



<b>IP TEST REPORT</b>	
Report reference number:	MTEx 1446/21.0287
Date Tested:	19/07/2021
Date Report was issued:	23/07/2021
Standards.....:	SANS 60529:2013 "Degree of protection provided by enclosure (IP Code)."
IP rating obtained after testing:	IP55 Category 2
Applicant's Company Name .....	CPS Technologies
Applicant's reference.....:	COD
Device.....:	12U "Swing Frame"
Address.....:	James Cres & Suttie Avenue Halfway House Midrand 1684
General remarks: The test results presented in this Test Report relate only to the item or product tested. <ul style="list-style-type: none"> <li>"(see Attachment #)" refers to additional information appended to this document.</li> <li>"(see appended table)" refers to a table appended to this document.</li> <li>Throughout this document, a point "." is used as the decimal separator.</li> </ul> This report/certificate shall not be reproduced except in full.	

Reviewed by + signature (ExTL):	H. de Wet	
Approved by + signature (ExCB): (MTEx Laboratories Technical Signatory)	D. Young	



## 1. DESCRIPTION OF SAMPLE

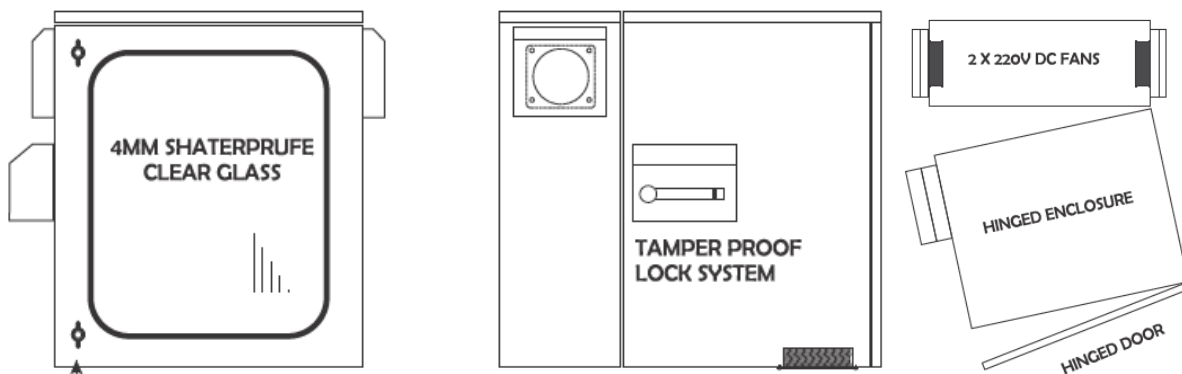
The swing frame enclosure was manufactured by CPS Technologies from 1.2mm mild steel and had a ZN Primer (80 Micron) and RAL 7035 Light grey (80 Micron) finish.

The enclosure had the following approximate dimensions: 649mm (Height) x 563mm (Width) x 670mm (Depth).

The front door had a 4mm shatterproof clear glass window fitted and was closed by means of two 20mm diameter wing nut cam locks.

A tamperproof locking system was fitted to the side of the enclosure to open and close the swing frame part at the back. Foam rubber seals were fitted to the front door and between the main enclosure and swing part at the back.

A microfibre air filter (Model JA1450) was fitted to bottom of the main enclosure, with two fans fitted to each of the two sides of the back swing part for extraction.



## 2. TEST RESULTS AND SETUP :

### SANS 60529: 2013 Ed.1.2

CLAUSE	TEST	RESULT
13.4	Dust test for first characteristic numeral 5 Category 2	
Step 1	Environmental conditions measured: Temp: 17°C, R-humidity: 52%, Pressure: 1015 hPa	
Step 2	Dimensional evaluation: 0.28 m <sup>3</sup>	
Step 3	Test Setup: The enclosure was placed inside the dust chamber in operating position, with the fans switched on during the full 8 hour duration of the test (No vacuum was applied except for the fans).	
Step 4	After testing inspection results: On completion of the test, a small amount of dust was visible inside the enclosure (Not enough dust to impair the working of any equipment fitted inside the enclosure).	
13.5	Special conditions for first characteristic numeral 5 The fans must always remain operational as to not render the report invalid. A filter to be fitted between the fans and enclosure.	





**SANS 60529: 2013 Ed.1.2**

CLAUSE	TEST	RESULT
14.2.5	TEST FOR SECOND CHARACTERISTIC NUMERAL 5 WITH 6.3MM NOZZLE	
	Internal diameter of nozzle: 6.3mm	
	Environmental conditions measured: Temp: 17°C, R-humidity: 52%, Pressure: 1015 hPa	
	Water flow rate: 12.5 l/min ± 5% ; Adjust pressure accordingly: 12.48 l/min	
	Stream: circle of approximately 40mm diameter at 2.5m distance from nozzle	
	Test duration: 1min per square meter of enclosure (3.45m <sup>2</sup> )	
	Minimum test duration: 3min	
	Distance between nozzle and enclosure: 2.5m - 3m	
	After testing inspection results On completion of the test, a small amount of water was visible inside the enclosure (Not enough water to impair the working of any equipment fitted inside the enclosure).	

### 3. CONCLUSION

The sample complied to the requirement of IP55 category 2 as set out in SANS 60529: 2013

### 4. ADDITIONAL NOTES AND RECOMMENDED "BATCH" VERIFICATION TESTING

-  Visually inspect for:
  - all the fasteners to be present
  - all fasteners to be secured
  - sealing o-ring present
-  Dust tank test for 2 hours (Batch tested).
-  IPX5 test (Batch tested).
-  Inspect joints for conformity.

End of Report.