

DESCRIPTION

Invention Title

Riser Tee

Technical Field

- [01] The present invention relates to a pipe connection device. Reference No. TESVILA/RISERTEE/09112022

Background Art

- [02] Water leaking and clogged waste pipes are very common issues that buildings face. The issues affect the following type of users. building owner, plumber, aircon installer, installer, main construction, and waterproofing specialist.
- [03] In the construction stage, the plumber allocates the Riser Tee position and fills the cement to the layer. Before it to prevent the Riser Tee is relocated plumber uses different methods to fix it (1).
- [04] After that, the plumber will spend time drilling holes for the basin and aircon pipe to be mounted into the riser tee (2). Then the construction fills in the cement into the layer. The Riser Tee may be ruptured when the cement started dry and released pressure (3).
- [05] During the waterproofing procedure, the plumber processes the waterproofing membrane on the top of the cement layer and the waterproofing membrane follows the slope leaks into the Riser Tee through the waste pipes (4).
- [06] As the waterproofing procedure ends, waterproofing testing will be the next step. Before it, the top of the Riser Tee hole will be covered by cement. After the waterproofing testing is done. The cement will be cracked and removed. In the meanwhile, the cement debris falls into the Riser Tee through the waste pipes (5), and the waterproofing layer will be damaged by the cement removal action (6).
- [07] Last, the mortar and tile layers will be processed and the debris falls into the Riser Tee through the waste pipes (7).
- [08] The above described are the reasons for pipes choking and water leaking made on the construction stage.
- [09] In the use stage, the water is not only drained out by the floor drain but also penetrated out via the gap of the tile through the waterproofing layer, hereinafter referred to as concealed water. The concealed water keeps stagnation until wears out the waterproofing membrane (8). Also, the water leaks out on the conjunction of the basin and aircon pipe if the plumber did not integrate well in the construction stage.
- [10] The above described are the reasons for water leaking made on the use stage.

Claims

- [11] The present invention designed the 1st tier of a circular ditch on the top of the mouth, the 2nd tier of circular teeth on the top of the mouth, the 3rd tier of a circle in the middle of the Riser Tee, the 4th tier of a circular base on the bottom that provides solutions for the background arts indication and 5th tier of 4 conjunctions for the basin, aircon and others pipe to integrate to the rise tee. Referred to drawing 1 for the front drawing.
- [12] The 1st tier of a circular ditch provides a solution for the clogged waste pipes issue that was made during the construction stage the waterproofing membranes fell from screeding. Referred to paragraph 5, note 4, drawing 2.
- [13] The 2nd tier of circular teeth provides a solution for the clogged waste pipes issue that was made during the construction stage which is holding a pipe and block the mortar fell from screeding and drained out the concealed water. Referred to paragraphs 6 and 7, notes 5 and 7 for the clogged waste issue, paragraphs 6 and 9, notes 6 and 8 for the water leaking issue, and drawing 3.
- [14] The 3rd tier of a circle provides a solution to prevent the cement filling process presses the Riser Tee causing a rupture, also it can block the water leak out. Referred to paragraph 4, note 3, drawing 4.
- [15] The 4th tier of a circular base provides a solution to prevent the cement filling process presses the Riser Tee causing relocation. Referred to paragraph 3, note 1, drawing 5.
- [16] The 5th tier of 4 conjunctions provides a solution for plumbers in the construction stage which they do not need spend time to drilling holes for the basin, aircon, and other pipes to integrate to the rise tee and the integration did not do well and the result in water leaking on the using stage. Referred to paragraph 3, note 2, drawing 6.