Fire Hosetech **1-2-3** Door Controller

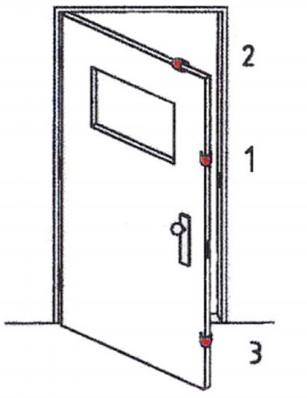
The door jammer/controller was developed as a joint venture in Holland by members of the Dutch Fire Brigade and the Dutch Police Force. Their practical experience led to the development of this simple but highly effective product that not only improves security and safety for members of the emergency and municipal services when accessing a building, but also clearly indicates a safe egress unit which can reduce evacuation times dramatically whilst also reducing risk.

Designed to clamp over the edges of doors with an average thickness of 36 – 50mm, the jammers are manufactured from an engineering plastic which is oil and grease resistant, extremely robust and suitable for temperatures up to 200^{o}C +. In addition it is labelled with a reflective "FIRE" identification to enhance visibility. In the event the door is too thick to accommodate the door jam, the jam can be positioned utilising the "lock hole" of the door frame where the dead bolt normally locates when the door is locked.

The extremely simple design gives the unit the ability to:

- Prevent a door from locking when you don't want it to.
- Ensure a safe retreat from smoke filled rooms by highlighting the exit.
- Control the opening in the doorway to prevent "strangling" hoses and interrupting water supply.
- Communicate route and room status with other members of the team via positioning according to the 1-2-3 technique.
- Improve ventilation.

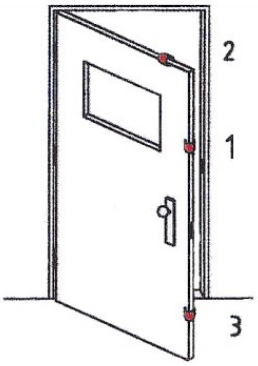
The 1-2-3 technique was developed to increase the scope and effectiveness of the door jam. In the drawing below, the 3 positions indicated are those used to "communicate" using the 1.2.3 technique. This comms technique can be used in conjunction with existing access deployment methods such as "FOX" or "Whaletail" wedges.



Position 1, at eye level, is used when a team is entering and progressing through the building in for instance a search for missing persons. Following this procedure systematically means that the team's route can easily be tracked both by following teams as well as when retreating/exiting, potentially increasing the speed of retreat. This method of securing the door in a partially open position also prevents problems caused by doors requiring special keys or code entries which can repeatedly frustrate progress if not secured.

Unit 1, Sowarth Field Industrial Estate, Settle, North Yorkshire. BD24 9AG
Phone 01729 825 999 Fax 01729 825 777

Position 3, between the latch and the bottom of the door is used to indicate that the space beyond has been explored and is safe and therefore does not need to be accessed by colleagues. This obviously prevents the space being explored repeatedly and frees personnel for more productive investigations saving time and allowing incident commanders to form a complete picture much more quickly.



Position 2 on the top of the door can be used to highlight the fact that there is a fire beyond this point. This will mean that any following teams are always aware of a specific, known danger in advance and have the option to avoid the area or retreat. The positioning is key as at temperatures above 200°C the jammer may lose its clamping force and in any other position may fall off. In position 2 natural gravity allied with softening will tend to keep it in place.

Using this system and method of working can give the fireman confidence that he will be able to follow a path to the exit. The highly reflective ORALITE material gives excellent visibility in torch light clearly showing the safe exit route and allowing the firefighter to focus even more concentration and awareness on the fire itself.

In addition to the identification/communication functions of the jammer, the unit can also be used to control the width of gap through a doorway. Accurately placing the jammer in Position 2 means that the door opening can be limited to allow just enough room to allow the hose through without risking kinking or strangulation. This position will still limit the amount of fresh air and oxygen reaching the seat of combustion.

Once the fire has been successfully extinguished and the command to “ventilate” is issued, clamps can be set in Position 2 but all as close to the hinge as possible maximising the size of the door opening. This obviously allows the maximum airflow without the risk of the door closing accidentally. This level of ventilation can also be achieved by positioning the jam at floor level wedged between the heel of the door and the architrave. The advantage of this placement is that it cannot slide during the opening and closing of the door.

To summarize therefore, use of the 1,2,3, Door Jammer and technique can offer improved safety and security for firefighters particularly when fighting fires inside complex buildings. It offers clear indications of safe exit routes and will assist in the speedy and safe evacuation of both victims and casualties. It offers opportunities for faster investigation and back up response and can limit smoke damage by offering easy and efficient ventilation when required.

Position 1 – Safe route for entry and exit

Position 2 – Beyond this door is a fire or possibly another hazard

Position 3 – The area beyond this door has been explored and is safe.

Fire Hosetech also have a range of standard door wedges available including the stainless steel Fox-Tail Wedge which is designed to fit in the jamb of the majority of hinged doors, secured by the hinge mechanism.

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