

2024

Inspection of Automatic Sprinkler System

ASIB



Inspection of Automatic Sprinkler System

BE5 DSV East London Industrial
Development Zone

Complete

Client/Site Name

BE5 DSV East London Industrial Development Zone

Billing Address

East London Industrial Development Zone SOC Ltd P O Box 5458
GREENFIELDS
5208

Attention:

Mteteleli Zantsi
Jade Boucher

Document No

UNC.8480

Prepared by

Keith van Onselen

Conducted on

09.05.2024 08:00 SAST

Site Location

East London Industrial
Development Zone
EC
5201
South Africa

Disclaimer

We have pleasure in attaching our inspector's report.

Whilst every care is taken in the preparation of the report which describes the conditions as found, such report is not a guarantee carrying responsibility for results and neither this Company nor any of its employees or agents shall be liable for any loss or damage of whatsoever nature and howsoever caused, (whether by actual or alleged negligence or otherwise), in any way arising out of the acts or omissions of the Company and/or its employees or agents aforesaid.

The report is based upon the visual inspection of the external condition of the equipment where accessible without having to provide scaffolding, ladders, staging, lighting and not requiring the removal or displacement of any temporary or permanent structure, fitting or fixture.

If there are any points arising on which you require clarification, kindly communicate with the undersigned. Assuring you of our best attention at all times.

Confidentiality

In order to maintain the integrity and credibility of the inspection processes and to protect the parties involved, it is understood that the inspectors will not divulge to unauthorized persons any information obtained during this inspection unless legally obligated to do so.

Yours faithfully,

THE AUTOMATIC SPRINKLER INSPECTION BUREAU (PTY) LIMITED



Nico van Loggerenberg
Managing Director

1. Report Summary

THE AUTOMATIC SPRINKLER INSPECTION BUREAU (PTY) LIMITED



REGISTRATION NUMBER: 1970/010833/07

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INDEPENDENT
THIRD PARTY
INSPECTION AND
ADVISORY
SERVICE SINCE
1970

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Code

B - Full Protection, Clearance
Certificate Issued

Please Note:

The Clearance Certificate is issued subject to the items in the report being attended to.

Standard

10th Edition

ASIB Contract No

UNC.8480

Client Order No

ELIDZ SLA
PO-004203

Was the sprinkler system design in order

Yes

Was the water supplies in order

No

Refer to report UNC.9478 conducted on 08/05/2024

Was the pump room in order

Yes

Refer to report UNC.9478 conducted on 08/05/2024

Was the installation control valves in order

No

Refer to Installation Control Valves - Section 7.

Was the storage in order

Yes

Refer to section 8

2. Hand Fire Appliances

Hand Fire Appliances - One unit per 100 m² of floor area.

Hand fire appliances date of the last service:

10/2022

Are the hand fire appliances due for their service.

No

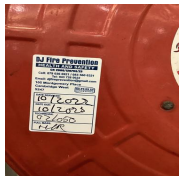


Photo 1

Clear access to the hand fire appliances must be maintained at all times.

3. Occupancy & Storage Guidance

Percentage Hazard.

% Ordinary Hazard

20
From 0 to 100

% High Hazard

80
From 0 to 100

Stack height signs not less than 500 mm by 500 mm in size must be prominently displayed at the maximum level of the allowable storage height in all storage and process risk areas.

Occupancy / Process Risk

Occupancy/Risk

Occupancy/Risk 1

► **Ordinary Hazard / High Hazard**

High Hazard

► **Select Occupancy / Process Risk**

Storage Risk

Where goods of differing categories are stored within the same area, it is the stack height limitations of the goods with the highest category that will apply.

► **Product Stored**

Automotive Components Plastic in Polystyrene Boxes Encapsulated

Category

CAT III

Storage

Method

Method 1

Storage Method

Free Standing / Block Storage

Design Density (mm)

10,0 mm/min

Roof Height (m)

10

Storage Height (m)

3,5

Method 2	
Storage Method	Beam Pallet Racking
Design Density (mm)	10,0 mm/min
Roof Height (m)	10
Storage Height (m)	
2,6	

4. Sprinkler System Design

Building

Building 1

Building Name

BE5 / BE6 DSV East London Industrial Development Zone

Date of First Inspection

Unknown

Original Installer

Unknown

Extension By

NA

Building Area m²

6456

Height of Building in meters

10

Sprinkler Detail

Area

Area 1

► Area & Type of Sprinklers

Roof Sprinklers

Ceiling Sprinklers

Canopy Sprinklers

Number of Sprinklers

1000

Calculations

Hydraulic Calculations

Area of Operation

Area of Operation 1

► **Area of Operation**

Pump Duty

Flows & Pressures

7500 l/min @ 960 kPa

Area of Operation 2

► **Area of Operation**

Roof & Rack Most Remote Area
of Operation

Flows & Pressures

4490 l/min @ 735 kPa

Area of Operation 3

► **Area of Operation**

Roof & Rack Most Favourable
Area of Operation

Flows & Pressures

4470 l/min @ 695 kPa

5. Water Supplies

► Water Stored on Site.

Yes

Refer to report UNC9478 ASP Pump House dated 08/05/2024

Add Water Storage Tanks

6. Pump Room

Pump Installed on Site

Yes

Refer to report UNC9478 ASP Pump House dated 08/05/2024

Add Pump House

7. Installation Control Valve(s)

7.1 Sprinkler control valves accessible

Yes

Valve Cabinet

Valve Cabinet 1

Location:

East wall



Photo 2

Number of Alarm Valves Installed

2 x 150 mm, 1 x 100 mm

7.2 Sprinkler Valve Location Plate Installed

Yes

7.3 Fire Brigade Booster Pressure Limitation Plate

Yes

7.4 Block Plan Installed

Yes

7.4.1 Is the block plan labelled in accordance with the areas fed by the sprinkler control valve assemblies

Yes

7.4.2 Are the correct installation details recorded on the block plan

Yes



Photo 3

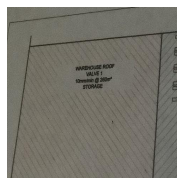


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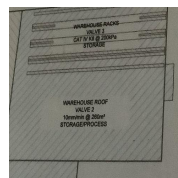


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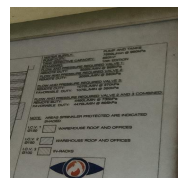


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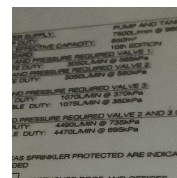


Photo 7

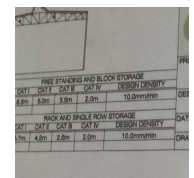


Photo 8

7.5 Sprinkler Valve Instruction Chart

No

A weatherproof valve instruction chart that relates specifically to the control valve assembly installed, (not a generic instruction chart) shall be mounted on a wall within the control valve cabinet or if the valves are internally located, as close to these as possible.

7.6 Is a sprinkler spares box present

Yes

7.6.1 Was the spares box contents accessible

Yes

7.6.2 Are the spares quantities correct

Yes

7.7 By Pass Arrangement Installed

No

It is recommended a valve bypass assembly be provided at each installation control valve. This allows the alarm valve to be overhauled without isolating the system and prevents wastage of water.

7.8 Fire Brigade Booster Connections Installed Correctly and Accessible

No



Photo 9

Installations must be fitted with fire brigade booster connections which will enable the fire brigade to pump water into the installation using their own equipment.

It appears that the booster connection piping to the main distribution riser is too long, which may restrict the opening of the booster plunger into the main distribution riser, this will prevent effective boosting of the sprinkler system and must be revised.

☒

7.9 Are the Installation Control Valves Housed within an Approved Valve Cabinet

Yes

Sprinkler protection is required within the valve cabinet

☒

7.10 Flow Switch Installed Correctly

Yes

7.11 Manifold Correctly Supported

Yes

7.12 Riser Mains Correctly Supported

No

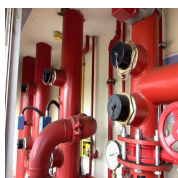


Photo 10

The riser main must be properly supported in accordance with the rules.

7.13 Riser Mains Externally Located

No

7.14 Flow Measuring Device Installed.

Yes



Photo 11



Photo 12



Photo 13

Flow Test Results	Pass
Recorded Flow and Pressure	4500 l/min @ 1050 kPa
7.15 Correct Pressure Gauges Installed	Yes
7.16 Correct Gauge Cocks Installed	Yes
7.17 Flanges Short Bolted	No
7.18 Loose / Missing Bolts, Nuts & Washers	No
7.19 False Alarm Prevention Pump Installed	N/A
7.20 Drain & Test Pipes Installed Correctly	Yes
<p>7.21 Weekly tests of the installation control valves alarm bell must be carried out with the alarms sounding for at least thirty seconds.</p> <p>All water pressure gauge readings must be checked and recorded.</p> <p>The testing and records should be carried out by a member of staff delegated to do this.</p>	
7.22 Trunk Main Pressure (kPa)	
1100	
7.23 Installation Pressure (kPa)	
1200	
7.24 ASIB Overhaul Date Tag No	Yes
Last Overhaul Date	
11/2021	
Next Overhaul Date	
11/2024	
7.25 Alarm Motor & Gong Test	Passed
7.26 Are All Valves in the Correct Positions	Yes

7.27 Are All Valves Secured

Yes

Non Compliance - Items

Item

Item 1

Non Compliance Items

► Description

Other

The flow test arrangement must be installed as per the manufacturers specifications

Recommendation Items

8. Storage

Are the required clearances being maintained.

Yes

Are the storage heights exceeded.

No

At the time of inspection the storage heights were being adhered to and found to be in order.

Issue

Issue 1

- Warehouse
The idle pallets stored within the warehouse must be removed, the roof installation is not designed to achieve the required densities, in the event of a fire the system will be overwhelmed and rendered useless.



Photo 14

9. Sprinkler System

Sprinkler System

Area

Area 1

Specified Area.

External Canopies

System Issue

Issue

Issue 1

Finding

Other

Specify Other.



Corrosion is evident on the sprinkler pipe work and must be addressed by your installer.

Location of Finding.

External canopies



Photo 15

Area 2

Specified Area.

Warehouse

BE5

System Issue

Issue

Issue 1

Finding

Sprinkler Heads

Sprinklers installed beneath open cell surfaces / translucent



sheeting.

All sprinklers located beneath open celled floors or stairwells and translucent sheeting must have approved water shields fitted above the sprinklers.

Location of Finding.

At roof where applicable

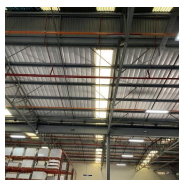


Photo 16

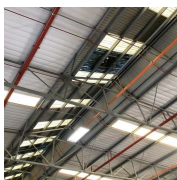


Photo 17

Issue 2

Finding

Partial Protection /
Communicating Areas

Portion of premises sprinkler protected with communicating sections that are not.



Partial protection can lead to a fire originating in the protected area radiating heat into the unprotected portion of the premises and starting secondary fires. The heat from these fires radiates or spreads back into the protected area causing excessive sprinkler operation.

Conversely, a fire originating in the unprotected portion will radiate heat or spread into the protected portion rapidly causing unnecessary sprinkler operation and overwhelming the sprinkler system installed.

Location of Finding.

G Brooks office



Photo 18

Issue 3

Finding

Pipe Support

The sprinkler pipe work must be correctly supported.



Pipe work must be supported independently from the composite panel, and the dry dropper must not be attached to the fabric of the cold room with mastic or insulating material that permanently bonds the dropper to the refrigerated structure.
In the event of collapse of the cold room, the cold room material must drop away from the sprinkler system.

Location of Finding.

Back offices



Photo 19

10. Proof of Inspection

Proof of inspection.


For and on behalf of client:



Camagwini Ngxokolo-Nomatye
20.06.2024 12:40 SAST

Proof of inspection.

ASIB Inspector:



Keith van Onselen
20.06.2024 12:41 SAST

WARNING

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The primary function of the ASIB is to protect the interests of the end user and as a result, we constantly update the list of registered suppliers and installing companies.

These companies have proven that they are capable of installing, extending and servicing fire sprinkler systems to the correct standards.

We have had occasion to remove companies for valid reasons which are not confidential and include, but are not limited to, poor workmanship, design, fabrication, incorrect advice, lack of skilled staff, fraudulent quotations and financial instability.

It is important to note that if a company is not listed with the ASIB and carries out work on a sprinkler system we will not be in a position to issue a Clearance Certificate for the premises which, in turn, may place you at risk.

In selecting your service provider, it is important to appreciate that the ASIB is not seeking to infer that a non-listed service provider is necessarily not capable of offering the required service to an appropriate standard. What the ASIB is saying, is that the ASIB is not in a position to give you the assurance that a non-listed provider concerned has demonstrated that it complies with the ASIB standards. In addition, because the ASIB is unable to fully inspect an installation (which by its nature has many inaccessible components), you will appreciate that the ASIB is also unfortunately not in a position to issue a Clearance Certificate in relation to an installation done by a non-listed company.

We advise you to check the listing status of the service provider you choose especially if there is any uncertainty.

You can access our website at <http://www.asib.co.za> which is current or phone our offices at 011 642 1703 for verification.

Email:

Email: 1

Recipient

Mteteleli@elidz.co.za

Email: 2

Recipient

camagwini@elidz.co.za

Media summary

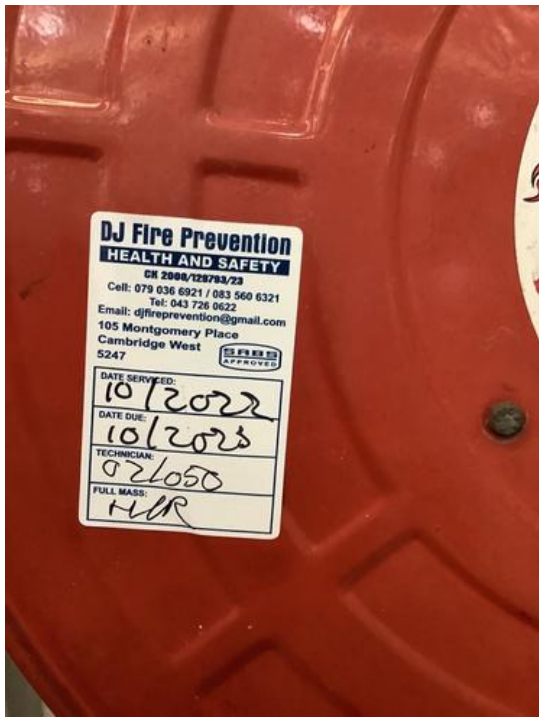


Photo 1



Photo 2

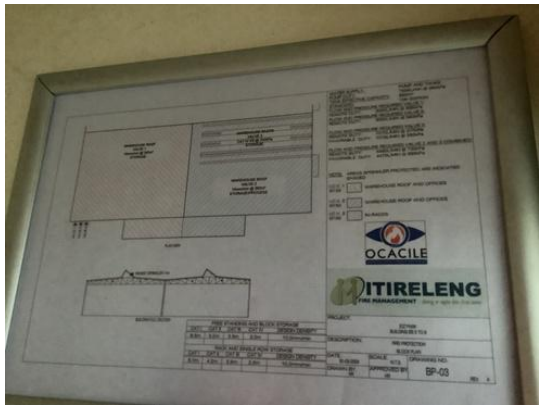


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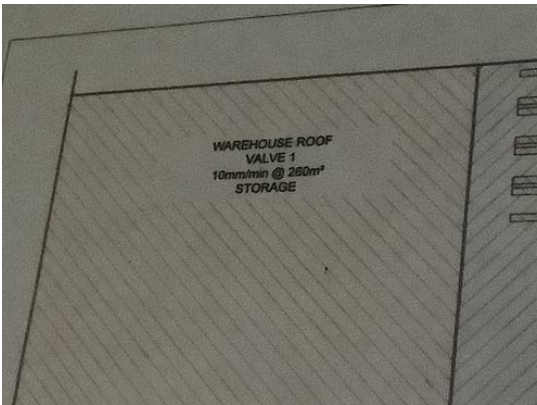


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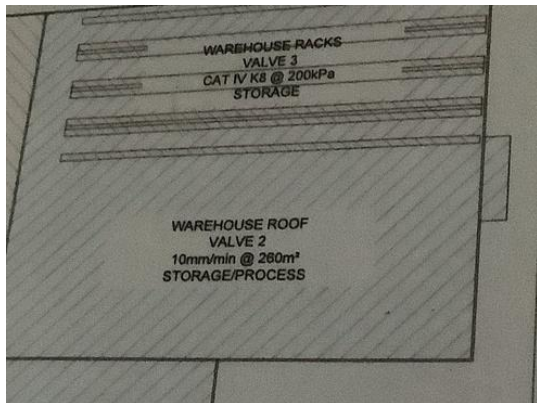


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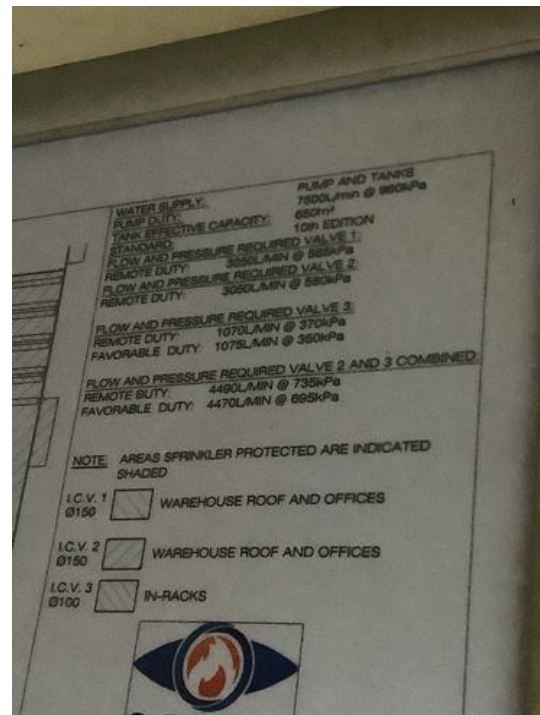


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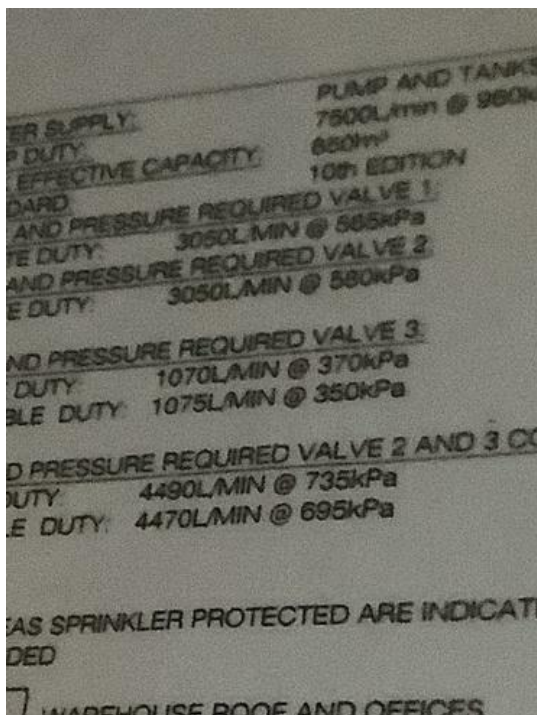


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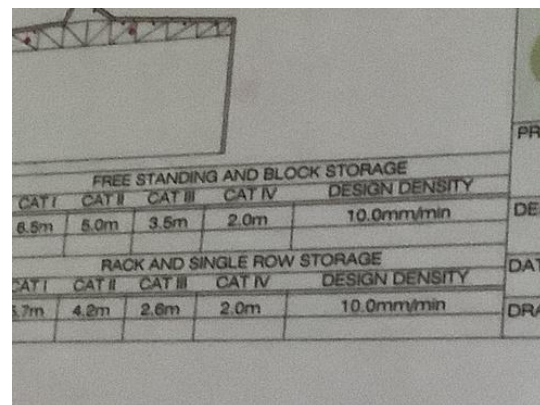


Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15

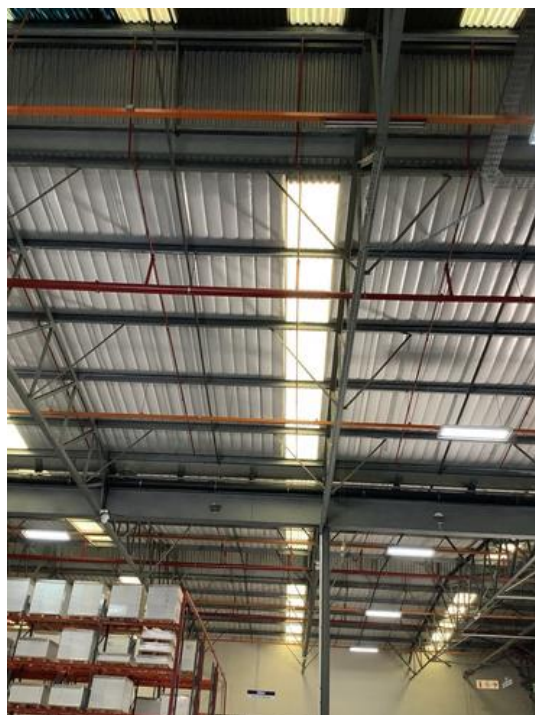


Photo 16



Photo 17



Photo 18



Photo 19