

Where the BCA, NZBC, IRC or IBC 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, NZBC, IRC or IBC Standards to determine the fire and acoustic levels required for each application.

ResCom[®] wall, ceiling and floor board for use in fire applications as following:

ResCom [®] Thickness	Single Panel Performance	Single Panel on Stud	Single Panel Either Side of Stud: System Excl Acoustic Requirements
10mm	60 minutes	Non-loadbearing wall -/60/60 Loadbearing wall 60/60/60	Non-loadbearing wall -/60/60 Loadbearing wall 60/60/60 (Thermal Insulation Required in Cavity)
10mm	90 minutes	Non-loadbearing wall -/90/90 Loadbearing wall 90/90/90	Non-loadbearing wall -/90/90 Loadbearing wall 90/90/90 (Thermal Insulation Required in Cavity)
12mm	120 minutes	Non-loadbearing wall -/120/120 Loadbearing wall 120/120/120	Non-loadbearing wall -/120/120 Loadbearing wall 120/120/120 (Thermal Insulation Required in Cavity)
14mm	180 minutes	Non-loadbearing wall -/180/180 Loadbearing wall 180/180/180	Non-loadbearing wall -/180/180 Loadbearing wall 180/180/180 (Thermal Insulation Required in Cavity)
15mm	240 minutes	Non-loadbearing wall -/240/240 Loadbearing wall 240/240/240	Non-loadbearing wall -/240/240 Loadbearing wall 240/240/240 (Thermal Insulation Required in Cavity)
18mm Flooring	120 minutes	Loadbearing Floor 120/120/120	Loadbearing 120/120/120 (Thermal Insulation Required in Ceiling Cavity)

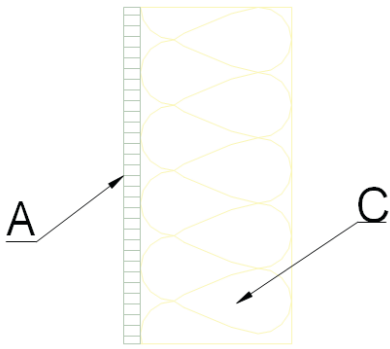
All gaps in fire rated structures must be filled with an approved FRL sealant. The use of appropriate fire rated insulation batts maybe required to reduce thermal transmission and build up within the cavity. Seek advice of the fire engineer and MgO Corp technical team prior to installation of a system.

The following is 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

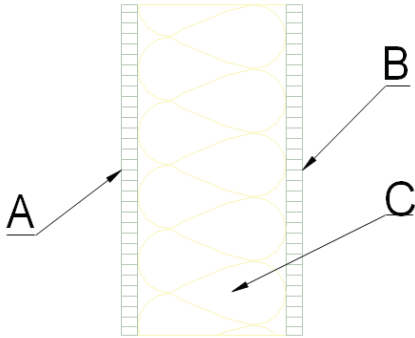
Penetrations:

ResCom[®] recommends that penetrations comply with the requirements of BCA Specification C3.15 in Australia and equivalent standards for other jurisdictions. Penetrations through ResCom Board complies with the BCA through Performance Requirement CP6, Clause C3.15 and Specification C3.15 as detailed in evaluation report #4099.3 101R00



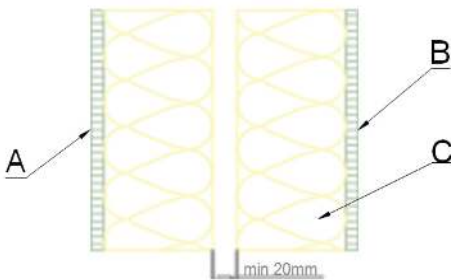
Single Board Applied to (Timber or Steel) Stud

A -	10mm ResCom	or	12mm ResCom
C -			
FRL	-/90/90		-/120/120
FRL	90/90/90	R13:BS	120/120/120



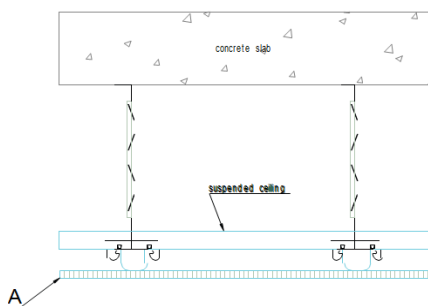
Single ResCom Board Applied Each Side (Timber or Steel) Stud

A -	10mm ResCom	or	12mm ResCom
B -	10mm ResCom	or	12mm ResCom
C -			
FRL	-/90/90		-/120/120
FRL	90/90/90	R13:BS	120/120/120



Single ResCom Board Each Side of Double (Timber or Steel) Stud

A -	10mm ResCom	or	12mm ResCom
B -	10mm ResCom	or	12mm ResCom
C -			
FRL	-/90/90		-/120/120
FRL	90/90/90	R13:BS	120/120/120



Suspended Ceiling from Concrete Slab or Steel Joist

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

Thermal and Acoustic Insulation

Bulk insulation is required in the wall cavity for loadbearing FRL systems as noted above in the ResCom^R FRL ratings. Bulk insulation maybe required also to achieve specified acoustic R_w+C_{tr} and R values performances in the building system. For specific performances seek direct advice from the appropriate fire and acoustic engineers or ResCom supply agents.