

2022

# Inspection of Automatic Sprinkler System

**ASIB**



## Inspection of Automatic Sprinkler System

Fire Suppression Solutions - Automould - ELIDZ -  
East London

Complete

### Client/Site Name

Fire Suppression Solutions - Automould - ELIDZ - East London

### Billing Address

Fire Suppression Solutions

### Attention:

Aiden Kilian

### Document No

UNC.8484

### Prepared by

Keith van Onselen

### Conducted on

18.10.2022 12:37 SAST

Automould (New warehouse  
extension)

### Site Location

Erf 60912

ELIDZ

East Londo

## 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

1407 IMBALI  
CNR LOUIS BOTHA AND  
TUDHOPE AVENUES  
BEREA  
JOHANNESBURG  
2198

TELEPHONE: +27 11 642 1703  
FACSIMILE: +27 11 642 1019  
E-MAIL: [asib@asib.co.za](mailto:asib@asib.co.za)  
WEB SITE: [www.asib.co.za](http://www.asib.co.za)

P O BOX 3139  
HOUGHTON  
2041

INDEPENDENT  
THIRD PARTY  
INSPECTION AND  
ADVISORY  
SERVICE SINCE  
1970

© 1970 - 2022 AUTOMATIC SPRINKLER INSPECTION BUREAU ALL RIGHTS RESERVED

#### First Inspection ☒

Fire Suppression Solutions

##### Code

C - Full Protection, Clearance  
Certificate not Issued

1st inspection- extension to existing

Compliance for a sprinkler extension inspection such as this is never issued. The compliance level of the sites overall inspection applies as per it's relevant certificate.

Clearance certificate withheld due to the following:

#### Water Supplies - See Report ☒

#### Storage - See Report ☒

##### Standard

10th Edition

#### ASIB Contract No

UNC.8484

#### Client Order No

Fire Suppression Solutions

#### Was the sprinkler system design in order

No

The block plan must be updated to indicate all the relevant design requirements

#### Was the water supplies in order

No

Refer to Water Supplies - Section 5.  
Tanks are not full and both infill valves were found in the closed position

#### Was the pump room in order

No

Refer to Pump Room - Section 6.

---

**Was the installation control valves in order**

No

Refer to Installation Control Valves - Section 7.

---

**Was the storage in order**

No

- Refer to Occupancy & Storage Guidance - Section 3.

- Refer to Storage - Section 8.

---

## 2. Hand Fire Appliances

Hand Fire Appliances - One unit per 100 m<sup>2</sup> of floor area.

**Hand fire appliances date of the last service:**

08/2022

**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**

**0**  
From 0 to 100

**% High Hazard**

**100**  
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**

Plastic injection moulded automotive parts

**Category**

CAT III

Storage

**Method**

#### Method 1

**Storage Method**

Free Standing / Block Storage

**Design Density (mm)**

15 mm/min

**Roof Height (m)**

12

**Storage Height (m)**

4,7

#### Method 2

**Storage Method**

Shelving

<b>Design Density (mm)</b>	15 mm/min
<b>Roof Height (m)</b>	12
<b>Storage Height (m)</b>	3,7
<b>The foregoing stack height limitations for racks and/or shelves refer to those areas where intermediate sprinkler protection has not been installed.</b>	<input checked="" type="checkbox"/>



#### 4. Sprinkler System Design

### Building

#### Building 1

##### Building Name

Automold Extension East London Industrial Development Zone

##### Date of First Inspection

August 2021

##### Original Installer

Fire Sprinkler Installations

##### Extension By

Fire Sprinkler Installations

##### Building Area m<sup>2</sup>

1720

##### Height of Building in meters

12

Sprinkler Detail

##### Area

##### Area 1

##### ► Area & Type of Sprinklers

Roof Sprinklers

Canopy Sprinklers

##### Number of Sprinklers

218

##### Calculations

Hydraulic Calculations

##### Area of Operation

##### Area of Operation 1

► Area of Operation	Pump Duty
Flows & Pressures	
9000 l/min @ 1000 kPa	
Area of Operation 2	
► Area of Operation	Roof Most Remote Area of Operation
Flows & Pressures	
6307 l/min @ 476 kPa	
Area of Operation 3	
► Area of Operation	Roof Most Favourable Area of Operation
Flows & Pressures	
5616 l/min @ 313 kPa	
<b>Additional Sprinkler System Designs Required</b>	Yes
The block plan must be updated to indicate all the relevant design requirements	
The following documentation is required and must be submitted to the ASIB	
As the majority of the required documentation for the sprinkler system has yet to be submitted, we are unable to comment on the accuracy of the design.	

## 5. Water Supplies

### Town Main - Flow Test Results

#### Town Main Diameter (mm)

100

#### Street / Road

Umsimbithi Road  
East London

#### Flow Recorded in Flow Test (l/min)

In excess of 1100 l/min

#### ► Water Stored on Site.

Yes

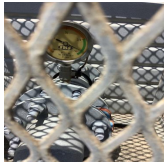


Photo 2



Photo 3

Add Water Storage Tanks

### Storage Tanks

#### Storage Tanks 1

#### Water Storage Tanks (Specify)

Pumped Water Supply - Suction  
Tanks

#### 5.1 Inspection Hatches Accessible

Yes

#### 5.2 Tank Infill

Recorded

#### Infill Rate (l/min)

In excess of 1100 l/min

#### 5.3 Tank Information Plate Installed

Yes



Photo 4

Tank Detail

**Name of Supplier**

SBS Tanks

**Name of Installer**

SBS Tanks

**► 50% or 100% Sub-Divided**

50% Sub-Divided

**► Tank Type**

Bladder

**Dimensions Circular**

9,86m x 8,34m high

**Vortex Inhibitor**

Yes

**Gross Storage Capacity (m<sup>3</sup>)**

574 x 2 = 1148

The value engraved on the information plate appears to be incorrect. This must be corrected

**Effective Storage Capacity (m<sup>3</sup>)**

The value engraved on the information plate appears to be incorrect. This must be corrected

**Dead Water (mm)**

To be determined

**Freeboard (mm)**

To be determined

**Dedicated or Combined Tank**

Dedicated

**5.4 Foundation Type**

Separate

**Flexible Coupling Installed on Suction Line**

Yes

**5.5 Infill Valves Accessible**

Yes

**5.6 Suction Isolating Valves Secured in the Open Position**

No



Photo 5

**5.7 Tank Suction Piping Correctly Supported**

No

**5.8 Infill Isolating Valves Secured in the Open Position.**

No



Photo 6



Photo 7

**5.9 Drain valves secured in the Closed Position.**

No



Photo 8

**5.10 Flanges / Equipment Short Bolted**

Yes



Photo 9

We recommend that the bolts for these flanges be removed and replaced with the correctly sized bolts so as to ensure that at least two full thread pitches past the chamfer protrude beyond the nut.

**5.11 Loose / Missing Bolts, Nuts & Washers**

No

Non - Compliance

**Item****Item 1****► Description**

Other

There is a leak in the test line return pipe

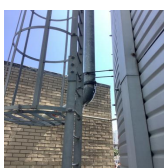


Photo 10

## Item 2

### ► Description

The inspection hatches are not accessible from the external ladder. The external ladders to the roof of the water tanks must be re-positioned so it is not necessary to walk across the roof to gain access to the inspection hatches.

## Item 3

### ► Description

Other

- The minimum tank infill diameter must be 100mm, it is recommended that the infill be rectified by your installer.



Photo 11

Recommendation

## 6. Pump Room

### Pump Installed on Site

Yes

Add Pump House

## Pump House

### Pump House 1

#### Pump House Location

Umsimbithi Road



Photo 12

#### 6.1 Pump House Signage

##### 6.1.1 Pump House External Signage

Yes

##### 6.1.2 Electrical DB Labeled

Yes

##### 6.1.3 Jockey Control Panel Labeled

Yes

##### 6.1.4 Diesel / Electric Pump Control Panel Labeled

Yes

##### 6.1.5 Annunciator Panel Labeled

Yes

##### 6.1.6 Pump House Remote Test Labeled

Yes

##### 6.1.7 Auto Start Test Arrangement Instruction Chart Installed

Yes

##### 6.1.8 Block Plan Installed - Correct Details

No



Photo 13

It is recommended that a block plan be provided with the following indicated thereon:

Particulars of the water supplies.

The occupancy of each building.

The hazard class of the system.

The extent of the protection.

The calculated flow and pressure requirements (remote and favorable areas) of the system.

A cross-section of the full height of the building or buildings indicating the height of the highest sprinkler with respect to a stated datum level.

#### 12th Edition Requirement

The flows and pressures for the remote and favorable areas of operation recorded on the block plans must reflect the maximum pressure (Pmax) and the maximum flow (Qmax) respectively.

#### 6.1.9 Diesel Engine Stop Lever Labeled

Yes

#### 6.1.10 Isolating Valves Correctly Labeled

No



Photo 14

It is recommended all isolating valves be labeled "Normally Open" or "Normally Closed".

#### 6.2 Pump House Equipment

##### 6.2.1 Electric Light Installed

Yes

##### 6.2.2 Natural Light Installed

Recommendation

Sufficient natural lighting is recommended, where the pump house is located above ground. Access doors are not acceptable for providing natural lighting.

##### 6.2.3 Mechanical Ventilation Installed

Yes

##### 6.2.4 Hour Meters Installed

Yes

##### 6.2.5 Correct Pressure Gauges Installed

Yes

##### 6.2.6 Correct Suction Pressure Gauge Installed.

Yes

##### 6.2.7 Correct Gauge Cocks Installed

No

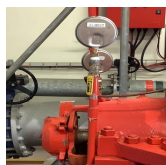


Photo 15



Photo 16

All pressure gauges fitted to a sprinkler system shall be fitted with an isolating gauge cock with bleed to be able to confirm gauge operation back to zero and enable each pressure gauge to be readily removed without interruption of the installation water supplies.

##### 6.2.8 Specify Flow Measuring Device.

Orifice Plate

Details on Orifice Plate



**Test Line (mm)**

150

**Duty Specified**

9000 l/min @ 1000 kPa

**K Factor**

6363.842

**Pressure Differential (kPa)**

200

**Orifice Diameter (mm)**

103.60

**6.2.9 Flanges / Equipment Short Bolted**

Yes



Photo 17



Photo 18

We recommend that the bolts for these flanges be removed and replaced with the correctly sized bolts so as to ensure that at least two full thread pitches past the chamfer protrude beyond the nut.

**6.2.10 Loose / Missing Bolts, Nuts & Washers**

No

**6.2.11 Electrical cables positioned 300mm above the finished floor level.**

Yes

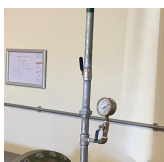
**6.2.12 Correct operating temperature sprinklers installed within the pump house.**

Yes

**6.3 Auto Start Test Arrangement****6.3.1 Auto Start Correctly Piped and Supported**

No

It was noted that an isolating valve is fitted on the supply pipe to the auto start test arrangement. This is not desirable as shutting this valve, will prevent the pump(s) from starting. This valve must be removed.



**6.3.2 Auto Start Diaphragm Valves Operational**

Yes

## 6.3.3 Pressure Switch 1 - Jockey Pump (90% of Churn Pressure)

**Cut-In Pressure (kPa)**

700

**Cut-Out Pressure (kPa)**

800

## 6.3.4 Pressure Switch

**Switch****Switch 1****► Primary or Secondary Pump**

Primary Pump

**► Specify Diesel or Electric**

Electric

Pressure Switch - Electric Motor

**Cut-In Pressure (kPa)**

580

**Switch 2****► Primary or Secondary Pump**

Secondary Pump

**► Specify Diesel or Electric**

Diesel

Pressure Switch - Diesel Primary

**Cut-In Pressure (kPa)**

500

Pressure Switch - Diesel Backup (Not  $\leq$  50 kPa Below Switch 1 - Not  $\geq$  20 Below Switch 1)**Cut-In Pressure (kPa)**

510

**The pressure switch settings are incorrect and must be set in accordance with the churn pressure.****6.4 Pumped Water Supply - Jockey Pump**

## Hour Meter

906:49

### 6.4.1 Jockey Pump Correctly Piped

Yes

### 6.4.2 Jockey Pump Test

Passed

Add Pump

## Pump

### Pump 1

#### ► Pump Type

Electric

### 6.8 Pumped Water Supply - Electric Motor Driven Pump

#### ► Primary or Secondary Pump

Primary Pump

### 6.8.1 ASIB Approval No

Yes

#### ASIB Approval Number Motor

2516

#### ASIB Approval Number Pump

2516

## Flow Q (m<sup>3</sup>)

9000 l/min

## Head (m)

1000 kPa

## Impeller Diameter (mm)

543

### 6.8.2 Electric Motor Make and Model

CMG Marat 355M/L-4 B3

### 6.8.3 ASIB Prime Mover Date Tag No

Yes

#### 6.8.3.1 ASIB Prime Mover Overhaul Date Tag No

0141530

#### 6.8.3.2 Last Service Date

07/12/2021

### 6.8.3.3 Next Service Date

07/12/2022

Service Overdue

No

### 6.8.4 Pump Make and Model

SPP Thrustream 200/58 B

### 6.8.5 ASIB Pump Overhaul Date Tag No

Yes

#### 6.8.5.1 ASIB Pump Overhaul Date Tag No

0141450

#### 6.8.5.2 Last Overhaul Date

07/12/2021

#### 6.8.5.3 Next Overhaul Date

07/12/2022

Service Overdue

No

### 6.8.6 Suction Pressure (kPa)

Gauge is faulty. This must be addressed by your installer



Photo 20

### 6.8.7 Base Grouted In

Yes

### 6.8.8 Base Painted

Yes

### 6.8.9 Delivery Piping Correctly Supported

Yes

### 6.8.10 Suction Piping Correctly Supported




No



Photo 21

It is recommended that additional support be provided on the pump suction line as close to the pump casing as possible. This is to ensure that there is no strain on the pump casing. If strain is present, it results in axial loading which in turn places excessive wear on the pump resulting in eventual or premature failure. It has been found that some pump and suction alignments have placed excessive strain on the volute of the pump resulting in poor performance.



6.8.11 Eccentric Reducer Piped Correctly	Yes
6.8.12 Cooling Line Correctly Aligned and Supported	Yes
6.8.13 Sight Glass Clean	Yes
6.8.14 Flexible Coupling Correctly Installed	Yes
6.8.15 Glands Condition	O.K.
6.9 Electric Motor Driven Pump - Test	
6.9.1 Panel Lamp Test	O.K.
6.9.2 Hour Meter Before Test.	
50:90	
6.9.3 Emergency Start - Button Depressed	Motor Started
6.9.4 Test - Button Depressed	Motor Started
6.9.5 Churn Pressure (kPa)	
1020	
6.9.6 Flow Test Recorded	
9000 l/min @ 1000 kPa	
<div>    </div> <div> <span>Photo 22</span> <span>Photo 23</span> <span>Photo 24</span> </div>	
6.9.7 Pump Flow Test	Passed
6.9.8 Hour Meter After Test	
50:97	

The Electric motor driven pump must be tested for at least 10 minutes every week in accordance

with the minimum requirements.

#### 6.10 Electric Motor Driven Pump Alarms

##### 6.10.1 Siren Alarm

Failed - See Report

##### 6.10.2 Flashing Light

Failed - See Report

#### Pump 2

##### ► Pump Type

Diesel

#### 6.5 Pumped Water Supply - Diesel Engine Driven Pump

##### ► Primary or Secondary Pump

Secondary Pump

##### 6.5.1 ASIB Approval No

Yes

##### ASIB Pump Set Approval Number

2515

##### 6.5.2 Diesel Tank Level

3/4



Photo 25

##### 6.5.3 Diesel Tank Bunded

Yes

##### 6.5.4 Spare Fuel Kept on Site

No

This tank must be kept full at all times and sufficient fuel for an additional six hours running time, (on full load) must be kept within on site.

##### 6.5.5 ASIB Prime Mover Date Tag No

Yes

##### 6.5.5.1 ASIB Prime Mover Overhaul Date Tag No


0141527

##### 6.5.5.2 Last Service Date

07/12/2021

##### 6.5.5.3 Next Service Date

07/12/2022

<b>Service Overdue</b>	No
<b>6.5.6 Pump Make and Model</b>	
SPP Thrustream 200/48	
<b>6.5.7 ASIB Pump Overhaul Date Tag No</b>	Yes
<b>6.5.7.1 ASIB Pump Overhaul Date Tag No</b>	
0141447	
<b>6.5.7.2 Last Overhaul Date</b>	
07/12/2021	
<b>6.5.7.3 Next Overhaul Date</b>	
07/12/2022	
<b>Service Overdue</b>	No
<b>6.5.8 Flow</b>	
9000 l/min	
<b>6.5.9 Diesel Engine Make and Model</b>	
Kirloskar 6SL8800TA	
<b>6.5.10 Head / Pressure</b>	
1000	
<b>6.5.11 Impeller Diameter (mm)</b>	
461	
<b>6.5.12 Suction Pressure (kPa)</b>	
45	
<b>6.5.13 Base Grouted In</b>	Yes
<b>6.5.14 Base Plate Grouting Painted</b>	Yes
<b>6.5.15 Delivery Piping Correctly Supported</b>	No
	

**6.5.16 Suction Piping Correctly Supported**

No



Photo 28

**6.5.17 Eccentric Reducer Piped Correctly**

Yes

**6.5.18 Correct Fuel Lines**

Yes

**6.5.19 Oil Level**

O.K.

**6.5.20 Batteries Installed on Stillage**

Yes

**6.5.21 Batteries Locked**

No



Photo 29

**6.5.22 Water Level (Heat Exchanger)**

O.K.

**6.5.23 Exhaust Correctly Supported**

Yes

**6.5.24 Exhaust Alignment**

Horizontal

**6.5.25 Exhaust Lagged**

Yes

**6.5.26 Sprinkler Protection  $\geq$  800mm From Exhaust**

Yes

**6.5.27 Cooling Line Correctly Aligned and Supported**

Yes

**6.5.28 Sight Glass Clean**

Yes

**6.5.29 Flexible Coupling Correctly Installed**

Yes

**6.5.30 Glands Condition**

Requires Attention

**Excessive flow****6.6 Diesel Engine Driven Pump - Test****6.6.1 Panel Lamp Test**

O.K.



## 6.6.2 Hour Meter Before Test

22:90

### 6.6.3 Test - Button Depressed

Engine Started

### 6.6.4 Battery 1 - Button Depressed

Engine Started

### 6.6.5 Battery 2 - Button Depressed

Engine Started

### 6.6.6 Battery 1 & 2 - Button Depressed

Engine Started

### 6.6.7 RPM Recorded

2000

### 6.6.8 Churn Pressure (kPa)

1000

### 6.6.9 Flow Test Recorded

9000 l/min @ 800 kPa



Photo 30



Photo 31

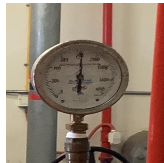


Photo 32

### 6.6.10 Pump Flow Test

Failed

### 6.6.11 Hour Meter After Test

23:00

The diesel engine driven pump must be tested for at least 30 minutes every week in accordance with the minimum requirements.

## 6.7 Diesel Engine Driven Pump - Alarms

### 6.7.1 Siren Alarm

Failed - See Report

### 6.7.2 Flashing Light

Failed - See Report

### 6.7.3 Abortive Start Test Successful

Failed

During the abortive start test the diesel engine will attempt to start six times, (six cycles). Each of these cycles alternates the batteries. The sequence is fifteen seconds cranking followed by six seconds rest before the next cycle starts alternating the battery. After the sixth attempt, the pump fail light will be indicated on the diesel engine control panel and a double tone alarm will sound.

This must be investigated by your installer and revised to achieve the correct sequence.

#### 6.7.4 Abortive Start - Number of Cranks

7  
From 0 to 9

#### 6.7.5 Abortive Start - Intermittent Siren

Failed - See Report

#### 6.7.6 Abortive Start - Flashing Light

Failed - See Report

#### 6.11 Pump House Alarms

##### 6.11.1 Power Failure - Electrical Isolator - Alarm Bell

Sounded

##### 6.11.2 Power Failure - Electrical Isolator - Flashing Light

Failed - See Report

##### 6.11.3 Pump House Protection - Terminal Test Valve Opened

Operated

#### Non - Compliance Items:

##### • Item

##### • Item 1

##### ► Description

Other

A hanger supporting the remote test line has come adrift

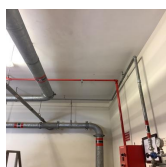


Photo 33

##### • Item 2

##### ► Description

The suction line inclines slightly towards the pump.

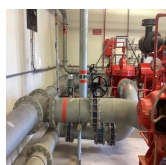


Photo 34

##### • Item 3

► **Description**

Foundation bolts have been passed through lugs that have been welded to the base plate for the pump set base frame. The bolts should pass through the purpose made holes in the pump set base frame. The stability of the pump set checked by your installer



Photo 35



Photo 36

Recommendations

## 7. Installation Control Valve(s)

### 7.1 Sprinkler control valves accessible

Yes

## Valve Cabinet

### Valve Cabinet 1

#### Location:

Loading yard



Photo 37



Photo 38



Photo 39

### Number of Alarm Valves Installed

2 x 150mm the right side valve feeds the new section

### 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

No



Photo 40



Photo 41

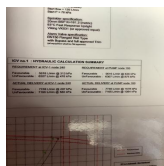


Photo 42

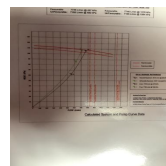


Photo 43

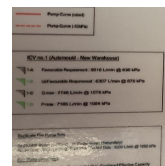


Photo 44

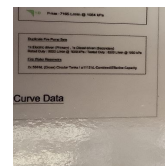


Photo 45

A block plan must be provided with the following indicated thereon:

Particulars of the water supplies.

The occupancy of each building.



The hazard class of the system.

The extent of the protection.

The calculated flow and pressure requirement of the system.

A cross-section of the full height of the building or buildings indicating the height of the highest sprinkler with respect to a stated datum level.

The flows and pressures for the remote and favorable areas of operation recorded on the block plans must reflect the maximum pressure (Pmax) and the maximum flow (Qmax) respectively.

<b>7.5 Sprinkler Valve Instruction Chart</b>	Yes
<b>7.6 Is a sprinkler spares box present</b>	Yes
<b>7.6.1 Was the spares box contents accessible</b>	Yes
<b>7.6.2 Are the spares quantities correct</b> <div>PROJECT/FSS 18/54 AUTMOULD 36/54</div> <div>High hazard multiple systems</div> <div>A total of 54 identical spare sprinklers (High Hazard requirement - where there is more than one installation control valve) must be maintained on the premises so that any sprinklers that have been damaged in any way may be promptly replaced.</div> <div>  <p>Photo 46</p> </div>	No
<div>The correct quantity of spare sprinklers and compatible sprinkler spanner of the types used must be kept within the spares box at all times.</div>	
<b>7.7 By Pass Arrangement Installed</b>	Yes
<b>7.8 Fire Brigade Booster Connections Installed Correctly and Accessible</b>	Yes
<b>7.9 Are the Installation Control Valves Housed within an Approved Valve Cabinet</b>	Yes
<b>7.10 Flow Switch Installed Correctly</b> <div>  <p>Photo 47</p> </div>	No
<div>The flow switch must be fitted downstream from the alarm valve with a 25mm test pipe installed at least 2 pipe diameters downstream of the flow switch.</div>	
<b>7.11 Manifold Correctly Supported</b>	Yes
<b>7.12 Riser Mains Correctly Supported</b>	No
<div>The riser main must be properly supported in accordance with the rules.</div>	
<b>7.13 Riser Mains Externally Located</b>	No
<b>7.14 Flow Measuring Device Installed.</b>	Yes

## Flow Test Results

Pass



Photo 48



Photo 49

### Recorded Flow and Pressure

In excess of 3300 l/min @ 1000 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

No

The drain and test pipes discharge within the valve cabinet. This must be revised so they discharge externally to the valve cabinet.

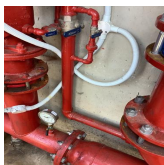


Photo 50

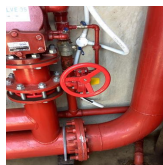


Photo 51

7.21 Weekly tests of the installation control valves alarm bell must be carried out with the alarms sounding for at least thirty seconds.

All water pressure gauge readings must be checked and recorded.

The testing and records should be carried out by a member of staff delegated to do this.

#### 7.22 Trunk Main Pressure (kPa)

1300

#### 7.23 Installation Pressure (kPa)

1300

#### 7.24 ASIB Overhaul Date Tag No

New Installation

First inspection 2021

The installation control valves must be overhauled three years after date of installation by an ASIB approved and registered installer, and once every 3 years thereafter. An ASIB valve overhaul date tag must be attached to the valve set after completion of the overhaul.

7.25 Alarm Motor & Gong Test	Passed
7.26 Are All Valves in the Correct Positions	Yes
7.27 Are All Valves Secured	No

All valves must be secured in their correct operative positions with light chains and padlocks that are keyed alike.

Non Compliance - Items

Item

Item 1

Non Compliance Items

► Description	Other
---------------	-------

Maximum 1200 kPa

The system pressure has exceeded the maximum allowable pressure of 1200 kPa, this must be investigated and rectified by your installer.



Photo 52

Recommendation Items

## 8. Storage

### High Hazard



In all High Hazard areas a clear space of not less than 1,0 metre must be maintained between top of stored goods and sprinkler deflector.

### Free Standing Block Storage and aisle widths are not being maintained.



No block of storage shall exceed 150 m<sup>2</sup> of floor area and shall be surrounded by aisle widths of not less than 2,4 m.

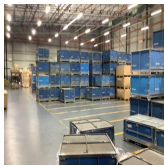


Photo 53



Photo 54

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.

### Shelves exceed 1,0 metre in width.



The shelves must be reduced to a maximum width of 1,0 metre or intermediate sprinkler protection will be mandatory at each shelf tier level.

### Location:

Entrance to production

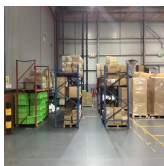


Photo 55



## 9. Sprinkler System

Sprinkler System

### Area

#### Area 1

Specified Area.

Warehouse

System Issue

#### Issue

##### Issue 1

Finding

Pipe Support

1st range hangers are exceeding the maximum distance of 2,0 metres from the distribution pipe.



Location of Finding.

One side of main



Photo 56

##### Issue 2

Finding

Pipe Support

Additional range pipe hangers must be installed to support the range pipe lengths between adjacent sprinklers.



Location of Finding.

Production side of main between second and third sprinklers

##### Issue 3

Finding

Sprinkler Heads

Distribution pattern of sprinklers affected.



Location of Finding.

## Second Sprinkler from east wall

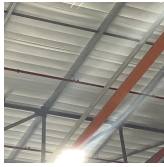


Photo 57

### Issue 4

#### Finding

#### Exposure Hazards

**Storage too close to building.**



Drencher heads required which are purpose made sprinklers designed to spray water over a surface to provide protection against fire exposure. It is not acceptable to use standard sprinkler heads with the fusible elements removed for the purpose of providing wall or face wetting. The drencher system must extend along the walls of the protected building to a distance of 15.0 metres beyond each end of the stored goods. The feed for the drenchers must be taken from the underside of the valves and not from the downstream side of the installation. The stop valve controlling the drencher installation shall be located near to the sprinkler control valves, but must be at least 10,0 metres from the goods stored or from the area where they are expected to operate.

#### Location of Finding.

Loading yard



Photo 58

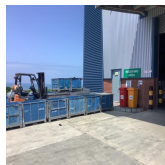


Photo 59

### Issue 5

#### Finding

#### Other

**Specify Other.**



Exposed / unprotected pipe work

Sprinkler pipe work must pass through a sprinkler protected area or be encased in a 2 hour fire rated enclosure.

#### Location of Finding.

Supply main from pump house. Back of warehouse



Photo 60

---

## 10. Proof of Inspection

Proof of inspection.

For and on behalf of client:



Aiden Kilian  
18.10.2022 12:44 SAST

---

Proof of inspection.

ASIB Inspector:



Keith van Onselen  
18.10.2022 12:45 SAST

---

### WARNING

© The Automatic Sprinkler Inspection Bureau (Pty) Ltd 1970-2022 All rights reserved.

Copyright subsists in this work. All information contained in this report is the property of The Automatic Sprinkler Inspection Bureau (Pty) Ltd. No part of this report may be reproduced, published, performed, broadcast, transmitted or adapted in any form or by any electronic, mechanical or other means without the written permission of the copyright holder. Any unauthorised reproduction, publishing, performance, broadcasting, transmission or adaption of this work will constitute copyright infringement and render the doer liable under both civil and criminal law.

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**

aiden.kilian@fssfire.co.za

---

**Email: 2**

---

**Recipient**

travisw@rnaconsulteng.co.za

---

## Appendix



Photo 1



Photo 2



Photo 3



Photo 4





Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



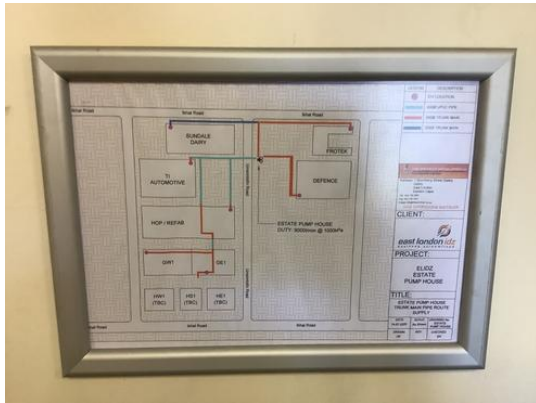




Photo 17



Photo 18



Photo 19



Photo 20





Photo 21



Photo 22

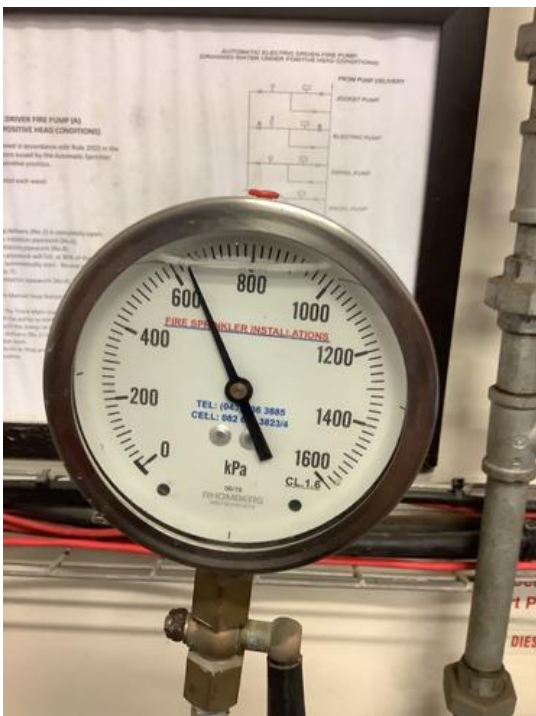


Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28





Photo 29



Photo 30



Photo 31

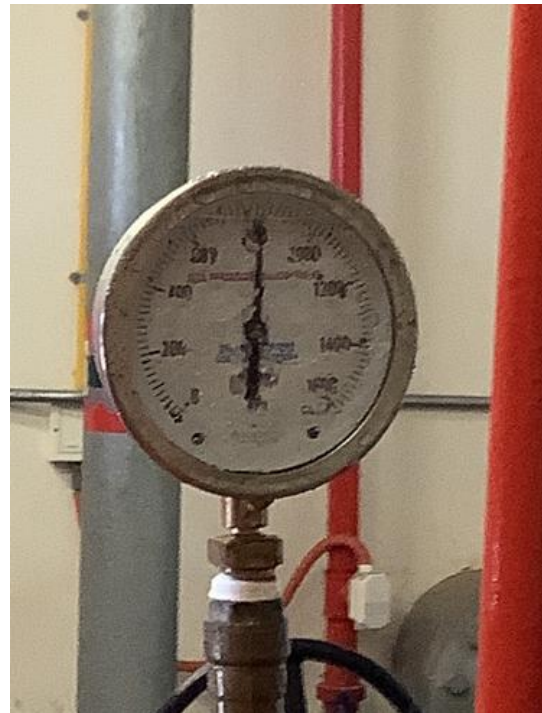


Photo 32



Photo 33



Photo 34



Photo 35



Photo 36





Photo 37



Photo 38



Photo 39

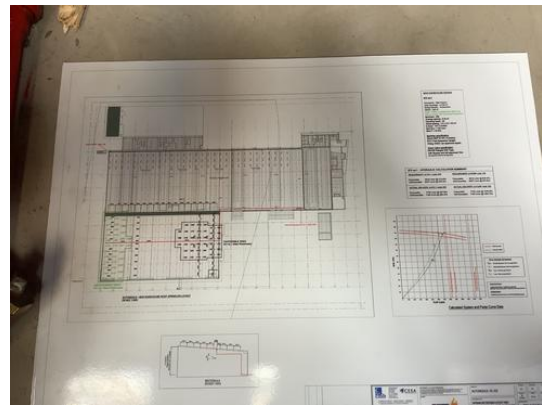


Photo 40

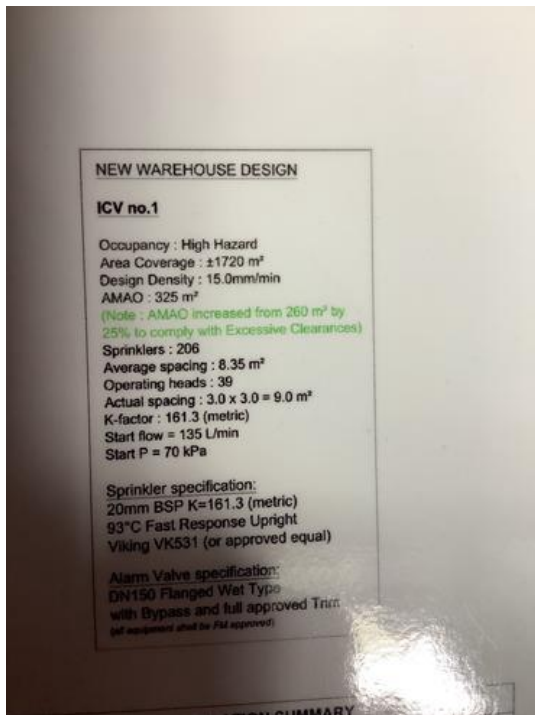


Photo 41

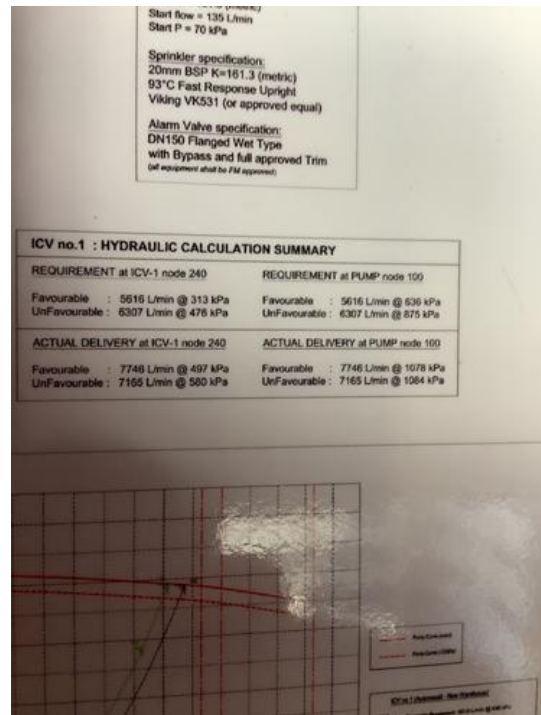


Photo 42

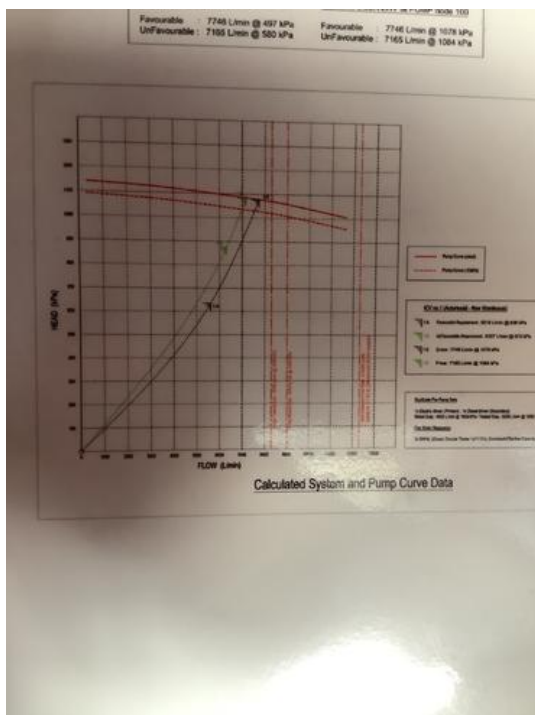


Photo 43

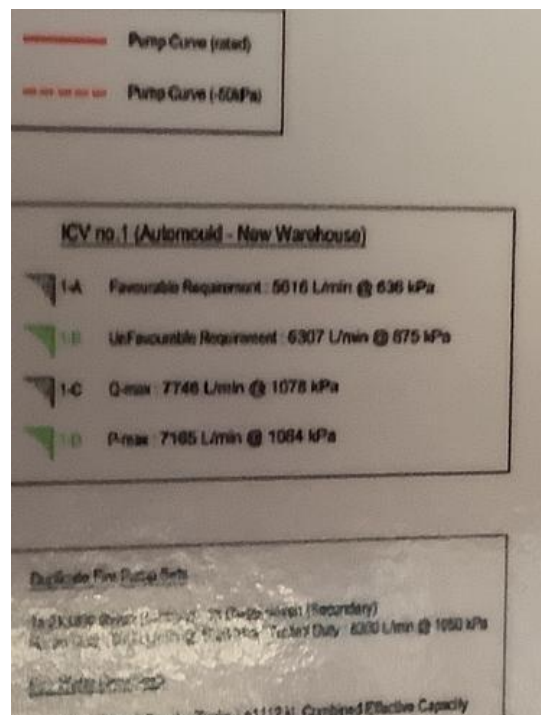


Photo 44



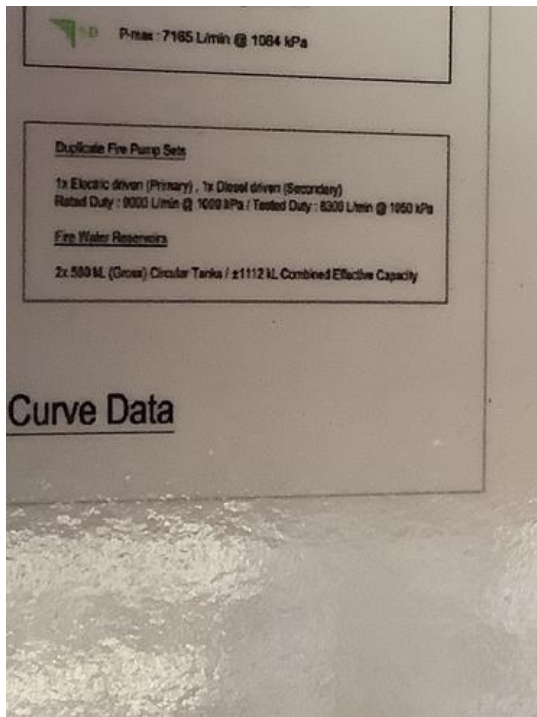


Photo 45



Photo 46



Photo 47



Photo 48



Photo 49



Photo 50



Photo 51



Photo 52





Photo 53



Photo 54



Photo 55



Photo 56



Photo 57



Photo 58



Photo 59



Photo 60