



TECHNICAL SPECIFICATIONS

TOKOZ PREMIUM

PLASTIC RAISED FLOATING
FLOOR PEDESTALS
(USED FOR INDOORS AND OUTDOORS)



TOKOZ PLASTIC & BUILDING MATERIALS INTERNATIONAL



1. DEFINITION OF UNIT PRICE

1.1. FLOATING FLOOR PEDESTALS CALLED AS PLASTIC ADJUSTING WEDGE

It is a turnkey price per square meter, including expenses such as any material and losses/damages, workmanship, vehicle, machine, equipment rent and expenses, correction of defective manufacturing and / or removing and re-paving, transportation, vertical and horizontal handling, storage costs and insurance that are required to perform pavement process by using TOKOZ and complementary products in order to attain intended final elevation and eliminate the inclination difference through plastic floating floor pedestals, which producing company (hereinafter referred to as TOKOZ) will supply to have relevant TSE Certificate and are produced suitable for effective TS 13776 Plastic Floating Floor Pedestal Standard in accordance with the principle details and a certified template in locations specified in the attached projects.

MEASURE: Assembled field is calculated according to project and approved attachments.

BRAND: TOKOZ C-F AND / OR TOKOZ T-A SERIES

2. OVERALL

2.1 PURPOSE

This specification describes the fundamentals of “plastic floating floor pedestals used for indoors and outdoors” and includes implementation details. That EMPLOYER/PROJECT MANAGER had approved the implementation details or materials cannot shirk prime contractor’s responsibility for the materials used and manufacturing. Scope of production is outlined below and cannot be limited to these in special cases. This technical specification and its addendum define the purpose of the project and details and the basic principles of work to be done. Including but not limited to those below for complete and perfect manufacturing, all kinds of materials and labor are covered by this specification and are under the responsibility of prime contractor.

2.2 DOCUMENTS RELATED TO PRODUCT

TOKOZ must be produced in conformity with the TS 13776 criteria in force and must have a TSE certificate related to producing company. EMPLOYER’s special terms describe the general principles of doing work subject to specification. In the case that any conflict is between the standards and specification articles, the approval will get from project owner.

2.3 DELIVERIES

2.3.1 Flooring type, application details and place of use will be indicated in manufacturing drawings, which will be prepared by prime contractor in accordance with the projects in the addendum. Materials shall not be delivered to building site before the approval of manufacturing drawings.

2.3.2 Catalog that products show compliance with features attached to the specification and certificates that show compliance with referred standards shall be presented in accordance with the procedures specified in the contract.

2.3.3 A minimum of 50 cm samples containing finishing alternatives, plates and sub-construction of the system and other components shall be presented for approval before the products are delivered to the construction site. Products presented and approved in this manner can be used in the project.

2.3.4 A model application with a minimum of 4 m² sample in total will perform, which illustrates all approaching and corner details in the dimensions and place where a controller deems appropriate for the selected materials. Products can be used in the project after application details are approved.

2.3.5 Relationships with adjacent construction works, approaching details and advices about assembling manufacturer products should also be submitted for approval.



2.4 QUALITY ASSURANCE

2.4.1. All coating materials should be provided from a manufacturer or dealer with at least 5 years successful experience of materials.

2.4.2. Manufacturing projects must be approved before the implementation starts.

2.4.3. It should be a certificate which assert that all materials to be used are provided from responsible sources.

2.4.4. On-site montage should be performed by experienced teams, who have experience in similar projects or will be recommended by the manufacturer.

2.5 DELIVERY, STORAGE AND HANDLING

2.5.1. All kind of vertical and horizontal handling of materials to site and area to be implemented are under PRIME CONTRACTOR's responsibility. Materials will not be damaged during handling and storage and their packaging shall be protected against wetting. Unloading will be performed by hand, and qualified lifting gear, machine and equipment for lifting and assembly will be installed by PRIME CONTRACTOR when needed.

2.5.2. TOKOZ products should be stored in suitable closed area to prevent their cardboard packaging damaging from moisture in the original package and maximal 8 packages should be placed on top of each other.

2.5.3. Utmost attention should be paid to avoid severe or permanent damage during the handling, and unused materials should not be left in the field of application. PRIME CONTRACTOR assumes full responsibility for this.

2.6 WARRANTY

It will be assessed under the general responsibilities of the prime contractor and producing company that are laid down by the contract and the laws, respectively.

2.6.1 Guarantee term in completed manufacturing is as follows:

*Five-years for the materials.

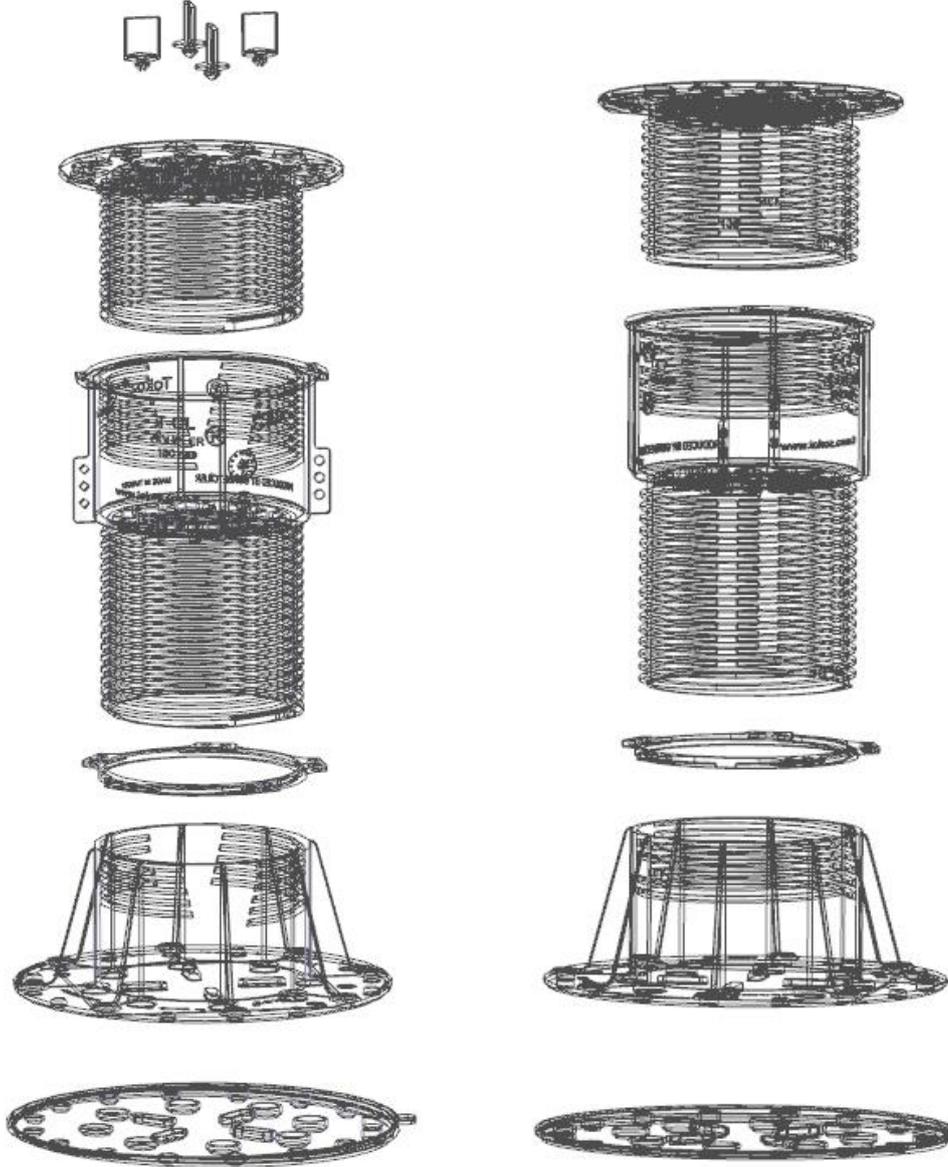
*One-year for the workmanship

Defects that may arise from material and/or implementation flaw/errors will be repaired without charge by PRIME CONTRACTOR within the warranty period. In the same way, they will be renewed free of charge by PRIME CONTRACTOR within the guarantee term whenever necessary.



3. MATERIALS

3.1 MAIN ELEMENTS

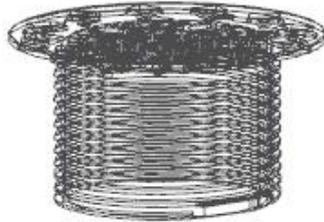


All materials will have the quality and dimensions specified in the project. Unless otherwise indicated, technical specifications presented in the following tables and types of material shown in the details will use in the material selection. All products to be used in the system must be resistant to adverse weather conditions, corrosion and chemicals and be recyclable. The required bearing capacity per each pedestal should be a minimum of 900 kg. Foot system and ancillary products must be polypropylene-based and adjustable between heights ranging from 28 mm to 1080 mm. Fixed elevation products must be 13 mm, 20 mm, 25 mm and 50 mm. Screw will be only used in carcass apparatus placed on void in the middle or on the edge of top basement of TOKOZs in the wood deck connection during installation.



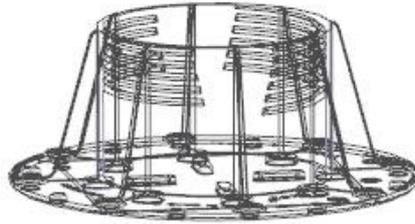
3.1.1 HEAD

Top basement with top plate and cylinder body is a gear system in which a height adjustment can be made, connecting to lower base or elevator through threads. There must be holes that positioning (joint) bars will be mounted on the top surface of topping base in order to use in the applications of coating plates with triangular, pentagonal and hexagonal, as well as rectangular, surfaces. A crack must be in the lowest gear housing to ensure that it does not disjoint from bottom base or coupler.



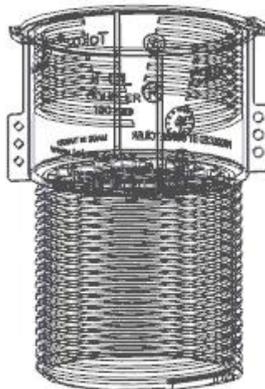
3.1.2 BASE

Bottom basement must be designed in a way that will not damage to the insulation layer on the surfaces coated with insulating materials such as PVC, EPDM, TPO. A slot must be at the top of the cylinder to ensure that it does not disjoint from top basement and coupler (and that will allow to affix gear cracks). The basement plate should be able to fix on the ground through adhered or screwing procedure via holes found on the it if necessary. If the system requires to raise, an elevator should be added to it by dismantling. Pedestal should have holes that enable possible collected liquid and water inside to drain. Orthopedic base pads and inclination corrective wedges must insert between lower base and ground in order to level slopes on the ground off and avoid uneven ground-based vibrations.



3.1.3 COUPLER

Spacer (coupler) will be used in the heights over 181 mm. Elevator should consist of two nested cylinders combined with injection. There must be holes inside the elevator to enable rain water to drain. A crack must be in the lowest gear housing to ensure that it does not disjoint from bottom base or other coupler. A slot must be at the top of the cylinder to ensure that it does not disjoint from top basement and other coupler (and that will allow to affix gear cracks).

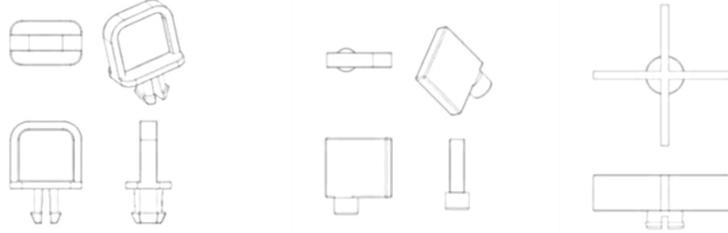




3.1.4 JOINT STRUCTURES

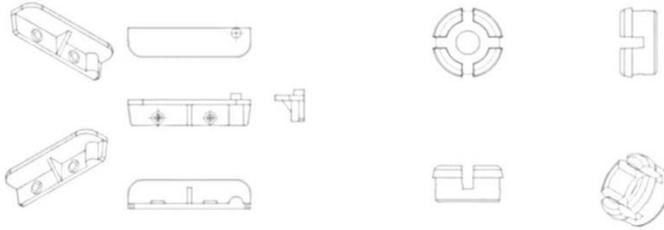
Thickness should be four alternatives in the form of = 2-4-6-8 mm.

It will be used in the areas to be paved. Bars should be able to fasten mechanically in a way that top base, bottom base and coupler will remain together without using another junction piece. Apart from these products, an alternative should also have to a single part of joint apparatus with crosshair and 4 mm-thick.



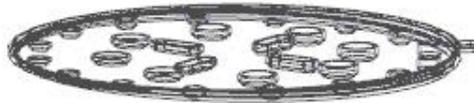
3.1.5 CARCASS FIXING ELEMENTS

It will be used in the areas to be laid wood deck (linear). Carcass fixing elements should be designed in a way that cannot be easily removed by placing in the void on the middle or on the edge of top basement of TOKOZS during the installation. These products should have two different alternatives.



3.1.6 SLOPE CORRECTOR

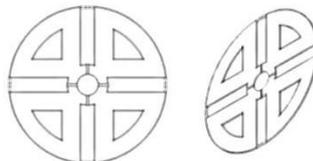
Inclination corrective wedges with different circular slope degrees should be supported bottom basement and, if required, top basement in order to make sure the load is evenly distributed. They should be able to use by placing more than one pieces on top of each other in line with the slope ratio, thus also being able to ensure high slopes to eliminate or reduce.



3.1.7 CALIBRATION ADJUSTMENT SHIMS

Thickness should be two alternatives in the form of = 1-2 mm.

Calibration adjustment seals with different circular thickness should have a quality in a way that will eliminate calibration problems and create an orthopedic surface by inserting between tile pavement and top basement





3.2 AUXILIARY COMPONENTS FOR APPLICATIONS

3.2.1 AUXILIARY COMPONENTS FOR WOOD APPLICATIONS

- 3.2.1.1 Stainless, galvanized or plastic (polypropylene) hidden screwing apparatus
- 3.2.1.2 Stainless screws
- 3.2.1.3 Teak oil or protective paint
- 3.2.1.4 Tile removal apparatus (for tile deck applications)
- 3.2.1.5 Other hand tools necessary for completing the application

3.2.2 AUXILIARY COMPONENTS FOR STONE APPLICATIONS

- 3.2.2.1 Stone removal apparatus
- 3.2.2.2 Other hand tools necessary for completing the application

4. INSPECTION AND PREPARATION

- 4.1. CONTRACTOR shall examine the current situations of areas it will perform an application before it starts to work, and shall do the necessary works to make these areas ready for manufacturing.
- 4.2 It will have a break in relevant applications in lagging areas in cases where weather conditions are unfavorable, and works will suspend until favorable conditions occur after the started work is put under protection. It does not need to suspend the work in the areas to be paved when weather conditions are unfavorable.
- 4.3. It will not damage insulation, waterproofing and other finished manufacturing during the installation. When damaged, relevant parts will be repaired immediately.

5. ASSEMBLY

5.1 GENERAL REQUIREMENTS

- 5.1.1 All products should manufacture in accordance with specification, manufacturer's written statements and manufacturing drawings details.
- 5.1.2 Materials must be brought to the site of construction within their unopened original packages that have label information the relevant standard is described.
- 5.1.3 All kinds of mechanical and electrical installations to be stayed under the raised floor should be placed in line with the foot layout plan. In the event that installation is delayed, installation axles should be marked on the ground one-to-one in the area to which they will apply and afterwards, foot applications should be continued.
- 5.1.4 Points where pedestals will be aligned can be determined with the help of rope on an individual basis.
- 5.1.5 For a slope corrector to use effectively, it must be determined the slope on the ground and the pedestal should be aligned at the desired level in the final elevation.
- 5.1.6 Finished floor elevation should be marked on the side walls and heights of TOKOZ should be controlled continuously according to this elevation during the installation.
- 5.1.7 In order to overcome the calibration problems that may arise in the coating plate, calibration adjustment shims with 1 mm and 2 mm-thick must be used, and care should be taken to use an orthopedic base pad on the uneven ground.
- 5.1.8 Joint structures should be used in a way that will key to the size and shape shown in the drawings in the areas to be paved.
- 5.1.9 Carcass fixing elements will be used in the areas where wood deck flooring will perform.
- 5.1.10 Flooring will start by selecting the longest edge line in general practice and an approval must get from employer or his representative, designer.
- 5.1.11 Defective products should not be used and even if the laying completes, these products detected should be replaced with new ones.
- 5.1.12 After the laying, application areas should be cleaned and should be put under protection if necessary.
- 5.1.13 Final elevation of raised flooring should be established with approval of the project architect, and surface slope should be controlled with rope and gauge throughout the entire application.



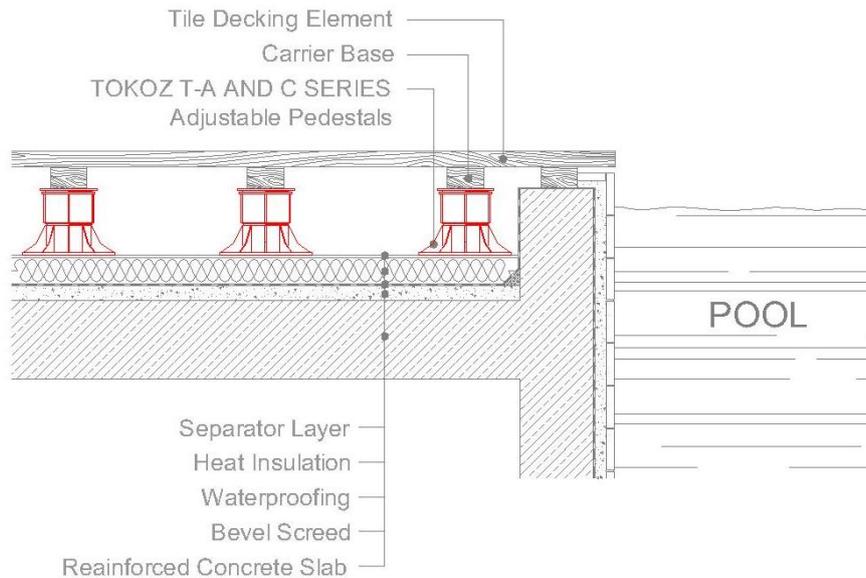
5.2 LATH APPLICATION

Threshold elevations on areas prepared for the application will be marked and completed on all side parapets. A modulation will be determined in a way that can minimize the edge cut and provide a visually saturation by studying on the project, and will submit for PRIME CONTRACTOR' approval. Application can start from any corner. More than one slope apparatus will be placed and used on the top of each other in line with slope ratio. In this way, it will also allow high slopes to eliminate or reduce. Slope apparatus with different circular slope degrees will be placed under the bottom basement and, if required, on top of it. A number of TOKOZ will be established in accordance with calculations compatible with construction and timber frame and lining material dimensions to be used. The frameworks will be placed on the carcass stabilizer found on the top basement of the pedestals but they will be fixed via screw hole with stainless screws before placing. Final coating wood (decks) will be attached to construction and timber frame via stainless screws in the form of top screwing or hidden screwing, by leaving enough joint space.

In case of hidden screwing, grooves will be opened, which are fitted into placing hidden screwing apparatus next to decks and into the desired joint space. Hidden screwing apparatus of product made of polypropylene or stainless metal will be attached decks to construction and timber frame via stainless screws. TOKOZs with variable adjustment height that provide millimetric measure will be selected according to final elevation, and construction and timber frame will be supported with TOKOZs in a way that will reach to the determined final elevation.

Teak oil or protective paint application should not be made in rainy or very hot days.

Floor should well be cleaned with a damp cloth against the dust before application. Teak oil application will be made twice. A flat brush and clean and dry cloth should be sufficient for application. Firstly, first oil layer will be applied to surface with the help of brush. After about a minute, a clean cloth will be again passed through oil applied with brush. Thus, this will enable oil to evenly spread, thereby being absorbed uniformly. During this process, attention should be paid not to be have oil-layer-applied too thick (70 gr/m²). A minimum of 16 hours should be waited between oil-applications. Teak oil or protective paint maintenance should be carried once to twice a year according to the conditions to which wood is exposed. Application details are shown below.





5.3 TILE APPLICATION

Threshold elevations on areas prepared for the application will be marked and completed on all side parapets. A modulation will be determined in a way that can minimize the edge cut and provide a visually saturation by studying on the project, and will submit for PRIME CONTRACTOR' approval. Application can start from any corner. More than one slope apparatus will be placed and used on the top of each other in line with slope ratio. In this way, it will also allow high slopes to eliminate or reduce. Slope apparatus with different circular slope degrees will be placed under the bottom basement and, if required, by centering on top of it. In accordance with calculations compatible with lining material dimensions to be used, TOKOZs will be placed through positioning (joint) lath placed on the middle positioning hole with 90 degrees found on the top basement. Therefore, each corner of paving stone will be placed on one fourth of TOKOZ. For 12 positioning holes found on top basement allow the application to perform with 30 degrees, the holes on the edge will be used for inclined cut.

Calibration differences encountered in the coating material will be eliminated by using 1 to 2 mm-calibration adjusting shims designed to be placed on TOKOZs and shims can also be used in case of need for noise isolation. TOKOZs with variable adjustment height that provide millimetric measure will be selected according to final elevation, which will be captured through setting by raising or lowering the bottom basement and spacer of TOKOZs after placing final elevation flooring stone. Tile application detail is shown below.

