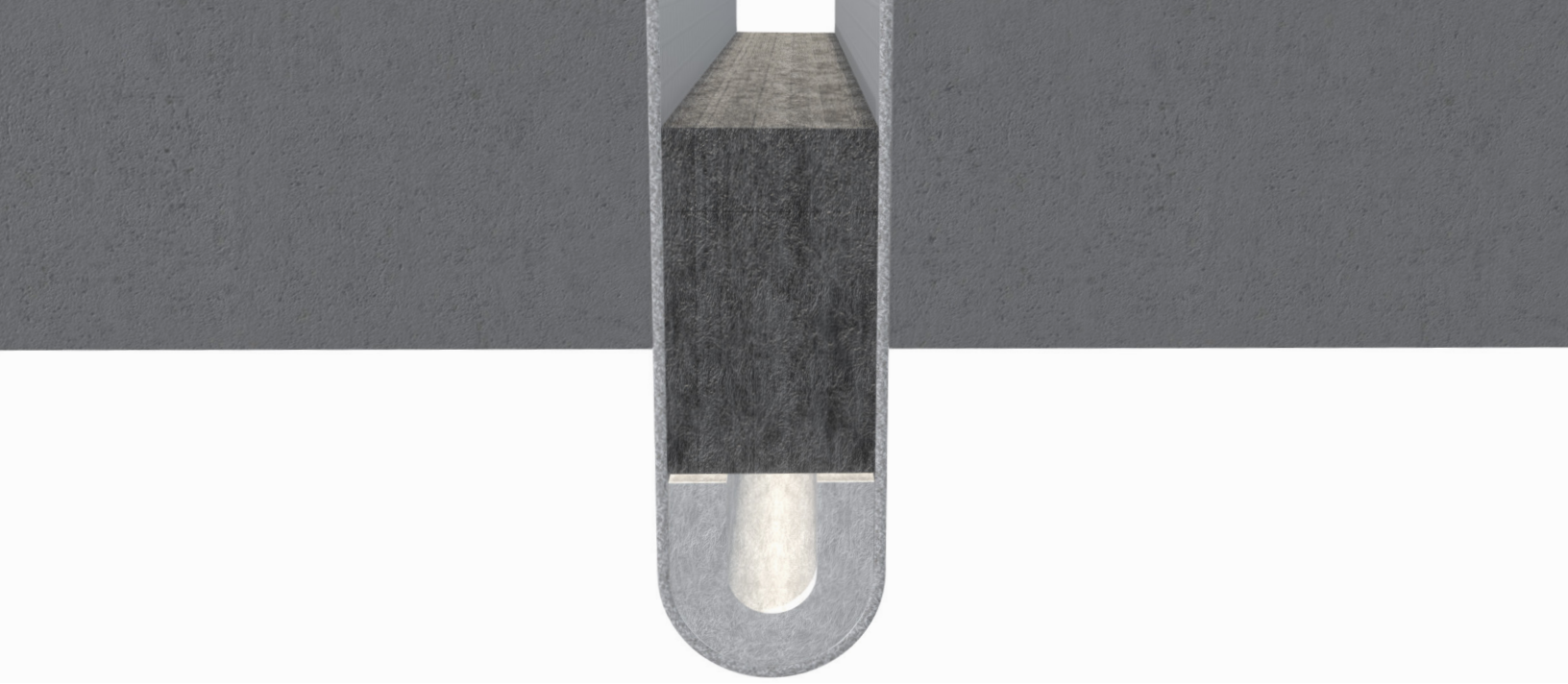
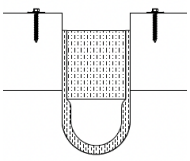
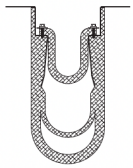


Understanding Fire Rated *Expansion Joints*

Fire rated expansion joints are necessary in order to maintain a building's safety and resiliency. Learn how to incorporate them without jeopardizing the life safety aspects of a building.

Block vs Drape Fire Barriers

There are two types of fire barriers that accommodate different movement criteria: block and drape.

	 BLOCK FIRE BARRIER	 DRAPE FIRE BARRIER
Joint Opening Size	4"-6"	4" minimum opening*
Expansion / Contraction	50%	100%
Total Movement	100%	200%

*Drape fire barrier typically requires a minimum 4" opening to prevent damage to the system during seismic movement. If damaged, the fire barrier may not perform as it should in the event a fire breaks out after the seismic event.

An expansion joint that runs through a building may interrupt a fire rated assembly. To maintain the integrity of the assembly and prevent the spread of fire, a tested and listed fire barrier should be incorporated.

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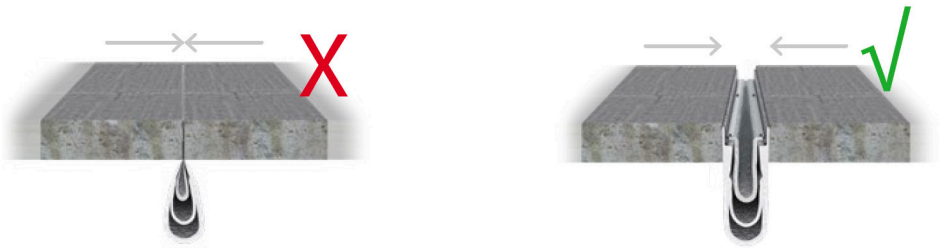
Understanding Fire Rated *Expansion Joints*

To ensure proper functionality of the expansion joint cover system, it is critical that fire barrier dimensions are considered when determining the final size of the expansion joint opening. Joints should never close to 0" when incorporating a fire barrier because it needs space to move in order to function properly.

For example: if a joint with fire barrier closes to 0" during or after a seismic event, the barrier could be damaged, and a breach could occur in your passive fire protection. Refer to the chart for recommended minimum joint openings.

Minimum joint width

The narrowest linear gap that the joint is expected to close to.



0" minimum joint width

Nominal Joint	1"	2"	3"	4"	5"	6"	7"	8"+
Recommended Minimum Opening Contraction	0.5"	1"	1"	2"	2"	3"	3"	4"