· High pressure jet drain cleaning
· CCTV inspections
· Thermology camera inspections
· Vaporooter sewer root foaming treatment
· Backflow device testing

Thermology and Inspection Report
For

xxxx Building Services
ATTENTIONxxxxx

ORDER NO: xxxxx
PROPERTY ADDRESS: xxxxxxxx
DATE OF INSPECTION: 14 August 2009

BRIEF:
Investigate leak above lounge room in downstairs of residence.

CONCLUSION:

The water leak into the lounge ceiling on the downstairs level was due to wind driven rain ingressing into timber weatherboard on the western side of the building. The metal roof above is not the cause of the leak and there were no leaks from the bathroom above.

The weatherboards have large gaps at the base of the boards which allows water to be blown in behind the boards causing damage to the plaster ceilings and sidewalls. The base of the window sills in the side of the window are also susceptible to leaks in a severe storm event.

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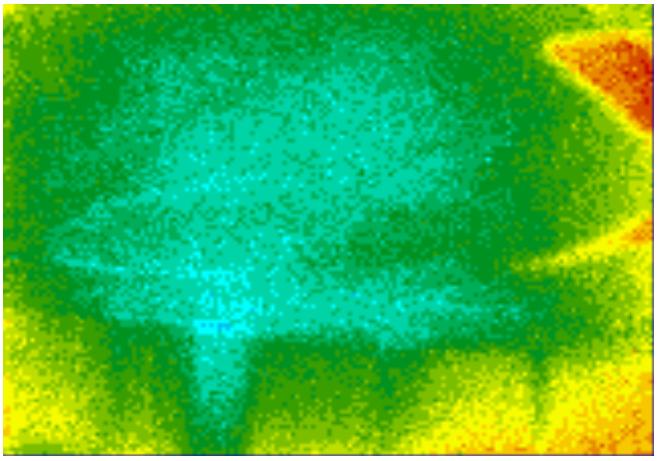
FINDINGS:

This property was inspected with thermal image camera and moisture meter, and the outside of the building was spray tested to identify points of water ingress into the residence. The property is a high-set timber weatherboard house approximately 60 years old.

As per the picture below (picture one) there are water marks on the ceiling in the down stairs lounge room. Directly above the rear is a bathroom that has been previously tested for water leaks by others and nothing has been found. The two holes in the ceiling are drain holes made by the tenants to let water build-up out of the ceiling after the last big rain event.

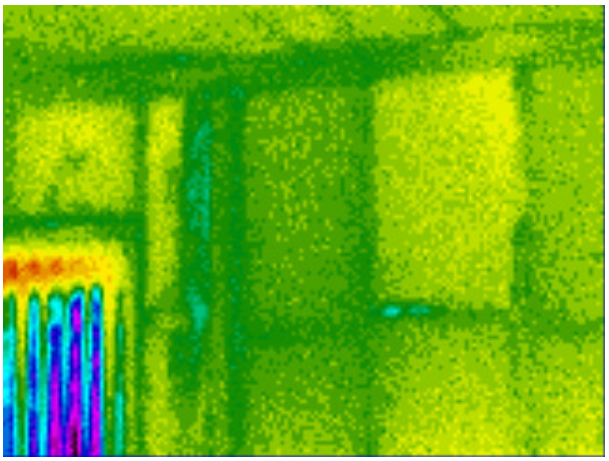
Picture 1 - ceiling of downstairs lounge room



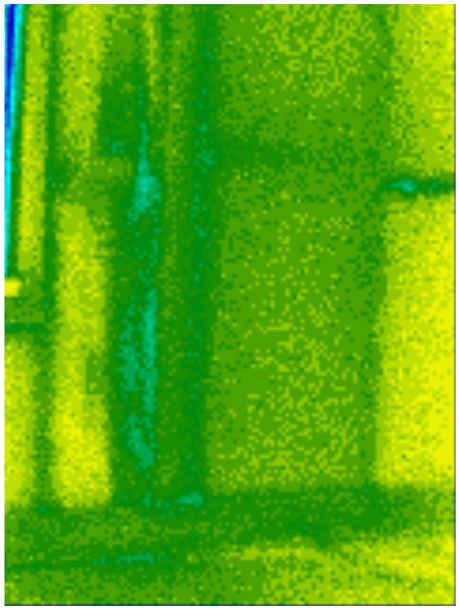
Thermal picture 1 - ceiling of downstairs lounge room

As per the thermal picture above there is no moisture in the ceiling prior to testing. From this we can safely say that there is no water ingress occurring from the bathroom and plumbing above.

Picture 2- side wall of lounge room in the lower-level



Thermal picture 2 - side wall of lounge room after spray testing



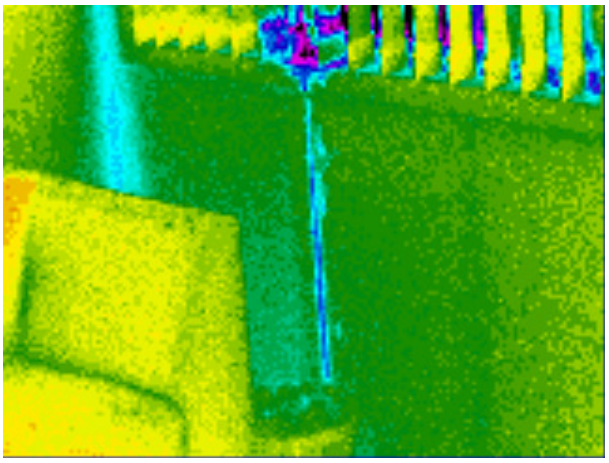
Thermal picture 3 - side wall of lounge room after testing

Picture 3 - external photo of the side wall on western side - the bathroom windows can be seen above the lounge room ceiling area where the damage is.

Picture 4 – western side weatherboard wall

Picture 5 - closer view of western side weatherboard wall

Picture 6 (above) – this shows the many large gaps in the weatherboard where they join; this is also the same around the window sills as shown.



Thermal picture 7 - water ingress at base of window sill after spray testing - this water was dripping from the window head above as you can see.

When the outside western wall was spray tested with water spray, there was significant water ingress in between the weatherboard and the internal plasterboard which shows up in the thermal pictures above.

With the severe weather events that have been occurring, this entire western wall would be well exposed to harsh wind driven rain. The water would track down in the wall where it would have accumulated in the ceiling space causing the water damage.

Picture 7 - downstairs wall of lounge room