BE AWARE ! X ! Cabinets that Fail !.

Reasons why these cabinets do not comply with AS/NZS1940:2004 and 2017

AS1940-2017 4.9.2 Clause (h) of the Standard states that ***" All materials must not melt at temperatures less than 850 Deg C "***
Standard Aluminium Pop Rivets will melt at 610 Deg C. and start to fail at 350 Deg C, allowing the thin top and side steel sheets of the cabinet to buckle (Like an oven tray buckling on a gas hob) and lift open, exposing the product to heat and possible explosion.

Rust can form between the over-lap of the top and side walls which will cause the cabinet walls to fail. Standard Blind Pop rivets are usually used when the parent metal is too thin to seam weld.

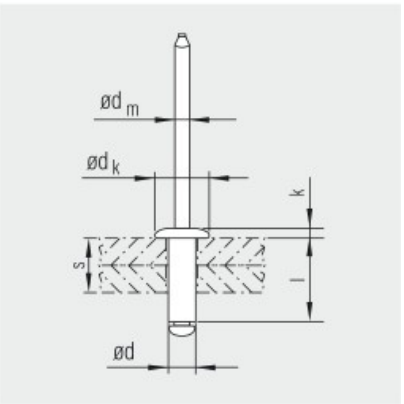
POP® Standard blind rivets

Dome head

Material

Sleeve
Aluminium AlMg 3/3.5
Melting point 590 – 610 °C

Mandrel
Steel zinc



Sheetmetal Thickness.
The weight of the cabinet is directly proportional to the thickness of the sheetmetal used in the construction.
AS1940 states that the sheetmetal thickness can be no less than 1.0mm

EG. The construction of a 250L Flammable Goods Cabinet uses approx. 20.85m2 of cold rolled or galvanised sheetmetal. Each 250L cabinet measures approx. 1100mm wide x 500mm deep x 1825mm high.

At 1.2mm thick x 9.42kg/m2 = weight of **196.40 kg**. Plus ..brackets, packaging & Merchandise
At 1.0mm thick x 7.83kg/m2 = weight of **163.67 kg**
At 0.8mm thick x 6.28kg/m2 = weight of **130.93 kg**
At 0.6mm thick x 4.71kg/m2 = weight of **98.20 kg**

Exterior Door Hinges. **X ! Fail !**

Spring loaded door hinges do not comply with AS1940 as the plastic bushes inside will simply melt in the event of fire and the spring tensioners will anneal, normalising the metal to where there is no tension to keep the door closed at all.

Exterior door hinges are just screwed on top of the door and the door post and allow the manually self closing doors to shut in any sequence .

If the Left Hand door shuts over the top of the Right Hand door, there will be a huge 40mm gap top and bottom of the LH door. Therefore the door catches will be redundant and not hold either door shut, allowing sparks, heat, flame orexplosion into or out of the cabinet. Coupled with the springs in the hinges normalising at heat over 400 degrees , the doors can simply fly open exposing flammable product to intense heat where a huge explosion will be likely .

Die Cast Alloy Door Handles **X ! Fail !**

Die Cast is an alloy where a mould is made and molten aluminium or zinc alloy is poured into it. Die cast alloy is softer than Aluminium and will completely melt at 385Deg C.

Die Cast Alloy handles are not magnetic so can be checked with a simple magnet , maybe one on your phone case.

Below is a Zinc Alloy Die Cast handle similar to the one above.

Click to Enlarge

LOCK FOCUS LEVER HANDLE

Stock Code: LFA/HL8R

$42.07 (Incl. GST)

Features:
Ideal for use on standard doors, gates and sheds.
8.0 mm square drive.
75 mm spindle length.
Operated by unlocking then rotating the handle.
180 degree rotation of the handle to unlock.
Zinc alloy diecast handle and rose.
Non master keyed.
Finished in bright chrome.
Supplied keyed to differ.
Keyed alike version also available

Please note on the Figure below that Zinc Casting Metals melt at 385 Degrees C and Aluminium a little higher at around 580 Degrees C . Much less than the 850 Degrees C. AS1940 requires .

COMPARE	Material	Alloy	Density	Melting Point (Average +/- 50)	Thermal Conductivity	Coefficient of Thermal Expansion	Electrical Conductivity
			g/cm³	°C	W / m K	µm/m°K	% IACS
☐	Aluminum Die Casting Metals	Aluminum Alloy A380	2.71	566	96	21.8	23.0
☐	Magnesium Casting Metals	AZ91D	1.81	533	72	25.2	12.2
☐	Aluminum Die Casting Metals	Aluminum Alloy 383 (ADC12)	2.74	549	96	21.1	23.0
☐	Aluminum Die Casting Metals	B390	2.71	580	134	18.0	27.0
☐	Aluminum Die Casting Metals	A413	2.66	578	121	21.6	31.0
☐	Zinc Casting Metals	Zamak 2	6.60	385	105	27.7	25.0
☐	Aluminum Die Casting Metals	413	2.66	578	113	20.4	31.0
☐	Aluminum Die Casting Metals	K-Alloy	2.63	680	113	-	32.0
☐	Zinc Casting Metals	Zamak 3	6.60	384	113	27.4	27.0