



**Site Preparation Specification**

**Purpose of Procedure**

To ensure that the installation site is properly evaluated and prepared with the appropriate utilities, consumables and supplies for the successful installation of Agilent instruments and systems.

**Customer Responsibilities**

Customers should ensure that all necessary operating supplies, consumables and usage dependent items such as columns, vials, syringes, solvents and buffers required for the successful installation of instruments and systems are available. Installation sites should be prepared in accordance with the following specifications. An Agilent customer engineer will call approximately 2 weeks prior to installation to confirm site readiness.

**Important Information**

This checklist is designed to be used in conjunction with the Agilent 1200 Series LC/MSD Site Preparation Manual. If you have problems providing any of the following, please contact your local Agilent sales office for assistance. Assistance with user specific applications may be provided but should be contracted separately. Users of the instrument should be present throughout the installation and familiarization otherwise important operational, maintenance and safety information may be missed.

**Procedure Checklist**



**Agilent G1956A/B Mainframe:**

*footprint:\**

Depth: 62.3 cm    Width: 64.0 cm  
 24.5 in            25.2 in

**Tick Boxes**

*maximum cabinet dimensions:\*\**

Weight: 63.1 kg    Height: 57.5 cm  
 138.75 lb            22.6 in

Depth: 68.83 cm    Width: 73.0 cm  
 27.1 in              28.75 in

**E1M18 Mechanical Pump:**

Weight: 32.0 kg    Height: 23 cm  
 70.4 lb              9.2 in

Depth: 51.0 cm    Width: 17.0 cm  
 20.4 in              6.8 in

**Agilent G1947A APCI Source:**

Weight: 1.7 kg    Height: 23 cm  
 3.75 lb              9.2 in

Depth: 13.0 cm    Width: 18 cm  
 5.1 in              7.1 in

**Agilent G1948A API-ES Source:**

Weight: 1.7 kg    Height: 17 cm  
 3.75 lb              6.8 in

Depth: 9.5 cm    Width: 18.0 cm  
 3.7 in              7.1 in

**Agilent G1971A APPI Source:**

Weight: 1.7 kg    Height: 23 cm  
 3.75 lb              9.2 in

Depth: 13.0 cm    Width: 18.0 cm  
 5.1 in              7.1 in

**Agilent G1978A Multimode Source:**

Weight: 2.29 kg    Height: 23 cm  
 5.05 lb              9.2 in

Depth: 13.0 cm    Width: 18.0 cm  
 5.1 in              7.1 in

\* The footprint dimensions represent the minimum dimensions of the supporting surface. This surface must also be relatively vibration free and capable of supporting at least 65 kg (143 lbs).

\*\* Maximum cabinet dimensions are for an Agilent G1956A/B with an Agilent G1947A APCI, G1971A APPI, or G1978A Multimode source installed. At least 30 cm (1 ft) to the left of the cabinet and at least 55 cm (1.8 ft) above the cabinet must be added to these dimensions to provide adequate instrument access.



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**Environmental Conditions**

**Temperature:** 15 to 35 °C (59 to 95 °F)  
at constant temperature (variations < 3 °C/hr).  
**Humidity:** < 95% relative, non-condensing

**Tick Boxes**



**Power**

**Americas & Japan:** 200 to 220 VAC; 1100 VA max<sup>1</sup>  
**Europe & Asia Pac:** 220 to 264 VAC; 1500 VA max<sup>1</sup>  
**G1971A APPI Source:** 110 - 240 VAC; 15 VA max<sup>2</sup>  
**G1978A MM Source:** 110 - 240 VAC; 15 VA max<sup>2</sup>

**N<sub>2</sub> Generator:** 90-110 VAC; 15 VA max<sup>3</sup>  
108-132 VAC; 15 VA max<sup>3</sup>  
207-253 VAC; 15 VA max<sup>3</sup>

All power: 50/60 Hz +/- 5%

<sup>1</sup>Single outlet for LC/MSD. See LC/MSD Site Preparation Manual, G1956-90098 for power cord configurations.

<sup>2</sup>Single outlet for G1971A APPI Source power supply.

<sup>3</sup>Single outlet for G1978A MM Source power supply.

<sup>4</sup>Single outlet for LC/MS N<sub>2</sub> Generator w/ compressor



**Heat Dissipation**

**Output:** 2000 Watts (6800 BTU / hour)<sup>1</sup>

<sup>1</sup>Approximately 600 Watts are removed with the source exhaust.



**Nitrogen Gas Supply**

**Purity:** 99.5% or better - Gas Cylinder  
98.0% or better - N<sub>2</sub> gas generator or liquid N<sub>2</sub> Dewar.

Balance of impurity should consist of oxygen and/or argon. Gas must be hydrocarbon free (< 0.1 ppm).

**Outlet Pressure:** 80-100 psi. A 1/4" Swagelok outlet (male) fitting is required to connect the LC/MSD.

**Volume:** Up to 15 liters/min.



**Laboratory Supply Requirements**

**Mobile Phases:** Water, Methanol, Isopropanol, Acetonitrile<sup>1</sup>

**Purity:** HPLC-grade or better

**Buffers:** Ammonium Formate<sup>2</sup>

**Acids:** Acetic or Formic Acid<sup>3</sup>

**Purity:** Ammonium formate, 97% or better  
Acetic acid, 99.7% or better  
Formic acid, 96% or better

<sup>1</sup>Methanol/water required for G1956B installation.

Organic/water required for G1956A installation.

<sup>2</sup>Required for G1956B installation.

<sup>3</sup>Optional for G1956A installation.



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***Exhaust Venting Requirements***

**Capacity:** Up to 15 liters/min. total.

**Connections:** Separate 1/2" hose barbs required for rough pump and ion source (ES, APCI, APPI or MM).

<sup>1</sup>A 20ft. length of 1/2 inch i.d. Tygon™ tubing is included for venting source exhaust (drain bottle) and rough pump. (Sufficient for two 10 foot lengths.)

**Tick Boxes**



***Remote Diagnostics***

**Phone:** One analog phone line is recommended to provide remote diagnostics capability for the LC/MSD. A second phone line is also strongly recommended for communication with the system operator.