

Bremic Security Products Pty. Ltd.

1300 4 SAFES (1300 472 337) F 1300 472 336 www.bremicsafes.com.au info@bremicsafes.com.au

3/88 Star Crescent, Hallam Victoria 3803 Australia ACN: 117 477 424 ABN: 14 184 671 842

Data and Fire Resistant Safes Safe Classification

Safes and strongrooms are classified into five grades according to Australian Standard AS/NZ 3809:1998. These grades should be used as a guide when purchasing a safe or strongroom. The table below sets out these grades:

Grading	Typical Application	Approx. Rating
Extra high security (Strongrooms only)	High volume financial institutions, safe deposit, mercantile properties	Over \$50000
High Security	Major jewellers, major retailers, financial institutions, banks, clubs, TAB, casinos	Over \$50000
Medium Security	Large retail, department stores, post offices, hotels	\$35-50000
Commercial Security	Large factories, medium retail, real estate agents	\$10-35000
Basic Security	Homes, small business, offices	\$0-10000

Recommended Insurance Rating

Manufacturers will often state the Recommended Insurance Rating of their safes. This rating refers to the recommended total value of goods that should be secured in a safe. This value will help you judge if the safe you are looking at will be suitable for securing your valuables. In the table above we've included an approximate rating for each of the gradings. We've also used this table to determine the classifications in our product range.

Fire Rating Or Fire Resistant

There is a big difference between these two terms. To obtain a fire rating, a safe must be tested according to the relevant standards. These test are rigorous and expensive. As a result many safe manufacturers do not Rate, but instead state the Fire Resistance of their safes.

Unless stated otherwise Fire Ratings only refer to the protection of paper. Sensitive materials such as stamps, microfilm, diskettes and magnetic media will require the higher protection offered by data inserts or data safes.

What would happen if you lost all your financial records and irreplaceable computer data? Conventional filing cabinets offer no fire protection and even fire resistant safes will not fully protect sensitive computer media. Fire Rated Safes and Cabinets are specially designed for protecting paper and important documents. Many come with a minimum 1-hour fire-rating and have been tested using international standard tests that involve both heating the safe in a furnace and a drop test to simulate a building collapse. Data Safes and Data Cabinets are specially designed for protecting paper, magnetic media such as computer disks and tapes, as well as microfilm and negatives.

JIS S 1037 Standard Fire Test

One of the common standards used for testing fire resistant safes is the Japanese Industrial Standard JIS S 1037. This standard consists of both 1-hour and a 2-hour testing procedures.

1-Hour Fire Test

The fire rated safe is put into a furnace and heated

Heat Test

up to 927C (1700F) over a period of one hour. At the end of one hour the fire rated safe is removed from

Drop Test

the furnace and dropped from a height of 4 meters on to a concrete and rubble floor.

The fire rated safe is allowed to cool and then opened.

Opening

The internal temperature must not have exceeded 177C (350F) and the contents must be completely undamaged by fire and legible.



2-Hour Fire Test

The fire rated safe is put into a furnace and heated up to 1010C (1850F) over a period of two hours, reaching 927C (1700F) after the first hour. At the end of two hours the fire rated safe is removed from the furnace and dropped from a height of 4 meters onto a concrete and rubble floor.

The fire rated safe is allowed to cool and then opened. The internal temperature must not have exceeded 177C (350F) and the contents must be completely undamaged by fire and legible. Note: The internal temperature must not exceed 52C for data cabinets

Many U.S. safe manufacturers provide ratings based on the UL standards. The standards consider the following tests:

Underwriters Laboratories (UL) Fire Ratings

Impact Test - The UL Impact Test calls for the safe to be heated to 1550 degrees for 30 minutes (1638 degrees for a 2 hour fire rated safe) then dropped onto concrete rubble from a height of 30 feet. The safe is then turned upside down and reheated for another 30 minutes (45 minutes for a 2 hour fire rated safe). During this process, it must maintain its integrity and protect all contents in order to pass the UL impact test.

Explosion Hazard Test - All UL fire-rated safes must undergo this test, during which the unit is inserted into a preheated 2000 degree oven. If the safe is not constructed properly, the rapid heating will likely cause an explosion.

Cool Down Test - This procedure is a key part of UL's fire testing procedures. After a one or two hour fire rating test, the safe is left in the oven for cool down time with the heat turned off. Because of the intensive heat of one and two hour tests, the temperature inside the safe will continue to rise for up to one hour after the oven is turned off. To pass UL testing, the safe's interior temperature may not exceed 350 degrees at any time during heat up or cool down procedures.

Safes will be approved according to the following classifications:

FR - Fire resistant, un-rated insulated safe - This product is awaiting UL approval.

Class 350 1/2 Hour Fire Rating - During this test, the safe is heated for one half hour to reach an exterior temperature of 1550 degrees. Because paper will begin to char at approximately 400 degrees, the unit being tested must maintain an interior temperature of less than 350 degrees during heat up and cool down testing in order to earn its rating.

Class 350 1 Hour Fire Rating - To earn this rating, the safe is heated for one hour to reach an exterior temperature of 1550 degrees, then put through the cool down test. During this time the safe must maintain an interior temperature of less than 350 degrees.

Class 350 1 Hour Fire & Impact Label - The safe has passed both UL impact testing and Class 350 1 hour fire testing (see above).

Class 350 2 Hour Fire Rating - The safe is heated for two hours to reach an exterior temperature of 1550 degrees and must maintain an interior temperature of less than 350 degrees to earn this rating.

Class 350 2 Hour Rating and Impact Label - The safe has passed both UL impact testing and Class 350 2 hour fire testing (see above).





Hallam, Victoria 3803



to 1300 472 336