end of the stud should be turned to face the Profile® location.

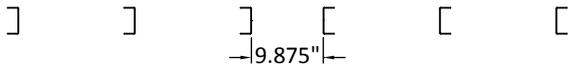
Particular care should be taken to ensure that the unit is being installed at the proper location, as determined by architectural requirements.

WARNING: For installation of the Profile® units, make certain walls are constructed of at least 20-gauge steel studs on 16" (41 cm) centerlines, and are covered with a minimum of 5/8" (15.9 mm) drywall. Failure to do so could cause the partition to collapse, resulting in personal injury or property damage.

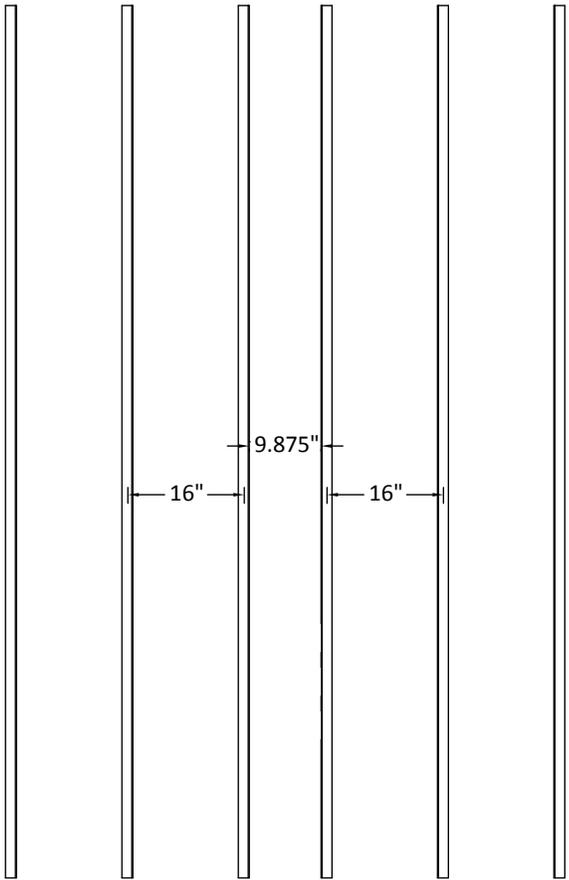
4. Make clearance cuts in stud(s) for electrical and low-voltage connections at locations indicated in Figure 1. Provisions for service connections are made on both sides of the assembly. Coordinate with jobsite personnel to determine the preferred location for clearance cuts.

Figure 1.

Frame opening as shown. Stud wall must be, at minimum, 20 gauge steel studs on 16" centerlines.

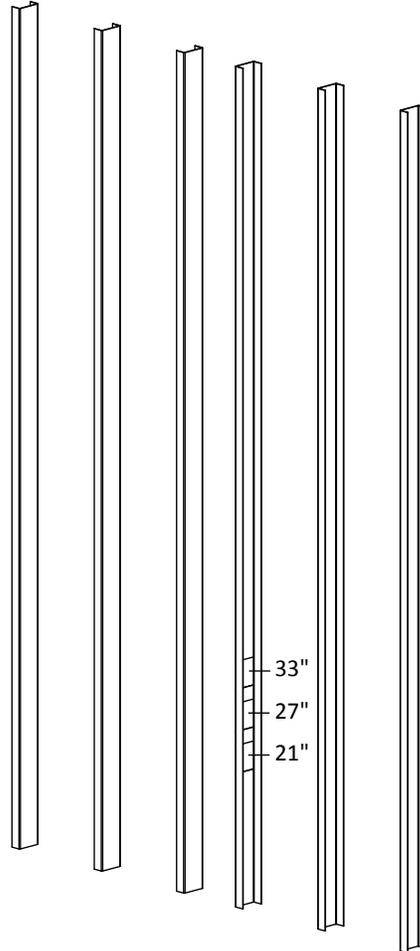


Install closed ends of stud facing each other



Make clearance cuts in studs for electrical service connections at distances indicated above finished floor.

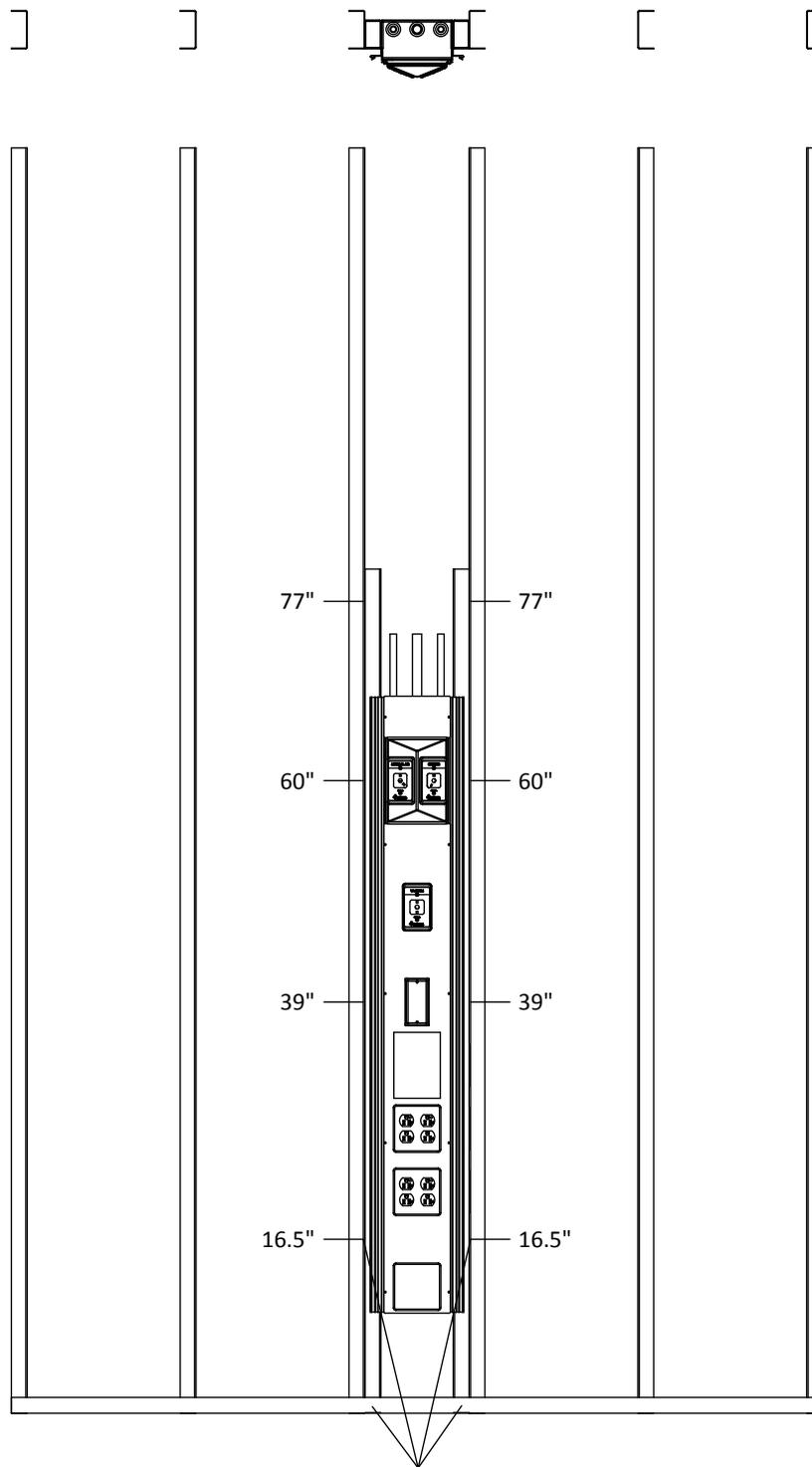
NOTE: Provisions for service connections are made on both sides of the assembly. Coordinate with jobsite personnel to determine the preferred location for clearance cuts.



UNIT INSTALLATION (Figure 2)

1. The housing is attached to 2.75" 16-gauge metal studs (80" overall length) for installation directly into the building wall. Set the Profile® assembly in place, ensuring that the unit is level before attaching it to the floor track and studs.
2. Attach to interior framing with standard framing fasteners (not included). Mounting brackets are provided at locations indicated in Figure 2.
3. Once the unit is attached in place and level, install additional framing and support as necessary.

Figure 2.



Set 2-Gas Profile® assembly into opening. Ensure unit is level and attach to floor track. Attach to studs, using two standard fasteners at each mounting bracket location indicated.

SERVICE CONNECTIONS (Figure 3)

The 2-Gas Profile® is designed to accept wall coverings ranging from 0.625" to 1.25" in thickness. Prior to making service connections, the component housing should be inspected to ensure that it is set for proper drywall installation.

MEDICAL GAS SERVICE CONNECTIONS

Medical gas/vacuum service terminations are within the footprint of the studs and extend 6" from the top of the chassis. Refer to project-specific drawings for service termination locations. Drop down and braze to the unit with medical gas piping according to NFPA 99 and local building codes.

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.

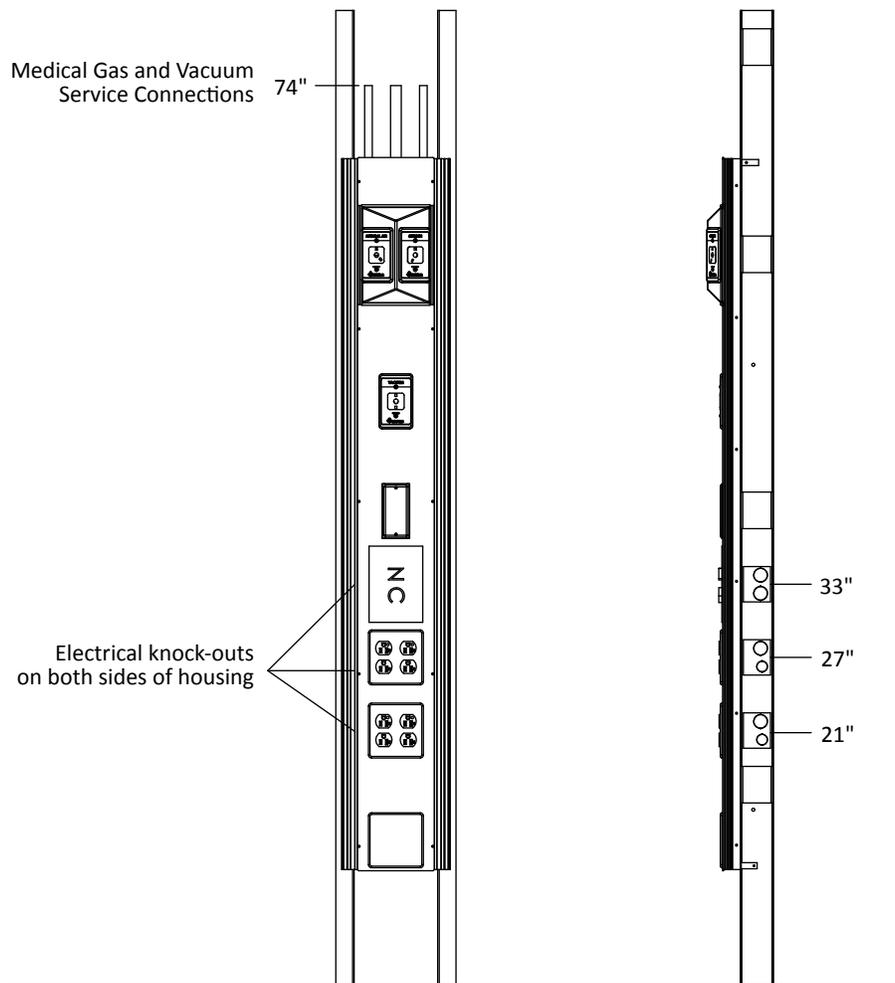
Modular Services warrants all defects in piping materials, brazed joints, and workmanship but cannot warrant leaking seals once the factory provided contamination prevention materials are removed from either the end of the piping or the station inlet/outlet.

ELECTRICAL SERVICE CONNECTIONS

Units are completely pre-wired with all service connections terminating in barriered compartments. Electrical knockouts are provided on both sides of the unit housing at locations indicated on the project drawings. Conduit should be installed by jobsite personnel from junction boxes above the accessible ceiling line to the supplied electrical knock-outs in the housing.

Pull necessary wiring through EMT conduit from the field-installed junction box, and make connections within the unit according to the National Electric Code and local building codes. Note: A copper ground bus is provided in the service connection compartment that will accept #6 to #14 AWG grounding conductors.

Figure 3.



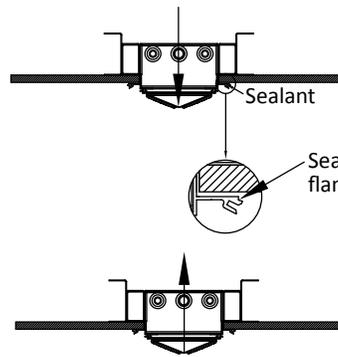
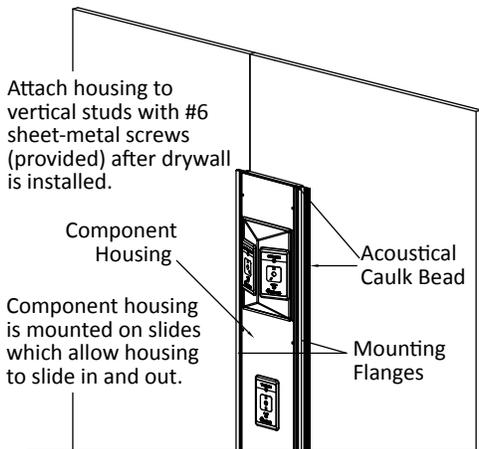
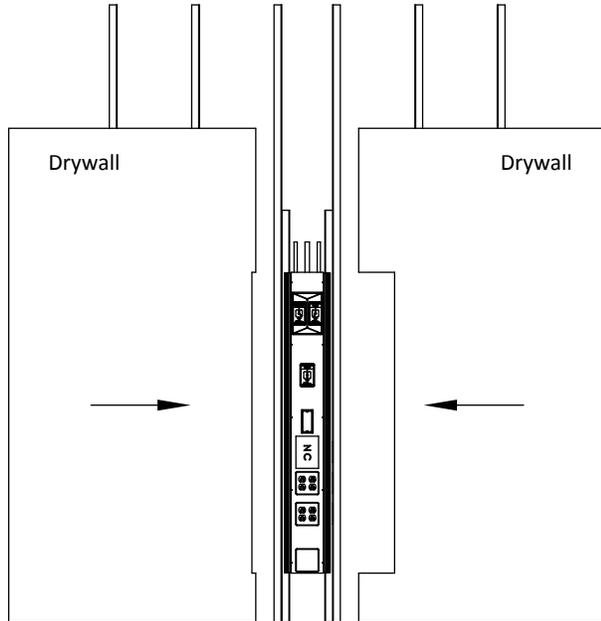
DRYWALL INSTALLATION (Figure 4)

1. Prior to installation of the drywall, ensure that all medical gas piping and any required unexposed electrical connections have been completed.
2. Pull the component housing out so that the gap behind the vertical side mounting flanges is slightly larger than the drywall thickness. This will allow the drywall material to slide in behind these flanges. The assembly is attached to the vertical studs with four screws in round holes and left slightly loose to allow for this adjustment. The 2-Gas Profile® is designed to accept wall coverings ranging from 0.625" to 1.25" in thickness.
3. For installation around the component housing, cut drywall to a size that will allow the material to slip under the lip of the vertical mounting flanges on each side of the housing. A seam will be required in the location of the component housing. At the top and the bottom, cut the drywall in a manner to minimize the gap at the component housing to lessen the amount of caulking required.
4. Attachment of the drywall can be accomplished using standard drywall fasteners directly to the metal studs (use extreme care with screws that are close to either the medical gas piping or the electrical conduits). Perform all taping, joining, texturing and painting before resetting the housing back to its original position (any additional wall coverings may be installed as well).

IMPORTANT: Wainscoting should not be installed under the aluminum flanges of the Profile® unit. Ideally, partial wall coverings should be installed after the painted finish trim is attached to the unit. If the coverings are to be installed before finish trim attachment, terminate 0.25" from the outer edge of the non-painted aluminum flange.

- Once the wall finishes are completed, caulk behind the vertical mounting flanges of the component housing with an acoustical sealant and position it back against the finished wall. This should be the same position that the medical gas brazing was performed to remove any tension to the brazed connections made.
- Attach the unit to the metal studs behind the drywall using #8 or #10 sheet metal or drywall screws. Apply acoustical caulk to fill the gap at the top and bottom between the component housing and the drywall to seal off the wall cavity.

Figure 4.



After drywall has been installed, pull assembly out of wall approximately 1/8" and apply acoustical sealant between wall and flange on unit.

Sealant should only be behind flange and NOT in here

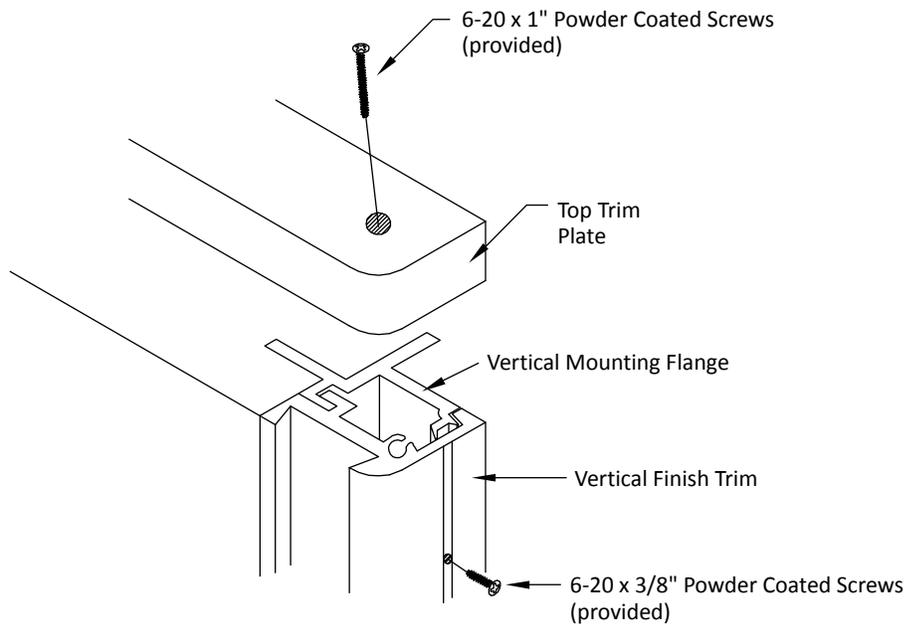
Push unit back flush with wall and fasten with #6 sheet-metal drywall screws (provided) in pre-drilled holes. Also apply sealant between unit and drywall at top and bottom of unit.

IMPORTANT: Drywall must be inserted BEHIND mounting flanges.

FINISH TRIM INSTALLATION (Figure 5)

- Remove the plastic sheet or drop cloth used to cover the component housing during drywall installation.
- The finish trim top and bottom trim plates are shipped pre-assembled, and are packaged separately. Disassemble the trim (keep all screws, as they will be needed to reassemble the trim).
- Slide the two vertical finished trim pieces into place from the side and attach them to the vertical mounting flanges with the eight 6-20x3/8" screws provided.
- Attach the top and bottom trim plates to the vertical mounting flanges using the 6-20x1" screws provided.

Figure 5.



CARE AND MAINTENANCE

1. Clean with mild detergent and warm water. **Do not use lubricants or oils on unit.**
2. Avoid excessive moisture build-up, 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.

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.



MODULAR
SERVICES COMPANY

500 E. Britton Rd. • Oklahoma City, OK 73114

Tel: 800.687.0938 • Fax: 405.528.0368

www.modularservices.com

info@modularservices.com