Regarding Modifications to any USC Approved Backflow Prevention Assembly

The USC Foundation’s approval of any assembly on the USC List of Approved Backflow Prevention Assemblies is invalid when an assembly has been modified in any way.

Modifications to an assembly may include: installation of an assembly in an orientation other than the orientation in which the assembly was approved, removing the shutoff valves, placing ells or other fittings between the main body and the shutoff valve. Additionally, assemblies may not be rotated on their axes. The shutoff valves may not be rotated either, with the following exception: The Foundation has determined that flanged assemblies of the 2½-inch and larger sizes may have their shutoff valves rotated one bolt hole without affecting the operation of the assembly. The Foundation will allow this without the approval status being affected.

All assemblies on the USC List go through a thorough laboratory and field evaluation. After an assembly successfully completes both phases of the approval program they are placed on the USC List. Since the assembly was submitted and approved by the Foundation under certain parameters, any modification to an approved assembly invalidates the USC Approval.


10.1.1.7 Modifications
Modifications to backflow prevention assemblies will invalidate the Foundation for Cross-Connection Control and Hydraulic Research’s approval. Assemblies must be installed and maintained in the configuration(s) and orientation(s) in which they were evaluated and approved. Shutoff valves may be replaced only with shutoff valves, which are approved for each size and model of assembly. Detector assemblies (i.e., DCDA, DCDA-II, RPDA, RPDA-II) are permitted to have the water meters replaced only with the acceptable water meters approved with each size and model of assembly. The bypass assemblies on detector assemblies may only be replaced with the specific assemblies approved with each size and model of assembly.

For any questions about the USC Approval of any assembly on the USC List please contact the Foundation Office.