

1. What is Anti-Termite Treatment in building?

Anti-termite treatment is a chemical procedure carried out for soil, masonry, wood and electrical fixtures to provide the building with a chemical barrier against the subterranean or wood-nesting termites before and after construction.

Site Preparation

1. The trees, stumps, logs, or roots present at the site, which may be harboring the termites, shall be removed.
2. A depth of 75mm surface soil is scarified from the top; the places where penetration of chemical treatment is likely to be slow.
3. In the case of loose and porous or sandy soils where loss of treating solution is more, pre-moistening of the soil is carried out to fill the capillaries is carried out.
4. For treatment in flooring, leveling and grading shall be completed, which must be free from organic debris and should be well compacted.
5. All wood related work equipment such as frameworks, leveling pegs, timber offcuts, or other builder's debris should be removed from the area to be treated.

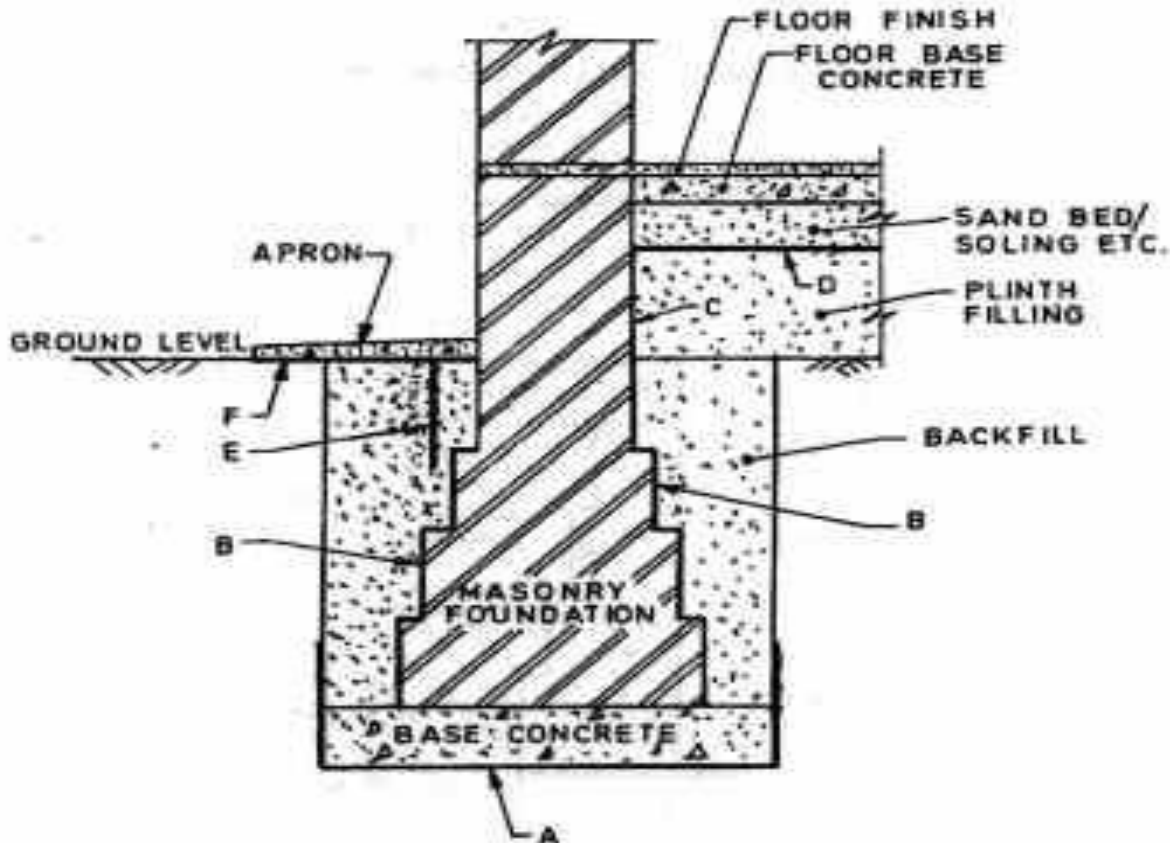
How to do Anti-Termite Treatment in Masonry and RCC

Foundation?

1. The bottom surface and sides (up to about 30 cm) of the excavations carried out for foundation shall be treated with the chemical at the rate of 5 L/m² of surface area.
2. The backfill in immediate contact with the masonry foundation or retaining wall is treated with the chemical at the rate of 7.5 L/m² of the vertical surface of the sub-structure for each side.
3. The earth-fill is done in layers and, the chemical treatment shall be carried out for each layer.
4. The voids in the joints of masonry are the possible entry points into the building for which the treatment is necessary.
5. However, in RCC foundations, there are no such voids for the termites to penetrate.
6. For the RCC foundation, the treatment may be started at 500 mm below ground level.
7. The soil in the immediate contact with RCC shall be treated with 7.5 liters/m² of the chemical, as shown in figure 2.
8. For treatment in flooring, the chemical emulsion at the rate of 5litre/m² shall be treated before laying sand bed or sub-grade.
9. In the case where the surface is hard, and seeping of emulsion does not take place, holes up to 50 mm to 75 mm deep at 150 mm centers both ways may be made with a 12 mm steel rod to facilitate saturation of the soil with chemicals.



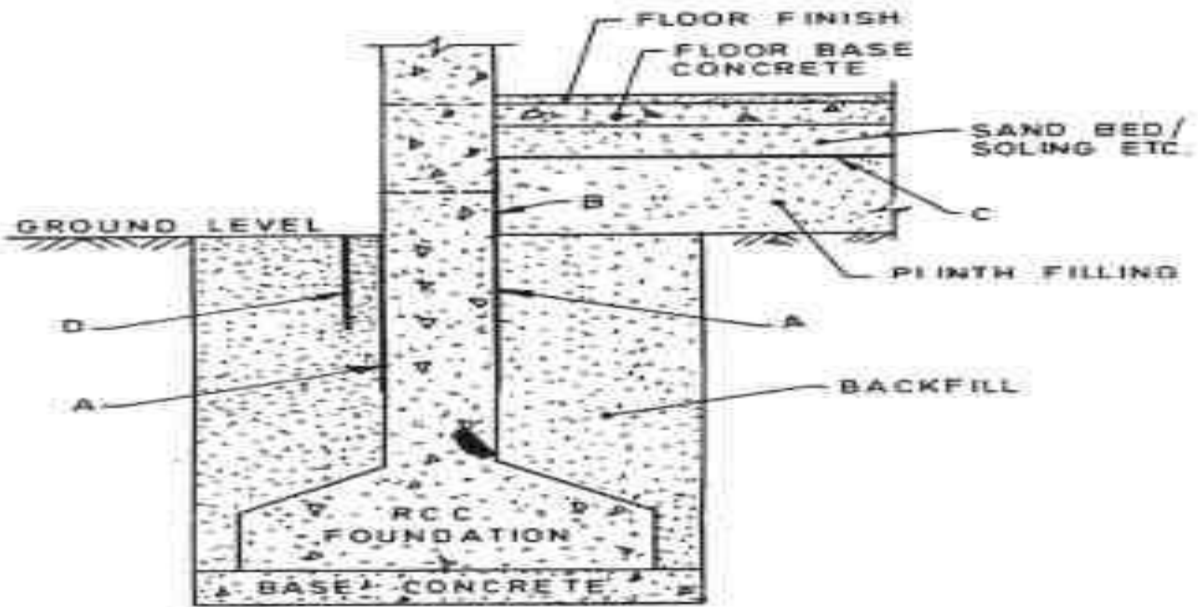
10. After the completion of the building, holes of depth 300mm are dug at intervals of 150mm along the external perimeter of the building and the chemical emulsion is poured along the water at the rate of 7.5litre/m² of the vertical surfaces in contact with the earth.
11. In the event of the filling being more than 300 mm, the external perimeter treatment shall extend to the full depth of filling down to the ground level so as to ensure continuity of the chemical barrier.
12. The treatment for the apron which is placed over the top surface of consolidated earth shall be treated with the chemical emulsion at the rate of 5 liters/m² of the surface before the apron is laid.



Stages of Treatment

- A = Bottom and sides of trenches
- B = Backfill in immediate contact with masonry foundation
- C = Junction of wall and floor
- D = Top surface of plinth filling
- E = External perimeter of building
- F = Soil below apron





Stages of Treatment

- A = Backfill in immediate contact with RCC foundation
- B = Junction of wall and floor
- C = Top surface of plinth filling
- D = External perimeter of building

Anti-Termite Treatment in Other Works

1. Retaining Walls above Ground Level

The retaining walls above the ground level, such as basement walls or outer wall above the floor level needs to be protected by providing a chemical barrier against the entry of termites. The soil retained by the walls shall be treated with the chemical emulsion at the rate of 7.5 liters/m² of the vertical surface in contact with the soil.

2. Underground Pipes and Conduits

The soil in contact with the pipes and conduits in the foundation area must be treated so as to protect it from termites. The soil in connection with the pipes or conduits is loosened for a distance of 150 mm and a depth of 75 mm, and then the treatment should be commenced at the same rate as the foundation soil.



3. Expansion Joints

The expansion joints at ground level are one of the worst hazards for termite infestation. The soil under the expansion joints must be treated with special attention at the time of treatment under the plinth. This treatment should be supplemented by treating the expansion joint once the subgrade is laid at the rate of 2 liters per linear meter.

3. Voids in Masonry

The common entry point of the termites into the building is through the voids in the building. To arrest the movement of termites, squirting chemical emulsion through holes drilled in the wall at the plinth level. The holes with a downward slope of 45° shall be drilled.

5. Wood Work

1. The woodwork, which has been damaged beyond repair, shall be replaced after appropriate treatment.
2. Infested woodwork, which can be used, shall be protected with chemical treatment squirted through inclined holes drilled into the woodwork up to the core, on the unaffected side of the frame.

6. Electrical Fixtures

For the treatment of electrical fixtures, the inside of the enclosures of electrical fixtures shall be treated liberally with **chlordan powder**.

☺ Which are the effective chemicals used for anti-termite treatment?

1. Bifenthrin EC, diluted 20ml in one lit of water
2. Imidachlopride 30.5% SC, diluted 2.1ml in one lit of water
3. Chlorpyrifos 20% EC, 1.0 percent by weight, viz. 50 ml in one lit of water

☺ Which is the best time to carry out the anti-termite treatment?

Anti-termite treatment should start when foundation trenches and pits are ready to take mass concrete in foundations. The treatment should not be carried out when it is raining or when the soil is wet.

