| | TEST REPORT EN 12825:2001 Adjustable Plastic Pedestal | |
|--|--|---|
| Report Reference No. | TCF-06-0331-SAT | |
| Tested by (printed name + signature) | Mary Wu | Mary Wu |
| Approved by (printed name + signature) | Stephan Lu | Stephan Lv |
| Date of issue | Feb 28th, 2021 | |
| Testing Laboratory : | Shanghai MICEZ Equipment Testi | ng & Technical Co., LTD |
| Address | Room 402, Huifeng Business No.(District, Shanghai, China. | 6111 Zhongchun Road, Minhang |
| Testing location/procedure:: | CB TL SMT | TMP |
| Address | As above | |
| Applicant's name | Yixing MTech Plastics Co., Ltd. | |
| Address | No. 155 Renmin Road Nanxin He Province China | eqiao town Yixing city Jiangsu |
| Test specification: | | |
| Standard | EN 12825:2001 | |
| Test procedure | N/A | |
| Procedure deviation | No deviation | |
| Non-standard test method | N/A | |
| Test Report Form No | EN 12825-2A | |
| Master TRF | Dated 2021-02 | |
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| This publication may be reproduced in wh acknowledged as copyright owner and so liability for damages resulting from the re- context. | ource of the material. IECEE takes no re | esponsibility for and will not assume |
| Test item description | Adjustable Plastic Pedestal | |
| Manufacturer | Yixing MTech Plastics Co., Ltd. | |
| Trade Mark | MTech | |
| Model/Type reference | 18-30mm, 30-50mm, 30-60mm, 5 60-140mm, 70-110mm, 110-150n 130-280mm, 140-220mm, 150-31 260-400mm, 290-410mm, 305-51 450-720mm, Self-leveling head, 5 | nm, 110-190mm, 130-210mm, 0mm, 240-320mm, 0mm, 370-520mm, |
| Serial number | | |
| Ratings | N/A | |

| Particulars: test item vs. test requirements | | |
|--|--|--|
| Equipment mobility | : Fixed equipment | |
| Operating condition | : Continuous | |
| Tested for IT power systems | : N/A | |
| IT testing, phase-phase voltage (V) | : N/A | |
| Class of equipment | Class I | |
| Mass of equipment | : | |
| Protection against ingress of water | : N/A | |
| Possible test case verdicts: | | |
| - test case does not apply to the test object | : N/A | |
| - test item does meet the requirement | : P(Pass) | |
| - test item does not meet the requirement | : F(Fail) | |
| Testing | : | |
| Initial Assessment Date | : Feb 23 th , 2021 | |
| Registration Date | : Feb 28 th , 2021 | |
| General remarks: | | |
| This test report is not valid as a CB Test Report u Laboratory and appended to a CB Test Certificate | Inless signed by an approved CB Testing e issued by an NCB in accordance with IECEE 02. | |
| The test results presented in this report relate only to This report shall not be reproduced except in full, wit laboratory. | | |
| "(see Enclosure #)" refers to additional information a | opended to the report. | |
| "(see appended table)" refers to a table appended to the report. | | |

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma (point) is used as the decimal separator.

General product information:

- a) The model is specially used for supportingb) External application

Copy of marking plate and summary of test results (information/comments):

Adjustable Plastic Pedestal MODEL No.: As described above Date: Feb, 2021

MADE IN CHINA

Yixing MTech Plastics Co., Ltd.

Summary of testing :

1. The construction and main component are the same

2. The representative test sample are models described above.

3.All type tests according to this standard have been conducted on the representative test sample

4.All tests were passed.

| | EN 12825 | | |
|--------|---|----------------------------|---------|
| Clause | Requirement – Test | Result - Remark | Verdict |
| 4 | Requirements | | |
| 4.1 | General and load classes | | |
| | The ultimate load is the main criterion for classification. All other load bearing characteristics are related to the ultimate load. | | Pass |
| 4.2 | Loadbearing capacity | | |
| 4.2.1 | General | | |
| | The raised access floor shall be designed and manufactured in such a way that it provides mechanical resistance and stability and that the loading that is liable to act upon it during its intended use will not lead to deformation or collapse. | | Pass |
| 4.2.2 | Static loading requirements | | |
| | The element when subjected to the test procedures as given in 5.2.1 shall meet the following criteria : a) Before the element collapses it shall have withstood the relevant ultimate load for its | It meets the criteria. | Pass |
| | classas given in Table 1; | | |
| | b) When the load applied is equivalent to the working load which is the ultimate load divided by the safety factor, the measured deflection shall not exceed the stated value in accordance to Table 2. | | |
| 4.2.3 | Pedestal vertical load bearing capacity | | |
| | The understructure has to support 4 times the working load of the system tested.The pedestal may not become distorted or damaged.Tests shall be carried out in a ccordance with 5.2.2. | In a ccordance with 5.2.2. | Pass |
| 4.2.4 | Permanent deformation after loading | | |
| | After the application for 30 min of a test load equivalent of the working load at the weakest point of the element, the residual deflection 5 min after the removal of the load shall not exceed 0,5 mm when testing according to 5.4. | Not exceed 0.5mm. | Pass |
| 4.3 | Dynamic loading requirements | | |
| 4.3.1 | Absorption of hard body impacts | | |
| | Where required, the element shall sustain the hard body impact test as described in 5.5.1. This test shall not cause any parts of the element to collapse, requiring that the test result be stated only if the test has been performed. | | Pass |
| 4.3.2 | Absorption of soft body impacts | | |

| | Where required, the element shall sustain the soft body impact test a s described in 5.5.2. This test shall not cause any parts of the element to collapse, requiring that the test result be stated only if the test has been | | Pass |
|------|--|--|------|
| | performed. | | |
| 4.4 | Dimensional deviations | | |
| | The panels of a plastic pedestal shall be manufactured within dimensions that enable their interchangeability. | | Pass |
| 4.5 | Protection against corrosion | | |
| | The element shall comply with European standards, if existing, in respect of protection of metallic materials against corrosion if existing. In the absence of such standards, elements shall comply with requirements valid in the place of use of the product. | Comply with requirements | Pass |
| 4.6 | Peel resistance | | |
| | Where peel resistance is required, the connection to the pedestal shall have a peel resistance more than 0,8 N/mm. The peel resistance shall be determined by the test method in accordance with 5.7. | | Pass |
| 4.7 | Reaction to fire | | |
| | Where required, the plastic pedestal shall be classified for its reaction to fire according to prEN 13501-1. Where the test method permits a representa tive portion of the plastic pedestal to be tested, this shall be done in a ccordance with the provisions of that method (i.e. for the positioning of joints). Where not possible, reaction to fire testing and classifica tion shall be on the basis of the performance of each component and/or material making up the plastic pedestal. In this case, results for the plastic pedestal shall be based on stating the reaction to fire classification of each component and/or material. | According to prEN 13501-1. It was Class E | Pass |
| 4.8 | Resistance to fire | | |
| | Where required, the plastic pedestal shall be classified for its resistance to fire a ccording to prEN 13501-2. | According to prEN 13501-2. It was Class E | Pass |
| 4.9 | Electrostatic conductivity | | |
| | The element shall comply with EN 1081, EN 1815 and HD 384.6.61, where relevant. | | Pass |
| 4.10 | Risk of electrocution | | |
| | The element shall comply with HD 384.5.54, HD 384.4.473, where relevant. | | Pass |
| 4.11 | Acoustic insulation | | |
| | Where required the impact and/or airborne sound insulation of the plastic pedestal shall be tested in a ccordance to EN ISO | | Pass |

| | 140-12. | | |
|---------|---|----------------------------------|------|
| 4.12 | Thermal conductivity | | |
| | Where required, the thermal conductivity shall be determined in accordance to prEN 12524 or by testing to EN 12644 or EN 12667. | | Pass |
| 5 | Test and measurement methods | | |
| 5.1 | General | | |
| | Testing of the element shall be carried out with reference to the requirements as follows: The tests in 5.2, 5.3, 5.4, 5.5, 5.6 and 5.7 shall be carried out at a temperature of (20 \pm 5) ° C and (55 \pm 10) % relative humidity. | 25° C, 65% relative humidity. | Pass |
| 5.2 | Static load | | |
| 5.2.1 | Load test on element | | |
| 5.2.1.1 | Test conditions | | |
| 5.2.1.2 | Principle | | |
| | A steadily increasing load shall be applied to an element until failure of the element occurs. A graph shall be produced showing the deflection of the element against the applied load. | Compliance with the requirement. | Pass |
| 5.2.1.3 | Apparatus | | |
| | A test apparatus in accordance with the layout of Figure 1, together with a deflection measuring device connected to a continuous recording apparatus. | | Pass |
| 5.2.1.4 | Procedure | | |
| | Panels shall be mounted on the particular pedestals as they would be on site. Pedestals shall be adjusted to their maximum permissible height. If stringers are part of the element they shall be included together with any other fixings such a s bolts holding panels to pedestals. If adhesive is used to fix the pedestals to the sub-floors then the test shall not begin until 48 h after the adhesive was first applied. | | Pass |
| 5.2.1.5 | Expression of results and precision of test methods | | |
| | Deflection readings shall be read within a limit of error of $\pm 0,01$ mm and load within an error of ± 1 %. | Compliance with the requirement. | Pass |
| 5.3.1 | Pedestal vertical load test | | |
| 5.3.1.1 | Sampling | | |
| | All parts forming a pedestal shall be taken at random from the actual production. | Compliance with the requirement. | Pass |
| 5.3.1.2 | Preparation and preservation of samples and test pieces | | |
| 5.3.1.3 | Principle | | |

| | A load is applied to determine whether the pedestals meet the requirement defined in 4.2.3. | | Pass |
|---------|---|----------------------------------|------|
| 5.3.1.4 | Apparatus | | |
| | A test apparatus in accordance with Figure 2 shall be used. | Compliance with the requirement. | Pass |
| 5.3.1.5 | Procedure | | |
| | The pedestal base shall be rigidly fastened to a rigid substratum within the test apparatus. Instead of fastening by adhesive or mechanical fixing an appropriate clamping device may be used providing its adequacy is proven by comparative tests and checked at regular intervals. | | Pass |
| 5.4 | Permanent deformation test on element | | |
| 5.4.1 | Sampling | | |
| 5.4.2 | Preparation and preservation of samples and test pieces | | Pass |
| 5.4.3 | Principle | | |
| | This test is carried out using the same apparatus and procedure as test 5.2.1 except the load is not increased beyond the working load point and is held a t that load for 30 min. Residual deformation is measured 5 min after removal of the load. | Compliance with the requirement. | Pass |
| 5.4.4 | Apparatus | | |
| 5.4.5 | Procedure | | |
| | This test is carried out as an extension of the test as described in 5.2.1 using one element only. | | Pass |
| 5.5 | Dynamic Loading | | |
| 5.5.1 | Hard body impact test | | |
| 5.5.1.1 | Sampling | | |
| | One element (and stringers if applicable) has to be sampled at random from the actual production. | | Pass |
| 5.5.1.2 | Preparation and preservation of samples and test pieces | | |
| 5.5.1.3 | Principle | | |
| | To assess whether or not an element withstands a n impact load from a hard body. | | Pass |
| 5.5.1.4 | Apparatus | | |
| 5.5.1.5 | Procedure | | |
| | A steel indentor with a mass of $(4,5 \pm 0,05)$ kg and with a 50 mm hemispherical end shall be dropped inside a guide tube of 55 mm internal diameter onto the test panel from a height of (600 \pm 10) mm onto the following positions: — the centre of the panel and; | | Pass |
| | the centre of one edge of the panel | | |

| | and/or; | | |
|-----------|---|----------------------------------|------|
| | - any other point which is the weakest point | | |
| | of the element. | | |
| | The panel shall not collapse or crack after any impact. | | |
| 5.5.1.6 | Expression of results | | |
| | The result shall be reported as PASS or FAIL depending on whether or not the panel collapses or cracks. Any damage to the panel shall be reported. | Compliance with the requirement. | Pass |
| 5.5.2 | Soft body impact test | | |
| 5.5.2.1 | Sampling | | |
| | One element (and stringers if applicable) has to be sampled at random from the actual production. | | Pass |
| 5.5.2.2 | Preparation and preservation of samples and test pieces | | |
| 5.5.2.3 | Principle | | |
| | To assess whether or not a panel withstands an impact load from a soft body. | | Pass |
| 5.5.2.4 | Apparatus | | |
| | A device in accordance with Figure 4 or equivalent shall be used. | | N/A |
| 5.5.2.4.1 | A flat bottomed canvas bag containing dried sand 2 to 4 mm diameter and having a mass of (40 \pm 0,8) kg. The bag shall be 300 mm maximum in diameter. | | Pass |
| 5.5.2.4.2 | A device for hoisting and instantaneous release of a bag. | | |
| 5.5.2.4.3 | A measuring rod with length equal to the prescribed drop height (1000 \pm 10) mm. | | Pass |
| 5.5.2.5 | Procedure | | |
| | The filled bag shall be dropped on to the test panel from a height of 1 m. | | Pass |
| 5.5.2.6 | Expression of results | | |
| | The result shall be reported as PASS or FAIL depending on whether or not the panel collapses or cracks. Any damage to the panel shall be reported. | | Pass |
| 5.6 | Measurement of dimensions | | |
| 5.6.1 | General | | |
| | Measurements shall be carried out on panels as they are to be supplied to the customer, except that for initial testing procedures the covering (if any) may be omitted (see Table 3), providing it does not contribute to the structural strength of the panel. | | Pass |
| 5.6.2 | Sampling and preparation for dimensional measurement | | |
| | When sampling the measurements shall be ma de on three new panels taken at random | | Pass |

| | from the actual production. | | |
|---------|--|----------------------------------|------|
| 5.6.3 | Length of panel sides | | |
| 5.6.3.1 | Principle | | |
| | Measurements shall be made at the level of the line of contact with adjacent panels. | Compliance with the requirement. | Pass |
| 5.6.3.2 | Apparatus | | |
| | A measuring device in a ccordance with Figure 5 shall be used. The measuring device sha II have a reading accuracy of 0,01 mm. | | Pass |
| 5.6.3.3 | Procedure | | |
| | Zero the dial gauge to the manufacturer's stated size, measured from the transverse stop B1. The panel is put upside down into contact with traverse stops B1, B2 and B3. The four sides of the panel are successively measured. | Compliance with the requirement. | Pass |
| 5.6.3.4 | Expression of results including methods of calculation and precision of the test methods | | |
| | Readings are to be taken to two decimal places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the values given in Table 3. | | Pass |
| 5.6.4 | Squareness of panel | | |
| 5.6.4.1 | Principle | | |
| | Squareness is determined by measuring the length of the deviation from the perpendicular on a reference line. | Compliance with the requirement. | Pass |
| 5.6.4.2 | Apparatus | | |
| | A measuring device in accordance with the layout of Figure 6 shall be used. | | Pass |
| 5.6.4.3 | Procedure | | |
| | Zero the dialgauge C2 to the exact perpendicular established by the transverse stops B.1 and the reference line through B2 and B3. | | Pass |
| 5.6.4.4 | Expression of results including methods of calculation and precision of the test methods | | |
| | Readings are to be taken to two decimal places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the tolerances given in Table 3. | | Pass |
| 5.6.5 | Straightnes s of sides horizontally | | |
| 5.6.5.1 | Principle | | |
| | Straightness is determined by measuring the deviation from a reference line. | | Pass |
| 5.6.5.2 | Apparatus | | |
| | A measuring device in accordance with | | Pass |

| | Figure 7 shall be used. | |
|---------|---|------|
| 5.6.5.3 | Procedure | |
| | Zero the dial gauge C.3 to the reference line passing through B2 and B3. The panel is placed upside down into contact | Pass |
| | with the transverse stops B1, B2 and B3. | |
| 5.6.5.4 | Expression of results including methods of calculation and precision of test methods | |
| | Readings are to be taken to two decimal places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the values given in Table 3. | Pass |
| 5.6.6 | Thicknes s of panel | |
| 5.6.6.1 | Principle | |
| | Thickness is determined by measuring the deviation from the manufacturer's stated value. | Pass |
| 5.6.6.2 | Apparatus | |
| | A measuring device in accordance with Figure 8 shall be used. The measuring device shall have a reading accuracy of 0,01 mm. | Pass |
| 5.6.6.3 | Procedure | |
| 0.0.0.0 | The panel is put upside down on three calibrated blocks A, B and C as shown in Figure 8. | Pass |
| 5.6.6.4 | Expression of results including methods of calculation and precision of test methods | |
| | Readings are to be taken to two decimal places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the values given in Table 3. | Pass |
| 5.6.7 | Panel twist | |
| 5.6.7.1 | Principle | |
| | Panel twist is determined by measuring the movement of the panels at the rocking corner. | Pass |
| 5.6.7.2 | Apparatus | |
| | A measuring device in accordance with Figure 9 shall be used. The measuring device shall have a reading accuracy of 0,01 mm. | Pass |
| 5.6.7.3 | Procedure | |
| | The panel is put upside down on three calibrated blocks A, B and C as shown in Figure 9. | Pass |
| 5.6.7.4 | Expression of results including methods of calculation and precision of test methods | |
| | Readings are to be taken to two decimal | Pass |

| | places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the values given in Table 3. | |
|---------|---|------|
| 5.6.8 | Vertical warping of panels | |
| 5.6.8.1 | Principle | |
| | Vertical warping of panel sides is determined by measuring the deviation of a parallel line between a reference plane and the top surface of a panel. | Pass |
| 5.6.8.2 | Apparatus | |
| | A measuring device in accordance with Figure 10 shall be used. The measuring device shall have a reading | Pass |
| | accuracy of 0,01 mm. | |
| 5.6.8.3 | Procedure | |
| | The panel is put upside down on three calibrated blocks A, B and C as shown in Figure 10. | Pass |
| 5.6.8.4 | Expression of results including methods of calculation and precision of test methods | |
| | Readings are to be taken to two decimal places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the values given in Table 3. | Pass |
| 5.6.9 | Difference in height from perimeter trims to panel surface | Pass |
| 5.6.9.1 | Principle | |
| | Measuring of the difference between the top surface of the panel and the surface of the edge trim. | Pass |
| 5.6.9.2 | Apparatus | |
| | A measuring device in accordance with Figure 11 shall be used. The measuring device shall have a reading accuracy of 0,01 mm. | Pass |
| 5.6.9.3 | Procedure | |
| | The panel is placed topside up on four blocks as shown in Figure 11. | Pass |
| 5.6.9.4 | Expression of results including methods of calculation and precision of test methods | |
| | Readings are to be taken to two decimal places and shall be rounded and recorded to the nearest first decimal place. All measured deviations shall be within the values given in Table 3. | Pass |
| 5.7 | Peel resistance | |
| | To determine the peel resistance, two strips are cut out from the access floor panel each a s shown in Figure 12 and Figure 13. | Pass |
| 6 | Evaluation of conformity | |

| 6.1 | General | | |
|-------|--|----------------------|------|
| | The compliance of a raised access floor with the requirements of this standard and with the stated values (including classes) shall be demonstrated by: initial type testing; factory production control by the manufacturer, including product assessment. | Initial type testing | Pass |
| 6.2 | Type testing | | |
| 6.2.1 | Initial type testing | | |
| | Initial type testing shall be performed on first application of this standard. Tests previously performed in accordance with the provisions of this standard (same product, same characteristic(s), test method, sampling procedure, system of attestation of conformity, etc.) may be taken into account. Whenever a change occurs in the floor design, the raw material or supplier of components, or the production process (subject to the definition of a family, see 6.1), which would change significantly one or more of the stated characteristics, the type test shall be repeated for the appropriate characteristic(s). | Initial type testing | Pass |
| 6.3 | Factory production control (FPC) | | |
| 6.3.1 | General | | |
| | The manufacturer shall establish, document and maintain a FPC-system to ensure that the product placed on the market conforms with the stated performance characteristics. The FPC-system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product. | No this situation. | N/A |
| 6.3.2 | Equipment | | |
| | All weighing, measuring and testing equipment used by the manufacturer shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria. | No this situation. | N/A |
| 6.3.3 | Raw materials and components | | |
| | The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity. | No this situation. | N/A |
| 6.3.4 | Design process | | |
| | If design or calculation has been used, (except where verified by testing), the FPC-system shall | No this situation. | N/A |

| | document the design of products, identify the checking procedure and those individuals responsible for the design. | | |
|-----|---|---|------|
| 7 | Marking , labelling and packaging | | |
| 7.1 | Marking and labelling | | |
| | The following information shall appear on the commercial documents: the manufacturers' trademark or identification mark; the number and year of this European Standard; the year and month of marking; the following characteristics, a s relevant: reaction to fire; resistance to fire; load bearing capacity and deflection; grade of tolerance; safety factor; electrostatic conductivity; impact sound insulation; thermal conductivity; peel resistance; corrosion protection; risk of electroduction; ha rd body impact; soft body impact. The components shall be identifiable so that they can be linked to the element and thereby to the commercial documents. | In according to the requirement it is compliance. | Pass |
| 7.2 | Packaging | | |
| | The packaging shall ensure that the product will be transported and delivered without any damage and shall provide protection against humidity. | In according to the requirement it is compliance. | Pass |

Photographs









