There are a number of situations where your product or process may require segmented gaskets. Because of how sheets of gasket material are manufactured, some pieces of machinery are too big to utilize a single-piece gasket.

But you can also use segmented gaskets to get better yield from a sheet of gasketing material, minimizing the waste generated with centers.

Larger gaskets are often manufactured in sections and joined with beveled cuts. This is a procedure that requires extra skiving and gluing operations. It is tough to achieve an even, smooth joint without steps or transverse grooves, which can create leak paths.

The glue and layered materials can affect the thickness and compressibility of the joined area, which can lead to uneven loading.

Your best solution is to die cut the joint using a dovetail or puzzle pattern. The material will flow tighter under compression, creating a tighter and longer-lasting seal. When done properly, this method should not require additional sealant, which can have a negative impact on the gasketing material.

The question of whether a gasket material can make and maintain a seal depends not only on the material’s quality, but the medium being sealed, the design of the flange, the amount of pressure applied to the gasket by the bolts and the way the gasket is assembled into the flanges and tightened.

For more information on segmented gaskets and other gasketing material, contact Gallagher Fluid Seals.