

Where the BCA specifies the need for a fire separation system, a level of fire separation needs to be determined according to the type of structure and the uses on either side of the wall, floor or ceiling structure.

The level of fire separation is expressed by three numbers. For example, 60/60/60 represents:

- The first number indicates that for 60 minutes the wall must continue to carry the design loads. A dash here indicates a non-loadbearing wall.
- The second 60 minutes is the time before the wall's integrity is affected to allow the penetration of hot gasses or flames.
- The third 60 minutes indicates an insulation failure for allowing too much heat to pass through the wall.

Refer to the BCA to determine the fire and acoustic levels required for each application.

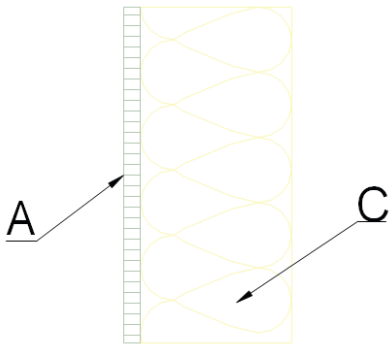
ResCom[®] wall, ceiling and floor board is JAZ/ANZ CodeMark approved for use (CMA-CM40009) in fire applications as following:

ResCom [®] Thickness	Single Stud One Side	Single Stud Each Side	Double Stud Each Side
10mm	Loadbearing wall 60/60/60 Non-loadbearing wall -/60/60	Loadbearing wall 60/60/60 Non-loadbearing wall -/120/120	Loadbearing wall 60/60/60 Non-loadbearing wall -/120/120
10mm	Loadbearing wall 90/90/90 Non-loadbearing wall -/90/90	Loadbearing wall 90/90/90 Non-loadbearing wall -/180/180	Loadbearing wall 90/90/90 Non-loadbearing wall -/180/180
12mm	Loadbearing wall 120/120/120 Non-loadbearing wall -/120/120	Loadbearing wall 120/120/120 Non-loadbearing wall -/240/240	Loadbearing wall 120/120/120 Non-loadbearing wall -/240/240
14mm	Loadbearing wall 180/180/180 Non-loadbearing wall -/180/180	Loadbearing wall 180/180/180 Non-loadbearing wall -/360/360	Loadbearing wall 180/180/180 Non-loadbearing wall -/360/360
15mm	Loadbearing wall 240/240/240 Non-loadbearing wall -/240/240	Loadbearing wall 240/240/240 Non-loadbearing wall -/480/480	Loadbearing wall 240/240/240 Non-loadbearing wall -/480/480
18mm	Loadbearing wall 120/120/120 Non-loadbearing wall -/120/120	Loadbearing wall 120/120/120 Non-loadbearing wall -/240/240	Loadbearing wall 120/120/120 Non-loadbearing wall -/240/240

When more than one board is used, such as one on each side of a wall or two linings on one side of a wall, the total minutes of fire resistance is additive. This means that two 10mm boards will give at least 180 minutes of fire resistance. All gaps in fire rated structures must be filled with an approved sealant and the use of appropriate fire rated insulation batts. The following are a list of recommended sealants:

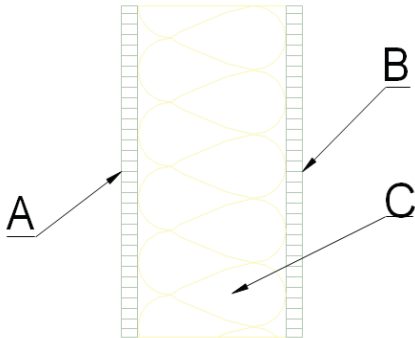
Product Name	Manufacturer
Fireban One	Bostik
Selley's	Fireblock
Firesound, Fula Foam (Fire Resistant)	HB Fuller
Fire Mate Sealant	Everbuild
Fyreflex sealant	Grinnel
Lorient Fire Sealant	Lorient





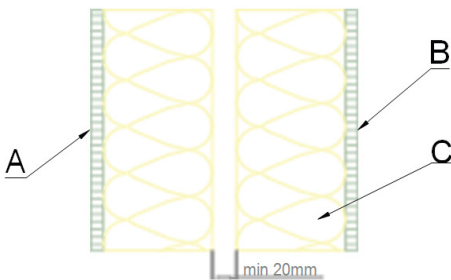
Single Stud (Timber & Steel)

A -	10mm MgO	or	12mm MgO
C -		R2:BS	
FRL	-/90/90		-/120/120
Rw + Ctr	53		54
Required FRL	-/90/90 RISF 90 min. and Rw + Ctr 50 or better		



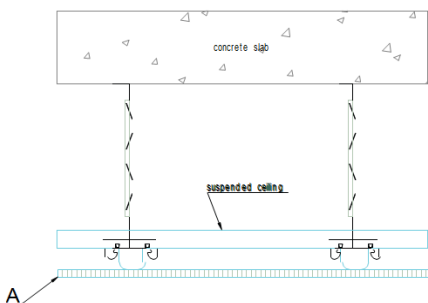
Single Stud Each Side (Timber & Steel)

A -	10mm MgO	or	12mm MgO
B -	10mm MgO	or	12mm MgO
C -		R2:BS	
FRL	-/180/180		-/240/240
Rw + Ctr	50		47+crt
Required FRL	-/90/90 RISF 90 min. and Rw + Ctr 50 or better		



Double Stud Double Side (Timber & Steel)

A -	10mm MgO	or	12mm MgO
B -	10mm MgO	or	12mm MgO
C -		R2:BS	
FRL	-/180/180		-/240/240
Rw + Ctr	50		60+ctr
Required FRL	-/90/90 RISF 90 min. and Rw + Ctr 50 or better		



Suspended Ceiling from Concrete Slab (Steel)

A -	10mm MgO	or	12mm MgO
FRL	-/90/90		-/120/120
Required FRL	-/60/60 RISF 60min	or	-/90/90 RISF 90min
	Back Block to Joints		Back Block to Joints