



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.

<i>Note. For VACUUM LINES, It is important to use 2 X 45 degree bends where 90 degree bends are indicated for use, where possible.</i> |
| 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.
<i>Please use 2 X 45 degree bends where 90 degree bends are indicated for use, where possible.</i> |

Electrical

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|----|---|-------|--|
| 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.

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|----|----|-------------------------------|--|
| 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). <i>Note. Switching does not exceed 24v.</i> |
|----|----|-------------------------------|--|

Compressor

Plumbing

1. A AIR 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

- 1 P POWER 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

1. V VACUUM 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.*
2. Ws WASTE Supply 40mm dia waste in PVC, with incorporated drainage fall from Suction System location at least 2%.
3. Ve Vent Supply 40mm dia Air Vent from Suction System Location to extend to external building location.

Electrical

1. P POWER 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*
2. Vs VAC REM 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.

X-Ray

Electrical

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|----|---|----------------------|--|
| 1. | P | POWER | supply GPO <i>minimum</i> 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)

<i>Check x ray unit for Electrical circuit requirements.</i>

<i>Should be wired to same REMOTE isolation on/off switch as dental chair system.</i> |
| 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

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|----|----|--------|--|
| 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.
<i>similar to domestic dishwasher waste connection.</i> |

Electrical

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