

Plumbing & Leak detection

Platinum Business Park Unit 40 Taurus Road Brackenfell, 7560 021 200 5887/079 540 1802

info@core-services.co.za

Leak	Detection	Keport	
123			

Date:	19/01/2023
Client:	Leak Detection 5
Number:	021 200 5887
Email:	info@core-services.co.za
Address:	12345 Main Road
	Fresnaye
	Cape Town
Technician:	John Smith + Peter Plumb
Start Time:	14:30 End Time: 15:45
✓ Resident	tial Pool Commercial Other

Client-Site briefing:

Leak detection requested due to visible water damage on the ground floor ceiling, directly below a first floor bathroom shower. Client suspects that the leak is from an extension that was done on the shower rose.

Resultant Damages:

Number of affected areas:

Water damage on the lounge ceiling (Ground Floor)

<u>Area</u>	<u>Item</u>	Test Conducted	<u>Result</u>
Main	Water Meter	Visual	Start Time: 14:45 End Time: 14:51
			Start Read: 57357686
			End Read: 57357693
	Main water Supply line	Gas pressure test	Start Time: 15:03 End Time: 15:08
			Start Read: 3,01 Bar
			End Read: 2,98 Bar
Bathroom No1	Mixer/Rose	Water pressure test	Start Time: 15:16 End Time: 15:17
			Start Read: 2,25 Bar
			End Read: 0,08 Bar
		Thermal imaging	Visible thermal offshoot
Bathroom No2	Mixer/Rose	Water pressure test	Start Time: 15:34 End Time: 15:39
			Start Read: 2,68 Bar
			End Read: 2,70 Bar

Findings:

At the time of our inspection we conducted a visual inspection of the water meter when all points were closed and movement was noted. We conducted a tracer gas pressure test on the main water supply line and an insignificant drop in pressure was noted. There was water visible in the water meter housing and a visual leak identified on the water meter during the water meter inspection, this could be the cause of the drop noted during the pressure test. We conducted a water pressure test on the shower mixer to rose line in the shower above (Bathroom No1) the affected area and a significant drop in pressure was noted. We conducted thermal imaging on the wall between the mixer and the rose and positive thermal offshoot was noted. This is the most probable cause for the water damage below.

Recommendation:

We recommend that the client alert the council in order to repair the leak on the water meter or replace.

We recommend that the area where the thermal offshoot was identified be opened up and the leak be visually identified and repaired.

Please Note: A leak detection investigation is by all means a process of elimination and once a water leak has been found, the identification of any additional leaks would be subject to the repair of the initial leak.

Photograph



Relevant Description

Water meter inspection, movement from:

Time Start:14:45Time End:14:51Read Start:37357686Read End:37357693Movement noted on water meter when all points were closed.Suspected to be caused by visual leak identified at water meter.



Pressure test conducted, drop in pressure from:

Time Start: 15:03 Time End: 15:08

Read Start: 3,01 Bar Read End: 2,98 Bar

Insignificant drop in pressure noted during tracer gas pressure test on the main water supply line. Suspected to be caused by the leak at the water meter.



Pressure test conducted, drop in pressure from:

 Time Start:
 15:03
 Time End:
 15:08

 Read Start:
 3,01 Bar
 Read End:
 2,98 Bar

Significant drop in pressure noted during pressure test conducted on the shower mixer to rose line above the affected area.



38.6 °C

Avg. 38.4 °C

Avg. 38.4 °C

Avg. 38.3 °C

Avg. 38.3 °C

Min. 38.1 °C

Avg. 37.2 °C

Max. 38.3 °C

Min. 36.4 °C

Visual of thermal offshoot identified on the shower mixer to rose supply line.