| LABORATORY TEST REPORT | | | | | | |
|--|---|--|--|--|--|--|
| SASO 2655: Sanitary Appliances: General Requirements and methods of test for Plumbing Fixture Fittings. | | | | | | |
| Report No | : | WLR/ECI20/3169/01 | | | | |
| Sample No | : | WS/ECI20/3169/01 | | | | |
| Client Name | : | Moayana Technical Consultancy | | | | |
| Address | : | Amman, Jordan | | | | |
| Testing Laboratory | : | | | | | |
| Address | : | PO Box. 123279, Ras Al Khor II, Dubai- UAE. | | | | |
| Test item Description | : | Shower Head | | | | |
| Manufacturer | : | ZHEJIANG JIUHUAN SANITARY WARE CO., LTD | | | | |
| Brand / Trade Mark | : | Zinth | PRELIMINARY REPORT SUBJECT TO VERIFICATION | | | |
| Model/Type Ref | : | 30192000 | WIMPEY LABORATORIES | | | |
| Country of Origin | : | China | P.O.Box: 123279. DUBAI-U.A.E. | | | |
| Test Standard / Method | : | SASO 2655: Sanitary Appliar test for Plumbing Fixture Fitt | nces: General Requirements and methods of ings. | | | |
| Report Date | : | 20/10/2020 | | | | |
| Test item received | : | 08/10/2020 | | | | |
| Date of Test | : | 10/10/2020 – 20/10/2020 | | | | |
| Tested by | : | SJV, AJC & VVS. | | | | |
| Summary of testing | : | The Below test parameter co Technical Regulation M.A-15 | omplies with the specification of SASO 2655 & 6-16-03-06 | | | |

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RESULTS

Test Environmental ConditionsTemperature (°C): 23 ± 2 Relative Humidity (%) : 50 ± 5



| Clause No. | Requirement – Test | | | | Observation | Verdio | | |
|------------|--|-----------|-----------|-----------|-----------------------------------|------------------------------------|----------|--|
| 4.4 | Threaded | connec | tions | | | | | |
| Descriptio | | scriptior | n Size | | Size | | | |
| 4.4.1 | Pipe Th | read (Sh | nower | | ½ NPT | Comply with standard | Р | |
| | | Head) | | | requirement | | | |
| 4.4.2 | Hose Thre | hee | | | | Comply with standard | Р | |
| 4.4.2 | nose nine | au | | | | requirement | | |
| 4.4.3 | Aerators | | | | | Comply with standard | Р | |
| | Actators | | | | | requirement | | |
| 5.0 | Performance Requirements and Test Procedures | | | | | | | |
| 5.1.1 | Precondit | ioning | | | | | | |
| | Laborat | tory | Labora | boratory | | | | |
| | , Temperature Relativ | | | - | Duration | | | |
| | (°C) | | | | (Hours) | | | |
| | | | | | | Test Specimen accordance with | | |
| | 23 ± 2 50 ± | | | 5 12 | | the laboratory ambient conditions. | Р | |
| | | | | | | | | |
| 5.1.2 | Installatio | on for te | sting | | | | | |
| | Installation for testing | | | | | Installed in accordance with the | Р | |
| | | | | | manufacturer's instructions | F | | |
| 5.2 | Coatings | | | | | | | |
| | | | | | | Surfaces of the coated | | |
| 5.2.1 | General | | | | components free of surface | Р | | |
| 5.2.1 | General | | | | defects and uncoated areas and | | | |
| | | | | | not be stained | | | |
| | | | | | | The coated parts comply with the | | |
| 5.2.2.1 | | | | | performance requirements of | | | |
| | Performa | nce requ | uirements | | Clause 5.2.2.1 after being | Р | | |
| | | | | | subjected to one of the following | | | |
| | | | | | | corrosion tests | | |
| 5.3 | Pressure and temperature | | | | | | | |
| 5.3.1.3 | Procedure with the outlet(s) blocked | | | | | | | |
| | Appli | | | nperature | | | | |
| | Pressure | (kPa) | | °C) | (Min) | | <u> </u> | |
| | Cold | | | | The joints of the fittings no | | | |
| | 140 | 860 | Cold | Hot | 5 Min | The joints of the fittings no | Р | |

| 5.3.5 | Ball Joint Leak | age | | | PRELIMINARY REPORT SUBJECT TO VERIFICATION WIMPEY LABORATORIES P.O.Box: 123279, DUBAI-U.A.E. | | |
|---------|------------------------------------|---------------------|---------------------|---------------------|---|---|--|
| | Applied Pressure (kPa | | mperature °C) | Duration (Min) | | | |
| | 345 | | 38 | 5 | Ball joints of the Shower head No leakages | Ρ | |
| 5.4 | Flow rate | | | | | | |
| | Product | | | | Shower Head | | |
| 5.4.2.3 | Inlet Pressure (Bar) | Trail 1 (L/Min.) | Trail 2 (L/Min.) | Trail 3 (L/Min.) | Avg. Measured Flow Rate (L/Min.) | | |
| | 1.5 | 6.04 | 6.08 | 6.07 | 6.06 | | |
| | 3.0 | 6.12 | 6.15 | 6.10 | 6.12 | Р | |
| | 4.5 | 6.23 | 6.25 | 6.28 | 6.25 | Г | |
| | Average Nominal Flow | | | (L/min.) | 6.14 | | |
| | Water Efficiency Rating | | | | See Table 1 | А | |
| | Product | | | | Hand Shower | | |
| | Inlet Pressure (Bar) | Trail 1 (L/Min.) | Trail 2 (L/Min.) | Trail 3 (L/Min.) | Avg. Measured Flow Rate (L/Min.) | | |
| | 1.5 | 5.52 | 5.55 | 5.59 | 5.55 | | |
| | 3.0 | 5.59 | 6.12 | 6.07 | 5.93 | | |
| | 4.5 | 6.23 | 6.25 | 6.30 | 6.26 | | |
| | Average N | ominal Flow | Rate, Qnom | 5.91 | | | |
| | ١ | Vater Efficie | ncy Rating | See Table 1 | А | | |
| 5.7 | Resistance to installation loading | | | | | | |
| 5.7.2 | Thread torque | strength | | | | | |
| | Thread | size | 3/4 | | | | |
| | Torque (| N.m) | 88 | | No evidence of cracking or separation have occurred | Ρ | |

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| Table 1 | |
|---------|--|
| | |

| Specification of Technical Regulation M.A-156-16-03-06. | | | | |
|---|------------------------------|--|--|--|
| Product Type | Shower Taps, Mixers and head | | | |
| Maximum Flow Rate | 9.5 L/Min. | | | |
| Nominal Flow Rate, Qnom (L/min) | Water Efficiency Rating | | | |
| 9.5 ≥ Qnom > 8.0 | В | | | |
| Qnom ≤ 8.0 | А | | | |

Photograph of Test Object and Marking



WLR/ECI20/3169/01



Possible Test Case Verdicts:

| -test case does not apply to the test object | : | N/A |
|--|---|----------|
| -test case does not conduct to the test object | : | N/C |
| -test object does meet the requirement | : | P (Pass) |
| -test object does not meet the requirement | : | F (Fail) |
| - Water Efficiency Rating/ Grade | : | A/B |

Remarks: The above test parameter complies with the specification of SASO 2655 & Technical Regulation M.A-156-16-03-06

Signed for and on behalf of Wimpey Laboratories

A. Umar Farook Technical Manager

Test results relate only to the samples tested. This report shall not be reproduced except in full, without the written approval of the Laboratory.

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