Why Bell (Socket) Joints and Flanges?

For FRP composite duct systems, we recommend the structural adhesive weld joints. The bell and spigot joint is the preferred joint through 36” diameter duct; especially when there is a significant number of duct fittings and flanges.

There is a significant initial cost savings for the structural adhesive joint. A quality structural adhesive kit is much less costly, than are the field butt weld overlay kits. And, bell and spigot joints are much easier and quicker to make in the field.

There also is a significant labor cost savings available to the installing contractor, by not having to make the time consuming field butt and strap overlay weld type joints. Depending upon the diameter of duct - and whether the installation is at field ground level, in a trench, or up overhead in pipe racks - the labor saving can be "hours" per joint. If you can furnish us the job conditions, and the diameter and number of joints, we can prepare for you an estimated range of installation labor savings by using the structural adhesive joint.

If a conductive lined duct system is being used, then again, the bell and spigot structural adhesive joint is "the best way to go". It is possible to maintain conductivity across a field overlay weld joint. However, that conductive field overlay weld is more difficult to make and requires extra skill, care, and attention to accomplish in the field. A field structural adhesive weld is more likely to maintain conductivity across the duct and fitting welds. And again, those bell and spigot structural adhesive welds are also easier to make in the field. Conductive systems using these structural adhesive welds require less labor and skill levels for field installation.

Please call or write for a complete fittings and flange catalog showing the wide range of bell and spigot joints available for structural adhesive joining of both standard and conductive lined FRP composite duct and pipe systems.