## WHAT IS RISING DAMP?

Rising Damp is a common phenomenon in many masonry buildings causing significant damage to buildings. Moisture containing salt from the ground can rise up the capillaries of masonry building materials such as brick, stone and mortar joints



of walls. Capillary rise is a natural phenomenon which can only be stopped by the introduction of an impermeable horizontal barrier in the base of the wall. This barrier is commonly called a damp-course.

# APPEARANCE OF RISING DAMP

Rising damp occurs in many solid brick and stone houses that have no damp-course or lack an adequate damp-course. Commonly it occurs in most Victorian and Edwardian structures and Californian bungalows. However, rising damp also occurs in many modern brick veneer walls below the floor level where the bricks are not protected by the existing damp-course. Rising damp exhibits as:



- " Peeling & bubbling paint work.
- " Water tide mark or staining.
- " Presence of salt on walls.
- " Flaking plaster & render.
- "Rotting skirting & floor boards.
- " Musty room smells.

#### For External Walls:

- " Fretted brickwork.
- " Water tide mark or staining.
- "Presence of efflorescence or salt.
- " Peeling & bubbling paintwork.
- "Crumbling bricks & missing mortar.







## WHO ARE WE?

Tech-Dry is an innovative manufacturer of sealers and treatments for protection of all kinds of concrete and masonry structures.

## **CONTACT US**

Tech-Dry Building Protection Systems 177-179 Coventry Street South Melbourne - VIC 3205

Phone: 03 9699 8202

Email: info@techdry.com.au



Tech-Dry®



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## DAMP COURSING

A D.I.Y Guide to Rising Damp and Damp Coursing.

## **HOW TO FIX RISING DAMP?**

DPC Cream is an innovative silicone cream formulated as a water-based cream containing 80% active silcone which can effectively form a permanent silicone damp-course within masonry walls. Refer to the following instructions on how to install your DPC Cream damp-course.

## **DPC CREAM USE INSTRUCTIONS**

Drill

Drill

& fill

& fill

STEP 1

Single brick wall

Double brick wall

Double brick wall

with cavity

Floor

level

Floor

Floor

Floor

#### STEP 1

If the damp-course is installed from the inside, carefully remove any skirting boards present to reveal the lowest mortar course just above the floor level.

If outside, locate a mortar joint at a position normally 150mm above ground level, or just above floor level so both sides of the wall are evident.

Mark holes at approx. 80mm apart so that 3 holes should be drilled into the mortar bed of each length of brick of approx. 230 mm. Avoid drilling holes directly above the vertical mortar joints of brick walls.

#### STEP 2:

Set the drilling depth at about 10mm less than the wall thickness. Drill 12mm holes into the mortar bed using a hammer drill.

## STEP 3:

Completely remove the dust from the holes using a vacuum cleaner fit with a proper adapter that can suck the dust from inside of the holes. It is important that NO drill dust is left in the holes!















Mortar & bricks saturated with DPC Cream

#### STEP 4:

Fit the DPC CREAM caulking tube with a nozzle fitted with the attached plastic tube that should be cut to a proper length to suit the wall thickness.

#### STEP 6:

Inject DPC CREAM slowly into each hole using a standard caulking gun. Extend the nozzle of the gun to the rear of the hole and slowly withdraw the nozzle as the cream fills the hole. Make sure holes are filled fully with the cream and avoid any bubbles or hollows when filling.

#### **DPC CREAM CONSUMPTION:**

Each hole should be filled with approximately 12ml of the cream for a single brick wall. Therefore, the consumption of DPC CREAM should be approximately 150ml per metre of single brick wall or 300ml per metre of double brick wall per fill.

#### AFTER CREAM INJECTION:

The cream in the holes may take up to 24 hours or more to be fully absorbed by the mortar bed and the bricks. After the cream is absorbed, there should be a continuous horizontal absorption mark (wet mark) in the treated mortar and bricks above and below the treated mortar bed. If the cream penetration has not reached the mortar in the middle of two holes, a second or more fills with DPC CREAM may be required using the same holes.

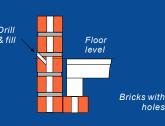
The treated wall may take several

days after the cream is absorbed to become a water repellent barrier (new silicone damp-course). The wall should then be allowed to dry before further renovation is carried out.

#### **FURTHER INFORMATION**

Due to the inherent variation of masonry walls, it is important that the applicator should carry out investigation and perform a trial before application to examine the suitability of DPC CREAM for the purpose.

- For bricks with holes: Drill at a 45° angle into the holes in the bricks. Use the holes in the brick to inject and hold the DPC Cream which will then penetrate into the mortar bed below that brick layer (as shown in the diagram). The amount of cream injected should be equivalent to that of a normal brick wall.
- For masonry with random shapes: As far as practically possible follow the mortar course at the appropriate selected level 80mm apart.





Walls with irregular stones

#### - For walls missing mortar: If

there is too much mortar missing in the mortar bed, inject a thick layer of DPC Cream over the horizontal surface of the bricks at the mortar joint being treated where the mortar is missing.

Some walls in poor condition may not be suitable for DIY DPC Cream damp-course. These walls include: Walls that are too wet (the drill dust generally shows appearance of wet sand); Walls with damaged bricks/stones/mortar due to serious rising damp or weathering. Please call Tech-Dry for further advice.

## **POST TREATMENT**

After the new damp-course is installed, the wall should be allowed to dry for up to 6 months before rendering/plastering/painting is carried out. You may leave the holes in internal walls un-plugged or you may plug them with a cement/sand mortar (1:3) after the damp-course installation. If the wall was previously rendered, it can then be re-rendered. It is important that you use a cement/sand render with cement/sand ratio of 1:3 with a proper salt retarding admixture. Please contact Tech-Dry for further advice.