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Brackenfell

23 August 2021

EXPERT WITNESS REPORT

This report is for:

Location:

91 Frangipani Street in the Klein Bron Estate in Brackenfell, Cape Town.

Type of Property:

Single Story free standing residential house with boundary walls on 3 sides and open ended at the North Eastern side at the front of the house.

Inspection:

The inspection was done on 23 August 2021 at 12h00 on a sunny weather day.

Method of inspection:

A Visual inspection.

I have used a Moisture meter to determine the presence of dampness.

CREDENTIALS OF THE EXPERT WITNESS

I am a Renovator, Waterproofing and Painting contractor for the last 20 years in the Western Cape.

I have been 18 years in the SANDF where one of my functions was Facility Management in which I was responsible for the planning, budgeting and management of the maintenance of facilities in the SANDF.

I was 5 years a Supervisor for Tsumeb Paint Contractor during which we executed renovations for TCL Mine facilities as well as LTA construction.

MANDATE

This report is based upon a visual inspection of the external and internal repaired, waterproofed and painted work on the property as guided by the contractor quotation as well as the owner complaints as per "DEFENDANTS PLEA" documents and the Jonathan Mitchell's "QUANTIFICATION REPORT".

This report is a personal opinion based on my experience on this field and therefore I do not accept any liability in connection with any errors or omissions in my opinion in this report.

BRIEF ON THE MATTER

I was informed on the background of this matter by Mr Charl Johnsen of Sealtek with regard to the following:

1. That the work was started in September of 2019.
2. That they were on site for a couple of weeks and that about 2 weeks before completion of the contract they were not allowed back onto the site.

The attorney for Mr Johnsen requested an inspection by me to determine if the work was done according to industry standards and procedures and to determine if the quantification and costing of remedial work is fair and reasonable.

The following documents were provided to me by Mr Johnson's Attorney and the owner of the property:

1. Two Quotations with the same number of 190819SC dd 19 August 2019.
2. The DEFENDANTS PLEA that contains the property owner's complaints on the execution of the work.
3. Jonathan W Mitchell inspection report.
4. Jonathan W Mitchell quantification report.

This report is compiled in accordance to the DEFENDANTS PLEA document containing the complaints of the owner. These complaints are then correlated with the specifications in the quotation of Mr Charl Johnsen.

This report follows the complaints per paragraph as in the Defendants Plea.

External Wall cracks:

There are some cracks that appeared on the North Eastern boundary wall.

In general there are four types of cracks that usually appeared on plastered brick work:

1. Structural cracks mostly caused by movement on the foundation caused by the type of soil or tree roots or excavations of sort. This is usually very costly to repair.

The cracks on the North eastern boundary walls could have been caused by the removal of the trees that was next to the wall. The roots of the trees might be rotting and causing the soil to compact and this might have led to movement on the foundation.

2. Then there are also cracks caused by substrate movement in the absence of movement joints.

The cracks that appear on the North eastern Boundary wall between the pier and wall is one of those cracks caused by the absences of and expansion joint. This crack should have been cut open with a grinder and filled with a backing cord and joint filler. It is only with the re-appearance of the crack that it can be identified as a joint.

This is thus also something that is usually covered by warranty or snag list repairs when it re-appears.

3. Dry line cracks that is cracks that runs horizontal on the walls and is caused by the bricklayers when they do not wet the brickwork the next day when continuing laying bricks where they stopped the previous day. These cracks need to be repaired by chasing open the plaster about 5cm on both sides of the crack and then masking the crack with mesh wire and re-plaster. This is cracks that reappears if not repair accordingly.

Unfortunately one only can determine that it is a dry-line crack when it re-appears after a while.

This is usually then repaired as part of warranty repairs or snag list repairs.

4. Plaster cracks.

This is the fine cracks that are only plaster deep and are caused by the drying out of the plaster.

These cracks are the ones that usually causing the different finish on a wall where the filler is very smooth in comparison to the plaster thus causing flat spots on the plaster. The only way to hide this unsightly type of smooth and coarse finishes is to use a textured paint.

These cracks are easily repaired by priming, skim filled with filler, prime and painted. None of these cracks was noticed during my inspection on any of the walls.

External Wall Finishes

The external wall finishes have a stippled effect like any stippled effect wall. One has to use more than one worker to apply paint onto walls. This in itself causes the application to be not similar on all areas all the more with a textured paint. On my inspection the textured paint on the wall look fairly even with only one or two areas with a coarser texture. It does not appear to be unsightly and as mentioned textured paint are usually used to cover up unsightly uneven spots. The severe course spots can be sanded down and smoothed out.

There is no need to re-do all the walls. This is a small remedial task on certain spots with the repainting of that walls from corner to corner.

Waterproofing the walls

The paint applied on the wall is definitely acrylic waterproof paint in the category of Plascon Wall Seal waterproofing paint or Sealtek Hydroflex. If this paint is applied with the Repellum primer or Aquatint primer on vertical surfaces we consider it as waterproofed. All horizontal flat surfaces should be waterproofed with a Membrane added to a waterproofing compound that allows water to pond on the areas.

It is my opinion that the paints that bubbles on the North Easter boundary wall is caused by insufficient waterproofing on the flat horizontal surfaces of the piers and walls. This is work that falls under the guarantee and have to be rectified by the contractor on the snag list or guarantee.

The paint that is flaking at the chimneys are due to unfinished work on the cowls and chimneys. The flaking paint above the braai is due to penetrating water from the top and when fire is made in the braai area the heat will change the moisture in steam which will push the paint from the walls.

The completion of the work on the chimneys will resolve this problem.

Sealing all external windows

All the windows have some sort of elastic sealer between the plaster and frames. The industry standard is to apply a 5mm beading of sealer around the frames. The penetration of water in this area could rather be from damp core around the windows not properly installed during the building of the property.

The windows on the front of the house are sealed with a Sandtex like epoxy sealer that cannot be remove without causing damage to the powder coating of the aluminium windows. The contractor does not know what this sealant was as he said to me it was not something that they applied.

It is my opinion that a flexible sealant should be applied over it in the corners. This will be less unsightly than damage to the powder coat on the aluminium frames. Part of it will still be visible as it was applied over the entire frame.

Painting of the external walls

The paint on all the wall of the house is in a good condition except for the wall where there is still work in progress. This is as I understand one of the areas where they attempting to smooth out the stipple on the wall. The results appear to be good and when finish with the painting of final coats should be acceptable.

The paint of the chimney near at the eastern side of the house will also need to be repaired after the work on the cowl and the waterproofing on top and at the gutters are completed. This is also due to work in progress.

The boundary wall at the pool area where plaster work is in progress still needed to be filled and imperfections repaired. The work on this wall is not completed and is regarded as work in progress.

The boundary wall on the north eastern side where crack and blistering paint appear need to be repaired and waterproofed on the flat horizontal surfaces. This is remedial work for the guarantee or snag list.

With regard to the colour chosen as well as the problem with the stipple in the paint I wonder why the defendant only complaint after most of the property has been painted with the wrong colour and stipple. There should have been ample time to stop the contractor before completing the paintwork. Was this questioned at any time or was it accepted then?

Ceilings

The ceiling was indeed painted with a ceiling paint. They used Duram Endurance Plus paint that is a one coat system similar to the Plascon One Coat Ceiling PVA. The statement in the Plaintiffs quotation to apply Hydroflex on the ceiling must be a mistake as Hydroflex is an External waterproofing paint as applied on the outside on the walls and is not normally applied on ceilings.

There are joints that cracked on the ceiling boards in the passage and one in the open plan that needs to be repaired and the entire ceiling painted thereafter.

The above is also snag list repairs at the end of the completion of the contract.

Roof and ridging

There are several tiles that are damaged where the corner tip of tiles are broken away. The plaintiff only quoted for the repair of cracked tiles and not for the replacement of these broken tiles. This tiles do not pose a waterproofing problem as all tiles are staged with 1/3 overlap on to the next tile. This broken corner falls in the overlap.

The plaintiff quoted for the waterproofing of cracked tiles. Two cracked tiles were found in a valley. This also have no waterproofing problem as a 600mm waterproofing valley flashing is under these tiles in the valleys.

I found the roof and ridging to be sufficiently waterproof as there are no watermarks or damp spots formed since all the rain from September 2019 to August 2021 on the ceiling.

Waterproofing the exposed brickwork underground

When rising damp appears on walls it is one of the methods to stop the rising damp by digging open the foundation and waterproof the area to prevent water penetration and moisture rising up in the wall. These areas are usually very coarse and needs to be plastered to provide a smooth surface to damp seal. Also if damp sealer is applied onto the rough concrete and or brickwork the moisture transfer will still take place along the plaster of the wall above.

The other side of the foundation is covered by the house and no or little water reached that area unless the house is on a slope and an area with a high water table.

This work was execute and therefor accepted as part of the quotation. Why is it now not acceptable?

Structural repairs

Chimneys:

There is work in progress on both chimneys. Both cowls need to be repaired. At both the chimneys the flashings at the gutters still need to be installed. Both chimneys flat surfaces around the cowl base plates needs to be waterproofed. Paint peeling on the braai is due to this incomplete work.

Weep holes:

The weep holes where the contractor worked were closed up and I was unable to determine the problems on them as raised by the defendant. What I can mention is that the weep hole around the house was all open. The weep holes in the front of the house, according to the contractor, was the once they worked on. The weep holes were already there but were closed up. They just have opened them up again.

The installation of weep holes is very important in cavity walls as this allows the ventilation in the walls and prevents the growth of black mould in the cavity. It is building regulation that weep holes should be installed in cavity walls.

Stairs:

I was unable to determine if the foundation of the stairs was substandard. My deduction is that nothing happened to the stair for the last 2 years since it has been build and therefor I accept that the foundation is up to standard.

The stairs do not need to be tied in with the house as long as the foundation is tied in and the brickwork is glued to the house with plaster.

As the stairs is not tiled at the moment the top step is finished with a topping. When the defendant wanted to tile the area the topping should be removed to provide a key for the tile adhesive. According to the contractor, the defendant did not want the steps tiled at the completion of the stairs and therefor it was finished with a topping rather than leaving it with an unsightly finish.

Cowls:

The cowls are not turning at the moment and needs to be repaired. It is work in progress as most of the work on the chimneys still needed to be completed.

Skirting and internal doors

The skirting and doors are painted with what seems to be water base enamel with a satin sheen and not gloss sheen. The cost of these paints is plus minus the same and both are enamels. The only difference is the gloss and semi-gloss finishes. The paintwork was re-done by the defendant and I therefore was unable to determine the paint applied by the contractor.

Boundary wall

The work on the boundary wall at the pool side is indeed incomplete. According to the contractor there need to be permission from the neighbour to work on top of the boundary wall as the wall was their property. The contractor can complete this wall with the permissions provided.

This wall can thus also be regarded as work in progress.

Paving installation

I was provided with photos of progress during the installation of the paving. I am thus unable to report on the completed product.

With my inspection there were a paving installed in a good condition.

Additional work:

Galvanised extractor:

I can confirm that a galvanised flute was installed in the chimney at the pool side.

Painting of Boundary wall:

Photos showed to me show that part of the wall was covered with artificial rock. It therefore was not measured in as part of the original quotation for paintwork. It is later requested to be removed and therefore that part of the wall also needs to be painted and thus measure in as an additional.

Expansion Joints on the Boundary wall at the pool:

I regard all work on this wall as work in progress as the contractor did not complete this wall as some work needed permission from the neighbour.

Building work at the manhole:

This should be rectified to enable the use of the inspection eye.

Plaster work above the sliding door:

This area was completed and painted and therefore I am unable to report on the material used.

As this area poses no problem since 2019 I can find that the material used was suitable for the purpose applied.

SUMMARY

It is my opinion that the problems on the work done is either due to work in progress that needs to be finish off and faults that appears that should be repair as either part of the snag list or under the guarantee as stated in the quotation.

COSTING OF THE REMIDIAL WORK AS REPORTED BY Jonathan W Mitchell

The costing of the remedial work is according to current cost of materials and labour but is not reasonable and fair as it provided for re-doing the entire job from A to Z while the remedial work that still needs to be done as work in progress or under guarantee will at the most be done in two weeks.

(SIGNED)

W.N. SCHLECHTER

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