



FREQUENTLY ASKED QUESTIONS

FEEDBACK TO BRIEF AND INFO PACK: APRIL–MAY 2016

Door and Unit Structure

1. What is the door made of?

The door can be made of whatever the teams decide is the smartest, most practical, economical and fits within the brief details

2. Are we expected to repair damaged doors and/or damaged precast structure?

No, teams are not expected to repair old doors. New doors must be manufactured as part of the design and installation tasks (refer to Brief, Parts 1 and 2: pages 4–8). Damage to the precast concrete unit will need to be repaired around the door lock area only, and this aspect is considered as part of the new door lock design. No further structural repair to the unit is expected, or required.

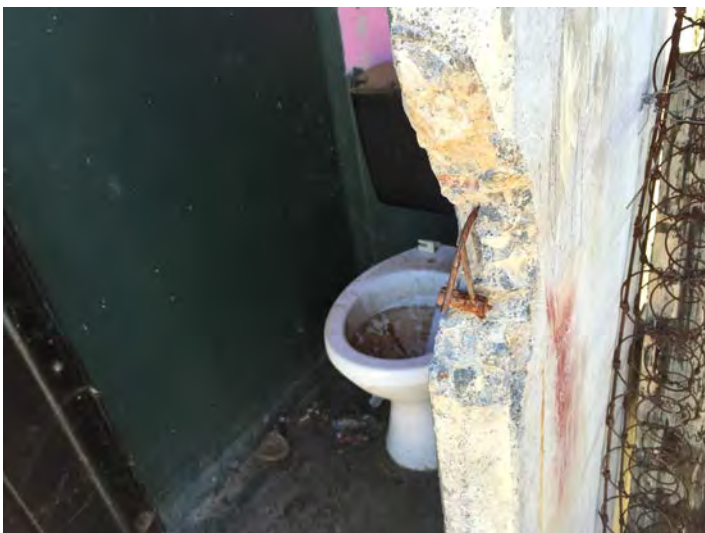
3. What gauge/thickness metal are the current doors made of? You mentioned MIG welding, is with fluxcore?

Doors that were installed in March are approximately 1.0mm to 1.2mm thick. At this stage welders have not been confirmed. Please inform the CPC Organizing Team if there is a preference, and we will endeavour to accommodate.

4. Are the sets of units (concrete units) connected to each other?

No, the units are not connected in any way. The units just stand side-by-side/butt up together.

See following photos for more information:



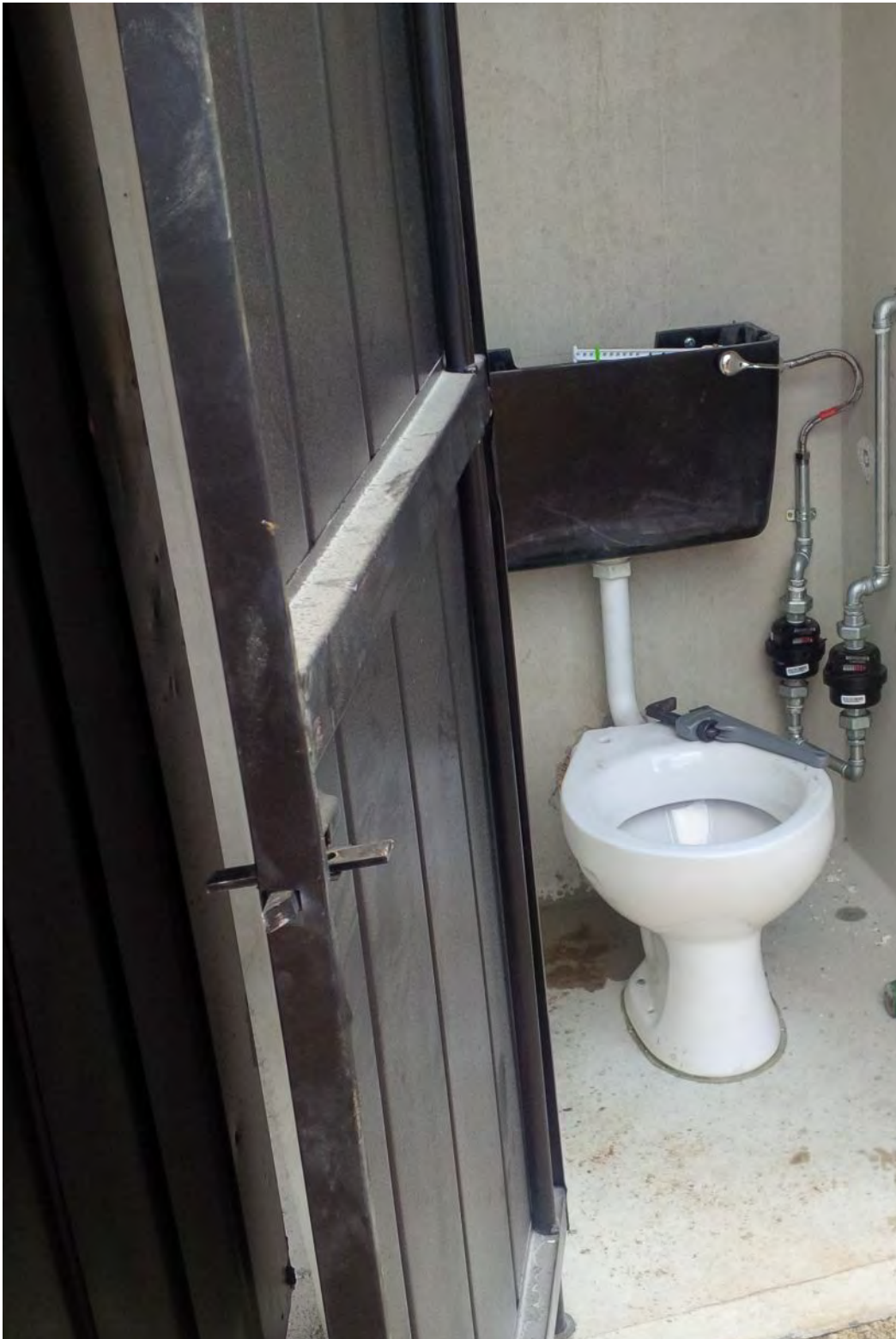
Typical damage to the door lock catch on the unit.



A failed door design that was trialed 2 years ago. Broken through the edge.



Typical damage to the top of unit near door hinge.



View of new door on units installed in March. Typically this door and latch fail within a short period.



Water and Waste

5. The existing piping appears to be Galvanised Iron (GI). Are we required to continue with Galvanised Iron (GI)?

Whatever Teams decide is the smartest, most practical, economical and fits within the brief details.

6. CPC will provide threading machine and taps?

Yes, the CPC Organizing Team will provide tools for threading and a vice to hold the pipe.

7. Is the water meter vertical type?

The water meter can be installed in any orientation.

8. Is the data logger only to be installed after the water meter, or would it require some connection to a remote computer?

The CPC Organizing Team will supply the logging equipment. At time of writing, arrangements are still being confirmed, so further detail will be provided to Teams ASAP.

9. Could we get some manufacturers specs on the current data recorders and water meters?

Images re. water meters are on pages 7–9 of this document: an excerpt from manufacturer's brochure is also included (full brochure is available at <http://bit.ly/1U3mN9p>) As in question #8 above, more detail will be provided re. data loggers as soon as it comes to hand.

10. We assume the WC to be floor mounted with 'P' trap and flush tank?

Yes, the p-trap pan needs to be securely fastened to the floor. The cistern is fixed to the wall can connected by a flush pipe.

11. Are we expected to repair damaged flush tanks, or replace them?

No repair. All fixtures and pipework inside the units must be replaced.

12. Assume that we need to install seat and cover? Not seen in any photo.

No, there will be no need to include a seat for the WC.

13. How and where is the drain from washing area (semi-circular) connected to main sewer?

The drain (gully) is connected to the sewer by a 100mm PVC trap.

14. In case of washing, will need a floor trap inside.

The units have fall to the front to stop them holding water. Teams may need to address the issues relating to wet/soiled ground in front of the units.

15. How flexible are the connections to the water and sewer? If some adjustment had to be made to hole location, could it be done on site?

Yes, any adjustments can be made on site.

16. Do all the sinks/basins make a direct connection to the underground piping, or do they spill to the concrete basin on the ground that appears to be connected to the underground drain?

Some troughs are connected directly and some spill into the waste point underneath. Each unit installation is individual. This will not be confirmed until the week prior to our arrival in July after the WASSUP team finalize plans with surrounding residents at focus sites.

See following photos for more information:



Waste and water connections to new unit. Note vent and inspection.



A typical existing waste water collection point (gully) connected to the sewer.



Water meters, pipework, pan and cistern used in March.



Plastic Duolite shires cistern by Pennyware.



Water meters installed in March. One has a logger probe installed (white cable, left).



The V110T KSM Volumetric Water Meter



The V110T KSM meter is designed for the measurement of cold potable water and offer accurate, long maintenance-free life and is highly-resistant to tampering.

The range includes three different class C meters to suit maximum flow rates from 3.0m³/h to 7.0m³/h. The V110T KSM's are suitable for water temperatures up to 50°C and a maximum working pressure of 1600 kPa. Standard

counter registration is m³ and litres. This meter has a blended UV stabilised polyacetal engineering plastic body.

It is a semi-positive rotary piston type wet dial water meter. It has a sealed wet dial counter and a 7mm thick lens complete with a non-return valve and pulse output facility.

Compliance with standards

Every V110T KSM water meter is individually tested over its flow range before despatch. Performance figures for the KSM range meet the requirements of the following:

- Approved by SABS 1529-1:1994.
 - ISO 4064-1.
 - Approval number SA842
- The meter has an approved pulse output and is also approved for both vertical and horizontal installations.

Counter

The combined counter and gear unit is liquid filled and sealed, with a simple straight-reading presentation. The number rollers are totally immersed in a non-toxic liquid which acts as a lubricant. The sac attached to the counter casing acts as a balancing membrane and ensures the pressure of the liquid in the counter is the same as that of the water inside the meter. The counter is placed in a window inside the meter body for easy reading.

Black numerals on white denote cubic meters, white numerals on red denote litres.

Tamperproof

The V110T KSM offers outstanding resistance to illegal tampering. Its unique conical body-half design means it cannot be dismantled while in service and the mechanically-driven counter cannot be interfered with magnetically. An individual serial number is engraved on each body.

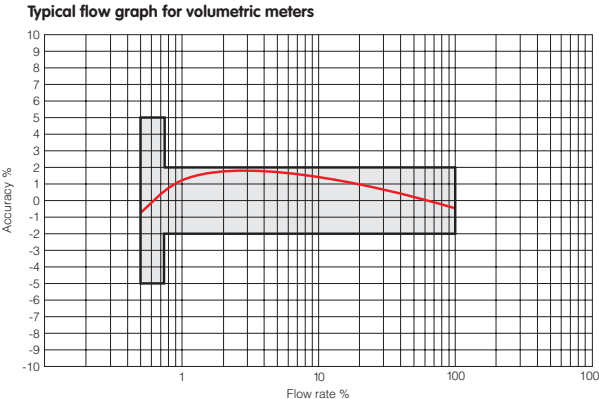
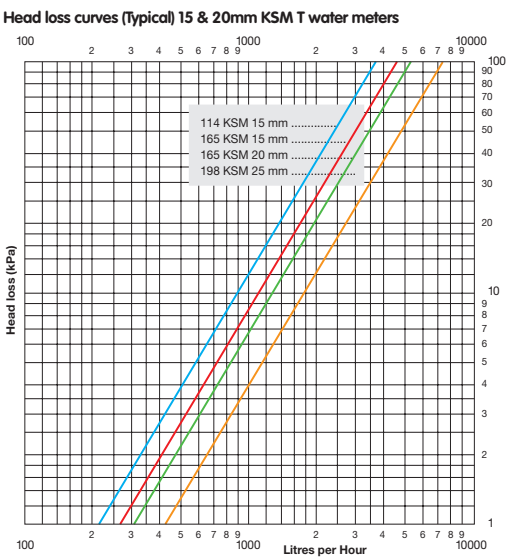
Features

- Pulse output.
- Non-return valve (internal disc-type reverse flow restrictor which reduces the possibility of water being run back illegally).
- Grooved piston (see diagram next page: V130T)

Materials

All meters are manufactured from highest quality materials ensuring maximum resistance to wear and corrosion. A comprehensive technical manual is available.

Meter Specifications	Nominal Size				
	mm	15 (114)	15 (165)	20(165)	25(198)
Maximum flow rate q _s ±2%	m ³ /h	3.0	3.0	5.0	7.0
Permanent flow rate q _p ±2%	m ³ /h	1.5	1.5	2.5	3.5
Transitional flow rate q _t ±2%	l/h	22.5	120	37.5	52.5
Minimum flow rate q _{min} ±5%	l/h	15.0	30.0	25.0	35.0
Starting flow (approximate)	l/h	5.7	5.7	9.5	13.2
Head loss at q _{max}	Refer to graph				
Meter resets to zero at	m ³	10 000	10 000	10 000	10 000
Minimum indicated digit value	m ³	0.00002	0.00002	0.00002	0.00002
Pulse output (litres per pulse)	litre	0.5	0.5	0.5	0.5
Maximum working pressure	kPa	1 600	1 600	1 600	1600
Maximum water temperature	°C	50	50	50	50
Meter length	mm	114	165	165	198
Weight - meter only	gram	433	477	498	662





General Queries

17. How is the ablution? Washing or toilet paper? Don't see either a tap or toilet paper holder.

Toilet paper or similar is used for the most part.

18. We we have power tools on site? Drills, bits, (both concrete and steel type)

Yes, we will have power tools (drill and grinder) at the CPC Hub where the work will be taking place. There will not be any power when the units are installed in the streets. If your Team needs anything specific contact the CPC Organizing Team ASAP so we can check availability.