Major Dental Equipment Utility Specifications

IMPORTANT – ensure suitable waterline backflow prevention device is installed in accordance with AS3500 Part 1:2003 for all equipment (or containing zone that equipment is installed within where adequate) within these specifications that require connection to Mains Water Supply.

Dental Chair and Unit

**Plumbing**

1. **W** WATER. Supply 1/2" (12mm) dia copper pipe. Finish w/- 1/2" MPT 30mm to the top of thread above floor level.

2. **A** AIR Supply 1/2" (12mm) dia copper pipe. Finish w/- 1/2" MPT 30mm to the top of thread above floor level.

3. **Ws** WASTE Supply 40mm dia PVC line to 50mm above floor level and maintain 40mm dia under floor.
   Supply waste trap under floor as applicable.

4. **V** VACUUM Supply 40mm dia PVC line 50mm above floor level and maintain 40mm dia PVC pressure line under floor.
   
   Note. For VACUUM LINES, It is important to use 2 X 45 degree bends where 90 degree bends are indicated for use, where possible.

5. **C** CONDUIT Supply 50mm dia PVC line from chair to surgery cabinetry to allow for cables etc for Monitors/camera etc on dental unit.
   Please use 2 X 45 degree bends where 90 degree bends are indicated for use, where possible.

**Electrical**

1. **P** POWER supply 240v/10a power to dental unit utility area on a dedicated circuit, leaving 600mm tail

   Power Supply must be installed in accordance with AS/NZS 3003.2011 for Body Protection with R.C.D (Residual Current Device)

   Each chair should have a REMOTE separate on/off switch with power indicator in a convenient location on the wall that is accessible to staff.

   Also check dental unit specifications for ceiling/wall mounted light where applicable.

   If needed, supply 240v/10a to marked area as required. Should be wired to same REMOTE on/off switch as dental unit.

2. **Vs** VACUUM REMOTE SWITCHING Supply figure 8 control wire from dental unit location to central vacuum location, leaving 500mm tail above floor level (AFL). Note. Switching does not exceed 24v.
### Compressor

**Plumbing**

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Supply 1/2" (12mm) dia copper pipe. Finish with 1/2" MPT brass barb fitting 300mm above floor level. 
*We will connect braided flexible air line to compressor*

**Electrical**

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Supply GPO *minimum* 240v/15a power to dental unit utility area on a dedicated circuit, with wall socket.

*Check compressor for exact circuit requirements.*

*Install REMOTE isolation on/off switch with illuminated indicator in a convenient location on the wall that is accessible to staff. Can be coupled with suction on/off switch.*

### Suction System

**Plumbing**

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<th>VACUUM</th>
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Supply 40mm dia PVC line from dental system locations and leave 50mm above floor level.

*Note. For VACUUM LINES, It is important to use 2 X 45 degree bends where 90 degree bends are indicated for use, where possible.*

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Supply 40mm dia waste in PVC, with incorporated drainage fall from Suction System location at least 2%.

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Supply 40mm dia Air Vent from Suction System Location to extend to external building location.

**Electrical**

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Supply GPO *minimum* 240v/15a power to dental unit utility area on a dedicated circuit, with wall socket

*Check Vacuum unit for exact circuit requirements.*

*Install REMOTE isolation on/off switch with illuminated indicator in a convenient location on the wall that is accessible to staff. Can be coupled with compressor on/off switch*

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Supply figure 8 (2-core) control wire from dental unit floor utility areas to central vacuum location, leaving 1000mm tail

*Note. Switching does not exceed 24v.*
Utility Specifications (continued)

Gritter Dental

**X-Ray**

**Electrical**

1. **P** POWER  supply GPO minimum 240v/10a power to marked location area (refer x-ray mounting template), Leave 500mm tail as requested.

   **Power Supply must be installed in accordance with AS/NZS 3003.2011 for Body Protection with R.C.D (Residual Current Device)**

   *Check x-ray unit for Electrical circuit requirements.*

   *Should be wired to same REMOTE isolation on/off switch as dental chair system.*

2. **R** REMOTE  for remote control connection, supply 3 core SWITCHING flex cable from x-ray location to selected area on wall. Leave tail of 600mm each end.

3. **S** STRUCTURAL REINFORCE  Where required, ensure wall mounting point for x-ray is reinforced with minimum 700x700x32mm board (spanning/mounted to internal wall studs) at location for mounting of x-ray unit.

   Bottom of board to be 110cm above floor level

   Reinforcement of wall should be made internally to wall prior to Gyprock sheeting – ensure no gap between reinforcement board and Gyprock sheeting.

   Refer Manufacturer’s template for exact location for reinforcement of wall for x-ray in relation to floor and dental system.

**Autoclave**

**OPTION plumbing for use with autoclaves that incorporate external water and waste connections and/or PC data logging for autoclave cycle (e.g. Melag brand)**

*Ensure access through countertop for water and waste connections to autoclave from connection point*

1. **W** WATER.  For filter water supply

   Supply under-counter at/near autoclave and finish with tap faucet ending at 20mm male BSP thread

2. **W** WATER.  For coolant water supply

   Supply under-counter at/near autoclave and finish with tap faucet ending at 20mm male BSP thread

3. **Ws** WASTE  Supply under-counter at/near autoclave with connection nipple to under sink P trap – ensure gravity flow.

   *similar to domestic dishwasher waste connection.*

**Electrical**

1. **P** POWER  supply GPO 240v/15a power to dental unit utility area on a dedicated circuit, with wall socket.

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