

## **COMPANY PROFILE AND APPLICATION SPECIFICATION**

PROCOAT PROJECTS is a wholly South African owned concern. The coating system itself, (PERMACOAT), TM ref No.09703694}, is a system of South African ingenuity and was designed by Procoat Projects and top quality coating manufacturer PAINTCOR. This specialised coating manufactured for the company has been S.A.B.S. certified (Test report No. 2151/874058/P616A) and is manufactured in consultation with HOECHST Germany, using the highest quality raw materials. The coating is stain resistant and has an elasticity of over 500%, completely eliminating hairline cracking on all wall surfaces.

PROCOAT PROJECTS has been specialising in painting and coating contracting since 1987. Franz Mostert helps supervise each contract together with their site manager and highly skilled foremen, ensuring that the highest standard of workmanship is maintained at all times. PROCOAT PROJECTS are members of '**THE DAMPPROOFING AND WATERPROOFING ASSOCIATION**' (Membership No.46). We have successfully completed over 600 homes in Gauteng. We are proud to offer our customers a variety of coating systems to suit our individual customer's needs and affordability of which one of the following applications are to be chosen.

### **THESE COATING APPLICATION SYSTEMS ARE:**

#### **PERMACOAT 1. 10 yrs +**

- A) Hydroblast walls.
  - B) Spotprime raw areas with Permacoat primer.
  - C) 3 x coats Permacoat application.
- (Preparation plus 3 coats)**

#### **PERMACOAT 2. 7 yrs +**

- A) Hydroblast walls.
  - B) Spotprime raw areas with Permacoat primer.
  - C) 2 x coats Permacoat application.
- (Preparation plus 2 coats)**

#### **PERMACOAT 3. 4 yrs +**

- A) Hydrowash walls.
  - B) Spotprime raw wall areas with Permacoat primer.
  - C) 1 x Coat of Permacoat
  - D) 1 x Coat of conventional paint.
- (Preparation plus 2 coats)**

PROCOAT PROJECTS OFFER OUR CLIENTS **3 DIFFERENT DAMP PROOFING OPTIONS** TO SUIT OUR CUSTOMERS NEEDS AND AFFORDABILITY. (One of the following may be chosen.)

### **DAMPPROOFING OPTION 1. (6 Months Guarantee)**

1. Chop plaster off wall 1 meter high or 400mm high above the highest point of rising damp to expose bare brick.
2. Mix salt retardant and waterproofing chemical into plaster. Re-plaster wall surface matching existing finish on wall.

## **DAMPPROOFING OPTION 2. (5 Year Guarantee)**

1. Chop plaster off wall 1 meter high or 400mm high above the highest point of rising damp to expose bare brick.
2. Tank bare brick wall surface with S.W.S. Tanking slurry.
3. Mix salt retardant and waterproofing chemical into plaster. Re-plaster wall surface matching existing finish on wall.

## **DAMPPROOFING OPTION 3. (10 Year Guarantee)**

1. Chop plaster off wall 1 meter high or 400mm high above the highest point of rising damp to expose bare brick.
2. Inject artificial Damp proof course into each bare brick horizontally, 1 brick above D.P.C. level and saturate bricks under pressure to create new D.P.C.
3. Tank bare brick wall surface with S.W.S. Tanking slurry.
4. Mix salt retardant and waterproofing chemical into plaster. Re-plaster wall surface matching existing finish on wall.

## **RISING DAMP IN BUILDINGS.**

### **WHAT IS IT? WHY TREAT IT?**

#### **What is rising damp?**

In the most simple terms, rising damp is a condition where moisture from the ground travels up through the pores in the bricks and mortar of a building, much in the same way that oil travels up through the wick of an oil lamp – once rising damp has become established, this moisture can cause problems such as damp patches on walls, peeling paint / wallpaper and eventually plaster falling away from the wall. In the longer term, it will lead to structural damage to the building, if left unchecked.

The symptoms of rising damp can often be confused with the symptoms of other damp problems such as lateral damp and condensation. These types of dampness require different methods of treatment, so it is essential that an expert is consulted to diagnose the type of dampness to be treated.

### **WHY HAS RISING DAMP OCCURRED IN MY HOUSE?**

The problem of rising damp has been known for at least 100 years. Therefore, it has been common building practice for some time to install a damp proof course (DPC) whenever a house is built. In a typical solid floor construction, the DPC usually consists of an impervious barrier around the whole building, set into the mortar bed just above the floor level. This DPC can become ineffective for a number of reasons:

1. The original builder forgot to install a DPC.
2. The original DPC was not positioned correctly.
3. The original DPC has deteriorated due, for example, to house settlement, vibration, from passing traffic, or general land subsidence. This is especially common where a Bitumen DPC has been used.
4. The damp course has been "Bridged" e.g. by earth being piled up against an outside wall.

If the rising damp is to be eliminated, it is essential that the precise cause of the breakdown in the DPC is established. Once again, expert advice should be sought.

### **WHY DO I NEED TO TREAT RISING DAMP?**

Rising damp is usually treated for purely cosmetic reasons, i.e. to remove the obvious symptoms that people can see and smell. However, even when damp is not visible, it would be foolish to ignore its presence, since its long term effects can be costly.

Your home is likely to be your largest ever investment. If left untreated, rising damp can cause structural and cosmetic problems that will adversely affect the value of this investment. The fungal attack often associated with damp can be extremely damaging, especially in older houses with suspended timber floors. In addition, damp timbers are known to be more susceptible to termite attack than dry timbers.

### **ADVERSE HEALTH EFFECTS OF LIVING IN A DAMP BUILDING.**

Rising damp will make a building cold, because heat within the house is absorbed in driving the moisture from the walls. Living in cold and damp conditions is known to exacerbate certain medical conditions such as bronchitis. Where the damp has caused fungi, the problem can be compounded due to bronchial problems caused by fungal spores.

### **HOW SHOULD RISING DAMP BE TREATED?**

All too often, the damp is not taken seriously and the symptoms are merely brushed over with paint or one of the many "WATERPROOFING" plasters on the market. These brush on "SOLUTIONS" may appear to work in the short term, however it should be remembered that they only treat some of the more minor symptoms of damp. Unless the rising damp itself is cured by the installation of a new DPC, it will keep spreading and its symptoms will keep on re-appearing. Only by installing a new DPC will you finally rid yourself of the time and expense of repeatedly treating, "The symptoms of rising damp".

**How do you test damping:** Tests were carried out with the help of an **ELECTRONIC MOISTURE METER.**

**Procoat Projects** recommend the use of the chemical injection system to install a new DPC. Other than the costly and risky process of re-installing a physical DPC, chemical injection is the only method of DPC re-instatement that has stood the test of time. In Europe, chemical injection is by far the most common method used to treat rising damp. It has been used since the 1950's to successfully treat rising damp in millions of homes. The system has been used in South Africa since the early 1970's.

## **SOLUTION TO A PAINT PROBLEM.**

The complete exterior wall surfaces and parapets need to be hydro-blasted with a specialised rotation hydro nozzle. It is of the utmost importance for the walls to be prepared in this manner, as the application of the coating **WILL FAIL** if it is not done correctly.

The hydro blaster finds all the problem paint and contaminated plaster on the exterior wall surfaces and removes that paint and plaster. **MOST IMPORTANTLY, IS THE FACT THAT THE SPECIALISED HYDRO-NOZZEL REMOVES THE TOP FEW MICRONS OF PAINT THAT HAVE BEEN EXPOSED TO THE ULTRA-VIOLET RAYS OF THE SUN.**

## **SOLUTION TO THE DAMP PROBLEM.**

**Stripping off damaged plaster and twice drilling each brick in a line at floor or ground level cures RISING DAMP.** Microsilan is then injected to form an artificial damp proof course. The plaster is replaced with a waterproofed plaster. Below the damp proof course level the wall can be excavated to foundation level and tanked with a waterproof plaster in certain cases. Specialized drainage systems should be installed around the home wall surfaces in extreme cases.

1. Strip old plaster 1 meter high or 400mm high above highest point of damp damage.
2. Drill two 10mm diameter holes in each brick in a continuous line just above ground or paving level, or in the first course above floor level, depending on the circumstances.
3. For single walls  $\frac{3}{4}$  way through each brick, in double walls through the first brick and  $\frac{3}{4}$  of the way into the inner brick.
4. Or  $\frac{3}{4}$  into the outside brick from the outside, and  $\frac{3}{4}$  into the inner brick if it is a cavity wall.
5. Microsilan or Dryzone chemical is injected into the holes with a specialised high-pressure injection machine.
6. Each brick is injected.
7. The holes are then plugged with a waterproof plaster.
8. The wall is then replastered where stripped with a heat generating waterproofing additive in the plaster, which speeds up the drying and waterproofs the walls.
9. After the wall has completely dried out it can be painted.

**LATERAL DAMP** is water penetration through walls because of the use of water absorbent bricks, bad brick jointing, inadequate cement or bad sand in the plaster mix, paint applied before the plaster is dry and use of cheap, inadequate and incorrectly applied paint finishes. The presence of lateral damp is evidenced the same as rising damp, by white efflorescence, damp brown patches, green algae and a deterioration of the plaster and paint coverings.

**N.B. DAMP PROBLEMS "MUST" BE SOLVED IN ORDER TO ENSURE A LONG LASTING PAINT AND COATING FINISH.**