






DIMENSION BID

WIRELINE INTERVENTION | PERFORATION SERVICES

FIRE SAFETY DBSB-HSE-10

ORIGINAL ISSUE : 25/06/2012
REVISION NUMBER : 02
REVISION DATE : 01/12/2014

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AMENDMENT RECORDS

This sheet will record all amendment of this Procedure. All particulars of the amendment shall be stated clearly. The HSE Department of Dimension Bid (M) Sdn. Bhd. (DBSB) shall be responsible for the maintenance and update of this record sheet.

CLASSIFICATION	DATE	REVISION PART	REASON/PURPOSE OF REVISION
Original Issue	25/06/2012	Establishment of procedure	Nil
Revision 1	08/01/2014	• Cover	• Organization restructure
Revision 2	01/12/2014	• Cover	• Organization restructure

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FLOW CHART

<u>RESPONSIBILITIES</u>	<u>PROCEDURE</u>	<u>DOCUMENTATION</u>
FIRE FIGHTING		
Parties of concern	Shout "Fire, fire, fire", Press the alarm	
↓		
Safety officer	Initiate evacuation procedure, remove injured person away from affected area (if any)	
↓		
Emergency Response team Leader	Action Decision <ol style="list-style-type: none"> 1. Support 2. Size of fire 3. Surrounding 4. Smoke and fumes 	
↓		
Emergency Response team Leader	Select the correct equipment for the class of fire <ol style="list-style-type: none"> 1. What is burning? 2. What equipment is available? 	
↓		
Emergency Response team	Safe working practice <ol style="list-style-type: none"> 1. Test firefighting equipment 2. Hazard 3. Escape Route 4. Be vigilant 5. Containment 	
↓		
Emergency Response team / Safety Officer	Seal the area for further investigation, Inform the management	Incident investigation form

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SUBJECT FIRE PROTECTION

Definition Study and practice of mitigating the unwanted effects of potentially destructive fires. It involves the study of the behavior, compartmentalization, suppression and investigation of fire and its related emergencies, as well as the research and development, production, testing and application of mitigating systems

Type and Class of Fire

Class	Description	Example
A	Fire involves flammable solid	Wood, cloths, paper etc
B	Fire involves flammable liquid	Gasoline, paint
C	Fire involves flammable gas	Natural gas, propane
D	Fire involves combustible metal	Sodium, magnesium, potassium
F	Fire involves cooking fats and oil	

Fire Protection Structure Typical Structural fire protection usually achieved with via three mean

- **Passive Fire Protection**
 - Use of integral, fire-resistance rated wall and floor assemblies that are used to form fire compartments intended to limit the spread of fire
- **Active Fire Protection**
 - Manual and automatic detection and suppression of fires, as in using and installing a fire sprinkler system
- **Education**
 - The building owners and operators have copies and a working understanding of the applicable building and fire codes, having a purpose-designed fire safety plan and ensuring that building occupants, operators and emergency personnel know the building

Common Hazard associated with fire

- Some common fire hazards are as follows:
- Exposed wiring system in poor condition
 - Cigarettes,
 - Heat generate equipment (Power Pack, Air compressor etc)
 - Batteries
 - Flammable liquid

Fire safety plan structure

Every Dimension Bid Premises should have fire safety plan as part of the emergency drill and response plan. This to ensure that all visitors and staff are informed of what to do in case of fire. During a fire emergency, a copy of the approved fire safety plan must be available at all time.
In preparation to for the fire safety plan incorporated into emergency Response plan.

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The element of the plan must include as follows:-

- Key contact information
- Utility services (Including shut-off valves for water, gas and electric)
- Access issues
- Dangerous stored materials
- Location of people with special needs
- Connections to sprinkler system
- Layout, drawing, and site plan of building
- Maintenance schedules for life safety systems
- Personnel training and fire drill procedures

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SUBJECT FIRE FIGHTING

Definition An act to extinguishers the fire.

Fire's physical properties Fires start when a flammable and/or a combustible material, in combination with a sufficient quantity of an oxidizer such as oxygen gas or another oxygen-rich compound (though non-oxygen oxidizers exist that can replace oxygen), is exposed to a source of heat or ambient temperature above the flash point for the fuel/oxidizer mix, and is able to sustain a rate of rapid oxidation that produces a chain reaction. This is commonly called the fire tetrahedron.

Science of extinguishment There are four elements needed to start and sustain a fire and/or flame. These elements are classified in the "fire tetrahedron" and are

- Reducing agent (fuel)
- Heat
- Self-sustained chemical chain reaction
- Oxidizing agent (oxygen)

Fire can be extinguished by removing any one of the elements of the fire tetrahedron



Figure 1: Fire tetrahedron

Fire Fighting Equipment In Dimension Bid premises, the fire fightings equipment is located strategically and well accessible

- Fire Extinguisher (See figure 01)
 - 1) Fire Extinguisher is an active fire protection device used to extinguish or control a fire, often in emergency situations. Typically, a fire extinguisher consists of a handheld cylindrical pressure vessel containing an agent which can be discharged to extinguish a fire.
 - 2) Fire extinguishers are typically fitted in buildings at an easily-accessible location, such as against a wall in a high-traffic area.

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Figure 01: Fire Extinguisher

- 3) Fire hose reels are located to provide a reasonably accessible and controlled supply of water to combat a potential fire risk.
- 4) These appliances are designed to deliver, as a minimum, 0.33ltrs of water per second. A control nozzle attached to the end of the hose enables the operator to control the direction and flow of water to the fire. All fire hose reels come with a unique ball or gate valve shut off device, a plastic or solid brass hose reel nozzle, and mounting bracket.



Figure no. 02: Fire Hose Reel

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Fire Fighting Technique

Fire Extinguisher

The typical steps for operating a fire extinguisher (described by the acronym ("PASS")) are the following (see figure no.3):

1. **PULL** the safety pin.
2. **AIM** the nozzle at the base of the fire, from a safe distance.
3. **SQUEEZE** the handles.
4. **SWEEP** the extinguisher from side to side while aiming at the base of the fire

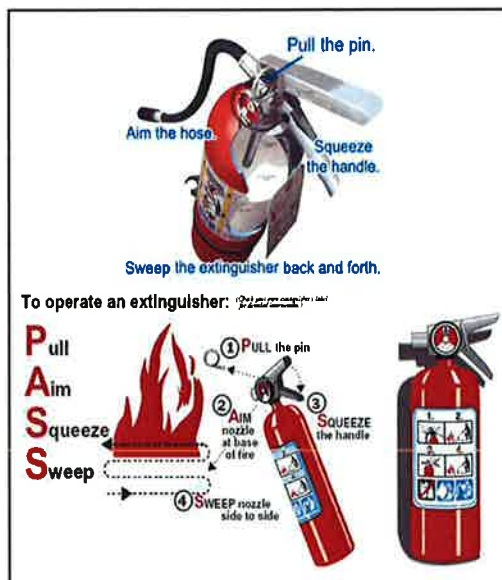


Figure 03: "PASS" Step to extinguisher fire

Fire Hose Reels

Fire hose reels are all very similar in operation. This is the generic procedure:

1. Ensure the nozzle or jet is in the closed position
2. Turn on the main valve (some will not let the nozzle out until this is done)
3. Pull the hose off the drum, towards the fire
4. Open the nozzle or valve and direct the stream of water at the fire
5. Only use on Class A fuels.

Fire Fighting Equipment's inspection and maintenance

Fire Extinguisher's inspection and maintenance

- A. Monthly
 - Location in designated place.
 - Obstructions to access or visibility.
 - Operating instructions on nameplate are legible and facing outward.
 - Seals and tamper indicators are not broken or missing.
 - Determine fullness by weighing or "hefting."
 - Examine extinguishers for obvious physical damage, corrosion, leakage, or a clogged nozzle
 - Pressure indicator is in the operable range position.

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B. Yearly

- Gauge
- Weight
- Pin Lock
- Inspection tag
- Hose – cuts, wear, blocking
- Thread damaged
- Corrosion

Fire Hose Reel's inspection and maintenance

C. Monthly

- Performed by building owner
- Location in designated place.
- Obstructions to access or visibility.
- Operating instructions on nameplate are legible and facing outward.
- Seals and tamper indicators are not broken or missing.
- Examine for obvious physical damage, corrosion, leakage,

D. Yearly

- Performed by competent person
- Inspection tag
- Hose – cuts, wear, blocking
- Thread damaged